



24th Edition

Michigan Gas Safety

Standards Guide

Federal Pipeline Safety Regulations with Michigan Rules Added

Code of Federal Regulations
Title 49 Transportation
Parts 191, 192, 199 and 40
Updated as of
October 1, 2017

Michigan
Gas Safety Standards
24th Edition
Updated as of
January 3, 2019

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24th Edition

Michigan Gas Safety Standards Guide

Federal Pipeline Safety Regulations with Michigan Rules Added

Effective: January 3, 2019

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PREFACE

The Michigan gas safety standards are promulgated by authority conferred on the Public Service Commission by section 2 of 1969 PA 165, filed with MCL 483.152, and section 231 of 1965 PA 380, MCL 16.331, and Executive Reorganization Order Nos. 1996-2, 2003-1, 2008-4, 2011-4, 2015-10, MCL 445.2001, MCL 445.2011, MCL 445.2025, MCL 445.2030, and MCL 460.21 .

The rules contained in the 24th Edition of the Michigan Gas Safety Standards Guide were filed with the Office of the Great Seal and became effective on January 3, 2019.

To order a printed version of the currently published edition of the Michigan Gas Safety Standards Guide at the State of Michigan's cost, please send your request to LARA-MPSC-Operations@michigan.gov with the quantity desired. Staff will follow-up with specifics of your order.

To obtain access to an electronic version of the document, please visit our website at www.michigan.gov/mpsc, you can locate the document under the Natural Gas tab. Please contact MPSC if you would like the document e-mailed.

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EDITIONS OF THE MICHIGAN GAS SAFETY STANDARDS

<u>Edition</u>	<u>Docket Number</u>	<u>Effective Date</u>
1	D-3929	November 21, 1957
2	U-2767	August 31, 1967
3a ¹	U-3665	December 31, 1970
3b ¹	U-3665	January 1, 1972
4	U-3665	May 31, 1972
5	U-3665	April 14, 1973
6	U-3665	December 27, 1974
7	U-3665	July 6, 1976
8	U-3665	August 16, 1977
9	U-3665	October 28, 1978
10	U-3665	July 21, 1979
11	U-3665	May 13, 1981
12	U-3665	January 28, 1982
13	U-3665	April 10, 1985
14	U-3665	August 21, 1986
15	U-3665	April 24, 1991
16	U-10525	October 24, 1995
17 ²	U-11750	January 6, 2000
18	U-12570	March 21, 2001
19	U-13600	July 30, 2003
20	U-14464	December 13, 2006
21	U-15545	April 17, 2009
22	U-16295	November 4, 2010
23	U-17462	December 23, 2014
24	U-17826	January 3, 2019

- ¹Editions 3a and 3b are separate sets of rules adopted by proclamation of the Governor under the emergency rules provision of the Administrative Procedures Act of 1969.
- ²Identifies the edition of the gas safety standards code where the title of the compiled document was changed to *"The Michigan Gas Safety Standards."*

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USE OF THIS GUIDE

This document is a combination of final published rules from the Code of Federal Regulations (CFR) Title 49 Transportation Parts 191, 192, 199, and 40 annual edition through October 1, 2017, as published in the Federal Register and the 24th edition of the Michigan Gas Safety Standards that became effective on January 3, 2019 and are part of the Michigan Administrative Code.

This guide was created to provide a usable form of the gas safety standards and is not the official version of the Michigan Gas Safety Standards as filed with the Michigan Secretary of State.

- Areas of this guide where the federal regulations differ from the Michigan state safety standards, the states' standards will take precedence and are identified by striking out the non-applicable portions of the federal code (~~for example~~). An operator is not required to comply with portions of the federal regulations which are crossed out. An operator under state jurisdiction shall comply with all state safety standards as set forth.
- More restrictive state safety standards will be identified in an *italic font*.
- More restrictive state **SOUR GAS** standards will be identified as detailed above, plus the paragraph will be shaded (highlighted light blue if viewed electronically).

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CHANGES TO THIS EDITION – CODE OF FEDERAL REGULATIONS (CFR)

Amendment Number	Federal Register Cite	Effective Date	Rule(s) Impacted	In Reference To:
Title 49 CFR Part 191 – Transportation of Natural and Other Gas by Pipeline; Annual Reports, Incident Reports, and Safety-Related Condition Reports				
23	80 FR 12762	10/01/15	191.7	Remove offshore pipeline condition report reference and update NPMS reporting.
			191.25	Allow safety-related condition report submittal by electronic mail.
			191.27	Rule removed.
			191.29	New rule requiring NPMS submissions.
24	81 FR 91860	01/18/17	191.1	Revision to accommodate storage rule.
			191.3	Include references to “underground natural gas storage facility.”
			191.15	Revision to accommodate storage rule.
			191.17	Revision to accommodate storage rule.
			191.21	Grammatical revision.
			191.22	Revision to accommodate storage rule.
25	82 FR 7972	03/24/17	191.23	Revision to accommodate storage rule.
			191.3	Define “confirmed discovery.”
			191.5	Update notification requirements.
			191.22	Update notification requirements.
Title 49 CFR Part 192 – Transportation of Natural and Other Gas by Pipeline: Minimum Federal Safety Standards				
119	80 FR 168	03/06/15	192.7	Updated incorporated standards.
			192.11	Grammatical revision.
			192.55	Grammatical revision.
			192.59	Prohibit rework and regrind of plastic pipe.
			192.63	Include thermoplastic pipe.
			192.65	Update incorporated standard.
			192.112	Grammatical revision.
			192.113	Grammatical revision.
			192.123	Update incorporated standard.
			192.145	Grammatical revision.
			192.147	Grammatical revision.

Section One: Changes to Code of Federal Regulations

Amendment Number	Federal Register Cite	Effective Date	Rule(s) Impacted	In Reference To:
Title 49 CFR Part 192 – Transportation of Natural and Other Gas by Pipeline: Minimum Federal Safety Standards				
119	80 FR 168	03/06/15	192.153	Remove paragraphs (b)(1) through (b)(4).
			192.163	Grammatical revision.
			192.165	Grammatical revision.
			192.177	Update incorporated standard.
			192.189	Grammatical revision.
			192.191	Update incorporated standard.
			191.225	Grammatical revision.
			192.227	Grammatical revision.
			192.229	Grammatical revision.
			192.241	Grammatical revision.
			192.281	Grammatical revision.
			192.283	Update incorporated standard.
			192.485	Grammatical revision.
			192.735	Grammatical revision.
			192.903	Grammatical revision.
			192.923	Update incorporated standard and grammatical revision.
			192.925	Update incorporated standard.
			192.931	Update incorporated standard.
			192.933	Grammatical revision.
			192.935	Update incorporated standard.
			192.939	Update incorporated standard and grammatical revision.
			Appendix B	Update incorporated standard and grammatical revision.
	80 FR 46847	08/06/15	192.11	Grammatical revision.
			192.55	Grammatical revision.
			192.153	Return paragraphs (b)(1) through (b)(4).
			192.191	Grammatical revision.
			192.735	Grammatical revision.
			192.923	Grammatical revision.
			192.933	Grammatical revision.
			Appendix B	Grammatical revision.

Amendment Number	Federal Register Cite	Effective Date	Rule(s) Impacted	In Reference To:
Title 49 CFR Part 192 – Transportation of Natural and Other Gas by Pipeline: Minimum Federal Safety Standards				
120	80 FR 12762	10/01/15	192.3	Define “welder” and “welder operator.”
			192.9	Require Type B gathering lines to comply with 192.706 and 192.703(c).
			192.65	Grammatical revision.
			192.112	Revision to mill hydrostatic testing.
			192.153	Revision to pressure vessel requirements.
			192.165	Revision to pressure vessel requirements.
			192.225	Include additional standards and welding operator.
			192.227	Include additional standards and welding operator.
			192.229	Include additional standards and welding operator.
			192.241	Include additional standard.
			192.243	Include welding operator.
			192.285	Revise joiner requalification requirements.
			192.305	Disallow operator personnel from inspecting own work.
			192.503	Include component other than pipe pressure testing exemption.
			192.505	Remove component other than pipe pressure testing exemption.
			192.620	Require new pipeline alternative MAOP notification to PHMSA.
			192.805	Allow significant program change submittal by electronic mail.
			192.925	Grammatical revision.
			192.949	Allow any notification by electronic mail.
	80 FR 46847	08/06/15	192.305	Effective date delayed indefinitely.

Section One: Changes to Code of Federal Regulations

Amendment Number	Federal Register Cite	Effective Date	Rule(s) Impacted	In Reference To:
Title 49 CFR Part 192 – Transportation of Natural and Other Gas by Pipeline: Minimum Federal Safety Standards				
121	81 FR 70987	04/14/17	192.381	Grammatical revision.
			192.383	Define “branched service line” and update installation requirements.
			192.385	New rule requiring service line valves.
122	81 FR 91860	01/18/17	192.3	Define “underground natural gas storage facility.”
			192.7	Include additional standards.
			192.12	New rule regarding storage facilities.
123	82 FR 7972	03/24/17	192.14	Require conversion of service notifications to PHMSA.
			192.175	Update clearance requirements.
			192.225	Update incorporated reference.
			192.227	Update incorporated reference.
			192.631	Require role and responsibilities to be defined.
			192.740	New rule regarding farm taps.
			192.1003	Exclude farm taps.
Title 49 CFR Part 199 – Drug and Alcohol Testing				
26	80 FR 168	03/06/15	199.111	Remove and reserve.
27	82 FR 7972	03/24/17	199.105	Require additional documentation.
			199.117	Require three year retention for documentation.
			199.119	Allow reporting submittal by electronic mail.
			199.225	Grammatical revision.
			199.227	Require three year retention for documentation.
			199.229	Allow reporting submittal by electronic mail.
Title 49 CFR Part 40 – Procedures for Transportation Workplace Drug and Alcohol Testing Programs				
	80 FR 19551	04/13/15	40.3	Define “chain of custody.”
			40.45	Update to include forms.
			40.73	Update to include following form procedures.
	81 FR 52364	08/08/16	40.3	Update definition of “service agent.”

CHANGES TO THIS EDITION – MICHIGAN ADMINISTRATIVE CODE

Michigan Administrative Code Number effective January 3, 2019	In Reference To:
Part 2. Safety Standards and Testing Requirements	
<i>R 460.20201</i>	<i>Grammatical revision.</i>
Part 3. Additional Minimum Safety Standards	
<i>R 460.20304</i>	<i>Update incorporated standard and grammatical revision.</i>
<i>R 460.20306</i>	<i>Grammatical revision.</i>
<i>R 460.20308</i>	<i>Grammatical revision.</i>
<i>R 460.20310</i>	<i>Grammatical revision and supersedes 192.455(e).</i>
<i>R 460.20312</i>	<i>Update to exclude plastic service lines and supersedes 192.511(b) and (c).</i>
<i>R 460.20313</i>	<i>Update to only apply to plastic pipelines, except plastic service line.</i>
<i>R 460.20314</i>	<i>Grammatical revision and excludes distribution facilities. Update to require test date.</i>
<i>R 460.20316</i>	<i>Update to require leak survey before uprating and supersedes 192.557(b)(2).</i>
<i>R 460.20317</i>	<i>Rescinded.</i>
<i>R 460.20319</i>	<i>Grammatical revision.</i>
<i>R 460.20326</i>	<i>Prohibit use of a welded patch and supersedes 192.717(b)(3) and 192.711(c).</i>
<i>R 460.20331</i>	<i>Grammatical revision.</i>
<i>R 460.20332</i>	<i>Grammatical revision.</i>
<i>R 460.20335</i>	<i>New rule regarding master meter systems and supersedes 191.3 definition.</i>
<i>R 460.20338</i>	<i>New rule regarding farm taps.</i>
Part 4. Sour Gas Pipelines	
<i>R 460.20407</i>	<i>Grammatical revision.</i>
<i>R 460.20409</i>	<i>Grammatical revision.</i>
Part 5. Records and Reports	
<i>R 460.20501</i>	<i>Update to require records and reports to be maintained for two inspection cycles.</i>
<i>R 460.20502</i>	<i>Update rule requirements.</i>
<i>R 460.20503</i>	<i>Update to include distribution system overpressure.</i>
<i>R 460.20504</i>	<i>Update to require supplemental reports.</i>

Michigan Administrative Code Number effective January 3, 2019	In Reference To:
Part 6. Adoption of Standards	
<i>R 460.20601</i>	<i>Grammatical revision.</i>
<i>R 460.20602</i>	<i>Update organization information.</i>
<i>R 460.20603</i>	<i>Update adopted standard.</i>
<i>R 460.20604</i>	<i>Update adopted standard.</i>
<i>R 460.20605</i>	<i>Update adopted standard.</i>
<i>R 460.20604</i>	<i>Update adopted standard.</i>

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<i>R 460.20102 Definitions.</i>	192.3	61
<i>R 460.20103 Adoption of documents by reference generally.</i>	Section Six (6) Part 1	441
<i>R 460.201104 Rescission.</i>	Section Six (6) Part 1	441
Part 2. Safety Standards and Testing Requirements		
<i>R 460.20201 Pipeline safety standards; adoption by reference.</i>	Section Six (6) Part 2	442
<i>R 460.20202 Drug and alcohol testing requirements.</i>	199.101	248
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<i>R 460.20301 Scope.</i>	192.1	58
<i>R 460.20302 Compressor station piping.</i>	192.163	94
<i>R 460.20303 Vault and pit sealing, venting, and ventilation.</i>	192.187	101
<i>R 460.20304 Welding procedures.</i>	192.225	106
<i>R 460.20305 Welder qualification records.</i>	192.227	107
<i>R 460.20306 Nondestructive testing.</i>	192.243	110
<i>R 460.20307 Welding preheating.</i>	192.235	108
<i>R 460.20308 Customer meters and regulators; location.</i>	192.353	125
<i>R 460.20309 Service lines; valve location.</i>	192.365	128
<i>R 460.20310 Galvanized or aluminum pipe prohibited for direct burial or submerged use.</i>	192.455	136
<i>R 460.20311 Test requirements for pipelines operating below 100 psig.</i>	192.509	147
<i>R 460.20312 Test requirements; service lines other than plastic.</i>	192.511	148
<i>R 460.20313 Minimum test duration; plastic pipelines.</i>	192.513	148
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<i>R 460.20315 Leaks occurring during uprating; repairs and monitoring required.</i>	192.553	150

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<i>R 460.20318 Gas leak investigation; establishment of service; customer leak complaint records.</i>	192.603	154
<i>R 460.20319 Filing of operation and maintenance manual with commission staff required.</i>	192.605	157
<i>R 460.20320 Rescinded.</i>	192.614	161
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<i>R 460.20402 Materials for pipe and components; requirements.</i>	192.55	75
<i>R 460.20403 Steel pipe; design formula.</i>	192.105	78
<i>R 460.20404 Purging of sour gas pipelines; plan; personnel.</i>	192.629	175
<i>R 460.20405 Valves; qualification for sour gas service.</i>	192.145	89
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<i>R 460.20602 Names, addresses, and phone numbers of organizations.</i>	Section Six (6) Part 6	444
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TITLE 49 CFR PART 191

**TRANSPORTATION OF NATURAL
AND OTHER GAS BY PIPELINE;
ANNUAL REPORTS, INCIDENT
REPORTS, AND SAFETY-RELATED
CONDITION REPORTS *WITH
MICHIGAN ADMINISTRATIVE CODE
ADDED***

SECTION TWO (2)

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PART 191—TRANSPORTATION OF NATURAL AND OTHER GAS BY PIPELINE; ANNUAL REPORTS, INCIDENT REPORTS, AND SAFETY-RELATED CONDITION REPORTS

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Authority: 49 U.S.C. 5121, 60102, 60103, 60104, 60108, 60117, 60118, 60124, 60132, and 60141; and 49 CFR 1.97.

(By authority conferred on the public service commission by section 2 of 1969 PA 165, MCL 483.152, and section 231 of 1965 PA 380, MCL 16.331, and Executive Reorganization Order Nos. 1996-2, 2003-1, 2008-4, 2011-4, 2015-10, MCL 445.2001, MCL 445.2011, MCL 445.2025, MCL 445.2030, and MCL 460.21.)

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§191.1 Scope.

- (a) This part prescribes requirements for the reporting of incidents, safety-related conditions, annual pipeline summary data, National Operator Registry information, and other miscellaneous conditions by operators of underground natural gas storage facilities and natural gas pipeline facilities located in the United States or Puerto Rico, including underground natural gas storage facilities and pipelines within the limits of the Outer Continental Shelf as that term is defined in the Outer Continental Shelf Lands Act (43 U.S.C. 1331).
- (b) This part does not apply to—
- (1) Offshore gathering of gas in State waters upstream from the outlet flange of each facility where hydrocarbons are produced or where produced hydrocarbons are first separated, dehydrated, or otherwise processed, whichever facility is farther downstream;
 - (2) Pipelines on the Outer Continental Shelf (OCS) that are producer-operated and cross into State waters without first connecting to a transporting operator's facility on the OCS, upstream (generally seaward) of the last valve on the last production facility on the OCS. Safety equipment protecting PHMSA-regulated pipeline segments is not excluded. Producing operators for those pipeline segments upstream of the last valve of the last production facility on the OCS may petition the Administrator, or designee, for approval to operate under PHMSA regulations governing pipeline design, construction, operation, and maintenance under 49 CFR 190.9.
 - (3) Pipelines on the Outer Continental Shelf upstream of the point at which operating responsibility transfers from a producing operator to a transporting operator; or
 - (4) Onshore gathering of gas—
 - (i) Through a pipeline that operates at less than 0 psig (0 kPa);
 - (ii) Through a pipeline that is not a regulated onshore gathering line (as determined in §192.8 of this subchapter); and
 - (iii) Within inlets of the Gulf of Mexico, except for the requirements in §192.612.

[Amdt. 191-5, 49 FR 18960, May 3, 1984, as amended by Amdt. 191-6, 53 FR 24949, July 1, 1988; Amdt. 191-11, 61 FR 27793, June 3, 1996; Amdt. 191-12, 62 FR 61695, Nov. 19, 1997; Amdt. 191-15, 68 FR 46111, Aug. 5, 2003; 70 FR 11139, Mar. 8, 2005; 75 FR 72904, Nov. 26, 2010; Amdt. 191-24, 81 FR 91871, Dec. 19, 2016]

§191.3 Definitions.

As used in this part and the PHMSA Forms referenced in this part—

Administrator means the Administrator, Pipeline and Hazardous Materials Safety Administration or his or her delegate.

Confirmed Discovery means when it can be reasonably determined, based on information available to the operator at the time a reportable event has occurred, even if only based on a preliminary evaluation.

Gas means natural gas, flammable gas, or gas which is toxic or corrosive;

Incident means any of the following events:

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- (1) An event that involves a release of gas from a pipeline, gas from an underground natural gas storage facility, liquefied natural gas, liquefied petroleum gas, refrigerant gas, or gas from an LNG facility, and that results in one or more of the following consequences:
 - (i) A death, or personal injury necessitating in-patient hospitalization;
 - (ii) Estimated property damage of \$50,000 or more, including loss to the operator and others, or both, but excluding cost of gas lost;
 - (iii) Unintentional estimated gas loss of three million cubic feet or more;
- (2) An event that results in an emergency shutdown of an LNG facility or an underground natural gas storage facility. Activation of an emergency shutdown system for reasons other than an actual emergency does not constitute an incident.
- (3) An event that is significant in the judgment of the operator, even though it did not meet the criteria of paragraphs (1) or (2) of this definition.

LNG Facility means a liquefied natural gas facility as defined in §193.2007 of part 193 of this chapter;

~~**Master Meter System** means a pipeline system for distributing gas within, but not limited to, a definable area, such as a mobile home park, housing project, or apartment complex, where the operator purchases metered gas from an outside source for resale through a gas distribution pipeline system. The gas distribution pipeline system supplies the ultimate consumer who either purchases the gas directly through a meter or by other means, such as by rents;~~

Municipality means a city, county, or any other political subdivision of a State;

Offshore means beyond the line of ordinary low water along that portion of the coast of the United States that is in direct contact with the open seas and beyond the line marking the seaward limit of inland waters;

Operator means a person who engages in the transportation of gas;

Outer Continental Shelf means all submerged lands lying seaward and outside the area of lands beneath navigable waters as defined in Section 2 of the Submerged Lands Act (43 U.S.C. 1301) and of which the subsoil and seabed appertain to the United States and are subject to its jurisdiction and control.

Person means any individual, firm, joint venture, partnership, corporation, association, State, municipality, cooperative association, or joint stock association, and includes any trustee, receiver, assignee, or personal representative thereof;

Pipeline or Pipeline System means all parts of those physical facilities through which gas moves in transportation, including, but not limited to, pipe, valves, and other appurtenance attached to pipe, compressor units, metering stations, regulator stations, delivery stations, holders, and fabricated assemblies.

State includes each of the several States, the District of Columbia, and the Commonwealth of Puerto Rico;

Transportation of Gas means the gathering, transmission, or distribution of gas by pipeline, or the storage of gas in or affecting interstate or foreign commerce.

Underground natural gas storage facility means an underground natural gas storage facility as defined in §192.3 of this chapter.

[35 FR 320, Jan. 8, 1970, as amended by Amdt. 191-5, 49 FR 18960, May 3, 1984; Amdt. 191-10, 61 FR 18516, Apr. 26, 1996; Amdt. 191-12, 62 FR 61695, Nov. 19, 1997; 68 FR 11749, Mar. 12, 2003; 70 FR 11139, Mar. 8, 2005; 75 FR 72905, Nov. 26, 2010; Amdt. 191-24, 81 FR 91871, Dec. 19, 2016; Amdt. 191-25, 82 FR 7997, Jan. 23, 2017]

R 460.20335 Master meter systems.

- (1) The definition of “**master meter system**” contained in 49 C.F.R. §191.3, which is adopted by reference in R 460.20606, is superseded by the following:
- (a) As used in these rules, “**master meter system**” means a distribution pipeline system that receives metered gas from an outside source and that is used for distributing gas within a definable area, including but not limited to, a mobile home park, vacation rental housing complex, apartment complex, college campus, or prison. The master meter system supplies the ultimate consumer of the gas whether the gas is purchased or supplied at no cost.
 - (b) As used in this rule, “**distribution pipeline system**” means a system of main and service lines including all parts of those physical facilities through which gas moves in transportation, including but not limited to, pipe, valves, and other appurtenance attached to pipe, metering stations, regulator stations, delivery stations, holders, and fabricated assemblies. The distribution pipeline system ends at the outlet of the sub-meter, the outlet of the service regulator, or the building wall, whichever is furthest downstream.
 - (c) As used in this rule, “**ultimate consumer**” means a third-party end-user occupying an area containing distribution piping from the distribution pipeline system who routinely consumes gas from the system.
 - (d) As used in this rule, “**sub-meter**” means 1 of 2 or more meters for measuring different sections of gas supply that is located downstream from a master meter.
- (2) An operator shall not supply gas to any new master meter system established on or after January 1, 2019 unless the commission has provided a waiver.
- (3) The design, construction, inspection, and testing of additions to existing master meter systems are the responsibility of the operator with the direct costs paid by the owner, unless the commission has provided a waiver.
- (4) Unless the commission has provided a waiver, for master meter systems that were established before January 1, 2019, an operator shall make efforts to negotiate an operations and maintenance agreement with the master meter system owner that ensures compliance with all applicable requirements of the gas safety standards for that system. The direct cost to the operator for services performed under this agreement, including an appropriate administrative overhead, may be charged to the owner of the master meter system. The monthly charge per service line must not exceed the residential meter charge or customer charge included in the operator’s tariffs on January 1, 2018. An operator shall apply for any necessary waivers under this subrule by January 1, 2020.
- (5) Beginning March 15, 2019, all operators shall provide an annual report to the commission describing the location, type of facility served, number of services at each known master meter system in service at the end of the previous calendar year, and the names and contact information for all known master meter system owners with whom the operator is unable to execute an operations and maintenance contract.

History: 2019 MR 1, Eff. Jan. 3, 2019.

§191.5 Immediate notice of certain incidents.

- (a) At the earliest practicable moment following discovery, but no later than one hour after confirmed discovery, each operator must give notice in accordance with paragraph (b) of this section of each incident as defined in §191.3.
- (b) Each notice required by paragraph (a) of this section must be made to the National Response Center either by telephone to 800-424-8802 (in Washington, DC, 202-267-2675) or electronically at <http://www.nrc.uscg.mil> and must include the following information:
 - (1) Names of operator and person making report and their telephone numbers.
 - (2) The location of the incident.
 - (3) The time of the incident.
 - (4) The number of fatalities and personal injuries, if any.
 - (5) All other significant facts that are known by the operator that are relevant to the cause of the incident or extent of the damages.
- (c) Within 48 hours after the confirmed discovery of an incident, to the extent practicable, an operator must revise or confirm its initial telephonic notice required in paragraph (b) of this section with an estimate of the amount of product released, an estimate of the number of fatalities and injuries, and all other significant facts that are known by the operator that are relevant to the cause of the incident or extent of the damages. If there are no changes or revisions to the initial report, the operator must confirm the estimates in its initial report.

[Amdt. 191-4, 47 FR 32720, July 29, 1982, as amended by Amdt. 191-5, 49 FR 18960, May 3, 1984; Amdt. 191-8, 54 FR 40878, Oct. 4, 1989; 75 FR 72905, Nov. 26, 2010; Amdt. 191-25, 82 FR 7997, Jan. 23, 2017]

R 460.20503 Reports of incidents; telephonic notice to the commission staff.

- (1) *At the earliest practicable moment following discovery, an operator shall give notice to the commission staff of any of the following situations:*
 - (a) *An incident that is reportable pursuant to 49 C.F.R. §191.5, which is adopted by reference in R460.20606.*
 - (b) *An event resulting in estimated property damage of \$10,000.00 or more including loss to the operator and others, or both, but excluding the cost of gas lost. As used in this subdivision, an “event” means on or relating to an operator’s facilities that may or may not involve a release of gas.*
 - (c) *An event resulting in the loss of service to more than 100 customers.*
 - (d) *An event involving a customer's gas facility that results in a fatality or an explosion causing structural damage.*
 - (e) *An event resulting in an unintentional release of gas estimated by the operator to be 1 million cubic feet or more or an unintentional activation of an emergency shutdown system of any portion of a compressor station involving the release of gas.*
 - (f) *An event that causes the pressure of any portion of a distribution system to rise above its maximum allowable operating pressure plus the build-up allowed for operation of pressure limiting or control devices.*

- (g) *An event that receives or is likely to receive extensive news coverage or is significant in the judgment of the operator, even though it did not meet the criteria of subdivisions (a), (b), (c), (d), (e), or (f) of this subrule. This subdivision is not subject to the penalty provisions of section 11 of 1969 PA 165, MCL 483.161.*
- (2) *If additional information is received by the operator after the initial report that indicates a different cause, more serious injury, or more serious property damage than was initially reported, then the operator shall make a supplemental telephone report to the commission staff as soon as practicable.*
- (3) *When requested by the commission staff, an operator shall supplement a report made in accordance with subrule (1) of this rule within a reasonable time, with a written report giving full details, such as the cause of the incident or occurrence, the extent of injuries or damage, and the steps taken, if any, to prevent a recurrence of the incident or occurrence.*

History: 1998-2000 AACCS; 2014 AACCS; 2019 MR 1, Eff. Jan. 3, 2019.

R 460.20424 Telephonic notice to the commission of sour gas leak.

SOUR GAS

In addition to each of the reporting requirements set forth in R 460.20503, an operator of pipeline facilities used in the transportation of sour gas shall, at the earliest practicable moment, but not more than 8 hours following the release of any quantity of sour gas that has the potential to harm the public, give telephonic notice to the commission staff of the release.

History: 2003 AACCS.

§191.7 Report submission requirements.

- (a) **General.** Except as provided in paragraphs (b) and (e) of this section, an operator must submit each report required by this part electronically to the Pipeline and Hazardous Materials Safety Administration at <http://portal.phmsa.dot.gov/pipeline> unless an alternative reporting method is authorized in accordance with paragraph (d) of this section.
- (b) **Exceptions.** An operator is not required to submit a safety-related condition report (§191.25) electronically.
- (c) **Safety-related conditions.** An operator must submit concurrently to the applicable State agency a safety-related condition report required by §191.23 for intrastate pipeline transportation or when the State agency acts as an agent of the Secretary with respect to interstate transmission facilities.
- (d) **Alternative Reporting Method.** If electronic reporting imposes an undue burden and hardship, an operator may submit a written request for an alternative reporting method to the Information Resources Manager, Office of Pipeline Safety, Pipeline and Hazardous Materials Safety Administration, PHP-20, 1200 New Jersey Avenue, SE, Washington DC 20590. The request must describe the undue burden and hardship. PHMSA will review the request and may authorize, in writing, an alternative reporting method. An authorization will state the period for which it is valid, which may be indefinite. An operator must contact PHMSA at 202-366-8075, or electronically to informationresourcesmanager@dot.gov or make arrangements for submitting a report that is due after a request for alternative reporting is submitted but before an authorization or denial is received.

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- (e) **National Pipeline Mapping System (NPMS).** An operator must provide the NPMS data to the address identified in the NPMS Operator Standards manual available at www.npms.phmsa.dot.gov or by contacting the PHMSA Geographic Information Systems Manager at (202) 366-4595

[75 FR 72905, Nov. 26, 2010, as amended at by Amdt. 191-23, 80 FR 12777, Mar. 11, 2015]

R 460.20504 Reports.

- (1) *An operator shall concurrently submit a written report that is required to be filed with any federal agency by 49 C.F.R. §191, which are adopted by reference in R 460.20606, to the commission at P.O. Box 30221, Lansing, Michigan 48909-0221 or at LARA-MPSC-Operations@michigan.gov*
- (2) *An operator required to submit an annual report in accordance with 49 C.F.R. §191.11 and 49 C.F.R. §191.17, which are adopted by reference in R 460.20606 of these rules, shall also submit a supplemental report to the commission staff. In the supplemental report, the operator shall subdivide the information in the reports required under 49 C.F.R. §191.11 and 49 C.F.R. §191.17 into specific regions identified by the commission staff. The staff shall identify and communicate these regions to the operator by the end of the calendar year for which the reports are being submitted. For the purpose of this rule, “regions” are defined as geographical, operational, or functional areas of the operator’s system. These supplemental reports are to be submitted no later than the dates required in 49 C.F.R. §191.11 and 49 C.F.R. §191.17 and in a similar format.*

History: 1998-2000 AACCS; 2019 MR 1, Eff. Jan. 3, 2019.

§191.9 Distribution system: Incident report.

- (a) Except as provided in paragraph (c) of this section, each operator of a distribution pipeline system shall submit Department of Transportation Form RSPA F 7100.1 as soon as practicable but not more than 30 days after detection of an incident required to be reported under §191.5.
- (b) When additional relevant information is obtained after the report is submitted under paragraph (a) of this section, the operator shall make supplementary reports as deemed necessary with a clear reference by date and subject to the original report.
- (c) Master meter operators are not required to submit an incident report as required by this section.

[Amdt. 191-5, 49 FR 18960, May 3, 1984, as amended at 75 FR 72905, Nov. 26, 2010]

§191.11 Distribution system: Annual report.

- (a) **General.** Except as provided in paragraph (b) of this section, each operator of a distribution pipeline system must submit an annual report for that system on DOT Form PHMSA F 7100.1-1. This report must be submitted each year, not later than March 15, for the preceding calendar year.
- (b) **Not required.** The annual report requirement in this section does not apply to a master meter system or to a petroleum gas system that serves fewer than 100 customers from a single source.

[75 FR 72905, Nov. 26, 2010]

§191.12 Distribution Systems: Mechanical Fitting Failure Reports.

Each mechanical fitting failure, as required by §192.1009, must be submitted on a Mechanical Fitting Failure Report Form PHMSA F-7100.1-2. An operator must submit a mechanical fitting failure report for each mechanical fitting failure that occurs within a calendar year not later than March 15 of the following year (for example, all mechanical failure reports for calendar year 2011 must be submitted no later than March 15, 2012). Alternatively, an operator may elect to submit its reports throughout the year. In addition, an operator must also report this information to the State pipeline safety authority if a State has obtained regulatory authority over the operator's pipeline.

[76 FR 5499, Feb. 1, 2011]

§191.13 Distribution systems reporting transmission pipelines; transmission or gathering systems reporting distribution pipelines.

Each operator, primarily engaged in gas distribution, who also operates gas transmission or gathering pipelines shall submit separate reports for these pipelines as required by §§191.15 and 191.17. Each operator, primarily engaged in gas transmission or gathering, who also operates gas distribution pipelines shall submit separate reports for these pipelines as required by §§191.9 and 191.11.

[Amdt. 191-5, 49 FR 18961, May 3, 1984]

§191.15 Transmission systems; gathering systems; liquefied natural gas facilities; and underground natural gas storage facilities: Incident report.

- (a) **Transmission or Gathering.** Each operator of a transmission or a gathering pipeline system must submit DOT Form PHMSA F 7100.2 as soon as practicable but not more than 30 days after detection of an incident required to be reported under §191.5 of this part.
- (b) **LNG.** Each operator of a liquefied natural gas plant or facility must submit DOT Form PHMSA F 7100.3 as soon as practicable but not more than 30 days after detection of an incident required to be reported under §191.5 of this part.
- (c) **Underground natural gas storage facility.** Each operator of an underground natural gas storage facility must submit DOT Form PHMSA F7100.2 as soon as practicable but not more than 30 days after detection of an incident required to be reported under §191.5.
- (d) **Supplemental report.** Where additional related information is obtained after a report is submitted under paragraph (a), (b) or (c) of this section, the operator must make a supplemental report as soon as practicable with a clear reference by date to the original report.

[75 FR 72905, Nov. 26, 2010; as amended by Amdt. 191-24, 81 FR 91871, Dec. 19, 2016]

§191.17 Transmission systems; gathering systems; liquefied natural gas facilities; and underground natural gas storage facilities: Annual report.

- (a) **Transmission or Gathering.** Each operator of a transmission or a gathering pipeline system must submit an annual report for that system on DOT Form PHMSA 7100.2.1. This report must be submitted each year,

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not later than March 15, for the preceding calendar year, except that for the 2010 reporting year the report must be submitted by June 15, 2011.

- (b) **LNG.** Each operator of a liquefied natural gas facility must submit an annual report for that system on DOT Form PHMSA 7100.3-1 This report must be submitted each year, not later than March 15, for the preceding calendar year, except that for the 2010 reporting year the report must be submitted by June 15, 2011.
- (c) **Underground natural gas storage facility.** Each operator of an underground natural gas storage facility must submit an annual report on DOT PHMSA Form 7100.4-1 by March 15, for the preceding calendar year except that the first report must be submitted by July 18, 2017.

[75 FR 72905, Nov. 26, 2010, as amended by Amdt. 191-24, 81 FR 91871, Dec. 19, 2016]

§191.21 OMB control number assigned to information collection.

This section displays the control number assigned by the Office of Management and Budget (OMB) to the information collection requirements in this part. The Paperwork Reduction Act requires agencies to display a current control number assigned by the Director of OMB for each agency information collection requirement.

OMB Control Number 2137-0522

SECTION OF 49 CFR PART 191 WHERE IDENTIFIED	FORM NO.
§191.5	Telephonic.
§191.9	PHMSA 7100.1, PHMSA 7100.3.
§191.11	PHMSA 7100.1-1, PHMSA 7100.3-1.
§191.12	PHMSA 7100.1-2.
§191.15	PHMSA 7100.2., PHMSA 7100.3.
§191.17	PHMSA 7100.2-1, PHMSA 7100.3-1.PHMSA 7100.4-1.
§191.22	PHMSA 1000.1., PHMSA 1000.2.

[75 FR 72905, Nov. 26, 2010, as amended by Amdt. 191-24, 81 FR 91871, Dec. 19, 2016]

§191.22 National Registry of Pipeline and LNG operators.

- (a) **OPID Request.** Effective January 1, 2012, each operator of a gas pipeline, gas pipeline facility, underground natural gas storage facility, LNG plant or LNG facility must obtain from PHMSA an Operator Identification Number (OPID). An OPID is assigned to an operator for the pipeline or pipeline system for which the operator has primary responsibility. To obtain an OPID, an operator must complete an OPID Assignment Request DOT Form PHMSA F 1000.1 through the National Registry of Pipeline, Underground Natural Gas Storage Facility, and LNG Operators in accordance with §191.7.
- (b) **OPID validation.** An operator who has already been assigned one or more OPID by January 1, 2011, must validate the information associated with each OPID through the National Registry of Pipeline, Underground Natural Gas Storage Facility, and LNG Operators at <http://opsweb.phmsa.dot.gov>, and correct that information as necessary, no later than June 30, 2012.
- (c) **Changes.** Each operator of a gas pipeline, gas pipeline facility, underground natural gas storage facility,

LNG plant, or LNG facility must notify PHMSA electronically through the National Registry of Pipeline, Underground Natural Gas Storage Facility, and LNG Operators at <http://opsweb.phmsa.dot.gov> of certain events.

- (1) An operator must notify PHMSA of any of the following events not later than 60 days before the event occurs:
 - (i) Construction or any planned rehabilitation, replacement, modification, upgrade, uprate, or update of a facility, other than a section of line pipe, that costs \$10 million or more. If 60 day notice is not feasible because of an emergency, an operator must notify PHMSA as soon as practicable;
 - (ii) Construction of 10 or more miles of a new or replacement pipeline; or
 - (iii) Construction of a new LNG plant or LNG facility; or
 - (iv) Construction of a new underground natural gas storage facility or the abandonment, drilling or well workover (including replacement of wellhead, tubing, or a new casing) of an injection, withdrawal, monitoring, or observation well for an underground natural gas storage facility.
 - (v) Reversal of product flow direction when the reversal is expected to last more than 30 days. This notification is not required for pipeline systems already designed for bi-directional flow; or
 - (vi) A pipeline converted for service under §192.14 of this chapter, or a change in commodity as reported on the annual report as required by §191.17.
- (2) An operator must notify PHMSA of any of the following events not later than 60 days after the event occurs:
 - (i) A change in the primary entity responsible (i.e., with an assigned OPID) for managing or administering a safety program required by this part covering pipeline facilities operated under multiple OPIDs.
 - (ii) A change in the name of the operator;
 - (iii) A change in the entity (e.g., company, municipality) responsible for an existing pipeline, pipeline segment, pipeline facility, underground natural gas storage facility, or LNG facility;
 - (iv) The acquisition or divestiture of 50 or more miles of a pipeline or pipeline system subject to Part 192 of this subchapter;
 - (v) The acquisition or divestiture of an existing LNG plant or LNG facility subject to Part 193 of this subchapter; or
 - (vi) The acquisition or divestiture of an existing underground natural gas storage facility subject to part 192 of this subchapter.
- (d) **Reporting.** An operator must use the OPID issued by PHMSA for all reporting requirements covered under this subchapter and for submissions to the National Pipeline Mapping System.

[Amdt. No. 191-21, 75 FR 72906, Nov. 26, 2010 , as amended by Amdt. 191-24, 81 FR 91871, Dec. 19, 2016; Amdt. 191-25, 82 FR 7997, Jan. 23, 2017]

R 460.20502 Construction filings and reports.

- (1) *In addition to the requirements contained in 49 C.F.R. §191.22, which is adopted by reference in R 460.20606, an operator or other person proposing to construct a gas pipeline or gas pipeline facility shall notify the commission staff not less than 60 days before any of the following begins:*
- (a) *Construction or any planned rehabilitation, replacement, modification, upgrade, uprate, or update of a facility, other than a section of line pipe, that costs \$1 million or more;*
 - (b) *Construction of any of the following gas facilities connected to a transmission pipeline system:*
 - (i) *Metering station.*
 - (ii) *Regulating station.*
 - (iii) *Treatment plant.*
 - (iv) *Production plant.*
 - (v) *Compressor unit.*
 - (c) *Construction of a gas transmission pipeline wherein the maximum allowable operating pressure will result in a hoop stress of 30% or more of specified minimum yield strength.*
 - (d) *Construction of 1 or more miles of contiguous new or replacement pipeline, excluding the length associated with service lines.*
- (2) *As part of the notification required under subrule (1)(a) to (c) of this rule, an operator or other person proposing to construct a gas pipeline or gas pipeline facility shall file all of the following before construction begins:*
- (a) *A facility schematic or map showing the proposed route of the line on a scale not less than 3/8 of an inch to 1 mile.*
 - (b) *Engineering specifications covering design, construction, materials, and testing, and operating pressures.*
 - (c) *Certification that the facilities will be in compliance with these rules.*
- (3) *As part of the notification required under subrule (1)(d) of this rule, an operator or other person proposing to construct a gas pipeline shall comply with the requirements in subrule (2) of these rules upon request.*
- (4) *An application filed under 1929 PA 9, MCL 483.101 to 483.120, 1929 PA 69, MCL 460.501 to 460.506, 1923 PA 238, MCL 486.251 to MCL 486.255, or pursuant to a commission order meets the requirements of subrules (1) and (2) of this rule.*
- (5) *Except for distribution facilities, within 60 days following the completion of construction and testing of facilities covered by subrules (1), (2), and (3) of this rule, an operator shall file a report with the commission containing the information required under 49 C.F.R. § 192.517, adopted by reference in R 460.20606 of these rules, and R 460.20314, and a route map of the as-built pipeline.*
- (6) *If notification under subrule (1) of this rule is not possible due to an emergency, an operator shall notify the commission staff as soon as feasible.*

History: 1998-2000 AACCS; 2003 AACCS; 2010 AACCS; 2019 MR 1, Eff. Jan. 3, 2019.

§191.23 Reporting safety-related conditions.

- (a) Except as provided in paragraph (b) of this section, each operator shall report in accordance with §191.25 the existence of any of the following safety-related conditions involving facilities in service:
- (1) In the case of a pipeline (other than an LNG facility) that operates at a hoop stress of 20 percent or more of its specified minimum yield strength, general corrosion that has reduced the wall thickness to less than that required for the maximum allowable operating pressure, and localized corrosion pitting to a degree where leakage might result.
 - (2) In the case of an underground natural gas storage facility, including injection, withdrawal, monitoring, or observation well, general corrosion that has reduced the wall thickness to less than that required for the maximum well operating pressure, and localized corrosion pitting to a degree where leakage might result.
 - (3) Unintended movement or abnormal loading by environmental causes, such as an earthquake, landslide, or flood, that impairs the serviceability of a pipeline or the structural integrity or reliability of an underground natural gas storage facility, including injection, withdrawal, monitoring, or observation well for an underground natural gas storage facility, or LNG facility that contains, controls, or processes gas or LNG.
 - (4) Any crack or other material defect that impairs the structural integrity or reliability of an underground natural gas storage facility or LNG facility that contains, controls, or processes gas or LNG.
 - (5) Any material defect or physical damage that impairs the serviceability of a pipeline that operates at a hoop stress of 20% or more of its specified minimum yield strength or underground natural gas storage facility, including injection, withdrawal, monitoring, or observations well for an underground natural gas storage facility.
 - (6) Any malfunction or operating error that causes the pressure of a pipeline or underground natural gas storage facility or LNG facility that contains or processes gas or LNG to rise above its maximum well operating pressure (or working pressure for LNG facilities) plus the margin (build-up) allowed for operation of pressure limiting or control devices.
 - (7) A leak in a pipeline or an underground natural gas storage facility, including injection, withdrawal, monitoring, or observation well for an underground natural gas storage facility, or LNG facility that contains or processes gas or LNG that constitutes an emergency.
 - (8) Inner tank leakage, ineffective insulation, or frost heave that impairs the structural integrity of an LNG storage tank.
 - (9) Any safety-related condition that could lead to an imminent hazard and causes (either directly or indirectly by remedial action of the operator), for purposes other than abandonment, a 20% or more reduction in operating pressure or shutdown of operation of a pipeline or an underground natural gas storage facility, including injection, withdrawal, monitoring, or observation well for an underground natural gas storage facility, or an LNG facility that contains or processes gas or LNG.
- (b) A report is not required for any safety-related condition that—
- (1) Exists on a master meter system or a customer-owned service line;

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- (2) Is an incident or results in an incident before the deadline for filing the safety-related condition report;
- (3) Exists on a pipeline (other than an LNG facility or Underground Natural Gas Storage facility) that is more than 220 yards (200 meters) from any building intended for human occupancy or outdoor place of assembly, except that reports are required for conditions within the right-of-way of an active railroad, paved road, street, or highway; or
- (4) Is corrected by repair or replacement in accordance with applicable safety standards before the deadline for filing the safety-related condition report, except that reports are required for conditions under paragraph (a)(1) of this section other than localized corrosion pitting on an effectively coated and cathodically protected pipeline.

[Amdt. 191-6, 53 FR 24949, July 1, 1988, as amended by Amdt. 191-14, 63 FR 37501, July 13, 1998 ; Amdt. 191-24, 81 FR 91872, Dec. 19, 2016]

§191.25 Filing safety-related condition reports.

- (a) Each report of a safety-related condition under §191.23(a) must be filed (received by OPS within five working days, not including Saturday, Sunday, or Federal Holidays) after the day a representative of the operator first determines that the condition exists, but not later than 10 working days after the day a representative of the operator discovers the condition. Separate conditions may be described in a single report if they are closely related. Reports may be transmitted by electronic mail to InformationResourcesManager@dot.gov or by facsimile at (202) 366-7128.
- (b) The report must be headed "Safety-Related Condition Report" and provide the following information:
 - (1) Name and principal address of operator.
 - (2) Date of report.
 - (3) Name, job title, and business telephone number of person submitting the report.
 - (4) Name, job title, and business telephone number of person who determined that the condition exists.
 - (5) Date condition was discovered and date condition was first determined to exist.
 - (6) Location of condition, with reference to the State (and town, city, or county) or offshore site, and as appropriate, nearest street address, offshore platform, survey station number, milepost, landmark, or name of pipeline.
 - (7) Description of the condition, including circumstances leading to its discovery, any significant effects of the condition on safety, and the name of the commodity transported or stored.
 - (8) The corrective action taken (including reduction of pressure or shutdown) before the report is submitted and the planned follow-up or future corrective action, including the anticipated schedule for starting and concluding such action.

[Amdt. 191-6, 53 FR 24949, July 1, 1988; 53 FR 29800, Aug. 8, 1988, as amended by Amdt. 191-7, 54 FR 32344, Aug. 7, 1989; Amdt. 191-8, 54 FR 40878, Oct. 4, 1989; Amdt. 191-10, 61 FR 18516, Apr. 26, 1996; Amdt. 191-23, 80 FR 12777, Mar. 11, 2015]

§191.29 National Pipeline Mapping System.

- (a) Each operator of a gas transmission pipeline or liquefied natural gas facility must provide the following geospatial data to PHMSA for that pipeline or facility:
- (1) Geospatial data, attributes, metadata and transmittal letter appropriate for use in the National Pipeline Mapping System. Acceptable formats and additional information are specified in the NPMS Operator Standards Manual available at www.npms.phmsa.dot.gov or by contacting the PHMSA Geographic Information Systems Manager at (202) 366-4595.
 - (2) The name of and address for the operator.
 - (3) The name and contact information of a pipeline company employee, to be displayed on a public Web site, who will serve as a contact for questions from the general public about the operator's NPMS data.
- (b) The information required in paragraph (a) of this section must be submitted each year, on or before March 15, representing assets as of December 31 of the previous year. If no changes have occurred since the previous year's submission, the operator must comply with the guidance provided in the NPMS Operator Standards manual available at www.npms.phmsa.dot.gov or contact the PHMSA Geographic Information Systems Manager at (202) 366-4595

[Amdt. 191-23, 80 FR 12777, Mar. 11, 2015]

DRAFT



TITLE 49 CFR PART 192

TRANSPORTATION OF NATURAL AND OTHER GAS BY PIPELINE: MINIMUM FEDERAL SAFETY STANDARDS WITH *MICHIGAN ADMINISTRATIVE CODE* ADDED

SECTION THREE (3)

DRAFT

PART 192—TRANSPORTATION OF NATURAL AND OTHER GAS BY PIPELINE: MINIMUM FEDERAL SAFETY STANDARDS

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Authority: 49 U.S.C. 5103, 60102, 60104, 60108, 60109, 60110, 60113, 60116, 60118, 60137, 60141; and 49 CFR 1.97.

Source: 35 FR 13257, Aug. 19, 1970, unless otherwise noted.

Editorial Note: Nomenclature changes to part 192 appear at 71 FR 33406, June 9, 2006.

(By authority conferred on the Public Service Commission by section 2 of 1969 PA 165, MCL 483.152, and section 231 of 1965 PA 380, MCL 16.331, and Executive Reorganization Order Nos. 1996-2, 2003-1, 2008-4, and 2011-4, MCL 445.2001, MCL 445.2011, MCL 445.2025, and MCL 445.2030.)

Subpart A—General

§192.1 What is the scope of this part?

- ~~(a) This part prescribes minimum safety requirements for pipeline facilities and the transportation of gas, including pipeline facilities and the transportation of gas within the limits of the outer continental shelf as that term is defined in the Outer Continental Shelf Lands Act (43 U.S.C. 1331).~~
- ~~(b) This part does not apply to—~~
- ~~(1) Offshore gathering of gas in State waters upstream from the outlet flange of each facility where hydrocarbons are produced or where produced hydrocarbons are first separated, dehydrated, or otherwise processed, whichever facility is farther downstream;~~
 - ~~(2) Pipelines on the Outer Continental Shelf (OCS) that are producer operated and cross into State waters without first connecting to a transporting operator's facility on the OCS, upstream (generally seaward) of the last valve on the last production facility on the OCS. Safety equipment protecting PHMSA-regulated pipeline segments is not excluded. Producing operators for those pipeline segments upstream of the last valve of the last production facility on the OCS may petition the Administrator, or designee, for approval to operate under PHMSA regulations governing pipeline design, construction, operation, and maintenance under 49 CFR 190.9;~~
 - ~~(3) Pipelines on the Outer Continental Shelf upstream of the point at which operating responsibility transfers from a producing operator to a transporting operator;~~
 - ~~(4) Onshore gathering of gas—~~
 - ~~(i) Through a pipeline that operates at less than 0 psig (0 kPa);~~
 - ~~(ii) Through a pipeline that is not a regulated onshore gathering line (as determined in §192.8); and~~
 - ~~(iii) Within inlets of the Gulf of Mexico, except for the requirements in §192.612; or~~
 - ~~(5) Any pipeline system that transports only petroleum gas or petroleum gas/air mixtures to—~~
 - ~~(i) Fewer than 10 customers, if no portion of the system is located in a public place; or~~
 - ~~(ii) A single customer, if the system is located entirely on the customer's premises (no matter if a portion of the system is located in a public place).~~

[35 FR 13257, Aug. 19, 1970, as amended by Amdt. 192-27, 41 FR 34605, Aug. 16, 1976; Amdt. 192-67, 56 FR 63771, Dec. 5, 1991; Amdt. 192-78, 61 FR 28782, June 6, 1996; Amdt. 192-81, 62 FR 61695, Nov. 19, 1997; Amdt. 192-92, 68 FR 46112, Aug. 5, 2003; 70 FR 11139, Mar. 8, 2005; Amdt. 192-102, 71 FR 13301, Mar. 15, 2006; Amdt. 192-103, 72 FR 4656, Feb. 1, 2007]

R 460.20101 Applicability of rules.

- (1) These rules apply to the design, fabrication, installation, inspection, testing, and safety aspects of the operation and maintenance of gas pipeline facilities used in the transportation of gas.*
- (2) These rules do not apply to either of the following:*

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(a) The onshore gathering of gas under either of the following conditions:

(i) Through a pipeline that operates at less than 0 psig.

(ii) Through a pipeline that is not a regulated onshore gathering line as determined by 49 C.F.R. §192.8.

(b) Any pipeline system that transports only petroleum gas or petroleum gas and air mixtures under either of the following circumstances:

(i) The pipeline has fewer than 10 customers and no portion of the system is located in a public place.

(ii) The pipeline has only 1 customer.

(3) The work performed within the scope of these rules shall meet or exceed all of the safety standards in these rules.

History: 1998-2000 AACS; 2009 AACS; 2014 MR 24, Eff. Dec. 23, 2014.

R 460.20301 Scope.

(1) The rules contained in this part are additional requirements for the design, fabrication, installation, inspection, testing, and safety aspects of the operation and maintenance of gas pipeline facilities operated within the state of Michigan.

(2) Operators of pipeline facilities used in the transportation of gas that are under the jurisdiction of the commission shall meet all of the requirements of 49 C.F.R. §192, which is adopted by reference in R 460.20606, and all of the additional requirements in this part.

History: 1998-2000 AACS.

R 460.20401 Scope; conversion of existing pipeline to sour gas service.

SOUR GAS

(1) The rules in this part are additional requirements for the design, fabrication, installation, inspection, testing, and safety aspects of the operation and maintenance of gas pipeline facilities used in the transportation of sour gas.

(2) Operators of pipeline facilities used for the transportation of sour gas that are under the jurisdiction of the commission shall meet all of the requirements in parts 2, 3, and 5 of these rules, all of the requirements in 49 C.F.R. Part 192, which is adopted by reference in R 460.20606, and all of the additional requirements in this part.

(3) Existing pipeline facilities not designed and built for the transportation of sour gas shall not be converted for use in the transportation of sour gas without prior review and approval of the commission.

History: 1998-2000 AACS; 2003 AACS.

§192.3 Definitions.

As used in this part:

Abandoned means permanently removed from service.

Active Corrosion means continuing corrosion that, unless controlled, could result in a condition that is detrimental to public safety.

Administrator means the Administrator, Pipeline and Hazardous Materials Safety Administration or his or her delegate.

Alarm means an audible or visible means of indicating to the controller that equipment or processes are outside operator-defined, safety-related parameters.

Control Room means an operations center staffed by personnel charged with the responsibility for remotely monitoring and controlling a pipeline facility.

Controller means a qualified individual who remotely monitors and controls the safety-related operations of a pipeline facility via a SCADA system from a control room, and who has operational authority and accountability for the remote operational functions of the pipeline facility.

Customer Meter means the meter that measures the transfer of gas from an operator to a consumer.

Distribution Line means a pipeline other than a gathering or transmission line.

Electrical Survey means a series of closely spaced pipe-to-soil readings over pipelines which are subsequently analyzed to identify locations where a corrosive current is leaving the pipeline.

Exposed Underwater Pipeline means an underwater pipeline where the top of the pipe protrudes above the underwater natural bottom (as determined by recognized and generally accepted practices) in waters less than 15 feet (4.6 meters) deep, as measured from mean low water.

Gas means natural gas, flammable gas, or gas which is toxic or corrosive.

Gathering Line means a pipeline that transports gas from a current production facility to a transmission line or main.

Gulf of Mexico and Its Inlets means the waters from the mean high water mark of the coast of the Gulf of Mexico and its inlets open to the sea (excluding rivers, tidal marshes, lakes, and canals) seaward to include the territorial sea and Outer Continental Shelf to a depth of 15 feet (4.6 meters), as measured from the mean low water.

Hazard to Navigation means, for the purposes of this part, a pipeline where the top of the pipe is less than 12 inches (305 millimeters) below the underwater natural bottom (as determined by recognized and generally accepted practices) in waters less than 15 feet (4.6 meters) deep, as measured from the mean low water.

High-Pressure Distribution System means a distribution system in which the gas pressure in the main is higher than the pressure provided to the customer.

Line Section means a continuous run of transmission line between adjacent compressor stations, between a compressor station and storage facilities, between a compressor station and a block valve, or between adjacent block valves.

Listed Specification means a specification listed in section I of appendix B of this part.

Low-Pressure Distribution System means a distribution system in which the gas pressure in the main is substantially the same as the pressure provided to the customer.

Main means a distribution line that serves as a common source of supply for more than one service line.

Maximum Actual Operating Pressure means the maximum pressure that occurs during normal operations over a period of 1 year.

Maximum Allowable Operating Pressure (MAOP) means the maximum pressure at which a pipeline or segment of a pipeline may be operated under this part.

Municipality means a city, county, or any other political subdivision of a State.

Offshore means beyond the line of ordinary low water along that portion of the coast of the United States that is in direct contact with the open seas and beyond the line marking the seaward limit of inland waters.

Operator means a person who engages in the transportation of gas.

Outer Continental Shelf means all submerged lands lying seaward and outside the area of lands beneath navigable waters as defined in Section 2 of the Submerged Lands Act (43 U.S.C. 1301) and of which the subsoil and seabed appertain to the United States and are subject to its jurisdiction and control.

Person means any individual, firm, joint venture, partnership, corporation, association, State, municipality, cooperative association, or joint stock association, and including any trustee, receiver, assignee, or personal representative thereof.

Petroleum Gas means propane, propylene, butane, (normal butane or isobutanes), and butylene (including isomers), or mixtures composed predominantly of these gases, having a vapor pressure not exceeding 208 psi (1434 kPa) gage at 100 °F (38 °C).

Pipe means any pipe or tubing used in the transportation of gas, including pipe-type holders.

Pipeline means all parts of those physical facilities through which gas moves in transportation, including pipe, valves, and other appurtenance attached to pipe, compressor units, metering stations, regulator stations, delivery stations, holders, and fabricated assemblies.

Pipeline Environment includes soil resistivity (high or low), soil moisture (wet or dry), soil contaminants that may promote corrosive activity, and other known conditions that could affect the probability of active corrosion.

Pipeline Facility means new and existing pipelines, rights-of-way, and any equipment, facility, or building used in the transportation of gas or in the treatment of gas during the course of transportation.

Service Line means a distribution line that transports gas from a common source of supply to an individual customer, to two adjacent or adjoining residential or small commercial customers, or to multiple residential or small commercial customers served through a meter header or manifold. A service line ends at the outlet of the customer meter or at the connection to a customer's piping, whichever is further downstream, or at the connection to customer piping if there is no meter.

Service Regulator means the device on a service line that controls the pressure of gas delivered from a higher pressure to the pressure provided to the customer. A service regulator may serve one customer or multiple customers through a meter header or manifold.

SMYS means specified minimum yield strength is:

- (1) For steel pipe manufactured in accordance with a listed specification, the yield strength specified as a minimum in that specification; or

- (2) For steel pipe manufactured in accordance with an unknown or unlisted specification, the yield strength determined in accordance with §192.107(b).

State means each of the several States, the District of Columbia, and the Commonwealth of Puerto Rico.

Supervisory Control and Data Acquisition (SCADA) System means a computer-based system or systems used by a controller in a control room that collects and displays information about a pipeline facility and may have the ability to send commands back to the pipeline facility.

Transmission Line means a pipeline, other than a gathering line, that: (1) Transports gas from a gathering line or storage facility to a distribution center, storage facility, or large volume customer that is not downstream from a distribution center; (2) operates at a hoop stress of 20 percent or more of SMYS; or (3) transports gas within a storage field.

Note: A large volume customer may receive similar volumes of gas as a distribution center, and includes factories, power plants, and institutional users of gas.

Transportation of Gas means the gathering, transmission, or distribution of gas by pipeline or the storage of gas, in or affecting interstate or foreign commerce.

Underground natural gas storage facility means a facility that stores natural gas in an underground facility incident to natural gas transportation, including—

- (1) A depleted hydrocarbon reservoir;
- (2) An aquifer reservoir; or
- (3) A solution-mined salt cavern reservoir, including associated material and equipment used for injection, withdrawal, monitoring, or observation wells, and wellhead equipment, piping, rights-of-way, property, buildings, compressor units, separators, metering equipment, and regulator equipment.

Welder means a person who performs manual or semi-automatic welding.

Welding operator means a person who operates machine or automatic welding equipment.

[Amdt. 192-13, 38 FR 9084, Apr. 10, 1973]

Editorial Note: For Federal Register citations affecting §192.3, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and at www.fdsys.gov.

R 460.20102 Definitions.

As used in these rules:

- (a) **"Commission"** means the Michigan public service commission.
- (b) **"Corrosion"** means the destruction or deterioration of a material, usually a metal, by an electrochemical process, due to a reaction with the material's environment.
- (c) **"Customer"** means a person or company who purchases gas from a distributor for the person's or company's own use or for the use of a tenant, or both.
- (d) **"Hoop stress"** means the stress in a pipe wall which acts circumferentially in a plane perpendicular to the longitudinal axis of the pipe and which is produced by the pressure of the fluid in the pipe.
- (e) **"Leak"** means the unintentional escape of gas from a pipeline facility or a customer's facility.

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- (f) **"Leakage survey"** means a systematic inspection that is made to locate leaks in a gas pipeline.
- (g) **"Pressure"** means gauge pressure, unless otherwise stated, expressed in pounds per square inch above atmospheric pressure and is abbreviated **"psig."**
- (h) **"Sour gas"** means gas containing a concentration of hydrogen sulfide (H₂S) greater than or equal to 300 parts per million (ppm.).
- (i) **"System"** means all pipeline facilities used by a particular operator in the transportation of gas, including all of the following:
 - (A) Line pipe.
 - (B) Valves.
 - (C) Other appurtenances connected to line pipe.
 - (D) Compressor units.
 - (E) Fabricated assemblies associated with compressor units.
 - (F) Metering.
 - (G) Customers' meters.
 - (H) Delivery stations.
 - (I) Fabricated assemblies in metering and delivery stations.
- (j) **"Vault"** means an underground structure that may be entered and that is designed to contain piping and piping components, such as valves and pressure regulators. The terms "vault" and "pit" are used interchangeably in these rules.

History: 1998-2000 AACCS.

§192.5 Class locations.

- (a) This section classifies pipeline locations for purposes of this part. The following criteria apply to classifications under this section.
 - (1) A "class location unit" is an onshore area that extends 220 yards (200 meters) on either side of the centerline of any continuous 1- mile (1.6 kilometers) length of pipeline.
 - (2) Each separate dwelling unit in a multiple dwelling unit building is counted as a separate building intended for human occupancy.
- (b) Except as provided in paragraph (c) of this section, pipeline locations are classified as follows:
 - (1) A Class 1 location is:
 - (i) An offshore area; or
 - (ii) Any class location unit that has 10 or fewer buildings intended for human occupancy.
 - (2) A Class 2 location is any class location unit that has more than 10 but fewer than 46 buildings intended for human occupancy.
 - (3) A Class 3 location is:
 - (i) Any class location unit that has 46 or more buildings intended for human occupancy; or

- (ii) An area where the pipeline lies within 100 yards (91 meters) of either a building or a small, well-defined outside area (such as a playground, recreation area, outdoor theater, or other place of public assembly) that is occupied by 20 or more persons on at least 5 days a week for 10 weeks in any 12-month period. (The days and weeks need not be consecutive.)

(4) A Class 4 location is any class location unit where buildings with four or more stories above ground are prevalent.

(c) The length of Class locations 2, 3, and 4 may be adjusted as follows:

- (1) A Class 4 location ends 220 yards (200 meters) from the nearest building with four or more stories above ground.
- (2) When a cluster of buildings intended for human occupancy requires a Class 2 or 3 location, the class location ends 220 yards (200 meters) from the nearest building in the cluster.

[Amdt. 192-78, 61 FR 28783, June 6, 1996; 61 FR 35139, July 5, 1996, as amended by Amdt. 192-85, 63 FR 37502, July 13, 1998]

§192.7 What documents are incorporated by reference partly or wholly in this part?

(a) This part prescribes standards, or portions thereof, incorporated by reference into this part with the approval of the Director of the Federal Register in 5 U.S.C. 552(a) and 1 CFR part 51. The materials listed in this section have the full force of law. To enforce any edition other than that specified in this section, PHMSA must publish a notice of change in the Federal Register.

- (1) **Availability of standards incorporated by reference.** All of the materials incorporated by reference are available for inspection from several sources, including the following:
 - (i) The Office of Pipeline Safety, Pipeline and Hazardous Materials Safety Administration, 1200 New Jersey Avenue SE, Washington, DC 20590. For more information contact 202-366-4046 or go to the PHMSA Web site at: <http://www.phmsa.dot.gov/pipeline/regs>.
 - (ii) The National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030 or go to the NARA Web site at: http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.
 - (iii) Copies of standards incorporated by reference in this part can also be purchased or are otherwise made available from the respective standards-developing organization at the addresses provided in the centralized IBR section below.

(2) [Reserved]

(b) American Petroleum Institute (API), 1220 L Street NW., Washington, DC 20005, phone: 202-682-8000, <http://api.org/>.

- (1) API Recommended Practice 5L1, *“Recommended Practice for Railroad Transportation of Line Pipe,”* 7th edition, September 2009, (API RP 5L1), IBR approved for §192.65(a).
- (2) API Recommended Practice 5LT, *“Recommended Practice for Truck Transportation of Line Pipe,”* First edition, March 2012, (API RP 5LT), IBR approved for §192.65(c).
- (3) API Recommended Practice 5LW, *“Recommended Practice for Transportation of Line Pipe on Barges and Marine Vessels,”* 3rd edition, September 2009, (API RP 5LW), IBR approved for §192.65(b).

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- (4) API Recommended Practice 80, *“Guidelines for the Definition of Onshore Gas Gathering Lines,”* 1st edition, April 2000, (API RP 80), IBR approved for §192.8(a).
- (5) API Recommended Practice 1162, *“Public Awareness Programs for Pipeline Operators,”* 1st edition, December 2003, (API RP 1162), IBR approved for §192.616(a), (b), and (c).
- (6) API Recommended Practice 1165, *“Recommended Practice for Pipeline SCADA Displays,”* First edition, January 2007, (API RP 1165), IBR approved for §192.631(c).
- (7) API Specification 5L, *“Specification for Line Pipe,”* 45th edition, effective July 1, 2013, (API Spec 5L), IBR approved for §§192.55(e); 192.112(a), (b), (d), (e); 192.113; and Item I, Appendix B to Part 192.
- (8) ANSI/API Specification 6D, *“Specification for Pipeline Valves,”* 23rd edition, effective October 1, 2008, including Errata 1 (June 2008), Errata2 (/November 2008), Errata 3 (February 2009), Errata 4 (April 2010), Errata 5 (November 2010), Errata 6 (August 2011) Addendum 1 (October 2009), Addendum 2 (August 2011), and Addendum 3 (October 2012), (ANSI/API Spec 6D), IBR approved for §192.145(a).
- (9) API Standard 1104, *“Welding of Pipelines and Related Facilities,”* 20th edition, October 2005, including errata/addendum (July 2007) and errata 2 (2008), (API Std 1104), IBR approved for §§192.225(a); 192.227(a); 192.229(c); 192.241(c); and Item II, Appendix B.
- (10) API Recommended Practice 1170, *“Design and Operation of Solution-mined Salt Caverns Used for Natural Gas Storage,”* First edition, July 2015 (API RP 1170), IBR approved for §192.12.
- (11) API Recommended Practice 1171, *“Functional Integrity of Natural Gas Storage in Depleted Hydrocarbon Reservoirs and Aquifer Reservoirs,”* First edition, September 2015, (API RP 1171), IBR approved for §192.12.
- (c) ASME International (ASME), Three Park Avenue, New York, NY 10016, 800-843-2763 (U.S./Canada), <http://www.asme.org/>.
 - (1) ASME/ANSI B16.1-2005, *“Gray Iron Pipe Flanges and Flanged Fittings: (Classes 25, 125, and 250),”* August 31, 2006, (ASME/ANSI B16.1), IBR approved for §192.147(c).
 - (2) ASME/ANSI B16.5-2003, *“Pipe Flanges and Flanged Fittings,”* October 2004, (ASME/ANSI B16.5), IBR approved for §§192.147(a) and 192.279.
 - (3) ASME/ANSI B31G-1991 (Reaffirmed 2004), *“Manual for Determining the Remaining Strength of Corroded Pipelines,”* 2004, (ASME/ANSI B31G), IBR approved for §§192.485(c) and 192.933(a).
 - (4) ASME/ANSI B31.8-2007, *“Gas Transmission and Distribution Piping Systems,”* November 30, 2007, (ASME/ANSI B31.8), IBR approved for §§192.112(b) and 192.619(a).
 - (5) ASME/ANSI B31.8S-2004, *“Supplement to B31.8 on Managing System Integrity of Gas Pipelines,”* 2004, (ASME/ANSI B31.8S-2004), IBR approved for §§192.903 note to Potential impact radius; 192.907 introductory text, (b); 192.911 introductory text, (i), (k), (l), (m); 192.913(a), (b), (c); 192.917 (a), (b), (c), (d), (e); 192.921(a); 192.923(b); 192.925(b); 192.927(b), (c); 192.929(b); 192.933(c), (d); 192.935 (a), (b); 192.937(c); 192.939(a); and 192.945(a).
 - (6) ASME Boiler & Pressure Vessel Code, Section I, *“Rules for Construction of Power Boilers 2007,”* 2007 edition, July 1, 2007, (ASME BPVC, Section I), IBR approved for §192.153(b).
 - (7) ASME Boiler & Pressure Vessel Code, Section VIII, Division 1 *“Rules for Construction of Pressure Vessels,”* 2007 edition, July 1, 2007, (ASME BPVC, Section VIII, Division 1), IBR approved for §§192.153(a), (b), (d); and 192.165(b).

- (8) ASME Boiler & Pressure Vessel Code, Section VIII, Division 2 *“Alternate Rules, Rules for Construction of Pressure Vessels,”* 2007 edition, July 1, 2007, (ASME BPVC, Section VIII, Division 2), IBR approved for §§192.153(b), (d); and 192.165(b).
- (9) ASME Boiler & Pressure Vessel Code, Section IX: *“Qualification Standard for Welding and Brazing Procedures, Welders, Brazers, and Welding and Brazing Operators,”* 2007 edition, July 1, 2007, ASME BPVC, Section IX, IBR approved for §§192.225(a); 192.227(a); and Item II, Appendix B to Part 192.
- (d) American Society for Testing and Materials (ASTM), 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA 19428, phone: (610) 832-9585, Web site: <http://www.astm.org/>.
- (1) ASTM A53/A53M-10, *“Standard Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless,”* approved October 1, 2010, (ASTM A53/A53M), IBR approved for §192.113; and Item II, Appendix B to Part 192.
- (2) ASTM A106/A106M-10, *“Standard Specification for Seamless Carbon Steel Pipe for High-Temperature Service,”* approved October 1, 2010, (ASTM A106/A106M), IBR approved for §192.113; and Item I, Appendix B to Part 192.
- (3) ASTM A333/A333M-11, *“Standard Specification for Seamless and Welded Steel Pipe for Low-Temperature Service,”* approved April 1, 2011, (ASTM A333/A333M), IBR approved for §192.113; and Item I, Appendix B to Part 192.
- (4) ASTM A372/A372M-10, *“Standard Specification for Carbon and Alloy Steel Forgings for Thin-Walled Pressure Vessels,”* approved October 1, 2010, (ASTM A372/A372M), IBR approved for §192.177(b).
- (5) ASTM A381-96 (reapproved 2005), *“Standard Specification for Metal-Arc Welded Steel Pipe for Use with High-Pressure Transmission Systems,”* approved October 1, 2005, (ASTM A381), IBR approved for §192.113; and Item I, Appendix B to Part 192.
- (6) ASTM A578/A578M-96 (reapproved 2001), *“Standard Specification for Straight-Beam Ultrasonic Examination of Plain and Clad Steel Plates for Special Applications,”* (ASTM A578/A578M), IBR approved for §192.112(c).
- (7) ASTM A671/A671M-10, *“Standard Specification for Electric-Fusion-Welded Steel Pipe for Atmospheric and Lower Temperatures,”* approved April 1, 2010, (ASTM A671/A671M), IBR approved for §192.113; and Item I, Appendix B to Part 192.
- (8) ASTM A672/A672M-09, *“Standard Specification for Electric-Fusion-Welded Steel Pipe for High-Pressure Service at Moderate Temperatures,”* approved October 1, 2009, (ASTM A672/672M), IBR approved for §192.113 and Item I, Appendix B to Part 192.
- (9) ASTM A691/A691M-09, *“Standard Specification for Carbon and Alloy Steel Pipe, Electric-Fusion-Welded for High-Pressure Service at High Temperatures,”* approved October 1, 2009, (ASTM A691/A691M), IBR approved for §192.113 and Item I, Appendix B to Part 192.
- (10) ASTM D638-03, *“Standard Test Method for Tensile Properties of Plastics,”* 2003, (ASTM D638), IBR approved for §192.283(a) and (b).
- (11) ASTM D2513-87, *“Standard Specification for Thermoplastic Gas Pressure Pipe, Tubing, and Fittings,”* (ASTM D2513-87), IBR approved for §192.63(a).

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- (12) ASTM D2513-99, *“Standard Specification for Thermoplastic Gas Pressure Pipe, Tubing, and Fittings,”* (ASTM D 2513-99), IBR approved for §§192.191(b); 192.281(b); 192.283(a) and Item 1, Appendix B to Part 192.
- (13) ASTM D2513-09a, *“Standard Specification for Polyethylene (PE) Gas Pressure Pipe, Tubing, and Fittings,”* approved December 1, 2009, (ASTM D2513-09a), IBR approved for §§192.123(e); 192.191(b); 192.283(a); and Item 1, Appendix B to Part 192.
- (14) ASTM D2517-00, *“Standard Specification for Reinforced Epoxy Resin Gas Pressure Pipe and Fittings,”* (ASTM D 2517), IBR approved for §§192.191(a); 192.281(d); 192.283(a); and Item I, Appendix B to Part 192.
- (15) ASTM F1055-1998, *“Standard Specification for Electrofusion Type Polyethylene Fittings for Outside Diameter Controller Polyethylene Pipe and Tubing,”* (ASTM F1055), IBR approved for §192.283(a).
- (e) Gas Technology Institute (GTI), formerly the Gas Research Institute (GRI)), 1700 S. Mount Prospect Road, Des Plaines, IL 60018, phone: 847-768-0500, Web site: www.gastechnology.org.
 - (1) GRI 02/0057 (2002) *“Internal Corrosion Direct Assessment of Gas Transmission Pipelines Methodology,”* (GRI 02/0057), IBR approved for §192.927(c).
 - (2) [Reserved]
- (f) Manufacturers Standardization Society of the Valve and Fittings Industry, Inc. (MSS), 127 Park St. NE., Vienna, VA 22180, phone: 703-281-6613, Web site: <http://www.mss-hq.org/>.
 - (1) MSS SP-44-2010, Standard Practice, *“Steel Pipeline Flanges,”* 2010 edition, (including Errata (May 20, 2011)), (MSS SP-44), IBR approved for §192.147(a).
 - (2) [Reserved]
- (g) NACE International (NACE), 1440 South Creek Drive, Houston, TX 77084: phone: 281-228-6223 or 800-797-6223, Web site: <http://www.nace.org/Publications/>.
 - (1) ANSI/NACE SP0502-2010, Standard Practice, *“Pipeline External Corrosion Direct Assessment Methodology,”* revised June 24, 2010, (NACE SP0502), IBR approved for §§192.923(b); 192.925(b); 192.931(d); 192.935(b) and 192.939(a).
 - (2) [Reserved]
- (h) National Fire Protection Association (NFPA), 1 Batterymarch Park, Quincy, Massachusetts 02169, phone: 1 617 984-7275, Web site: <http://www.nfpa.org/>.
 - (1) NFPA-30 (2012), *“Flammable and Combustible Liquids Code,”* 2012 edition, June 20, 2011, including Errata 30-12-1 (September 27, 2011) and Errata 30-12-2 (November 14, 2011), (NFPA-30), IBR approved for §192.735(b).
 - (2) NFPA-58 (2004), *“Liquefied Petroleum Gas Code (LP-Gas Code),”* (NFPA-58), IBR approved for §192.11(a), (b), and (c).
 - (3) NFPA-59 (2004), *“Utility LP-Gas Plant Code,”* (NFPA-59), IBR approved for §192.11(a), (b); and (c).
 - (4) NFPA-70 (2011), *“National Electrical Code,”* 2011 edition, issued August 5, 2010, (NFPA-70), IBR approved for §§192.163(e); and 192.189(c).

- (i) Pipeline Research Council International, Inc. (PRCI), c/o Technical Toolboxes, 3801 Kirby Drive, Suite 520, P.O. Box 980550, Houston, TX 77098, phone: 713-630-0505, toll free: 866-866-6766, Web site: <http://www.ttoolboxes.com/>. (Contract number PR-3-805.)
 - (1) AGA, Pipeline Research Committee Project, PR-3-805, *“A Modified Criterion for Evaluating the Remaining Strength of Corroded Pipe,”* (December 22, 1989), (PRCI PR-3-805 (R-STRENG)), IBR approved for §192.485(c); 192.933(a) and (d).
 - (2) [Reserved]
- (j) Plastics Pipe Institute, Inc. (PPI), 105 Decker Court, Suite 825, Irving, TX 75062, phone: 469-499-1044, <http://www.plasticpipe.org/>.
 - (1) PPI TR-3/2008 HDB/HDS/PDB/SDB/MRS Policies (2008), *“Policies and Procedures for Developing Hydrostatic Design Basis (HDB), Pressure Design Basis (PDB), Strength Design Basis (SDB), and Minimum Required Strength (MRS) Ratings for Thermoplastic Piping Materials or Pipe,”* May 2008, IBR approved for §192.121.
 - (2) [Reserved]

[35 FR 13257, Aug. 19, 1970]

Editorial Note: For Federal Register citations affecting §192.7, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and at www.fdsys.gov.

§192.8 How are onshore gathering lines and regulated onshore gathering lines determined?

- (a) An operator must use API RP 80 (incorporated by reference, see §192.7), to determine if an onshore pipeline (or part of a connected series of pipelines) is an onshore gathering line. The determination is subject to the limitations listed below. After making this determination, an operator must determine if the onshore gathering line is a regulated onshore gathering line under paragraph (b) of this section.
 - (1) The beginning of gathering, under section 2.2(a)(1) of API RP 80, may not extend beyond the furthestmost downstream point in a production operation as defined in section 2.3 of API RP 80. This furthestmost downstream point does not include equipment that can be used in either production or transportation, such as separators or dehydrators, unless that equipment is involved in the processes of “production and preparation for transportation or delivery of hydrocarbon gas” within the meaning of “production operation.”
 - (2) The endpoint of gathering, under section 2.2(a)(1)(A) of API RP 80, may not extend beyond the first downstream natural gas processing plant, unless the operator can demonstrate, using sound engineering principles, that gathering extends to a further downstream plant.
 - (3) If the endpoint of gathering, under section 2.2(a)(1)(C) of API RP 80, is determined by the commingling of gas from separate production fields, the fields may not be more than 50 miles from each other, unless the Administrator finds a longer separation distance is justified in a particular case (see 49 CFR §190.9).
 - (4) The endpoint of gathering, under section 2.2(a)(1)(D) of API RP 80, may not extend beyond the furthestmost downstream compressor used to increase gathering line pressure for delivery to another pipeline.

Section Three: Subpart A – §192.9

(b) For purposes of §192.9, “regulated onshore gathering line” means:

- (1) Each onshore gathering line (or segment of onshore gathering line) with a feature described in the second column that lies in an area described in the third column; and
- (2) As applicable, additional lengths of line described in the fourth column to provide a safety buffer:

Type	Feature	Area	Safety buffer
A	<p>—Metallic and the MAOP produces a hoop stress of 20 percent or more of SMYS. If the stress level is unknown, an operator must determine the stress level according to the applicable provisions in subpart C of this part</p> <p>—Non-metallic and the MAOP is more than 125 psig (862 kPa)</p>	Class 2, 3, or 4 location (see §192.5)	None.
B	<p>—Metallic and the MAOP produces a hoop stress of less than 20 percent of SMYS. If the stress level is unknown, an operator must determine the stress level according to the applicable provisions in subpart C of this part</p> <p>—Non-metallic and the MAOP is 125 psig (862 kPa) or less</p>	<p>Area 1. Class 3 or 4 location</p> <p>Area 2. An area within a Class 2 location the operator determines by using any of the following three methods:</p> <p>(a) A Class 2 location.</p> <p>(b) An area extending 150 feet (45.7 m) on each side of the centerline of any continuous 1 mile (1.6 km) of pipeline and including more than 10 but fewer than 46 dwellings</p> <p>(c) An area extending 150 feet (45.7 m) on each side of the centerline of any continuous 1000 feet (305 m) of pipeline and including 5 or more dwellings</p>	<p>If the gathering line is in Area 2(b) or 2(c), the additional lengths of line extend upstream and downstream from the area to a point where the line is at least 150 feet (45.7 m) from the nearest dwelling in the area. However, if a cluster of dwellings in Area 2 (b) or 2(c) qualifies a line as Type B, the Type B classification ends 150 feet (45.7 m) from the nearest dwelling in the cluster.</p>

[Amdt. 192-102, 71 FR 13289, Mar. 15, 2006]

§192.9 What requirements apply to gathering lines?

- (a) **Requirements.** An operator of a gathering line must follow the safety requirements of this part as prescribed by this section.
- (b) **Offshore lines.** An operator of an offshore gathering line must comply with requirements of this part applicable to transmission lines, except the requirements in §192.150 and in subpart O of this part.
- (c) **Type A lines.** An operator of a Type A regulated onshore gathering line must comply with the requirements of this part applicable to transmission lines, except the requirements in §192.150 and in

subpart O of this part. However, an operator of a Type A regulated onshore gathering line in a Class 2 location may demonstrate compliance with subpart N by describing the processes it uses to determine the qualification of persons performing operations and maintenance tasks.

(d) **Type B lines.** An operator of a Type B regulated onshore gathering line must comply with the following requirements:

- (1) If a line is new, replaced, relocated, or otherwise changed, the design, installation, construction, initial inspection, and initial testing must be in accordance with requirements of this part applicable to transmission lines;
- (2) If the pipeline is metallic, control corrosion according to requirements of subpart I of this part applicable to transmission lines;
- (3) Carry out a damage prevention program under §192.614;
- (4) Establish a public education program under §192.616;
- (5) Establish the MAOP of the line under §192.619; and
- (6) Install and maintain line markers according to the requirements for transmission lines in §192.707.
- (7) Conduct leakage surveys in accordance with §192.706 using leak detection equipment and promptly repair hazardous leaks that are discovered in accordance with §192.703(c).

(e) **Compliance deadlines.** An operator of a regulated onshore gathering line must comply with the following deadlines, as applicable.

- (1) An operator of a new, replaced, relocated, or otherwise changed line must be in compliance with the applicable requirements of this section by the date the line goes into service, unless an exception in §192.13 applies.
- (2) If a regulated onshore gathering line existing on April 14, 2006 was not previously subject to this part, an operator has until the date stated in the second column to comply with the applicable requirement for the line listed in the first column, unless the Administrator finds a later deadline is justified in a particular case:

REQUIREMENT	COMPLIANCE DEADLINE
Control corrosion according to Subpart I requirements for transmission lines	April 15, 2009
Carry out a damage prevention program under §192.614	October 15, 2007
Establish MAOP under §192.619	October 15, 2007
Install and maintain line markers under §192.707	April 15, 2008
Establish a public education program under §192.616	April 15, 2008
Other provisions of this part as required by paragraph (c) of this section for Type A lines	April 15, 2009

- (3) If, after April 14, 2006, a change in class location or increase in dwelling density causes an onshore gathering line to be a regulated onshore gathering line, the operator has 1 year for Type B lines and 2 years for Type A lines after the line becomes a regulated onshore gathering line to comply with this section.

[Amdt. 192-102, 71 FR 13301, Mar. 15, 2006, as amended by Amdt. 192-120, 80 FR 12777, Mar. 11, 2015]

§192.10 Outer continental shelf pipelines.

Operators of transportation pipelines on the Outer Continental Shelf (as defined in the Outer Continental Shelf Lands Act; 43 U.S.C. 1331) must identify on all their respective pipelines the specific points at which operating responsibility transfers to a producing operator. For those instances in which the transfer points are not identifiable by a durable marking, each operator will have until September 15, 1998 to identify the transfer points. If it is not practicable to durably mark a transfer point and the transfer point is located above water, the operator must depict the transfer point on a schematic located near the transfer point. If a transfer point is located subsea, then the operator must identify the transfer point on a schematic which must be maintained at the nearest upstream facility and provided to PHMSA upon request. For those cases in which adjoining operators have not agreed on a transfer point by September 15, 1998 the Regional Director and the MMS Regional Supervisor will make a joint determination of the transfer point.

[Amdt. 192-81, 62 FR 61695, Nov. 19, 1997, as amended at 70 FR 11139, Mar. 8, 2005]

§192.11 Petroleum gas systems.

- (a) Each plant that supplies petroleum gas by pipeline to a natural gas distribution system must meet the requirements of this part and NFPA 58 and NFPA 59.
- (b) Each pipeline system subject to this part that transports only petroleum gas or petroleum gas/air mixtures must meet the requirements of this part and of ANSI/NFPA 58 and 59 (incorporated by reference, see §192.7).
- (c) In the event of a conflict between this part and NFPA 58 and NFPA 59 (incorporated by reference, see §192.7), NFPA 58 and NFPA 59 prevail.

[Amdt. 192-78, 61 FR 28783, June 6, 1996, as amended by Amdt. 192-119, 80 FR 180, Jan. 5, 2015; 80 FR 46847, Aug. 6, 2015]

§192.12 Underground natural gas storage facilities.

Underground natural gas storage facilities must meet the following requirements:

- (a) Each underground natural gas storage facility that uses a solution-mined salt cavern reservoir for gas storage constructed after July 18, 2017 must meet all requirements and recommendations of API RP 1170 (incorporated by reference, see §192.7).
- (b) Each underground natural gas storage facility that uses a solution-mined salt cavern reservoir for storage including those constructed not later than July 18, 2017 must meet the operations, maintenance, integrity demonstration and verification, monitoring, threat and hazard identification, assessment, remediation, site security, emergency response and preparedness, and recordkeeping requirements and recommendations of API RP 1170, sections 9, 10, and 11 (incorporated by reference, see §192.7) by January 18, 2018.
- (c) Each underground natural gas storage facility that uses a depleted hydrocarbon reservoir or an aquifer reservoir for storage constructed after July 18, 2017 must meet all requirements and recommendations of API RP 1171 (incorporated by reference, see §192.7).
- (d) Each underground natural gas storage facility that uses a depleted hydrocarbon reservoir or an aquifer

reservoir for gas storage, including those constructed not later than July 18, 2017 must meet the operations, maintenance, integrity demonstration and verification, monitoring, threat and hazard identification, assessment, remediation, site security, emergency response and preparedness, and recordkeeping requirements and recommendations of API RP 1171, sections 8, 9, 10, and 11 (incorporated by reference, see §192.7) by January 18, 2018.

- (e) Operators of underground gas storage facilities must establish and follow written procedures for operations, maintenance, and emergencies implementing the requirements of API RP 1170 and API RP 1171, as required under this section, including the effective dates as applicable, and incorporate such procedures into their written procedures for operations, maintenance, and emergencies established pursuant to §192.605.
- (f) With respect to the incorporation by reference of API RP 1170 and API RP 1171 in this section, the non-mandatory provisions (i.e., provisions containing the word “should” or other non-mandatory language) are adopted as mandatory provisions under the authority of the pipeline safety laws except when the operator includes or references written technical justifications in its program or procedural manual, described in paragraph (a)(5) of this section, as to why compliance with a provision of the recommended practice is not practicable and not necessary for safety with respect to specified underground storage facilities or equipment. The justifications for any deviation from any provision of API RP 1170 and API RP 1171 must be technically reviewed and documented by a subject matter expert to ensure there will be no adverse impact on design, construction, operations, maintenance, integrity, emergency preparedness and response, and overall safety and must be dated and approved by a senior executive officer, vice president, or higher office with responsibility of the underground natural gas storage facility. An operator must discontinue use of any variance where PHMSA determines and provides notice that the variance adversely impacts design, construction, operations, maintenance, integrity, emergency preparedness and response, or overall safety.

[Amdt. 192-122, 81 FR 91873, Dec. 19, 2016]

§192.13 What general requirements apply to pipelines regulated under this part?

- (a) No person may operate a segment of pipeline listed in the first column that is readied for service after the date in the second column, unless:
- (1) The pipeline has been designed, installed, constructed, initially inspected, and initially tested in accordance with this part; or
 - (2) The pipeline qualifies for use under this part according to the requirements in §192.14.

PIPELINE	DATE
Offshore gathering line	July 31, 1977
Regulated onshore gathering line to which this part did not apply until April 14, 2006	March 15 2007
All other pipelines	March 12, 1971

- (b) No person may operate a segment of pipeline listed in the first column that is replaced, relocated, or otherwise changed after the date in the second column, unless the replacement, relocation or change has been made according to the requirements in this part.

Section Three: Subpart A – §192.14

PIPELINE	DATE
Offshore gathering line	July 31, 1977.
Regulated onshore gathering line to which this part did not apply until April 14, 2006	March 15, 2007.
All other pipelines	November 12, 1970.

- (c) Each operator shall maintain, modify as appropriate, and follow the plans, procedures, and programs that it is required to establish under this part.

[35 FR 13257, Aug. 19, 1970, as amended by Amdt. 192-27, 41 FR 34605, Aug. 16, 1976; Amdt. 192-30, 42 FR 60148, Nov. 25, 1977; Amdt. 192-102, 71 FR 13303, Mar. 15, 2006]

§192.14 Conversion to service subject to this part.

- (a) A steel pipeline previously used in service not subject to this part qualifies for use under this part if the operator prepares and follows a written procedure to carry out the following requirements:
- (1) The design, construction, operation, and maintenance history of the pipeline must be reviewed and, where sufficient historical records are not available, appropriate tests must be performed to determine if the pipeline is in a satisfactory condition for safe operation.
 - (2) The pipeline right-of-way, all aboveground segments of the pipeline, and appropriately selected underground segments must be visually inspected for physical defects and operating conditions which reasonably could be expected to impair the strength or tightness of the pipeline.
 - (3) All known unsafe defects and conditions must be corrected in accordance with this part.
 - (4) The pipeline must be tested in accordance with subpart J of this part to substantiate the maximum allowable operating pressure permitted by subpart L of this part.
- (b) Each operator must keep for the life of the pipeline a record of the investigations, tests, repairs, replacements, and alterations made under the requirements of paragraph (a) of this section.
- (c) An operator converting a pipeline from service not previously covered by this part must notify PHMSA 60 days before the conversion occurs as required by §191.22 of this chapter.

[Amdt. 192-30, 42 FR 60148, Nov. 25, 1977, as amended by Amdt. 192-123, 82 FR 7997, Jan. 23, 2017]

§192.15 Rules of regulatory construction.

- (a) As used in this part:

Includes means including but not limited to.

May means “is permitted to” or “is authorized to.”

May not means “is not permitted to” or “is not authorized to.”

Shall is used in the mandatory and imperative sense.

- (b) In this part:

- (1) Words importing the singular include the plural;
- (2) Words importing the plural include the singular; and

(3) Words importing the masculine gender include the feminine.

§192.16 Customer notification.

- (a) This section applies to each operator of a service line who does not maintain the customer's buried piping up to entry of the first building downstream, or, if the customer's buried piping does not enter a building, up to the principal gas utilization equipment or the first fence (or wall) that surrounds that equipment. For the purpose of this section, "customer's buried piping" does not include branch lines that serve yard lanterns, pool heaters, or other types of secondary equipment. Also, "maintain" means monitor for corrosion according to §192.465 if the customer's buried piping is metallic, survey for leaks according to §192.723, and if an unsafe condition is found, shut off the flow of gas, advise the customer of the need to repair the unsafe condition, or repair the unsafe condition.
- (b) Each operator shall notify each customer once in writing of the following information:
- (1) The operator does not maintain the customer's buried piping.
 - (2) If the customer's buried piping is not maintained, it may be subject to the potential hazards of corrosion and leakage.
 - (3) Buried gas piping should be—
 - (i) Periodically inspected for leaks;
 - (ii) Periodically inspected for corrosion if the piping is metallic; and
 - (iii) Repaired if any unsafe condition is discovered.
 - (4) When excavating near buried gas piping, the piping should be located in advance, and the excavation done by hand.
 - (5) The operator (if applicable), plumbing contractors, and heating contractors can assist in locating, inspecting, and repairing the customer's buried piping.
- (c) Each operator shall notify each customer not later than August 14, 1996, or 90 days after the customer first receives gas at a particular location, whichever is later. However, operators of master meter systems may continuously post a general notice in a prominent location frequented by customers.
- (d) Each operator must make the following records available for inspection by the Administrator or a State agency participating under 49 U.S.C. 60105 or 60106:
- (1) A copy of the notice currently in use; and
 - (2) Evidence that notices have been sent to customers within the previous 3 years.

[Amdt. 192-74, 60 FR 41828, Aug. 14, 1995, as amended by Amdt. 192-74A, 60 FR 63451, Dec. 11, 1995; Amdt. 192-83, 63 FR 7723, Feb. 17, 1998]

Subpart B—Materials

§192.51 Scope.

This subpart prescribes minimum requirements for the selection and qualification of pipe and components for use in pipelines.

§192.53 General.

Materials for pipe and components must be:

- (a) Able to maintain the structural integrity of the pipeline under temperature and other environmental conditions that may be anticipated;
- (b) Chemically compatible with any gas that they transport and with any other material in the pipeline with which they are in contact; and
- (c) Qualified in accordance with the applicable requirements of this subpart.

§192.55 Steel pipe.

- (a) New steel pipe is qualified for use under this part if:
 - (1) It was manufactured in accordance with a listed specification;
 - (2) It meets the requirements of—
 - (i) Section II of appendix B to this part; or
 - (ii) If it was manufactured before November 12, 1970, either section II or III of appendix B to this part; or
 - (3) It is used in accordance with paragraph (c) or (d) of this section.
- (b) Used steel pipe is qualified for use under this part if:
 - (1) It was manufactured in accordance with a listed specification and it meets the requirements of paragraph II-C of appendix B to this part;
 - (2) It meets the requirements of:
 - (i) Section II of appendix B to this part; or
 - (ii) If it was manufactured before November 12, 1970, either section II or III of appendix B to this part;
 - (3) It has been used in an existing line of the same or higher pressure and meets the requirements of paragraph II-C of appendix B to this part; or
 - (4) It is used in accordance with paragraph (c) of this section.
- (c) New or used steel pipe may be used at a pressure resulting in a hoop stress of less than 6,000 p.s.i. (41 MPa) where no close coiling or close bending is to be done, if visual examination indicates that the pipe is

in good condition and that it is free of split seams and other defects that would cause leakage. If it is to be welded, steel pipe that has not been manufactured to a listed specification must also pass the weldability tests prescribed in paragraph II-B of appendix B to this part.

- (d) Steel pipe that has not been previously used may be used as replacement pipe in a segment of pipeline if it has been manufactured prior to November 12, 1970, in accordance with the same specification as the pipe used in constructing that segment of pipeline.
- (e) New steel pipe that has been cold expanded must comply with the mandatory provisions of API Spec 5L (incorporated by reference, see §192.7).

[35 FR 13257, Aug. 19, 1970, as amended by Amdt. 191-1, 35 FR 17660, Nov. 17, 1970; Amdt. 192-12, 38 FR 4761, Feb. 22, 1973; Amdt. 192-51, 51 FR 15335, Apr. 23, 1986; 58 FR 14521, Mar. 18, 1993; Amdt. 192-85, 63 FR 37502, July 13, 1998; Amdt. 192-119, 80 FR 180, Jan. 5, 2015; 80 FR 46847, Aug. 6, 2015]

R 460.20402 Materials for pipe and components; requirements.

SOUR GAS

In addition to the requirements in 49 C.F.R. §192.55, which is adopted by reference in R 460.20606, metallic materials for pipe and other components used to transport sour gas shall meet the requirements in the national association of corrosion engineers international standard NACE MR0175/ISO 15156, 2004-2007, which are adopted by reference in R 460.20605.

History: 1998-2000 AACS; 2003 AACS; 2009 AACS; 2010 AACS.

§192.57 [Reserved]

§192.59 Plastic pipe.

- (a) New plastic pipe is qualified for use under this part if:
 - (1) It is manufactured in accordance with a listed specification; and
 - (2) It is resistant to chemicals with which contact may be anticipated.
- (b) Used plastic pipe is qualified for use under this part if:
 - (1) It was manufactured in accordance with a listed specification;
 - (2) It is resistant to chemicals with which contact may be anticipated;
 - (3) It has been used only in natural gas service;
 - (4) Its dimensions are still within the tolerances of the specification to which it was manufactured; and
 - (5) It is free of visible defects.
- (c) For the purpose of paragraphs (a)(1) and (b)(1) of this section, where pipe of a diameter included in a listed specification is impractical to use, pipe of a diameter between the sizes included in a listed specification may be used if it:
 - (1) Meets the strength and design criteria required of pipe included in that listed specification; and

Section Three: Subpart A – §192.3

(2) Is manufactured from plastic compounds which meet the criteria for material required of pipe included in that listed specification.

(d) Rework and/or regrind material is not allowed in plastic pipe produced after March 6, 2015 used under this part.

[35 FR 13257, Aug. 19, 1970, as amended by Amdt. 192-19, 40 FR 10472, Mar. 6, 1975; Amdt. 192-58, 53 FR 1635, Jan. 21, 1988; Amdt. 192-119, 80 FR 180, Jan. 5, 2015]

§192.61 [Reserved]

§192.63 Marking of materials.

(a) Except as provided in paragraph (d) of this section, each valve, fitting, length of pipe, and other component must be marked—

(1) As prescribed in the specification or standard to which it was manufactured, except that thermoplastic pipe and fittings made of plastic materials other than polyethylene must be marked in accordance with ASTM D2513-87 (incorporated by reference, see §192.7);

(2) To indicate size, material, manufacturer, pressure rating, and temperature rating, and as appropriate, type, grade, and model.

(b) Surfaces of pipe and components that are subject to stress from internal pressure may not be field die stamped.

(c) If any item is marked by die stamping, the die must have blunt or rounded edges that will minimize stress concentrations.

(d) Paragraph (a) of this section does not apply to items manufactured before November 12, 1970, that meet all of the following:

(1) The item is identifiable as to type, manufacturer, and model.

(2) Specifications or standards giving pressure, temperature, and other appropriate criteria for the use of items are readily available.

[Amdt. 192-1, 35 FR 17660, Nov. 17, 1970, as amended by Amdt. 192-31, 43 FR 883, Apr. 3, 1978; Amdt. 192-61, 53 FR 36793, Sept. 22, 1988; Amdt. 192-62, 54 FR 5627, Feb. 6, 1989; Amdt. 192-61A, 54 FR 32642, Aug. 9, 1989; 58 FR 14521, Mar. 18, 1993; Amdt. 192-76, 61 FR 26122, May 24, 1996; 61 FR 36826, July 15, 1996; Amdt. 192-114, 75 FR 48603, Aug. 11, 2010; Amdt. 192-119, 80 FR 180, Jan. 5, 2015]

§192.65 Transportation of pipe.

(a) **Railroad.** In a pipeline to be operated at a hoop stress of 20 percent or more of SMYS, an operator may not install pipe having an outer diameter to wall thickness of 70 to 1, or more, that is transported by railroad unless the transportation is performed by API RP 5L1 (incorporated by reference, see §192.7).

(b) **Ship or barge.** In a pipeline to be operated at a hoop stress of 20 percent or more of SMYS, an operator may not use pipe having an outer diameter to wall thickness ratio of 70 to 1, or more, that is transported

by ship or barge on both inland and marine waterways unless the transportation is performed in accordance with API RP 5LW (incorporated by reference, see §192.7).

- (c) **Truck.** In a pipeline to be operated at a hoop stress of 20 percent or more of SMYS, an operator may not use pipe having an outer diameter to wall thickness ratio of 70 to 1, or more, that is transported by truck unless the transportation is performed in accordance with API RP 5LT (incorporated by reference, see §192.7).

[Amdt. 192-114, 75 FR 48603, Aug. 11, 2010, as amended by Amdt. 192-119, 80 FR 180, Jan. 5, 2015; Amdt. 192-120, 80 FR 12777, Mar. 11, 2015]

DRAFT

Subpart C—Pipe Design

§192.101 Scope.

This subpart prescribes the minimum requirements for the design of pipe.

§192.103 General.

Pipe must be designed with sufficient wall thickness, or must be installed with adequate protection, to withstand anticipated external pressures and loads that will be imposed on the pipe after installation.

§192.105 Design formula for steel pipe.

(a) The design pressure for steel pipe is determined in accordance with the following formula:

$$P = \left(\frac{2St}{D} \right) * F * E * T$$

P =Design pressure in pounds per square inch (kPa) gauge.

S =Yield strength in pounds per square inch (kPa) determined in accordance with §192.107.

D =Nominal outside diameter of the pipe in inches (millimeters).

t =Nominal wall thickness of the pipe in inches (millimeters). If this is unknown, it is determined in accordance with §192.109. Additional wall thickness required for concurrent external loads in accordance with §192.103 may not be included in computing design pressure.

F =Design factor determined in accordance with §192.111.

E =Longitudinal joint factor determined in accordance with §192.113.

T =Temperature derating factor determined in accordance with §192.115.

(b) If steel pipe that has been subjected to cold expansion to meet the SMYS is subsequently heated, other than by welding or stress relieving as a part of welding, the design pressure is limited to 75 percent of the pressure determined under paragraph (a) of this section if the temperature of the pipe exceeds 900 °F (482 °C) at any time or is held above 600 °F (316 °C) for more than 1 hour.

[35 FR 13257, Aug. 19, 1970, as amended by Amdt. 192-47, 49 FR 7569, Mar. 1, 1984; Amdt. 192-85, 63 FR 37502, July 13, 1998]

R 460.20403 Steel pipe; design formula.

SOUR GAS

In addition to the requirements set forth in 49 C.F.R. §192.105 through §192.115, which are adopted by reference in R 460.20606, steel pipe designed for use in the transportation of sour gas shall use a design factor of 0.40.

History: 1998-2000 AACS; 2003 AACS.

§192.107 Yield strength (S) for steel pipe.

- (a) For pipe that is manufactured in accordance with a specification listed in section I of appendix B of this part, the yield strength to be used in the design formula in §192.105 is the SMYS stated in the listed specification, if that value is known.
- (b) For pipe that is manufactured in accordance with a specification not listed in section I of appendix B to this part or whose specification or tensile properties are unknown, the yield strength to be used in the design formula in §192.105 is one of the following:
- (1) If the pipe is tensile tested in accordance with section II-D of appendix B to this part, the lower of the following:
 - (i) 80 percent of the average yield strength determined by the tensile tests.
 - (ii) The lowest yield strength determined by the tensile tests.
 - (2) If the pipe is not tensile tested as provided in paragraph (b)(1) of this section, 24,000 p.s.i. (165 MPa).

[35 FR 13257, Aug. 19, 1970, as amended by Amdt. 192-78, 61 FR 28783, June 6, 1996; Amdt. 192-83, 63 FR 7723, Feb. 17, 1998; Amdt. 192-85, 63 FR 37502, July 13, 1998]

§192.109 Nominal wall thickness (t) for steel pipe.

- (a) If the nominal wall thickness for steel pipe is not known, it is determined by measuring the thickness of each piece of pipe at quarter points on one end.
- (b) However, if the pipe is of uniform grade, size, and thickness and there are more than 10 lengths, only 10 percent of the individual lengths, but not less than 10 lengths, need be measured. The thickness of the lengths that are not measured must be verified by applying a gauge set to the minimum thickness found by the measurement. The nominal wall thickness to be used in the design formula in §192.105 is the next wall thickness found in commercial specifications that is below the average of all the measurements taken. However, the nominal wall thickness used may not be more than 1.14 times the smallest measurement taken on pipe less than 20 inches (508 millimeters) in outside diameter, nor more than 1.11 times the smallest measurement taken on pipe 20 inches (508 millimeters) or more in outside diameter.

[35 FR 13257, Aug. 19, 1970, as amended by Amdt. 192-85, 63 FR 37502, July 13, 1998]

§192.111 Design factor (F) for steel pipe.

- (a) Except as otherwise provided in paragraphs (b), (c), and (d) of this section, the design factor to be used in the design formula in §192.105 is determined in accordance with the following table:

CLASS LOCATION	DESIGN FACTOR (F)
1	0.72
2	0.60
3	0.50
4	0.40

Section Three: Subpart C – §192.112

- (b) A design factor of 0.60 or less must be used in the design formula in §192.105 for steel pipe in Class 1 locations that:
- (1) Crosses the right-of-way of an unimproved public road, without a casing;
 - (2) Crosses without a casing, or makes a parallel encroachment on, the right-of-way of either a hard surfaced road, a highway, a public street, or a railroad;
 - (3) Is supported by a vehicular, pedestrian, railroad, or pipeline bridge; or
 - (4) Is used in a fabricated assembly, (including separators, mainline valve assemblies, cross-connections, and river crossing headers) or is used within five pipe diameters in any direction from the last fitting of a fabricated assembly, other than a transition piece or an elbow used in place of a pipe bend which is not associated with a fabricated assembly.
- (c) For Class 2 locations, a design factor of 0.50, or less, must be used in the design formula in §192.105 for uncased steel pipe that crosses the right-of-way of a hard surfaced road, a highway, a public street, or a railroad.
- (d) For Class 1 and Class 2 locations, a design factor of 0.50, or less, must be used in the design formula in §192.105 for—
- (1) Steel pipe in a compressor station, regulating station, or measuring station; and
 - (2) Steel pipe, including a pipe riser, on a platform located offshore or in inland navigable waters.

[35 FR 13257, Aug. 19, 1970, as amended by Amdt. 192-27, 41 FR 34605, Aug. 16, 1976]

§192.112 Additional design requirements for steel pipe using alternative maximum allowable operating pressure.

For a new or existing pipeline segment to be eligible for operation at the alternative maximum allowable operating pressure (MAOP) calculated under §192.620, a segment must meet the following additional design requirements. Records for alternative MAOP must be maintained, for the useful life of the pipeline, demonstrating compliance with these requirements:

To address this design issue:	The pipeline segment must meet these additional requirements:
(a) General standards for the steel pipe	(1) The plate, skelp, or coil used for the pipe must be micro-alloyed, fine grain, fully killed, continuously cast steel with calcium treatment.
	(2) The carbon equivalents of the steel used for pipe must not exceed 0.25 percent by weight, as calculated by the Ito-Bessyo formula (Pcm formula) or 0.43 percent by weight, as calculated by the International Institute of Welding (IIW) formula.
	(3) The ratio of the specified outside diameter of the pipe to the specified wall thickness must be less than 100. The wall thickness or other mitigative measures must prevent denting and ovality anomalies during construction, strength testing and anticipated operational stresses.
	(4) The pipe must be manufactured using API Spec 5L, product specification level 2 (incorporated by reference, see §192.7) for maximum operating pressures and minimum and maximum operating temperatures and other requirements under this section.

To address this design issue:	The pipeline segment must meet these additional requirements:
(b) Fracture control	<p>(1) The toughness properties for pipe must address the potential for initiation, propagation and arrest of fractures in accordance with:</p> <ul style="list-style-type: none"> (i) API Spec 5L (incorporated by reference, see §192.7); or (ii) American Society of Mechanical Engineers (ASME) B31.8 (incorporated by reference, see §192.7); and (iii) Any correction factors needed to address pipe grades, pressures, temperatures, or gas compositions not expressly addressed in API Spec 5L, product specification level 2 or ASME B31.8 (incorporated by reference, see §192.7). <p>(2) Fracture control must:</p> <ul style="list-style-type: none"> (i) Ensure resistance to fracture initiation while addressing the full range of operating temperatures, pressures, gas compositions, pipe grade and operating stress levels, including maximum pressures and minimum temperatures for shut-in conditions, that the pipeline is expected to experience. If these parameters change during operation of the pipeline such that they are outside the bounds of what was considered in the design evaluation, the evaluation must be reviewed and updated to assure continued resistance to fracture initiation over the operating life of the pipeline; (ii) Address adjustments to toughness of pipe for each grade used and the decompression behavior of the gas at operating parameters; (iii) Ensure at least 99 percent probability of fracture arrest within eight pipe lengths with a probability of not less than 90 percent within five pipe lengths; and (iv) Include fracture toughness testing that is equivalent to that described in supplementary requirements SR5A, SR5B, and SR6 of API Specification 5L (incorporated by reference, see §192.7) and ensures ductile fracture and arrest with the following exceptions: <ul style="list-style-type: none"> (A) The results of the Charpy impact test prescribed in SR5A must indicate at least 80 percent minimum shear area for any single test on each heat of steel; and (B) The results of the drop weight test prescribed in SR6 must indicate 80 percent average shear area with a minimum single test result of 60 percent shear area for any steel test samples. The test results must ensure a ductile fracture and arrest. <p>(3) If it is not physically possible to achieve the pipeline toughness properties of paragraphs (b)(1) and (2) of this section, additional design features, such as mechanical or composite crack arrestors and/or heavier walled pipe of proper design and spacing, must be used to ensure fracture arrest as described in paragraph (b)(2)(iii) of this section.</p>
(c) Plate/coil quality control	<p>(1) There must be an internal quality management program at all mills involved in producing steel, plate, coil, skelp, and/or rolling pipe to be operated at alternative MAOP. These programs must be structured to eliminate or detect defects and inclusions affecting pipe quality.</p> <p>(2) A mill inspection program or internal quality management program must include (i) and either (ii) or (iii):</p> <ul style="list-style-type: none"> (i) An ultrasonic test of the ends and at least 35 percent of the surface of the plate/coil or pipe to identify imperfections that impair serviceability such as laminations, cracks, and inclusions. At least 95 percent of the lengths of pipe manufactured must be tested. For all pipelines designed after December 22, 2008, the test must be done in accordance with ASTM A578/A578M Level B, or API Spec 5L Paragraph 7.8.10 (incorporated by reference, see §192.7) or equivalent method, and either

To address this design issue:	The pipeline segment must meet these additional requirements:
(c) Plate/coil quality control	<p>(ii) A macro etch test or other equivalent method to identify inclusions that may form centerline segregation during the continuous casting process. Use of sulfur prints is not an equivalent method. The test must be carried out on the first or second slab of each sequence graded with an acceptance criteria of one or two on the Mannesmann scale or equivalent; or</p> <p>(iii) A quality assurance monitoring program implemented by the operator that includes audits of: (a) all steelmaking and casting facilities, (b) quality control plans and manufacturing procedure specifications, (c) equipment maintenance and records of conformance, (d) applicable casting superheat and speeds, and (e) centerline segregation monitoring records to ensure mitigation of centerline segregation during the continuous casting process.</p>
(d) Seam quality control	<p>(1) There must be a quality assurance program for pipe seam welds to assure tensile strength provided in API Spec 5L (incorporated by reference, see §192.7) for appropriate grades.</p> <p>(2) There must be a hardness test, using Vickers (Hv10) hardness test method or equivalent test method, to assure a maximum hardness of 280 Vickers of the following:</p> <p>(i) A cross section of the weld seam of one pipe from each heat plus one pipe from each welding line per day; and</p> <p>(ii) For each sample cross section, a minimum of 13 readings (three for each heat affected zone, three in the weld metal, and two in each section of pipe base metal).</p> <p>(3) All of the seams must be ultrasonically tested after cold expansion and mill hydrostatic testing.</p>
(e) Mill hydrostatic test	<p>(1) All pipe to be used in a new pipeline segment installed after October 1, 2015, must be hydrostatically tested at the mill at a test pressure corresponding to a hoop stress of 95 percent SMYS for 10 seconds.</p> <p>(2) Pipe in operation prior to December 22, 2008, must have been hydrostatically tested at the mill at a test pressure corresponding to a hoop stress of 90 percent SMYS for 10 seconds.</p> <p>(3) Pipe in operation on or after December 22, 2008, but before October 1, 2015, must have been hydrostatically tested at the mill at a test pressure corresponding to a hoop stress of 95 percent SMYS for 10 seconds. The test pressure may include a combination of internal test pressure and the allowance for end loading stresses imposed by the pipe mill hydrostatic testing equipment as allowed by "ANSI/API Spec 5L" (incorporated by reference, see §192.7).</p>
(f) Coating	<p>(1) The pipe must be protected against external corrosion by a non-shielding coating.</p> <p>(2) Coating on pipe used for trenchless installation must be non-shielding and resist abrasions and other damage possible during installation.</p> <p>(3) A quality assurance inspection and testing program for the coating must cover the surface quality of the bare pipe, surface cleanliness and chlorides, blast cleaning, application temperature control, adhesion, cathodic disbondment, moisture permeation, bending, coating thickness, holiday detection, and repair.</p>
(g) Fittings and flanges	<p>(1) There must be certification records of flanges, factory induction bends and factory weld ells. Certification must address material properties such as chemistry, minimum yield strength and minimum wall thickness to meet design conditions.</p> <p>(2) If the carbon equivalents of flanges, bends and ells are greater than 0.42 percent by weight, the qualified welding procedures must include a pre-heat procedure.</p> <p>(3) Valves, flanges and fittings must be rated based upon the required specification rating class for the alternative MAOP.</p>

To address this design issue:	The pipeline segment must meet these additional requirements:
(h) Compressor stations	(1) A compressor station must be designed to limit the temperature of the nearest downstream segment operating at alternative MAOP to a maximum of 120 degrees Fahrenheit (49 degrees Celsius) or the higher temperature allowed in paragraph (h)(2) of this section unless a long-term coating integrity monitoring program is implemented in accordance with paragraph (h)(3) of this section.
	(2) If research, testing and field monitoring tests demonstrate that the coating type being used will withstand a higher temperature in long-term operations, the compressor station may be designed to limit downstream piping to that higher temperature. Test results and acceptance criteria addressing coating adhesion, cathodic disbondment, and coating condition must be provided to each PHMSA pipeline safety regional office where the pipeline is in service at least 60 days prior to operating above 120 degrees Fahrenheit (49 degrees Celsius). An operator must also notify a State pipeline safety authority when the pipeline is located in a State where PHMSA has an interstate agent agreement, or an intrastate pipeline is regulated by that State.
	(3) Pipeline segments operating at alternative MAOP may operate at temperatures above 120 degrees Fahrenheit (49 degrees Celsius) if the operator implements a long-term coating integrity monitoring program. The monitoring program must include examinations using direct current voltage gradient (DCVG), alternating current voltage gradient (ACVG), or an equivalent method of monitoring coating integrity. An operator must specify the periodicity at which these examinations occur and criteria for repairing identified indications. An operator must submit its long-term coating integrity monitoring program to each PHMSA pipeline safety regional office in which the pipeline is located for review before the pipeline segments may be operated at temperatures in excess of 120 degrees Fahrenheit (49 degrees Celsius). An operator must also notify a State pipeline safety authority when the pipeline is located in a State where PHMSA has an interstate agent agreement, or an intrastate pipeline is regulated by that State.

[73 FR 62175, Oct. 17, 2008, as amended by Amdt. 192-111, 74 FR 62505, Nov. 30, 2009; Amdt. 192-119, 80 FR 180, Jan. 5, 2015; Amdt. 192-120, 80 FR 12777, Mar. 11, 2015]

§192.113 Longitudinal joint factor (E) for steel pipe.

The longitudinal joint factor to be used in the design formula in §192.105 is determined in accordance with the following table:

SPECIFICATION	PIPE CLASS	LONGITUDINAL JOINT FACTOR (E)
ASTM A 53/A53M	Seamless	1.00
	Electric resistance welded	1.00
	Furnace butt welded	.60
ASTM A 106	Seamless	1.00
ASTM A 333/A 333M	Seamless	1.00
	Electric resistance welded	1.00
ASTM A 381	Double submerged arc welded	1.00
ASTM A 671	Electric-fusion-welded	1.00
ASTM A 672	Electric-fusion-welded	1.00
ASTM A 691	Electric-fusion-welded	1.00
API Spec 5L	Seamless	1.00

SPECIFICATION	PIPE CLASS	LONGITUDINAL JOINT FACTOR (E)
API Spec 5L	Electric resistance welded	1.00
	Electric flash welded	1.00
	Submerged arc welded	1.00
	Furnace butt welded	.60
Other	Pipe over 4 inches (102 millimeters)	.80
Other	Pipe 4 inches (102 millimeters) or less	.60

If the type of longitudinal joint cannot be determined, the joint factor to be used must not exceed that designated for “Other.”

[Amdt. 192-37, 46 FR 10159, Feb. 2, 1981, as amended by Amdt. 192-51, 51 FR 15335, Apr. 23, 1986; Amdt. 192-62, 54 FR 5627, Feb. 6, 1989; 58 FR 14521, Mar. 18, 1993; Amdt. 192-85, 63 FR 37502, July 13, 1998; Amdt. 192-94, 69 FR 32894, June 14, 2004]

§192.115 Temperature derating factor (T) for steel pipe.

The temperature derating factor to be used in the design formula in §192.105 is determined as follows:

GAS TEMPERATURE IN DEGREES FAHRENHEIT (CELSIUS)	TEMPERATURE DERATING FACTOR (T)
250 °F (121 °C) or less	1.000
300 °F (149 °C)	0.967
350 °F (177 °C)	0.933
400 °F (204 °C)	0.900
450 °F (232 °C)	0.867

For intermediate gas temperatures, the derating factor is determined by interpolation.

[35 FR 13257, Aug. 19, 1970, as amended by Amdt. 192-85, 63 FR 37502, July 13, 1998]

§192.117 [Reserved]

§192.119 [Reserved]

§192.121 Design of plastic pipe.

Subject to the limitations of §192.123, the design pressure for plastic pipe is determined by either of the following formulas:

$$P = 2S \frac{t}{(D - t)} (DF)$$

$$P = \frac{2S}{(SDR - 1)} (DF)$$

Where:

P = Design pressure, gauge, psig (kPa).

S = For thermoplastic pipe, the HDB is determined in accordance with the listed specification at a temperature equal to 73 °F (23 °C), 100 °F (38 °C), 120 °F (49 °C), or 140 °F (60 °C). In the absence of an HDB established at the specified temperature, the HDB of a higher temperature may be used in determining a design pressure rating at the specified temperature by arithmetic interpolation using the procedure in Part D.2 of PPI TR-3/2008, HDB/PDB/SDB/MRS Policies (incorporated by reference, see §192.7). For reinforced thermosetting plastic pipe, 11,000 psig (75,842 kPa). [Note: Arithmetic interpolation is not allowed for PA-11 pipe.]

t = Specified wall thickness, inches (mm).

D = Specified outside diameter, inches (mm).

SDR = Standard dimension ratio, the ratio of the average specified outside diameter to the minimum specified wall thickness, corresponding to a value from a common numbering system that was derived from the American National Standards Institute preferred number series 10.

$DF = 0.32$ or

$= 0.40$ for PA-11 pipe produced after January 23, 2009 with a nominal pipe size (IPS or CTS) 4-inch or less, and a SDR of 11 or greater (i.e. thicker pipe wall).

[Amdt. 192-111, 74 FR 62505, Nov. 30, 2009, as amended by Amdt. 192-114, 75 FR 48603, Aug. 11, 2010]

§192.123 Design limitations for plastic pipe.

(a) Except as provided in paragraph (e) and paragraph (f) of this section, the design pressure may not exceed a gauge pressure of 100 psig (689 kPa) for plastic pipe used in:

- (1) Distribution systems; or
- (2) Classes 3 and 4 locations.

(b) Plastic pipe may not be used where operating temperatures of the pipe will be:

- (1) Below -20 °F (-20 °C), or -40 °F (-40 °C) if all pipe and pipeline components whose operating temperature will be below -29 °C (-20 °F) have a temperature rating by the manufacturer consistent with that operating temperature; or

(2) Above the following applicable temperatures:

- (i) For thermoplastic pipe, the temperature at which the HDB used in the design formula under §192.121 is determined.
- (ii) For reinforced thermosetting plastic pipe, 150 °F (66 °C).

(c) The wall thickness for thermoplastic pipe may not be less than 0.062 inches (1.57 millimeters).

(d) The wall thickness for reinforced thermosetting plastic pipe may not be less than that listed in the following table:

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NOMINAL SIZE IN INCHES (MILLIMETERS).	MINIMUM WALL THICKNESS INCHES (MILLIMETERS).
2 (51)	0.060 (1.52)
3 (76)	0.060 (1.52)
4 (102)	0.070 (1.78)
6 (152)	0.100 (2.54)

- (e) The design pressure for thermoplastic pipe produced after July 14, 2004 may exceed a gauge pressure of 100 psig (689 kPa) provided that:
- (1) The design pressure does not exceed 125 psig (862 kPa);
 - (2) The material is a polyethylene (PE) pipe with the designation code as specified within ASTM D2513-09a (incorporated by reference, see §192.7);
 - (3) The pipe size is nominal pipe size (IPS) 12 or less; and
 - (4) The design pressure is determined in accordance with the design equation defined in §192.121.
- (f) The design pressure for polyamide-11 (PA-11) pipe produced after January 23, 2009 may exceed a gauge pressure of 100 psig (689 kPa) provided that:
- (1) The design pressure does not exceed 200 psig (1379 kPa);
 - (2) The pipe size is nominal pipe size (IPS or CTS) 4-inch or less; and
 - (3) The pipe has a standard dimension ratio of SDR-11 or greater (i.e., thicker pipe wall).

[35 FR 13257, Aug. 19, 1970, as amended by Amdt. 192-31, 43 FR 13883, Apr. 3, 1978; Amdt. 192-78, 61 FR 28783, June 6, 1996; Amdt. 192-85, 63 FR 37502, July 13, 1998; Amdt. 192-93, 68 FR 53900, Sept. 15, 2003; 69 FR 32894, June 14, 2004; Amdt. 192-94, 69 FR 54592, Sept. 9, 2004; Amdt. 192-103, 71 FR 33407, June 9, 2006; 73 FR 79005, Dec. 24, 2008; Amdt. 192-114, 75 FR 48603, Aug. 11, 2010; Amdt. 192-119, 80 FR 181, Jan. 5, 2015]

§192.125 Design of copper pipe.

- (a) Copper pipe used in mains must have a minimum wall thickness of 0.065 inches (1.65 millimeters) and must be hard drawn.
- (b) Copper pipe used in service lines must have wall thickness not less than that indicated in the following table:

STANDARD SIZE INCH (MILLIMETER)	NOMINAL O.D. INCH (MILLIMETER)	WALL THICKNESS INCH (MILLIMETER)	
		NOMINAL	TOLERANCE
½ (13)	.625 (16)	.040 (1.06)	.0035 (.0889)
5/8 (16)	.750 (19)	.042 (1.07)	.0035 (.0889)
¾ (19)	.875 (22)	.045 (1.14)	.004 (.102)
1 (25)	1.125 (29)	.050 (1.27)	.004 (.102)
1 ¼ (32)	1.375 (35)	.055 (1.40)	.0045 (.1143)
1 ½ (38)	1.625 (41)	.060 (1.52)	.0045 (.1143)

- (c) Copper pipe used in mains and service lines may not be used at pressures in excess of 100 p.s.i. (689 kPa) gage.

- (d) Copper pipe that does not have an internal corrosion resistant lining may not be used to carry gas that has an average hydrogen sulfide content of more than 0.3 grains/100 ft³ (6.9/m³) under standard conditions. Standard conditions refers to 60 °F and 14.7 psia (15.6 °C and one atmosphere) of gas.

[35 FR 13257, Aug. 19, 1970, as amended by Amdt. 192-62, 54 FR 5628, Feb. 6, 1989; Amdt. 192-85, 63 FR 37502, July 13, 1998]

DRAFT

Subpart D—Design of Pipeline Components

§192.141 Scope.

This subpart prescribes minimum requirements for the design and installation of pipeline components and facilities. In addition, it prescribes requirements relating to protection against accidental overpressuring.

§192.143 General requirements.

- (a) Each component of a pipeline must be able to withstand operating pressures and other anticipated loadings without impairment of its serviceability with unit stresses equivalent to those allowed for comparable material in pipe in the same location and kind of service. However, if design based upon unit stresses is impractical for a particular component, design may be based upon a pressure rating established by the manufacturer by pressure testing that component or a prototype of the component.
- (b) The design and installation of pipeline components and facilities must meet applicable requirements for corrosion control found in subpart I of this part.

[Amdt. 48, 49 FR 19824, May 10, 1984 as amended at 72 FR 20059, Apr. 23, 2007]

§192.144 Qualifying metallic components.

Notwithstanding any requirement of this subpart which incorporates by reference an edition of a document listed in §192.7 or Appendix B of this part, a metallic component manufactured in accordance with any other edition of that document is qualified for use under this part if—

- (a) It can be shown through visual inspection of the cleaned component that no defect exists which might impair the strength or tightness of the component; and
- (b) The edition of the document under which the component was manufactured has equal or more stringent requirements for the following as an edition of that document currently or previously listed in §192.7 or appendix B of this part:
 - (1) Pressure testing;
 - (2) Materials; and
 - (3) Pressure and temperature ratings.

[Amdt. 192-45, 48 FR 30639, July 5, 1983, as amended by Amdt. 192-94, 69 FR 32894, June 14, 2004]

§192.145 Valves.

- (a) Except for cast iron and plastic valves, each valve must meet the minimum requirements of ANSI/API Spec 6D (incorporated by reference, see §192.7), or to a national or international standard that provides an equivalent performance level. A valve may not be used under operating conditions that exceed the applicable pressure-temperature ratings contained in those requirements.

(b) Each cast iron and plastic valve must comply with the following:

- (1) The valve must have a maximum service pressure rating for temperatures that equal or exceed the maximum service temperature.
- (2) The valve must be tested as part of the manufacturing, as follows:
 - (i) With the valve in the fully open position, the shell must be tested with no leakage to a pressure at least 1.5 times the maximum service rating.
 - (ii) After the shell test, the seat must be tested to a pressure not less than 1.5 times the maximum service pressure rating. Except for swing check valves, test pressure during the seat test must be applied successively on each side of the closed valve with the opposite side open. No visible leakage is permitted.
 - (iii) After the last pressure test is completed, the valve must be operated through its full travel to demonstrate freedom from interference.

(c) Each valve must be able to meet the anticipated operating conditions.

(d) No valve having shell (body, bonnet, cover, and/or end flange) components made of ductile iron may be used at pressures exceeding 80 percent of the pressure ratings for comparable steel valves at their listed temperature. However, a valve having shell components made of ductile iron may be used at pressures up to 80 percent of the pressure ratings for comparable steel valves at their listed temperature, if:

- (1) The temperature-adjusted service pressure does not exceed 1,000 p.s.i. (7 Mpa) gage; and
- (2) Welding is not used on any ductile iron component in the fabrication of the valve shells or their assembly.

(e) No valve having shell (body, bonnet, cover, and/or end flange) components made of cast iron, malleable iron, or ductile iron may be used in the gas pipe components of compressor stations.

[35 FR 13257, Aug. 19, 1970, as amended by Amdt. 192-62, 54 FR 5628, Feb. 6, 1989; Amdt. 192-85, 63 FR 37502, July 13, 1998; Amdt. 192-94, 69 FR 32894, June 14, 2004; Amdt. 192-114, 75 FR 48603, Aug. 11, 2010; Amdt. 192-119, 80 FR 181, Jan. 5, 2015]

R 460.20405 Valves; qualification for sour gas service.

SOUR GAS

An operator shall ensure that valves used for sour gas service are qualified for sour gas service in accordance with the national association of corrosion engineers international standard MR0175/ISO 15156, 2004-2007, which is adopted by reference in R460.20605. R460.20605.

History: 1998-2000 AACS; 2003 AACS; 2009 AACS; 2010 AACS

§192.147 Flanges and flange accessories.

- (a) Each flange or flange accessory (other than cast iron) must meet the minimum requirements of ASME/ANSI B 16.5 and MSS SP-44 (incorporated by reference, see §192.7) , or the equivalent.
- (b) Each flange assembly must be able to withstand the maximum pressure at which the pipeline is to be operated and to maintain its physical and chemical properties at any temperature to which it is anticipated that it might be subjected in service.

- (c) Each flange on a flanged joint in cast iron pipe must conform in dimensions, drilling, face and gasket design to ASME/ANSI B16.1 (incorporated by reference, see §192.7) and be cast integrally with the pipe, valve, or fitting.

[35 FR 13257, Aug. 19, 1970, as amended by Amdt. 192-62, 54 FR 5628, Feb. 6, 1989; 58 FR 14521, Mar. 18, 1993; Amdt. 192-119, 80 FR 181, Jan. 5, 2015]

§192.149 Standard fittings.

- (a) The minimum metal thickness of threaded fittings may not be less than specified for the pressures and temperatures in the applicable standards referenced in this part, or their equivalent.
- (b) Each steel butt-welding fitting must have pressure and temperature ratings based on stresses for pipe of the same or equivalent material. The actual bursting strength of the fitting must at least equal the computed bursting strength of pipe of the designated material and wall thickness, as determined by a prototype that was tested to at least the pressure required for the pipeline to which it is being added.

§192.150 Passage of internal inspection devices.

- (a) Except as provided in paragraphs (b) and (c) of this section, each new transmission line and each replacement of line pipe, valve, fitting, or other line component in a transmission line must be designed and constructed to accommodate the passage of instrumented internal inspection devices.
- (b) This section does not apply to:
 - (1) Manifolds;
 - (2) Station piping such as at compressor stations, meter stations, or regulator stations;
 - (3) Piping associated with storage facilities, other than a continuous run of transmission line between a compressor station and storage facilities;
 - (4) Cross-overs;
 - (5) Sizes of pipe for which an instrumented internal inspection device is not commercially available;
 - (6) Transmission lines, operated in conjunction with a distribution system which are installed in Class 4 locations;
 - (7) Offshore transmission lines, except transmission lines 10 ¾ inches (273 millimeters) or more in outside diameter on which construction begins after December 28, 2005, that run from platform to platform or platform to shore unless—
 - (i) Platform space or configuration is incompatible with launching or retrieving instrumented internal inspection devices; or
 - (ii) If the design includes taps for lateral connections, the operator can demonstrate, based on investigation or experience, that there is no reasonably practical alternative under the design circumstances to the use of a tap that will obstruct the passage of instrumented internal inspection devices; and

- (8) Other piping that, under §190.9 of this chapter, the Administrator finds in a particular case would be impracticable to design and construct to accommodate the passage of instrumented internal inspection devices.
- (c) An operator encountering emergencies, construction time constraints or other unforeseen construction problems need not construct a new or replacement segment of a transmission line to meet paragraph (a) of this section, if the operator determines and documents why an impracticability prohibits compliance with paragraph (a) of this section. Within 30 days after discovering the emergency or construction problem the operator must petition, under §190.9 of this chapter, for approval that design and construction to accommodate passage of instrumented internal inspection devices would be impracticable. If the petition is denied, within 1 year after the date of the notice of the denial, the operator must modify that segment to allow passage of instrumented internal inspection devices.

[Amdt. 192-72, 59 FR 17281, Apr. 12, 1994, as amended by Amdt. 192-85, 63 FR 37502, July 13, 1998; Amdt. 192-97, 69 FR 36029, June 28, 2004]

§192.151 Tapping.

- (a) Each mechanical fitting used to make a hot tap must be designed for at least the operating pressure of the pipeline.
- (b) Where a ductile iron pipe is tapped, the extent of full-thread engagement and the need for the use of outside-sealing service connections, tapping saddles, or other fixtures must be determined by service conditions.
- (c) Where a threaded tap is made in cast iron or ductile iron pipe, the diameter of the tapped hole may not be more than 25 percent of the nominal diameter of the pipe unless the pipe is reinforced, except that
 - (1) Existing taps may be used for replacement service, if they are free of cracks and have good threads; and
 - (2) A 1 ¼ -inch (32 millimeters) tap may be made in a 4-inch (102 millimeters) cast iron or ductile iron pipe, without reinforcement.

However, in areas where climate, soil, and service conditions may create unusual external stresses on cast iron pipe, unreinforced taps may be used only on 6-inch (152 millimeters) or larger pipe.

[35 FR 13257, Aug. 19, 1970, as amended by Amdt. 192-85, 63 FR 37502, July 13, 1998]

§192.153 Components fabricated by welding.

- (a) Except for branch connections and assemblies of standard pipe and fittings joined by circumferential welds, the design pressure of each component fabricated by welding, whose strength cannot be determined, must be established in accordance with paragraph UG-101 of the ASME Boiler and Pressure Vessel Code (BPVC) (Section VIII, Division 1) (incorporated by reference, see §192.7).
- (b) Each prefabricated unit that uses plate and longitudinal seams must be designed, constructed, and tested in accordance with section 1 of the ASME BPVC (Section VIII, Division 1 or Section VIII, Division 2) (incorporated by reference, see §192.7), except for the following:
 - (1) Regularly manufactured butt-welding fittings.

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- (2) Pipe that has been produced and tested under a specification listed in appendix B to this part.
- (3) Partial assemblies such as split rings or collars.
- (4) Prefabricated units that the manufacturer certifies have been tested to at least twice the maximum pressure to which they will be subjected under the anticipated operating conditions.
- (c) Orange-peel bull plugs and orange-peel swages may not be used on pipelines that are to operate at a hoop stress of 20 percent or more of the SMYS of the pipe.
- (d) Except for flat closures designed in accordance with the ASME BPVC (Section VIII, Division 1 or 2), flat closures and fish tails may not be used on pipe that either operates at 100 p.s.i. (689 kPa) gage or more, or is more than 3 inches in (76 millimeters) nominal diameter.
- (e) A component having a design pressure established in accordance with paragraph (a) or paragraph (b) of this section and subject to the strength testing requirements of §192.505(b) must be tested to at least 1.5 times the MAOP.

[35 FR 13257, Aug. 19, 1970, as amended by Amdt. 192-1, 35 FR 17660, Nov. 17, 1970; 58 FR 14521, Mar. 18, 1993; Amdt. 192-68, 58 FR 45268, Aug. 27, 1993; Amdt. 192-85, 63 FR 37502, July 13, 1998; Amdt. 192-119, 80 FR 181, Jan. 5, 2015; Amdt. 192-120, 80 FR 12778, Mar. 11, 2015; Amdt. 192-119, 80 FR 46847, Aug. 6, 2015]

§192.155 Welded branch connections.

Each welded branch connection made to pipe in the form of a single connection, or in a header or manifold as a series of connections, must be designed to ensure that the strength of the pipeline system is not reduced, taking into account the stresses in the remaining pipe wall due to the opening in the pipe or header, the shear stresses produced by the pressure acting on the area of the branch opening, and any external loadings due to thermal movement, weight, and vibration.

§192.157 Extruded outlets.

Each extruded outlet must be suitable for anticipated service conditions and must be at least equal to the design strength of the pipe and other fittings in the pipeline to which it is attached.

§192.159 Flexibility.

Each pipeline must be designed with enough flexibility to prevent thermal expansion or contraction from causing excessive stresses in the pipe or components, excessive bending or unusual loads at joints, or undesirable forces or moments at points of connection to equipment, or at anchorage or guide points.

§192.161 Supports and anchors.

- (a) Each pipeline and its associated equipment must have enough anchors or supports to:
 - (1) Prevent undue strain on connected equipment;
 - (2) Resist longitudinal forces caused by a bend or offset in the pipe; and

- (3) Prevent or damp out excessive vibration.
- (b) Each exposed pipeline must have enough supports or anchors to protect the exposed pipe joints from the maximum end force caused by internal pressure and any additional forces caused by temperature expansion or contraction or by the weight of the pipe and its contents.
- (c) Each support or anchor on an exposed pipeline must be made of durable, noncombustible material and must be designed and installed as follows:
 - (1) Free expansion and contraction of the pipeline between supports or anchors may not be restricted.
 - (2) Provision must be made for the service conditions involved.
 - (3) Movement of the pipeline may not cause disengagement of the support equipment.
- (d) Each support on an exposed pipeline operated at a stress level of 50 percent or more of SMYS must comply with the following:
 - (1) A structural support may not be welded directly to the pipe.
 - (2) The support must be provided by a member that completely encircles the pipe.
 - (3) If an encircling member is welded to a pipe, the weld must be continuous and cover the entire circumference.
- (e) Each underground pipeline that is connected to a relatively unyielding line or other fixed object must have enough flexibility to provide for possible movement, or it must have an anchor that will limit the movement of the pipeline.
- (f) Except for offshore pipelines, each underground pipeline that is being connected to new branches must have a firm foundation for both the header and the branch to prevent detrimental lateral and vertical movement.

[35 FR 13257, Aug. 19, 1970, as amended by Amdt. 192-58, 53 FR 1635, Jan. 21, 1988]

§192.163 Compressor stations: Design and construction.

- (a) **Location of compressor building.** Except for a compressor building on a platform located offshore or in inland navigable waters, each main compressor building of a compressor station must be located on property under the control of the operator. It must be far enough away from adjacent property, not under control of the operator, to minimize the possibility of fire being communicated to the compressor building from structures on adjacent property. There must be enough open space around the main compressor building to allow the free movement of fire-fighting equipment.
- (b) **Building construction.** Each building on a compressor station site must be made of noncombustible materials if it contains either—
 - (1) Pipe more than 2 inches (51 millimeters) in diameter that is carrying gas under pressure; or
 - (2) Gas handling equipment other than gas utilization equipment used for domestic purposes.
- (c) **Exits.** Each operating floor of a main compressor building must have at least two separated and unobstructed exits located so as to provide a convenient possibility of escape and an unobstructed passage to a place of safety. Each door latch on an exit must be of a type which can be readily opened

from the inside without a key. Each swinging door located in an exterior wall must be mounted to swing outward.

- (d) **Fenced areas.** Each fence around a compressor station must have at least two gates located so as to provide a convenient opportunity for escape to a place of safety, or have other facilities affording a similarly convenient exit from the area. Each gate located within 200 feet (61 meters) of any compressor plant building must open outward and, when occupied, must be openable from the inside without a key.
- (e) **Electrical facilities.** Electrical equipment and wiring installed in compressor stations must conform to the NFPA-70, so far as that code is applicable.

[35 FR 13257, Aug. 19, 1970, as amended by Amdt. 192-27, 41 FR 34605, Aug. 16, 1976; Amdt. 192-37, 46 FR 10159, Feb. 2, 1981; 58 FR 14521, Mar. 18, 1993; Amdt. 192-85, 63 FR 37502, 37503, July 13, 1998; Amdt. 192-119, 80 FR 181, Jan. 5, 2015]

R 460.20302 Compressor station piping.

- (1) *An operator shall install and test gas piping, other than instrument, control, and sample piping, in accordance with these rules.*
- (2) *An operator shall identify all emergency valves and controls by signs. An operator shall identify important gas pressure piping by signs or color coding to indicate its function.*
- (3) *An operator shall ensure that fuel gas lines within a compressor station conform to both of the following provisions:*
- (a) *Are provided with master shutoff valves located outside of a building.*
- (b) *Are equipped with pressure limiting devices to prevent the maximum allowable operating pressure from being exceeded by more than 10%.*
- (4) *An operator shall equip the air piping within a compressor station that is part of an air starter with a check valve in the starting air line near each engine to prevent backflow from the engine into the air piping system. An operator shall also place a similar check valve in the main air line on the immediate outlet side of the air tank or tanks. An operator shall install equipment for cooling the air and removing the moisture and entrained oil between the starting air compressor and the air storage tank.*

History: 1998-2000 AACCS; 2009 AACCS.

§192.165 Compressor stations: Liquid removal.

- (a) Where entrained vapors in gas may liquefy under the anticipated pressure and temperature conditions, the compressor must be protected against the introduction of those liquids in quantities that could cause damage.
- (b) Each liquid separator used to remove entrained liquids at a compressor station must:
- (1) Have a manually operable means of removing these liquids.
- (2) Where slugs of liquid could be carried into the compressors, have either automatic liquid removal facilities, an automatic compressor shutdown device, or a high liquid level alarm; and
- (3) Be manufactured in accordance with section VIII ASME Boiler and Pressure Vessel Code (BPVC) (incorporated by reference, see §192.7) and the additional requirements of §192.153(e) except that

liquid separators constructed of pipe and fittings without internal welding must be fabricated with a design factor of 0.4, or less.

[35 FR 13257, Aug. 19, 1970, as amended by Amdt. 192-119, 80 FR 181, Jan. 5, 2015; Amdt. 192-120, 80 FR 12778, Mar. 11, 2015]

§192.167 Compressor stations: Emergency shutdown.

- (a) Except for unattended field compressor stations of 1,000 horsepower (746 kilowatts) or less, each compressor station must have an emergency shutdown system that meets the following:
 - (1) It must be able to block gas out of the station and blow down the station piping.
 - (2) It must discharge gas from the blowdown piping at a location where the gas will not create a hazard.
 - (3) It must provide means for the shutdown of gas compressing equipment, gas fires, and electrical facilities in the vicinity of gas headers and in the compressor building, except that:
 - (i) Electrical circuits that supply emergency lighting required to assist station personnel in evacuating the compressor building and the area in the vicinity of the gas headers must remain energized; and
 - (ii) Electrical circuits needed to protect equipment from damage may remain energized.
 - (4) It must be operable from at least two locations, each of which is:
 - (i) Outside the gas area of the station;
 - (ii) Near the exit gates, if the station is fenced, or near emergency exits, if not fenced; and
 - (iii) Not more than 500 feet (153 meters) from the limits of the station.
- (b) If a compressor station supplies gas directly to a distribution system with no other adequate source of gas available, the emergency shutdown system must be designed so that it will not function at the wrong time and cause an unintended outage on the distribution system.
- (c) On a platform located offshore or in inland navigable waters, the emergency shutdown system must be designed and installed to actuate automatically by each of the following events:
 - (1) In the case of an unattended compressor station:
 - (i) When the gas pressure equals the maximum allowable operating pressure plus 15 percent; or
 - (ii) When an uncontrolled fire occurs on the platform; and
 - (2) In the case of a compressor station in a building:
 - (i) When an uncontrolled fire occurs in the building; or
 - (ii) When the concentration of gas in air reaches 50 percent or more of the lower explosive limit in a building which has a source of ignition.

For the purpose of paragraph (c)(2)(ii) of this section, an electrical facility which conforms to Class 1, Group D, of the National Electrical Code is not a source of ignition.

[35 FR 13257, Aug. 19, 1970, as amended by Amdt. 192-27, 41 FR 34605, Aug. 16, 1976; Amdt. 192-85, 63 FR 37503, July 13, 1998]

R 460.20406 Compressor station; emergency shutdown.

SOUR GAS

In addition to the requirements set forth in 49 C.F.R. §192.167(a)(2), which is adopted by reference in R 460.20606, if there is an emergency shutdown, all gas released from sour gas pipeline facilities shall be flared in a manner that minimizes the danger to the general public.

History: 2003 AACS

§192.169 Compressor stations: Pressure limiting devices.

- (a) Each compressor station must have pressure relief or other suitable protective devices of sufficient capacity and sensitivity to ensure that the maximum allowable operating pressure of the station piping and equipment is not exceeded by more than 10 percent.
- (b) Each vent line that exhausts gas from the pressure relief valves of a compressor station must extend to a location where the gas may be discharged without hazard.

§192.171 Compressor stations: Additional safety equipment.

- (a) Each compressor station must have adequate fire protection facilities. If fire pumps are a part of these facilities, their operation may not be affected by the emergency shutdown system.
- (b) Each compressor station prime mover, other than an electrical induction or synchronous motor, must have an automatic device to shut down the unit before the speed of either the prime mover or the driven unit exceeds a maximum safe speed.
- (c) Each compressor unit in a compressor station must have a shutdown or alarm device that operates in the event of inadequate cooling or lubrication of the unit.
- (d) Each compressor station gas engine that operates with pressure gas injection must be equipped so that stoppage of the engine automatically shuts off the fuel and vents the engine distribution manifold.
- (e) Each muffler for a gas engine in a compressor station must have vent slots or holes in the baffles of each compartment to prevent gas from being trapped in the muffler.

§192.173 Compressor stations: Ventilation.

Each compressor station building must be ventilated to ensure that employees are not endangered by the accumulation of gas in rooms, sumps, attics, pits, or other enclosed places.

§192.175 Pipe-type and bottle-type holders.

- (a) Each pipe-type and bottle-type holder must be designed so as to prevent the accumulation of liquids in the holder, in connecting pipe, or in auxiliary equipment, that might cause corrosion or interfere with the safe operation of the holder.
- (b) Each pipe-type or bottle-type holder must have minimum clearance from other holders in accordance with the following formula:

$$C = \frac{3D \cdot P \cdot F}{1000} \text{ in inches;}$$

$$(C = \frac{3D \cdot P \cdot F}{6,895}) \text{ in millimeters}$$

in which:

C=Minimum clearance between pipe containers or bottles in inches (millimeters).

D=Outside diameter of pipe containers or bottles in inches (millimeters).

P=Maximum allowable operating pressure, psi (kPa) gauge.

F=Design factor as set forth in §192.111 of this part.

[35 FR 13257, Aug. 19, 1970, as amended by Amdt. 192-85, 63 FR 37503, July 13, 1998 ; Amdt. 192-123, 82 FR 7997, Jan. 23, 2017]

§192.177 Additional provisions for bottle-type holders.

(a) Each bottle-type holder must be—

- (1) Located on a site entirely surrounded by fencing that prevents access by unauthorized persons and with minimum clearance from the fence as follows:

MAXIMUM ALLOWABLE OPERATING PRESSURE	MINIMUM CLEARANCE FEET (METERS)
Less than 1,000 p.s.i. (7 MPa) gage	25 (7.6)
1,000 p.s.i. (7 MPa) gage or more	100 (31)

- (2) Designed using the design factors set forth in §192.111; and

- (3) Buried with a minimum cover in accordance with §192.327.

(b) Each bottle-type holder manufactured from steel that is not weldable under field conditions must comply with the following:

- (1) A bottle-type holder made from alloy steel must meet the chemical and tensile requirements for the various grades of steel in ASTM A372/372M (incorporated by reference, see §192.7).
- (2) The actual yield-tensile ratio of the steel may not exceed 0.85.
- (3) Welding may not be performed on the holder after it has been heat treated or stress relieved, except that copper wires may be attached to the small diameter portion of the bottle end closure for cathodic protection if a localized thermit welding process is used.
- (4) The holder must be given a mill hydrostatic test at a pressure that produces a hoop stress at least equal to 85 percent of the SMYS.
- (5) The holder, connection pipe, and components must be leak tested after installation as required by subpart J of this part.

[35 FR 13257, Aug. 19, 1970, as amended by Amdt. 192-58, 53 FR 1635, Jan. 21, 1988; Amdt. 192-62, 54 FR 5628, Feb. 6, 1989; 58 FR 14521, Mar. 18, 1993; Amdt. 192-85, 63 FR 37503, July 13, 1998; Amdt. 192-119, 80 FR 181, Jan. 5, 2015]

§192.179 Transmission line valves.

- (a) Each transmission line, other than offshore segments, must have sectionalizing block valves spaced as follows, unless in a particular case the Administrator finds that alternative spacing would provide an equivalent level of safety:
- (1) Each point on the pipeline in a Class 4 location must be within 2 ½ miles (4 kilometers) of a valve.
 - (2) Each point on the pipeline in a Class 3 location must be within 4 miles (6.4 kilometers) of a valve.
 - (3) Each point on the pipeline in a Class 2 location must be within 7 ½ miles (12 kilometers) of a valve.
 - (4) Each point on the pipeline in a Class 1 location must be within 10 miles (16 kilometers) of a valve.
- (b) Each sectionalizing block valve on a transmission line, other than offshore segments, must comply with the following:
- (1) The valve and the operating device to open or close the valve must be readily accessible and protected from tampering and damage.
 - (2) The valve must be supported to prevent settling of the valve or movement of the pipe to which it is attached.
- (c) Each section of a transmission line, other than offshore segments, between main line valves must have a blowdown valve with enough capacity to allow the transmission line to be blown down as rapidly as practicable. Each blowdown discharge must be located so the gas can be blown to the atmosphere without hazard and, if the transmission line is adjacent to an overhead electric line, so that the gas is directed away from the electrical conductors.
- (d) Offshore segments of transmission lines must be equipped with valves or other components to shut off the flow of gas to an offshore platform in an emergency.

[35 FR 13257, Aug. 19, 1970, as amended by Amdt. 192-27, 41 FR 34606, Aug. 16, 1976; Amdt. 192-78, 61 FR 28784, June 6, 1996; Amdt. 192-85, 63 FR 37503, July 13, 1998]

R 460.20407 Sectionalizing block valves.

SOUR GAS

In addition to the requirements in 49 C.F.R. §192.179, which is adopted by reference in R 460.20606, an operator of pipeline facilities used in the transportation of sour gas shall comply with all of the following requirements for any portion of the pipeline that contains more than 10 pounds of H₂S per mile, with the weight calculated according to the formula:

$$W = 9.318 * 10^{-8} \frac{P * V * M * H}{T}, \text{ where:}$$

W=Weight of H₂S in pounds per mile of pipe,

P=Absolute pressure in pounds per square inch,

V=Volume of one mile of pipe in cubic feet,

M=Molecular weight of the gas in grams per mole,

H=Quantity of H₂S in the gas in parts per million,

T=Temperature in degrees Rankine.

- (a) Sectionalizing block valves must be installed and located so that each point on the pipeline is within 3 miles of a sectionalizing block valve with a block valve located at each end of the pipeline.*
- (b) A pipeline must incorporate block valve automation so that block valves will automatically close upon the registering of low pressure readings. The system must be designed to operate even in the event of a power failure or malfunction of electronic devices and must be designed to fail in a closed position.*
- (c) A pipeline must incorporate a supervisory control and data acquisitions (SCADA) system that complies with all of the following provisions:*
 - (i) Is monitored by the operator to ensure appropriate response to emergencies.*
 - (ii) Is programmed to automatically close block valves based on operating data gathered at each metering site and at each automated block valve.*
 - (iii) Automatically closes the upstream and downstream sectionalizing block valves surrounding any sectionalizing block valve that is in an alarm condition.*
 - (iv) Allows the operator monitoring the SCADA system to close, but not open, any or all of the block valves and metering points.*
- (d) H2S sensors must be located at all sectionalizing block valve sites. The sensors must provide a warning to the SCADA system at H2S levels of 10 ppm and shall close the block valve at H2S levels of 30 ppm.*
- (e) Control valves must be installed at appropriate locations at well sites or laterals to automatically shut off the flow of gas into the pipeline in the event of a line break or over pressure conditions.*

History: 2003 AACs; 2009 AACs; 2010 AACs; 2019 MR 1, Eff. Jan. 3, 2019.

§192.181 Distribution line valves.

- (a) Each high-pressure distribution system must have valves spaced so as to reduce the time to shut down a section of main in an emergency. The valve spacing is determined by the operating pressure, the size of the mains, and the local physical conditions.
- (b) Each regulator station controlling the flow or pressure of gas in a distribution system must have a valve installed on the inlet piping at a distance from the regulator station sufficient to permit the operation of the valve during an emergency that might preclude access to the station.
- (c) Each valve on a main installed for operating or emergency purposes must comply with the following:
 - (1) The valve must be placed in a readily accessible location so as to facilitate its operation in an emergency.
 - (2) The operating stem or mechanism must be readily accessible.
 - (3) If the valve is installed in a buried box or enclosure, the box or enclosure must be installed so as to avoid transmitting external loads to the main.

§192.183 Vaults: Structural design requirements.

- (a) Each underground vault or pit for valves, pressure relieving, pressure limiting, or pressure regulating stations, must be able to meet the loads which may be imposed upon it, and to protect installed equipment.

- (b) There must be enough working space so that all of the equipment required in the vault or pit can be properly installed, operated, and maintained.
- (c) Each pipe entering, or within, a regulator vault or pit must be steel for sizes 10 inch (254 millimeters), and less, except that control and gage piping may be copper. Where pipe extends through the vault or pit structure, provision must be made to prevent the passage of gases or liquids through the opening and to avert strains in the pipe.

[35 FR 13257, Aug. 19, 1970, as amended by Amdt. 192-85, 63 FR 37503, July 13, 1998]

§192.185 Vaults: Accessibility.

Each vault must be located in an accessible location and, so far as practical, away from:

- (a) Street intersections or points where traffic is heavy or dense;
- (b) Points of minimum elevation, catch basins, or places where the access cover will be in the course of surface waters; and
- (c) Water, electric, steam, or other facilities.

§192.187 Vaults: Sealing, venting, and ventilation.

Each underground vault or closed top pit containing either a pressure regulating or reducing station, or a pressure limiting or relieving station, must be sealed, vented or ventilated as follows:

- (a) When the internal volume exceeds 200 cubic feet (5.7 cubic meters):
 - (1) The vault or pit must be ventilated with two ducts, each having at least the ventilating effect of a pipe 4 inches (102 millimeters) in diameter;
 - (2) The ventilation must be enough to minimize the formation of combustible atmosphere in the vault or pit; and
 - (3) The ducts must be high enough above grade to disperse any gas-air mixtures that might be discharged.
- (b) When the internal volume is more than 75 cubic feet (2.1 cubic meters) but less than 200 cubic feet (5.7 cubic meters):
 - (1) If the vault or pit is sealed, each opening must have a tight fitting cover without open holes through which an explosive mixture might be ignited, and there must be a means for testing the internal atmosphere before removing the cover;
 - (2) If the vault or pit is vented, there must be a means of preventing external sources of ignition from reaching the vault atmosphere; or
 - (3) If the vault or pit is ventilated, paragraph (a) or (c) of this section applies.
- (c) If a vault or pit covered by paragraph (b) of this section is ventilated by openings in the covers or gratings and the ratio of the internal volume, in cubic feet, to the effective ventilating area of the cover or grating, in square feet, is less than 20 to 1, no additional ventilation is required.

[35 FR 13257, Aug. 19, 1970, as amended by Amdt. 192-85, 63 FR 37503, July 13, 1998]

R 460.20303 Vault and pit sealing, venting, and ventilation.

In addition to the requirements contained in 49 C.F.R. §192.187(a)(3), which is adopted by reference in R 460.20606, an operator shall ensure that the outside end of the ventilation ducts of an underground vault or closed top pit is equipped with a suitable weatherproof fitting or vent head designed to prevent foreign matter from entering or obstructing the duct.

History: 1998-2000 AACCS.

§192.189 Vaults: Drainage and waterproofing.

- (a) Each vault must be designed so as to minimize the entrance of water.
 - (b) A vault containing gas piping may not be connected by means of a drain connection to any other underground structure.
 - (c) Electrical equipment in vaults must conform to the applicable requirements of Class 1, Group D, of the National Electrical Code, NFPA-70 (incorporated by reference, see §192.7).
- [35 FR 13257, Aug. 19, 1970, as amended by Amdt. 192-76, 61 FR 26122, May 24, 1996; Amdt. 192-119, 80 FR 181, Jan. 5, 2015]

§192.191 Design pressure of plastic fittings.

- (a) Thermosetting fittings for plastic pipe must conform to ASTM D 2517, (incorporated by reference, see §192.7).
 - (b) Thermoplastic fittings for plastic pipe must conform to ASTM D2513-99 for plastic materials other than polyethylene or ASTM D2513-09a for polyethylene plastic materials.
- [Amdt. 192-114, 75 FR 48603, Aug. 11, 2010, as amended by Amdt. 192-119, 80 FR 181, Jan. 5, 2015]

§192.193 Valve installation in plastic pipe.

Each valve installed in plastic pipe must be designed so as to protect the plastic material against excessive torsional or shearing loads when the valve or shutoff is operated, and from any other secondary stresses that might be exerted through the valve or its enclosure.

§192.195 Protection against accidental overpressuring.

- (a) General requirements. Except as provided in §192.197, each pipeline that is connected to a gas source so that the maximum allowable operating pressure could be exceeded as the result of pressure control failure or of some other type of failure, must have pressure relieving or pressure limiting devices that meet the requirements of §§192.199 and 192.201.
- (b) Additional requirements for distribution systems. Each distribution system that is supplied from a source of gas that is at a higher pressure than the maximum allowable operating pressure for the system must—

- (1) Have pressure regulation devices capable of meeting the pressure, load, and other service conditions that will be experienced in normal operation of the system, and that could be activated in the event of failure of some portion of the system; and
- (2) Be designed so as to prevent accidental overpressuring.

§192.197 Control of the pressure of gas delivered from high-pressure distribution systems.

- (a) If the maximum actual operating pressure of the distribution system is 60 p.s.i. (414 kPa) gage, or less and a service regulator having the following characteristics is used, no other pressure limiting device is required:
 - (1) A regulator capable of reducing distribution line pressure to pressures recommended for household appliances.
 - (2) A single port valve with proper orifice for the maximum gas pressure at the regulator inlet.
 - (3) A valve seat made of resilient material designed to withstand abrasion of the gas, impurities in gas, cutting by the valve, and to resist permanent deformation when it is pressed against the valve port.
 - (4) Pipe connections to the regulator not exceeding 2 inches (51 millimeters) in diameter.
 - (5) A regulator that, under normal operating conditions, is able to regulate the downstream pressure within the necessary limits of accuracy and to limit the build-up of pressure under no-flow conditions to prevent a pressure that would cause the unsafe operation of any connected and properly adjusted gas utilization equipment.
 - (6) A self-contained service regulator with no external static or control lines.
- (b) If the maximum actual operating pressure of the distribution system is 60 p.s.i. (414 kPa) gage, or less, and a service regulator that does not have all of the characteristics listed in paragraph (a) of this section is used, or if the gas contains materials that seriously interfere with the operation of service regulators, there must be suitable protective devices to prevent unsafe overpressuring of the customer's appliances if the service regulator fails.
- (c) If the maximum actual operating pressure of the distribution system exceeds 60 p.s.i. (414 kPa) gage, one of the following methods must be used to regulate and limit, to the maximum safe value, the pressure of gas delivered to the customer:
 - (1) A service regulator having the characteristics listed in paragraph (a) of this section, and another regulator located upstream from the service regulator. The upstream regulator may not be set to maintain a pressure higher than 60 p.s.i. (414 kPa) gage. A device must be installed between the upstream regulator and the service regulator to limit the pressure on the inlet of the service regulator to 60 p.s.i. (414 kPa) gage or less in case the upstream regulator fails to function properly. This device may be either a relief valve or an automatic shutoff that shuts, if the pressure on the inlet of the service regulator exceeds the set pressure (60 p.s.i. (414 kPa) gage or less), and remains closed until manually reset.
 - (2) A service regulator and a monitoring regulator set to limit, to a maximum safe value, the pressure of the gas delivered to the customer.
 - (3) A service regulator with a relief valve vented to the outside atmosphere, with the relief valve set to

open so that the pressure of gas going to the customer does not exceed a maximum safe value. The relief valve may either be built into the service regulator or it may be a separate unit installed downstream from the service regulator. This combination may be used alone only in those cases where the inlet pressure on the service regulator does not exceed the manufacturer's safe working pressure rating of the service regulator, and may not be used where the inlet pressure on the service regulator exceeds 125 p.s.i. (862 kPa) gage. For higher inlet pressures, the methods in paragraph (c) (1) or (2) of this section must be used.

- (4) A service regulator and an automatic shutoff device that closes upon a rise in pressure downstream from the regulator and remains closed until manually reset.

[35 FR 13257, Aug. 19, 1970, as amended by Amdt. 192-1, 35 FR 17660, Nov. 7, 1970; Amdt. 192-85, 63 FR 37503, July 13, 1998; Amdt. 192-93, 68 FR 53900, Sept. 15, 2003]

§192.199 Requirements for design of pressure relief and limiting devices.

Except for rupture discs, each pressure relief or pressure limiting device must:

- (a) Be constructed of materials such that the operation of the device will not be impaired by corrosion;
- (b) Have valves and valve seats that are designed not to stick in a position that will make the device inoperative;
- (c) Be designed and installed so that it can be readily operated to determine if the valve is free, can be tested to determine the pressure at which it will operate, and can be tested for leakage when in the closed position;
- (d) Have support made of noncombustible material;
- (e) Have discharge stacks, vents, or outlet ports designed to prevent accumulation of water, ice, or snow, located where gas can be discharged into the atmosphere without undue hazard;
- (f) Be designed and installed so that the size of the openings, pipe, and fittings located between the system to be protected and the pressure relieving device, and the size of the vent line, are adequate to prevent hammering of the valve and to prevent impairment of relief capacity;
- (g) Where installed at a district regulator station to protect a pipeline system from overpressuring, be designed and installed to prevent any single incident such as an explosion in a vault or damage by a vehicle from affecting the operation of both the overpressure protective device and the district regulator; and
- (h) Except for a valve that will isolate the system under protection from its source of pressure, be designed to prevent unauthorized operation of any stop valve that will make the pressure relief valve or pressure limiting device inoperative.

[35 FR 13257, Aug. 19, 1970, as amended by Amdt. 192-1, 35 FR 17660, Nov. 17, 1970]

§192.201 Required capacity of pressure relieving and limiting stations.

- (a) Each pressure relief station or pressure limiting station or group of those stations installed to protect a pipeline must have enough capacity, and must be set to operate, to insure the following:

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- (1) In a low pressure distribution system, the pressure may not cause the unsafe operation of any connected and properly adjusted gas utilization equipment.
- (2) In pipelines other than a low pressure distribution system:
 - (i) If the maximum allowable operating pressure is 60 p.s.i. (414 kPa) gage or more, the pressure may not exceed the maximum allowable operating pressure plus 10 percent, or the pressure that produces a hoop stress of 75 percent of SMYS, whichever is lower;
 - (ii) If the maximum allowable operating pressure is 12 p.s.i. (83 kPa) gage or more, but less than 60 p.s.i. (414 kPa) gage, the pressure may not exceed the maximum allowable operating pressure plus 6 p.s.i. (41 kPa) gage; or
 - (iii) If the maximum allowable operating pressure is less than 12 p.s.i. (83 kPa) gage, the pressure may not exceed the maximum allowable operating pressure plus 50 percent.
- (b) When more than one pressure regulating or compressor station feeds into a pipeline, relief valves or other protective devices must be installed at each station to ensure that the complete failure of the largest capacity regulator or compressor, or any single run of lesser capacity regulators or compressors in that station, will not impose pressures on any part of the pipeline or distribution system in excess of those for which it was designed, or against which it was protected, whichever is lower.
- (c) Relief valves or other pressure limiting devices must be installed at or near each regulator station in a low-pressure distribution system, with a capacity to limit the maximum pressure in the main to a pressure that will not exceed the safe operating pressure for any connected and properly adjusted gas utilization equipment.

[35 FR 13257, Aug. 19, 1970, as amended by Amdt. 192-9, 37 FR 20827, Oct. 4, 1972; Amdt. 192-85, 63 FR 37503, July 13, 1998]

§192.203 Instrument, control, and sampling pipe and components.

- (a) **Applicability.** This section applies to the design of instrument, control, and sampling pipe and components. It does not apply to permanently closed systems, such as fluid-filled temperature-responsive devices.
- (b) **Materials and design.** All materials employed for pipe and components must be designed to meet the particular conditions of service and the following:
 - (1) Each takeoff connection and attaching boss, fitting, or adapter must be made of suitable material, be able to withstand the maximum service pressure and temperature of the pipe or equipment to which it is attached, and be designed to satisfactorily withstand all stresses without failure by fatigue.
 - (2) Except for takeoff lines that can be isolated from sources of pressure by other valving, a shutoff valve must be installed in each takeoff line as near as practicable to the point of takeoff. Blowdown valves must be installed where necessary.
 - (3) Brass or copper material may not be used for metal temperatures greater than 400 °F (204 °C).
 - (4) Pipe or components that may contain liquids must be protected by heating or other means from damage due to freezing.
 - (5) Pipe or components in which liquids may accumulate must have drains or drips.

- (6) Pipe or components subject to clogging from solids or deposits must have suitable connections for cleaning.
- (7) The arrangement of pipe, components, and supports must provide safety under anticipated operating stresses.
- (8) Each joint between sections of pipe, and between pipe and valves or fittings, must be made in a manner suitable for the anticipated pressure and temperature condition. Slip type expansion joints may not be used. Expansion must be allowed for by providing flexibility within the system itself.
- (9) Each control line must be protected from anticipated causes of damage and must be designed and installed to prevent damage to any one control line from making both the regulator and the over-pressure protective device inoperative.

[35 FR 13257, Aug. 19, 1970, as amended by Amdt. 192-78, 61 FR 28784, June 6, 1996; Amdt. 192-85, 63 FR 37503, July 13, 1998]

DRAFT

Subpart E—Welding of Steel in Pipelines

§192.221 Scope.

- (a) This subpart prescribes minimum requirements for welding steel materials in pipelines.
- (b) This subpart does not apply to welding that occurs during the manufacture of steel pipe or steel pipeline components.

§192.225 Welding procedures.

- (a) Welding must be performed by a qualified welder or welding operator in accordance with welding procedures qualified under section 5, section 12, Appendix A or Appendix B of API Std 1104 (incorporated by reference, see §192.7), or section IX of the ASME Boiler and Pressure Vessel Code (ASME BPVC) (incorporated by reference, see §192.7) to produce welds meeting the requirements of this subpart. The quality of the test welds used to qualify welding procedures must be determined by destructive testing in accordance with the applicable welding standard(s).
- (b) Each welding procedure must be recorded in detail, including the results of the qualifying tests. This record must be retained and followed whenever the procedure is used.

[Amdt. 192-52, 51 FR 20297, June 4, 1986; Amdt. 192-94, 69 FR 32894, June 14, 2004; Amdt. 192-119, 80 FR 181, Jan. 5, 2015; Amdt. 192-120, 80 FR 12778, Mar. 11, 2015; Amdt. 192-123, 82 FR 7997, Jan. 23, 2017]

R 460.20304 Welding procedures.

In addition to the requirements contained in 49 C.F.R. §192.225, which is adopted by reference in R 460.20606, an operator shall ensure that a welding procedure meets all of the following requirements:

- (a) Is qualified under section IX of the ASME boiler and pressure vessel code, which is adopted by reference in R 460.20604, or section 5, section 12, or appendix A of API standard 1104, which is adopted by reference in R 460.20603, whichever is appropriate to the function of the weld.*
- (b) Is qualified under appendix B of API standard 1104, which is adopted by reference in R 460.20603, for pipelines operating at greater than 60 psig.*
- (c) A copy of the welding procedure being followed is on the jobsite when welding is performed.*

History: 1998-2000 AACS; 2009 AACS; 2014 AACS; 2019 MR 1, Eff. Jan. 3, 2019.

R 460.20408 Qualification of welding procedures.

SOUR GAS

In addition to the requirements 49 C.F.R. §192.225, which is adopted by reference in R 460.20606, an operator of pipeline facilities used in the transportation of sour gas shall use welding procedures that conform to the welding provisions of the national association of corrosion engineers international standard NACE MR0175/ISO 15156, 2004-2007, which is adopted by reference in R 460.20605.

History: 2003 AACS; 2009 AACS; 2010 AACS.

§192.227 Qualification of welders and welding operators.

- (a) Except as provided in paragraph (b) of this section, each welder or welding operator must be qualified in accordance with section 6, section 12, Appendix A or Appendix B of API Std 1104 (incorporated by reference, see §192.7), or section IX of the ASME Boiler and Pressure Vessel Code (ASME BPVC) (incorporated by reference, see §192.7). However, a welder or welding operator qualified under an earlier edition than the listed in §192.7 of this part may weld but may not requalify under that earlier edition.
- (b) A welder may qualify to perform welding on pipe to be operated at a pressure that produces a hoop stress of less than 20 percent of SMYS by performing an acceptable test weld, for the process to be used, under the test set forth in section I of Appendix C of this part. Each welder who is to make a welded service line connection to a main must first perform an acceptable test weld under section II of Appendix C of this part as a requirement of the qualifying test.

[Amdt. 192-120, 80 FR 12778, Mar. 11, 2015, as amended by Amdt. 192-123, 82 FR 7997, Jan. 23, 2017]

R 460.20305 Welder qualification records.

An operator shall establish and maintain a record of all qualified welders that indicates the date and results of tests. The record shall specifically include the welding procedure for which each welder has qualified. An operator shall make the record available for inspection at each jobsite.

History: 1998-2000 AACS.

§192.229 Limitations on welders and welding operators.

- (a) No welder or welding operator whose qualification is based on nondestructive testing may weld compressor station pipe and components.
- (b) A welder or welding operator may not weld with a particular welding process unless, within the preceding 6 calendar months, the welder or welding operator was engaged in welding with that process.
- (c) A welder or welding operator qualified under §192.227(a)—
 - (1) May not weld on pipe to be operated at a pressure that produces a hoop stress of 20 percent or more of SMYS unless within the preceding 6 calendar months the welder or welding operator has had one weld tested and found acceptable under either section 6, section 9, section 12 or Appendix A of API Std 1104 (incorporated by reference, see §192.7). Alternatively, welders or welding operators may maintain an ongoing qualification status by performing welds tested and found acceptable under the above acceptance criteria at least twice each calendar year, but at intervals not exceeding 7 1/2 months. A welder or welding operator qualified under an earlier edition of a standard listed in §192.7 of this part may weld, but may not re-qualify under that earlier edition; and,
 - (2) May not weld on pipe to be operated at a pressure that produces a hoop stress of less than 20 percent of SMYS unless the welder or welding operator is tested in accordance with paragraph (c)(1) of this section or re-qualifies under paragraph (d)(1) or (d)(2) of this section.
- (d) A welder or welding operator qualified under §192.227(b) may not weld unless—

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- (1) Within the preceding 15 calendar months, but at least once each calendar year, the welder or welding operator has requalified under §192.227(b); or
- (2) Within the preceding 7 ½ calendar months, but at least twice each calendar year, the welder or welding operator has had—
 - (i) A production weld cut out, tested, and found acceptable in accordance with the qualifying test; or
 - (ii) For a welder who works only on service lines 2 inches (51 millimeters) or smaller in diameter, the welder has had two sample welds tested and found acceptable in accordance with the test in section III of Appendix C of this part.

[Amdt. 192-120, 80 FR 12778, Mar. 11, 2015]

§192.231 Protection from weather.

The welding operation must be protected from weather conditions that would impair the quality of the completed weld.

§192.233 Miter joints.

- (a) A miter joint on steel pipe to be operated at a pressure that produces a hoop stress of 30 percent or more of SMYS may not deflect the pipe more than 3°.
- (b) A miter joint on steel pipe to be operated at a pressure that produces a hoop stress of less than 30 percent, but more than 10 percent, of SMYS may not deflect the pipe more than 12 ½° and must be a distance equal to one pipe diameter or more away from any other miter joint, as measured from the crotch of each joint.
- (c) A miter joint on steel pipe to be operated at a pressure that produces a hoop stress of 10 percent or less of SMYS may not deflect the pipe more than 90°.

§192.235 Preparation for welding.

Before beginning any welding, the welding surfaces must be clean and free of any material that may be detrimental to the weld, and the pipe or component must be aligned to provide the most favorable condition for depositing the root bead. This alignment must be preserved while the root bead is being deposited.

R 460.20307 Welding preheating.

In addition to the requirements contained in 49 C.F.R. §192.235, which is adopted by reference in R 460.20606, if preheating is required, then an operator shall monitor the preheat temperature to ensure that the required preheat temperature is reached before beginning, and is maintained during, the welding operation.

History: 1998-2000 AACS.

§192.241 Inspection and test of welds.

- (a) Visual inspection of welding must be conducted by an individual qualified by appropriate training and experience to ensure that:
- (1) The welding is performed in accordance with the welding procedure; and
 - (2) The weld is acceptable under paragraph (c) of this section.
- (b) The welds on a pipeline to be operated at a pressure that produces a hoop stress of 20 percent or more of SMYS must be nondestructively tested in accordance with §192.243, except that welds that are visually inspected and approved by a qualified welding inspector need not be nondestructively tested if:
- (1) The pipe has a nominal diameter of less than 6 inches (152 millimeters); or
 - (2) The pipeline is to be operated at a pressure that produces a hoop stress of less than 40 percent of SMYS and the welds are so limited in number that nondestructive testing is impractical.
- (c) The acceptability of a weld that is nondestructively tested or visually inspected is determined according to the standards in section 9 or Appendix A of API Std 1104 (incorporated by reference, see §192.7). Appendix A of API Std 1104 may not be used to accept cracks.

[35 FR 13257, Aug. 19, 1970, as amended by Amdt. 192-37, 46 FR 10160, Feb. 2, 1981; Amdt. 192-78, 61 FR 28784, June 6, 1996; Amdt. 192-85, 63 FR 37503, July 13, 1998; Amdt. 192-94, 69 FR 32894, June 14, 2004; Amdt. 192-119, 80 FR 181, Jan. 5, 2015; Amdt. 192-120, 80 FR 12778, Mar. 11, 2015]

R 460.20409 Inspection and testing of welds.

SOUR GAS

In addition to the requirements set forth in 49 C.F.R. §192.241(b), which is adopted by reference in R 460.20606, an operator of pipeline facilities used in the transportation of sour gas shall engage in nondestructive testing of 100% of all girth butt welds. Nondestructive testing of welds shall be performed by any process that clearly indicates all defects in the welds.

History: 2003 AACs; 2019 MR 1, Eff. Jan. 3, 2019.

§192.243 Nondestructive testing.

- (a) Nondestructive testing of welds must be performed by any process, other than trepanning, that will clearly indicate defects that may affect the integrity of the weld.
- (b) Nondestructive testing of welds must be performed:
- (1) In accordance with written procedures; and
 - (2) By persons who have been trained and qualified in the established procedures and with the equipment employed in testing.
- (c) Procedures must be established for the proper interpretation of each nondestructive test of a weld to ensure the acceptability of the weld under §192.241(c).
- (d) When nondestructive testing is required under §192.241(b), the following percentages of each day's field butt welds, selected at random by the operator, must be nondestructively tested over their entire circumference:

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- (1) In Class 1 locations, except offshore, at least 10 percent.
 - (2) In Class 2 locations, at least 15 percent.
 - (3) In Class 3 and Class 4 locations, at crossings of major or navigable rivers, offshore, and within railroad or public highway rights-of-way, including tunnels, bridges, and overhead road crossings, 100 percent unless impracticable, in which case at least 90 percent. Nondestructive testing must be impracticable for each girth weld not tested.
 - (4) At pipeline tie-ins, including tie-ins of replacement sections, 100 percent.
 - (e) Except for a welder or welding operator whose work is isolated from the principal welding activity, a sample of each welder or welding operator's work for each day must be nondestructively tested, when nondestructive testing is required under §192.241(b).
 - (f) When nondestructive testing is required under §192.241(b), each operator must retain, for the life of the pipeline, a record showing by milepost, engineering station, or by geographic feature, the number of girth welds made, the number nondestructively tested, the number rejected, and the disposition of the rejects.
- [35 FR 13257, Aug. 19, 1970, as amended by Amdt. 192-27, 41 FR 34606, Aug. 16, 1976; Amdt. 192-50, 50 FR 37192, Sept. 12, 1985; Amdt. 192-78, 61 FR 28784, June 6, 1996; Amdt. 192-120, 80 FR 12779, Mar. 11, 2015]

R 460.20306 Nondestructive testing.

- (1) *In addition to the nondestructive testing required under 49 C.F.R. §192.243(d), which is adopted by reference in R 460.20606, an operator shall also ensure that 100% of each day's field butt welds are nondestructively tested over their entire circumferences in the following locations:*
 - (a) *Regulating stations.*
 - (b) *Measuring stations.*
 - (c) *Compressor stations.*
- (2) *If it is not practical to test 100% of each day's field butt welds as required by subrule (1) of this rule, then an operator shall nondestructively test at least 90% of each day's field butt welds selected at random at the locations specified in subrule (1) of this rule.*

History: 1998-2000 AACS; 2010 AACS; 2019 MR 1, Eff. Jan. 3, 2019.

§192.245 Repair or removal of defects.

- (a) Each weld that is unacceptable under §192.241(c) must be removed or repaired. Except for welds on an offshore pipeline being installed from a pipeline vessel, a weld must be removed if it has a crack that is more than 8 percent of the weld length.
- (b) Each weld that is repaired must have the defect removed down to sound metal and the segment to be repaired must be preheated if conditions exist which would adversely affect the quality of the weld repair. After repair, the segment of the weld that was repaired must be inspected to ensure its acceptability.
- (c) Repair of a crack, or of any defect in a previously repaired area must be in accordance with written weld repair procedures that have been qualified under §192.225. Repair procedures must provide that the

minimum mechanical properties specified for the welding procedure used to make the original weld are met upon completion of the final weld repair.

[Amdt. 192-46, 48 FR 48674, Oct. 20, 1983]

DRAFT

Subpart F—Joining of Materials Other Than by Welding

§192.271 Scope.

- (a) This subpart prescribes minimum requirements for joining materials in pipelines, other than by welding.
- (b) This subpart does not apply to joining during the manufacture of pipe or pipeline components.

§192.273 General.

- (a) The pipeline must be designed and installed so that each joint will sustain the longitudinal pullout or thrust forces caused by contraction or expansion of the piping or by anticipated external or internal loading.
- (b) Each joint must be made in accordance with written procedures that have been proven by test or experience to produce strong gastight joints.
- (c) Each joint must be inspected to insure compliance with this subpart.

R 460.20410 Threaded joints.

SOUR GAS

In addition to the requirements set forth in 49 C.F.R. §192.273, which is adopted by reference in R 460.20606, an operator of pipeline facilities used in the transportation of sour gas shall not use threaded joints to join any sections or other components of a buried pipeline.

History: 2003 AACS.

§192.275 Cast iron pipe.

- (a) Each caulked bell and spigot joint in cast iron pipe must be sealed with mechanical leak clamps.
- (b) Each mechanical joint in cast iron pipe must have a gasket made of a resilient material as the sealing medium. Each gasket must be suitably confined and retained under compression by a separate gland or follower ring.
- (c) Cast iron pipe may not be joined by threaded joints.
- (d) Cast iron pipe may not be joined by brazing.

[35 FR 13257, Aug. 19, 1970, as amended by Amdt. 192-62, 54 FR 5628, Feb. 6, 1989]

§192.277 Ductile iron pipe.

- (a) Ductile iron pipe may not be joined by threaded joints.
- (b) Ductile iron pipe may not be joined by brazing.

[35 FR 13257, Aug. 19, 1970, as amended by Amdt. 192-62, 54 FR 5628, Feb. 6, 1989]

§192.279 Copper pipe.

Copper pipe may not be threaded except that copper pipe used for joining screw fittings or valves may be threaded if the wall thickness is equivalent to the comparable size of Schedule 40 or heavier wall pipe listed in Table C1 of ASME/ANSI B16.5.

[Amdt. 192-62, 54 FR 5628, Feb. 6, 1989, as amended at 58 FR 14521, Mar. 18, 1993]

§192.281 Plastic pipe.

- (a) **General.** A plastic pipe joint that is joined by solvent cement, adhesive, or heat fusion may not be disturbed until it has properly set. Plastic pipe may not be joined by a threaded joint or miter joint.
- (b) **Solvent cement joints.** Each solvent cement joint on plastic pipe must comply with the following:
 - (1) The mating surfaces of the joint must be clean, dry, and free of material which might be detrimental to the joint.
 - (2) The solvent cement must conform to ASTM D2513-99, (incorporated by reference, see §192.7).
 - (3) The joint may not be heated to accelerate the setting of the cement.
- (c) **Heat-fusion joints.** Each heat-fusion joint on plastic pipe must comply with the following:
 - (1) A butt heat-fusion joint must be joined by a device that holds the heater element square to the ends of the piping, compresses the heated ends together, and holds the pipe in proper alignment while the plastic hardens.
 - (2) A socket heat-fusion joint must be joined by a device that heats the mating surfaces of the joint uniformly and simultaneously to essentially the same temperature.
 - (3) An electrofusion joint must be joined utilizing the equipment and techniques of the fittings manufacturer or equipment and techniques shown, by testing joints to the requirements of §192.283(a)(1)(iii), to be at least equivalent to those of the fittings manufacturer.
 - (4) Heat may not be applied with a torch or other open flame.
- (d) **Adhesive joints.** Each adhesive joint on plastic pipe must comply with the following:
 - (1) The adhesive must conform to ASTM D 2517 (incorporated by reference, see §192.7).
 - (2) The materials and adhesive must be compatible with each other.
- (e) **Mechanical joints.** Each compression type mechanical joint on plastic pipe must comply with the following:
 - (1) The gasket material in the coupling must be compatible with the plastic.
 - (2) A rigid internal tubular stiffener, other than a split tubular stiffener, must be used in conjunction with the coupling.

[35 FR 13257, Aug. 19, 1970, as amended by Amdt. 192-34, 44 FR 42973, July 23, 1979; Amdt. 192-58, 53 FR 1635, Jan. 21, 1988; Amdt. 192-61, 53 FR 36793, Sept. 22, 1988; 58 FR 14521, Mar. 18, 1993; Amdt. 192-78, 61 FR 28784, June 6, 1996; Amdt. 192-114, 75 FR 48603, Aug. 11, 2010; Amdt. 192-119, 80 FR 181, Jan. 5, 2015]

§192.283 Plastic pipe: Qualifying joining procedures.

- (a) **Heat fusion, solvent cement, and adhesive joints.** Before any written procedure established under §192.273(b) is used for making plastic pipe joints by a heat fusion, solvent cement, or adhesive method, the procedure must be qualified by subjecting specimen joints made according to the procedure to the following tests:
- (1) The burst test requirements of—
 - (i) In the case of thermoplastic pipe, paragraph 6.6 (Sustained Pressure Test) or paragraph 6.7 (Minimum Hydrostatic Burst Test) of ASTM D2513-99 for plastic materials other than polyethylene or ASTM D2513-09a (incorporated by reference, see §192.7) for polyethylene plastic materials;
 - (ii) In the case of thermosetting plastic pipe, paragraph 8.5 (Minimum Hydrostatic Burst Pressure) or paragraph 8.9 (Sustained Static Pressure Test) of ASTM D2517 (incorporated by reference, see §192.7); or
 - (iii) In the case of electrofusion fittings for polyethylene (PE) pipe and tubing, paragraph 9.1 (Minimum Hydraulic Burst Pressure Test), paragraph 9.2 (Sustained Pressure Test), paragraph 9.3 (Tensile Strength Test), or paragraph 9.4 (Joint Integrity Tests) of ASTM F1055 (incorporated by reference, see §192.7).
 - (2) For procedures intended for lateral pipe connections, subject a specimen joint made from pipe sections joined at right angles according to the procedure to a force on the lateral pipe until failure occurs in the specimen. If failure initiates outside the joint area, the procedure qualifies for use; and
 - (3) For procedures intended for non-lateral pipe connections, follow the tensile test requirements of ASTM D638 (incorporated by reference, see §192.7), except that the test may be conducted at ambient temperature and humidity. If the specimen elongates no less than 25 percent or failure initiates outside the joint area, the procedure qualifies for use.
- (b) **Mechanical joints.** Before any written procedure established under §192.273(b) is used for making mechanical plastic pipe joints that are designed to withstand tensile forces, the procedure must be qualified by subjecting 5 specimen joints made according to the procedure to the following tensile test:
- (1) Use an apparatus for the test as specified in ASTM D 638 (except for conditioning), (incorporated by reference, see §192.7).
 - (2) The specimen must be of such length that the distance between the grips of the apparatus and the end of the stiffener does not affect the joint strength.
 - (3) The speed of testing is 0.20 in (5.0 mm) per minute, plus or minus 25 percent.
 - (4) Pipe specimens less than 4 inches (102 mm) in diameter are qualified if the pipe yields to an elongation of no less than 25 percent or failure initiates outside the joint area.
 - (5) Pipe specimens 4 inches (102 mm) and larger in diameter shall be pulled until the pipe is subjected to a tensile stress equal to or greater than the maximum thermal stress that would be produced by a temperature change of 100 °F (38 °C) or until the pipe is pulled from the fitting. If the pipe pulls from the fitting, the lowest value of the five test results or the manufacturer's rating, whichever is lower must be used in the design calculations for stress.

- (6) Each specimen that fails at the grips must be retested using new pipe.
- (7) Results obtained pertain only to the specific outside diameter, and material of the pipe tested, except that testing of a heavier wall pipe may be used to qualify pipe of the same material but with a lesser wall thickness.
- (c) A copy of each written procedure being used for joining plastic pipe must be available to the persons making and inspecting joints.
- (d) Pipe or fittings manufactured before July 1, 1980, may be used in accordance with procedures that the manufacturer certifies will produce a joint as strong as the pipe.

[Amdt. 192-34A, 45 FR 9935, Feb. 14, 1980, as amended by Amdt. 192-34B, 46 FR 39, Jan. 2, 1981; 47 FR 32720, July 29, 1982; 47 FR 49973, Nov. 4, 1982; 58 FR 14521, Mar. 18, 1993; Amdt. 192-78, 61 FR 28784, June 6, 1996; Amdt. 192-85, 63 FR 37503, July 13, 1998; Amdt. 192-94, 69 FR 32895, June 14, 2004; Amdt. 192-94, 69 FR 54592, Sept. 9, 2004; Amdt. 192-114, 75 FR 48603, Aug. 11, 2010]

§192.285 Plastic pipe: Qualifying persons to make joints.

- (a) No person may make a plastic pipe joint unless that person has been qualified under the applicable joining procedure by:
 - (1) Appropriate training or experience in the use of the procedure; and
 - (2) Making a specimen joint from pipe sections joined according to the procedure that passes the inspection and test set forth in paragraph (b) of this section.
- (b) The specimen joint must be:
 - (1) Visually examined during and after assembly or joining and found to have the same appearance as a joint or photographs of a joint that is acceptable under the procedure; and
 - (2) In the case of a heat fusion, solvent cement, or adhesive joint:
 - (i) Tested under any one of the test methods listed under §192.283(a) applicable to the type of joint and material being tested;
 - (ii) Examined by ultrasonic inspection and found not to contain flaws that would cause failure; or
 - (iii) Cut into at least 3 longitudinal straps, each of which is:
 - (A) Visually examined and found not to contain voids or discontinuities on the cut surfaces of the joint area; and
 - (B) Deformed by bending, torque, or impact, and if failure occurs, it must not initiate in the joint area.
- (c) A person must be re-qualified under an applicable procedure once each calendar year at intervals not exceeding 15 months, or after any production joint is found unacceptable by testing under §192.513.
- (d) Each operator shall establish a method to determine that each person making joints in plastic pipelines in the operator's system is qualified in accordance with this section.

[Amdt. 192-34A, 45 FR 9935, Feb. 14, 1980, as amended by Amdt. 192-34B, 46 FR 39, Jan. 2, 1981; Amdt. 192-93, 68 FR 53900, Sept. 15, 2003; Amdt. 192-120, 80 FR 12779, Mar. 11, 2015]

§192.287 Plastic pipe: Inspection of joints.

No person may carry out the inspection of joints in plastic pipes required by §§192.273(c) and 192.285(b) unless that person has been qualified by appropriate training or experience in evaluating the acceptability of plastic pipe joints made under the applicable joining procedure.

[Amdt. 192-34, 44 FR 42974, July 23, 1979]

DRAFT

Subpart G—General Construction Requirements for Transmission Lines and Mains

§192.301 Scope.

This subpart prescribes minimum requirements for constructing transmission lines and mains.

§192.303 Compliance with specifications or standards.

Each transmission line or main must be constructed in accordance with comprehensive written specifications or standards that are consistent with this part.

§192.305¹ Inspection: General.

Each transmission line or main must be inspected to ensure that it is constructed in accordance with this part.

¹§192.305 was amended by 80 FR 12672, effective October 1, 2015. However, the effective date was delayed indefinitely by 80 FR 58633, published on September 30, 2015.

§192.307 Inspection of materials.

Each length of pipe and each other component must be visually inspected at the site of installation to ensure that it has not sustained any visually determinable damage that could impair its serviceability.

§192.309 Repair of steel pipe.

- (a) Each imperfection or damage that impairs the serviceability of a length of steel pipe must be repaired or removed. If a repair is made by grinding, the remaining wall thickness must at least be equal to either:
- (1) The minimum thickness required by the tolerances in the specification to which the pipe was manufactured; or
 - (2) The nominal wall thickness required for the design pressure of the pipeline.
- (b) Each of the following dents must be removed from steel pipe to be operated at a pressure that produces a hoop stress of 20 percent, or more, of SMYS, unless the dent is repaired by a method that reliable engineering tests and analyses show can permanently restore the serviceability of the pipe:
- (1) A dent that contains a stress concentrator such as a scratch, gouge, groove, or arc burn.
 - (2) A dent that affects the longitudinal weld or a circumferential weld.
 - (3) In pipe to be operated at a pressure that produces a hoop stress of 40 percent or more of SMYS, a dent that has a depth of:
 - (i) More than $\frac{1}{4}$ inch (6.4 millimeters) in pipe 12 $\frac{3}{4}$ inches (324 millimeters) or less in outer diameter; or
 - (ii) More than 2 percent of the nominal pipe diameter in pipe over 12 $\frac{3}{4}$ inches (324 millimeters) in outer diameter.

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For the purpose of this section a “dent” is a depression that produces a gross disturbance in the curvature of the pipe wall without reducing the pipe-wall thickness. The depth of a dent is measured as the gap between the lowest point of the dent and a prolongation of the original contour of the pipe.

- (c) Each arc burn on steel pipe to be operated at a pressure that produces a hoop stress of 40 percent, or more, of SMYS must be repaired or removed. If a repair is made by grinding, the arc burn must be completely removed and the remaining wall thickness must be at least equal to either:
 - (1) The minimum wall thickness required by the tolerances in the specification to which the pipe was manufactured; or
 - (2) The nominal wall thickness required for the design pressure of the pipeline.
- (d) A gouge, groove, arc burn, or dent may not be repaired by insert patching or by pounding out.
- (e) Each gouge, groove, arc burn, or dent that is removed from a length of pipe must be removed by cutting out the damaged portion as a cylinder.

[35 FR 13257, Aug. 19, 1970, as amended by Amdt. 192-1, 35 FR 17660, Nov. 17, 1970; Amdt. 192-85, 63 FR 37503, July 13, 1998; Amdt. 192-88, 64 FR 69664, Dec. 14, 1999]

R 460.20411 Repair of steel pipe.

SOUR GAS

In addition to the requirements set forth in 49 C.F.R. §192.309, which is adopted by reference in R 460.20606, an operator of pipeline facilities used in the transportation of sour gas shall remove any imperfection or damage discovered during construction that impairs the serviceability of a length of steel pipe by cutting out the damaged portion of the pipe as a cylinder and replacing it with an undamaged piece of pipe which meets or exceeds the specifications of the original pipe.

History: 2003 AACS.

§192.311 Repair of plastic pipe.

Each imperfection or damage that would impair the serviceability of plastic pipe must be repaired or removed.

[Amdt. 192-93, 68 FR 53900, Sept. 15, 2003]

§192.313 Bends and elbows.

- (a) Each field bend in steel pipe, other than a wrinkle bend made in accordance with §192.315, must comply with the following:
 - (1) A bend must not impair the serviceability of the pipe.
 - (2) Each bend must have a smooth contour and be free from buckling, cracks, or any other mechanical damage.
 - (3) On pipe containing a longitudinal weld, the longitudinal weld must be as near as practicable to the neutral axis of the bend unless:

- (i) The bend is made with an internal bending mandrel; or
 - (ii) The pipe is 12 inches (305 millimeters) or less in outside diameter or has a diameter to wall thickness ratio less than 70.
- (b) Each circumferential weld of steel pipe which is located where the stress during bending causes a permanent deformation in the pipe must be nondestructively tested either before or after the bending process.
- (c) Wrought-steel welding elbows and transverse segments of these elbows may not be used for changes in direction on steel pipe that is 2 inches (51 millimeters) or more in diameter unless the arc length, as measured along the crotch, is at least 1 inch (25 millimeters).

[Amdt. No. 192-26, 41 FR 26018, June 24, 1976, as amended by Amdt. 192-29, 42 FR 42866, Aug. 25, 1977; Amdt. 192-29, 42 FR 60148, Nov. 25, 1977; Amdt. 192-49, 50 FR 13225, Apr. 3, 1985; Amdt. 192-85, 63 FR 37503, July 13, 1998]

§192.315 Wrinkle bends in steel pipe.

- (a) A wrinkle bend may not be made on steel pipe to be operated at a pressure that produces a hoop stress of 30 percent, or more, of SMYS.
- (b) Each wrinkle bend on steel pipe must comply with the following:
- (1) The bend must not have any sharp kinks.
 - (2) When measured along the crotch of the bend, the wrinkles must be a distance of at least one pipe diameter.
 - (3) On pipe 16 inches (406 millimeters) or larger in diameter, the bend may not have a deflection of more than $1\frac{1}{2}^{\circ}$ for each wrinkle.
 - (4) On pipe containing a longitudinal weld the longitudinal seam must be as near as practicable to the neutral axis of the bend.

[35 FR 13257, Aug. 19, 1970, as amended by Amdt. 192-85, 63 FR 37503, July 13, 1998]

§192.317 Protection from hazards.

- (a) The operator must take all practicable steps to protect each transmission line or main from washouts, floods, unstable soil, landslides, or other hazards that may cause the pipeline to move or to sustain abnormal loads. In addition, the operator must take all practicable steps to protect offshore pipelines from damage by mud slides, water currents, hurricanes, ship anchors, and fishing operations.
- (b) Each aboveground transmission line or main, not located offshore or in inland navigable water areas, must be protected from accidental damage by vehicular traffic or other similar causes, either by being placed at a safe distance from the traffic or by installing barricades.
- (c) Pipelines, including pipe risers, on each platform located offshore or in inland navigable waters must be protected from accidental damage by vessels.

[Amdt. 192-27, 41 FR 34606, Aug. 16, 1976, as amended by Amdt. 192-78, 61 FR 28784, June 6, 1996]

§192.319 Installation of pipe in a ditch.

- (a) When installed in a ditch, each transmission line that is to be operated at a pressure producing a hoop stress of 20 percent or more of SMYS must be installed so that the pipe fits the ditch so as to minimize stresses and protect the pipe coating from damage.
- (b) When a ditch for a transmission line or main is backfilled, it must be backfilled in a manner that:
 - (1) Provides firm support under the pipe; and
 - (2) Prevents damage to the pipe and pipe coating from equipment or from the backfill material.
- (c) All offshore pipe in water at least 12 feet (3.7 meters) deep but not more than 200 feet (61 meters) deep, as measured from the mean low tide, except pipe in the Gulf of Mexico and its inlets under 15 feet (4.6 meters) of water, must be installed so that the top of the pipe is below the natural bottom unless the pipe is supported by stanchions, held in place by anchors or heavy concrete coating, or protected by an equivalent means. Pipe in the Gulf of Mexico and its inlets under 15 feet (4.6 meters) of water must be installed so that the top of the pipe is 36 inches (914 millimeters) below the seabed for normal excavation or 18 inches (457 millimeters) for rock excavation.

[35 FR 13257, Aug. 19, 1970, as amended by Amdt. 192-27, 41 FR 34606, Aug. 16, 1976; Amdt. 192-78, 61 FR 28784, June 6, 1996; Amdt. 192-85, 63 FR 37503, July 13, 1998]

§192.321 Installation of plastic pipe.

- (a) Plastic pipe must be installed below ground level except as provided by paragraphs (g) and (h) of this section.
- (b) Plastic pipe that is installed in a vault or any other below grade enclosure must be completely encased in gas-tight metal pipe and fittings that are adequately protected from corrosion.
- (c) Plastic pipe must be installed so as to minimize shear or tensile stresses.
- (d) Thermoplastic pipe that is not encased must have a minimum wall thickness of 0.090 inch (2.29 millimeters), except that pipe with an outside diameter of 0.875 inch (22.3 millimeters) or less may have a minimum wall thickness of 0.062 inch (1.58 millimeters).
- (e) Plastic pipe that is not encased must have an electrically conducting wire or other means of locating the pipe while it is underground. Tracer wire may not be wrapped around the pipe and contact with the pipe must be minimized but is not prohibited. Tracer wire or other metallic elements installed for pipe locating purposes must be resistant to corrosion damage, either by use of coated copper wire or by other means.
- (f) Plastic pipe that is being encased must be inserted into the casing pipe in a manner that will protect the plastic. The leading end of the plastic must be closed before insertion.
- (g) Uncased plastic pipe may be temporarily installed above ground level under the following conditions:
 - (1) The operator must be able to demonstrate that the cumulative aboveground exposure of the pipe does not exceed the manufacturer's recommended maximum period of exposure or 2 years, whichever is less.

- (2) The pipe either is located where damage by external forces is unlikely or is otherwise protected against such damage.
 - (3) The pipe adequately resists exposure to ultraviolet light and high and low temperatures.
- (h) Plastic pipe may be installed on bridges provided that it is:
- (1) Installed with protection from mechanical damage, such as installation in a metallic casing;
 - (2) Protected from ultraviolet radiation; and
 - (3) Not allowed to exceed the pipe temperature limits specified in §192.123.

[35 FR 13257, Aug. 19, 1970, as amended by Amdt. 192-78, 61 FR 28784, June 6, 1996; Amdt. 192-85, 63 FR 37503, July 13, 1998; Amdt. 192-93, 68 FR 53900, Sept. 15, 2003; Amdt. 192-94, 69 FR 32895, June 14, 2004]

§192.323 Casing.

Each casing used on a transmission line or main under a railroad or highway must comply with the following:

- (a) The casing must be designed to withstand the superimposed loads.
- (b) If there is a possibility of water entering the casing, the ends must be sealed.
- (c) If the ends of an unvented casing are sealed and the sealing is strong enough to retain the maximum allowable operating pressure of the pipe, the casing must be designed to hold this pressure at a stress level of not more than 72 percent of SMYS.
- (d) If vents are installed on a casing, the vents must be protected from the weather to prevent water from entering the casing.

§192.325 Underground clearance.

- (a) Each transmission line must be installed with at least 12 inches (305 millimeters) of clearance from any other underground structure not associated with the transmission line. If this clearance cannot be attained, the transmission line must be protected from damage that might result from the proximity of the other structure.
- (b) Each main must be installed with enough clearance from any other underground structure to allow proper maintenance and to protect against damage that might result from proximity to other structures.
- (c) In addition to meeting the requirements of paragraph (a) or (b) of this section, each plastic transmission line or main must be installed with sufficient clearance, or must be insulated, from any source of heat so as to prevent the heat from impairing the serviceability of the pipe.
- (d) Each pipe-type or bottle-type holder must be installed with a minimum clearance from any other holder as prescribed in §192.175(b).

[35 FR 13257, Aug. 19, 1970, as amended by Amdt. 192-85, 63 FR 37503, July 13, 1998]

R 460.20413 Underground clearances.

SOUR GAS

In addition to the requirements set forth in 49 C.F.R. §192.325, which is adopted by reference in R 460.20606, an operator of pipeline facilities used in the transportation of sour gas shall, if practical, install the pipeline with not less than 48 inches of clearance from all other underground structures not associated with the pipeline. If this clearance cannot be practicably attained, the pipeline shall be protected from damage that might result due to its proximity to the other structure or structures.

History: 2003 AACS.

§192.327 Cover.

- (a) Except as provided in paragraphs (c), (e), (f), and (g) of this section, each buried transmission line must be installed with a minimum cover as follows:

LOCATION	NORMAL SOIL	CONSOLIDATED ROCK
INCHES (MILLIMETERS)		
Class 1 locations	30 (762)	18 (457)
Class 2, 3, and 4 locations	36 (914)	24 (610)
Drainage ditches of public roads and railroad crossings	36 (914)	24 (610)

- (b) Except as provided in paragraphs (c) and (d) of this section, each buried main must be installed with at least 24 inches (610 millimeters) of cover.
- (c) Where an underground structure prevents the installation of a transmission line or main with the minimum cover, the transmission line or main may be installed with less cover if it is provided with additional protection to withstand anticipated external loads.
- (d) A main may be installed with less than 24 inches (610 millimeters) of cover if the law of the State or municipality:
- (1) Establishes a minimum cover of less than 24 inches (610 millimeters);
 - (2) Requires that mains be installed in a common trench with other utility lines; and
 - (3) Provides adequately for prevention of damage to the pipe by external forces.
- (e) Except as provided in paragraph (c) of this section, all pipe installed in a navigable river, stream, or harbor must be installed with a minimum cover of 48 inches (1,219 millimeters) in soil or 24 inches (610 millimeters) in consolidated rock between the top of the pipe and the underwater natural bottom (as determined by recognized and generally accepted practices).
- (f) All pipe installed offshore, except in the Gulf of Mexico and its inlets, under water not more than 200 feet (60 meters) deep, as measured from the mean low tide, must be installed as follows:
- (1) Except as provided in paragraph (c) of this section, pipe under water less than 12 feet (3.66 meters) deep, must be installed with a minimum cover of 36 inches (914 millimeters) in soil or 18 inches (457 millimeters) in consolidated rock between the top of the pipe and the natural bottom.

(2) Pipe under water at least 12 feet (3.66 meters) deep must be installed so that the top of the pipe is below the natural bottom, unless the pipe is supported by stanchions, held in place by anchors or heavy concrete coating, or protected by an equivalent means.

(g) All pipelines installed under water in the Gulf of Mexico and its inlets, as defined in §192.3, must be installed in accordance with §192.612(b)(3).

[35 FR 13257, Aug. 19, 1970, as amended by Amdt. 192-27, 41 FR 34606, Aug. 16, 1976; Amdt. 192-78, 61 FR 28785, June 6, 1996; Amdt. 192-85, 63 FR 37503, July 13, 1998; Amdt. 192-98, 69 FR 48406, Aug. 10, 2004]

R 460.20414 Cover.

SOUR GAS

In addition to the requirements set forth in 49 C.F.R. §192.327, which is adopted by reference in R 460.20606, an operator of pipeline facilities used in the transportation of sour gas shall comply with all of the following provisions:

- (a) Pipelines shall be buried, except where special conditions of usage necessitate above ground construction.*
- (b) A buried pipeline shall be installed with a minimum cover of 48 inches.*
- (c) When practical, a warning tape shall be installed not less than 12 inches directly above the pipeline, but not more than 36 inches below grade, for the purpose of warning excavators of the existence of the pipeline and the hazardous nature of sour gas.*

History: 2003 AACS.

R 460.20415 Pipeline location.

SOUR GAS

In addition to the requirements set forth in 49 C.F.R. §192.327, which is adopted by reference in R 460.20606, an operator of pipeline facilities used in the transportation of sour gas shall comply with both of the following provisions:

- (a) A pipeline shall be routed to avoid class 3 and 4 locations, if practical.*
- (b) Use of road rights-of-way shall be avoided, if practical.*

History: 2003 AACS.

§192.328 Additional construction requirements for steel pipe using alternative maximum allowable operating pressure.

For a new or existing pipeline segment to be eligible for operation at the alternative maximum allowable operating pressure calculated under §192.620, a segment must meet the following additional construction requirements. Records must be maintained, for the useful life of the pipeline, demonstrating compliance with these requirements:

TO ADDRESS THIS CONSTRUCTION ISSUE:	THE PIPELINE SEGMENT MUST MEET THIS ADDITIONAL CONSTRUCTION REQUIREMENT:
(a) Quality assurance	(1) The construction of the pipeline segment must be done under a quality assurance plan addressing pipe inspection, hauling and stringing, field bending, welding, non-destructive examination of girth welds, applying and testing field applied coating, lowering of the pipeline into the ditch, padding and backfilling, and hydrostatic testing.
	(2) The quality assurance plan for applying and testing field applied coating to girth welds must be: (i) Equivalent to that required under §192.112(f)(3) for pipe; and (ii) Performed by an individual with the knowledge, skills, and ability to assure effective coating application.
(b) Girth welds	(1) All girth welds on a new pipeline segment must be non-destructively examined in accordance with §192.243(b) and (c).
(c) Depth of cover	(1) Notwithstanding any lesser depth of cover otherwise allowed in §192.327, there must be at least 36 inches (914 millimeters) of cover or equivalent means to protect the pipeline from outside force damage.
	(2) In areas where deep tilling or other activities could threaten the pipeline, the top of the pipeline must be installed at least one foot below the deepest expected penetration of the soil.
(d) Initial strength testing	(1) The pipeline segment must not have experienced failures indicative of systemic material defects during strength testing, including initial hydrostatic testing. A root cause analysis, including metallurgical examination of the failed pipe, must be performed for any failure experienced to verify that it is not indicative of a systemic concern. The results of this root cause analysis must be reported to each PHMSA pipeline safety regional office where the pipe is in service at least 60 days prior to operating at the alternative MAOP. An operator must also notify a State pipeline safety authority when the pipeline is located in a State where PHMSA has an interstate agent agreement, or an intrastate pipeline is regulated by that State.
(e) Interference currents	(1) For a new pipeline segment, the construction must address the impacts of induced alternating current from parallel electric transmission lines and other known sources of potential interference with corrosion control.

[72 FR 62176, Oct. 17, 2008]

Subpart H—Customer Meters, Service Regulators, and Service Lines

§192.351 Scope.

This subpart prescribes minimum requirements for installing customer meters, service regulators, service lines, service line valves, and service line connections to mains.

§192.353 Customer meters and regulators: Location.

- ~~(a) Each meter and service regulator, whether inside or outside a building, must be installed in a readily accessible location and be protected from corrosion and other damage, including, if installed outside a building, vehicular damage that may be anticipated. However, the upstream regulator in a series may be buried.~~
- ~~(b) Each service regulator installed within a building must be located as near as practical to the point of service line entrance.~~
- ~~(c) Each meter installed within a building must be located in a ventilated place and not less than 3 feet (914 millimeters) from any source of ignition or any source of heat which might damage the meter.~~
- ~~(d) Where feasible, the upstream regulator in a series must be located outside the building, unless it is located in a separate metering or regulating building.~~

[35 FR 13257, Aug. 19, 1970, as amended by Amdt. 192-85, 63 FR 37503, July 13, 1998; Amdt. 192-93, 68 FR 53900, Sept. 15, 2003]

R 460.20308 Customer meters and regulators; location.

The requirements contained in 49 C.F.R. §192.353, which is adopted by reference in R 460.20606, are superseded by all of the following provisions:

- (a) An operator shall install a customer's meter and regulator outside the building, unless any of the following apply:*
 - (i) The distribution system operates at 10 psig or less and an outside meter set assembly is not practical.*
 - (ii) A commercial building, industrial building, or apartment building if an outside meter set assembly is not practical.*
 - (iii) Row-type houses or houses where the proximity of adjoining buildings makes outside meter set assemblies impractical.*
- (b) A service line excluded under subdivision (a) of this rule must include an outside above grade riser, if practical.*
- (c) If an outside meter set assembly or an outside above grade riser is installed, then the above grade piping shall be designed to prevent an external force applied to the service line from being transferred to and damaging the inside piping.*

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- (d) An operator shall install a meter and service regulator, whether inside or outside of a building, in a readily accessible location and shall protect the meter and regulator from corrosion and other damage. An operator shall not install a meter in a bedroom, closet, bathroom, under a combustible stairway, or in an unventilated or inaccessible place.*
- (e) An operator shall ensure that a service regulator installed inside a building is located as near as practical to the point of service line entrance.*
- (f) An operator shall ensure that a meter installed inside a building is located in a ventilated place not less than 3 feet from a source of ignition or heat that might damage the meter.*
- (g) An operator shall ensure that the upstream regulator in a series is located outside of the building unless it is located in a separate metering or regulating building.*

History: 1998-2000 AACs; 2019 MR 1, Eff. Jan. 3, 2019.

§192.355 Customer meters and regulators: Protection from damage.

- (a) Protection from vacuum or back pressure.** If the customer's equipment might create either a vacuum or a back pressure, a device must be installed to protect the system.
- (b) Service regulator vents and relief vents.** Service regulator vents and relief vents must terminate outdoors, and the outdoor terminal must—
 - (1) Be rain and insect resistant;
 - (2) Be located at a place where gas from the vent can escape freely into the atmosphere and away from any opening into the building; and
 - (3) Be protected from damage caused by submergence in areas where flooding may occur.
- (c) Pits and vaults.** Each pit or vault that houses a customer meter or regulator at a place where vehicular traffic is anticipated, must be able to support that traffic.

[35 FR 13257, Aug. 19, 1970, as amended by Amdt. 192-58, 53 FR 1635, Jan. 21, 1988]

§192.357 Customer meters and regulators: Installation.

- (a)** Each meter and each regulator must be installed so as to minimize anticipated stresses upon the connecting piping and the meter.
- (b)** When close all-thread nipples are used, the wall thickness remaining after the threads are cut must meet the minimum wall thickness requirements of this part.
- (c)** Connections made of lead or other easily damaged material may not be used in the installation of meters or regulators.
- (d)** Each regulator that might release gas in its operation must be vented to the outside atmosphere.

§192.359 Customer meter installations: Operating pressure.

- (a) A meter may not be used at a pressure that is more than 67 percent of the manufacturer's shell test pressure.
- (b) Each newly installed meter manufactured after November 12, 1970, must have been tested to a minimum of 10 p.s.i. (69 kPa) gage.
- (c) A rebuilt or repaired tinned steel case meter may not be used at a pressure that is more than 50 percent of the pressure used to test the meter after rebuilding or repairing.

[35 FR 13257, Aug. 19, 1970, as amended by Amdt. 192-1, 35 FR 17660, Nov. 17, 1970; Amdt. 192-85, 63 FR 37503, July 13, 1998]

§192.361 Service lines: Installation.

- (a) **Depth.** Each buried service line must be installed with at least 12 inches (305 millimeters) of cover in private property and at least 18 inches (457 millimeters) of cover in streets and roads. However, where an underground structure prevents installation at those depths, the service line must be able to withstand any anticipated external load.
- (b) **Support and Backfill.** Each service line must be properly supported on undisturbed or well-compacted soil, and material used for backfill must be free of materials that could damage the pipe or its coating.
- (c) **Grading for Drainage.** Where condensate in the gas might cause interruption in the gas supply to the customer, the service line must be graded so as to drain into the main or into drips at the low points in the service line.
- (d) **Protection Against Piping Strain and External Loading.** Each service line must be installed so as to minimize anticipated piping strain and external loading.
- (e) **Installation of Service Lines into Buildings.** Each underground service line installed below grade through the outer foundation wall of a building must:
 - (1) In the case of a metal service line, be protected against corrosion;
 - (2) In the case of a plastic service line, be protected from shearing action and backfill settlement; and
 - (3) Be sealed at the foundation wall to prevent leakage into the building.
- (f) **Installation of Service Lines Under Buildings.** Where an underground service line is installed under a building:
 - (1) It must be encased in a gas tight conduit;
 - (2) The conduit and the service line must, if the service line supplies the building it underlies, extend into a normally usable and accessible part of the building; and
 - (3) The space between the conduit and the service line must be sealed to prevent gas leakage into the building and, if the conduit is sealed at both ends, a vent line from the annular space must extend to a point where gas would not be a hazard, and extend above grade, terminating in a rain and insect resistant fitting.

- (g) **Locating Underground Service Lines.** Each underground nonmetallic service line that is not encased must have a means of locating the pipe that complies with §192.321(e).

[35 FR 13257, Aug. 19, 1970, as amended by Amdt. 192-75, 61 FR 18517, Apr. 26, 1996; Amdt. 192-85, 63 FR 37503, July 13, 1998; Amdt. 192-93, 68 FR 53900, Sept. 15, 2003]

§192.363 Service lines: Valve requirements.

- (a) Each service line must have a service-line valve that meets the applicable requirements of subparts B and D of this part. A valve incorporated in a meter bar, that allows the meter to be bypassed, may not be used as a service-line valve.
- (b) A soft seat service line valve may not be used if its ability to control the flow of gas could be adversely affected by exposure to anticipated heat.
- (c) Each service-line valve on a high-pressure service line, installed above ground or in an area where the blowing of gas would be hazardous, must be designed and constructed to minimize the possibility of the removal of the core of the valve with other than specialized tools.

§192.365 Service lines: Location of valves.

- (a) **Relation to Regulator or Meter.** Each service-line valve must be installed upstream of the regulator or, if there is no regulator, upstream of the meter.
- (b) **Outside Valves.** Each service line must have a shut-off valve in a readily accessible location that, if feasible, is outside of the building.
- (c) **Underground Valves.** Each underground service-line valve must be located in a covered durable curb box or standpipe that allows ready operation of the valve and is supported independently of the service lines.

R 460.20309 Service lines; valve location.

(1) *In addition to the requirements contained in 49 C.F.R. §192.365, which is adopted by reference in R 460.20606, an operator shall ensure that service lines are equipped with a valve located on the service line outside the building if any of the following provisions apply:*

- (a) *The service line operates at a pressure of more than 10 psig.*
- (b) *The service line is 2 inches or larger in diameter.*
- (c) *The service line supplies any of the following:*
- (i) *A hospital.*
 - (ii) *A church.*
 - (iii) *A theater.*
 - (iv) *A school.*
 - (v) *A building of public assemblage similar to the buildings listed in paragraphs (i) to (iv) of this subdivision.*

(vi) *A commercial or industrial building.*

(vii) *A dwelling that houses more than 4 families.*

(2) *An operator shall ensure that an outside valve required by subrule (1) of this rule is located aboveground in an accessible place, if feasible. If an aboveground location is not feasible, then the operator shall ensure that a curb valve or other remote valve is installed.*

(3) *If a curb valve is installed, then the operator shall establish a planned procedure which permits accurately locating the service line valve within a reasonable period of time when the service line valve is not plainly visible at the surface of the ground during all periods of the year.*

History: 1998-2000 AACs; 2009 AACs.

§192.367 Service lines: General requirements for connections to main piping.

(a) **Location.** Each service line connection to a main must be located at the top of the main or, if that is not practical, at the side of the main, unless a suitable protective device is installed to minimize the possibility of dust and moisture being carried from the main into the service line.

(b) **Compression-Type Connection to Main.** Each compression-type service line to main connection must:

- (1) Be designed and installed to effectively sustain the longitudinal pull-out or thrust forces caused by contraction or expansion of the piping, or by anticipated external or internal loading; and
- (2) If gaskets are used in connecting the service line to the main connection fitting, have gaskets that are compatible with the kind of gas in the system.

[35 FR 13257, Aug. 19, 1970, as amended by Amdt. 192-75, 61 FR 18517, Apr. 26, 1996]

§192.369 Service lines: Connections to cast iron or ductile iron mains.

(a) Each service line connected to a cast iron or ductile iron main must be connected by a mechanical clamp, by drilling and tapping the main, or by another method meeting the requirements of §192.273.

(b) If a threaded tap is being inserted, the requirements of §192.151 (b) and (c) must also be met.

§192.371 Service lines: Steel.

Each steel service line to be operated at less than 100 p.s.i. (689 kPa) gage must be constructed of pipe designed for a minimum of 100 p.s.i. (689 kPa) gage.

[Amdt. 192-1, 35 FR 17660, Nov. 17, 1970, as amended by Amdt. 192-85, 63 FR 37503, July 13, 1998]

§192.373 Service lines: Cast iron and ductile iron.

(a) Cast or ductile iron pipe less than 6 inches (152 millimeters) in diameter may not be installed for service lines.

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(b) If cast iron pipe or ductile iron pipe is installed for use as a service line, the part of the service line which extends through the building wall must be of steel pipe.

(c) A cast iron or ductile iron service line may not be installed in unstable soil or under a building.

[35 FR 13257, Aug. 19, 1970, as amended by Amdt. 192-85, 63 FR 37503, July 13, 1998]

§192.375 Service lines: Plastic.

(a) Each plastic service line outside a building must be installed below ground level, except that—

(1) It may be installed in accordance with §192.321(g); and

(2) It may terminate above ground level and outside the building, if—

(i) The above ground level part of the plastic service line is protected against deterioration and external damage; and

(ii) The plastic service line is not used to support external loads.

(b) Each plastic service line inside a building must be protected against external damage.

[35 FR 13257, Aug. 19, 1970, as amended by Amdt. 192-78, 61 FR 28785, June 6, 1996]

§192.377 Service lines: Copper.

Each copper service line installed within a building must be protected against external damage.

§192.379 New service lines not in use.

Each service line that is not placed in service upon completion of installation must comply with one of the following until the customer is supplied with gas:

(a) The valve that is closed to prevent the flow of gas to the customer must be provided with a locking device or other means designed to prevent the opening of the valve by persons other than those authorized by the operator.

(b) A mechanical device or fitting that will prevent the flow of gas must be installed in the service line or in the meter assembly.

(c) The customer's piping must be physically disconnected from the gas supply and the open pipe ends sealed.

[Amdt. 192-8, 37 FR 20694, Oct. 3, 1972]

§192.381 Service lines: Excess flow valve performance standards.

(a) Excess flow valves (EFVs) to be used on service lines that operate continuously throughout the year at a pressure not less than 10 p.s.i. (69 kPa) gage must be manufactured and tested by the manufacturer according to an industry specification, or the manufacturer's written specification, to ensure that each valve will:

- (1) Function properly up to the maximum operating pressure at which the valve is rated;
- (2) Function properly at all temperatures reasonably expected in the operating environment of the service line;
- (3) At 10 p.s.i. (69 kPa) gage:
 - (i) Close at, or not more than 50 percent above, the rated closure flow rate specified by the manufacturer; and
 - (ii) Upon closure, reduce gas flow—
 - (A) For an excess flow valve designed to allow pressure to equalize across the valve, to no more than 5 percent of the manufacturer's specified closure flow rate, up to a maximum of 20 cubic feet per hour (0.57 cubic meters per hour); or
 - (B) For an excess flow valve designed to prevent equalization of pressure across the valve, to no more than 0.4 cubic feet per hour (.01 cubic meters per hour); and
- (4) Not close when the pressure is less than the manufacturer's minimum specified operating pressure and the flow rate is below the manufacturer's minimum specified closure flow rate.
- (b) An excess flow valve must meet the applicable requirements of Subparts B and D of this part.
- (c) An operator must mark or otherwise identify the presence of an excess flow valve in the service line.
- (d) An operator shall locate an excess flow valve as near as practical to the fitting connecting the service line to its source of gas supply.
- (e) An operator should not install an excess flow valve on a service line where the operator has prior experience with contaminants in the gas stream, where these contaminants could be expected to cause the excess flow valve to malfunction or where the excess flow valve would interfere with necessary operation and maintenance activities on the service, such as blowing liquids from the line.

[Amdt. 192-79, 61 FR 31459, June 20, 1996, as amended by Amdt. 192-80, 62 FR 2619, Jan. 17, 1997; Amdt. 192-85, 63 FR 37504, July 13, 1998; Amdt. 192-121, 81 FR 71001, Oct. 14, 2016]

§192.383 Excess flow valve installation.

- (a) **Definitions.** As used in this section:

Branched service line means a gas service line that begins at the existing service line or is installed concurrently with the primary service line but serves a separate residence.

Replaced service line means a gas service line where the fitting that connects the service line to the main is replaced or the piping connected to this fitting is replaced.

Service line serving single-family residence means a gas service line that begins at the fitting that connects the service line to the main and serves only one single-family residence (SFR).

- (b) **Installation Required.** An EFV installation must comply with the performance standards in §192.381. After April 14, 2017, each operator must install an EFV on any new or replaced service line serving the following types of services before the line is activated:
- (1) A single service line to one SFR;

- (2) A branched service line to a SFR installed concurrently with the primary SFR service line (i.e., a single EFV may be installed to protect both service lines);
 - (3) A branched service line to a SFR installed off a previously installed SFR service line that does not contain an EFV;
 - (4) Multifamily residences with known customer loads not exceeding 1,000 SCFH per service, at time of service installation based on installed meter capacity, and
 - (5) A single, small commercial customer served by a single service line with a known customer load not exceeding 1,000 SCFH, at the time of meter installation, based on installed meter capacity.
- (c) **Exceptions to excess flow valve installation requirement.** An operator need not install an excess flow valve if one or more of the following conditions are present:
- (1) The service line does not operate at a pressure of 10 psig or greater throughout the year;
 - (2) The operator has prior experience with contaminants in the gas stream that could interfere with the EFV's operation or cause loss of service to a customer;
 - (3) An EFV could interfere with necessary operation or maintenance activities, such as blowing liquids from the line; or
 - (4) An EFV meeting the performance standards in §192.381 is not commercially available to the operator.
- (d) **Customer's right to request an EFV.** Existing service line customers who desire an EFV on service lines not exceeding 1,000 SCFH and who do not qualify for one of the exceptions in paragraph (c) of this section may request an EFV to be installed on their service lines. If an eligible service line customer requests an EFV installation, an operator must install the EFV at a mutually agreeable date. The operator's rate-setter determines how and to whom the costs of the requested EFVs are distributed.
- (e) **Operator notification of customers concerning EFV installation.** Operators must notify customers of their right to request an EFV in the following manner:
- (1) Except as specified in paragraphs (c) and (e)(5) of this section, each operator must provide written or electronic notification to customers of their right to request the installation of an EFV. Electronic notification can include emails, Web site postings, and e-billing notices.
 - (2) The notification must include an explanation for the service line customer of the potential safety benefits that may be derived from installing an EFV. The explanation must include information that an EFV is designed to shut off the flow of natural gas automatically if the service line breaks.
 - (3) The notification must include a description of EFV installation and replacement costs. The notice must alert the customer that the costs for maintaining and replacing an EFV may later be incurred, and what those costs will be to the extent known.
 - (4) The notification must indicate that if a service line customer requests installation of an EFV and the load does not exceed 1,000 SCFH and the conditions of paragraph (c) are not present, the operator must install an EFV at a mutually agreeable date.
 - (5) Operators of master-meter systems and liquefied petroleum gas (LPG) operators with fewer than 100 customers may continuously post a general notification in a prominent location frequented by customers.

- (f) **Operator evidence of customer notification.** An operator must make a copy of the notice or notices currently in use available during PHMSA inspections or State inspections conducted under a pipeline safety program certified or approved by PHMSA under 49 U.S.C. 60105 or 60106.
- (g) **Reporting.** Except for operators of master-meter systems and LPG operators with fewer than 100 customers, each operator must report the EFV measures detailed in the annual report required by §191.11.
- [Amdt. 192-121, 81 FR 71001, Oct. 14, 2016; 81 FR 72739, Oct. 21, 2016]

§192.385 Manual service line shut-off valve installation.

- (a) **Definitions.** As used in this section:

Manual service line shut-off valve means a curb valve or other manually operated valve located near the service line that is safely accessible to operator personnel or other personnel authorized by the operator to manually shut off gas flow to the service line, if needed.

- (b) **Installation requirement.** The operator must install either a manual service line shut-off valve or, if possible, based on sound engineering analysis and availability, an EFV for any new or replaced service line with installed meter capacity exceeding 1,000 SCFH.
- (c) **Accessibility and maintenance.** Manual service line shut-off valves for any new or replaced service line must be installed in such a way as to allow accessibility during emergencies. Manual service shut-off valves installed under this section are subject to regular scheduled maintenance, as documented by the operator and consistent with the valve manufacturer's specification.

[Amdt. 192-121, 81 FR 71002, Oct. 14, 2016]

Subpart I—Requirements for Corrosion Control

Source: Amdt. 192-4, 36 FR 12302, June 30, 1971, unless otherwise noted.

§192.451 Scope.

(a) This subpart prescribes minimum requirements for the protection of metallic pipelines from external, internal, and atmospheric corrosion.

(b) [Reserved]

[Amdt. 192-4, 36 FR 12302, June 30, 1971, as amended by Amdt. 192-27, 41 FR 34606, Aug. 16, 1976; Amdt. 192-33, 43 FR 39389, Sept. 5, 1978]

§192.452 How does this subpart apply to converted pipelines and regulated onshore gathering lines?

(a) **Converted Pipelines.** Notwithstanding the date the pipeline was installed or any earlier deadlines for compliance, each pipeline which qualifies for use under this part in accordance with §192.14 must meet the requirements of this subpart specifically applicable to pipelines installed before August 1, 1971, and all other applicable requirements within 1 year after the pipeline is readied for service. However, the requirements of this subpart specifically applicable to pipelines installed after July 31, 1971, apply if the pipeline substantially meets those requirements before it is readied for service or it is a segment which is replaced, relocated, or substantially altered.

(b) **Regulated Onshore Gathering Lines.** For any regulated onshore gathering line under §192.9 existing on April 14, 2006, that was not previously subject to this part, and for any onshore gathering line that becomes a regulated onshore gathering line under §192.9 after April 14, 2006, because of a change in class location or increase in dwelling density:

(1) The requirements of this subpart specifically applicable to pipelines installed before August 1, 1971, apply to the gathering line regardless of the date the pipeline was actually installed; and

(2) The requirements of this subpart specifically applicable to pipelines installed after July 31, 1971, apply only if the pipeline substantially meets those requirements.

[Amdt. 192-30, 42 FR 60148, Nov. 25, 1977, as amended by Amdt. 192-102, 71 FR 13303, Mar. 15, 2006]

§192.453 General.

The corrosion control procedures required by §192.605(b)(2), including those for the design, installation, operation, and maintenance of cathodic protection systems, must be carried out by, or under the direction of, a person qualified in pipeline corrosion control methods.

[Amdt. 192-71, 59 FR 6584, Feb. 11, 1994]

§192.455 External corrosion control: Buried or submerged pipelines installed after July 31, 1971.

- (a) Except as provided in paragraphs (b), (c), and (f) of this section, each buried or submerged pipeline installed after July 31, 1971, must be protected against external corrosion, including the following:
 - (1) It must have an external protective coating meeting the requirements of §192.461.
 - (2) It must have a cathodic protection system designed to protect the pipeline in accordance with this subpart, installed and placed in operation within 1 year after completion of construction.
- (b) An operator need not comply with paragraph (a) of this section, if the operator can demonstrate by tests, investigation, or experience in the area of application, including, as a minimum, soil resistivity measurements and tests for corrosion accelerating bacteria, that a corrosive environment does not exist. However, within 6 months after an installation made pursuant to the preceding sentence, the operator shall conduct tests, including pipe-to-soil potential measurements with respect to either a continuous reference electrode or an electrode using close spacing, not to exceed 20 feet (6 meters), and soil resistivity measurements at potential profile peak locations, to adequately evaluate the potential profile along the entire pipeline. If the tests made indicate that a corrosive condition exists, the pipeline must be cathodically protected in accordance with paragraph (a)(2) of this section.
- (c) An operator need not comply with paragraph (a) of this section, if the operator can demonstrate by tests, investigation, or experience that—
 - (1) For a copper pipeline, a corrosive environment does not exist; or
 - (2) For a temporary pipeline with an operating period of service not to exceed 5 years beyond installation, corrosion during the 5-year period of service of the pipeline will not be detrimental to public safety.
- (d) Notwithstanding the provisions of paragraph (b) or (c) of this section, if a pipeline is externally coated, it must be cathodically protected in accordance with paragraph (a)(2) of this section.
- ~~(e) Aluminum may not be installed in a buried or submerged pipeline if that aluminum is exposed to an environment with a natural pH in excess of 8, unless tests or experience indicate its suitability in the particular environment involved.~~
- (f) This section does not apply to electrically isolated, metal alloy fittings in plastic pipelines, if:
 - (1) For the size fitting to be used, an operator can show by test, investigation, or experience in the area of application that adequate corrosion control is provided by the alloy composition; and
 - (2) The fitting is designed to prevent leakage caused by localized corrosion pitting.

[Amdt. 192-4, 36 FR 12302, June 30, 1971, as amended at Amdt. 192-28, 42 FR 35654, July 11, 1977; Amdt. 192-39, 47 FR 9844, Mar. 8, 1982; Amdt. 192-78, 61 FR 28785, June 6, 1996; Amdt. 192-85, 63 FR 37504, July 13, 1998]

R 460.20310 Galvanized or aluminum pipe prohibited for direct burial or submerged use.

- (1) *In addition to the requirements contained in 49 C.F.R. §192.461 which is adopted by reference in R 460.20606, an operator shall not utilize galvanized pipe or aluminum pipe for direct burial or submerged use.*
- (2) *The requirements contained in 49 C.F.R. §192.455(e), which is adopted by reference in R 460.20606, are superseded by the requirement that an operator shall not utilize aluminum pipe for direct burial or submerged use.*

History: 1998-2000 AACS; 2019 MR 1, Eff. Jan. 3, 2019.

§192.457 External corrosion control: Buried or submerged pipelines installed before August 1, 1971.

- (a) Except for buried piping at compressor, regulator, and measuring stations, each buried or submerged transmission line installed before August 1, 1971, that has an effective external coating must be cathodically protected along the entire area that is effectively coated, in accordance with this subpart. For the purposes of this subpart, a pipeline does not have an effective external coating if its cathodic protection current requirements are substantially the same as if it were bare. The operator shall make tests to determine the cathodic protection current requirements.
- (b) Except for cast iron or ductile iron, each of the following buried or submerged pipelines installed before August 1, 1971, must be cathodically protected in accordance with this subpart in areas in which active corrosion is found:
- (1) Bare or ineffectively coated transmission lines.
 - (2) Bare or coated pipes at compressor, regulator, and measuring stations.
 - (3) Bare or coated distribution lines.

[Amdt. 192-4, 36 FR 12302, June 30, 1971, as amended by Amdt. 192-33, 43 FR 39390, Sept. 5, 1978; Amdt. 192-93, 68 FR 53900, Sept. 15, 2003]

§192.459 External corrosion control: Examination of buried pipeline when exposed.

Whenever an operator has knowledge that any portion of a buried pipeline is exposed, the exposed portion must be examined for evidence of external corrosion if the pipe is bare, or if the coating is deteriorated. If external corrosion requiring remedial action under §§192.483 through 192.489 is found, the operator shall investigate circumferentially and longitudinally beyond the exposed portion (by visual examination, indirect method, or both) to determine whether additional corrosion requiring remedial action exists in the vicinity of the exposed portion.

[Amdt. 192-87, 64 FR 56981, Oct. 22, 1999]

§192.461 External corrosion control: Protective coating.

- (a) Each external protective coating, whether conductive or insulating, applied for the purpose of external corrosion control must—
 - (1) Be applied on a properly prepared surface;
 - (2) Have sufficient adhesion to the metal surface to effectively resist underfilm migration of moisture;
 - (3) Be sufficiently ductile to resist cracking;
 - (4) Have sufficient strength to resist damage due to handling and soil stress; and
 - (5) Have properties compatible with any supplemental cathodic protection.
- (b) Each external protective coating which is an electrically insulating type must also have low moisture absorption and high electrical resistance.
- (c) Each external protective coating must be inspected just prior to lowering the pipe into the ditch and backfilling, and any damage detrimental to effective corrosion control must be repaired.
- (d) Each external protective coating must be protected from damage resulting from adverse ditch conditions or damage from supporting blocks.
- (e) If coated pipe is installed by boring, driving, or other similar method, precautions must be taken to minimize damage to the coating during installation.

§192.463 External corrosion control: Cathodic protection.

- (a) Each cathodic protection system required by this subpart must provide a level of cathodic protection that complies with one or more of the applicable criteria contained in appendix D of this part. If none of these criteria is applicable, the cathodic protection system must provide a level of cathodic protection at least equal to that provided by compliance with one or more of these criteria.
- (b) If amphoteric metals are included in a buried or submerged pipeline containing a metal of different anodic potential—
 - (1) The amphoteric metals must be electrically isolated from the remainder of the pipeline and cathodically protected; or
 - (2) The entire buried or submerged pipeline must be cathodically protected at a cathodic potential that meets the requirements of appendix D of this part for amphoteric metals.
- (c) The amount of cathodic protection must be controlled so as not to damage the protective coating or the pipe.

§192.465 External corrosion control: Monitoring.

- (a) Each pipeline that is under cathodic protection must be tested at least once each calendar year, but with intervals not exceeding 15 months, to determine whether the cathodic protection meets the requirements of §192.463. However, if tests at those intervals are impractical for separately protected short sections of mains or transmission lines, not in excess of 100 feet (30 meters), or separately

Section Three: Subpart I – §192.467

protected service lines, these pipelines may be surveyed on a sampling basis. At least 10 percent of these protected structures, distributed over the entire system must be surveyed each calendar year, with a different 10 percent checked each subsequent year, so that the entire system is tested in each 10-year period.

- (b) Each cathodic protection rectifier or other impressed current power source must be inspected six times each calendar year, but with intervals not exceeding 2 ½ months, to insure that it is operating.
- (c) Each reverse current switch, each diode, and each interference bond whose failure would jeopardize structure protection must be electrically checked for proper performance six times each calendar year, but with intervals not exceeding 2 ½ months. Each other interference bond must be checked at least once each calendar year, but with intervals not exceeding 15 months.
- (d) Each operator shall take prompt remedial action to correct any deficiencies indicated by the monitoring.
- (e) After the initial evaluation required by §§192.455(b) and (c) and 192.457(b), each operator must, not less than every 3 years at intervals not exceeding 39 months, reevaluate its unprotected pipelines and cathodically protect them in accordance with this subpart in areas in which active corrosion is found. The operator must determine the areas of active corrosion by electrical survey. However, on distribution lines and where an electrical survey is impractical on transmission lines, areas of active corrosion may be determined by other means that include review and analysis of leak repair and inspection records, corrosion monitoring records, exposed pipe inspection records, and the pipeline environment.

[Amdt. 192-4, 36 FR 12302, June 30, 1971, as amended by Amdt. 192-33, 43 FR 39390, Sept. 5, 1978; Amdt. 192-35A, 45 FR 23441, Apr. 7, 1980; Amdt. 192-85, 63 FR 37504, July 13, 1998; Amdt. 192-93, 68 FR 53900, Sept. 15, 2003; Amdt. 192-114, 75 FR 48603, Aug. 11, 2010]

§192.467 External corrosion control: Electrical isolation.

- (a) Each buried or submerged pipeline must be electrically isolated from other underground metallic structures, unless the pipeline and the other structures are electrically interconnected and cathodically protected as a single unit.
- (b) One or more insulating devices must be installed where electrical isolation of a portion of a pipeline is necessary to facilitate the application of corrosion control.
- (c) Except for unprotected copper inserted in ferrous pipe, each pipeline must be electrically isolated from metallic casings that are a part of the underground system. However, if isolation is not achieved because it is impractical, other measures must be taken to minimize corrosion of the pipeline inside the casing.
- (d) Inspection and electrical tests must be made to assure that electrical isolation is adequate.
- (e) An insulating device may not be installed in an area where a combustible atmosphere is anticipated unless precautions are taken to prevent arcing.
- (f) Where a pipeline is located in close proximity to electrical transmission tower footings, ground cables or counterpoise, or in other areas where fault currents or unusual risk of lightning may be anticipated, it must be provided with protection against damage due to fault currents or lightning, and protective measures must also be taken at insulating devices.

[Amdt. 192-4, 36 FR 12302, June 30, 1971, as amended by Amdt. 192-33, 43 FR 39390, Sept. 5, 1978]

§192.469 External corrosion control: Test stations.

Each pipeline under cathodic protection required by this subpart must have sufficient test stations or other contact points for electrical measurement to determine the adequacy of cathodic protection.

[Amdt. 192-27, 41 FR 34606, Aug. 16, 1976]

§192.471 External corrosion control: Test leads.

- (a) Each test lead wire must be connected to the pipeline so as to remain mechanically secure and electrically conductive.
- (b) Each test lead wire must be attached to the pipeline so as to minimize stress concentration on the pipe.
- (c) Each bared test lead wire and bared metallic area at point of connection to the pipeline must be coated with an electrical insulating material compatible with the pipe coating and the insulation on the wire.

§192.473 External corrosion control: Interference currents.

- (a) Each operator whose pipeline system is subjected to stray currents shall have in effect a continuing program to minimize the detrimental effects of such currents.
- (b) Each impressed current type cathodic protection system or galvanic anode system must be designed and installed so as to minimize any adverse effects on existing adjacent underground metallic structures.

[Amdt. 192-4, 36 FR 12302, June 30, 1971, as amended by Amdt. 192-33, 43 FR 39390, Sept. 5, 1978]

§192.475 Internal corrosion control: General.

- (a) Corrosive gas may not be transported by pipeline, unless the corrosive effect of the gas on the pipeline has been investigated and steps have been taken to minimize internal corrosion.
- (b) Whenever any pipe is removed from a pipeline for any reason, the internal surface must be inspected for evidence of corrosion. If internal corrosion is found—
 - (1) The adjacent pipe must be investigated to determine the extent of internal corrosion;
 - (2) Replacement must be made to the extent required by the applicable paragraphs of §§192.485, 192.487, or 192.489; and
 - (3) Steps must be taken to minimize the internal corrosion.
- (c) Gas containing more than 0.25 grain of hydrogen sulfide per 100 cubic feet (5.8 milligrams/m³) at standard conditions (4 parts per million) may not be stored in pipe-type or bottle-type holders.)

[Amdt. 192-4, 36 FR 12302, June 30, 1971, as amended by Amdt. 192-33, 43 FR 39390, Sept. 5, 1978; Amdt. 192-78, 61 FR 28785, June 6, 1996; Amdt. 192-85, 63 FR 37504, July 13, 1998]

R 460.20416 Internal corrosion control; generally.

SOUR GAS

In addition to the requirements set forth in 49 C.F.R. §192.475, which is adopted by reference in R 460.20606,

an operator of pipeline facilities used in the transportation of sour gas shall not transport by pipeline any gas containing H₂S, unless the corrosive effect of the H₂S has been investigated and steps have been taken to minimize internal corrosion for the pipeline facilities.

History: 2003 AACs.

§192.476 Internal corrosion control: Design and construction of transmission line.

- (a) **Design and construction.** Except as provided in paragraph (b) of this section, each new transmission line and each replacement of line pipe, valve, fitting, or other line component in a transmission line must have features incorporated into its design and construction to reduce the risk of internal corrosion. At a minimum, unless it is impracticable or unnecessary to do so, each new transmission line or replacement of line pipe, valve, fitting, or other line component in a transmission line must:
- (1) Be configured to reduce the risk that liquids will collect in the line;
 - (2) Have effective liquid removal features whenever the configuration would allow liquids to collect; and
 - (3) Allow use of devices for monitoring internal corrosion at locations with significant potential for internal corrosion.
- (b) **Exceptions to applicability.** The design and construction requirements of paragraph (a) of this section do not apply to the following:
- (1) Offshore pipeline; and
 - (2) Pipeline installed or line pipe, valve, fitting or other line component replaced before May 23, 2007.
- (c) **Change to existing transmission line.** When an operator changes the configuration of a transmission line, the operator must evaluate the impact of the change on internal corrosion risk to the downstream portion of an existing onshore transmission line and provide for removal of liquids and monitoring of internal corrosion as appropriate.
- (d) **Records.** An operator must maintain records demonstrating compliance with this section. Provided the records show why incorporating design features addressing paragraph (a)(1), (a)(2), or (a)(3) of this section is impracticable or unnecessary, an operator may fulfill this requirement through written procedures supported by as-built drawings or other construction records.

[72 FR 20059, Apr. 23, 2007]

§192.477 Internal corrosion control: Monitoring.

If corrosive gas is being transported, coupons or other suitable means must be used to determine the effectiveness of the steps taken to minimize internal corrosion. Each coupon or other means of monitoring internal corrosion must be checked two times each calendar year, but with intervals not exceeding 7 ½ months.

[Amdt. 192-33, 43 FR 39390, Sept. 5, 1978]

R 460.20417 Internal corrosion control; monitoring.

SOUR GAS

In addition to the requirements set forth in 49 C.F.R. §192.477, which is adopted by reference in R 460.20606, an operator of pipeline facilities used in the transportation of sour gas shall use coupons or other suitable means to determine the effectiveness of the steps taken to minimize internal corrosion. Initially, each coupon or other means of monitoring internal corrosion shall be checked 4 times each calendar year, but with intervals of not more than 3 ½ months until a monitoring schedule can be developed that will adequately identify internal corrosion. The monitoring schedule shall not exceed the schedule set forth in 49 C.F.R. §192.477.

History: 2003 AACs.

§192.479 Atmospheric corrosion control: General.

- (a) Each operator must clean and coat each pipeline or portion of pipeline that is exposed to the atmosphere, except pipelines under paragraph (c) of this section.
- (b) Coating material must be suitable for the prevention of atmospheric corrosion.
- (c) Except portions of pipelines in offshore splash zones or soil-to-air interfaces, the operator need not protect from atmospheric corrosion any pipeline for which the operator demonstrates by test, investigation, or experience appropriate to the environment of the pipeline that corrosion will—
 - (1) Only be a light surface oxide; or
 - (2) Not affect the safe operation of the pipeline before the next scheduled inspection.

[Amdt. 192-93, 68 FR 53901, Sept. 15, 2003]

§192.481 Atmospheric corrosion control: Monitoring.

- (a) Each operator must inspect each pipeline or portion of pipeline that is exposed to the atmosphere for evidence of atmospheric corrosion, as follows:

IF THE PIPELINE IS LOCATED:	THEN THE FREQUENCY OF INSPECTION IS:
Onshore	At least once every 3 calendar years, but with intervals not exceeding 39 months
Offshore	At least once each calendar year, but with intervals not exceeding 15 months

- (b) During inspections the operator must give particular attention to pipe at soil-to-air interfaces, under thermal insulation, under disbonded coatings, at pipe supports, in splash zones, at deck penetrations, and in spans over water.
- (c) If atmospheric corrosion is found during an inspection, the operator must provide protection against the corrosion as required by §192.479.

[Amdt. 192-93, 68 FR 53901, Sept. 15, 2003]

§192.483 Remedial measures: General.

- (a) Each segment of metallic pipe that replaces pipe removed from a buried or submerged pipeline because of external corrosion must have a properly prepared surface and must be provided with an external protective coating that meets the requirements of §192.461.
- (b) Each segment of metallic pipe that replaces pipe removed from a buried or submerged pipeline because of external corrosion must be cathodically protected in accordance with this subpart.
- (c) Except for cast iron or ductile iron pipe, each segment of buried or submerged pipe that is required to be repaired because of external corrosion must be cathodically protected in accordance with this subpart.

§192.485 Remedial measures: Transmission lines.

- (a) **General corrosion.** Each segment of transmission line with general corrosion and with a remaining wall thickness less than that required for the MAOP of the pipeline must be replaced or the operating pressure reduced commensurate with the strength of the pipe based on actual remaining wall thickness. However, corroded pipe may be repaired by a method that reliable engineering tests and analyses show can permanently restore the serviceability of the pipe. Corrosion pitting so closely grouped as to affect the overall strength of the pipe is considered general corrosion for the purpose of this paragraph.
- (b) **Localized corrosion pitting.** Each segment of transmission line pipe with localized corrosion pitting to a degree where leakage might result must be replaced or repaired, or the operating pressure must be reduced commensurate with the strength of the pipe, based on the actual remaining wall thickness in the pits.
- (c) Under paragraphs (a) and (b) of this section, the strength of pipe based on actual remaining wall thickness may be determined by the procedure in ASME/ANSI B31G (incorporated by reference, see §192.7) or the procedure in PRCI PR 3-805 (R-STRENG) (incorporated by reference, see §192.7). Both procedures apply to corroded regions that do not penetrate the pipe wall, subject to the limitations prescribed in the procedures.

[Amdt. 192-4, 36 FR 12302, June 30, 1971, as amended by Amdt. 192-33, 43 FR 39390, Sept. 5, 1978; Amdt. 192-78, 61 FR 28785, June 6, 1996; Amdt. 192-88, 64 FR 69664, Dec. 14, 1999; Amdt. 192-119, 80 FR 181, Jan. 5, 2015]

R 460.20418 Remedial measures.

SOUR GAS

In addition to the requirements set forth in 49 C.F.R. §192.485, which is adopted by reference in R 460.20606, an operator of pipeline facilities used in the transportation of sour gas shall remove from service and replace every segment of a pipeline that has general corrosion resulting in a remaining wall thickness less than that required for the MAOP of the pipeline.

History: 2003 AACS.

§192.487 Remedial measures: Distribution lines other than cast iron or ductile iron lines.

- (a) **General corrosion.** Except for cast iron or ductile iron pipe, each segment of generally corroded distribution line pipe with a remaining wall thickness less than that required for the MAOP of the pipeline,

or a remaining wall thickness less than 30 percent of the nominal wall thickness, must be replaced. However, corroded pipe may be repaired by a method that reliable engineering tests and analyses show can permanently restore the serviceability of the pipe. Corrosion pitting so closely grouped as to affect the overall strength of the pipe is considered general corrosion for the purpose of this paragraph.

- (b) **Localized corrosion pitting.** Except for cast iron or ductile iron pipe, each segment of distribution line pipe with localized corrosion pitting to a degree where leakage might result must be replaced or repaired.

[Amdt. 192-4, 36 FR 12302, June 30, 1971, as amended by Amdt. 192-88, 64 FR 69665, Dec. 14, 1999]

§192.489 Remedial measures: Cast iron and ductile iron pipelines.

- (a) **General graphitization.** Each segment of cast iron or ductile iron pipe on which general graphitization is found to a degree where a fracture or any leakage might result, must be replaced.
- (b) **Localized graphitization.** Each segment of cast iron or ductile iron pipe on which localized graphitization is found to a degree where any leakage might result, must be replaced or repaired, or sealed by internal sealing methods adequate to prevent or arrest any leakage.

§192.490 Direct assessment.

Each operator that uses direct assessment as defined in §192.903 on an onshore transmission line made primarily of steel or iron to evaluate the effects of a threat in the first column must carry out the direct assessment according to the standard listed in the second column. These standards do not apply to methods associated with direct assessment, such as close interval surveys, voltage gradient surveys, or examination of exposed pipelines, when used separately from the direct assessment process.

THREAT	STANDARD ¹
External corrosion	§192.925 ²
Internal corrosion in pipelines that transport dry gas	§192.927
Stress corrosion cracking	§192.929
¹ For lines not subject to subpart O of this part, the terms “covered segment” and “covered pipeline segment” in §§192.925, 192.927, and 192.929 refer to the pipeline segment on which direct assessment is performed.	
² In §192.925(b), the provision regarding detection of coating damage applies only to pipelines subject to subpart O of this part.	

[Amdt. 192-101, 70 FR 61575, Oct. 25, 2005]

§192.491 Corrosion control records.

- (a) Each operator shall maintain records or maps to show the location of cathodically protected piping, cathodic protection facilities, galvanic anodes, and neighboring structures bonded to the cathodic protection system. Records or maps showing a stated number of anodes, installed in a stated manner or spacing, need not show specific distances to each buried anode.
- (b) Each record or map required by paragraph (a) of this section must be retained for as long as the pipeline remains in service.

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- (c) Each operator shall maintain a record of each test, survey, or inspection required by this subpart in sufficient detail to demonstrate the adequacy of corrosion control measures or that a corrosive condition does not exist. These records must be retained for at least 5 years, except that records related to §§192.465 (a) and (e) and 192.475(b) must be retained for as long as the pipeline remains in service.

[Amdt. 192-78, 61 FR 28785, June 6, 1996]

DRAFT

Subpart J—Test Requirements

§192.501 Scope.

This subpart prescribes minimum leak-test and strength-test requirements for pipelines.

§192.503 General requirements.

- (a) No person may operate a new segment of pipeline, or return to service a segment of pipeline that has been relocated or replaced, until—
 - (1) It has been tested in accordance with this subpart and §192.619 to substantiate the maximum allowable operating pressure; and
 - (2) Each potentially hazardous leak has been located and eliminated.
- (b) The test medium must be liquid, air, natural gas, or inert gas that is—
 - (1) Compatible with the material of which the pipeline is constructed;
 - (2) Relatively free of sedimentary materials; and
 - (3) Except for natural gas, nonflammable.
- (c) Except as provided in §192.505(a), if air, natural gas, or inert gas is used as the test medium, the following maximum hoop stress limitations apply:

CLASS LOCATION	MAXIMUM HOOP STRESS ALLOWED AS PERCENTAGE OF SMYS	
	NATURAL GAS	AIR OR INERT GAS
1	80	80
2	30	75
3	30	50
4	30	40

- (d) Each joint used to tie in a test segment of pipeline is excepted from the specific test requirements of this subpart, but each non-welded joint must be leak tested at not less than its operating pressure.
- (e) If a component other than pipe is the only item being replaced or added to a pipeline, a strength test after installation is not required, if the manufacturer of the component certifies that:
 - (1) The component was tested to at least the pressure required for the pipeline to which it is being added;
 - (2) The component was manufactured under a quality control system that ensures that each item manufactured is at least equal in strength to a prototype and that the prototype was tested to at least the pressure required for the pipeline to which it is being added; or
 - (3) The component carries a pressure rating established through applicable ASME/ANSI, Manufacturers Standardization Society of the Valve and Fittings Industry, Inc. (MSS) specifications, or by unit strength calculations as described in §192.143.

[35 FR 13257, Aug. 19, 1970, as amended by Amdt. 192-58, 53 FR 1635, Jan. 21, 1988; Amdt. 192-60, 53 FR 36029, Sept. 16, 1988; Amdt. 192-60A, 54 FR 5485, Feb. 3, 1989; Amdt. 192-120, 80 FR 12779, Mar. 11, 2015]

§192.505 Strength test requirements for steel pipeline to operate at a hoop stress of 30 percent or more of SMYS.

- (a) Except for service lines, each segment of a steel pipeline that is to operate at a hoop stress of 30 percent or more of SMYS must be strength tested in accordance with this section to substantiate the proposed maximum allowable operating pressure. In addition, in a Class 1 or Class 2 location, if there is a building intended for human occupancy within 300 feet (91 meters) of a pipeline, a hydrostatic test must be conducted to a test pressure of at least 125 percent of maximum operating pressure on that segment of the pipeline within 300 feet (91 meters) of such a building, but in no event may the test section be less than 600 feet (183 meters) unless the length of the newly installed or relocated pipe is less than 600 feet (183 meters). However, if the buildings are evacuated while the hoop stress exceeds 50 percent of SMYS, air or inert gas may be used as the test medium.
- (b) In a Class 1 or Class 2 location, each compressor station regulator station, and measuring station, must be tested to at least Class 3 location test requirements.
- (c) Except as provided in paragraph (e) of this section, the strength test must be conducted by maintaining the pressure at or above the test pressure for at least 8 hours.
- (d) For fabricated units and short sections of pipe, for which a post installation test is impractical, a preinstallation strength test must be conducted by maintaining the pressure at or above the test pressure for at least 4 hours.

[35 FR 13257, Aug. 19, 1970, as amended by Amdt. 192-85, 63 FR 37504, July 13, 1998; Amdt. 192-94, 69 FR 32895, June 14, 2004; Amdt. 195-94, 69 FR 54592, Sept. 9, 2004; Amdt. 192-120, 80 FR 12779, Mar. 11, 2015]

R 460.20412 Strength test requirements.

SOUR GAS

In addition to the requirements set forth in 49 C.F.R. §192.505, which is adopted by reference in R 460.20606, an operator of pipeline facilities used in the transportation of sour gas shall pressure test in place all sour gas pipelines to not less than 2 times their maximum allowable operating pressure (MAOP) for not less than 8 hours.

History: 2003 AACS.

§192.507 Test requirements for pipelines to operate at a hoop stress less than 30 percent of SMYS and at or above 100 p.s.i. (689 kPa) gage.

Except for service lines and plastic pipelines, each segment of a pipeline that is to be operated at a hoop stress less than 30 percent of SMYS and at or above 100 p.s.i. (689 kPa) gage must be tested in accordance with the following:

- (a) The pipeline operator must use a test procedure that will ensure discovery of all potentially hazardous leaks in the segment being tested.

- (b) If, during the test, the segment is to be stressed to 20 percent or more of SMYS and natural gas, inert gas, or air is the test medium—
- (1) A leak test must be made at a pressure between 100 p.s.i. (689 kPa) gage and the pressure required to produce a hoop stress of 20 percent of SMYS; or
 - (2) The line must be walked to check for leaks while the hoop stress is held at approximately 20 percent of SMYS.
- (c) The pressure must be maintained at or above the test pressure for at least 1 hour.

[35 FR 13257, Aug. 19, 1970, as amended by Amdt. 192-58, 53 FR 1635, Jan. 21, 1988; Amdt. 192-85, 63 FR 37504, July 13, 1998]

§192.509 Test requirements for pipelines to operate below 100 p.s.i. (689 kPa) gage.

Except for service lines and plastic pipelines, each segment of a pipeline that is to be operated below 100 p.s.i. (689 kPa) gage must be leak tested in accordance with the following:

- (a) The test procedure used must ensure discovery of all potentially hazardous leaks in the segment being tested.
- ~~(b) Each main that is to be operated at less than 1 p.s.i. (6.9 kPa) gage must be tested to at least 10 p.s.i. (69 kPa) gage and each main to be operated at or above 1 p.s.i. (6.9 kPa) gage must be tested to at least 90 p.s.i. (621 kPa) gage.~~

[35 FR 13257, Aug. 19, 1970, as amended by Amdt. 192-58, 53 FR 1635, Jan. 21, 1988; Amdt. 192-85, 63 FR 37504, July 13, 1998]

R 460.20311 Test requirements for pipelines operating below 100 psig.

The requirements contained in 49 C.F.R. §192.509(b), which is adopted by reference in R 460.20606, are superseded by all of the following provisions:

- (a) An operator shall test a main that is to be operated at less than 1 psig to not less than 10 psig.*
- (b) An operator shall test a main that is to be operated at or above 1 psig, but not more than 60 psig, to not less than 90 psig.*
- (c) An operator shall test a main that is to be operated at more than 60 psig, but less than 100 psig, to not less than 1 ½ times the proposed maximum allowable operating pressure.*
- (d) An operator shall ensure that the test pressure is maintained at or above the test pressure requirement for the pipeline being tested for not less than 1 hour. However, the operator shall test a relatively short segment for not less than 30 minutes.*

History: 1998-2000 AACS.

§192.511 Test requirements for service lines.

- (a) Each segment of a service line (other than plastic) must be leak tested in accordance with this section before being placed in service. If feasible, the service line connection to the main must be

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included in the test; if not feasible, it must be given a leakage test at the operating pressure when placed in service.

~~(b) Each segment of a service line (other than plastic) intended to be operated at a pressure of at least 1 p.s.i. (6.9 kPa) gage but not more than 40 p.s.i. (276 kPa) gage must be given a leak test at a pressure of not less than 50 p.s.i. (345 kPa) gage.~~

~~(c) Each segment of a service line (other than plastic) intended to be operated at pressures of more than 40 p.s.i. (276 kPa) gage must be tested to at least 90 p.s.i. (621 kPa) gage, except that each segment of a steel service line stressed to 20 percent or more of SMYS must be tested in accordance with §192.507 of this subpart.~~

[35 FR 13257, Aug. 19, 1970, as amended by Amdt. 192-74, 61 FR 18517, Apr. 26, 1996; Amdt. 192-85, 63 FR 37504, July 13, 1998]

R 460.20312 Test requirements; service lines other than plastic.

The requirements contained in 49 C.F.R. §192.511(b) and (c), which are adopted by reference in R 460.20606, are superseded by the requirement that an operator shall test all service lines, other than plastic service lines, to a minimum pressure of 90 psig, but not less than 150% of the maximum allowable operating pressure, for not less than 10 minutes. Each segment of a steel service line stressed to 20% or more of specified minimum yield strength must still be tested in accordance with 49 C.F.R. § 192.507, which is adopted by reference in R 460.20606.

History: 1998-2000 AACS; 2019 MR 1, Eff. Jan. 3, 2019.

§192.513 Test requirements for plastic pipelines.

- (a) Each segment of a plastic pipeline must be tested in accordance with this section.
- (b) The test procedure must insure discovery of all potentially hazardous leaks in the segment being tested.
- (c) The test pressure must be at least 150 percent of the maximum operating pressure or 50 p.s.i. (345 kPa) gage, whichever is greater. However, the maximum test pressure may not be more than three times the pressure determined under §192.121, at a temperature not less than the pipe temperature during the test.
- (d) During the test, the temperature of thermoplastic material may not be more than 100 °F (38 °C), or the temperature at which the material's long-term hydrostatic strength has been determined under the listed specification, whichever is greater.

[35 FR 13257, Aug. 19, 1970, as amended by Amdt. 192-77, 61 FR 27793, June 3, 1996; 61 FR 45905, Aug. 30, 1996; Amdt. 192-85, 63 FR 37504, July 13, 1998]

R 460.20313 Minimum test duration; plastic pipelines.

In addition to the requirements contained in 49 C.F.R. §192.513, which is adopted by reference in R 460.20606, an operator shall test plastic pipelines according to all of the following:

- (a) Except for plastic service lines, the test must be maintained at or above the pressure requirement for not less than one hour. However, an operator may test a relatively short segment for not less than 30 minutes.*

(b) All plastic service lines must be pressure tested for not less than 10 minutes.

History: 1998-2000 AACS; 2019 MR 1, Eff. Jan. 3, 2019.

§192.515 Environmental protection and safety requirements.

- (a) In conducting tests under this subpart, each operator shall insure that every reasonable precaution is taken to protect its employees and the general public during the testing. Whenever the hoop stress of the segment of the pipeline being tested will exceed 50 percent of SMYS, the operator shall take all practicable steps to keep persons not working on the testing operation outside of the testing area until the pressure is reduced to or below the proposed maximum allowable operating pressure.
- (b) The operator shall insure that the test medium is disposed of in a manner that will minimize damage to the environment.

§192.517 Records.

- (a) Each operator shall make, and retain for the useful life of the pipeline, a record of each test performed under §§192.505 and 192.507. The record must contain at least the following information:
 - (1) The operator's name, the name of the operator's employee responsible for making the test, and the name of any test company used.
 - (2) Test medium used.
 - (3) Test pressure.
 - (4) Test duration.
 - (5) Pressure recording charts, or other record of pressure readings.
 - (6) Elevation variations, whenever significant for the particular test.
 - (7) Leaks and failures noted and their disposition.
- (b) Each operator must maintain a record of each test required by §§192.509, 192.511, and 192.513 for at least 5 years.

[35 FR 13257, Aug. 19, 1970, as amended by Amdt. 192-93, 68 FR 53901, Sept. 15, 2003]

R 460.20314 Test records.

In addition to the requirements contained in 49 C.F.R. §192.517(a), which is adopted by reference in R 460.20606, an operator shall retain the following test record information:

- (a) The proposed maximum allowable operating pressure of the pipeline.*
- (b) Except for distribution facilities, the existing class location of the area in which the pipeline will be installed*
- (c) The date the test was performed..*

History: 1998-2000 AACS; 2019 MR 1, Eff. Jan. 3, 2019.

Subpart K—Uprating

§192.551 Scope.

This subpart prescribes minimum requirements for increasing maximum allowable operating pressures (uprating) for pipelines.

§192.553 General requirements.

- (a) **Pressure Increases.** Whenever the requirements of this subpart require that an increase in operating pressure be made in increments, the pressure must be increased gradually, at a rate that can be controlled, and in accordance with the following:
- (1) At the end of each incremental increase, the pressure must be held constant while the entire segment of pipeline that is affected is checked for leaks.
 - (2) Each leak detected must be repaired before a further pressure increase is made, except that a leak determined not to be potentially hazardous need not be repaired, if it is monitored during the pressure increase and it does not become potentially hazardous.
- (b) **Records.** Each operator who uprates a segment of pipeline shall retain for the life of the segment a record of each investigation required by this subpart, of all work performed, and of each pressure test conducted, in connection with the uprating.
- (c) **Written Plan.** Each operator who uprates a segment of pipeline shall establish a written procedure that will ensure that each applicable requirement of this subpart is complied with.
- (d) **Limitation on Increase in Maximum Allowable Operating Pressure.** Except as provided in §192.555(c), a new maximum allowable operating pressure established under this subpart may not exceed the maximum that would be allowed under §§192.619 and 192.621 for a new segment of pipeline constructed of the same materials in the same location. However, when uprating a steel pipeline, if any variable necessary to determine the design pressure under the design formula (§192.105) is unknown, the MAOP may be increased as provided in §192.619(a)(1).

[35 FR 13257, Aug. 10, 1970, as amended by Amdt. 192-78, 61 FR 28785, June 6, 1996; Amdt. 192-93, 68 FR 53901, Sept. 15, 2003]

R 460.20315 Leaks occurring during uprating; repairs and monitoring required.

- (1) *In addition to the requirements contained in 49 C.F.R. §192.553, which is adopted by reference in R 460.20606, if the new and higher maximum allowable operating pressure will be more than 10 psig, then an operator shall expose and repair and monitor a leak that is detected during the uprating operation.*
- (2) *An operator shall file a complete copy of the written plan described in 49 C.F.R. §192.553(c), which is adopted by reference in R 460.20606, with the commission not less than 30 calendar days before commencement of a project.*

History: 1998-2000 AACs; 2014 MR 24, Eff. Dec. 23, 2014.

§192.555 Uprating to a pressure that will produce a hoop stress of 30 percent or more of SMYS in steel pipelines.

- (a) Unless the requirements of this section have been met, no person may subject any segment of a steel pipeline to an operating pressure that will produce a hoop stress of 30 percent or more of SMYS and that is above the established maximum allowable operating pressure.
- (b) Before increasing operating pressure above the previously established maximum allowable operating pressure the operator shall:
 - (1) Review the design, operating, and maintenance history and previous testing of the segment of pipeline and determine whether the proposed increase is safe and consistent with the requirements of this part; and
 - (2) Make any repairs, replacements, or alterations in the segment of pipeline that are necessary for safe operation at the increased pressure.
- (c) After complying with paragraph (b) of this section, an operator may increase the maximum allowable operating pressure of a segment of pipeline constructed before September 12, 1970, to the highest pressure that is permitted under §192.619, using as test pressure the highest pressure to which the segment of pipeline was previously subjected (either in a strength test or in actual operation).
- (d) After complying with paragraph (b) of this section, an operator that does not qualify under paragraph (c) of this section may increase the previously established maximum allowable operating pressure if at least one of the following requirements is met:
 - (1) The segment of pipeline is successfully tested in accordance with the requirements of this part for a new line of the same material in the same location.
 - (2) An increased maximum allowable operating pressure may be established for a segment of pipeline in a Class 1 location if the line has not previously been tested, and if:
 - (i) It is impractical to test it in accordance with the requirements of this part;
 - (ii) The new maximum operating pressure does not exceed 80 percent of that allowed for a new line of the same design in the same location; and
 - (iii) The operator determines that the new maximum allowable operating pressure is consistent with the condition of the segment of pipeline and the design requirements of this part.
- (e) Where a segment of pipeline is uprated in accordance with paragraph (c) or (d)(2) of this section, the increase in pressure must be made in increments that are equal to:
 - (1) 10 percent of the pressure before the uprating; or
 - (2) 25 percent of the total pressure increase, whichever produces the fewer number of increments.

R 460.20316 Leakage survey and repair requirement before uprating.

- (1) *In addition to the requirements contained in 49 C.F.R. §192.555(b)(2), which is adopted by reference in R 460.20606, an operator shall conduct a leakage survey and repair all leaks found before the operator begins uprating any segment of a steel pipeline to an operating pressure that will produce a hoop stress of 30% or more of the specified minimum yield strength for the pipeline.*

(2) The provisions contained in 49 C.F.R. §192.557(b)(2), which is adopted by reference in R 460.20606, are superseded by the requirement that before an operator begins uprating any segment of a steel pipeline to an operating pressure that will produce a hoop stress of less than 30% of the specified minimum yield strength, a leakage survey must be conducted and all leaks found shall be repaired.

History: 1998-2000 AACs; 2019 MR 1, Eff. Jan. 3, 2019.

§192.557 Uprating: Steel pipelines to a pressure that will produce a hoop stress less than 30 percent of SMYS: plastic, cast iron, and ductile iron pipelines.

- (a) Unless the requirements of this section have been met, no person may subject:
- (1) A segment of steel pipeline to an operating pressure that will produce a hoop stress less than 30 percent of SMYS and that is above the previously established maximum allowable operating pressure; or
 - (2) A plastic, cast iron, or ductile iron pipeline segment to an operating pressure that is above the previously established maximum allowable operating pressure.
- (b) Before increasing operating pressure above the previously established maximum allowable operating pressure, the operator shall:
- (1) Review the design, operating, and maintenance history of the segment of pipeline;
 - ~~(2) Make a leakage survey (if it has been more than 1 year since the last survey) and repair any leaks that are found, except that a leak determined not to be potentially hazardous need not be repaired, if it is monitored during the pressure increase and it does not become potentially hazardous;~~
 - (3) Make any repairs, replacements, or alterations in the segment of pipeline that are necessary for safe operation at the increased pressure;
 - (4) Reinforce or anchor offsets, bends and dead ends in pipe joined by compression couplings or bell and spigot joints to prevent failure of the pipe joint, if the offset, bend, or dead end is exposed in an excavation;
 - (5) Isolate the segment of pipeline in which the pressure is to be increased from any adjacent segment that will continue to be operated at a lower pressure; and
 - (6) If the pressure in mains or service lines, or both, is to be higher than the pressure delivered to the customer, install a service regulator on each service line and test each regulator to determine that it is functioning. Pressure may be increased as necessary to test each regulator, after a regulator has been installed on each pipeline subject to the increased pressure.
- (c) After complying with paragraph (b) of this section, the increase in maximum allowable operating pressure must be made in increments that are equal to 10 p.s.i. (69 kPa) gage or 25 percent of the total pressure increase, whichever produces the fewer number of increments. Whenever the requirements of paragraph (b)(6) of this section apply, there must be at least two approximately equal incremental increases.
- (d) If records for cast iron or ductile iron pipeline facilities are not complete enough to determine stresses produced by internal pressure, trench loading, rolling loads, beam stresses, and other bending loads, in evaluating the level of safety of the pipeline when operating at the proposed increased pressure, the following procedures must be followed:

- (1) In estimating the stresses, if the original laying conditions cannot be ascertained, the operator shall assume that cast iron pipe was supported on blocks with tamped backfill and that ductile iron pipe was laid without blocks with tamped backfill.
- (2) Unless the actual maximum cover depth is known, the operator shall measure the actual cover in at least three places where the cover is most likely to be greatest and shall use the greatest cover measured.
- (3) Unless the actual nominal wall thickness is known, the operator shall determine the wall thickness by cutting and measuring coupons from at least three separate pipe lengths. The coupons must be cut from pipe lengths in areas where the cover depth is most likely to be the greatest. The average of all measurements taken must be increased by the allowance indicated in the following table:

PIPE SIZE INCHES (MILLIMETERS)	ALLOWANCE INCHES (MILLIMETERS)		
	CAST IRON PIPE		DUCTILE IRON PIPE
	PIT CAST PIPE	CENTRIFUGALLY CAST PIPE	
3 to 8 (76 to 203)	0.075 (1.91)	0.065 (1.65)	0.065 (1.65)
10 to 12 (254 to 305)	0.08 (2.03)	0.07 (1.78)	0.07 (1.78)
14 to 24 (356 to 610)	0.08 (2.03)	0.08 (2.03)	0.075 (1.91)
30 to 42 (762 to 1067)	0.09 (2.29)	0.09 (2.29)	0.075 (1.91)
48 (1219)	0.09 (2.29)	0.09 (2.29)	0.08 (2.03)
54 to 60 (1372 to 1524)	0.09 (2.29)		

- (4) For cast iron pipe, unless the pipe manufacturing process is known, the operator shall assume that the pipe is pit cast pipe with a bursting tensile strength of 11,000 p.s.i. (76 MPa) gage and a modulus of rupture of 31,000 p.s.i. (214 MPa) gage.

[35 FR 13257, Aug. 19, 1970, as amended by Amdt. 192-37, 46 FR 10160, Feb. 2, 1981; Amdt. 192-62, 54 FR 5628, Feb. 6, 1989; Amdt. 195-85, 63 FR 37504, July 13, 1998]

R 460.20317 Rescinded.

History: 1998-2000 AACS; 2019 MR 1, Eff. Jan. 3, 2019.

Subpart L—Operations

§192.601 Scope.

This subpart prescribes minimum requirements for the operation of pipeline facilities.

§192.603 General provisions.

- (a) No person may operate a segment of pipeline unless it is operated in accordance with this subpart.
- (b) Each operator shall keep records necessary to administer the procedures established under §192.605.
- (c) The Associate Administrator or the State Agency that has submitted a current certification under the pipeline safety laws, (49 U.S.C. 60101 et seq.) with respect to the pipeline facility governed by an operator's plans and procedures may, after notice and opportunity for hearing as provided in 49 CFR 190.206 or the relevant State procedures, require the operator to amend its plans and procedures as necessary to provide a reasonable level of safety.

[35 FR 13257, Aug. 19, 1970, as amended by Amdt. 192-66, 56 FR 31090, July 9, 1991; Amdt. 192-71, 59 FR 6584, Feb. 11, 1994; Amdt. 192-75, 61 FR 18517, Apr. 26, 1996; Amdt. 192-118, 78 FR 58915, Sept. 25, 2013]

R 460.20501 Records.

- (1) *An operator shall maintain the information generated by any recordkeeping requirement in these rules within the state at the operating headquarters office of each service area and shall make the information available to the commission and its staff for inspection and copying upon request.*
- (2) *An operator shall maintain all of the following additional records:*
 - (a) *Maps and records showing the locations of pipelines and service lines, including lines that have been abandoned but not removed.*
 - (b) *An up-to-date schematic drawing of station piping, which shall be available at each aboveground pressure-regulating station containing buried station components.*
- (3) *In addition to the requirements contained in 49 C.F.R. §192.603(b), which is adopted by reference in R 460.20606, an operator shall establish and maintain records, make reports, and record such information as may be reasonably required to demonstrate that the operator has acted or is acting in compliance with these rules and 49 C.F.R. Part 192. The operator shall maintain these records and reports for the time periods prescribed in 49 C.F.R. Part 192; for a minimum of 2 inspection cycles, if applicable; or for a minimum of 5 years, whichever is longer.*

History: 1998-2000 AACs; 2019 MR 1, Eff. Jan. 3, 2019.

R 460.20318 Gas leak investigation; establishment of service; customer leak complaint records.

- (1) *An operator shall conduct an investigation of every gas leak report received as soon as possible. If the investigation reveals a hazardous situation, then the operator shall take immediate action to evacuate, repair, or isolate the facilities involved to reduce any danger to the public.*

(2) *A distribution utility shall not establish gas service to an applicant until the utility has made a leakage test, using gas at utilization pressure, to ensure that the applicant's fuel line is gastight and has made a determination that gas odor is detectible, where applicable. If fuel lines are not present upon completion of meter installation, the operator shall comply with all of the following:*

- (a) A valve shall be installed on the outlet piping of the meter. This valve shall be in the closed position.*
 - (b) The valve shall be tagged with contact information of the distribution utility and notice that the fuel line installation must comply with applicable fuel piping codes.*
 - (c) A mechanical device or fitting that will prevent the flow of gas shall be installed at the outlet piping.*
- (3) *An operator shall keep records of all customer leak complaints and the disposition of the complaints.*

History: 1998-2000 AACs; 2014 MR 24, Eff. Dec. 23, 2014.

§192.605 Procedural manual for operations, maintenance, and emergencies.

- (a) **General.** Each operator shall prepare and follow for each pipeline, a manual of written procedures for conducting operations and maintenance activities and for emergency response. For transmission lines, the manual must also include procedures for handling abnormal operations. This manual must be reviewed and updated by the operator at intervals not exceeding 15 months, but at least once each calendar year. This manual must be prepared before operations of a pipeline system commence. Appropriate parts of the manual must be kept at locations where operations and maintenance activities are conducted.
- (b) **Maintenance and normal operations.** The manual required by paragraph (a) of this section must include procedures for the following, if applicable, to provide safety during maintenance and operations.
 - (1) Operating, maintaining, and repairing the pipeline in accordance with each of the requirements of this subpart and subpart M of this part.
 - (2) Controlling corrosion in accordance with the operations and maintenance requirements of subpart I of this part.
 - (3) Making construction records, maps, and operating history available to appropriate operating personnel.
 - (4) Gathering of data needed for reporting incidents under Part 191 of this chapter in a timely and effective manner.
 - (5) Starting up and shutting down any part of the pipeline in a manner designed to assure operation within the MAOP limits prescribed by this part, plus the build-up allowed for operation of pressure-limiting and control devices.
 - (6) Maintaining compressor stations, including provisions for isolating units or sections of pipe and for purging before returning to service.
 - (7) Starting, operating and shutting down gas compressor units.
 - (8) Periodically reviewing the work done by operator personnel to determine the effectiveness, and adequacy of the procedures used in normal operation and maintenance and modifying the procedures when deficiencies are found.

- (9) Taking adequate precautions in excavated trenches to protect personnel from the hazards of unsafe accumulations of vapor or gas, and making available when needed at the excavation, emergency rescue equipment, including a breathing apparatus and, a rescue harness and line.
 - (10) Systematic and routine testing and inspection of pipe-type or bottle-type holders including—
 - (i) Provision for detecting external corrosion before the strength of the container has been impaired;
 - (ii) Periodic sampling and testing of gas in storage to determine the dew point of vapors contained in the stored gas which, if condensed, might cause internal corrosion or interfere with the safe operation of the storage plant; and
 - (iii) Periodic inspection and testing of pressure limiting equipment to determine that it is in safe operating condition and has adequate capacity.
 - (11) Responding promptly to a report of a gas odor inside or near a building, unless the operator's emergency procedures under §192.615(a)(3) specifically apply to these reports.
 - (12) Implementing the applicable control room management procedures required by §192.631.
- (c) **Abnormal operation.** For transmission lines, the manual required by paragraph (a) of this section must include procedures for the following to provide safety when operating design limits have been exceeded:
- (1) Responding to, investigating, and correcting the cause of:
 - (i) Unintended closure of valves or shutdowns;
 - (ii) Increase or decrease in pressure or flow rate outside normal operating limits;
 - (iii) Loss of communications;
 - (iv) Operation of any safety device; and
 - (v) Any other foreseeable malfunction of a component, deviation from normal operation, or personnel error, which may result in a hazard to persons or property.
 - (2) Checking variations from normal operation after abnormal operation has ended at sufficient critical locations in the system to determine continued integrity and safe operation.
 - (3) Notifying responsible operator personnel when notice of an abnormal operation is received.
 - (4) Periodically reviewing the response of operator personnel to determine the effectiveness of the procedures controlling abnormal operation and taking corrective action where deficiencies are found.
 - (5) The requirements of this paragraph (c) do not apply to natural gas distribution operators that are operating transmission lines in connection with their distribution system.
- (d) **Safety-related condition reports.** The manual required by paragraph (a) of this section must include instructions enabling personnel who perform operation and maintenance activities to recognize conditions that potentially may be safety-related conditions that are subject to the reporting requirements of §191.23 of this subchapter.
- (e) **Surveillance, emergency response, and accident investigation.** The procedures required by §§192.613(a), 192.615, and 192.617 must be included in the manual required by paragraph (a) of this section.
- [Amdt. 192-71, 59 FR 6584, Feb. 11, 1994, as amended by Amdt. 192-71A, 60 FR 14381, Mar. 17, 1995; Amdt. 192-93, 68 FR 53901, Sept. 15, 2003; Amdt. 192-112, 74 FR 63327, Dec. 3, 2009]

R 460.20319 Filing of operation and maintenance manual with commission staff required.

In addition to the requirements contained in 49 C.F.R. §192.605, which is adopted by reference in R 460.20606, an operator shall file the operation and maintenance manual required by 49 C.F.R. §192.605 with the commission staff in paper or electronic form. The operation and maintenance manual must include procedures that address both the federal rules and the rules contained in the Michigan gas safety standards. An operator shall file a change in the operation and maintenance manual with the commission staff within 90 calendar days after the change is made. An operator shall identify the specific changes.

History: 1998-2000 AACS; 2014 AACS; 2019 MR 1, Eff. Jan. 3, 2019.

R 460.20419 Sour gas pipeline operating and maintenance manual; contents.

SOUR GAS

The manual required by 49 C.F.R. §192.605, which is adopted by reference in R 460.20606 and which shall be filed with the commission and updated as specified in R 460.20319, shall address all hazards inherent with the transportation of sour gas and shall contain plans and procedures to minimize the health risk to the operator's employees and the general public during normal operating conditions.

History: 2003 AACS; 2014 MR 24, Eff. Dec. 23, 2014.

R 460.20420 Safety procedures for abnormal operating conditions.

SOUR GAS

The manual required by 49 C.F.R. §192.605, which is adopted by reference in R 460.20606 and which shall be filed with the commission and updated as specified in R 460.20319, shall also address the hazards inherent with the transportation of sour gas and shall include plans and procedures to minimize the health risk to the operator's employees and the general public during abnormal operating conditions.

History: 2003 AACS; 2014 MR 24, Eff. Dec. 23, 2014.

§192.607 [Reserved]**§192.609 Change in class location: Required study.**

Whenever an increase in population density indicates a change in class location for a segment of an existing steel pipeline operating at hoop stress that is more than 40 percent of SMYS, or indicates that the hoop stress corresponding to the established maximum allowable operating pressure for a segment of existing pipeline is not commensurate with the present class location, the operator shall immediately make a study to determine:

- (a) The present class location for the segment involved.
- (b) The design, construction, and testing procedures followed in the original construction, and a comparison of these procedures with those required for the present class location by the applicable provisions of this part.
- (c) The physical condition of the segment to the extent it can be ascertained from available records;
- (d) The operating and maintenance history of the segment;
- (e) The maximum actual operating pressure and the corresponding operating hoop stress, taking pressure gradient into account, for the segment of pipeline involved; and

- (f) The actual area affected by the population density increase, and physical barriers or other factors which may limit further expansion of the more densely populated area.

§192.611 Change in class location: Confirmation or revision of maximum allowable operating pressure.

- (a) If the hoop stress corresponding to the established maximum allowable operating pressure of a segment of pipeline is not commensurate with the present class location, and the segment is in satisfactory physical condition, the maximum allowable operating pressure of that segment of pipeline must be confirmed or revised according to one of the following requirements:
- (1) If the segment involved has been previously tested in place for a period of not less than 8 hours:
 - (i) The maximum allowable operating pressure is 0.8 times the test pressure in Class 2 locations, 0.667 times the test pressure in Class 3 locations, or 0.555 times the test pressure in Class 4 locations. The corresponding hoop stress may not exceed 72 percent of the SMYS of the pipe in Class 2 locations, 60 percent of SMYS in Class 3 locations, or 50 percent of SMYS in Class 4 locations.
 - (ii) The alternative maximum allowable operating pressure is 0.8 times the test pressure in Class 2 locations and 0.667 times the test pressure in Class 3 locations. For pipelines operating at alternative maximum allowable pressure per §192.620, the corresponding hoop stress may not exceed 80 percent of the SMYS of the pipe in Class 2 locations and 67 percent of SMYS in Class 3 locations.
 - (2) The maximum allowable operating pressure of the segment involved must be reduced so that the corresponding hoop stress is not more than that allowed by this part for new segments of pipelines in the existing class location.
 - (3) The segment involved must be tested in accordance with the applicable requirements of subpart J of this part, and its maximum allowable operating pressure must then be established according to the following criteria:
 - (i) The maximum allowable operating pressure after the requalification test is 0.8 times the test pressure for Class 2 locations, 0.667 times the test pressure for Class 3 locations, and 0.555 times the test pressure for Class 4 locations.
 - (ii) The corresponding hoop stress may not exceed 72 percent of the SMYS of the pipe in Class 2 locations, 60 percent of SMYS in Class 3 locations, or 50 percent of SMYS in Class 4 locations.
 - (iii) For pipeline operating at an alternative maximum allowable operating pressure per §192.620, the alternative maximum allowable operating pressure after the requalification test is 0.8 times the test pressure for Class 2 locations and 0.667 times the test pressure for Class 3 locations. The corresponding hoop stress may not exceed 80 percent of the SMYS of the pipe in Class 2 locations and 67 percent of SMYS in Class 3 locations.
- (b) The maximum allowable operating pressure confirmed or revised in accordance with this section, may not exceed the maximum allowable operating pressure established before the confirmation or revision.
- (c) Confirmation or revision of the maximum allowable operating pressure of a segment of pipeline in accordance with this section does not preclude the application of §§192.553 and 192.555.
- (d) Confirmation or revision of the maximum allowable operating pressure that is required as a result of a

study under §192.609 must be completed within 24 months of the change in class location. Pressure reduction under paragraph (a) (1) or (2) of this section within the 24-month period does not preclude establishing a maximum allowable operating pressure under paragraph (a)(3) of this section at a later date.

[Amdt. 192-63A, 54 FR 24174, June 6, 1989 as amended by Amdt. 192-78, 61 FR 28785, June 6, 1996; Amdt. 192-94, 69 FR 32895, June 14, 2004; 73 FR 62177, Oct. 17, 2008]

§192.612 Underwater inspection and reburial of pipelines in the Gulf of Mexico and its inlets.

- (a) Each operator shall prepare and follow a procedure to identify its pipelines in the Gulf of Mexico and its inlets in waters less than 15 feet (4.6 meters) deep as measured from mean low water that are at risk of being an exposed underwater pipeline or a hazard to navigation. The procedures must be in effect August 10, 2005.
- (b) Each operator shall conduct appropriate periodic underwater inspections of its pipelines in the Gulf of Mexico and its inlets in waters less than 15 feet (4.6 meters) deep as measured from mean low water based on the identified risk.
- (c) If an operator discovers that its pipeline is an exposed underwater pipeline or poses a hazard to navigation, the operator shall—
 - (1) Promptly, but not later than 24 hours after discovery, notify the National Response Center, telephone: 1-800-424-8802, of the location and, if available, the geographic coordinates of that pipeline.
 - (2) Promptly, but not later than 7 days after discovery, mark the location of the pipeline in accordance with 33 CFR part 64 at the ends of the pipeline segment and at intervals of not over 500 yards (457 meters) long, except that a pipeline segment less than 200 yards (183 meters) long need only be marked at the center; and
 - (3) Within 6 months after discovery, or not later than November 1 of the following year if the 6 month period is later than November 1 of the year of discovery, bury the pipeline so that the top of the pipe is 36 inches (914 millimeters) below the underwater natural bottom (as determined by recognized and generally accepted practices) for normal excavation or 18 inches (457 millimeters) for rock excavation.
 - (i) An operator may employ engineered alternatives to burial that meet or exceed the level of protection provided by burial.
 - (ii) If an operator cannot obtain required state or Federal permits in time to comply with this section, it must notify OPS; specify whether the required permit is State or Federal; and, justify the delay.

[Amdt. 192-98, 69 FR 48406, Aug. 10, 2004]

§192.613 Continuing surveillance.

- (a) Each operator shall have a procedure for continuing surveillance of its facilities to determine and take appropriate action concerning changes in class location, failures, leakage history, corrosion, substantial changes in cathodic protection requirements, and other unusual operating and maintenance conditions.
- (b) If a segment of pipeline is determined to be in unsatisfactory condition but no immediate hazard exists, the operator shall initiate a program to recondition or phase out the segment involved, or, if the segment

cannot be reconditioned or phased out, reduce the maximum allowable operating pressure in accordance with §192.619 (a) and (b).

§192.614 Damage prevention program.

- (a) Except as provided in paragraphs (d) and (e) of this section, each operator of a buried pipeline must carry out, in accordance with this section, a written program to prevent damage to that pipeline from excavation activities. For the purposes of this section, the term “excavation activities” includes excavation, blasting, boring, tunneling, backfilling, the removal of aboveground structures by either explosive or mechanical means, and other earthmoving operations.
- (b) An operator may comply with any of the requirements of paragraph (c) of this section through participation in a public service program, such as a one-call system, but such participation does not relieve the operator of responsibility for compliance with this section. However, an operator must perform the duties of paragraph (c)(3) of this section through participation in a one-call system, if that one-call system is a qualified one-call system. In areas that are covered by more than one qualified one-call system, an operator need only join one of the qualified one-call systems if there is a central telephone number for excavators to call for excavation activities, or if the one-call systems in those areas communicate with one another. An operator's pipeline system must be covered by a qualified one-call system where there is one in place. For the purpose of this section, a one-call system is considered a “qualified one-call system” if it meets the requirements of section (b)(1) or (b)(2) of this section.
- (1) The state has adopted a one-call damage prevention program under §198.37 of this chapter; or
- (2) The one-call system:
- (i) Is operated in accordance with §198.39 of this chapter;
 - (ii) Provides a pipeline operator an opportunity similar to a voluntary participant to have a part in management responsibilities; and
 - (iii) Assesses a participating pipeline operator a fee that is proportionate to the costs of the one-call system's coverage of the operator's pipeline.
- (c) The damage prevention program required by paragraph (a) of this section must, at a minimum:
- (1) Include the identity, on a current basis, of persons who normally engage in excavation activities in the area in which the pipeline is located.
- (2) Provides for notification of the public in the vicinity of the pipeline and actual notification of the persons identified in paragraph (c)(1) of this section of the following as often as needed to make them aware of the damage prevention program:
- (i) The program's existence and purpose; and
 - (ii) How to learn the location of underground pipelines before excavation activities are begun.
- (3) Provide a means of receiving and recording notification of planned excavation activities.
- (4) If the operator has buried pipelines in the area of excavation activity, provide for actual notification of persons who give notice of their intent to excavate of the type of temporary marking to be provided and how to identify the markings.

- (5) Provide for temporary marking of buried pipelines in the area of excavation activity before, as far as practical, the activity begins.
- (6) Provide as follows for inspection of pipelines that an operator has reason to believe could be damaged by excavation activities:
 - (i) The inspection must be done as frequently as necessary during and after the activities to verify the integrity of the pipeline; and
 - (ii) In the case of blasting, any inspection must include leakage surveys.
- (d) A damage prevention program under this section is not required for the following pipelines:
 - (1) Pipelines located offshore.
 - (2) Pipelines, other than those located offshore, in Class 1 or 2 locations until September 20, 1995.
 - (3) Pipelines to which access is physically controlled by the operator.
- (e) Pipelines operated by persons other than municipalities (including operators of master meters) whose primary activity does not include the transportation of gas need not comply with the following:
 - (1) The requirement of paragraph (a) of this section that the damage prevention program be written; and
 - (2) The requirements of paragraphs (c)(1) and (c)(2) of this section.

[Amdt. 192-40, 47 FR 13824, Apr. 1, 1982, as amended by Amdt. 192-57, 52 FR 32800, Aug. 31, 1987; Amdt. 192-73, 60 FR 14650, Mar. 20, 1995; Amdt. 192-78, 61 FR 28785, June 6, 1996; Amdt. 192-82, 62 FR 61699, Nov. 19, 1997; Amdt. 192-84, 63 FR 38758, July 20, 1998]

R 460.20320 Rescinded.

History: 1998-2000 AACS; 2009 AACS.

R 460.20421 Damage prevention program.

SOUR GAS

In addition to the requirements set forth in 49 C.F.R. §192.614, which is adopted by reference in R 460.20606, an operator of pipeline facilities used in the transportation of sour gas shall comply with both of the following provisions:

- (a) When notified by the "One-Call" system or by other means of possible excavation activity in the pipeline right-of-way, the pipeline operator shall monitor the excavation activity using on-site personnel.*
- (b) When responding to requests to mark the pipeline location, the operator shall notify the excavator of the hazards inherent in the release of sour gas.*

History: 2003 AACS.

§192.615 Emergency plans.

- (a) Each operator shall establish written procedures to minimize the hazard resulting from a gas pipeline emergency. At a minimum, the procedures must provide for the following:
 - (1) Receiving, identifying, and classifying notices of events which require immediate response by the operator.

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- (2) Establishing and maintaining adequate means of communication with appropriate fire, police, and other public officials.
 - (3) Prompt and effective response to a notice of each type of emergency, including the following:
 - (i) Gas detected inside or near a building.
 - (ii) Fire located near or directly involving a pipeline facility.
 - (iii) Explosion occurring near or directly involving a pipeline facility.
 - (iv) Natural disaster.
 - (4) The availability of personnel, equipment, tools, and materials, as needed at the scene of an emergency.
 - (5) Actions directed toward protecting people first and then property.
 - (6) Emergency shutdown and pressure reduction in any section of the operator's pipeline system necessary to minimize hazards to life or property.
 - (7) Making safe any actual or potential hazard to life or property.
 - (8) Notifying appropriate fire, police, and other public officials of gas pipeline emergencies and coordinating with them both planned responses and actual responses during an emergency.
 - (9) Safely restoring any service outage.
 - (10) Beginning action under §192.617, if applicable, as soon after the end of the emergency as possible.
 - (11) Actions required to be taken by a controller during an emergency in accordance with §192.631.
- (b) Each operator shall:
- (1) Furnish its supervisors who are responsible for emergency action a copy of that portion of the latest edition of the emergency procedures established under paragraph (a) of this section as necessary for compliance with those procedures.
 - (2) Train the appropriate operating personnel to assure that they are knowledgeable of the emergency procedures and verify that the training is effective.
 - (3) Review employee activities to determine whether the procedures were effectively followed in each emergency.
- (c) Each operator shall establish and maintain liaison with appropriate fire, police, and other public officials to:
- (1) Learn the responsibility and resources of each government organization that may respond to a gas pipeline emergency;
 - (2) Acquaint the officials with the operator's ability in responding to a gas pipeline emergency;
 - (3) Identify the types of gas pipeline emergencies of which the operator notifies the officials; and
 - (4) Plan how the operator and officials can engage in mutual assistance to minimize hazards to life or property.

[Amdt. 192-24, 41 FR 13587, Mar. 31, 1976, as amended by Amdt. 192-71, 59 FR 6585, Feb. 11, 1994; Amdt. 192-112, 74 FR 63327, Dec. 3, 2009]

R 460.20422 Emergency procedures.

SOUR GAS

The plan required by 49 C.F.R. §192.615, which is adopted by reference in R 460.20606, shall address the hazards inherent with the transportation of sour gas and shall include plans and procedures to minimize the health risk to the operator's employees and the general public in the event of an emergency.

History: 2003 AACs.

§192.616 Public awareness.

- (a) Except for an operator of a master meter or petroleum gas system covered under paragraph (j) of this section, each pipeline operator must develop and implement a written continuing public education program that follows the guidance provided in the American Petroleum Institute's (API) Recommended Practice (RP) 1162 (incorporated by reference, see §192.7).
- (b) The operator's program must follow the general program recommendations of API RP 1162 and assess the unique attributes and characteristics of the operator's pipeline and facilities.
- (c) The operator must follow the general program recommendations, including baseline and supplemental requirements of API RP 1162, unless the operator provides justification in its program or procedural manual as to why compliance with all or certain provisions of the recommended practice is not practicable and not necessary for safety.
- (d) The operator's program must specifically include provisions to educate the public, appropriate government organizations, and persons engaged in excavation related activities on:
 - (1) Use of a one-call notification system prior to excavation and other damage prevention activities;
 - (2) Possible hazards associated with unintended releases from a gas pipeline facility;
 - (3) Physical indications that such a release may have occurred;
 - (4) Steps that should be taken for public safety in the event of a gas pipeline release; and
 - (5) Procedures for reporting such an event.
- (e) The program must include activities to advise affected municipalities, school districts, businesses, and residents of pipeline facility locations.
- (f) The program and the media used must be as comprehensive as necessary to reach all areas in which the operator transports gas.
- (g) The program must be conducted in English and in other languages commonly understood by a significant number and concentration of the non-English speaking population in the operator's area.
- (h) Operators in existence on June 20, 2005, must have completed their written programs no later than June 20, 2006. The operator of a master meter or petroleum gas system covered under paragraph (j) of this section must complete development of its written procedure by June 13, 2008. Upon request, operators must submit their completed programs to PHMSA or, in the case of an intrastate pipeline facility operator, the appropriate State agency.
- (i) The operator's program documentation and evaluation results must be available for periodic review by appropriate regulatory agencies.

(j) Unless the operator transports gas as a primary activity, the operator of a master meter or petroleum gas system is not required to develop a public awareness program as prescribed in paragraphs (a) through (g) of this section. Instead the operator must develop and implement a written procedure to provide its customers public awareness messages twice annually. If the master meter or petroleum gas system is located on property the operator does not control, the operator must provide similar messages twice annually to persons controlling the property. The public awareness message must include:

- (1) A description of the purpose and reliability of the pipeline;
- (2) An overview of the hazards of the pipeline and prevention measures used;
- (3) Information about damage prevention;
- (4) How to recognize and respond to a leak; and
- (5) How to get additional information.

[Amdt. 192-100, 70 FR 28842, May 19, 2005; 70 FR 35041, June 16, 2005; 72 FR 70810, Dec. 13, 2007]

R 460.20321 Rescinded.

History: 1998-2000 AACs; 2009 AACs.

R 460.20423 Sour gas education programs.

SOUR GAS

In addition to the requirements set forth in 49 C.F.R. §192.616, which is adopted by reference in R 460.20606, an operator of pipeline facilities used in the transportation of sour gas shall establish continuing education programs that enable the public, appropriate government organizations, and persons engaged in excavation-related activities to accomplish both of the following:

- (a) Recognize a sour gas pipeline emergency for the purpose of reporting it to the operator or other appropriate public officials.*
- (b) Take appropriate action in the event of an unplanned release of sour gas.*

History: 2003 AACs.

§192.617 Investigation of failures.

Each operator shall establish procedures for analyzing accidents and failures, including the selection of samples of the failed facility or equipment for laboratory examination, where appropriate, for the purpose of determining the causes of the failure and minimizing the possibility of a recurrence.

§192.619 Maximum allowable operating pressure: Steel or plastic pipelines.

(a) No person may operate a segment of steel or plastic pipeline at a pressure that exceeds a maximum allowable operating pressure determined under paragraph (c) or (d) of this section, or the lowest of the following:

- (1) The design pressure of the weakest element in the segment, determined in accordance with subparts C and D of this part. However, for steel pipe in pipelines being converted under §192.14 or uprated

under subpart K of this part, if any variable necessary to determine the design pressure under the design formula (§192.105) is unknown, one of the following pressures is to be used as design pressure:

- (i) Eighty percent of the first test pressure that produces yield under section N5 of Appendix N of ASME B31.8 (incorporated by reference, see §192.7), reduced by the appropriate factor in paragraph (a)(2)(ii) of this section; or
- (ii) If the pipe is 12 ¾ inches (324 mm) or less in outside diameter and is not tested to yield under this paragraph, 200 p.s.i. (1379 kPa).

(2) The pressure obtained by dividing the pressure to which the segment was tested after construction as follows:

- (i) For plastic pipe in all locations, the test pressure is divided by a factor of 1.5.
- (ii) For steel pipe operated at 100 p.s.i. (689 kPa) gage or more, the test pressure is divided by a factor determined in accordance with the following table:

CLASS LOCATION	FACTORS ¹ , SEGMENT—		
	INSTALLED BEFORE (NOV. 12, 1970)	INSTALLED AFTER (NOV. 11, 1970)	CONVERTED UNDER §192.14
1	1.1	1.1	1.25
2	1.25	1.25	1.25
3	1.4	1.5	1.5
4	1.4	1.5	1.5

¹ For offshore segments installed, uprated or converted after July 31, 1977, that are not located on an offshore platform, the factor is 1.25. For segments installed, uprated or converted after July 31, 1977, that are located on an offshore platform or on a platform in inland navigable waters, including a pipe riser, the factor is 1.5.

(3) The highest actual operating pressure to which the segment was subjected during the 5 years preceding the applicable date in the second column. This pressure restriction applies unless the segment was tested according to the requirements in paragraph (a)(2) of this section after the applicable date in the third column or the segment was uprated according to the requirements in subpart K of this part:

PIPELINE SEGMENT	PRESSURE DATE	TEST DATE
—Onshore gathering line that first became subject to this part (other than §192.612) after April 13, 2006. —Onshore transmission line that was a gathering line not subject to this part before March 15, 2006	March 15, 2006, or date line becomes subject to this part, whichever is later.	5 years preceding applicable date in second column.
Offshore gathering lines	July 1, 1976	July 1, 1971.
All other pipelines	July 1, 1970	July 1, 1965.

(4) The pressure determined by the operator to be the maximum safe pressure after considering the history of the segment, particularly known corrosion and the actual operating pressure.

(b) No person may operate a segment to which paragraph (a)(4) of this section is applicable, unless over-pressure protective devices are installed on the segment in a manner that will prevent the maximum allowable operating pressure from being exceeded, in accordance with §192.195.

- (c) The requirements on pressure restrictions in this section do not apply in the following instance. An operator may operate a segment of pipeline found to be in satisfactory condition, considering its operating and maintenance history, at the highest actual operating pressure to which the segment was subjected during the 5 years preceding the applicable date in the second column of the table in paragraph (a)(3) of this section. An operator must still comply with §192.611.
- (d) The operator of a pipeline segment of steel pipeline meeting the conditions prescribed in §192.620(b) may elect to operate the segment at a maximum allowable operating pressure determined under §192.620(a).

[35 FR 13257, Aug. 19, 1970]

Editorial Note: For Federal Register citations affecting §192.619, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and at www.fdsys.gov.

§192.620 Alternative maximum allowable operating pressure for certain steel pipelines.

(a) **How does an operator calculate the alternative maximum allowable operating pressure?** An operator calculates the alternative maximum allowable operating pressure by using different factors in the same formulas used for calculating maximum allowable operating pressure under §192.619(a) as follows:

- (1) In determining the alternative design pressure under §192.105, use a design factor determined in accordance with §192.111(b), (c), or (d) or, if none of these paragraphs apply, in accordance with the following table:

CLASS LOCATION	ALTERNATIVE DESIGN FACTOR (F)
1	0.80
2	0.67
3	0.56

- (i) For facilities installed prior to December 22, 2008, for which §192.111(b), (c), or (d) applies, use the following design factors as alternatives for the factors specified in those paragraphs: §192.111(b)–0.67 or less; 192.111(c) and (d)–0.56 or less.

(ii) [Reserved]

(2) The alternative maximum allowable operating pressure is the lower of the following:

- (i) The design pressure of the weakest element in the pipeline segment, determined under subparts C and D of this part.
- (ii) The pressure obtained by dividing the pressure to which the pipeline segment was tested after construction by a factor determined in the following table:

CLASS LOCATION	ALTERNATIVE TEST FACTOR
1	1.25
2	¹ 1.50
3	1.50

¹For Class 2 alternative maximum allowable operating pressure segments installed prior to December 22, 2008 the alternative test factor is 1.25.

- (b) ***When may an operator use the alternative maximum allowable operating pressure calculated under paragraph (a) of this section?*** An operator may use an alternative maximum allowable operating pressure calculated under paragraph (a) of this section if the following conditions are met:
- (1) The pipeline segment is in a Class 1, 2, or 3 location;
 - (2) The pipeline segment is constructed of steel pipe meeting the additional design requirements in §192.112;
 - (3) A supervisory control and data acquisition system provides remote monitoring and control of the pipeline segment. The control provided must include monitoring of pressures and flows, monitoring compressor start-ups and shut-downs, and remote closure of valves per paragraph (d)(3) of this section;
 - (4) The pipeline segment meets the additional construction requirements described in §192.328;
 - (5) The pipeline segment does not contain any mechanical couplings used in place of girth welds;
 - (6) If a pipeline segment has been previously operated, the segment has not experienced any failure during normal operations indicative of a systemic fault in material as determined by a root cause analysis, including metallurgical examination of the failed pipe. The results of this root cause analysis must be reported to each PHMSA pipeline safety regional office where the pipeline is in service at least 60 days prior to operation at the alternative MAOP. An operator must also notify a State pipeline safety authority when the pipeline is located in a State where PHMSA has an interstate agent agreement, or an intrastate pipeline is regulated by that State; and
 - (7) At least 95 percent of girth welds on a segment that was constructed prior to December 22, 2008, must have been non-destructively examined in accordance with §192.243(b) and (c).
- (c) ***What is an operator electing to use the alternative maximum allowable operating pressure required to do?*** If an operator elects to use the alternative maximum allowable operating pressure calculated under paragraph (a) of this section for a pipeline segment, the operator must do each of the following:
- (1) For pipelines already in service, notify the PHMSA pipeline safety regional office where the pipeline is in service of the intention to use the alternative pressure at least 180 days before operating at the alternative MAOP. For new pipelines, notify the PHMSA pipeline safety regional office of planned alternative MAOP design and operation at least 60 days prior to the earliest start date of either pipe manufacturing or construction activities. An operator must also notify the state pipeline safety authority when the pipeline is located in a state where PHMSA has an interstate agent agreement or where an intrastate pipeline is regulated by that state.
 - (2) Certify, by signature of a senior executive officer of the company, as follows:
 - (i) The pipeline segment meets the conditions described in paragraph (b) of this section; and
 - (ii) The operating and maintenance procedures include the additional operating and maintenance requirements of paragraph (d) of this section; and
 - (iii) The review and any needed program upgrade of the damage prevention program required by paragraph (d)(4)(v) of this section has been completed.
 - (3) Send a copy of the certification required by paragraph (c)(2) of this section to each PHMSA pipeline safety regional office where the pipeline is in service 30 days prior to operating at the alternative MAOP. An operator must also send a copy to a State pipeline safety authority when the pipeline is

located in a State where PHMSA has an interstate agent agreement, or an intrastate pipeline is regulated by that State.

(4) For each pipeline segment, do one of the following:

- (i) Perform a strength test as described in §192.505 at a test pressure calculated under paragraph (a) of this section or
- (ii) For a pipeline segment in existence prior to December 22, 2008, certify, under paragraph (c)(2) of this section, that the strength test performed under §192.505 was conducted at test pressure calculated under paragraph (a) of this section, or conduct a new strength test in accordance with paragraph (c)(4)(i) of this section.

(5) Comply with the additional operation and maintenance requirements described in paragraph (d) of this section.

(6) If the performance of a construction task associated with implementing alternative MAOP that occurs after December 22, 2008, can affect the integrity of the pipeline segment, treat that task as a “covered task,” notwithstanding the definition in §192.801(b) and implement the requirements of subpart N as appropriate.

(7) Maintain, for the useful life of the pipeline, records demonstrating compliance with paragraphs (b), (c)(6), and (d) of this section.

(8) A Class 1 and Class 2 location can be upgraded one class due to class changes per §192.611(a). All class location changes from Class 1 to Class 2 and from Class 2 to Class 3 must have all anomalies evaluated and remediated per: The “original pipeline class grade” §192.620(d)(11) anomaly repair requirements; and all anomalies with a wall loss equal to or greater than 40 percent must be excavated and remediated. Pipelines in Class 4 may not operate at an alternative MAOP.

(d) ***What additional operation and maintenance requirements apply to operation at the alternative maximum allowable operating pressure?*** In addition to compliance with other applicable safety standards in this part, if an operator establishes a maximum allowable operating pressure for a pipeline segment under paragraph (a) of this section, an operator must comply with the additional operation and maintenance requirements as follows:

TO ADDRESS INCREASED RISK OF A MAXIMUM ALLOWABLE OPERATING PRESSURE BASED ON HIGHER STRESS LEVELS IN THE FOLLOWING AREAS:	TAKE THE FOLLOWING ADDITIONAL STEP:
(1) Identifying and evaluating threats	Develop a threat matrix consistent with §192.917 to do the following: (i) Identify and compare the increased risk of operating the pipeline at the increased stress level under this section with conventional operation; and (ii) Describe and implement procedures used to mitigate the risk.
(2) Notifying the public	(i) Recalculate the potential impact circle as defined in §192.903 to reflect use of the alternative maximum operating pressure calculated under paragraph (a) of this section and pipeline operating conditions; and (ii) In implementing the public education program required under §192.616, perform the following:

TO ADDRESS INCREASED RISK OF A MAXIMUM ALLOWABLE OPERATING PRESSURE BASED ON HIGHER STRESS LEVELS IN THE FOLLOWING AREAS:	TAKE THE FOLLOWING ADDITIONAL STEP:
(2) Notifying the public	(A) Include persons occupying property within 220 yards of the centerline and within the potential impact circle within the targeted audience; and (B) Include information about the integrity management activities performed under this section within the message provided to the audience.
(3) Responding to an emergency in an area defined as a high consequence area in §192.903	(i) Ensure that the identification of high consequence areas reflects the larger potential impact circle recalculated under paragraph (d)(2)(i) of this section. (ii) If personnel response time to mainline valves on either side of the high consequence area exceeds one hour (under normal driving conditions and speed limits) from the time the event is identified in the control room, provide remote valve control through a supervisory control and data acquisition (SCADA) system, other leak detection system, or an alternative method of control. (iii) Remote valve control must include the ability to close and monitor the valve position (open or closed), and monitor pressure upstream and downstream. (iv) A line break valve control system using differential pressure, rate of pressure drop or other widely-accepted method is an acceptable alternative to remote valve control.
(4) Protecting the right-of-way	(i) Patrol the right-of-way at intervals not exceeding 45 days, but at least 12 times each calendar year, to inspect for excavation activities, ground movement, wash outs, leakage, or other activities or conditions affecting the safety operation of the pipeline. (ii) Develop and implement a plan to monitor for and mitigate occurrences of unstable soil and ground movement. (iii) If observed conditions indicate the possible loss of cover, perform a depth of cover study and replace cover as necessary to restore the depth of cover or apply alternative means to provide protection equivalent to the originally-required depth of cover. (iv) Use line-of-sight line markers satisfying the requirements of §192.707(d) except in agricultural areas, large water crossings or swamp, steep terrain, or where prohibited by Federal Energy Regulatory Commission orders, permits, or local law. (v) Review the damage prevention program under §192.614(a) in light of national consensus practices, to ensure the program provides adequate protection of the right-of-way. Identify the standards or practices considered in the review, and meet or exceed those standards or practices by incorporating appropriate changes into the program. (vi) Develop and implement a right-of-way management plan to protect the pipeline segment from damage due to excavation activities.
(5) Controlling internal corrosion	(i) Develop and implement a program to monitor for and mitigate the presence of, deleterious gas stream constituents. (ii) At points where gas with potentially deleterious contaminants enters the pipeline, use filter separators or separators and gas quality monitoring equipment. (iii) Use gas quality monitoring equipment that includes a moisture analyzer, chromatograph, and periodic hydrogen sulfide sampling. (iv) Use cleaning pigs and sample accumulated liquids. Use inhibitors when corrosive gas or liquids are present.

TO ADDRESS INCREASED RISK OF A MAXIMUM ALLOWABLE OPERATING PRESSURE BASED ON HIGHER STRESS LEVELS IN THE FOLLOWING AREAS:	TAKE THE FOLLOWING ADDITIONAL STEP:
(5) Controlling internal corrosion	<p>(v) Address deleterious gas stream constituents as follows: (A) Limit carbon dioxide to 3 percent by volume; (B) Allow no free water and otherwise limit water to seven pounds per million cubic feet of gas; and (C) Limit hydrogen sulfide to 1.0 grain per hundred cubic feet (16 ppm) of gas, where the hydrogen sulfide is greater than 0.5 grain per hundred cubic feet (8 ppm) of gas, implement a pigging and inhibitor injection program to address deleterious gas stream constituents, including follow-up sampling and quality testing of liquids at receipt points.</p> <p>(vi) Review the program at least quarterly based on the gas stream experience and implement adjustments to monitor for, and mitigate the presence of, deleterious gas stream constituents.</p>
(6) Controlling interference that can impact external corrosion	<p>(i) Prior to operating an existing pipeline segment at an alternate maximum allowable operating pressure calculated under this section, or within six months after placing a new pipeline segment in service at an alternate maximum allowable operating pressure calculated under this section, address any interference currents on the pipeline segment.</p> <p>(ii) To address interference currents, perform the following: (A) Conduct an interference survey to detect the presence and level of any electrical current that could impact external corrosion where interference is suspected; (B) Analyze the results of the survey; and (C) Take any remedial action needed within 6 months after completing the survey to protect the pipeline segment from deleterious current.</p>
(7) Confirming external corrosion control through indirect assessment	<p>(i) Within six months after placing the cathodic protection of a new pipeline segment in operation, or within six months after certifying a segment under §192.620(c)(1) of an existing pipeline segment under this section, assess the adequacy of the cathodic protection through an indirect method such as close-interval survey, and the integrity of the coating using direct current voltage gradient (DCVG) or alternating current voltage gradient (ACVG).</p> <p>(ii) Remediate any construction damaged coating with a voltage drop classified as moderate or severe (IR drop greater than 35% for DCVG or 50 dBμv for ACVG) under section 4 of NACE RP-0502-2002 (incorporated by reference, see §192.7).</p> <p>(iii) Within six months after completing the baseline internal inspection required under paragraph (d)(9) of this section, integrate the results of the indirect assessment required under paragraph (d)(7)(i) of this section with the results of the baseline internal inspection and take any needed remedial actions.</p> <p>(iv) For all pipeline segments in high consequence areas, perform periodic assessments as follows: (A) Conduct periodic close interval surveys with current interrupted to confirm voltage drops in association with periodic assessments under subpart O of this part. (B) Locate pipe-to-soil test stations at half-mile intervals within each high consequence area ensuring at least one station is within each high consequence area, if practicable. (C) Integrate the results with those of the baseline and periodic assessments for integrity done under paragraphs (d)(9) and (d)(10) of this section.</p>

TO ADDRESS INCREASED RISK OF A MAXIMUM ALLOWABLE OPERATING PRESSURE BASED ON HIGHER STRESS LEVELS IN THE FOLLOWING AREAS:	TAKE THE FOLLOWING ADDITIONAL STEP:
(8) Controlling external corrosion through cathodic protection	<p>(i) If an annual test station reading indicates cathodic protection below the level of protection required in subpart I of this part, complete remedial action within six months of the failed reading or notify each PHMSA pipeline safety regional office where the pipeline is in service demonstrating that the integrity of the pipeline is not compromised if the repair takes longer than 6 months. An operator must also notify a State pipeline safety authority when the pipeline is located in a State where PHMSA has an interstate agent agreement, or an intrastate pipeline is regulated by that State; and</p> <p>(ii) After remedial action to address a failed reading, confirm restoration of adequate corrosion control by a close interval survey on either side of the affected test station to the next test station unless the reason for the failed reading is determined to be a rectifier connection or power input problem that can be remediated and otherwise verified.</p> <p>(iii) If the pipeline segment has been in operation, the cathodic protection system on the pipeline segment must have been operational within 12 months of the completion of construction.</p>
(9) Conducting a baseline assessment of integrity	<p>(i) Except as provided in paragraph (d)(9)(iii) of this section, for a new pipeline segment operating at the new alternative maximum allowable operating pressure, perform a baseline internal inspection of the entire pipeline segment as follows: (A) Assess using a geometry tool after the initial hydrostatic test and backfill and within six months after placing the new pipeline segment in service; and (B) Assess using a high resolution magnetic flux tool within three years after placing the new pipeline segment in service at the alternative maximum allowable operating pressure.</p> <p>(ii) Except as provided in paragraph (d)(9)(iii) of this section, for an existing pipeline segment, perform a baseline internal assessment using a geometry tool and a high resolution magnetic flux tool before, but within two years prior to, raising pressure to the alternative maximum allowable operating pressure as allowed under this section.</p> <p>(iii) If headers, mainline valve by-passes, compressor station piping, meter station piping, or other short portion of a pipeline segment operating at alternative maximum allowable operating pressure cannot accommodate a geometry tool and a high resolution magnetic flux tool, use direct assessment (per §192.925, §192.927 and/or §192.929) or pressure testing (per subpart J of this part) to assess that portion.</p>
(10) Conducting periodic assessments of integrity	<p>(i) Determine a frequency for subsequent periodic integrity assessments as if all the alternative maximum allowable operating pressure pipeline segments were covered by subpart O of this part and</p> <p>(ii) Conduct periodic internal inspections using a high resolution magnetic flux tool on the frequency determined under paragraph (d)(10)(i) of this section, or</p> <p>(iii) Use direct assessment (per §192.925, §192.927 and/or §192.929) or pressure testing (per subpart J of this part) for periodic assessment of a portion of a segment to the extent permitted for a baseline assessment under paragraph (d)(9)(iii) of this section.</p>

TO ADDRESS INCREASED RISK OF A MAXIMUM ALLOWABLE OPERATING PRESSURE BASED ON HIGHER STRESS LEVELS IN THE FOLLOWING AREAS:	TAKE THE FOLLOWING ADDITIONAL STEP:
(11) Making repairs	<p>(i) Perform the following when evaluating an anomaly:</p> <p>(A) Use the most conservative calculation for determining remaining strength or an alternative validated calculation based on pipe diameter, wall thickness, grade, operating pressure, operating stress level, and operating temperature: and</p> <p>(B) Take into account the tolerances of the tools used for the inspection.</p> <p>(ii) Repair a defect immediately if any of the following apply:</p> <p>(A) The defect is a dent discovered during the baseline assessment for integrity under paragraph (d)(9) of this section and the defect meets the criteria for immediate repair in §192.309(b).</p> <p>(B) The defect meets the criteria for immediate repair in §192.933(d).</p> <p>(C) The alternative maximum allowable operating pressure was based on a design factor of 0.67 under paragraph (a) of this section and the failure pressure is less than 1.25 times the alternative maximum allowable operating pressure.</p> <p>(D) The alternative maximum allowable operating pressure was based on a design factor of 0.56 under paragraph (a) of this section and the failure pressure is less than or equal to 1.4 times the alternative maximum allowable operating pressure.</p> <p>(iii) If paragraph (d)(11)(ii) of this section does not require immediate repair, repair a defect within one year if any of the following apply:</p> <p>(A) The defect meets the criteria for repair within one year in §192.933(d).</p> <p>(B) The alternative maximum allowable operating pressure was based on a design factor of 0.80 under paragraph (a) of this section and the failure pressure is less than 1.25 times the alternative maximum allowable operating pressure.</p> <p>(C) The alternative maximum allowable operating pressure was based on a design factor of 0.67 under paragraph (a) of this section and the failure pressure is less than 1.50 times the alternative maximum allowable operating pressure.</p> <p>(D) The alternative maximum allowable operating pressure was based on a design factor of 0.56 under paragraph (a) of this section and the failure pressure is less than or equal to 1.80 times the alternative maximum allowable operating pressure.</p> <p>(iv) Evaluate any defect not required to be repaired under paragraph (d)(11)(ii) or (iii) of this section to determine its growth rate, set the maximum interval for repair or re-inspection, and repair or re-inspect within that interval.</p>

- (e) ***Is there any change in overpressure protection associated with operating at the alternative maximum allowable operating pressure?*** Notwithstanding the required capacity of pressure relieving and limiting stations otherwise required by §192.201, if an operator establishes a maximum allowable operating pressure for a pipeline segment in accordance with paragraph (a) of this section, an operator must:
- (1) Provide overpressure protection that limits mainline pressure to a maximum of 104 percent of the maximum allowable operating pressure; and
 - (2) Develop and follow a procedure for establishing and maintaining accurate set points for the supervisory control and data acquisition system.

[73 FR 62177, Oct. 17, 2008, as amended by Amdt. 192-111, 74 FR 62505, Nov. 30, 2009; Amdt. 192-120, 80 FR 12779, Mar. 11, 2015]

§192.621 Maximum allowable operating pressure: High-pressure distribution systems.

- (a) No person may operate a segment of a high pressure distribution system at a pressure that exceeds the lowest of the following pressures, as applicable:
- (1) The design pressure of the weakest element in the segment, determined in accordance with subparts C and D of this part.
 - (2) 60 p.s.i. (414 kPa) gage, for a segment of a distribution system otherwise designed to operate at over 60 p.s.i. (414 kPa) gage, unless the service lines in the segment are equipped with service regulators or other pressure limiting devices in series that meet the requirements of §192.197(c).
 - ~~(3) 25 p.s.i. (172 kPa) gage in segments of cast iron pipe in which there are unreinforced bell and spigot joints.~~
 - (4) The pressure limits to which a joint could be subjected without the possibility of its parting.
 - (5) The pressure determined by the operator to be the maximum safe pressure after considering the history of the segment, particularly known corrosion and the actual operating pressures.
- (b) No person may operate a segment of pipeline to which paragraph (a)(5) of this section applies, unless overpressure protective devices are installed on the segment in a manner that will prevent the maximum allowable operating pressure from being exceeded, in accordance with §192.195.

[35 FR 13257, Aug. 19, 1970, as amended by Amdt. 192-85, 63 FR 37504, July 13, 1998]

R 460.20322 Maximum allowable operating pressure of pipeline containing cast-iron pipe.

Notwithstanding the requirement contained in 49 C.F.R. §192.621(a)(3), which is adopted by reference in R 460.20606, a person shall not operate any segment of a pipeline containing cast-iron pipe that has unreinforced bell and spigot joints at a pressure of more than 10 psig.

History: 1998-2000 AACs.

§192.623 Maximum and minimum allowable operating pressure; Low-pressure distribution systems.

- (a) No person may operate a low-pressure distribution system at a pressure high enough to make unsafe the operation of any connected and properly adjusted low-pressure gas burning equipment.
- (b) No person may operate a low pressure distribution system at a pressure lower than the minimum pressure at which the safe and continuing operation of any connected and properly adjusted low-pressure gas burning equipment can be assured.

§192.625 Odorization of gas.

- (a) A combustible gas in a distribution line must contain a natural odorant or be odorized so that at a concentration in air of one-fifth of the lower explosive limit, the gas is readily detectable by a person with a normal sense of smell.
- (b) After December 31, 1976, a combustible gas in a transmission line in a Class 3 or Class 4 location must comply with the requirements of paragraph (a) of this section unless:
 - (1) At least 50 percent of the length of the line downstream from that location is in a Class 1 or Class 2 location;
 - (2) The line transports gas to any of the following facilities which received gas without an odorant from that line before May 5, 1975;
 - (i) An underground storage field;
 - (ii) A gas processing plant;
 - (iii) A gas dehydration plant; or
 - (iv) An industrial plant using gas in a process where the presence of an odorant:
 - (A) Makes the end product unfit for the purpose for which it is intended;
 - (B) Reduces the activity of a catalyst; or
 - (C) Reduces the percentage completion of a chemical reaction;
 - (3) In the case of a lateral line which transports gas to a distribution center, at least 50 percent of the length of that line is in a Class 1 or Class 2 location; or
 - (4) The combustible gas is hydrogen intended for use as a feedstock in a manufacturing process.
- (c) In the concentrations in which it is used, the odorant in combustible gases must comply with the following:
 - (1) The odorant may not be deleterious to persons, materials, or pipe.
 - (2) The products of combustion from the odorant may not be toxic when breathed nor may they be corrosive or harmful to those materials to which the products of combustion will be exposed.
- (d) The odorant may not be soluble in water to an extent greater than 2.5 parts to 100 parts by weight.
- (e) Equipment for odorization must introduce the odorant without wide variations in the level of odorant.
- (f) To assure the proper concentration of odorant in accordance with this section, each operator must

conduct periodic sampling of combustible gases using an instrument capable of determining the percentage of gas in air at which the odor becomes readily detectable. Operators of master meter systems may comply with this requirement by—

- (1) Receiving written verification from their gas source that the gas has the proper concentration of odorant; and
- (2) Conducting periodic “sniff” tests at the extremities of the system to confirm that the gas contains odorant.

[35 FR 13257, Aug. 19, 1970]

Editorial Note: For Federal Register citations affecting §192.625, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and at www.fdsys.gov.

R 460.20323 Odorization of gas; records maintenance.

In addition to the requirements contained in 49 C.F.R. §192.625, which is adopted by reference in R 460.20606, an operator shall establish and maintain adequate records to establish compliance with the requirements of 49 C.F.R. §192.625, including the quantity of odorant used per million cubic feet of gas and sampling to determine the effectiveness of odorization.

History: 1998-2000 AACS.

§192.627 Tapping pipelines under pressure.

Each tap made on a pipeline under pressure must be performed by a crew qualified to make hot taps.

§192.629 Purging of pipelines.

- (a) When a pipeline is being purged of air by use of gas, the gas must be released into one end of the line in a moderately rapid and continuous flow. If gas cannot be supplied in sufficient quantity to prevent the formation of a hazardous mixture of gas and air, a slug of inert gas must be released into the line before the gas.
- (b) When a pipeline is being purged of gas by use of air, the air must be released into one end of the line in a moderately rapid and continuous flow. If air cannot be supplied in sufficient quantity to prevent the formation of a hazardous mixture of gas and air, a slug of inert gas must be released into the line before the air.

R 460.20404 Purging of sour gas pipelines; plan; personnel.

SOUR GAS

In addition to satisfying the requirements set forth in 49 C.F.R. §192.629, which is adopted by reference in R 460.20606, an operator of pipeline facilities used in the transportation of sour gas shall comply with both of the following provisions:

- (a) *The purging of sour gas from a pipeline shall be accomplished by burning or by equivalent control of H₂S.*

(b) All purging and blowing down of sour gas pipelines shall be done in accordance with a written plan. The plan shall include public and operator personnel safety and environmental protection considerations. Properly equipped personnel who are trained and familiar with the potential hazards of sour gas shall perform all purging and blowing down operations.

History: 1998-2000 AACS; 2003 AACS.

§192.631 Control room management.

(a) General.

- (1) This section applies to each operator of a pipeline facility with a controller working in a control room who monitors and controls all or part of a pipeline facility through a SCADA system. Each operator must have and follow written control room management procedures that implement the requirements of this section, except that for each control room where an operator's activities are limited to either or both of:
 - (i) Distribution with less than 250,000 services, or
 - (ii) Transmission without a compressor station, the operator must have and follow written procedures that implement only paragraphs (d) (regarding fatigue), (i) (regarding compliance validation), and (j) (regarding compliance and deviations) of this section.
- (2) The procedures required by this section must be integrated, as appropriate, with operating and emergency procedures required by §§192.605 and 192.615. An operator must develop the procedures no later than August 1, 2011, and must implement the procedures according to the following schedule. The procedures required by paragraphs (b), (c)(5), (d)(2) and (d)(3), (f) and (g) of this section must be implemented no later than October 1, 2011. The procedures required by paragraphs (c)(1) through (4), (d)(1), (d)(4), and (e) must be implemented no later than August 1, 2012. The training procedures required by paragraph (h) must be implemented no later than August 1, 2012, except that any training required by another paragraph of this section must be implemented no later than the deadline for that paragraph.

(b) Roles and responsibilities. Each operator must define the roles and responsibilities of a controller during normal, abnormal, and emergency operating conditions. To provide for a controller's prompt and appropriate response to operating conditions, an operator must define each of the following:

- (1) A controller's authority and responsibility to make decisions and take actions during normal operations;
- (2) A controller's role when an abnormal operating condition is detected, even if the controller is not the first to detect the condition, including the controller's responsibility to take specific actions and to communicate with others;
- (3) A controller's role during an emergency, even if the controller is not the first to detect the emergency, including the controller's responsibility to take specific actions and to communicate with others;
- (4) A method of recording controller shift-changes and any hand-over of responsibility between controllers; and
- (5) The roles, responsibilities and qualifications of others with the authority to direct or supersede the specific technical actions of a controller.

- (c) **Provide adequate information.** Each operator must provide its controllers with the information, tools, processes and procedures necessary for the controllers to carry out the roles and responsibilities the operator has defined by performing each of the following:
- (1) Implement sections 1, 4, 8, 9, 11.1, and 11.3 of API RP 1165 (incorporated by reference, see §192.7) whenever a SCADA system is added, expanded or replaced, unless the operator demonstrates that certain provisions of sections 1, 4, 8, 9, 11.1, and 11.3 of API RP 1165 are not practical for the SCADA system used;
 - (2) Conduct a point-to-point verification between SCADA displays and related field equipment when field equipment is added or moved and when other changes that affect pipeline safety are made to field equipment or SCADA displays;
 - (3) Test and verify an internal communication plan to provide adequate means for manual operation of the pipeline safely, at least once each calendar year, but at intervals not to exceed 15 months;
 - (4) Test any backup SCADA systems at least once each calendar year, but at intervals not to exceed 15 months; and
 - (5) Establish and implement procedures for when a different controller assumes responsibility, including the content of information to be exchanged.
- (d) **Fatigue mitigation.** Each operator must implement the following methods to reduce the risk associated with controller fatigue that could inhibit a controller's ability to carry out the roles and responsibilities the operator has defined:
- (1) Establish shift lengths and schedule rotations that provide controllers off-duty time sufficient to achieve eight hours of continuous sleep;
 - (2) Educate controllers and supervisors in fatigue mitigation strategies and how off-duty activities contribute to fatigue;
 - (3) Train controllers and supervisors to recognize the effects of fatigue; and
 - (4) Establish a maximum limit on controller hours-of-service, which may provide for an emergency deviation from the maximum limit if necessary for the safe operation of a pipeline facility.
- (e) **Alarm management.** Each operator using a SCADA system must have a written alarm management plan to provide for effective controller response to alarms. An operator's plan must include provisions to:
- (1) Review SCADA safety-related alarm operations using a process that ensures alarms are accurate and support safe pipeline operations;
 - (2) Identify at least once each calendar month points affecting safety that have been taken off scan in the SCADA host, have had alarms inhibited, generated false alarms, or that have had forced or manual values for periods of time exceeding that required for associated maintenance or operating activities;
 - (3) Verify the correct safety-related alarm set-point values and alarm descriptions at least once each calendar year, but at intervals not to exceed 15 months;
 - (4) Review the alarm management plan required by this paragraph at least once each calendar year, but at intervals not exceeding 15 months, to determine the effectiveness of the plan;
 - (5) Monitor the content and volume of general activity being directed to and required of each controller

at least once each calendar year, but at intervals not to exceed 15 months, that will assure controllers have sufficient time to analyze and react to incoming alarms; and

- (6) Address deficiencies identified through the implementation of paragraphs (e)(1) through (e)(5) of this section.
- (f) **Change management.** Each operator must assure that changes that could affect control room operations are coordinated with the control room personnel by performing each of the following:
- (1) Establish communications between control room representatives, operator's management, and associated field personnel when planning and implementing physical changes to pipeline equipment or configuration;
 - (2) Require its field personnel to contact the control room when emergency conditions exist and when making field changes that affect control room operations; and
 - (3) Seek control room or control room management participation in planning prior to implementation of significant pipeline hydraulic or configuration changes.
- (g) **Operating experience.** Each operator must assure that lessons learned from its operating experience are incorporated, as appropriate, into its control room management procedures by performing each of the following:
- (1) Review incidents that must be reported pursuant to 49 CFR part 191 to determine if control room actions contributed to the event and, if so, correct, where necessary, deficiencies related to:
 - (i) Controller fatigue;
 - (ii) Field equipment;
 - (iii) The operation of any relief device;
 - (iv) Procedures;
 - (v) SCADA system configuration; and
 - (vi) SCADA system performance.
 - (2) Include lessons learned from the operator's experience in the training program required by this section.
- (h) **Training.** Each operator must establish a controller training program and review the training program content to identify potential improvements at least once each calendar year, but at intervals not to exceed 15 months. An operator's program must provide for training each controller to carry out the roles and responsibilities defined by the operator. In addition, the training program must include the following elements:
- (1) Responding to abnormal operating conditions likely to occur simultaneously or in sequence;
 - (2) Use of a computerized simulator or non-computerized (tabletop) method for training controllers to recognize abnormal operating conditions;
 - (3) Training controllers on their responsibilities for communication under the operator's emergency response procedures;
 - (4) Training that will provide a controller a working knowledge of the pipeline system, especially during the development of abnormal operating conditions;

- (5) For pipeline operating setups that are periodically, but infrequently used, providing an opportunity for controllers to review relevant procedures in advance of their application; and
 - (6) Control room team training and exercises that include both controllers and other individuals, defined by the operator, who would reasonably be expected to operationally collaborate with controllers (control room personnel) during normal, abnormal or emergency situations. Operators must comply with the team training requirements under this paragraph by no later than January 23, 2018.
- (i) **Compliance validation.** Upon request, operators must submit their procedures to PHMSA or, in the case of an intrastate pipeline facility regulated by a State, to the appropriate State agency.
- (j) **Compliance and deviations.** An operator must maintain for review during inspection:
- (1) Records that demonstrate compliance with the requirements of this section; and
 - (2) Documentation to demonstrate that any deviation from the procedures required by this section was necessary for the safe operation of a pipeline facility.

[Amdt. 192-112, 74 FR 63327, Dec. 3, 2009, as amended at 75 FR 5537, Feb. 3, 2010; 76 FR 35135, June 16, 2011; Amdt. 192-123, 82 FR 7997, Jan. 23, 2017]

DRAFT

Subpart M—Maintenance

§192.701 Scope.

This subpart prescribes minimum requirements for maintenance of pipeline facilities.

§192.703 General.

- (a) No person may operate a segment of pipeline, unless it is maintained in accordance with this subpart.
- (b) Each segment of pipeline that becomes unsafe must be replaced, repaired, or removed from service.
- (c) Hazardous leaks must be repaired promptly.

§192.705 Transmission lines: Patrolling.

- (a) Each operator shall have a patrol program to observe surface conditions on and adjacent to the transmission line right-of-way for indications of leaks, construction activity, and other factors affecting safety and operation.
- (b) The frequency of patrols is determined by the size of the line, the operating pressures, the class location, terrain, weather, and other relevant factors, but intervals between patrols may not be longer than prescribed in the following table:

CLASS LOCATION OF LINE	MAXIMUM INTERVAL BETWEEN PATROLS	
	AT HIGHWAY AND RAILROAD CROSSINGS	AT ALL OTHER PLACES
1, 2	7 ½ months; but at least twice each calendar year	15 months; but at least once each calendar year.
3	4 ½ months; but at least four times each calendar year	7 ½ months; but at least twice each calendar year.
4	4 ½ months; but at least four times each calendar year	4 ½ months; but at least four times each calendar year.

- (c) Methods of patrolling include walking, driving, flying or other appropriate means of traversing the right-of-way.

[Amdt. 192-21, 40 FR 20283, May 9, 1975, as amended by Amdt. 192-43, 47 FR 46851, Oct. 21, 1982; Amdt. 192-78, 61 FR 28786, June 6, 1996]

R 460.20325 Transmission line patrolling.

In addition to the requirements contained in 49 C.F.R. §192.705, which is adopted by reference in R 460.20606, at intervals of not more than 6 weeks, but not less than 12 times each calendar year, an operator shall patrol all transmission lines that are operating at 40% or more of specified minimum

yield strength to observe surface conditions on, and adjacent to, the transmission line right-of-way for indications of leaks, construction activity, and other factors affecting safety and operation.

History: 1998-2000 AACS.

R 460.20425 Sour gas pipeline patrolling

SOUR GAS

In addition to the requirements set forth in 49 C.F.R. §192.705, which is adopted by reference in R 460.20606, an operator of pipeline facilities used in the transportation of sour gas shall, at intervals of not more than 6 weeks, but not less than 12 times each calendar year, patrol all pipelines that are used in the transportation of sour gas.

History: 2003 AACS; 2009 AACS.

§192.706 Transmission lines: Leakage surveys.

Leakage surveys of a transmission line must be conducted at intervals not exceeding 15 months, but at least once each calendar year. However, in the case of a transmission line which transports gas in conformity with §192.625 without an odor or odorant, leakage surveys using leak detector equipment must be conducted—

- (a) In Class 3 locations, at intervals not exceeding 7 ½ months, but at least twice each calendar year; and
- (b) In Class 4 locations, at intervals not exceeding 4 ½ months, but at least four times each calendar year.

[Amdt. 192-21, 40 FR 20283, May 9, 1975, as amended by Amdt. 192-43, 47 FR 46851, Oct. 21, 1982; Amdt. 192-71, 59 FR 6585, Feb. 11, 1994]

R 460.20426 Leakage surveys.

SOUR GAS

In addition to the requirements set forth in 49 C.F.R. §192.706, which is adopted by reference in R 460.20606, an operator of pipeline facilities used in the transportation of sour gas shall conduct leak surveys of those pipeline facilities using leak detection equipment at intervals of not more than 7 ½ months, but not less than 2 times each calendar year, for all areas falling within the class 1 and class 2 location designations set forth in 49 C.F.R. §192.5, which is adopted by reference in R 460.20606.

History: 2003 AACS.

§192.707 Line markers for mains and transmission lines.

- (a) **Buried pipelines.** Except as provided in paragraph (b) of this section, a line marker must be placed and maintained as close as practical over each buried main and transmission line:
 - (1) At each crossing of a public road and railroad; and
 - (2) Wherever necessary to identify the location of the transmission line or main to reduce the possibility of damage or interference.
- (b) **Exceptions for buried pipelines.** Line markers are not required for the following pipelines:

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- (1) Mains and transmission lines located offshore, or at crossings of or under waterways and other bodies of water.
 - (2) Mains in Class 3 or Class 4 locations where a damage prevention program is in effect under §192.614.
 - (3) Transmission lines in Class 3 or 4 locations until March 20, 1996.
 - (4) Transmission lines in Class 3 or 4 locations where placement of a line marker is impractical.
- (c) **Pipelines aboveground.** Line markers must be placed and maintained along each section of a main and transmission line that is located aboveground in an area accessible to the public.
- (d) **Marker warning.** The following must be written legibly on a background of sharply contrasting color on each line marker:
- (1) The word “Warning,” “Caution,” or “Danger” followed by the words “Gas (or name of gas transported) Pipeline” all of which, except for markers in heavily developed urban areas, must be in letters at least 1 inch (25 millimeters) high with ¼ inch (6.4 millimeters) stroke.
 - (2) The name of the operator and the telephone number (including area code) where the operator can be reached at all times.

[Amdt. 192-20, 40 FR 13505, Mar. 27, 1975; Amdt. 192-27, 41 FR 39752, Sept. 16, 1976, as amended by Amdt. 192-20A, 41 FR 56808, Dec. 30, 1976; Amdt. 192-44, 48 FR 25208, June 6, 1983; Amdt. 192-73, 60 FR 14650, Mar. 20, 1995; Amdt. 192-85, 63 FR 37504, July 13, 1998]

R 460.20427 Line markers for sour gas pipelines.

SOUR GAS

In addition to the requirements set forth in 49 C.F.R. §192.707, which is adopted by reference in R 460.20606, an operator of pipeline facilities used in the transportation of sour gas shall comply with both of the following provisions:

- (a) *Line markers shall be placed and maintained as close as practical over a sour gas pipeline and shall clearly identify the pipeline as a carrier of sour gas.*
- (b) *Where practical, at least 1 line marker shall be visible from any location on the sour gas pipeline.*

History: 2003 AACS.

§192.709 Transmission lines: Record keeping.

Each operator shall maintain the following records for transmission lines for the periods specified:

- (a) The date, location, and description of each repair made to pipe (including pipe-to-pipe connections) must be retained for as long as the pipe remains in service.
- (b) The date, location, and description of each repair made to parts of the pipeline system other than pipe must be retained for at least 5 years. However, repairs generated by patrols, surveys, inspections, or tests required by subparts L and M of this part must be retained in accordance with paragraph (c) of this section.
- (c) A record of each patrol, survey, inspection, and test required by subparts L and M of this part must be

retained for at least 5 years or until the next patrol, survey, inspection, or test is completed, whichever is longer.

[Amdt. 192-78, 61 FR 28786, June 6, 1996]

§192.711 Transmission lines: General requirements for repair procedures.

- (a) **Temporary repairs.** Each operator must take immediate temporary measures to protect the public whenever:
- (1) A leak, imperfection, or damage that impairs its serviceability is found in a segment of steel transmission line operating at or above 40 percent of the SMYS; and
 - (2) It is not feasible to make a permanent repair at the time of discovery.
- (b) **Permanent repairs.** An operator must make permanent repairs on its pipeline system according to the following:
- (1) Non integrity management repairs: The operator must make permanent repairs as soon as feasible.
 - (2) Integrity management repairs: When an operator discovers a condition on a pipeline covered under Subpart O-Gas Transmission Pipeline Integrity Management, the operator must remediate the condition as prescribed by §192.933(d).
- ~~(c) **Welded patch.** Except as provided in §192.717(b)(3), no operator may use a welded patch as a means of repair.~~

[Amdt. 192-114, 75 FR 48604, Aug. 11, 2010]

R 460.20428 Prohibition on temporary repairs.

SOUR GAS

- (1) *In addition to the requirements set forth in 49 C.F.R. §192.711, which is adopted by reference in R 460.20606, an operator of pipeline facilities used in the transportation of sour gas shall comply with all of the following provisions:*
- (a) *Temporary repairs are not allowed on pipeline facilities used in the transportation of sour gas.*
 - (b) *Sour gas pipeline facilities in need of repair shall be removed from service until permanent repairs can be made.*
- (2) *This rule does not prohibit emergency repairs solely designed to protect the operator's employees and the public from a release of sour gas.*

History: 2003 AACS.

§192.713 Transmission lines: Permanent field repair of imperfections and damages.

- (a) Each imperfection or damage that impairs the serviceability of pipe in a steel transmission line operating at or above 40 percent of SMYS must be—
- (1) Removed by cutting out and replacing a cylindrical piece of pipe; or
 - (2) Repaired by a method that reliable engineering tests and analyses show can permanently restore the serviceability of the pipe.

(b) Operating pressure must be at a safe level during repair operations.

[Amdt. 192-88, 64 FR 69665, Dec. 14, 1999]

§192.715 Transmission lines: Permanent field repair of welds.

Each weld that is unacceptable under §192.241(c) must be repaired as follows:

- (a) If it is feasible to take the segment of transmission line out of service, the weld must be repaired in accordance with the applicable requirements of §192.245.
- (b) A weld may be repaired in accordance with §192.245 while the segment of transmission line is in service if:
 - (1) The weld is not leaking;
 - (2) The pressure in the segment is reduced so that it does not produce a stress that is more than 20 percent of the SMYS of the pipe; and
 - (3) Grinding of the defective area can be limited so that at least 1/8 inch (3.2 millimeters) thickness in the pipe weld remains.
- (c) A defective weld which cannot be repaired in accordance with paragraph (a) or (b) of this section must be repaired by installing a full encirclement welded split sleeve of appropriate design.

[35 FR 13257, Aug. 19, 1970, as amended by Amdt. 192-85, 63 FR 37504, July 13, 1998]

§192.717 Transmission lines: Permanent field repair of leaks.

Each permanent field repair of a leak on a transmission line must be made by—

- (a) Removing the leak by cutting out and replacing a cylindrical piece of pipe; or
- (b) Repairing the leak by one of the following methods:
 - (1) Install a full encirclement welded split sleeve of appropriate design, unless the transmission line is joined by mechanical couplings and operates at less than 40 percent of SMYS.
 - (2) If the leak is due to a corrosion pit, install a properly designed bolt-on-leak clamp.
 - ~~(3) If the leak is due to a corrosion pit and on pipe of not more than 40,000 psi (267 Mpa) SMYS, fillet weld over the pitted area a steel plate patch with rounded corners, of the same or greater thickness than the pipe, and not more than one half of the diameter of the pipe in size.~~
 - (4) If the leak is on a submerged offshore pipeline or submerged pipeline in inland navigable waters, mechanically apply a full encirclement split sleeve of appropriate design.
 - (5) Apply a method that reliable engineering tests and analyses show can permanently restore the serviceability of the pipe.

[Amdt. 192-88, 64 FR 69665, Dec. 14, 1999]

R 460.20326 Transmission lines; permanent field repair of leaks.

- (1) *The requirements contained in 49 C.F.R. §192.717(b)(3), which is adopted by reference in R 460.20606, are superseded by the requirement that an operator shall not repair a transmission pipeline through the use of a welded patch.*
- (2) *The requirements of 49 C.F.R. § 192.711(c) are superseded by the requirement that an operator shall not repair a leak through the use of a welded patch.*

History: 1998-2000 AACS; 2009 AACS; 2019 MR 1, Eff. Jan. 3, 2019.

R 460.20429 Permanent field repair of leaks.

SOUR GAS

In addition to the requirements set forth in 49 C.F.R. §192.717, which is adopted by reference in R 460.20606, an operator of pipeline facilities used in the transportation of sour gas shall perform a permanent field repair of a leak by cutting out a cylindrical piece of pipe and replacing it with pipe of similar or greater design strength which meets the design criteria for facilities used in the transportation of sour gas.

History: 2003 AACS.

§192.719 Transmission lines: Testing of repairs.

- (a) Testing of replacement pipe. If a segment of transmission line is repaired by cutting out the damaged portion of the pipe as a cylinder, the replacement pipe must be tested to the pressure required for a new line installed in the same location. This test may be made on the pipe before it is installed.
- (b) Testing of repairs made by welding. Each repair made by welding in accordance with §§192.713, 192.715, and 192.717 must be examined in accordance with §192.241.

[35 FR 13257, Aug. 19, 1970, as amended by Amdt. 192-54, 51 FR 41635, Nov. 18, 1986]

§192.721 Distribution systems: Patrolling.

- (a) The frequency of patrolling mains must be determined by the severity of the conditions which could cause failure or leakage, and the consequent hazards to public safety.
- (b) Mains in places or on structures where anticipated physical movement or external loading could cause failure or leakage must be patrolled—
- (1) In business districts, at intervals not exceeding 4 ½ months, but at least four times each calendar year; and
 - (2) Outside business districts, at intervals not exceeding 7 ½ months, but at least twice each calendar year.

[35 FR 13257, Aug. 19, 1970, as amended by Amdt. 192-43, 47 FR 46851, Oct. 21, 1982; Amdt. 192-78, 61 FR 28786, June 6, 1996]

§192.723 Distribution systems: Leakage surveys.

- (a) Each operator of a distribution system shall conduct periodic leakage surveys in accordance with this section.

(b) The type and scope of the leakage control program must be determined by the nature of the operations and the local conditions, but it must meet the following minimum requirements:

- (1) A leakage survey with leak detector equipment must be conducted in business districts, including tests of the atmosphere in gas, electric, telephone, sewer, and water system manholes, at cracks in pavement and sidewalks, and at other locations providing an opportunity for finding gas leaks, at intervals not exceeding 15 months, but at least once each calendar year.
- (2) A leakage survey with leak detector equipment must be conducted outside business districts as frequently as necessary, but at least once every 5 calendar years at intervals not exceeding 63 months. However, for cathodically unprotected distribution lines subject to §192.465(e) on which electrical surveys for corrosion are impractical, a leakage survey must be conducted at least once every 3 calendar years at intervals not exceeding 39 months.

[35 FR 13257, Aug. 19, 1970, as amended by Amdt. 192-43, 47 FR 46851, Oct. 21, 1982; Amdt. 192-70, 58 FR 54528, 54529, Oct. 22, 1993; Amdt. 192-71, 59 FR 6585, Feb. 11, 1994; Amdt. 192-94, 69 FR 32895, June 14, 2004; Amdt. 192-94, 69 FR 54592, Sept. 9, 2004]

R 460.20327 Distribution system; leakage surveys and procedures.

In addition to the requirements contained in 49 C.F.R. §192.723, which is adopted by reference in R 460.20606, all of the following requirements apply:

- (a) A gas leak located by a survey that, due to its location or relative magnitude, constitutes a hazard or potential hazard to the public or to buildings shall receive immediate corrective action. Immediate corrective action shall consist of an immediate effort to protect life and property and continuous remedial action thereafter until the condition is no longer hazardous.*
- (b) An operator shall schedule a gas leak which does not constitute an immediate hazard to the public or to buildings, but which requires scheduled repair within the operator's maintenance manual, for repair within 1 year.*
- (c) An operator shall ensure that a gas leak which is located by a survey, other than a leak covered by subdivision (a) or (b) of this rule, is subjected to regular surveillance at intervals not exceeding 15 months, but at least once each calendar year.*

History: 1998-2000 AACS; 2014 MR 24, Eff. Dec. 23, 2014.

§192.725 Test requirements for reinstating service lines.

- (a) Except as provided in paragraph (b) of this section, each disconnected service line must be tested in the same manner as a new service line, before being reinstated.
- (b) Each service line temporarily disconnected from the main must be tested from the point of disconnection to the service line valve in the same manner as a new service line, before reconnecting. However, if provisions are made to maintain continuous service, such as by installation of a bypass, any part of the original service line used to maintain continuous service need not be tested.

§192.727 Abandonment or deactivation of facilities.

- (a) Each operator shall conduct abandonment or deactivation of pipelines in accordance with the requirements of this section.
- (b) Each pipeline abandoned in place must be disconnected from all sources and supplies of gas; purged of gas; in the case of offshore pipelines, filled with water or inert materials; and sealed at the ends. However, the pipeline need not be purged when the volume of gas is so small that there is no potential hazard.
- (c) Except for service lines, each inactive pipeline that is not being maintained under this part must be disconnected from all sources and supplies of gas; purged of gas; in the case of offshore pipelines, filled with water or inert materials; and sealed at the ends. However, the pipeline need not be purged when the volume of gas is so small that there is no potential hazard.
- (d) Whenever service to a customer is discontinued, one of the following must be complied with:
 - (1) The valve that is closed to prevent the flow of gas to the customer must be provided with a locking device or other means designed to prevent the opening of the valve by persons other than those authorized by the operator.
 - (2) A mechanical device or fitting that will prevent the flow of gas must be installed in the service line or in the meter assembly.
 - (3) The customer's piping must be physically disconnected from the gas supply and the open pipe ends sealed.
- (e) If air is used for purging, the operator shall insure that a combustible mixture is not present after purging.
- (f) Each abandoned vault must be filled with a suitable compacted material.
- (g) For each abandoned offshore pipeline facility or each abandoned onshore pipeline facility that crosses over, under or through a commercially navigable waterway, the last operator of that facility must file a report upon abandonment of that facility.
 - (1) The preferred method to submit data on pipeline facilities abandoned after October 10, 2000 is to the National Pipeline Mapping System (NPMS) in accordance with the NPMS *"Standards for Pipeline and Liquefied Natural Gas Operator Submissions."* To obtain a copy of the NPMS Standards, please refer to the NPMS homepage at <http://www.npms.phmsa.dot.gov> or contact the NPMS National Repository (703) 317-3073. A digital data format is preferred, but hard copy submissions are acceptable if they comply with the NPMS Standards. In addition to the NPMS-required attributes, operators must submit the date of abandonment, diameter, method of abandonment, and certification that, to the best of the operator's knowledge, all of the reasonably available information requested was provided and, to the best of the operator's knowledge, the abandonment was completed in accordance with applicable laws. Refer to the NPMS Standards for details in preparing your data for submission. The NPMS Standards also include details of how to submit data. Alternatively, operators may submit reports by mail, fax or e-mail to the Office of Pipeline Safety, Pipeline and Hazardous Materials Safety Administration, U.S. Department of Transportation, Information Resources Manager, PHP-10, 1200 New Jersey Avenue, SE., Washington, DC 20590-0001; fax (202) 366-4566; e-mail InformationResourcesManager@phmsa.dot.gov. The information in the report must contain all reasonably available information related to the facility, including information in the possession of a

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third party. The report must contain the location, size, date, method of abandonment, and a certification that the facility has been abandoned in accordance with all applicable laws.

(2) [Reserved]

[Amdt. 192-8, 37 FR 20695, Oct. 3, 1972, as amended by Amdt. 192-27, 41 FR 34607, Aug. 16, 1976; Amdt. 192-71, 59 FR 6585, Feb. 11, 1994; Amdt. 192-89, 65 FR 54443, Sept. 8, 2000; 65 FR 57861, Sept. 26, 2000; 70 FR 11139, Mar. 8, 2005; Amdt. 192-103, 72 FR 4656, Feb. 1, 2007; 73 FR 16570, Mar. 28, 2008; 74 FR 2894, Jan. 16, 2009]

R 460.20332 Discontinuation of inactive service lines.

(1) In addition to complying with the requirements contained in 49 C.F.R. §192.727, which is adopted by reference in R 460.20606, an operator shall, within 9 months after a service line becomes inactive, discontinue gas service for any inactive service line with components located inside a structure pursuant to the methods specified in either of the following regulations:

(i) In accordance with 49 C.F.R. §192.727(d)(1) and (d)(2).

(ii) In accordance with 49 C.F.R. §192.727(d)(3) by physically disconnecting the service line outside the building.

(2) As used in subrule (1) of this rule, “inactive service line” means a service line where there has been no customer of record for a continuous 24-month period and gas service to the premises has not been discontinued.

History: 2014 AACCS; 2019 MR 1, Eff. Jan. 3, 2019.

§192.731 Compressor stations: Inspection and testing of relief devices.

- (a) Except for rupture discs, each pressure relieving device in a compressor station must be inspected and tested in accordance with §§192.739 and 192.743, and must be operated periodically to determine that it opens at the correct set pressure.
- (b) Any defective or inadequate equipment found must be promptly repaired or replaced.
- (c) Each remote control shutdown device must be inspected and tested at intervals not exceeding 15 months, but at least once each calendar year, to determine that it functions properly.

[35 FR 13257, Aug. 19, 1970, as amended by Amdt. 192-43, 47 FR 46851, Oct. 21, 1982]

§192.735 Compressor stations: Storage of combustible materials.

- (a) Flammable or combustible materials in quantities beyond those required for everyday use, or other than those normally used in compressor buildings, must be stored a safe distance from the compressor building.
- (b) Aboveground oil or gasoline storage tanks must be protected in accordance with NFPA-30 (incorporated by reference, see §192.7).

[35 FR 13257, Aug. 19, 1970, as amended by Amdt. 192-119, 80 FR 181, Jan. 5, 2015; 80 FR 46847, Aug. 6, 2015]

§192.736 Compressor stations: Gas detection.

- (a) Not later than September 16, 1996, each compressor building in a compressor station must have a fixed gas detection and alarm system, unless the building is—
- (1) Constructed so that at least 50 percent of its upright side area is permanently open; or
 - (2) Located in an unattended field compressor station of 1,000 horsepower (746 kW) or less.
- (b) Except when shutdown of the system is necessary for maintenance under paragraph (c) of this section, each gas detection and alarm system required by this section must—
- (1) Continuously monitor the compressor building for a concentration of gas in air of not more than 25 percent of the lower explosive limit; and
 - (2) If that concentration of gas is detected, warn persons about to enter the building and persons inside the building of the danger.
- (c) Each gas detection and alarm system required by this section must be maintained to function properly. The maintenance must include performance tests.

[58 FR 48464, Sept. 16, 1993, as amended by Amdt. 192-85, 63 FR 37504, July 13, 1998]

§192.739 Pressure limiting and regulating stations: Inspection and testing.

- (a) Each pressure limiting station, relief device (except rupture discs), and pressure regulating station and its equipment must be subjected at intervals not exceeding 15 months, but at least once each calendar year, to inspections and tests to determine that it is—
- (1) In good mechanical condition;
 - (2) Adequate from the standpoint of capacity and reliability of operation for the service in which it is employed;
 - (3) Except as provided in paragraph (b) of this section, set to control or relieve at the correct pressure consistent with the pressure limits of §192.201(a); and
 - (4) Properly installed and protected from dirt, liquids, or other conditions that might prevent proper operation.
- (b) For steel pipelines whose MAOP is determined under §192.619(c), if the MAOP is 60 p.s.i. (414 kPa) gage or more, the control or relief pressure limit is as follows:

IF THE MAOP PRODUCES A HOOP STRESS THAT IS:	THEN THE PRESSURE LIMIT IS:
Greater than 72 percent of SMYS	MAOP plus 4 percent.
Unknown as a percentage of SMYS	A pressure that will prevent unsafe operation of the pipeline considering its operating and maintenance history and MAOP.

[35 FR 13257, Aug. 19, 1970, as amended by Amdt. 192-43, 47 FR 46851, Oct. 21, 1982; Amdt. 192-93, 68 FR 53901, Sept. 15, 2003; Amdt. 192-96, 69 FR 27863, May 17, 2004]

R 460.20324 Fenced areas; alternate means of exit.

An operator shall ensure that a fence which may hamper or prevent the escape of persons from the vicinity of a meter or regulator station in an emergency has an alternate means of exit, such as a second gate, exit ladder, or platform. Alternate means of exit must be unlocked whenever the fenced area is occupied and there is the potential for a hazardous atmosphere.

History: 1998-2000 AACCS.

R 460.20328 Pressure-limiting and pressure-regulating stations; inspection and testing.

In addition to the requirements contained in 49 C.F.R. §192.739, which is adopted by reference in R 460.20606, an operator shall tag a pressure-limiting or pressure-relief device installed to provide overpressure protection to a transmission line or distribution main to indicate the maximum allowable operating pressure of the facilities being protected and the set pressure or shall make a record of the information available at each location.

History: 1998-2000 AACCS.

R 460.20430 Inspection of pressure limiting and pressure regulating stations.

SOUR GAS

In addition to the requirements set forth in 49 C.F.R. §192.739, which is adopted by reference in R 460.20606, an operator of pipeline facilities used in the transportation of sour gas shall inspect all pressure limiting and pressure regulating devices at intervals of not more than 7 ½ months, but not less than twice each calendar year.

History: 2003 AACCS; 2009 AACCS.

§192.740 Pressure regulating, limiting, and overpressure protection—Individual service lines directly connected to production, gathering, or transmission pipelines.

- (a) This section applies, except as provided in paragraph (c) of this section, to any service line directly connected to a production, gathering, or transmission pipeline that is not operated as part of a distribution system.
- (b) Each pressure regulating or limiting device, relief device (except rupture discs), automatic shutoff device, and associated equipment must be inspected and tested at least once every 3 calendar years, not exceeding 39 months, to determine that it is:
 - (1) In good mechanical condition;
 - (2) Adequate from the standpoint of capacity and reliability of operation for the service in which it is employed;
 - (3) Set to control or relieve at the correct pressure consistent with the pressure limits of §192.197; and to limit the pressure on the inlet of the service regulator to 60 psi (414 kPa) gauge or less in case the upstream regulator fails to function properly; and
 - (4) Properly installed and protected from dirt, liquids, or other conditions that might prevent proper operation.

(c) This section does not apply to equipment installed on service lines that only serve engines that power irrigation pumps.

[Amdt. 192-123, 82 FR 7998, Jan. 23, 2017]

R 460.20338 Farm taps.

- (1) As used in this rule, “farm tap” means a distribution line directly connected to a production, gathering, or transmission pipeline not operated as part of a distribution system, or to a natural gas producing well, compressor station, or gas processing facility that delivers gas to a landowner or occupant other than the operator.*
- (2) Effective January 1, 2019, an operator shall not construct any new farm taps unless all of the following apply:*
 - (a) The operator is a public utility as defined in section 1 of 1972 PA 299, MCL 460.111.*
 - (b) The farm tap complies with all of the requirements of the gas safety standards.*
 - (c) The gas supplied meets the requirements for gas quality set forth in part 8 of the technical standards for gas service, R 460.2381 and R 460.2382.*
- (3) This rule does not apply to domestic wells. As used in this rule, “domestic well” means a well that produces gas and that is owned by the owner of the surface estate on which the well is located and that is used only to provide gas for the owner’s domestic use.*
- (4) Beginning March 15, 2019, all operators supplying gas to 1 or more farm taps shall provide an annual report on the status of farm taps connected to the operator’s facilities. The report must include the location of each farm tap connection, safety equipment installed on each connection, and the source of gas supply. This reporting requirement does not apply to farm taps connected to transmission pipelines operated by distribution utilities.*

History: 2019 MR 1, Eff. Jan. 3, 2019.

§192.741 Pressure limiting and regulating stations: Telemetering or recording gauges.

- (a) Each distribution system supplied by more than one district pressure regulating station must be equipped with telemetering or recording pressure gauges to indicate the gas pressure in the district.
- (b) On distribution systems supplied by a single district pressure regulating station, the operator shall determine the necessity of installing telemetering or recording gauges in the district, taking into consideration the number of customers supplied, the operating pressures, the capacity of the installation, and other operating conditions.
- (c) If there are indications of abnormally high or low pressure, the regulator and the auxiliary equipment must be inspected and the necessary measures employed to correct any unsatisfactory operating conditions.

§192.743 Pressure limiting and regulating stations: Capacity of relief devices.

- (a) Pressure relief devices at pressure limiting stations and pressure regulating stations must have sufficient capacity to protect the facilities to which they are connected. Except as provided in §192.739(b), the capacity must be consistent with the pressure limits of §192.201(a). This capacity must be determined at intervals not exceeding 15 months, but at least once each calendar year, by testing the devices in place or by review and calculations.
- (b) If review and calculations are used to determine if a device has sufficient capacity, the calculated capacity must be compared with the rated or experimentally determined relieving capacity of the device for the conditions under which it operates. After the initial calculations, subsequent calculations need not be made if the annual review documents that parameters have not changed to cause the rated or experimentally determined relieving capacity to be insufficient.
- (c) If a relief device is of insufficient capacity, a new or additional device must be installed to provide the capacity required by paragraph (a) of this section.

[Amdt. 192-93, 68 FR 53901, Sept. 15, 2003, as amended by Amdt. 192-96, 69 FR 27863, May 17, 2004]

§192.745 Valve maintenance: Transmission lines.

- (a) Each transmission line valve that might be required during any emergency must be inspected and partially operated at intervals not exceeding 15 months, but at least once each calendar year.
- (b) Each operator must take prompt remedial action to correct any valve found inoperable, unless the operator designates an alternative valve.

[Amdt. 192-43, 47 FR 46851, Oct. 21, 1982, as amended by Amdt. 192-93, 68 FR 53901, Sept. 15, 2003]

R 460.20431 Valve maintenance; sour gas pipelines.

SOUR GAS

In addition to the requirements set forth in 49 C.F.R. §192.745, which is adopted by reference in R 460.20606, an operator of pipeline facilities used in the transportation of sour gas shall inspect and partially operate each pipeline valve that might be required during an emergency at intervals of not more than 7 ½ months, but not less than twice each calendar year.

History: 2003 AACS.

§192.747 Valve maintenance: Distribution systems.

- (a) Each valve, the use of which may be necessary for the safe operation of a distribution system, must be checked and serviced at intervals not exceeding 15 months, but at least once each calendar year.
- (b) Each operator must take prompt remedial action to correct any valve found inoperable, unless the operator designates an alternative valve.

[Amdt. 192-43, 47 FR 46851, Oct. 21, 1982, as amended by Amdt. 192-93, 68 FR 53901, Sept. 15, 2003]

R 460.20329 Valve maintenance; distribution systems.

In addition to the requirements contained in 49 C.F.R. §192.747, which is adopted by reference in R 460.20606, an operator shall partially operate a valve that may be necessary for the safe operation of a distribution system at intervals of not more than 15 months, but at least each calendar year.

History: 1998-2000 AACCS.

§192.749 Vault maintenance.

- (a) Each vault housing pressure regulating and pressure limiting equipment, and having a volumetric internal content of 200 cubic feet (5.66 cubic meters) or more, must be inspected at intervals not exceeding 15 months, but at least once each calendar year, to determine that it is in good physical condition and adequately ventilated.
- (b) If gas is found in the vault, the equipment in the vault must be inspected for leaks, and any leaks found must be repaired.
- (c) The ventilating equipment must also be inspected to determine that it is functioning properly.
- (d) Each vault cover must be inspected to assure that it does not present a hazard to public safety.

[35 FR 13257, Aug. 19, 1970, as amended by Amdt. 192-43, 47 FR 46851, Oct. 21, 1982; Amdt. 192-85, 63 FR 37504, July 13, 1998]

§192.751 Prevention of accidental ignition.

Each operator shall take steps to minimize the danger of accidental ignition of gas in any structure or area where the presence of gas constitutes a hazard of fire or explosion, including the following:

- (a) When a hazardous amount of gas is being vented into open air, each potential source of ignition must be removed from the area and a fire extinguisher must be provided.
- (b) Gas or electric welding or cutting may not be performed on pipe or on pipe components that contain a combustible mixture of gas and air in the area of work.
- (c) Post warning signs, where appropriate.

R 460.20330 Prevention of accidental ignition.

In addition to the requirements contained in 49 C.F.R. §192.751, which is adopted by reference in R 460.20606, before welding in or around a vault, pit, or other structure or area containing gas facilities, an operator shall make a thorough check to determine the possible presence of a combustible gas mixture. Welding shall begin only when safe conditions are indicated.

History: 1998-2000 AACCS.

§192.753 Caulked bell and spigot joints.

- ~~(a) Each cast iron caulked bell and spigot joint that is subject to pressures of more than 25 p.s.i. (172kPa) gage must be sealed with:~~

~~(1) A mechanical leak clamp; or~~

~~(2) A material or device which:~~

~~(i) Does not reduce the flexibility of the joint;~~

~~(ii) Permanently bonds, either chemically or mechanically, or both, with the bell and spigot metal surfaces or adjacent pipe metal surfaces; and~~

~~(iii) Seals and bonds in a manner that meets the strength, environmental, and chemical compatibility requirements of §§192.53 (a) and (b) and 192.143.~~

(b) Each cast iron caulked bell and spigot joint that is subject to pressures of 25 p.s.i. (172kPa) gage or less and is exposed for any reason must be sealed by a means other than caulking.

[35 FR 13257, Aug. 19, 1970, as amended by Amdt. 192-25, 41 FR 23680, June 11, 1976; Amdt. 192-85, 63 FR 37504, July 13, 1998; Amdt. 192-93, 68 FR 53901, Sept. 15, 2003]

R 460.20331 Caulked bell and spigot joints.

The requirements contained in 49 C.F.R. §192.753(a), which is adopted by reference in R 460.20606, are superseded by the following:

(a) An operator shall seal a cast-iron, caulked bell and spigot joint subject to pressures of more than 10 psig with either of the following:

(i) A mechanical leak clamp.

(ii) A material or device that has all of the following characteristics:

(A) Does not reduce the flexibility of the joint.

(B) Permanently bonds, either chemically or mechanically, or both, with the bell and spigot metal surfaces or adjacent pipe metal surfaces.

(C) Seals and bonds in a manner that meets the strength, environmental, and chemical compatibility requirements of 49 C.F.R. §192.53 and 49 C.F.R. §192.143, which are adopted by reference in R 460.20606.

History: 1998-2000 AACCS; 2019 MR 1, Eff. Jan. 3, 2019.

§192.755 Protecting cast-iron pipelines.

When an operator has knowledge that the support for a segment of a buried cast-iron pipeline is disturbed:

(a) That segment of the pipeline must be protected, as necessary, against damage during the disturbance by:

(1) Vibrations from heavy construction equipment, trains, trucks, buses, or blasting;

(2) Impact forces by vehicles;

(3) Earth movement;

(4) Apparent future excavations near the pipeline; or

(5) Other foreseeable outside forces which may subject that segment of the pipeline to bending stress.

(b) As soon as feasible, appropriate steps must be taken to provide permanent protection for the disturbed segment from damage that might result from external loads, including compliance with applicable requirements of §§192.317(a), 192.319, and 192.361(b)-(d).

[Amdt. 192-23, 41 FR 13589, Mar. 31, 1976]

DRAFT

Subpart N—Qualification of Pipeline Personnel

Source: Amdt. 192-86, 64 FR 46865, Aug. 27, 1999, unless otherwise noted.

§192.801 Scope.

- (a) This subpart prescribes the minimum requirements for operator qualification of individuals performing covered tasks on a pipeline facility.
- (b) For the purpose of this subpart, a covered task is an activity, identified by the operator, that:
 - (1) Is performed on a pipeline facility;
 - (2) Is an operations or maintenance task;
 - (3) Is performed as a requirement of this part; and
 - (4) Affects the operation or integrity of the pipeline.

§192.803 Definitions.

Abnormal Operating Condition means a condition identified by the operator that may indicate a malfunction of a component or deviation from normal operations that may:

- (a) Indicate a condition exceeding design limits; or
- (b) Result in a hazard(s) to persons, property, or the environment.

Evaluation means a process, established and documented by the operator, to determine an individual's ability to perform a covered task by any of the following:

- (a) Written examination;
- (b) Oral examination;
- (c) Work performance history review;
- (d) Observation during:
 - (1) Performance on the job,
 - (2) On the job training, or
 - (3) Simulations;
- (e) Other forms of assessment.

Qualified means that an individual has been evaluated and can:

- (a) Perform assigned covered tasks; and
- (b) Recognize and react to abnormal operating conditions.

[Amdt. 192-86, 64 FR 46865, Aug. 27, 1999, as amended by Amdt. 192-90, 66 FR 43523, Aug. 20, 2001]

§192.805 Qualification program.

Each operator shall have and follow a written qualification program. The program shall include provisions to:

- (a) Identify covered tasks;
- (b) Ensure through evaluation that individuals performing covered tasks are qualified;
- (c) Allow individuals that are not qualified pursuant to this subpart to perform a covered task if directed and observed by an individual that is qualified;
- (d) Evaluate an individual if the operator has reason to believe that the individual's performance of a covered task contributed to an incident as defined in Part 191;
- (e) Evaluate an individual if the operator has reason to believe that the individual is no longer qualified to perform a covered task;
- (f) Communicate changes that affect covered tasks to individuals performing those covered tasks;
- (g) Identify those covered tasks and the intervals at which evaluation of the individual's qualifications is needed;
- (h) After December 16, 2004, provide training, as appropriate, to ensure that individuals performing covered tasks have the necessary knowledge and skills to perform the tasks in a manner that ensures the safe operation of pipeline facilities; and
- (i) After December 16, 2004, notify the Administrator or a state agency participating under 49 U.S.C. Chapter 601 if the operator significantly modifies the program after the administrator or state agency has verified that it complies with this section. Notifications to PHMSA may be submitted by electronic mail to InformationResourcesManager@dot.gov, or by mail to ATTN: Information Resources Manager DOT/PHMSA/OPS, East Building, 2nd Floor, E22-321, New Jersey Avenue SE., Washington, DC 20590.

[Amdt. 192-86, 64 FR 46865, Aug. 27, 1999, as amended by Amdt. 192-100, 70 FR 10335, Mar. 3, 2005; Amdt. 192-120, 80 FR 12779, Mar. 11, 2015]

§192.807 Recordkeeping.

Each operator shall maintain records that demonstrate compliance with this subpart.

- (a) Qualification records shall include:
 - (1) Identification of qualified individual(s);
 - (2) Identification of the covered tasks the individual is qualified to perform;
 - (3) Date(s) of current qualification; and
 - (4) Qualification method(s).
- (b) Records supporting an individual's current qualification shall be maintained while the individual is performing the covered task. Records of prior qualification and records of individuals no longer performing covered tasks shall be retained for a period of five years.

§192.809 General.

- (a) Operators must have a written qualification program by April 27, 2001. The program must be available for review by the Administrator or by a state agency participating under 49 U.S.C. Chapter 601 if the program is under the authority of that state agency.
- (b) Operators must complete the qualification of individuals performing covered tasks by October 28, 2002.
- (c) Work performance history review may be used as a sole evaluation method for individuals who were performing a covered task prior to October 26, 1999.
- (d) After October 28, 2002, work performance history may not be used as a sole evaluation method.
- (e) After December 16, 2004, observation of on-the-job performance may not be used as the sole method of evaluation.

[Amdt. 192-86, 64 FR 46865, Aug. 27, 1999, as amended by Amdt. 192-90, 66 FR 43524, Aug. 20, 2001; Amdt. 192-100, 70 FR 10335, Mar. 3, 2005]

Subpart O—Gas Transmission Pipeline Integrity Management

Source: 68 FR 69817, Dec. 15, 2003, unless otherwise noted.

§192.901 What do the regulations in this subpart cover?

This subpart prescribes minimum requirements for an integrity management program on any gas transmission pipeline covered under this part. For gas transmission pipelines constructed of plastic, only the requirements in §§192.917, 192.921, 192.935 and 192.937 apply.

§192.903 What definitions apply to this subpart?

The following definitions apply to this subpart:

Assessment is the use of testing techniques as allowed in this subpart to ascertain the condition of a covered pipeline segment.

Confirmatory Direct Assessment is an integrity assessment method using more focused application of the principles and techniques of direct assessment to identify internal and external corrosion in a covered transmission pipeline segment.

Covered Segment or Covered Pipeline Segment means a segment of gas transmission pipeline located in a high consequence area. The terms gas and transmission line are defined in §192.3.

Direct Assessment is an integrity assessment method that utilizes a process to evaluate certain threats (i.e., external corrosion, internal corrosion and stress corrosion cracking) to a covered pipeline segment's integrity. The process includes the gathering and integration of risk factor data, indirect examination or analysis to identify areas of suspected corrosion, direct examination of the pipeline in these areas, and post assessment evaluation.

High Consequence Area means an area established by one of the methods described in paragraphs (1) or (2) as follows:

- (1) An area defined as—
 - (i) A Class 3 location under §192.5; or
 - (ii) A Class 4 location under §192.5; or
 - (iii) Any area in a Class 1 or Class 2 location where the potential impact radius is greater than 660 feet (200 meters), and the area within a potential impact circle contains 20 or more buildings intended for human occupancy; or
 - (iv) Any area in a Class 1 or Class 2 location where the potential impact circle contains an identified site.
- (2) The area within a potential impact circle containing—
 - (i) 20 or more buildings intended for human occupancy, unless the exception in paragraph (4) applies; or

(ii) An identified site.

- (3) Where a potential impact circle is calculated under either method (1) or (2) to establish a high consequence area, the length of the high consequence area extends axially along the length of the pipeline from the outermost edge of the first potential impact circle that contains either an identified site or 20 or more buildings intended for human occupancy to the outermost edge of the last contiguous potential impact circle that contains either an identified site or 20 or more buildings intended for human occupancy. (See figure E.I.A. in appendix E.)
- (4) If in identifying a high consequence area under paragraph (1)(iii) of this definition or paragraph (2)(i) of this definition, the radius of the potential impact circle is greater than 660 feet (200 meters), the operator may identify a high consequence area based on a prorated number of buildings intended for human occupancy with a distance of 660 feet (200 meters) from the centerline of the pipeline until December 17, 2006. If an operator chooses this approach, the operator must prorate the number of buildings intended for human occupancy based on the ratio of an area with a radius of 660 feet (200 meters) to the area of the potential impact circle (i.e., the prorated number of buildings intended for human occupancy is equal to $20 \times (660 \text{ feet})^2 / \text{potential impact radius in feet}^2$).

Identified Site means each of the following areas:

- (a) An outside area or open structure that is occupied by twenty (20) or more persons on at least 50 days in any twelve (12)-month period. (The days need not be consecutive.) Examples include but are not limited to, beaches, playgrounds, recreational facilities, camping grounds, outdoor theaters, stadiums, recreational areas near a body of water, or areas outside a rural building such as a religious facility; or
- (b) A building that is occupied by twenty (20) or more persons on at least five (5) days a week for ten (10) weeks in any twelve (12)-month period. (The days and weeks need not be consecutive.) Examples include, but are not limited to, religious facilities, office buildings, community centers, general stores, 4-H facilities, or roller skating rinks; or
- (c) A facility occupied by persons who are confined, are of impaired mobility, or would be difficult to evacuate. Examples include but are not limited to hospitals, prisons, schools, day-care facilities, retirement facilities or assisted-living facilities.

Potential Impact Circle is a circle of radius equal to the potential impact radius (PIR).

Potential Impact Radius (PIR) means the radius of a circle within which the potential failure of a pipeline could have significant impact on people or property. PIR is determined by the formula $r = 0.69 \sqrt{p \cdot d^2}$, where 'r' is the radius of a circular area in feet surrounding the point of failure, 'p' is the maximum allowable operating pressure (MAOP) in the pipeline segment in pounds per square inch and 'd' is the nominal diameter of the pipeline in inches.

Note: 0.69 is the factor for natural gas. This number will vary for other gases depending upon their heat of combustion. An operator transporting gas other than natural gas must use section 3.2 of ASME/ANSI B31.8S (incorporated by reference, see §192.7) to calculate the impact radius formula.

Remediation is a repair or mitigation activity an operator takes on a covered segment to limit or reduce the probability of an undesired event occurring or the expected consequences from the event.

[68 FR 69817, Dec. 15, 2003, as amended by Amdt. 192-95, 69 FR 18231, Apr. 6, 2004; Amdt. 192-95, 69 FR 29904, May 26, 2004; Amdt. 192-103, 72 FR 4657, Feb. 1, 2007; Amdt. 192-119, 80 FR 181, Jan. 5, 2015]

§192.905 How does an operator identify a high consequence area?

- (a) **General.** To determine which segments of an operator's transmission pipeline system are covered by this subpart, an operator must identify the high consequence areas. An operator must use method (1) or (2) from the definition in §192.903 to identify a high consequence area. An operator may apply one method to its entire pipeline system, or an operator may apply one method to individual portions of the pipeline system. An operator must describe in its integrity management program which method it is applying to each portion of the operator's pipeline system. The description must include the potential impact radius when utilized to establish a high consequence area. (See appendix E.I. for guidance on identifying high consequence areas.)
- (b)(1) **Identified sites.** An operator must identify an identified site, for purposes of this subpart, from information the operator has obtained from routine operation and maintenance activities and from public officials with safety or emergency response or planning responsibilities who indicate to the operator that they know of locations that meet the identified site criteria. These public officials could include officials on a local emergency planning commission or relevant Native American tribal officials.
- (2) If a public official with safety or emergency response or planning responsibilities informs an operator that it does not have the information to identify an identified site, the operator must use one of the following sources, as appropriate, to identify these sites.
- (i) Visible marking (e.g., a sign); or
 - (ii) The site is licensed or registered by a Federal, State, or local government agency; or
 - (iii) The site is on a list (including a list on an internet web site) or map maintained by or available from a Federal, State, or local government agency and available to the general public.
- (c) **Newly identified areas.** When an operator has information that the area around a pipeline segment not previously identified as a high consequence area could satisfy any of the definitions in §192.903, the operator must complete the evaluation using method (1) or (2). If the segment is determined to meet the definition as a high consequence area, it must be incorporated into the operator's baseline assessment plan as a high consequence area within one year from the date the area is identified.

§192.907 What must an operator do to implement this subpart?

- (a) **General.** No later than December 17, 2004, an operator of a covered pipeline segment must develop and follow a written integrity management program that contains all the elements described in §192.911 and that addresses the risks on each covered transmission pipeline segment. The initial integrity management program must consist, at a minimum, of a framework that describes the process for implementing each program element, how relevant decisions will be made and by whom, a time line for completing the work to implement the program element, and how information gained from experience will be continuously incorporated into the program. The framework will evolve into a more detailed and comprehensive program. An operator must make continual improvements to the program.

- (b) **Implementation Standards.** In carrying out this subpart, an operator must follow the requirements of this subpart and of ASME/ANSI B31.8S (incorporated by reference, see §192.7) and its appendices, where specified. An operator may follow an equivalent standard or practice only when the operator demonstrates the alternative standard or practice provides an equivalent level of safety to the public and property. In the event of a conflict between this subpart and ASME/ANSI B31.8S, the requirements in this subpart control.

§192.909 How can an operator change its integrity management program?

- (a) **General.** An operator must document any change to its program and the reasons for the change before implementing the change.
- (b) **Notification.** An operator must notify OPS, in accordance with §192.949, of any change to the program that may substantially affect the program's implementation or may significantly modify the program or schedule for carrying out the program elements. An operator must also notify a State or local pipeline safety authority when either a covered segment is located in a State where OPS has an interstate agent agreement, or an intrastate covered segment is regulated by that State. An operator must provide the notification within 30 days after adopting this type of change into its program.

[68 FR 69817, Dec. 15, 2003, as amended by Amdt. 192-95, 69 FR 18231, Apr. 6, 2004]

§192.911 What are the elements of an integrity management program?

An operator's initial integrity management program begins with a framework (see §192.907) and evolves into a more detailed and comprehensive integrity management program, as information is gained and incorporated into the program. An operator must make continual improvements to its program. The initial program framework and subsequent program must, at minimum, contain the following elements. (When indicated, refer to ASME/ANSI B31.8S (incorporated by reference, see §192.7) for more detailed information on the listed element.)

- (a) An identification of all high consequence areas, in accordance with §192.905.
- (b) A baseline assessment plan meeting the requirements of §192.919 and §192.921.
- (c) An identification of threats to each covered pipeline segment, which must include data integration and a risk assessment. An operator must use the threat identification and risk assessment to prioritize covered segments for assessment (§192.917) and to evaluate the merits of additional preventive and mitigative measures (§192.935) for each covered segment.
- (d) A direct assessment plan, if applicable, meeting the requirements of §192.923, and depending on the threat assessed, of §§192.925, 192.927, or 192.929.
- (e) Provisions meeting the requirements of §192.933 for remediating conditions found during an integrity assessment.
- (f) A process for continual evaluation and assessment meeting the requirements of §192.937.
- (g) If applicable, a plan for confirmatory direct assessment meeting the requirements of §192.931.

- (h) Provisions meeting the requirements of §192.935 for adding preventive and mitigative measures to protect the high consequence area.
- (i) A performance plan as outlined in ASME/ANSI B31.8S, section 9 that includes performance measures meeting the requirements of §192.945.
- (j) Record keeping provisions meeting the requirements of §192.947.
- (k) A management of change process as outlined in ASME/ANSI B31.8S, section 11.
- (l) A quality assurance process as outlined in ASME/ANSI B31.8S, section 12.
- (m) A communication plan that includes the elements of ASME/ANSI B31.8S, section 10, and that includes procedures for addressing safety concerns raised by—
 - (1) OPS; and
 - (2) A State or local pipeline safety authority when a covered segment is located in a State where OPS has an interstate agent agreement.
- (n) Procedures for providing (when requested), by electronic or other means, a copy of the operator's risk analysis or integrity management program to—
 - (1) OPS; and
 - (2) A State or local pipeline safety authority when a covered segment is located in a State where OPS has an interstate agent agreement.
- (o) Procedures for ensuring that each integrity assessment is being conducted in a manner that minimizes environmental and safety risks.
- (p) A process for identification and assessment of newly-identified high consequence areas. (See §192.905 and §192.921.)

[68 FR 69817, Dec. 15, 2003, as amended by Amdt. 192-95, 69 FR 18231, Apr. 6, 2004]

§192.913 When may an operator deviate its program from certain requirements of this subpart?

- (a) **General.** ASME/ANSI B31.8S (incorporated by reference, see §192.7) provides the essential features of a performance-based or a prescriptive integrity management program. An operator that uses a performance-based approach that satisfies the requirements for exceptional performance in paragraph (b) of this section may deviate from certain requirements in this subpart, as provided in paragraph (c) of this section.
- (b) **Exceptional Performance.** An operator must be able to demonstrate the exceptional performance of its integrity management program through the following actions.
 - (1) To deviate from any of the requirements set forth in paragraph (c) of this section, an operator must have a performance-based integrity management program that meets or exceeds the performance-based requirements of ASME/ANSI B31.8S and includes, at a minimum, the following elements—
 - (i) A comprehensive process for risk analysis;
 - (ii) All risk factor data used to support the program;

- (iii) A comprehensive data integration process;
 - (iv) A procedure for applying lessons learned from assessment of covered pipeline segments to pipeline segments not covered by this subpart;
 - (v) A procedure for evaluating every incident, including its cause, within the operator's sector of the pipeline industry for implications both to the operator's pipeline system and to the operator's integrity management program;
 - (vi) A performance matrix that demonstrates the program has been effective in ensuring the integrity of the covered segments by controlling the identified threats to the covered segments;
 - (vii) Semi-annual performance measures beyond those required in §192.945 that are part of the operator's performance plan. (See §192.911(i).) An operator must submit these measures, by electronic or other means, on a semi-annual frequency to OPS in accordance with §192.951; and
 - (viii) An analysis that supports the desired integrity reassessment interval and the remediation methods to be used for all covered segments.
- (2) In addition to the requirements for the performance-based plan, an operator must—
- (i) Have completed at least two integrity assessments on each covered pipeline segment the operator is including under the performance-based approach, and be able to demonstrate that each assessment effectively addressed the identified threats on the covered segment.
 - (ii) Remediate all anomalies identified in the more recent assessment according to the requirements in §192.933, and incorporate the results and lessons learned from the more recent assessment into the operator's data integration and risk assessment.
- (c) **Deviation.** Once an operator has demonstrated that it has satisfied the requirements of paragraph (b) of this section, the operator may deviate from the prescriptive requirements of ASME/ANSI B31.8S and of this subpart only in the following instances.
- (1) The time frame for reassessment as provided in §192.939 except that reassessment by some method allowed under this subpart (e.g., confirmatory direct assessment) must be carried out at intervals no longer than seven years;
 - (2) The time frame for remediation as provided in §192.933 if the operator demonstrates the time frame will not jeopardize the safety of the covered segment.

[68 FR 69817, Dec. 15, 2003, as amended by Amdt. 192-95, 69 FR 18231, Apr. 6, 2004]

§192.915 What knowledge and training must personnel have to carry out an integrity management program?

- (a) **Supervisory Personnel.** The integrity management program must provide that each supervisor whose responsibilities relate to the integrity management program possesses and maintains a thorough knowledge of the integrity management program and of the elements for which the supervisor is responsible. The program must provide that any person who qualifies as a supervisor for the integrity management program has appropriate training or experience in the area for which the person is responsible.

- (b) ***Persons who carry out assessments and evaluate assessment results.*** The integrity management program must provide criteria for the qualification of any person—
- (1) Who conducts an integrity assessment allowed under this subpart; or
 - (2) Who reviews and analyzes the results from an integrity assessment and evaluation; or
 - (3) Who makes decisions on actions to be taken based on these assessments.
- (c) ***Persons responsible for preventive and mitigative measures.*** The integrity management program must provide criteria for the qualification of any person—
- (1) Who implements preventive and mitigative measures to carry out this subpart, including the marking and locating of buried structures; or
 - (2) Who directly supervises excavation work carried out in conjunction with an integrity assessment.

§192.917 How does an operator identify potential threats to pipeline integrity and use the threat identification in its integrity program?

- (a) ***Threat Identification.*** An operator must identify and evaluate all potential threats to each covered pipeline segment. Potential threats that an operator must consider include, but are not limited to, the threats listed in ASME/ANSI B31.8S (incorporated by reference, see §192.7), section 2, which are grouped under the following four categories:
- (1) Time dependent threats such as internal corrosion, external corrosion, and stress corrosion cracking;
 - (2) Static or resident threats, such as fabrication or construction defects;
 - (3) Time independent threats such as third party damage and outside force damage; and
 - (4) Human error.
- (b) ***Data Gathering and Integration.*** To identify and evaluate the potential threats to a covered pipeline segment, an operator must gather and integrate existing data and information on the entire pipeline that could be relevant to the covered segment. In performing this data gathering and integration, an operator must follow the requirements in ASME/ANSI B31.8S, section 4. At a minimum, an operator must gather and evaluate the set of data specified in Appendix A to ASME/ANSI B31.8S, and consider both on the covered segment and similar non-covered segments, past incident history, corrosion control records, continuing surveillance records, patrolling records, maintenance history, internal inspection records and all other conditions specific to each pipeline.
- (c) ***Risk assessment.*** An operator must conduct a risk assessment that follows ASME/ANSI B31.8S, section 5, and considers the identified threats for each covered segment. An operator must use the risk assessment to prioritize the covered segments for the baseline and continual reassessments (§§192.919, 192.921, 192.937), and to determine what additional preventive and mitigative measures are needed (§192.935) for the covered segment.
- (d) ***Plastic Transmission Pipeline.*** An operator of a plastic transmission pipeline must assess the threats to each covered segment using the information in sections 4 and 5 of ASME B31.8S, and consider any threats unique to the integrity of plastic pipe.

(e) **Actions to address particular threats.** If an operator identifies any of the following threats, the operator must take the following actions to address the threat.

(1) **Third party damage.** An operator must utilize the data integration required in paragraph (b) of this section and ASME/ANSI B31.8S, Appendix A7 to determine the susceptibility of each covered segment to the threat of third party damage. If an operator identifies the threat of third party damage, the operator must implement comprehensive additional preventive measures in accordance with §192.935 and monitor the effectiveness of the preventive measures. If, in conducting a baseline assessment under §192.921, or a reassessment under §192.937, an operator uses an internal inspection tool or external corrosion direct assessment, the operator must integrate data from these assessments with data related to any encroachment or foreign line crossing on the covered segment, to define where potential indications of third party damage may exist in the covered segment.

An operator must also have procedures in its integrity management program addressing actions it will take to respond to findings from this data integration.

(2) **Cyclic fatigue.** An operator must evaluate whether cyclic fatigue or other loading condition (including ground movement, suspension bridge condition) could lead to a failure of a deformation, including a dent or gouge, or other defect in the covered segment. An evaluation must assume the presence of threats in the covered segment that could be exacerbated by cyclic fatigue. An operator must use the results from the evaluation together with the criteria used to evaluate the significance of this threat to the covered segment to prioritize the integrity baseline assessment or reassessment.

(3) **Manufacturing and Construction Defects.** If an operator identifies the threat of manufacturing and construction defects (including seam defects) in the covered segment, an operator must analyze the covered segment to determine the risk of failure from these defects. The analysis must consider the results of prior assessments on the covered segment. An operator may consider manufacturing and construction related defects to be stable defects if the operating pressure on the covered segment has not increased over the maximum operating pressure experienced during the five years preceding identification of the high consequence area. If any of the following changes occur in the covered segment, an operator must prioritize the covered segment as a high risk segment for the baseline assessment or a subsequent reassessment.

(i) Operating pressure increases above the maximum operating pressure experienced during the preceding five years;

(ii) MAOP increases; or

(iii) The stresses leading to cyclic fatigue increase.

(4) **ERW Pipe.** If a covered pipeline segment contains low frequency electric resistance welded pipe (ERW), lap welded pipe or other pipe that satisfies the conditions specified in ASME/ANSI B31.8S, Appendices A4.3 and A4.4, and any covered or noncovered segment in the pipeline system with such pipe has experienced seam failure, or operating pressure on the covered segment has increased over the maximum operating pressure experienced during the preceding five years, an operator must select an assessment technology or technologies with a proven application capable of assessing seam integrity and seam corrosion anomalies. The operator must prioritize the covered segment as a high risk segment for the baseline assessment or a subsequent reassessment.

- (5) **Corrosion.** If an operator identifies corrosion on a covered pipeline segment that could adversely affect the integrity of the line (conditions specified in §192.933), the operator must evaluate and remediate, as necessary, all pipeline segments (both covered and non-covered) with similar material coating and environmental characteristics. An operator must establish a schedule for evaluating and remediating, as necessary, the similar segments that is consistent with the operator's established operating and maintenance procedures under Part 192 for testing and repair.

[68 FR 69817, Dec. 15, 2003, as amended by Amdt. 192-95, 69 FR 18231, Apr. 6, 2004]

§192.919 What must be in the baseline assessment plan?

An operator must include each of the following elements in its written baseline assessment plan:

- (a) Identification of the potential threats to each covered pipeline segment and the information supporting the threat identification. (See §192.917.);
- (b) The methods selected to assess the integrity of the line pipe, including an explanation of why the assessment method was selected to address the identified threats to each covered segment. The integrity assessment method an operator uses must be based on the threats identified to the covered segment. (See §192.917.) More than one method may be required to address all the threats to the covered pipeline segment;
- (c) A schedule for completing the integrity assessment of all covered segments, including risk factors considered in establishing the assessment schedule;
- (d) If applicable, a direct assessment plan that meets the requirements of §§192.923, and depending on the threat to be addressed, of §192.925, §192.927, or §192.929; and
- (e) A procedure to ensure that the baseline assessment is being conducted in a manner that minimizes environmental and safety risks.

§192.921 How is the baseline assessment to be conducted?

- (a) *Assessment methods.* An operator must assess the integrity of the line pipe in each covered segment by applying one or more of the following methods depending on the threats to which the covered segment is susceptible. An operator must select the method or methods best suited to address the threats identified to the covered segment (See §192.917).
 - (1) Internal inspection tool or tools capable of detecting corrosion, and any other threats to which the covered segment is susceptible. An operator must follow ASME/ANSI B31.8S (incorporated by reference, see §192.7), section 6.2 in selecting the appropriate internal inspection tools for the covered segment.
 - (2) Pressure test conducted in accordance with subpart J of this part. An operator must use the test pressures specified in Table 3 of section 5 of ASME/ANSI B31.8S, to justify an extended reassessment interval in accordance with §192.939.
 - (3) Direct assessment to address threats of external corrosion, internal corrosion, and stress corrosion cracking. An operator must conduct the direct assessment in accordance with the requirements listed in §192.923 and with, as applicable, the requirements specified in §§192.925, 192.927 or 192.929;

- (4) Other technology that an operator demonstrates can provide an equivalent understanding of the condition of the line pipe. An operator choosing this option must notify the Office of Pipeline Safety (OPS) 180 days before conducting the assessment, in accordance with §192.949. An operator must also notify a State or local pipeline safety authority when either a covered segment is located in a State where OPS has an interstate agent agreement, or an intrastate covered segment is regulated by that State.
- (b) **Prioritizing Segments.** An operator must prioritize the covered pipeline segments for the baseline assessment according to a risk analysis that considers the potential threats to each covered segment. The risk analysis must comply with the requirements in §192.917.
- (c) **Assessment for Particular Threats.** In choosing an assessment method for the baseline assessment of each covered segment, an operator must take the actions required in §192.917(e) to address particular threats that it has identified.
- (d) **Time Period.** An operator must prioritize all the covered segments for assessment in accordance with §192.917 (c) and paragraph (b) of this section. An operator must assess at least 50 percent of the covered segments beginning with the highest risk segments, by December 17, 2007. An operator must complete the baseline assessment of all covered segments by December 17, 2012.
- (e) **Prior assessment.** An operator may use a prior integrity assessment conducted before December 17, 2002 as a baseline assessment for the covered segment, if the integrity assessment meets the baseline requirements in this subpart and subsequent remedial actions to address the conditions listed in §192.933 have been carried out. In addition, if an operator uses this prior assessment as its baseline assessment, the operator must reassess the line pipe in the covered segment according to the requirements of §192.937 and §192.939.
- (f) **Newly Identified Areas.** When an operator identifies a new high consequence area (see §192.905), an operator must complete the baseline assessment of the line pipe in the newly identified high consequence area within ten (10) years from the date the area is identified.
- (g) **Newly Installed Pipe.** An operator must complete the baseline assessment of a newly-installed segment of pipe covered by this subpart within ten (10) years from the date the pipe is installed. An operator may conduct a pressure test in accordance with paragraph (a)(2) of this section, to satisfy the requirement for a baseline assessment.
- (h) **Plastic Transmission Pipeline.** If the threat analysis required in §192.917(d) on a plastic transmission pipeline indicates that a covered segment is susceptible to failure from causes other than third-party damage, an operator must conduct a baseline assessment of the segment in accordance with the requirements of this section and of §192.917. The operator must justify the use of an alternative assessment method that will address the identified threats to the covered segment.

[68 FR 69817, Dec. 15, 2003, as amended by Amdt. 192-95, 69 FR 18232, Apr. 6, 2004]

§192.923 How is direct assessment used and for what threats?

- (a) **General.** An operator may use direct assessment either as a primary assessment method or as a supplement to the other assessment methods allowed under this subpart. An operator may only use direct assessment as the primary assessment method to address the identified threats of external corrosion (EC), internal corrosion (IC), and stress corrosion cracking (SCC).

- (b) **Primary method.** An operator using direct assessment as a primary assessment method must have a plan that complies with the requirements in—
- (1) Section 192.925 and ASME/ANSI B31.8S (incorporated by reference, see §192.7) section 6.4, and NACE SP0502 (incorporated by reference, see §192.7), if addressing external corrosion (EC).
 - (2) Section 192.927 and ASME/ANSI B31.8S (incorporated by reference, see §192.7), section 6.4, appendix B2, if addressing internal corrosion (IC).
 - (3) Section 192.929 and ASME/ANSI B31.8S (incorporated by reference, see §192.7), appendix A3, if addressing stress corrosion cracking (SCC).
- (c) **Supplemental Method.** An operator using direct assessment as a supplemental assessment method for any applicable threat must have a plan that follows the requirements for confirmatory direct assessment in §192.931.

[68 FR 69817, Dec. 15, 2003, as amended by Amdt. 192-114, 75 FR 48604, Aug. 11, 2010; Amdt. 192-119, 80 FR 178, 182, Jan. 5, 2015; 80 FR 46847, Aug. 6, 2015]

§192.925 What are the requirements for using External Corrosion Direct Assessment (ECDA)?

- (a) **Definition.** ECDA is a four-step process that combines preassessment, indirect inspection, direct examination, and post assessment to evaluate the threat of external corrosion to the integrity of a pipeline.
- (b) **General Requirements.** An operator that uses direct assessment to assess the threat of external corrosion must follow the requirements in this section, in ASME/ANSI B31.8S (incorporated by reference, see §192.7), section 6.4, and in NACE SP0502 (incorporated by reference, see §192.7). An operator must develop and implement a direct assessment plan that has procedures addressing pre-assessment, indirect inspection, direct examination, and post assessment. If the ECDA detects pipeline coating damage, the operator must also integrate the data from the ECDA with other information from the data integration (§192.917(b)) to evaluate the covered segment for the threat of third party damage and to address the threat as required by §192.917(e)(1).
- (1) **Preassessment.** In addition to the requirements in ASME/ANSI B31.8S section 6.4 and NACE SP0502, section 3, the plan's procedures for preassessment must include—
 - (i) Provisions for applying more restrictive criteria when conducting ECDA for the first time on a covered segment; and
 - (ii) The basis on which an operator selects at least two different, but complementary indirect assessment tools to assess each ECDA Region. If an operator utilizes an indirect inspection method that is not discussed in Appendix A of NACE SP0502, the operator must demonstrate the applicability, validation basis, equipment used, application procedure, and utilization of data for the inspection method.
 - (2) **Indirect Examination.** In addition to the requirements in ASME/ANSI B31.8S, section 6.4 and in NACE SP0502, section 4, the plan's procedures for indirect inspection of the ECDA regions must include—
 - (i) Provisions for applying more restrictive criteria when conducting ECDA for the first time on a covered segment;

- (ii) Criteria for identifying and documenting those indications that must be considered for excavation and direct examination. Minimum identification criteria include the known sensitivities of assessment tools, the procedures for using each tool, and the approach to be used for decreasing the physical spacing of indirect assessment tool readings when the presence of a defect is suspected;
 - (iii) Criteria for defining the urgency of excavation and direct examination of each indication identified during the indirect examination. These criteria must specify how an operator will define the urgency of excavating the indication as immediate, scheduled or monitored; and
 - (iv) Criteria for scheduling excavation of indications for each urgency level.
- (3) **Direct Examination.** In addition to the requirements in ASME/ANSI B31.8S section 6.4 and NACE SP0502, section 5, the plan's procedures for direct examination of indications from the indirect examination must include—
- (i) Provisions for applying more restrictive criteria when conducting ECDA for the first time on a covered segment;
 - (ii) Criteria for deciding what action should be taken if either:
 - (A) Corrosion defects are discovered that exceed allowable limits (Section 5.5.2.2 of NACE SP0502), or
 - (B) Root cause analysis reveals conditions for which ECDA is not suitable (Section 5.6.2 of NACE SP0502);
 - (iii) Criteria and notification procedures for any changes in the ECDA Plan, including changes that affect the severity classification, the priority of direct examination, and the time frame for direct examination of indications; and
 - (iv) Criteria that describe how and on what basis an operator will reclassify and reprioritize any of the provisions that are specified in section 5.9 of NACE SP0502.
- (4) **Post Assessment and Continuing Evaluation.** In addition to the requirements in ASME/ANSI B31.8S section 6.4 and NACE SP0502, section 6, the plan's procedures for post assessment of the effectiveness of the ECDA process must include—
- (i) Measures for evaluating the long-term effectiveness of ECDA in addressing external corrosion in covered segments; and
 - (ii) Criteria for evaluating whether conditions discovered by direct examination of indications in each ECDA region indicate a need for reassessment of the covered segment at an interval less than that specified in §192.939. (See Appendix D of NACE SP0502.)

[68 FR 69817, Dec. 15, 2003, as amended by Amdt. 192-95, 69 FR 29904, May 26, 2004; Amdt. 192-114, 75 FR 48604, Aug. 11, 2010; Amdt. 192-119, 80 FR 178, Jan. 5, 2015; Amdt. 192-120, 80 FR 12779, Mar. 11, 2015]

§192.927 What are the requirements for using Internal Corrosion Direct Assessment (ICDA)?

- (a) **Definition.** Internal Corrosion Direct Assessment (ICDA) is a process an operator uses to identify areas along the pipeline where fluid or other electrolyte introduced during normal operation or by an upset condition may reside, and then focuses direct examination on the locations in covered segments where

internal corrosion is most likely to exist. The process identifies the potential for internal corrosion caused by microorganisms, or fluid with CO₂, O₂, hydrogen sulfide or other contaminants present in the gas.

- (b) **General Requirements.** An operator using direct assessment as an assessment method to address internal corrosion in a covered pipeline segment must follow the requirements in this section and in ASME/ANSI B31.8S (incorporated by reference, see §192.7), section 6.4 and appendix B2. The ICDA process described in this section applies only for a segment of pipe transporting nominally dry natural gas, and not for a segment with electrolyte nominally present in the gas stream. If an operator uses ICDA to assess a covered segment operating with electrolyte present in the gas stream, the operator must develop a plan that demonstrates how it will conduct ICDA in the segment to effectively address internal corrosion, and must provide notification in accordance with §192.921 (a)(4) or §192.937(c)(4).
- (c) **The ICDA Plan.** An operator must develop and follow an ICDA plan that provides for preassessment, identification of ICDA regions and excavation locations, detailed examination of pipe at excavation locations, and post-assessment evaluation and monitoring.
- (1) **Preassessment.** In the preassessment stage, an operator must gather and integrate data and information needed to evaluate the feasibility of ICDA for the covered segment, and to support use of a model to identify the locations along the pipe segment where electrolyte may accumulate, to identify ICDA regions, and to identify areas within the covered segment where liquids may potentially be entrained. This data and information includes, but is not limited to—
- (i) All data elements listed in appendix A2 of ASME/ANSI B31.8S;
 - (ii) Information needed to support use of a model that an operator must use to identify areas along the pipeline where internal corrosion is most likely to occur. (See paragraph (a) of this section.) This information, includes, but is not limited to, location of all gas input and withdrawal points on the line; location of all low points on covered segments such as sags, drips, inclines, valves, manifolds, dead-legs, and traps; the elevation profile of the pipeline in sufficient detail that angles of inclination can be calculated for all pipe segments; and the diameter of the pipeline, and the range of expected gas velocities in the pipeline;
 - (iii) Operating experience data that would indicate historic upsets in gas conditions, locations where these upsets have occurred, and potential damage resulting from these upset conditions; and
 - (iv) Information on covered segments where cleaning pigs may not have been used or where cleaning pigs may deposit electrolytes.
- (2) **ICDA Region Identification.** An operator's plan must identify where all ICDA Regions are located in the transmission system, in which covered segments are located. An ICDA Region extends from the location where liquid may first enter the pipeline and encompasses the entire area along the pipeline where internal corrosion may occur and where further evaluation is needed. An ICDA Region may encompass one or more covered segments. In the identification process, an operator must use the model in GRI 02-0057, *"Internal Corrosion Direct Assessment of Gas Transmission Pipelines—Methodology,"* (incorporated by reference, see §192.7). An operator may use another model if the operator demonstrates it is equivalent to the one shown in GRI 02-0057. A model must consider changes in pipe diameter, locations where gas enters a line (potential to introduce liquid) and locations down stream of gas draw-offs (where gas velocity is reduced) to define the critical pipe angle of inclination above which water film cannot be transported by the gas.

- (3) **Identification of locations for excavation and direct examination.** An operator's plan must identify the locations where internal corrosion is most likely in each ICDA region. In the location identification process, an operator must identify a minimum of two locations for excavation within each ICDA Region within a covered segment and must perform a direct examination for internal corrosion at each location, using ultrasonic thickness measurements, radiography, or other generally accepted measurement technique. One location must be the low point (e.g., sags, drips, valves, manifolds, dead-legs, traps) within the covered segment nearest to the beginning of the ICDA Region. The second location must be further downstream, within a covered segment, near the end of the ICDA Region. If corrosion exists at either location, the operator must—
- (i) Evaluate the severity of the defect (remaining strength) and remediate the defect in accordance with §192.933;
 - (ii) As part of the operator's current integrity assessment either perform additional excavations in each covered segment within the ICDA region, or use an alternative assessment method allowed by this subpart to assess the line pipe in each covered segment within the ICDA region for internal corrosion; and
 - (iii) Evaluate the potential for internal corrosion in all pipeline segments (both covered and non-covered) in the operator's pipeline system with similar characteristics to the ICDA region containing the covered segment in which the corrosion was found, and as appropriate, remediate the conditions the operator finds in accordance with §192.933.
- (4) **Post-Assessment Evaluation and Monitoring.** An operator's plan must provide for evaluating the effectiveness of the ICDA process and continued monitoring of covered segments where internal corrosion has been identified. The evaluation and monitoring process includes—
- (i) Evaluating the effectiveness of ICDA as an assessment method for addressing internal corrosion and determining whether a covered segment should be reassessed at more frequent intervals than those specified in §192.939. An operator must carry out this evaluation within a year of conducting an ICDA; and
 - (ii) Continually monitoring each covered segment where internal corrosion has been identified using techniques such as coupons, UT sensors or electronic probes, periodically drawing off liquids at low points and chemically analyzing the liquids for the presence of corrosion products. An operator must base the frequency of the monitoring and liquid analysis on results from all integrity assessments that have been conducted in accordance with the requirements of this subpart, and risk factors specific to the covered segment. If an operator finds any evidence of corrosion products in the covered segment, the operator must take prompt action in accordance with one of the two following required actions and remediate the conditions the operator finds in accordance with §192.933.
 - (A) Conduct excavations of covered segments at locations downstream from where the electrolyte might have entered the pipe; or
 - (B) Assess the covered segment using another integrity assessment method allowed by this subpart.
- (5) **Other Requirements.** The ICDA plan must also include—
- (i) Criteria an operator will apply in making key decisions (e.g., ICDA feasibility, definition of ICDA Regions, conditions requiring excavation) in implementing each stage of the ICDA process;

- (ii) Provisions for applying more restrictive criteria when conducting ICDA for the first time on a covered segment and that become less stringent as the operator gains experience; and
- (iii) Provisions that analysis be carried out on the entire pipeline in which covered segments are present, except that application of the remediation criteria of §192.933 may be limited to covered segments.

[68 FR 69817, Dec. 15, 2003, as amended by Amdt. 192-95, 69 FR 18232, Apr. 6, 2004]

§192.929 What are the requirements for using Direct Assessment for Stress Corrosion Cracking (SCCDA)?

- (a) **Definition.** Stress Corrosion Cracking Direct Assessment (SCCDA) is a process to assess a covered pipe segment for the presence of SCC primarily by systematically gathering and analyzing excavation data for pipe having similar operational characteristics and residing in a similar physical environment.
- (b) **General Requirements.** An operator using direct assessment as an integrity assessment method to address stress corrosion cracking in a covered pipeline segment must have a plan that provides, at minimum, for—
 - (1) **Data Gathering and Integration.** An operator's plan must provide for a systematic process to collect and evaluate data for all covered segments to identify whether the conditions for SCC are present and to prioritize the covered segments for assessment. This process must include gathering and evaluating data related to SCC at all sites an operator excavates during the conduct of its pipeline operations where the criteria in ASME/ANSI B31.8S (incorporated by reference, see §192.7), appendix A3.3 indicate the potential for SCC. This data includes at minimum, the data specified in ASME/ANSI B31.8S, appendix A3.
 - (2) **Assessment Method.** The plan must provide that if conditions for SCC are identified in a covered segment, an operator must assess the covered segment using an integrity assessment method specified in ASME/ANSI B31.8S, appendix A3, and remediate the threat in accordance with ASME/ANSI B31.8S, appendix A3, section A3.4.

[68 FR 69817, Dec. 15, 2003, as amended by Amdt. 192-95, 69 FR 18233, Apr. 6, 2004]

§192.931 How may Confirmatory Direct Assessment (CDA) be used?

An operator using the confirmatory direct assessment (CDA) method as allowed in §192.937 must have a plan that meets the requirements of this section and of §§192.925 (ECDA) and §192.927 (ICDA).

- (a) **Threats.** An operator may only use CDA on a covered segment to identify damage resulting from external corrosion or internal corrosion.
- (b) **External Corrosion Plan.** An operator's CDA plan for identifying external corrosion must comply with §192.925 with the following exceptions.
 - (1) The procedures for indirect examination may allow use of only one indirect examination tool suitable for the application.
 - (2) The procedures for direct examination and remediation must provide that—
 - (i) All immediate action indications must be excavated for each ECDA region; and

- (ii) At least one high risk indication that meets the criteria of scheduled action must be excavated in each ECDA region.
- (c) **Internal Corrosion Plan.** An operator's CDA plan for identifying internal corrosion must comply with §192.927 except that the plan's procedures for identifying locations for excavation may require excavation of only one high risk location in each ICDA region.
- (d) **Defects requiring near-term remediation.** If an assessment carried out under paragraph (b) or (c) of this section reveals any defect requiring remediation prior to the next scheduled assessment, the operator must schedule the next assessment in accordance with NACE SP0502 (incorporated by reference, see §192.7), section 6.2 and 6.3. If the defect requires immediate remediation, then the operator must reduce pressure consistent with §192.933 until the operator has completed reassessment using one of the assessment techniques allowed in §192.937.

[68 FR 69817, Dec. 15, 2003, as amended by Amdt. 192-114, 75 FR 48604, Aug. 11, 2010; Amdt. 192-119, 80 FR 178, Jan. 5, 2015]

§192.933 What actions must be taken to address integrity issues?

- (a) **General requirements.** An operator must take prompt action to address all anomalous conditions the operator discovers through the integrity assessment. In addressing all conditions, an operator must evaluate all anomalous conditions and remediate those that could reduce a pipeline's integrity. An operator must be able to demonstrate that the remediation of the condition will ensure the condition is unlikely to pose a threat to the integrity of the pipeline until the next reassessment of the covered segment.
 - (1) **Temporary Pressure Reduction.** If an operator is unable to respond within the time limits for certain conditions specified in this section, the operator must temporarily reduce the operating pressure of the pipeline or take other action that ensures the safety of the covered segment. An operator must determine any temporary reduction in operating pressure required by this section using ASME/ANSI B31G (incorporated by reference, see §192.7); Pipeline Research Council, International, PR-3-805 (R-STRENG) (incorporated by reference, see §192.7); or by reducing the operating pressure to a level not exceeding 80 percent of the level at the time the condition was discovered. An operator must notify PHMSA in accordance with §192.949 if it cannot meet the schedule for evaluation and remediation required under paragraph (c) of this section and cannot provide safety through a temporary reduction in operating pressure or through another action. An operator must also notify a State pipeline safety authority when either a covered segment is located in a State where PHMSA has an interstate agent agreement or an intrastate covered segment is regulated by that State.
 - (2) **Long-Term Pressure Reduction.** When a pressure reduction exceeds 365 days, the operator must notify PHMSA under §192.949 and explain the reasons for the remediation delay. This notice must include a technical justification that the continued pressure reduction will not jeopardize the integrity of the pipeline. The operator also must notify a State pipeline safety authority when either a covered segment is located in a State where PHMSA has an interstate agent agreement, or an intrastate covered segment is regulated by that State.
- (b) **Discovery of Condition.** Discovery of a condition occurs when an operator has adequate information about a condition to determine that the condition presents a potential threat to the integrity of the

pipeline. A condition that presents a potential threat includes, but is not limited to, those conditions that require remediation or monitoring listed under paragraphs (d)(1) through (d)(3) of this section. An operator must promptly, but no later than 180 days after conducting an integrity assessment, obtain sufficient information about a condition to make that determination, unless the operator demonstrates that the 180-day period is impracticable.

- (c) ***Schedule for Evaluation and Remediation.*** An operator must complete remediation of a condition according to a schedule prioritizing the conditions for evaluation and remediation. Unless a special requirement for remediating certain conditions applies, as provided in paragraph (d) of this section, an operator must follow the schedule in ASME/ANSI B31.8S (incorporated by reference, see §192.7), section 7, Figure 4. If an operator cannot meet the schedule for any condition, the operator must explain the reasons why it cannot meet the schedule and how the changed schedule will not jeopardize public safety.
- (d) ***Special Requirements for Scheduling Remediation—***(1) ***Immediate Repair Conditions.*** An operator's evaluation and remediation schedule must follow ASME/ANSI B31.8S, section 7 in providing for immediate repair conditions. To maintain safety, an operator must temporarily reduce operating pressure in accordance with paragraph (a) of this section or shut down the pipeline until the operator completes the repair of these conditions. An operator must treat the following conditions as immediate repair conditions:
 - (i) A calculation of the remaining strength of the pipe shows a predicted failure pressure less than or equal to 1.1 times the maximum allowable operating pressure at the location of the anomaly. Suitable remaining strength calculation methods include ASME/ANSI B31G (incorporated by reference, see §192.7), PRCI PR-3-805 (R-STRENG) (incorporated by reference, see §192.7), or an alternative equivalent method of remaining strength calculation.
 - (ii) A dent that has any indication of metal loss, cracking or a stress riser.
 - (iii) An indication or anomaly that in the judgment of the person designated by the operator to evaluate the assessment results requires immediate action.
- (2) ***One-year Conditions.*** Except for conditions listed in paragraph (d)(1) and (d)(3) of this section, an operator must remediate any of the following within one year of discovery of the condition:
 - (i) A smooth dent located between the 8 o'clock and 4 o'clock positions (upper 2/3 of the pipe) with a depth greater than 6% of the pipeline diameter (greater than 0.50 inches in depth for a pipeline diameter less than Nominal Pipe Size (NPS) 12).
 - (ii) A dent with a depth greater than 2% of the pipeline's diameter (0.250 inches in depth for a pipeline diameter less than NPS 12) that affects pipe curvature at a girth weld or at a longitudinal seam weld.
- (3) ***Monitored Conditions.*** An operator does not have to schedule the following conditions for remediation, but must record and monitor the conditions during subsequent risk assessments and integrity assessments for any change that may require remediation:
 - (i) A dent with a depth greater than 6% of the pipeline diameter (greater than 0.50 inches in depth for a pipeline diameter less than NPS 12) located between the 4 o'clock position and the 8 o'clock position (bottom 1/3 of the pipe).
 - (ii) A dent located between the 8 o'clock and 4 o'clock positions (upper 2/3 of the pipe) with a depth greater than 6% of the pipeline diameter (greater than 0.50 inches in depth for a pipeline diameter

less than Nominal Pipe Size (NPS) 12), and engineering analyses of the dent demonstrate critical strain levels are not exceeded.

- (iii) A dent with a depth greater than 2% of the pipeline's diameter (0.250 inches in depth for a pipeline diameter less than NPS 12) that affects pipe curvature at a girth weld or a longitudinal seam weld, and engineering analyses of the dent and girth or seam weld demonstrate critical strain levels are not exceeded. These analyses must consider weld properties.

[68 FR 69817, Dec. 15, 2003, as amended by Amdt. 192-95, 69 FR 18233, Apr. 6, 2004; Amdt. 192-104, 72 FR 39016, July 17, 2007; Amdt. 192-119, 80 FR 182, Jan. 5, 2015; 80 FR 46847, Aug. 6, 2015]

§192.935 What additional preventive and mitigative measures must an operator take?

- (a) **General Requirements.** An operator must take additional measures beyond those already required by Part 192 to prevent a pipeline failure and to mitigate the consequences of a pipeline failure in a high consequence area. An operator must base the additional measures on the threats the operator has identified to each pipeline segment. (See §192.917) An operator must conduct, in accordance with one of the risk assessment approaches in ASME/ANSI B31.8S (incorporated by reference, see §192.7), section 5, a risk analysis of its pipeline to identify additional measures to protect the high consequence area and enhance public safety. Such additional measures include, but are not limited to, installing Automatic Shut-off Valves or Remote Control Valves, installing computerized monitoring and leak detection systems, replacing pipe segments with pipe of heavier wall thickness, providing additional training to personnel on response procedures, conducting drills with local emergency responders and implementing additional inspection and maintenance programs.
- (b) Third party damage and outside force damage—
 - (1) **Third Party Damage.** An operator must enhance its damage prevention program, as required under §192.614 of this part, with respect to a covered segment to prevent and minimize the consequences of a release due to third party damage. Enhanced measures to an existing damage prevention program include, at a minimum—
 - (i) Using qualified personnel (see §192.915) for work an operator is conducting that could adversely affect the integrity of a covered segment, such as marking, locating, and direct supervision of known excavation work.
 - (ii) Collecting in a central database information that is location specific on excavation damage that occurs in covered and non-covered segments in the transmission system and the root cause analysis to support identification of targeted additional preventative and mitigative measures in the high consequence areas. This information must include recognized damage that is not required to be reported as an incident under part 191.
 - (iii) Participating in one-call systems in locations where covered segments are present.
 - (iv) Monitoring of excavations conducted on covered pipeline segments by pipeline personnel. If an operator finds physical evidence of encroachment involving excavation that the operator did not monitor near a covered segment, an operator must either excavate the area near the encroachment or conduct an above ground survey using methods defined in NACE SP0502 (incorporated by reference, see §192.7). An operator must excavate, and remediate, in accordance with ANSI/ASME

B31.8S and §192.933 any indication of coating holidays or discontinuity warranting direct examination.

- (2) **Outside Force Damage.** If an operator determines that outside force (e.g., earth movement, floods, unstable suspension bridge) is a threat to the integrity of a covered segment, the operator must take measures to minimize the consequences to the covered segment from outside force damage. These measures include, but are not limited to, increasing the frequency of aerial, foot or other methods of patrols, adding external protection, reducing external stress, and relocating the line.
 - (c) **Automatic shut-off valves (ASV) or Remote control valves (RCV).** If an operator determines, based on a risk analysis, that an ASV or RCV would be an efficient means of adding protection to a high consequence area in the event of a gas release, an operator must install the ASV or RCV. In making that determination, an operator must, at least, consider the following factors—swiftness of leak detection and pipe shutdown capabilities, the type of gas being transported, operating pressure, the rate of potential release, pipeline profile, the potential for ignition, and location of nearest response personnel.
 - (d) **Pipelines operating below 30% SMYS.** An operator of a transmission pipeline operating below 30% SMYS located in a high consequence area must follow the requirements in paragraphs (d)(1) and (d)(2) of this section. An operator of a transmission pipeline operating below 30% SMYS located in a Class 3 or Class 4 area but not in a high consequence area must follow the requirements in paragraphs (d)(1), (d)(2) and (d)(3) of this section.
 - (1) Apply the requirements in paragraphs (b)(1)(i) and (b)(1)(iii) of this section to the pipeline; and
 - (2) Either monitor excavations near the pipeline, or conduct patrols as required by §192.705 of the pipeline at bi-monthly intervals. If an operator finds any indication of unreported construction activity, the operator must conduct a follow up investigation to determine if mechanical damage has occurred.
 - (3) Perform semi-annual leak surveys (quarterly for unprotected pipelines or cathodically protected pipe where electrical surveys are impractical).
 - (e) **Plastic Transmission Pipeline.** An operator of a plastic transmission pipeline must apply the requirements in paragraphs (b)(1)(i), (b)(1)(iii) and (b)(1)(iv) of this section to the covered segments of the pipeline.
- [68 FR 69817, Dec. 15, 2003, as amended by Amdt. 192-95, 69 FR 18233, Apr. 6, 2004; Amdt. 192-95, 69 FR 29904, May 26, 2004; Amdt. 192-114, 75 FR 48604, Aug. 11, 2010; Amdt. 192-119, 80 FR 178, Jan. 5, 2015]

§192.937 What is a continual process of evaluation and assessment to maintain a pipeline's integrity?

- (a) **General.** After completing the baseline integrity assessment of a covered segment, an operator must continue to assess the line pipe of that segment at the intervals specified in §192.939 and periodically evaluate the integrity of each covered pipeline segment as provided in paragraph (b) of this section. An operator must reassess a covered segment on which a prior assessment is credited as a baseline under §192.921(e) by no later than December 17, 2009. An operator must reassess a covered segment on which a baseline assessment is conducted during the baseline period specified in §192.921(d) by no later than seven years after the baseline assessment of that covered segment unless the evaluation under paragraph (b) of this section indicates earlier reassessment.
- (b) **Evaluation.** An operator must conduct a periodic evaluation as frequently as needed to assure the integrity of each covered segment. The periodic evaluation must be based on a data integration and risk assessment of the entire pipeline as specified in §192.917. For plastic transmission pipelines, the periodic

evaluation is based on the threat analysis specified in 192.917(d). For all other transmission pipelines, the evaluation must consider the past and present integrity assessment results, data integration and risk assessment information (§192.917), and decisions about remediation (§192.933) and additional preventive and mitigative actions (§192.935). An operator must use the results from this evaluation to identify the threats specific to each covered segment and the risk represented by these threats.

- (c) **Assessment Methods.** In conducting the integrity reassessment, an operator must assess the integrity of the line pipe in the covered segment by any of the following methods as appropriate for the threats to which the covered segment is susceptible (see §192.917), or by confirmatory direct assessment under the conditions specified in §192.931.
- (1) Internal inspection tool or tools capable of detecting corrosion, and any other threats to which the covered segment is susceptible. An operator must follow ASME/ANSI B31.8S (incorporated by reference, see §192.7), section 6.2 in selecting the appropriate internal inspection tools for the covered segment.
 - (2) Pressure test conducted in accordance with subpart J of this part. An operator must use the test pressures specified in Table 3 of section 5 of ASME/ANSI B31.8S, to justify an extended reassessment interval in accordance with §192.939.
 - (3) Direct assessment to address threats of external corrosion, internal corrosion, or stress corrosion cracking. An operator must conduct the direct assessment in accordance with the requirements listed in §192.923 and with as applicable, the requirements specified in §§192.925, 192.927 or 192.929;
 - (4) Other technology that an operator demonstrates can provide an equivalent understanding of the condition of the line pipe. An operator choosing this option must notify the Office of Pipeline Safety (OPS) 180 days before conducting the assessment, in accordance with §192.949. An operator must also notify a State or local pipeline safety authority when either a covered segment is located in a State where OPS has an interstate agent agreement, or an intrastate covered segment is regulated by that State.
 - (5) Confirmatory direct assessment when used on a covered segment that is scheduled for reassessment at a period longer than seven years. An operator using this reassessment method must comply with §192.931.

[68 FR 69817, Dec. 15, 2003, as amended by Amdt. 192-95, 69 FR 18234, Apr. 6, 2004]

§192.939 What are the required reassessment intervals?

An operator must comply with the following requirements in establishing the reassessment interval for the operator's covered pipeline segments.

- (a) **Pipelines operating at or above 30% SMYS.** An operator must establish a reassessment interval for each covered segment operating at or above 30% SMYS in accordance with the requirements of this section. The maximum reassessment interval by an allowable reassessment method is seven years. If an operator establishes a reassessment interval that is greater than seven years, the operator must, within the seven-year period, conduct a confirmatory direct assessment on the covered segment, and then conduct the follow-up reassessment at the interval the operator has established. A reassessment carried out using

confirmatory direct assessment must be done in accordance with §192.931. The table that follows this section sets forth the maximum allowed reassessment intervals.

- (1) **Pressure test or internal inspection or other equivalent technology.** An operator that uses pressure testing or internal inspection as an assessment method must establish the reassessment interval for a covered pipeline segment by—
 - (i) Basing the interval on the identified threats for the covered segment (see §192.917) and on the analysis of the results from the last integrity assessment and from the data integration and risk assessment required by §192.917; or
 - (ii) Using the intervals specified for different stress levels of pipeline (operating at or above 30% SMYS) listed in ASME B31.8S (incorporated by reference, see §192.7), section 5, Table 3.
 - (2) **External Corrosion Direct Assessment.** An operator that uses ECDA that meets the requirements of this subpart must determine the reassessment interval according to the requirements in paragraphs 6.2 and 6.3 of NACE SP0502 (incorporated by reference, see §192.7).
 - (3) **Internal Corrosion or SCC Direct Assessment.** An operator that uses ICDA or SCCDA in accordance with the requirements of this subpart must determine the reassessment interval according to the following method. However, the reassessment interval cannot exceed those specified for direct assessment in ASME/ANSI B31.8S, section 5, Table 3.
 - (i) Determine the largest defect most likely to remain in the covered segment and the corrosion rate appropriate for the pipe, soil and protection conditions;
 - (ii) Use the largest remaining defect as the size of the largest defect discovered in the SCC or ICDA segment; and
 - (iii) Estimate the reassessment interval as half the time required for the largest defect to grow to a critical size.
- (b) **Pipelines Operating Below 30% SMYS.** An operator must establish a reassessment interval for each covered segment operating below 30% SMYS in accordance with the requirements of this section. The maximum reassessment interval by an allowable reassessment method is seven years. An operator must establish reassessment by at least one of the following—
- (1) Reassessment by pressure test, internal inspection or other equivalent technology following the requirements in paragraph (a)(1) of this section except that the stress level referenced in paragraph (a)(1)(ii) of this section would be adjusted to reflect the lower operating stress level. If an established interval is more than seven years, the operator must conduct by the seventh year of the interval either a confirmatory direct assessment in accordance with §192.931, or a low stress reassessment in accordance with §192.941.
 - (2) Reassessment by ECDA following the requirements in paragraph (a)(2) of this section.
 - (3) Reassessment by ICDA or SCCDA following the requirements in paragraph (a)(3) of this section.
 - (4) Reassessment by confirmatory direct assessment at 7-year intervals in accordance with §192.931, with reassessment by one of the methods listed in paragraphs (b)(1) through (b)(3) of this section by year 20 of the interval.

- (5) Reassessment by the low stress assessment method at 7-year intervals in accordance with §192.941 with reassessment by one of the methods listed in paragraphs (b)(1) through (b)(3) of this section by year 20 of the interval.
- (6) The following table sets forth the maximum reassessment intervals. Also refer to Appendix E.II for guidance on Assessment Methods and Assessment Schedule for Transmission Pipelines Operating Below 30% SMYS. In case of conflict between the rule and the guidance in the Appendix, the requirements of the rule control. An operator must comply with the following requirements in establishing a reassessment interval for a covered segment:

Maximum Reassessment Interval

ASSESSMENT METHOD	PIPELINE OPERATING AT OR ABOVE 50% SMYS	PIPELINE OPERATING AT OR ABOVE 30% SMYS, UP TO 50% SMYS	PIPELINE OPERATING BELOW 30% SMYS
Internal Inspection Tool, Pressure Test or Direct Assessment	10 years ^(*)	15 years ^(*)	20 years. ^(**)
Confirmatory Direct Assessment	7 years	7 years	7 years.
Low Stress Reassessment	Not applicable	Not applicable	7 years + ongoing actions specified in §192.941.
(*)A Confirmatory direct assessment as described in §192.931 must be conducted by year 7 in a 10-year interval and years 7 and 14 of a 15-year interval.			
(**)A low stress reassessment or Confirmatory direct assessment must be conducted by years 7 and 14 of the interval.			

[68 FR 69817, Dec. 15, 2003, as amended by Amdt. 192-95, 69 FR 18234, Apr. 6, 2004; 192-114, 75 FR 48604, Aug. 11, 2010; Amdt. 192-119, 80 FR 178, 182, Jan. 5, 2015]

§192.941 What is a low stress reassessment?

- (a) **General.** An operator of a transmission line that operates below 30% SMYS may use the following method to reassess a covered segment in accordance with §192.939. This method of reassessment addresses the threats of external and internal corrosion. The operator must have conducted a baseline assessment of the covered segment in accordance with the requirements of §§192.919 and 192.921.
- (b) **External Corrosion.** An operator must take one of the following actions to address external corrosion on the low stress covered segment.
- (1) **Cathodically Protected Pipe.** To address the threat of external corrosion on cathodically protected pipe in a covered segment, an operator must perform an electrical survey (i.e. indirect examination tool/method) at least every 7 years on the covered segment. An operator must use the results of each survey as part of an overall evaluation of the cathodic protection and corrosion threat for the covered segment. This evaluation must consider, at minimum, the leak repair and inspection records, corrosion monitoring records, exposed pipe inspection records, and the pipeline environment.

(2) ***Unprotected pipe or cathodically protected pipe where electrical surveys are impractical.*** If an electrical survey is impractical on the covered segment an operator must—

- (i) Conduct leakage surveys as required by §192.706 at 4-month intervals; and
- (ii) Every 18 months, identify and remediate areas of active corrosion by evaluating leak repair and inspection records, corrosion monitoring records, exposed pipe inspection records, and the pipeline environment.

(c) ***Internal Corrosion.*** To address the threat of internal corrosion on a covered segment, an operator must—

- (1) Conduct a gas analysis for corrosive agents at least once each calendar year;
- (2) Conduct periodic testing of fluids removed from the segment. At least once each calendar year test the fluids removed from each storage field that may affect a covered segment; and
- (3) At least every seven (7) years, integrate data from the analysis and testing required by paragraphs (c)(1)-(c)(2) with applicable internal corrosion leak records, incident reports, safety-related condition reports, repair records, patrol records, exposed pipe reports, and test records, and define and implement appropriate remediation actions.

[68 FR 69817, Dec. 15, 2003, as amended by Amdt. 192-95, 69 FR 18234, Apr. 6, 2004]

§192.943 When can an operator deviate from these reassessment intervals?

(a) ***Waiver from reassessment interval in limited situations.*** In the following limited instances, OPS may allow a waiver from a reassessment interval required by §192.939 if OPS finds a waiver would not be inconsistent with pipeline safety.

- (1) ***Lack of Internal Inspection Tools.*** An operator who uses internal inspection as an assessment method may be able to justify a longer reassessment period for a covered segment if internal inspection tools are not available to assess the line pipe. To justify this, the operator must demonstrate that it cannot obtain the internal inspection tools within the required reassessment period and that the actions the operator is taking in the interim ensure the integrity of the covered segment.
- (2) ***Maintain Product Supply.*** An operator may be able to justify a longer reassessment period for a covered segment if the operator demonstrates that it cannot maintain local product supply if it conducts the reassessment within the required interval.

(b) ***How to Apply.*** If one of the conditions specified in paragraph (a) (1) or (a) (2) of this section applies, an operator may seek a waiver of the required reassessment interval. An operator must apply for a waiver in accordance with 49 U.S.C. 60118(c), at least 180 days before the end of the required reassessment interval, unless local product supply issues make the period impractical. If local product supply issues make the period impractical, an operator must apply for the waiver as soon as the need for the waiver becomes known.

[68 FR 69817, Dec. 15, 2003, as amended by Amdt. 192-95, 69 FR 18234, Apr. 6, 2004]

§192.945 What methods must an operator use to measure program effectiveness?

- (a) **General.** An operator must include in its integrity management program methods to measure whether the program is effective in assessing and evaluating the integrity of each covered pipeline segment and in protecting the high consequence areas. These measures must include the four overall performance measures specified in ASME/ANSI B31.8S (incorporated by reference, see §192.7 of this part), section 9.4, and the specific measures for each identified threat specified in ASME/ANSI B31.8S, Appendix A. An operator must submit the four overall performance measures as part of the annual report required by §191.17 of this subchapter.
- (b) **External Corrosion Direct Assessment.** In addition to the general requirements for performance measures in paragraph (a) of this section, an operator using direct assessment to assess the external corrosion threat must define and monitor measures to determine the effectiveness of the ECDA process. These measures must meet the requirements of §192.925.

[68 FR 69817, Dec. 15, 2003, as amended by Amdt. 192-95, 69 FR 18234, Apr. 6, 2004; 75 FR 72906, Nov. 26, 2010]

§192.947 What records must an operator keep?

An operator must maintain, for the useful life of the pipeline, records that demonstrate compliance with the requirements of this subpart. At minimum, an operator must maintain the following records for review during an inspection.

- (a) A written integrity management program in accordance with §192.907;
- (b) Documents supporting the threat identification and risk assessment in accordance with §192.917;
- (c) A written baseline assessment plan in accordance with §192.919;
- (d) Documents to support any decision, analysis and process developed and used to implement and evaluate each element of the baseline assessment plan and integrity management program. Documents include those developed and used in support of any identification, calculation, amendment, modification, justification, deviation and determination made, and any action taken to implement and evaluate any of the program elements;
- (e) Documents that demonstrate personnel have the required training, including a description of the training program, in accordance with §192.915;
- (f) Schedule required by §192.933 that prioritizes the conditions found during an assessment for evaluation and remediation, including technical justifications for the schedule.
- (g) Documents to carry out the requirements in §§192.923 through 192.929 for a direct assessment plan;
- (h) Documents to carry out the requirements in §192.931 for confirmatory direct assessment;
- (i) Verification that an operator has provided any documentation or notification required by this subpart to be provided to OPS, and when applicable, a State authority with which OPS has an interstate agent agreement, and a State or local pipeline safety authority that regulates a covered pipeline segment within that State.

[68 FR 69817, Dec. 15, 2003, as amended by Amdt. 192-95, 69 FR 18234, Apr. 6, 2004]

§192.949 How does an operator notify PHMSA?

An operator must provide any notification required by this subpart by—

- (a) Sending the notification by electronic mail to InformationResourcesManager@dot.gov; or
- (b) Sending the notification by mail to ATTN: Information Resources Manager, DOT/PHMSA/OPS, East Building, 2nd Floor, E22-321, 1200 New Jersey Ave. SE., Washington, DC 20590.

[Amdt. 192-120, 80 FR 12779, Mar. 11, 2015]

§192.951 Where does an operator file a report?

An operator must file any report required by this subpart electronically to the Pipeline and Hazardous Materials Safety Administration in accordance with §191.7 of this subchapter.

[Amdt. No. 192-115, 75 FR 72906, Nov. 26, 2010]

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Subpart P—Gas Distribution Pipeline Integrity Management (IM)

Source: 74 FR 63934, Dec. 4, 2009, unless otherwise noted.

§192.1001 What definitions apply to this subpart?

The following definitions apply to this subpart:

Excavation Damage means any impact that results in the need to repair or replace an underground facility due to a weakening, or the partial or complete destruction, of the facility, including, but not limited to, the protective coating, lateral support, cathodic protection or the housing for the line device or facility.

Hazardous Leak means a leak that represents an existing or probable hazard to persons or property and requires immediate repair or continuous action until the conditions are no longer hazardous.

Integrity Management Plan or IM Plan means a written explanation of the mechanisms or procedures the operator will use to implement its integrity management program and to ensure compliance with this subpart.

Integrity Management Program or IM Program means an overall approach by an operator to ensure the integrity of its gas distribution system.

Mechanical Fitting means a mechanical device used to connect sections of pipe. The term “Mechanical fitting” applies only to:

- (1) Stab Type fittings;
- (2) Nut Follower Type fittings;
- (3) Bolted Type fittings; or
- (4) Other Compression Type fittings.

Small LPG Operator means an operator of a liquefied petroleum gas (LPG) distribution pipeline that serves fewer than 100 customers from a single source.

[74 FR 63934, Dec. 4, 2009, as amended at 76 FR 5499, Feb. 1, 2011]

§192.1003 What do the regulations in this subpart cover?

(a) **General.** Unless exempted in paragraph (b) of this section this subpart prescribes minimum requirements for an IM program for any gas distribution pipeline covered under this part, including liquefied petroleum gas systems. A gas distribution operator, other than a master meter operator or a small LPG operator, must follow the requirements in §§192.1005 through 192.1013 of this subpart. A master meter operator or small LPG operator of a gas distribution pipeline must follow the requirements in §192.1015 of this subpart.

(b) **Exceptions.** This subpart does not apply to an individual service line directly connected to a transmission, gathering, or production pipeline.

[Amdt. 192-123, 82 FR 7998, Jan. 23, 2017]

§192.1005 What must a gas distribution operator (other than a master meter or small LPG operator) do to implement this subpart?

No later than August 2, 2011 a gas distribution operator must develop and implement an integrity management program that includes a written integrity management plan as specified in §192.1007.

§192.1007 What are the required elements of an integrity management plan?

A written integrity management plan must contain procedures for developing and implementing the following elements:

- (a) **Knowledge.** An operator must demonstrate an understanding of its gas distribution system developed from reasonably available information.
 - (1) Identify the characteristics of the pipeline's design and operations and the environmental factors that are necessary to assess the applicable threats and risks to its gas distribution pipeline.
 - (2) Consider the information gained from past design, operations, and maintenance.
 - (3) Identify additional information needed and provide a plan for gaining that information over time through normal activities conducted on the pipeline (for example, design, construction, operations or maintenance activities).
 - (4) Develop and implement a process by which the IM program will be reviewed periodically and refined and improved as needed.
 - (5) Provide for the capture and retention of data on any new pipeline installed. The data must include, at a minimum, the location where the new pipeline is installed and the material of which it is constructed.
- (b) **Identify Threats.** The operator must consider the following categories of threats to each gas distribution pipeline: corrosion, natural forces, excavation damage, other outside force damage, material or welds, equipment failure, incorrect operations, and other concerns that could threaten the integrity of its pipeline. An operator must consider reasonably available information to identify existing and potential threats. Sources of data may include, but are not limited to, incident and leak history, corrosion control records, continuing surveillance records, patrolling records, maintenance history, and excavation damage experience.
- (c) **Evaluate and Rank Risk.** An operator must evaluate the risks associated with its distribution pipeline. In this evaluation, the operator must determine the relative importance of each threat and estimate and rank the risks posed to its pipeline. This evaluation must consider each applicable current and potential threat, the likelihood of failure associated with each threat, and the potential consequences of such a failure. An operator may subdivide its pipeline into regions with similar characteristics (e.g., contiguous areas within a distribution pipeline consisting of mains, services and other appurtenances; areas with common materials or environmental factors), and for which similar actions likely would be effective in reducing risk.
- (d) **Identify and Implement Measures to Address Risks.** Determine and implement measures designed to reduce the risks from failure of its gas distribution pipeline. These measures must include an effective leak management program (unless all leaks are repaired when found).

(e) **Measure Performance, Monitor Results, and Evaluate Effectiveness.**

(1) Develop and monitor performance measures from an established baseline to evaluate the effectiveness of its IM program. An operator must consider the results of its performance monitoring in periodically re-evaluating the threats and risks. These performance measures must include the following:

- (i) Number of hazardous leaks either eliminated or repaired as required by §192.703(c) of this subchapter (or total number of leaks if all leaks are repaired when found), categorized by cause;
- (ii) Number of excavation damages;
- (iii) Number of excavation tickets (receipt of information by the underground facility operator from the notification center);
- (iv) Total number of leaks either eliminated or repaired, categorized by cause;
- (v) Number of hazardous leaks either eliminated or repaired as required by §192.703(c) (or total number of leaks if all leaks are repaired when found), categorized by material; and
- (vi) Any additional measures the operator determines are needed to evaluate the effectiveness of the operator's IM program in controlling each identified threat.

(f) **Periodic Evaluation and Improvement.** An operator must re-evaluate threats and risks on its entire pipeline and consider the relevance of threats in one location to other areas. Each operator must determine the appropriate period for conducting complete program evaluations based on the complexity of its system and changes in factors affecting the risk of failure. An operator must conduct a complete program re-evaluation at least every five years. The operator must consider the results of the performance monitoring in these evaluations.

(g) **Report Results.** Report, on an annual basis, the four measures listed in paragraphs (e)(1)(i) through (e)(1)(iv) of this section, as part of the annual report required by §191.11. An operator also must report the four measures to the state pipeline safety authority if a state exercises jurisdiction over the operator's pipeline.

[74 FR 63934, Dec. 4, 2009, as amended at 76 FR 5499, Feb. 1, 2011]

§192.1009 What must an operator report when a mechanical fitting fails?

(a) Except as provided in paragraph (b) of this section, each operator of a distribution pipeline system must submit a report on each mechanical fitting failure, excluding any failure that results only in a nonhazardous leak, on a Department of Transportation Form PHMSA F-7100.1-2. The report(s) must be submitted in accordance with §191.12.

(b) The mechanical fitting failure reporting requirements in paragraph (a) of this section do not apply to the following:

- (1) Master meter operators;
- (2) Small LPG operator as defined in §192.1001; or
- (3) LNG facilities.

[76 FR 5499, Feb. 1, 2011]

§192.1011 What records must an operator keep?

An operator must maintain records demonstrating compliance with the requirements of this subpart for at least 10 years. The records must include copies of superseded integrity management plans developed under this subpart.

§192.1013 When may an operator deviate from required periodic inspections under this part?

- (a) An operator may propose to reduce the frequency of periodic inspections and tests required in this part on the basis of the engineering analysis and risk assessment required by this subpart.
- (b) An operator must submit its proposal to the PHMSA Associate Administrator for Pipeline Safety or, in the case of an intrastate pipeline facility regulated by the State, the appropriate State agency. The applicable oversight agency may accept the proposal on its own authority, with or without conditions and limitations, on a showing that the operator's proposal, which includes the adjusted interval, will provide an equal or greater overall level of safety.
- (c) An operator may implement an approved reduction in the frequency of a periodic inspection or test only where the operator has developed and implemented an integrity management program that provides an equal or improved overall level of safety despite the reduced frequency of periodic inspections.

§192.1015 What must a master meter or small liquefied petroleum gas (LPG) operator do to implement this subpart?

- (a) **General.** No later than August 2, 2011 the operator of a master meter system or a small LPG operator must develop and implement an IM program that includes a written IM plan as specified in paragraph (b) of this section. The IM program for these pipelines should reflect the relative simplicity of these types of pipelines.
- (b) **Elements.** A written integrity management plan must address, at a minimum, the following elements:
 - (1) **Knowledge.** The operator must demonstrate knowledge of its pipeline, which, to the extent known, should include the approximate location and material of its pipeline. The operator must identify additional information needed and provide a plan for gaining knowledge over time through normal activities conducted on the pipeline (for example, design, construction, operations or maintenance activities).
 - (2) **Identify threats.** The operator must consider, at minimum, the following categories of threats (existing and potential): Corrosion, natural forces, excavation damage, other outside force damage, material or weld failure, equipment failure, and incorrect operation.
 - (3) **Rank Risks.** The operator must evaluate the risks to its pipeline and estimate the relative importance of each identified threat.
 - (4) **Identify and Implement Measures to Mitigate Risks.** The operator must determine and implement measures designed to reduce the risks from failure of its pipeline.
 - (5) **Measure Performance, Monitor Results, and Evaluate Effectiveness.** The operator must monitor, as a performance measure, the number of leaks eliminated or repaired on its pipeline and their causes.

(6) ***Periodic Evaluation and Improvement.*** The operator must determine the appropriate period for conducting IM program evaluations based on the complexity of its pipeline and changes in factors affecting the risk of failure. An operator must re-evaluate its entire program at least every five years. The operator must consider the results of the performance monitoring in these evaluations.

(c) ***Records.*** The operator must maintain, for a period of at least 10 years, the following records:

- (1) A written IM plan in accordance with this section, including superseded IM plans;
- (2) Documents supporting threat identification; and
- (3) Documents showing the location and material of all piping and appurtenances that are installed after the effective date of the operator's IM program and, to the extent known, the location and material of all pipe and appurtenances that were existing on the effective date of the operator's program.

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Appendix A to Part 192 [Reserved]

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Appendix B to Part 192—Qualification of Pipe

I. **Listed Pipe Specifications.**

ANSI/API Specification 5L—Steel pipe, “*Specification for Line Pipe*” (incorporated by reference, see §192.7).

ASTM A53/A53M—Steel pipe, “*Standard Specification for Pipe, Steel Black and Hot-Dipped, Zinc-Coated, Welded and Seamless*” (incorporated by reference, see §192.7).

ASTM A106/A106M—Steel pipe, “*Standard Specification for Seamless Carbon Steel Pipe for High Temperature Service*” (incorporated by reference, see §192.7).

ASTM A333/A333M—Steel pipe, “*Standard Specification for Seamless and Welded Steel Pipe for Low Temperature Service*” (incorporated by reference, see §192.7).

ASTM A381—Steel pipe, “*Standard Specification for Metal-Arc-Welded Steel Pipe for Use with High-Pressure Transmission Systems*” (incorporated by reference, see §192.7).

ASTM A671/A671M—Steel pipe, “*Standard Specification for Electric-Fusion-Welded Pipe for Atmospheric and Lower Temperatures*” (incorporated by reference, see §192.7).

ASTM A672/672M—Steel pipe, “*Standard Specification for Electric-Fusion-Welded Steel Pipe for High-Pressure Service at Moderate Temperatures*” (incorporated by reference, see §192.7).

ASTM A691/A691M—Steel pipe, “*Standard Specification for Carbon and Alloy Steel Pipe, Electric-Fusion-Welded for High Pressure Service at High Temperatures*” (incorporated by reference, see §192.7).

ASTM D2513-99, “*Standard Specification for Thermoplastic Gas Pressure Pipe, Tubing, and Fittings*,” (incorporated by reference, see §192.7).

ASTM D2513-09a—Polyethylene thermoplastic pipe and tubing, “*Standard Specification for Polyethylene (PE) gas Pressure Pipe, Tubing, and Fittings*,” (incorporated by reference, see §192.7).

ASTM D2517—Thermosetting plastic pipe and tubing, “*Standard Specification for Reinforced Epoxy Resin Gas Pressure Pipe and Fittings*” (incorporated by reference, see §192.7).

II. **Steel pipe of unknown or unlisted specification.**

A. **Bending Properties.** For pipe 2 inches (51 millimeters) or less in diameter, a length of pipe must be cold bent through at least 90 degrees around a cylindrical mandrel that has a diameter 12 times the diameter of the pipe, without developing cracks at any portion and without opening the longitudinal weld.

For pipe more than 2 inches (51 millimeters) in diameter, the pipe must meet the requirements of the flattening tests set forth in ASTM A53/A53M (incorporated by reference, see §192.7), except that the number of tests must be at least equal to the minimum required in paragraph II-D of this appendix to determine yield strength.

B. **Weldability.** A girth weld must be made in the pipe by a welder who is qualified under subpart E of this part. The weld must be made under the most severe conditions under which welding will be allowed in

the field and by means of the same procedure that will be used in the field. On pipe more than 4 inches (102 millimeters) in diameter, at least one test weld must be made for each 100 lengths of pipe. On pipe 4 inches (102 millimeters) or less in diameter, at least one test weld must be made for each 400 lengths of pipe. The weld must be tested in accordance with API Standard 1104 (incorporated by reference, see §192.7). If the requirements of API Standard 1104 cannot be met, weldability may be established by making chemical tests for carbon and manganese, and proceeding in accordance with section IX of the ASME Boiler and Pressure Vessel Code (ibr, see 192.7). The same number of chemical tests must be made as are required for testing a girth weld.

C. **Inspection.** The pipe must be clean enough to permit adequate inspection. It must be visually inspected to ensure that it is reasonably round and straight and there are no defects which might impair the strength or tightness of the pipe.

D. **Tensile Properties.** If the tensile properties of the pipe are not known, the minimum yield strength may be taken as 24,000 p.s.i. (165 MPa) or less, or the tensile properties may be established by performing tensile tests as set forth in API Specification 5L (incorporated by reference, see §192.7). All test specimens shall be selected at random and the following number of tests must be performed:

NUMBER OF TENSILE TESTS—ALL SIZES	
10 lengths or less	1 set of tests for each length.
11 to 100 lengths	1 set of tests for each 5 lengths, but not less than 10 tests.
Over 100 lengths	1 set of tests for each 10 lengths, but not less than 20 tests.

If the yield-tensile ratio, based on the properties determined by those tests, exceeds 0.85, the pipe may be used only as provided in §192.55(c).

III. **Steel pipe manufactured before November 12, 1970, to earlier editions of listed specifications.** Steel pipe manufactured before November 12, 1970, in accordance with a specification of which a later edition is listed in section I of this appendix, is qualified for use under this part if the following requirements are met:

A. **Inspection.** The pipe must be clean enough to permit adequate inspection. It must be visually inspected to ensure that it is reasonably round and straight and that there are no defects which might impair the strength or tightness of the pipe.

B. **Similarity of Specification Requirements.** The edition of the listed specification under which the pipe was manufactured must have substantially the same requirements with respect to the following properties as a later edition of that specification listed in section I of this appendix:

- (1) Physical (mechanical) properties of pipe, including yield and tensile strength, elongation, and yield to tensile ratio, and testing requirements to verify those properties.
- (2) Chemical properties of pipe and testing requirements to verify those properties.

C. **Inspection or Test of Welded Pipe.** On pipe with welded seams, one of the following requirements must be met:

- (1) The edition of the listed specification to which the pipe was manufactured must have substantially the same requirements with respect to nondestructive inspection of welded seams and the standards for acceptance or rejection and repair as a later edition of the specification listed in section I of this appendix.

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- (2) The pipe must be tested in accordance with subpart J of this part to at least 1.25 times the maximum allowable operating pressure if it is to be installed in a class 1 location and to at least 1.5 times the maximum allowable operating pressure if it is to be installed in a class 2, 3, or 4 location.

Notwithstanding any shorter time period permitted under subpart J of this part, the test pressure must be maintained for at least 8 hours.

[35 FR 13257, Aug. 19, 1970]

Editorial Note: For Federal Register citations affecting appendix B to part 192, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and at www.fdsys.gov.

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Appendix C to Part 192—Qualification of Welders for Low Stress Level Pipe

- I. **Basic Test.** The test is made on pipe 12 inches (305 millimeters) or less in diameter. The test weld must be made with the pipe in a horizontal fixed position so that the test weld includes at least one section of overhead position welding. The beveling, root opening, and other details must conform to the specifications of the procedure under which the welder is being qualified. Upon completion, the test weld is cut into four coupons and subjected to a root bend test. If, as a result of this test, two or more of the four coupons develop a crack in the weld material, or between the weld material and base metal, that is more than 1/8-inch (3.2 millimeters) long in any direction, the weld is unacceptable. Cracks that occur on the corner of the specimen during testing are not considered. A welder who successfully passes a butt-weld qualification test under this section shall be qualified to weld on all pipe diameters less than or equal to 12 inches.
- II. **Additional tests for welders of service line connections to mains.** A service line connection fitting is welded to a pipe section with the same diameter as a typical main. The weld is made in the same position as it is made in the field. The weld is unacceptable if it shows a serious undercutting or if it has rolled edges. The weld is tested by attempting to break the fitting off the run pipe. The weld is unacceptable if it breaks and shows incomplete fusion, overlap, or poor penetration at the junction of the fitting and run pipe.
- III. **Periodic tests for welders of small service lines.** Two samples of the welder's work, each about 8 inches (203 millimeters) long with the weld located approximately in the center, are cut from steel service line and tested as follows:
- (1) One sample is centered in a guided bend testing machine and bent to the contour of the die for a distance of 2 inches (51 millimeters) on each side of the weld. If the sample shows any breaks or cracks after removal from the bending machine, it is unacceptable.
 - (2) The ends of the second sample are flattened and the entire joint subjected to a tensile strength test. If failure occurs adjacent to or in the weld metal, the weld is unacceptable. If a tensile strength testing machine is not available, this sample must also pass the bending test prescribed in subparagraph (1) of this paragraph.

[35 FR 13257, Aug. 19, 1970, as amended by Amdt. 192-85, 63 FR 37504, July 13, 1998; Amdt. 192-94, 69 FR 32896, June 14, 2004]

Appendix D to Part 192—Criteria for Cathodic Protection and Determination of Measurements

I. Criteria for cathodic protection—

A. *Steel, cast iron, and ductile iron structures.*

- (1) A negative (cathodic) voltage of at least 0.85 volt, with reference to a saturated copper-copper sulfate half-cell. Determination of this voltage must be made with the protective current applied, and in accordance with sections II and IV of this appendix.
- (2) A negative (cathodic) voltage shift of at least 300 millivolts. Determination of this voltage shift must be made with the protective current applied, and in accordance with sections II and IV of this appendix. This criterion of voltage shift applies to structures not in contact with metals of different anodic potentials.
- (3) A minimum negative (cathodic) polarization voltage shift of 100 millivolts. This polarization voltage shift must be determined in accordance with sections III and IV of this appendix.
- (4) A voltage at least as negative (cathodic) as that originally established at the beginning of the Tafel segment of the E-log-I curve. This voltage must be measured in accordance with section IV of this appendix.
- (5) A net protective current from the electrolyte into the structure surface as measured by an earth current technique applied at predetermined current discharge (anodic) points of the structure.

B. *Aluminum Structures.*

- (1) Except as provided in paragraphs (3) and (4) of this paragraph, a minimum negative (cathodic) voltage shift of 150 millivolts, produced by the application of protective current. The voltage shift must be determined in accordance with sections II and IV of this appendix.
- (2) Except as provided in paragraphs (3) and (4) of this paragraph, a minimum negative (cathodic) polarization voltage shift of 100 millivolts. This polarization voltage shift must be determined in accordance with sections III and IV of this appendix.
- (3) Notwithstanding the alternative minimum criteria in paragraphs (1) and (2) of this paragraph, aluminum, if cathodically protected at voltages in excess of 1.20 volts as measured with reference to a copper-copper sulfate half-cell, in accordance with section IV of this appendix, and compensated for the voltage (IR) drops other than those across the structure-electrolyte boundary may suffer corrosion resulting from the build-up of alkali on the metal surface. A voltage in excess of 1.20 volts may not be used unless previous test results indicate no appreciable corrosion will occur in the particular environment.
- (4) Since aluminum may suffer from corrosion under high pH conditions, and since application of cathodic protection tends to increase the pH at the metal surface, careful investigation or testing must be made before applying cathodic protection to stop pitting attack on aluminum structures in environments with a natural pH in excess of 8.

- C. **Copper Structures.** A minimum negative (cathodic) polarization voltage shift of 100 millivolts. This polarization voltage shift must be determined in accordance with sections III and IV of this appendix.

- D. **Metals of Different Anodic Potentials.** A negative (cathodic) voltage, measured in accordance with section IV of this appendix, equal to that required for the most anodic metal in the system must be maintained. If amphoteric structures are involved that could be damaged by high alkalinity covered by paragraphs (3) and (4) of paragraph B of this section, they must be electrically isolated with insulating flanges, or the equivalent.
- II. **Interpretation of Voltage Measurement.** Voltage (IR) drops other than those across the structure-electrolyte boundary must be considered for valid interpretation of the voltage measurement in paragraphs A(1) and (2) and paragraph B(1) of section I of this appendix.
- III. **Determination of Polarization Voltage Shift.** The polarization voltage shift must be determined by interrupting the protective current and measuring the polarization decay. When the current is initially interrupted, an immediate voltage shift occurs. The voltage reading after the immediate shift must be used as the base reading from which to measure polarization decay in paragraphs A(3), B(2), and C of section I of this appendix.
- IV. **Reference Half Cells.** A. Except as provided in paragraphs B and C of this section, negative (cathodic) voltage must be measured between the structure surface and a saturated copper-copper sulfate half-cell contacting the electrolyte.
- B. Other standard reference half cells may be substituted for the saturated copper-copper sulfate half-cell. Two commonly used reference half cells are listed below along with their voltage equivalent to -0.85 volt as referred to a saturated copper-copper sulfate half cell:
- (1) Saturated KCl calomel half cell: -0.78 volt.
 - (2) Silver-silver chloride half-cell used in sea water: -0.80 volt.
- C. In addition to the standard reference half cells, an alternate metallic material or structure may be used in place of the saturated copper-copper sulfate half-cell if its potential stability is assured and if its voltage equivalent referred to a saturated copper-copper sulfate half-cell is established.

[Amdt. 192-4, 36 FR 12305, June 30, 1971]

Appendix E to Part 192—Guidance on Determining High Consequence Areas and on Carrying out Requirements in the Integrity Management Rule

I. Guidance on Determining a High Consequence Area

To determine which segments of an operator's transmission pipeline system are covered for purposes of the integrity management program requirements, an operator must identify the high consequence areas. An operator must use method (1) or (2) from the definition in §192.903 to identify a high consequence area. An operator may apply one method to its entire pipeline system, or an operator may apply one method to individual portions of the pipeline system. (Refer to figure E.I.A for a diagram of a high consequence area).

Determining High Consequence Area

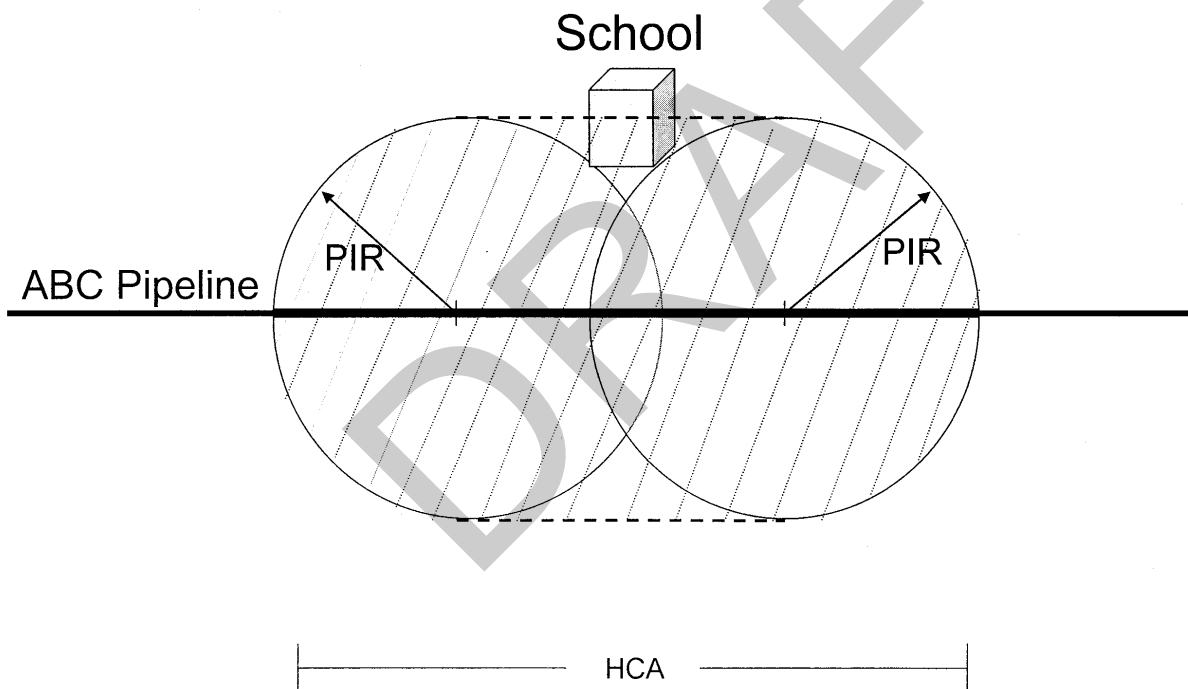


Figure E.I.A

II. Guidance on Assessment Methods and Additional Preventive and Mitigative Measures for Transmission Pipelines.

- (a) Table E.II.1 gives guidance to help an operator implement requirements on additional preventive and mitigative measures for addressing time dependent and independent threats for a transmission pipeline operating below 30% SMYS not in an HCA (i.e. outside of potential impact circle) but located within a Class 3 or Class 4 Location.

Table E.II.1: Preventive and Mitigative Measures for Transmission Pipelines Operating Below 30% SMYS not in an HCA but in a Class 3 or Class 4 Location

(Column 1) Threat	Existing 192 Requirements		(Column 4) Additional (to 192 requirements) Preventive and Mitigative Measures
	(Column 2) Primary	(Column 3) Secondary	
External Corrosion	455-(Gen. Post 1971), 457-(Gen. Pre-1971) 459-(Examination), 461-(Ext. coating) 463-(CP), 465-(Monitoring) 467-(Elect isolation), 469-Test stations) 471-(Test leads), 473-(Interference) 479-(Atmospheric), 481-(Atmospheric) 485-(Remedial), 705-(Patrol) 706-(Leak survey), 711 (Repair – gen.) 717-(Repair – perm.)	603-(Gen Oper'n) 613-(Surveillance)	For Cathodically Protected Transmission Pipeline: • Perform semi-annual leak surveys. For Unprotected Transmission Pipelines or for Cathodically Protected Pipe where Electrical Surveys are Impractical: • Perform quarterly leak surveys
Internal Corrosion	475-(Gen IC), 477-(IC monitoring) 485-(Remedial), 705-(Patrol) 706-(Leak survey), 711 (Repair – gen.) 717-(Repair – perm.)	53(a)-(Materials) 603-(Gen Oper'n) 613-(Surveillance)	• Perform semi-annual leak surveys.
3 rd Party Damage	103-(Gen. Design), 111-(Design factor) 317-(Hazard prot), 327-(Cover) 614-(Dam. Prevent), 616-(Public education) 705-(Patrol), 707-(Line markers) 711 (Repair – gen.), 717-(Repair – perm.)	615-(Emerg. Plan)	• Participation in state one-call system. • Use of qualified operator employees and contractors to perform marking and locating of buried structures and in direct supervision of excavation work, AND • Either monitoring of excavations near operator's transmission pipelines, or bi-monthly patrol of transmission pipelines in class 3 and 4 locations. Any indications of unreported construction activity would require a follow up investigation to determine if mechanical damage occurred.

Section Three: Part 192 - Appendix E

(b) Table E.II.2 gives guidance to help an operator implement requirements on assessment methods for addressing time dependent and independent threats for a transmission pipeline in an HCA.

Table E.II.2 Assessment Requirements for Transmission Pipelines in HCAs (Re-assessment intervals are maximum allowed)

Baseline Assessment Method (see Note 3)	Re-Assessment Requirements (see Note 3)					
	At or above 50% SMYS		At or above 30% SMYS		Below 30% SMYS	
	Max Re-Assessment Interval	Assessment Method	Max Re-Assessment Interval	Assessment Method	Max Re-Assessment Interval	Assessment Method
Pressure Testing	7	CDA	7	CDA	Ongoing	Preventative & Mitigative (P&M) Measures (see Table E.II.3), (see Note 2)
	10	Pressure Test or ILI or DA				
			15(see Note 1)	Pressure Test or ILI or DA (see Note 1)		
		Repeat inspection cycle every 10 years		Repeat inspection cycle every 15 years	20	Pressure Test or ILI or DA
						Repeat inspection cycle every 20 years
In-Line Inspection	7	CDA	7	CDA	Ongoing	Preventative & Mitigative (P&M) Measures (see Table E.II.3), (see Note 2)
	10	ILI or DA or Pressure Test				
		Repeat inspection cycle every 10 years	15(see Note 1)	ILI or DA or Pressure Test (see Note 1)		
				Repeat inspection cycle every 15 years	20	ILI or DA or Pressure Test
						Repeat inspection cycle every 20 years
Direct Assessment	7	CDA	7	CDA	Ongoing	Preventative & Mitigative (P&M) Measures (see Table E.II.3), (see Note 2)
	10	DA or ILI or Pressure Test				
			15(see Note 1)	DA or ILI or Pressure Test (see Note 1)		
		Repeat inspection cycle every 10 years		Repeat inspection cycle every 15 years	20	DA or ILI or Pressure Test
						Repeat inspection cycle every 20 years

Note 1: Operator may choose to utilize CDA at year 14, then utilize ILI, Pressure Test, or DA at year 15 as allowed under ASME B31.8S

Note 2: Operator may choose to utilize CDA at year 7 and 14 in lieu of P&M

Note 3: Operator may utilize "other technology that an operator demonstrates can provide an equivalent understanding of the condition of line pipe"

(c) Table E.II.3 gives guidance on preventative & mitigative measures addressing time dependent and independent threats for transmission pipelines that operate below 30% SMYS, in HCAs.

Table E.II.3

Preventative & Mitigative Measures addressing Time Dependent and Independent Threats for Transmission Pipelines that Operate Below 30% SMYS, in HCAs

Threat	Existing 192 Requirements		Additional (to 192 requirements) Preventive & Mitigative Measures
	Primary	Secondary	
External Corrosion	455-(Gen. Post 1971) 457-(Gen. Pre-1971) 459-(Examination) 461-(Ext. coating) 463-(CP) 465-(Monitoring) 467-(Elect isolation)	603-(Gen Oper) 613-(Surveil)	<p><u>For Cathodically Protected Trmn. Pipelines</u></p> <ul style="list-style-type: none"> Perform an electrical survey (i.e. indirect examination tool/method) at least every 7 years. Results are to be utilized as part of an overall evaluation of the CP system and corrosion threat for the covered segment. Evaluation shall include consideration of leak repair and inspection records, corrosion monitoring records, exposed pipe inspection records, and the pipeline environment.
External Corrosion	469-(Test stations) 471-(Test leads) 473-(Interference) 479-(Atmospheric) 481-(Atmospheric) 485-(Remedial) 705-(Patrol) 706-(Leak survey) 711 (Repair – gen.) 717-(Repair – perm.)		<p><u>For Unprotected Trmn. Pipelines or for Cathodically Protected Pipe where Electrical Surveys are Impracticable</u></p> <ul style="list-style-type: none"> Conduct quarterly leak surveys AND Every 1-1/2 years, determine areas of active corrosion by evaluation of leak repair and inspection records, corrosion monitoring records, exposed pipe inspection records, and the pipeline environment.
Internal Corrosion	475-(Gen IC) 477-(IC monitoring) 485-(Remedial) 705-(Patrol) 706-(Leak survey) 711 (Repair – gen.) 717-(Repair – perm.)	53(a)-(Materials) 603-(Gen Oper) 613-(Surveil)	<ul style="list-style-type: none"> Obtain and review gas analysis data each calendar year for corrosive agents from transmission pipelines in HCAs, Periodic testing of fluid removed from pipelines. Specifically, once each calendar year from each storage field that may affect transmission pipelines in HCAs, AND At least every 7 years, integrate data obtained with applicable internal corrosion leak records, incident reports, safety related condition reports, repair records, patrol records, exposed pipe reports, and test records.
3 rd Party Damage	103-(Gen. Design) 111-(Design factor) 317-(Hazard prot) 327-(Cover) 614-(Dam. Prevent) 616-(Public educat) 705-(Patrol) 707-(Line markers) 711 (Repair – gen.) 717-(Repair – perm.)	615 –(Emerg Plan)	<ul style="list-style-type: none"> Participation in state one-call system, Use of qualified operator employees and contractors to perform marking and locating of buried structures and in direct supervision of excavation work, AND Either monitoring of excavations near operator's transmission pipelines, or bi-monthly patrol of transmission pipelines in HCAs or class 3 and 4 locations. Any indications of unreported construction activity would require a follow up investigation to determine if mechanical damage occurred.

[Amdt. 192-95, 69 FR 18234, Apr. 6, 2004, as amended by Amdt. 192-95, May 26, 2004]

DRAFT



TITLE 49 CFR PART 199

DRUG AND ALCOHOL TESTING WITH *MICHIGAN ADMINISTRATIVE CODE* ADDED

SECTION FOUR (4)

DRAFT

PART 199—DRUG AND ALCOHOL TESTING

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§199.241	Training for supervisors.
§199.243	Referral, evaluation, and treatment.
§199.245	Contractor employees.

Authority: 49 U.S.C. 5103, 60102, 60104, 60108, 60117, and 60118; 49 CFR 1.53.

Source: 53 FR 47096, Nov. 21, 1988, unless otherwise noted.

(By authority conferred on the Public Service Commission by section 2 of 1969 PA 165, MCL 483.152, and section 231 of 1965 PA 380, MCL 16.331, and Executive Reorganization Order Nos. 1996-2, 2003-1, 2008-4, and 2011-4, MCL 445.2001, MCL 445.2011, MCL 445.2025, and MCL 445.2030.)

Subpart A—General

§199.1 Scope.

This part requires operators of pipeline facilities subject to part 192, 193, or 195 of this chapter to test covered employees for the presence of prohibited drugs and alcohol.

[Amdt. 199-19, 66 FR 47117, Sept. 11, 2001]

§199.2 Applicability.

- (a) This part applies to pipeline operators only with respect to employees located within the territory of the United States, including those employees located within the limits of the “**Outer Continental Shelf**” as that term is defined in the Outer Continental Shelf Lands Act (43 U.S.C. 1331).
- (b) This part does not apply to any person for whom compliance with this part would violate the domestic laws or policies of another country.
- (c) This part does not apply to covered functions performed on—
 - (1) Master meter systems, as defined in §191.3 of this chapter; or
 - (2) Pipeline systems that transport only petroleum gas or petroleum gas/air mixtures.

[Amdt. 199-19, 66 FR 47117, Sept. 11, 2001]

§199.3 Definitions.

As used in this part—

Accident means an incident reportable under part 191 of this chapter involving gas pipeline facilities or LNG facilities, or an accident reportable under part 195 of this chapter involving hazardous liquid pipeline facilities.

Administrator means the Administrator, Pipeline and Hazardous Materials Safety Administration or his or her delegate.

Covered employee, employee, or individual to be tested means a person who performs a covered function, including persons employed by operators, contractors engaged by operators, and persons employed by such contractors.

Covered function means an operations, maintenance, or emergency-response function regulated by part 192, 193, or 195 of this chapter that is performed on a pipeline or on an LNG facility.

DOT Procedures means the Procedures for Transportation Workplace Drug and Alcohol Testing Programs published by the Office of the Secretary of Transportation in part 40 of this title.

Fail a drug test means that the confirmation test result shows positive evidence of the presence under DOT Procedures of a prohibited drug in an employee's system.

Operator means a person who owns or operates pipeline facilities subject to part 192, 193, or 195 of this chapter.

Pass a drug test means that initial testing or confirmation testing under DOT Procedures does not show evidence of the presence of a prohibited drug in a person's system.

Performs a covered function includes actually performing, ready to perform, or immediately available to perform a covered function.

Positive rate for random drug testing means the number of verified positive results for random drug tests conducted under this part plus the number of refusals of random drug tests required by this part, divided by the total number of random drug tests results (i.e., positives, negatives, and refusals) under this part.

Prohibited drug means any of the following substances specified in Schedule I or Schedule II of the Controlled Substances Act (21 U.S.C. 812): marijuana, cocaine, opiates, amphetamines, and phencyclidine (PCP).

Refuse to submit, refuse, or refuse to take means behavior consistent with DOT Procedures concerning refusal to take a drug test or refusal to take an alcohol test.

State agency means an agency of any of the several states, the District of Columbia, or Puerto Rico that participates under the pipeline safety laws (49 U.S.C. 60101 et seq.)

[53 FR 47096, Nov. 21, 1988, as amended by Amdt. 199-2, 54 FR 51850, Dec. 18, 1989; 59 FR 62227, Dec. 2, 1994; Amdt. 199-13, 61 FR 18518, Apr. 26, 1996; Amdt. 199-15, 63 FR 13000, Mar. 17, 1998; Amdt. 199-19, 66 FR 47117, Sept. 11, 2001; 68 FR 11750, Mar. 12, 2003; 68 FR 75465, Dec. 31, 2003; 70 FR 11140, Mar. 8, 2005]

§199.5 DOT procedures.

The anti-drug and alcohol programs required by this part must be conducted according to the requirements of this part and DOT Procedures. Terms and concepts used in this part have the same meaning as in DOT Procedures. Violations of DOT Procedures with respect to anti-drug and alcohol programs required by this part are violations of this part.

[Amdt. 199-19, 66 FR 47118, Sept. 11, 2001]

§199.7 Stand-down waivers.

(a) Each operator who seeks a waiver under §40.21 of this title from the stand-down restriction must submit an application for waiver in duplicate to the Associate Administrator for Pipeline Safety, Pipeline and Hazardous Materials Safety Administration, U.S. Department of Transportation, 1200 New Jersey Avenue, SE, Washington, DC 20590-0001.

(b) Each application must—

- (1) Identify §40.21 of this title as the rule from which the waiver is sought;
- (2) Explain why the waiver is requested and describe the employees to be covered by the waiver;

- (3) Contain the information required by §40.21 of this title and any other information or arguments available to support the waiver requested; and
 - (4) Unless good cause is shown in the application, be submitted at least 60 days before the proposed effective date of the waiver.
- (c) No public hearing or other proceeding is held directly on an application before its disposition under this section. If the Associate Administrator determines that the application contains adequate justification, he or she grants the waiver. If the Associate Administrator determines that the application does not justify granting the waiver, he or she denies the application. The Associate Administrator notifies each applicant of the decision to grant or deny an application.

[Amdt. 199-19, 66 FR 47118, Sept. 11, 2001, as amended at 70 FR 11140, Mar. 8, 2005; 74 FR 2894, Jan. 16, 2009]

§199.9 Preemption of State and local laws.

- (a) Except as provided in paragraph (b) of this section, this part preempts any State or local law, rule, regulation, or order to the extent that:
- (1) Compliance with both the State or local requirement and this part is not possible;
 - (2) Compliance with the State or local requirement is an obstacle to the accomplishment and execution of any requirement in this part; or
 - (3) The State or local requirement is a pipeline safety standard applicable to interstate pipeline facilities.
- (b) This part shall not be construed to preempt provisions of State criminal law that impose sanctions for reckless conduct leading to actual loss of life, injury, or damage to property, whether the provisions apply specifically to transportation employees or employers or to the general public.

[Amdt. 199-9, 59 FR 7430, Feb. 15, 1994. Redesignated and amended by Amdt. 199-19, 66 FR 47119, Sept. 11, 2001]

Subpart B—Drug Testing

§199.100 Purpose.

The purpose of this subpart is to establish programs designed to help prevent accidents and injuries resulting from the use of prohibited drugs by employees who perform covered functions for operators of certain pipeline facilities subject to part 192, 193, or 195 of this chapter.

[Amdt. 199-19, 66 FR 47118, Sept. 11, 2001]

§199.101 Anti-drug plan.

- (a) Each operator shall maintain and follow a written anti-drug plan that conforms to the requirements of this part and the DOT Procedures. The plan must contain—
- (1) Methods and procedures for compliance with all the requirements of this part, including the employee assistance program;
 - (2) The name and address of each laboratory that analyzes the specimens collected for drug testing;
 - (3) The name and address of the operator's Medical Review Officer, and Substance Abuse Professional; and
 - (4) Procedures for notifying employees of the coverage and provisions of the plan.
- (b) The Associate Administrator or the State Agency that has submitted a current certification under the pipeline safety laws (49 U.S.C. 60101 et seq.) with respect to the pipeline facility governed by an operator's plans and procedures may, after notice and opportunity for hearing as provided in 49 CFR 190.206 or the relevant State procedures, require the operator to amend its plans and procedures as necessary to provide a reasonable level of safety.

[53 FR 47096, Nov. 21, 1988, as amended by Amdt. 199-2, 54 FR 51850, Dec. 18, 1989; Amdt. 199-4, 56 FR 31091, July 9, 1991; 56 FR 41077, Aug. 19, 1991; Amdt. 199-13, 61 FR 18518, Apr. 26, 1996; Amdt. 199-15, 63 FR 36863, July 8, 1998. Redesignated by Amdt. 199-19, 66 FR 47118, Sept. 11, 2001; Amdt. 199-25, 78 FR 58915, Sept. 25, 2013]

R 460.20202 Drug and alcohol testing requirements.

- (1) *An operator shall meet the drug and alcohol testing requirements in 49 C.F.R. part 199 entitled "Drug and Alcohol Testing," which is adopted by reference in R 460.20606.*
- (2) *An operator shall conduct the drug and alcohol testing required by subrule (1) of this rule according to the requirements of 49 C.F.R. part 199 and the procedures prescribed in 49 C.F.R. part 40 entitled "Procedures for Transportation Workplace Drug and Alcohol Testing Programs," which is adopted by reference in R 460.20606.*
- (3) *Subrule (1) of this rule applies only to operators who operate facilities subject to the natural gas pipeline safety act of 1968, 49 U.S.C. §60101 et seq., as amended.*

History: 1998-2000 AACS.

§199.103 Use of persons who fail or refuse a drug test.

(a) An operator may not knowingly use as an employee any person who—

- (1) Fails a drug test required by this part and the medical review officer makes a determination under DOT Procedures; or
- (2) Refuses to take a drug test required by this part.

(b) Paragraph (a)(1) of this section does not apply to a person who has—

- (1) Passed a drug test under DOT Procedures;
- (2) Been considered by the medical review officer in accordance with DOT Procedures and been determined by a substance abuse professional to have successfully completed required education or treatment; and
- (3) Not failed a drug test required by this part after returning to duty.

[53 FR 47096, Nov. 21, 1988, as amended by Amdt. 199-2, 54 FR 51850, Dec. 18, 1989. Redesignated and amended by Amdt. 199-19, 66 FR 47118, Sept. 11, 2001]

§199.105 Drug tests required.

Each operator shall conduct the following drug tests for the presence of a prohibited drug:

(a) ***Pre-employment testing.*** No operator may hire or contract for the use of any person as an employee unless that person passes a drug test or is covered by an anti-drug program that conforms to the requirements of this part.

(b) ***Post-accident testing.***

- (1) As soon as possible but no later than 32 hours after an accident, an operator must drug test each surviving covered employee whose performance of a covered function either contributed to the accident or cannot be completely discounted as a contributing factor to the accident. An operator may decide not to test under this paragraph but such a decision must be based on specific information that the covered employee's performance had no role in the cause(s) or severity of the accident.
- (2) If a test required by this section is not administered within the 32 hours following the accident, the operator must prepare and maintain its decision stating the reasons why the test was not promptly administered. If a test required by paragraph (b)(1) of this section is not administered within 32 hours following the accident, the operator must cease attempts to administer a drug test and must state in the record the reasons for not administering the test.

(c) ***Random testing.***

- (1) Except as provided in paragraphs (c)(2) through (4) of this section, the minimum annual percentage rate for random drug testing shall be 50 percent of covered employees.
- (2) The Administrator's decision to increase or decrease the minimum annual percentage rate for random drug testing is based on the reported positive rate for the entire industry. All information used for this determination is drawn from the drug MIS reports required by this subpart. In order to ensure reliability of the data, the Administrator considers the quality and completeness of the reported data,

may obtain additional information or reports from operators, and may make appropriate modifications in calculating the industry positive rate. Each year, the Administrator will publish in the Federal Register the minimum annual percentage rate for random drug testing of covered employees. The new minimum annual percentage rate for random drug testing will be applicable starting January 1 of the calendar year following publication.

- (3) When the minimum annual percentage rate for random drug testing is 50 percent, the Administrator may lower this rate to 25 percent of all covered employees if the Administrator determines that the data received under the reporting requirements of §199.119 for two consecutive calendar years indicate that the reported positive rate is less than 1.0 percent.
- (4) When the minimum annual percentage rate for random drug testing is 25 percent, and the data received under the reporting requirements of §199.119 for any calendar year indicate that the reported positive rate is equal to or greater than 1.0 percent, the Administrator will increase the minimum annual percentage rate for random drug testing to 50 percent of all covered employees.
- (5) The selection of employees for random drug testing shall be made by a scientifically valid method, such as a random number table or a computer-based random number generator that is matched with employees' Social Security numbers, payroll identification numbers, or other comparable identifying numbers. Under the selection process used, each covered employee shall have an equal chance of being tested each time selections are made.
- (6) The operator shall randomly select a sufficient number of covered employees for testing during each calendar year to equal an annual rate not less than the minimum annual percentage rate for random drug testing determined by the Administrator. If the operator conducts random drug testing through a consortium, the number of employees to be tested may be calculated for each individual operator or may be based on the total number of covered employees covered by the consortium who are subject to random drug testing at the same minimum annual percentage rate under this subpart or any DOT drug testing rule.
- (7) Each operator shall ensure that random drug tests conducted under this subpart are unannounced and that the dates for administering random tests are spread reasonably throughout the calendar year.
- (8) If a given covered employee is subject to random drug testing under the drug testing rules of more than one DOT agency for the same operator, the employee shall be subject to random drug testing at the percentage rate established for the calendar year by the DOT agency regulating more than 50 percent of the employee's function.
- (9) If an operator is required to conduct random drug testing under the drug testing rules of more than one DOT agency, the operator may—
 - (i) Establish separate pools for random selection, with each pool containing the covered employees who are subject to testing at the same required rate; or
 - (ii) Randomly select such employees for testing at the highest percentage rate established for the calendar year by any DOT agency to which the operator is subject.
- (d) **Testing based on reasonable cause.** Each operator shall drug test each employee when there is reasonable cause to believe the employee is using a prohibited drug. The decision to test must be based on a reasonable and articulable belief that the employee is using a prohibited drug on the basis of specific,

contemporaneous physical, behavioral, or performance indicators of probable drug use. At least two of the employee's supervisors, one of whom is trained in detection of the possible symptoms of drug use, shall substantiate and concur in the decision to test an employee. The concurrence between the two supervisors may be by telephone. However, in the case of operators with 50 or fewer employees subject to testing under this part, only one supervisor of the employee trained in detecting possible drug use symptoms shall substantiate the decision to test.

- (e) **Return-to-duty testing.** A covered employee who refuses to take or has a positive drug test may not return to duty in the covered function until the covered employee has complied with applicable provisions of DOT Procedures concerning substance abuse professionals and the return-to-duty process.
- (f) **Follow-up testing.** A covered employee who refuses to take or has a positive drug test shall be subject to unannounced follow-up drug tests administered by the operator following the covered employee's return to duty. The number and frequency of such follow-up testing shall be determined by a substance abuse professional, but shall consist of at least six tests in the first 12 months following the covered employee's return to duty. In addition, follow-up testing may include testing for alcohol as directed by the substance abuse professional, to be performed in accordance with 49 CFR part 40. Follow-up testing shall not exceed 60 months from the date of the covered employee's return to duty. The substance abuse professional may terminate the requirement for follow-up testing at any time after the first six tests have been administered, if the substance abuse professional determines that such testing is no longer necessary.

[53 FR 47096, Nov. 21, 1988, as amended by Amdt. 199-2, 54 FR 51850, Dec. 18, 1989; 59 FR 62227, Dec. 2, 1994; Amdt. 199-15, 63 FR 13000, Mar. 17, 1998; Amdt. 199-15, 63 FR 36863, July 8, 1998. Redesignated and amended by Amdt. 199-19, 66 FR 47118, Sept. 11, 2001; Amdt. 199-27, 82 FR 8001, Jan. 23, 2017]

§199.107 Drug testing laboratory.

- (a) Each operator shall use for the drug testing required by this part only drug testing laboratories certified by the Department of Health and Human Services under the DOT Procedures.
- (b) The drug testing laboratory must permit—
 - (1) Inspections by the operator before the laboratory is awarded a testing contract; and
 - (2) Unannounced inspections, including examination of records, at any time, by the operator, the Administrator, and if the operator is subject to state agency jurisdiction, a representative of that state agency.

[53 FR 47096, Nov. 21, 1988. Redesignated by Amdt. 199-19, 66 FR 47118, Sept. 11, 2001]

§199.109 Review of drug testing results.

- (a) **MRO appointment.** Each operator shall designate or appoint a medical review officer (MRO). If an operator does not have a qualified individual on staff to serve as MRO, the operator may contract for the provision of MRO services as part of its anti-drug program.
- (b) **MRO qualifications.** Each MRO must be a licensed physician who has the qualifications required by DOT Procedures.

- (c) **MRO duties.** The MRO must perform functions for the operator as required by DOT Procedures.
- (d) **MRO reports.** The MRO must report all drug test results to the operator in accordance with DOT Procedures.
- (e) Evaluation and rehabilitation may be provided by the operator, by a substance abuse professional under contract with the operator, or by a substance abuse professional not affiliated with the operator. The choice of substance abuse professional and assignment of costs shall be made in accordance with the operator/employee agreements and operator/employee policies.
- (f) The operator shall ensure that a substance abuse professional, who determines that a covered employee requires assistance in resolving problems with drug abuse, does not refer the covered employee to the substance abuse professional's private practice or to a person or organization from which the substance abuse professional receives remuneration or in which the substance abuse professional has a financial interest. This paragraph does not prohibit a substance abuse professional from referring a covered employee for assistance provided through:
 - (1) A public agency, such as a State, county, or municipality;
 - (2) The operator or a person under contract to provide treatment for drug problems on behalf of the operator;
 - (3) The sole source of therapeutically appropriate treatment under the employee's health insurance program; or
 - (4) The sole source of therapeutically appropriate treatment reasonably accessible to the employee.

[53 FR 47096, Nov. 21, 1988, as amended by Amdt. 199-2, 54 FR 51850, Dec. 18, 1989; Amdt. 199-15, 63 FR 13000, Mar. 17, 1998; Amdt. 199-15, 63 FR 36863, July 8, 1998. Redesignated and amended by Amdt. 199-19, 66 FR 47118, Sept. 11, 2001]

§199.111 [Reserved]

§199.113 Employee assistance program.

- (a) Each operator shall provide an employee assistance program (EAP) for its employees and supervisory personnel who will determine whether an employee must be drug tested based on reasonable cause. The operator may establish the EAP as a part of its internal personnel services or the operator may contract with an entity that provides EAP services. Each EAP must include education and training on drug use. At the discretion of the operator, the EAP may include an opportunity for employee rehabilitation.
- (b) Education under each EAP must include at least the following elements: display and distribution of informational material; display and distribution of a community service hot-line telephone number for employee assistance; and display and distribution of the employer's policy regarding the use of prohibited drugs.
- (c) Training under each EAP for supervisory personnel who will determine whether an employee must be drug tested based on reasonable cause must include one 60-minute period of training on the specific, contemporaneous physical, behavioral, and performance indicators of probable drug use.

[53 FR 47096, Nov. 21, 1988. Redesignated by Amdt. 199-19, 66 FR 47118, Sept. 11, 2001]

§199.115 Contractor employees.

With respect to those employees who are contractors or employed by a contractor, an operator may provide by contract that the drug testing, education, and training required by this part be carried out by the contractor provided:

- (a) The operator remains responsible for ensuring that the requirements of this part are complied with; and
- (b) The contractor allows access to property and records by the operator, the Administrator, and if the operator is subject to the jurisdiction of a state agency, a representative of the state agency for the purpose of monitoring the operator's compliance with the requirements of this part.

[53 FR 47096, Nov. 21, 1988. Redesignated by Amdt. 199-19, 66 FR 47118, Sept. 11, 2001]

§199.117 Recordkeeping.

- (a) Each operator shall keep the following records for the periods specified and permit access to the records as provided by paragraph (b) of this section:
 - (1) Records that demonstrate the collection process conforms to this part must be kept for at least 3 years.
 - (2) Records of employee drug test that indicate a verified positive result, records that demonstrate compliance with the recommendations of a substance abuse professional, and MIS annual report data shall be maintained for a minimum of five years.
 - (3) Records of employee drug test results that show employees passed a drug test must be kept for at least 1 year.
 - (4) Records confirming that supervisors and employees have been trained as required by this part must be kept for at least 3 years.
 - (5) Records of decisions not to administer post-accident employee drug tests must be kept for at least 3 years.
- (b) Information regarding an individual's drug testing results or rehabilitation must be released upon the written consent of the individual and as provided by DOT Procedures. Statistical data related to drug testing and rehabilitation that is not name-specific and training records must be made available to the Administrator or the representative of a state agency upon request.

[53 FR 47096, Nov. 21, 1988, as amended at 58 FR 68260, Dec. 23, 1993. Redesignated and amended by Amdt. 199-19, 66 FR 47119, Sept. 11, 2001; 68 FR 75465, Dec. 31, 2003; Amdt. 199-27, 82 FR 8001, Jan. 23, 2017]

§199.119 Reporting of anti-drug testing results.

- (a) Each large operator (having more than 50 covered employees) must submit an annual Management Information System (MIS) report to PHMSA of its anti-drug testing using the MIS form and instructions as required by 49 CFR part 40 (at §40.26 and appendix H to part 40), not later than March 15 of each year for the prior calendar year (January 1 through December 31). The Administrator may require by notice in the PHMSA Portal (<https://portal.phmsa.dot.gov/phmsaportal>) that small operators (50 or fewer covered employees), not otherwise required to submit annual MIS reports, to prepare and submit such reports to PHMSA.

- (b) Each report required under this section must be submitted electronically at <http://damis.dot.gov>. An operator may obtain the user name and password needed for electronic reporting from the PHMSA Portal (<https://portal.phmsa.dot.gov/phmsaportallanding>). If electronic reporting imposes an undue burden and hardship, the operator may submit a written request for an alternative reporting method to the Information Resources Manager, Office of Pipeline Safety, Pipeline and Hazardous Materials Safety Administration, 1200 New Jersey Avenue SE., Washington, DC 20590. The request must describe the undue burden and hardship. PHMSA will review the request and may authorize, in writing, an alternative reporting method. An authorization will state the period for which it is valid, which may be indefinite. An operator must contact PHMSA at 202-366-8075, or electronically to informationresourcesmanager@dot.gov to make arrangements for submitting a report that is due after a request for alternative reporting is submitted but before an authorization or denial is received.
- (c) To calculate the total number of covered employees eligible for random testing throughout the year, as an operator, you must add the total number of covered employees eligible for testing during each random testing period for the year and divide that total by the number of random testing periods. Covered employees, and only covered employees, are to be in an employer's random testing pool, and all covered employees must be in the random pool. If you are an employer conducting random testing more often than once per month (e.g., you select daily, weekly, bi-weekly), you do not need to compute this total number of covered employees rate more than on a once per month basis.
- (d) As an employer, you may use a service agent (e.g., C/TPA) to perform random selections for you; and your covered employees may be part of a larger random testing pool of covered employees. However, you must ensure that the service agent you use is testing at the appropriate percentage established for your industry and that only covered employees are in the random testing pool.
- (e) Each operator that has a covered employee who performs multi-DOT agency functions (e.g., an employee performs pipeline maintenance duties and drives a commercial motor vehicle), count the employee only on the MIS report for the DOT agency under which he or she is randomly tested. Normally, this will be the DOT agency under which the employee performs more than 50% of his or her duties. Operators may have to explain the testing data for these employees in the event of a DOT agency inspection or audit.
- (f) A service agent (e.g., Consortia/Third Party Administrator as defined in 49 CFR part 40) may prepare the MIS report on behalf of an operator. However, each report shall be certified by the operator's anti-drug manager or designated representative for accuracy and completeness.

[68 FR 75465, Dec. 31, 2003, as amended by Amdt. 199-20, 69 FR 32898, June 14, 2004; 70 FR 11140, Mar. 8, 2005; 73 FR 16571, Mar. 28, 2008; Amdt. 199-27, 82 FR 8001, Jan. 23, 2017]

Subpart C—Alcohol Misuse Prevention Program

Source: Amdt. 199-9, 59 FR 7430, Feb. 15, 1994, unless otherwise noted. Redesignated by Amdt. 199-19, 66 FR 47118, Sept. 11, 2001.

§199.200 Purpose.

The purpose of this subpart is to establish programs designed to help prevent accidents and injuries resulting from the misuse of alcohol by employees who perform covered functions for operators of certain pipeline facilities subject to parts 192, 193, or 195 of this chapter.

§199.201 [Reserved]**§199.202 Alcohol misuse plan.**

Each operator must maintain and follow a written alcohol misuse plan that conforms to the requirements of this part and DOT Procedures concerning alcohol testing programs. The plan shall contain methods and procedures for compliance with all the requirements of this subpart, including required testing, recordkeeping, reporting, education and training elements.

[Amdt. 199-9, 59 FR 7430, Feb. 15, 1994, as amended by Amdt. 199-19, 66 FR 47119, Sept. 11, 2001]

§199.203 [Reserved]**§199.205 [Reserved]****§199.209 Other requirements imposed by operators.**

- (a) Except as expressly provided in this subpart, nothing in this subpart shall be construed to affect the authority of operators, or the rights of employees, with respect to the use or possession of alcohol, including authority and rights with respect to alcohol testing and rehabilitation.
- (b) Operators may, but are not required to, conduct pre-employment alcohol testing under this subpart. Each operator that conducts pre-employment alcohol testing must—
 - (1) Conduct a pre-employment alcohol test before the first performance of covered functions by every covered employee (whether a new employee or someone who has transferred to a position involving the performance of covered functions);
 - (2) Treat all covered employees the same for the purpose of pre-employment alcohol testing (i.e., you must not test some covered employees and not others);
 - (3) Conduct the pre-employment tests after making a contingent offer of employment or transfer, subject to the employee passing the pre-employment alcohol test;

- (4) Conduct all pre-employment alcohol tests using the alcohol testing procedures in DOT Procedures; and
- (5) Not allow any covered employee to begin performing covered functions unless the result of the employee's test indicates an alcohol concentration of less than 0.04.

[Amdt. 199-9, 59 FR 7430, Feb. 15, 1994, as amended by Amdt. 199-19, 66 FR 47119, Sept. 11, 2001]

§199.211 Requirement for notice.

Before performing an alcohol test under this subpart, each operator shall notify a covered employee that the alcohol test is required by this subpart. No operator shall falsely represent that a test is administered under this subpart.

§199.213 [Reserved]

§199.215 Alcohol concentration.

Each operator shall prohibit a covered employee from reporting for duty or remaining on duty requiring the performance of covered functions while having an alcohol concentration of 0.04 or greater. No operator having actual knowledge that a covered employee has an alcohol concentration of 0.04 or greater shall permit the employee to perform or continue to perform covered functions.

§199.217 On-duty use.

Each operator shall prohibit a covered employee from using alcohol while performing covered functions. No operator having actual knowledge that a covered employee is using alcohol while performing covered functions shall permit the employee to perform or continue to perform covered functions.

§199.219 Pre-duty use.

Each operator shall prohibit a covered employee from using alcohol within four hours prior to performing covered functions, or, if an employee is called to duty to respond to an emergency, within the time period after the employee has been notified to report for duty. No operator having actual knowledge that a covered employee has used alcohol within four hours prior to performing covered functions or within the time period after the employee has been notified to report for duty shall permit that covered employee to perform or continue to perform covered functions.

§199.221 Use following an accident.

Each operator shall prohibit a covered employee who has actual knowledge of an accident in which his or her performance of covered functions has not been discounted by the operator as a contributing factor to the accident from using alcohol for eight hours following the accident, unless he or she has been given a post-accident test under §199.225(a), or the operator has determined that the employee's performance could not have contributed to the accident.

§199.223 Refusal to submit to a required alcohol test.

Each operator shall require a covered employee to submit to a post-accident alcohol test required under §199.225(a), a reasonable suspicion alcohol test required under §199.225(b), or a follow-up alcohol test required under §199.225(d). No operator shall permit an employee who refuses to submit to such a test to perform or continue to perform covered functions.

§199.225 Alcohol tests required.

Each operator must conduct the following types of alcohol tests for the presence of alcohol:

- (a) **Post-accident.** (1) As soon as practicable following an accident, each operator must test each surviving covered employee for alcohol if that employee's performance of a covered function either contributed to the accident or cannot be completely discounted as a contributing factor to the accident. The decision not to administer a test under this section must be based on specific information that the covered employee's performance had no role in the cause(s) or severity of the accident.
- (2)(i) If a test required by this section is not administered within 2 hours following the accident, the operator shall prepare and maintain on file a record stating the reasons the test was not promptly administered. If a test required by paragraph (a) is not administered within 8 hours following the accident, the operator shall cease attempts to administer an alcohol test and shall state in the record the reasons for not administering the test.
- (ii) [Reserved].
- (3) A covered employee who is subject to post-accident testing who fails to remain readily available for such testing, including notifying the operator or operator representative of his/her location if he/she leaves the scene of the accident prior to submission to such test, may be deemed by the operator to have refused to submit to testing. Nothing in this section shall be construed to require the delay of necessary medical attention for injured people following an accident or to prohibit a covered employee from leaving the scene of an accident for the period necessary to obtain assistance in responding to the accident or to obtain necessary emergency medical care.
- (b) **Reasonable suspicion testing.** (1) Each operator shall require a covered employee to submit to an alcohol test when the operator has reasonable suspicion to believe that the employee has violated the prohibitions in this subpart.
- (2) The operator's determination that reasonable suspicion exists to require the covered employee to undergo an alcohol test shall be based on specific, contemporaneous, articulable observations concerning the appearance, behavior, speech, or body odors of the employee. The required observations shall be made by a supervisor who is trained in detecting the symptoms of alcohol misuse. The supervisor who makes the determination that reasonable suspicion exists shall not conduct the breath alcohol test on that employee.
- (3) Alcohol testing is authorized by this section only if the observations required by paragraph (b)(2) of this section are made during, just preceding, or just after the period of the work day that the employee is required to be in compliance with this subpart. A covered employee may be directed by the operator

to undergo reasonable suspicion testing for alcohol only while the employee is performing covered functions; just before the employee is to perform covered functions; or just after the employee has ceased performing covered functions.

- (4)(i) If a test required by this section is not administered within 2 hours following the determination under paragraph (b)(2) of this section, the operator shall prepare and maintain on file a record stating the reasons the test was not promptly administered. If a test required by this section is not administered within 8 hours following the determination under paragraph (b)(2) of this section, the operator shall cease attempts to administer an alcohol test and shall state in the record the reasons for not administering the test. Records shall be submitted to PHMSA upon request of the Administrator.
- (ii) [Reserved]
- (iii) Notwithstanding the absence of a reasonable suspicion alcohol test under this section, an operator shall not permit a covered employee to report for duty or remain on duty requiring the performance of covered functions while the employee is under the influence of or impaired by alcohol, as shown by the behavioral, speech, or performance indicators of alcohol misuse, nor shall an operator permit the covered employee to perform or continue to perform covered functions, until:
- (A) An alcohol test is administered and the employee's alcohol concentration measures less than 0.02; or
- (B) The start of the employee's next regularly scheduled duty period, but not less than 8 hours following the determination under paragraph (b)(2) of this section that there is reasonable suspicion to believe that the employee has violated the prohibitions in this subpart.
- (iv) Except as provided in paragraph (b)(4)(ii), no operator shall take any action under this subpart against a covered employee based solely on the employee's behavior and appearance in the absence of an alcohol test. This does not prohibit an operator with the authority independent of this subpart from taking any action otherwise consistent with law.
- (c) **Return-to-duty testing.** Each operator shall ensure that before a covered employee returns to duty requiring the performance of a covered function after engaging in conduct prohibited by §§199.215 through 199.223, the employee shall undergo a return-to-duty alcohol test with a result indicating an alcohol concentration of less than 0.02.
- (d) **Follow-up testing.** (1) Following a determination under §199.243(b) that a covered employee is in need of assistance in resolving problems associated with alcohol misuse, each operator shall ensure that the employee is subject to unannounced follow-up alcohol testing as directed by a substance abuse professional in accordance with the provisions of §199.243(c)(2)(ii).
- (2) Follow-up testing shall be conducted when the covered employee is performing covered functions; just before the employee is to perform covered functions; or just after the employee has ceased performing such functions.
- (e) **Retesting of covered employees with an alcohol concentration of 0.02 or greater but less than 0.04.** Each operator shall retest a covered employee to ensure compliance with the provisions of §199.237, if an

operator chooses to permit the employee to perform a covered function within 8 hours following the administration of an alcohol test indicating an alcohol concentration of 0.02 or greater but less than 0.04.

[Amdt. 199-9, 59 FR 7430, Feb. 15, 1994, as amended at 59 FR 62239, 62246, Dec. 2, 1994; Amdt. 199-19, 66 FR 47119, Sept. 11, 2001; 70 FR 11140, March 8, 2005; Amdt. 199-27, 82 FR 8001, Jan. 23, 2017]

§199.227 Retention of records.

- (a) **General requirement.** Each operator shall maintain records of its alcohol misuse prevention program as provided in this section. The records shall be maintained in a secure location with controlled access.
- (b) **Period of retention.** Each operator shall maintain the records in accordance with the following schedule:
 - (1) **Five years.** Records of employee alcohol test results with results indicating an alcohol concentration of 0.02 or greater, documentation of refusals to take required alcohol tests, calibration documentation, employee evaluation and referrals, and MIS annual report data shall be maintained for a minimum of five years.
 - (2) **Two years.** Records related to the collection process (except calibration of evidential breath testing devices), and training shall be maintained for a minimum of two years.
 - (3) **One year.** Records of all test results below 0.02 (as defined in 49 CFR part 40) shall be maintained for a minimum of one year.
 - (4) **Three years.** Records of decisions not to administer post-accident employee alcohol tests must be kept for a minimum of three years.
- (c) **Types of records.** The following specific records shall be maintained:
 - (1) **Records related to the collection process:**
 - (i) Collection log books, if used.
 - (ii) Calibration documentation for evidential breath testing devices.
 - (iii) Documentation of breath alcohol technician training.
 - (iv) Documents generated in connection with decisions to administer reasonable suspicion alcohol tests.
 - (v) Documents generated in connection with decisions on post- accident tests.
 - (vi) Documents verifying existence of a medical explanation of the inability of a covered employee to provide adequate breath for testing.
 - (2) **Records related to test results:**
 - (i) The operator's copy of the alcohol test form, including the results of the test.
 - (ii) Documents related to the refusal of any covered employee to submit to an alcohol test required by this subpart.
 - (iii) Documents presented by a covered employee to dispute the result of an alcohol test administered under this subpart.
 - (3) **Records related to other violations of this subpart.**

(4) *Records related to evaluations:*

- (i) Records pertaining to a determination by a substance abuse professional concerning a covered employee's need for assistance.
- (ii) Records concerning a covered employee's compliance with the recommendations of the substance abuse professional.

(5) *Record(s) related to the operator's MIS annual testing data.*

(6) *Records related to education and training:*

- (i) Materials on alcohol misuse awareness, including a copy of the operator's policy on alcohol misuse.
- (ii) Documentation of compliance with the requirements of §199.231.
- (iii) Documentation of training provided to supervisors for the purpose of qualifying the supervisors to make a determination concerning the need for alcohol testing based on reasonable suspicion.
- (iv) Certification that any training conducted under this subpart complies with the requirements for such training.

[Amdt. 199-9, 59 FR 7430, Feb. 15, 1994, unless otherwise noted. Redesignated by Amdt. 199-19, 66 FR 47118, Sept. 11, 2001, as amended by Amdt. 199-27, 82 FR 8001, Jan. 23, 2017]

§199.229 Reporting of alcohol testing results.

- (a) Each large operator (having more than 50 covered employees) must submit an annual MIS report to PHMSA of its alcohol testing results using the MIS form and instructions as required by 49 CFR part 40 (at §40.26 and appendix H to part 40), not later than March 15 of each year for the prior calendar year (January 1 through December 31). The Administrator may require by notice in the PHMSA Portal (<https://portal.phmsa.dot.gov/phmsaportallanding>) that small operators (50 or fewer covered employees), not otherwise required to submit annual MIS reports, to prepare and submit such reports to PHMSA.
- (b) Each operator that has a covered employee who performs multi-DOT agency functions (e.g., an employee performs pipeline maintenance duties and drives a commercial motor vehicle), count the employee only on the MIS report for the DOT agency under which he or she is tested. Normally, this will be the DOT agency under which the employee performs more than 50% of his or her duties. Operators may have to explain the testing data for these employees in the event of a DOT agency inspection or audit.
- (c) Each report required under this section must be submitted electronically at <http://damis.dot.gov>. An operator may obtain the user name and password needed for electronic reporting from the PHMSA Portal (<https://portal.phmsa.dot.gov/phmsaportallanding>). If electronic reporting imposes an undue burden and hardship, the operator may submit a written request for an alternative reporting method to the Information Resources Manager, Office of Pipeline Safety, Pipeline and Hazardous Materials Safety Administration, 1200 New Jersey Avenue SE., Washington, DC 20590. The request must describe the undue burden and hardship. PHMSA will review the request and may authorize, in writing, an alternative reporting method. An authorization will state the period for which it is valid, which may be indefinite. An operator must contact PHMSA at 202-366-8075, or electronically to informationresourcesmanager@dot.gov to make arrangements for submitting a report that is due after a request for alternative reporting is submitted but before an authorization or denial is received.

- (d) A service agent (e.g., Consortia/Third Party Administrator as defined in part 40) may prepare the MIS report on behalf of an operator. However, each report shall be certified by the operator's anti-drug manager or designated representative for accuracy and completeness.

[68 FR 75466, Dec. 31, 2003, as amended by Amdt. 199-20, 69 FR 32898, June 14, 2004; 70 FR 11140, Mar. 8, 2005; 73 FR 16571, Mar. 28, 2008; 74 FR 2895, Jan. 16, 2009; Amdt. 199-27, 82 FR 8001, Jan. 23, 2017]

§199.231 Access to facilities and records.

- (a) Except as required by law or expressly authorized or required in this subpart, no employer shall release covered employee information that is contained in records required to be maintained in §199.227.
- (b) A covered employee is entitled, upon written request, to obtain copies of any records pertaining to the employee's use of alcohol, including any records pertaining to his or her alcohol tests. The operator shall promptly provide the records requested by the employee. Access to an employee's records shall not be contingent upon payment for records other than those specifically requested.
- (c) Each operator shall permit access to all facilities utilized in complying with the requirements of this subpart to the Secretary of Transportation, any DOT agency, or a representative of a state agency with regulatory authority over the operator.
- (d) Each operator shall make available copies of all results for employer alcohol testing conducted under this subpart and any other information pertaining to the operator's alcohol misuse prevention program, when requested by the Secretary of Transportation, any DOT agency with regulatory authority over the operator, or a representative of a state agency with regulatory authority over the operator. The information shall include name-specific alcohol test results, records, and reports.
- (e) When requested by the National Transportation Safety Board as part of an accident investigation, an operator shall disclose information related to the operator's administration of any post-accident alcohol tests administered following the accident under investigation.
- (f) An operator shall make records available to a subsequent employer upon receipt of the written request from the covered employee. Disclosure by the subsequent employer is permitted only as expressly authorized by the terms of the employee's written request.
- (g) An operator may disclose information without employee consent as provided by DOT Procedures concerning certain legal proceedings.
- (h) An operator shall release information regarding a covered employee's records as directed by the specific, written consent of the employee authorizing release of the information to an identified person. Release of such information by the person receiving the information is permitted only in accordance with the terms of the employee's consent.

[Amdt. 199-9, 59 FR 7430, Feb. 15, 1994, as amended by Amdt. 199-19, 66 FR 47119, Sept. 11, 2001]

§199.233 Removal from covered function.

Except as provided in §§199.239 through 199.243, no operator shall permit any covered employee to perform covered functions if the employee has engaged in conduct prohibited by §§199.215 through 199.223 or an alcohol misuse rule of another DOT agency.

§199.235 Required evaluation and testing.

No operator shall permit a covered employee who has engaged in conduct prohibited by §§199.215 through 199.223 to perform covered functions unless the employee has met the requirements of §199.243.

§199.237 Other alcohol-related conduct.

- (a) No operator shall permit a covered employee tested under the provisions of §199.225, who is found to have an alcohol concentration of 0.02 or greater but less than 0.04, to perform or continue to perform covered functions, until:
 - (1) The employee's alcohol concentration measures less than 0.02 in accordance with a test administered under §199.225(e); or
 - (2) The start of the employee's next regularly scheduled duty period, but not less than eight hours following administration of the test.
- (b) Except as provided in paragraph (a) of this section, no operator shall take any action under this subpart against an employee based solely on test results showing an alcohol concentration less than 0.04. This does not prohibit an operator with authority independent of this subpart from taking any action otherwise consistent with law.

§199.239 Operator obligation to promulgate a policy on the misuse of alcohol.

- (a) **General requirements.** Each operator shall provide educational materials that explain these alcohol misuse requirements and the operator's policies and procedures with respect to meeting those requirements.
 - (1) The operator shall ensure that a copy of these materials is distributed to each covered employee prior to start of alcohol testing under this subpart, and to each person subsequently hired for or transferred to a covered position.
 - (2) Each operator shall provide written notice to representatives of employee organizations of the availability of this information.
- (b) **Required content.** The materials to be made available to covered employees shall include detailed discussion of at least the following:
 - (1) The identity of the person designated by the operator to answer covered employee questions about the materials.
 - (2) The categories of employees who are subject to the provisions of this subpart.
 - (3) Sufficient information about the covered functions performed by those employees to make clear what period of the work day the covered employee is required to be in compliance with this subpart.
 - (4) Specific information concerning covered employee conduct that is prohibited by this subpart.
 - (5) The circumstances under which a covered employee will be tested for alcohol under this subpart.
 - (6) The procedures that will be used to test for the presence of alcohol, protect the covered employee and the integrity of the breath testing process, safeguard the validity of the test results, and ensure that those results are attributed to the correct employee.

- (7) The requirement that a covered employee submit to alcohol tests administered in accordance with this subpart.
 - (8) An explanation of what constitutes a refusal to submit to an alcohol test and the attendant consequences.
 - (9) The consequences for covered employees found to have violated the prohibitions under this subpart, including the requirement that the employee be removed immediately from covered functions, and the procedures under §199.243.
 - (10) The consequences for covered employees found to have an alcohol concentration of 0.02 or greater but less than 0.04.
 - (11) Information concerning the effects of alcohol misuse on an individual's health, work, and personal life; signs and symptoms of an alcohol problem (the employee's or a coworker's); and including intervening evaluating and resolving problems associated with the misuse of alcohol including intervening when an alcohol problem is suspected, confrontation, referral to any available EAP, and/or referral to management.
- (c) **Optional provisions.** The materials supplied to covered employees may also include information on additional operator policies with respect to the use or possession of alcohol, including any consequences for an employee found to have a specified alcohol level, that are based on the operator's authority independent of this subpart. Any such additional policies or consequences shall be clearly described as being based on independent authority.

§199.241 Training for supervisors.

Each operator shall ensure that persons designated to determine whether reasonable suspicion exists to require a covered employee to undergo alcohol testing under §199.225(b) receive at least 60 minutes of training on the physical, behavioral, speech, and performance indicators of probable alcohol misuse.

§199.243 Referral, evaluation, and treatment.

- (a) Each covered employee who has engaged in conduct prohibited by §§199.215 through 199.223 of this subpart shall be advised of the resources available to the covered employee in evaluating and resolving problems associated with the misuse of alcohol, including the names, addresses, and telephone numbers of substance abuse professionals and counseling and treatment programs.
- (b) Each covered employee who engages in conduct prohibited under §§199.215 through 199.223 shall be evaluated by a substance abuse professional who shall determine what assistance, if any, the employee needs in resolving problems associated with alcohol misuse.
- (c)(1) Before a covered employee returns to duty requiring the performance of a covered function after engaging in conduct prohibited by §§199.215 through 199.223 of this subpart, the employee shall undergo a return-to-duty alcohol test with a result indicating an alcohol concentration of less than 0.02.
- (2) In addition, each covered employee identified as needing assistance in resolving problems associated with alcohol misuse—
 - (i) Shall be evaluated by a substance abuse professional to determine that the employee has properly followed any rehabilitation program prescribed under paragraph (b) of this section, and

(ii) Shall be subject to unannounced follow-up alcohol tests administered by the operator following the employee's return to duty. The number and frequency of such follow-up testing shall be determined by a substance abuse professional, but shall consist of at least six tests in the first 12 months following the employee's return to duty. In addition, follow-up testing may include testing for drugs, as directed by the substance abuse professional, to be performed in accordance with 49 CFR part 40. Follow-up testing shall not exceed 60 months from the date of the employee's return to duty. The substance abuse professional may terminate the requirement for follow-up testing at any time after the first six tests have been administered, if the substance abuse professional determines that such testing is no longer necessary.

- (d) Evaluation and rehabilitation may be provided by the operator, by a substance abuse professional under contract with the operator, or by a substance abuse professional not affiliated with the operator. The choice of substance abuse professional and assignment of costs shall be made in accordance with the operator/employee agreements and operator/employee policies.
- (e) The operator shall ensure that a substance abuse professional who determines that a covered employee requires assistance in resolving problems with alcohol misuse does not refer the employee to the substance abuse professional's private practice or to a person or organization from which the substance abuse professional receives remuneration or in which the substance abuse professional has a financial interest. This paragraph does not prohibit a substance abuse professional from referring an employee for assistance provided through—
 - (1) A public agency, such as a State, county, or municipality;
 - (2) The operator or a person under contract to provide treatment for alcohol problems on behalf of the operator;
 - (3) The sole source of therapeutically appropriate treatment under the employee's health insurance program; or
 - (4) The sole source of therapeutically appropriate treatment reasonably accessible to the employee.

§199.245 Contractor employees.

- (a) With respect to those covered employees who are contractors or employed by a contractor, an operator may provide by contract that the alcohol testing, training and education required by this subpart be carried out by the contractor provided:
- (b) The operator remains responsible for ensuring that the requirements of this subpart and part 40 of this title are complied with; and
- (c) The contractor allows access to property and records by the operator, the Administrator, any DOT agency with regulatory authority over the operator or covered employee, and, if the operator is subject to the jurisdiction of a state agency, a representative of the state agency for the purposes of monitoring the operator's compliance with the requirements of this subpart and part 40 of this title.



TITLE 49 CFR PART 40

PROCEDURES FOR TRANSPORTATION WORKPLACE DRUG AND ALCOHOL TESTING PROGRAMS WITH *MICHIGAN ADMINISTRATIVE CODE* ADDED

SECTION FIVE (5)

DRAFT

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Authority: 49 U.S.C. 102, 301, 322, 5331, 20140, 31306, and 45101 et seq.

Source: 65 FR 79526, Dec. 19, 2000, unless otherwise noted.

Subpart A - Administrative Provisions

§40.1 Who does this regulation cover?

- (a) This part tells all parties who conduct drug and alcohol tests required by Department of Transportation (DOT) agency regulations how to conduct these tests and what procedures to use.
- (b) This part concerns the activities of transportation employers, safety-sensitive transportation employees (including self-employed individuals, contractors and volunteers as covered by DOT agency regulations), and service agents.
- (c) Nothing in this part is intended to supersede or conflict with the implementation of the Federal Railroad Administration's post-accident testing program (see 49 CFR 219.200).

§40.3 What do the terms used in this part mean?

In this part, the terms listed in this section have the following meanings:

Adulterated specimen. A specimen that has been altered, as evidenced by test results showing either a substance that is not a normal constituent for that type of specimen or showing an abnormal concentration of an endogenous substance.

Affiliate. Persons are affiliates of one another if, directly or indirectly, one controls or has the power to control the other, or a third party controls or has the power to control both. Indicators of control include, but are not limited to: interlocking management or ownership; shared interest among family members; shared facilities or equipment; or common use of employees. Following the issuance of a public interest exclusion, an organization having the same or similar management, ownership, or principal employees as the service agent concerning whom a public interest exclusion is in effect is regarded as an affiliate. This definition is used in connection with the public interest exclusion procedures of Subpart R of this part.

Air blank. In evidential breath testing devices (EBTs) using gas chromatography technology, a reading of the device's internal standard. In all other EBTs, a reading of ambient air containing no alcohol.

Alcohol. The intoxicating agent in beverage alcohol, ethyl alcohol or other low molecular weight alcohols, including methyl or isopropyl alcohol.

Alcohol concentration. The alcohol in a volume of breath expressed in terms of grams of alcohol per 210 liters of breath as indicated by a breath test under this part.

Alcohol confirmation test. A subsequent test using an EBT, following a screening test with a result of 0.02 or greater, that provides quantitative data about the alcohol concentration.

Alcohol screening device (ASD). A breath or saliva device, other than an EBT, that is approved by the National Highway Traffic Safety Administration (NHTSA) and placed on a conforming products list (CPL) for such devices.

Alcohol screening test. An analytic procedure to determine whether an employee may have a prohibited concentration of alcohol in a breath or saliva specimen.

Alcohol testing site. A place selected by the employer where employees present themselves for the purpose of providing breath or saliva for an alcohol test.

Alcohol use. The drinking or swallowing of any beverage, liquid mixture or preparation (including any medication), containing alcohol.

Aliquot. A fractional part of a specimen used for testing. It is taken as a sample representing the whole specimen.

Blind specimen or blind performance test specimen. A specimen submitted to a laboratory for quality control testing purposes, with a fictitious identifier, so that the laboratory cannot distinguish it from an employee specimen.

Breath Alcohol Technician (BAT). A person who instructs and assists employees in the alcohol testing process and operates an evidential breath testing device.

Cancelled test. A drug or alcohol test that has a problem identified that cannot be or has not been corrected, or which this part otherwise requires to be cancelled. A cancelled test is neither a positive nor a negative test.

Chain of custody. The procedure used to document the handling of the urine specimen from the time the employee gives the specimen to the collector until the specimen is destroyed. This procedure uses the Federal Drug Testing Custody and Control Form (CCF) as approved by the Office of Management and Budget.

Collection container. A container into which the employee urinates to provide the specimen for a drug test.

Collection site. A place selected by the employer where employees present themselves for the purpose of providing a urine specimen for a drug test.

Collector. A person who instructs and assists employees at a collection site, who receives and makes an initial inspection of the specimen provided by those employees, and who initiates and completes the CCF.

Confirmatory drug test. A second analytical procedure performed on a different aliquot of the original specimen to identify and quantify the presence of a specific drug or drug metabolite.

Confirmatory validity test. A second test performed on a different aliquot of the original urine specimen to further support a validity test result.

Confirmed drug test. A confirmation test result received by an MRO from a laboratory.

Consortium/Third-party administrator (C/TPA). A service agent that provides or coordinates the provision of a variety of drug and alcohol testing services to employers. C/TPAs typically perform administrative tasks concerning the operation of the employers' drug and alcohol testing programs. This term includes, but is not limited to, groups of employers who join together to administer, as a single entity, the DOT drug and alcohol testing programs of its members. C/TPAs are not "employers" for purposes of this part.

Continuing education. Training for substance abuse professionals (SAPs) who have completed qualification training and are performing SAP functions, designed to keep SAPs current on changes and developments in the DOT drug and alcohol testing program.

Designated employer representative (DER). An employee authorized by the employer to take immediate action(s) to remove employees from safety-sensitive duties, or cause employees to be removed from these covered duties, and to make required decisions in the testing and evaluation processes. The DER also receives test results and other communications for the employer, consistent with the requirements of this part. Service agents cannot act as DERs.

Dilute specimen. A urine specimen with creatinine and specific gravity values that are lower than expected for human urine.

DOT, The Department, DOT agency. These terms encompass all DOT agencies, including, but not limited to, the United States Coast Guard (USCG), the Federal Aviation Administration (FAA), the Federal Railroad Administration (FRA), the Federal Motor Carrier Safety Administration (FMCSA), the Federal Transit Administration (FTA), the National Highway Traffic Safety Administration (NHTSA), the Pipeline and Hazardous Materials Safety Administration (PHMSA), and the Office of the Secretary (OST). These terms include any designee of a DOT agency.

Drugs. The drugs for which tests are required under this part and DOT agency regulations are marijuana, cocaine, amphetamines, phencyclidine (PCP), and opiates.

Employee. Any person who is designated in a DOT agency regulation as subject to drug testing and/or alcohol testing. The term includes individuals currently performing safety-sensitive functions designated in DOT agency regulations and applicants for employment subject to pre-employment testing. For purposes of drug testing under this part, the term employee has the same meaning as the term “donor” as found on CCF and related guidance materials produced by the Department of Health and Human Services.

Employer. A person or entity employing one or more employees (including an individual who is self-employed) subject to DOT agency regulations requiring compliance with this part. The term includes an employer's officers, representatives, and management personnel. Service agents are not employers for the purposes of this part.

Error Correction Training. Training provided to BATs, collectors, and screening test technicians (STTs) following an error that resulted in the cancellation of a drug or alcohol test. Error correction training must be provided in person or by a means that provides real-time observation and interaction between the instructor and trainee.

Evidential Breath Testing Device (EBT). A device approved by NHTSA for the evidential testing of breath at the .02 and .04 alcohol concentrations, placed on NHTSA's Conforming Products List (CPL) for “Evidential Breath Measurement Devices” and identified on the CPL as conforming with the model specifications available from NHTSA's Traffic Safety Program.

HHS. The Department of Health and Human Services or any designee of the Secretary, Department of Health and Human Services.

Initial drug test (also known as a “Screening drug test”). The test used to differentiate a negative specimen from one that requires further testing for drugs or drug metabolites.

Initial specimen validity test. The first test used to determine if a urine specimen is adulterated, diluted, substituted, or invalid.

Invalid drug test. The result reported by an HHS-certified laboratory in accordance with the criteria established by HHS Mandatory Guidelines when a positive, negative, adulterated, or substituted result cannot be established for a specific drug or specimen validity test.

Invalid result. The result reported by a laboratory for a urine specimen that contains an unidentified adulterant, contains an unidentified interfering substance, has an abnormal physical characteristic, or has

an endogenous substance at an abnormal concentration that prevents the laboratory from completing testing or obtaining a valid drug test result.

Laboratory. Any U.S. laboratory certified by HHS under the National Laboratory Certification Program as meeting the minimum standards of Subpart C of the HHS Mandatory Guidelines for Federal Workplace Drug Testing Programs; or, in the case of foreign laboratories, a laboratory approved for participation by DOT under this part.

Limit of Detection (LOD). The lowest concentration at which a measurand can be identified, but (for quantitative assays) the concentration cannot be accurately calculated.

Limit of Quantitation. For quantitative assays, the lowest concentration at which the identity and concentration of the measurand can be accurately established.

Medical Review Officer (MRO). A person who is a licensed physician and who is responsible for receiving and reviewing laboratory results generated by an employer's drug testing program and evaluating medical explanations for certain drug test results.

Negative result. The result reported by an HHS-certified laboratory to an MRO when a specimen contains no drug or the concentration of the drug is less than the cutoff concentration for the drug or drug class and the specimen is a valid specimen.

Non-negative specimen. A urine specimen that is reported as adulterated, substituted, positive (for drug(s) or drug metabolite(s)), and/or invalid.

Office of Drug and Alcohol Policy and Compliance (ODAPC). The office in the Office of the Secretary, DOT, that is responsible for coordinating drug and alcohol testing program matters within the Department and providing information concerning the implementation of this part.

Oxidizing adulterant. A substance that acts alone or in combination with other substances to oxidize drugs or drug metabolites to prevent the detection of the drug or drug metabolites, or affects the reagents in either the initial or confirmatory drug test.

Primary specimen. In drug testing, the urine specimen bottle that is opened and tested by a first laboratory to determine whether the employee has a drug or drug metabolite in his or her system; and for the purpose of validity testing. The primary specimen is distinguished from the split specimen, defined in this section.

Positive result. The result reported by an HHS-certified laboratory when a specimen contains a drug or drug metabolite equal to or greater than the cutoff concentrations.

Qualification Training. The training required in order for a collector, BAT, MRO, SAP, or STT to be qualified to perform their functions in the DOT drug and alcohol testing program. Qualification training may be provided by any appropriate means (e.g., classroom instruction, internet application, CD-ROM, video).

Reconfirmed. The result reported for a split specimen when the second laboratory is able to corroborate the original result reported for the primary specimen.

Refresher Training. The training required periodically for qualified collectors, BATs, and STTs to review basic requirements and provide instruction concerning changes in technology (e.g., new testing methods that may be authorized) and amendments, interpretations, guidance, and issues concerning this part and DOT agency drug and alcohol testing regulations. Refresher training can be provided by any appropriate means (e.g., classroom instruction, internet application, CD-ROM, video).

Rejected for testing. The result reported by an HHS-certified laboratory when no tests are performed for a specimen because of a fatal flaw or a correctable flaw that is not corrected.

Screening drug test. See Initial drug test definition above.

Screening Test Technician (STT). A person who instructs and assists employees in the alcohol testing process and operates an ASD.

Secretary. The Secretary of Transportation or the Secretary's designee.

Service agent. Any person or entity, other than an employee of the employer, who provides services to employers and/or employees in connection with DOT drug and alcohol testing requirements. This includes, but is not limited to, collectors, BATs and STTs, laboratories, MROs, substance abuse professionals, and C/TPAs. To act as service agents, persons and organizations must meet DOT qualifications, if applicable. Service agents are not employers for purposes of this part.

Shipping container. A container that is used for transporting and protecting urine specimen bottles and associated documents from the collection site to the laboratory.

Specimen bottle. The bottle that, after being sealed and labeled according to the procedures in this part, is used to hold the urine specimen during transportation to the laboratory.

Split specimen. In drug testing, a part of the urine specimen that is sent to a first laboratory and retained unopened, and which is transported to a second laboratory in the event that the employee requests that it be tested following a verified positive test of the primary specimen or a verified adulterated or substituted test result.

Split specimen collection. A collection in which the urine collected is divided into two separate specimen bottles, the primary specimen (Bottle A) and the split specimen (Bottle B).

Stand-down. The practice of temporarily removing an employee from the performance of safety-sensitive functions based only on a report from a laboratory to the MRO of a confirmed positive test for a drug or drug metabolite, an adulterated test, or a substituted test, before the MRO has completed verification of the test result.

Substance Abuse Professional (SAP). A person who evaluates employees who have violated a DOT drug and alcohol regulation and makes recommendations concerning education, treatment, follow-up testing, and aftercare.

Substituted specimen. A urine specimen with creatinine and specific gravity values that are so diminished or so divergent that they are not consistent with normal human urine.

Verified test. A drug test result or validity testing result from an HHS-certified laboratory that has undergone review and final determination by the MRO.

[65 FR 79526, Dec. 19, 2000, as amended at 66 FR 41950, Aug. 9, 2001; 71 FR 49384, Aug. 23, 2006; 71 FR 55347, Sept. 22, 2006; 73 FR 35969, June 25, 2008; 75 FR 49861, Aug. 16, 2010; 76 FR 59577, Sept. 27, 2011; 80 FR 19553, Apr. 13, 2015; 81 FR 52365, Aug. 8, 2016]

§40.5 Who issues authoritative interpretations of this regulation?

ODAPC and the DOT Office of General Counsel (OGC) provide written interpretations of the provisions of this part. These written DOT interpretations are the only official and authoritative interpretations concerning the provisions of this part. DOT agencies may incorporate ODAPC/OGC interpretations in written guidance they issue concerning drug and alcohol testing matters. Only Part 40 interpretations issued after August 1, 2001, are considered valid.

§40.7 How can you get an exemption from a requirement in this regulation?

- (a) If you want an exemption from any provision of this part, you must request it in writing from the Office of the Secretary of Transportation, under the provisions and standards of 49 CFR part 5. You must send requests for an exemption to the following address: Department of Transportation, Deputy Assistant General Counsel for Regulation and Enforcement, 1200 New Jersey Avenue, SE, Washington, DC 20590.
- (b) Under the standards of 49 CFR part 5, we will grant the request only if the request documents special or exceptional circumstances, not likely to be generally applicable and not contemplated in connection with the rulemaking that established this part, that make your compliance with a specific provision of this part impracticable.
- (c) If we grant you an exemption, you must agree to take steps we specify to comply with the intent of the provision from which an exemption is granted.
- (d) We will issue written responses to all exemption requests.

Subpart B - Employer Responsibilities

§40.11 What are the general responsibilities of employers under this regulation?

- (a) As an employer, you are responsible for meeting all applicable requirements and procedures of this part.
- (b) You are responsible for all actions of your officials, representatives, and agents (including service agents) in carrying out the requirements of the DOT agency regulations.
- (c) All agreements and arrangements, written or unwritten, between and among employers and service agents concerning the implementation of DOT drug and alcohol testing requirements are deemed, as a matter of law, to require compliance with all applicable provisions of this part and DOT agency drug and alcohol testing regulations. Compliance with these provisions is a material term of all such agreements and arrangements.

R 460.20202 Drug and alcohol testing requirements.

- (1) *An operator shall meet the drug and alcohol testing requirements in 49 C.F.R. part 199 entitled "Drug and Alcohol Testing," which is adopted by reference in R 460.20606.*
- (2) *An operator shall conduct the drug and alcohol testing required by subrule (1) of this rule according to the requirements of 49 C.F.R. part 199 and the procedures prescribed in 49 C.F.R. part 40 entitled "Procedures for Transportation Workplace Drug and Alcohol Testing Programs," which is adopted by reference in R 460.20606.*
- (3) *Subrule (1) of this rule applies only to operators who operate facilities subject to the natural gas pipeline safety act of 1968, 49 U.S.C. §60101 et seq., as amended.*

History: 1998-2000 AACS.

§40.13 How do DOT drug and alcohol tests relate to non-DOT tests?

- (a) DOT tests must be completely separate from non-DOT tests in all respects.
- (b) DOT tests must take priority and must be conducted and completed before a non-DOT test is begun. For example, you must discard any excess urine left over from a DOT test and collect a separate void for the subsequent non-DOT test.
- (c) Except as provided in paragraph (d) of this section, you must not perform any tests on DOT urine or breath specimens other than those specifically authorized by this part or DOT agency regulations. For example, you may not test a DOT urine specimen for additional drugs, and a laboratory is prohibited from making a DOT urine specimen available for a DNA test or other types of specimen identity testing.
- (d) The single exception to paragraph (c) of this section is when a DOT drug test collection is conducted as part of a physical examination required by DOT agency regulations. It is permissible to conduct required medical tests related to this physical examination (*e.g.*, for glucose) on any urine remaining in the collection container after the drug test urine specimens have been sealed into the specimen bottles.
- (e) No one is permitted to change or disregard the results of DOT tests based on the results of non-DOT tests. For example, as an employer you must not disregard a verified positive DOT drug test result because the

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employee presents a negative test result from a blood or urine specimen collected by the employee's physician or a DNA test result purporting to question the identity of the DOT specimen.

- (f) As an employer, you must not use the CCF or the ATF in your non-DOT drug and alcohol testing programs. This prohibition includes the use of the DOT forms with references to DOT programs and agencies crossed out. You also must always use the CCF and ATF for all your DOT-mandated drug and alcohol tests.

§40.14 What collection information must employers provide to collectors?

As an employer, or an employer's service agent—for example a C/TPA, you must ensure the collector has the following information when conducting a urine specimen collection for you:

- (a) Full name of the employee being tested.
- (b) Employee SSN or ID number.
- (c) Laboratory name and address (can be pre-printed on the CCF).
- (d) Employer name, address, phone number, and fax number (can be pre-printed on the CCF at Step 1-A).
- (e) DER information required at §40.35 of this part.
- (f) MRO name, address, phone number, and fax number (can be pre-printed on the CCF at Step 1-B).
- (g) The DOT Agency which regulates the employee's safety-sensitive duties (the checkmark can pre-printed in the appropriate box on the CCF at Step 1-D).
- (h) Test reason, as appropriate: Pre-employment; Random; Reasonable Suspicion/Reasonable Cause; Post-Accident; Return-to-Duty; and Follow-up.
- (i) Whether the test is to be observed or not (see §40.67 of this part).
- (j) (Optional) C/TPA name, address, phone, and fax number (can be pre-printed on the CCF).

[75 FR 59107, Sept. 27, 2010]

§40.15 May an employer use a service agent to meet DOT drug and alcohol testing requirements?

- (a) As an employer, you may use a service agent to perform the tasks needed to comply with this part and DOT agency drug and alcohol testing regulations, consistent with the requirements of Subpart Q and other applicable provisions of this part.
- (b) As an employer, you are responsible for ensuring that the service agents you use meet the qualifications set forth in this part (*e.g.*, §40.121 for MROs). You may require service agents to show you documentation that they meet the requirements of this part (*e.g.*, documentation of MRO qualifications required by §40.121(e)).
- (c) You remain responsible for compliance with all applicable requirements of this part and other DOT drug and alcohol testing regulations, even when you use a service agent. If you violate this part or other DOT drug and alcohol testing regulations because a service agent has not provided services as our rules require, a DOT agency can subject you to sanctions. Your good faith use of a service agent is not a

defense in an enforcement action initiated by a DOT agency in which your alleged noncompliance with this part or a DOT agency drug and alcohol regulation may have resulted from the service agent's conduct.

(d) As an employer, you must not permit a service agent to act as your DER.

§40.17 Is an employer responsible for obtaining information from its service agents?

Yes, as an employer, you are responsible for obtaining information required by this part from your service agents. This is true whether or not you choose to use a C/TPA as an intermediary in transmitting information to you. For example, suppose an applicant for a safety-sensitive job takes a pre-employment drug test, but there is a significant delay in your receipt of the test result from an MRO or C/TPA. You must not assume that “no news is good news” and permit the applicant to perform safety-sensitive duties before receiving the result. This is a violation of the Department's regulations

§40.19[Reserved]

§40.21 May an employer stand down an employee before the MRO has completed the verification process?

- (a) As an employer, you are prohibited from standing employees down, except consistent with a waiver a DOT agency grants under this section.
- (b) You may make a request to the concerned DOT agency for a waiver from the prohibition of paragraph (a) of this section. Such a waiver, if granted, permits you to stand an employee down following the MRO's receipt of a laboratory report of a confirmed positive test for a drug or drug metabolite, an adulterated test, or a substituted test pertaining to the employee.
 - (1) For this purpose, the concerned DOT agency is the one whose drug and alcohol testing rules apply to the majority of the covered employees in your organization. The concerned DOT agency uses its applicable procedures for considering requests for waivers.
 - (2) Before taking action on a waiver request, the concerned DOT agency coordinates with other DOT agencies that regulate the employer's other covered employees.
 - (3) The concerned DOT agency provides a written response to each employer that petitions for a waiver, setting forth the reasons for the agency's decision on the waiver request.
- (c) Your request for a waiver must include, as a minimum, the following elements:
 - (1) Information about your organization:
 - (i) Your determination that standing employees down is necessary for safety in your organization and a statement of your basis for it, including any data on safety problems or incidents that could have been prevented if a stand-down procedure had been in place;
 - (ii) Data showing the number of confirmed laboratory positive, adulterated, and substituted test results for your employees over the two calendar years preceding your waiver request, and the

number and percentage of those test results that were verified positive, adulterated, or substituted by the MRO;

(iii) Information about the work situation of the employees subject to stand-down, including a description of the size and organization of the unit(s) in which the employees work, the process through which employees will be informed of the stand-down, whether there is an in-house MRO, and whether your organization has a medical disqualification or stand-down policy for employees in situations other than drug and alcohol testing; and

(iv) A statement of which DOT agencies regulate your employees.

(2) Your proposed written company policy concerning stand-down, which must include the following elements:

(i) Your assurance that you will distribute copies of your written policy to all employees that it covers;

(ii) Your means of ensuring that no information about the confirmed positive, adulterated, or substituted test result or the reason for the employee's temporary removal from performance of safety-sensitive functions becomes available, directly or indirectly, to anyone in your organization (or subsequently to another employer) other than the employee, the MRO and the DER;

(iii) Your means of ensuring that all covered employees in a particular job category in your organization are treated the same way with respect to stand-down;

(iv) Your means of ensuring that a covered employee will be subject to stand-down only with respect to the actual performance of safety-sensitive duties;

(v) Your means of ensuring that you will not take any action adversely affecting the employee's pay and benefits pending the completion of the MRO's verification process. This includes continuing to pay the employee during the period of the stand-down in the same way you would have paid him or her had he or she not been stood down; (vi) Your means of ensuring that the verification process will commence no later than the time an employee is temporarily removed from the performance of safety-sensitive functions and that the period of stand-down for any employee will not exceed five days, unless you are informed in writing by the MRO that a longer period is needed to complete the verification process; and

(vii) Your means of ensuring that, in the event that the MRO verifies the test negative or cancels it—

(A) You return the employee immediately to the performance of safety-sensitive duties;

(B) The employee suffers no adverse personnel or financial consequences as a result; and

(C) You maintain no individually identifiable record that the employee had a confirmed laboratory positive, adulterated, or substituted test result (*i.e.*, you maintain a record of the test only as a negative or cancelled test).

(d) The Administrator of the concerned DOT agency, or his or her designee, may grant a waiver request only if he or she determines that, in the context of your organization, there is a high probability that the procedures you propose will effectively enhance safety and protect the interests of employees in fairness and confidentiality.

(1) The Administrator, or his or her designee, may impose any conditions he or she deems appropriate on the grant of a waiver.

- (2) The Administrator, or his or her designee, may immediately suspend or revoke the waiver if he or she determines that you have failed to protect effectively the interests of employees in fairness and confidentiality, that you have failed to comply with the requirements of this section, or that you have failed to comply with any other conditions the DOT agency has attached to the waiver.
- (e) You must not stand employees down in the absence of a waiver, or inconsistent with the terms of your waiver. If you do, you are in violation of this part and DOT agency drug testing regulations, and you are subject to enforcement action by the DOT agency just as you are for other violations of this part and DOT agency rules.

§40.23 What actions do employers take after receiving verified test results?

- (a) As an employer who receives a verified positive drug test result, you must immediately remove the employee involved from performing safety-sensitive functions. You must take this action upon receiving the initial report of the verified positive test result. Do not wait to receive the written report or the result of a split specimen test.
- (b) As an employer who receives a verified adulterated or substituted drug test result, you must consider this a refusal to test and immediately remove the employee involved from performing safety-sensitive functions. You must take this action on receiving the initial report of the verified adulterated or substituted test result. Do not wait to receive the written report or the result of a split specimen test.
- (c) As an employer who receives an alcohol test result of 0.04 or higher, you must immediately remove the employee involved from performing safety-sensitive functions. If you receive an alcohol test result of 0.02-0.039, you must temporarily remove the employee involved from performing safety-sensitive functions, as provided in applicable DOT agency regulations. Do not wait to receive the written report of the result of the test.
- (d) As an employer, when an employee has a verified positive, adulterated, or substituted test result, or has otherwise violated a DOT agency drug and alcohol regulation, you must not return the employee to the performance of safety-sensitive functions until or unless the employee successfully completes the return-to-duty process of Subpart O of this part.
- (e) As an employer who receives a drug test result indicating that the employee's specimen was dilute, take action as provided in §40.197.
- (f) As an employer who receives a drug test result indicating that the employee's urine specimen test was cancelled because it was invalid and that a second collection must take place under direct observation—
 - (1) You must immediately direct the employee to provide a new specimen under direct observation.
 - (2) You must not attach consequences to the finding that the test was invalid other than collecting a new specimen under direct observation.
 - (3) You must not give any advance notice of this test requirement to the employee.
 - (4) You must instruct the collector to note on the CCF the same reason (*e.g.*, random test, post-accident test) and DOT Agency (*e.g.*, check DOT and FMCSA) as for the original collection.
 - (5) You must ensure that the collector conducts the collection under direct observation.

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- (g) As an employer who receives a cancelled test result when a negative result is required (*e.g.*, pre-employment, return-to-duty, or follow-up test), you must direct the employee to provide another specimen immediately.
- (h) As an employer, you may also be required to take additional actions required by DOT agency regulations (*e.g.*, FAA rules require some positive drug tests to be reported to the Federal Air Surgeon).
- (i) As an employer, you must not alter a drug or alcohol test result transmitted to you by an MRO, BAT, or C/TPA.

[65 FR 79526, Dec. 19, 2000, as amended at 71 FR 49384, Aug. 23, 2006; 73 FR 35970, June 25, 2008; 75 FR 59107, Sept. 27, 2010]

§40.25 Must an employer check on the drug and alcohol testing record of employees it is intending to use to perform safety-sensitive duties?

- (a) Yes, as an employer, you must, after obtaining an employee's written consent, request the information about the employee listed in paragraph (b) of this section. This requirement applies only to employees seeking to begin performing safety-sensitive duties for you for the first time (*i.e.*, a new hire, an employee transfers into a safety-sensitive position). If the employee refuses to provide this written consent, you must not permit the employee to perform safety-sensitive functions.
- (b) You must request the information listed in this paragraph (b) from DOT-regulated employers who have employed the employee during any period during the two years before the date of the employee's application or transfer:
 - (1) Alcohol tests with a result of 0.04 or higher alcohol concentration;
 - (2) Verified positive drug tests;
 - (3) Refusals to be tested (including verified adulterated or substituted drug test results);
 - (4) Other violations of DOT agency drug and alcohol testing regulations; and
 - (5) With respect to any employee who violated a DOT drug and alcohol regulation, documentation of the employee's successful completion of DOT return-to-duty requirements (including follow-up tests). If the previous employer does not have information about the return-to-duty process (*e.g.*, an employer who did not hire an employee who tested positive on a pre-employment test), you must seek to obtain this information from the employee.
- (c) The information obtained from a previous employer includes any drug or alcohol test information obtained from previous employers under this section or other applicable DOT agency regulations.
- (d) If feasible, you must obtain and review this information before the employee first performs safety-sensitive functions. If this is not feasible, you must obtain and review the information as soon as possible. However, you must not permit the employee to perform safety-sensitive functions after 30 days from the date on which the employee first performed safety-sensitive functions, unless you have obtained or made and documented a good faith effort to obtain this information.
- (e) If you obtain information that the employee has violated a DOT agency drug and alcohol regulation, you must not use the employee to perform safety-sensitive functions unless you also obtain information that

the employee has subsequently complied with the return-to-duty requirements of Subpart O of this part and DOT agency drug and alcohol regulations.

- (f) You must provide to each of the employers from whom you request information under paragraph (b) of this section written consent for the release of the information cited in paragraph (a) of this section.
- (g) The release of information under this section must be in any written form (*e.g.*, fax, e-mail, letter) that ensures confidentiality. As the previous employer, you must maintain a written record of the information released, including the date, the party to whom it was released, and a summary of the information provided.
- (h) If you are an employer from whom information is requested under paragraph (b) of this section, you must, after reviewing the employee's specific, written consent, immediately release the requested information to the employer making the inquiry.
- (i) As the employer requesting the information required under this section, you must maintain a written, confidential record of the information you obtain or of the good faith efforts you made to obtain the information. You must retain this information for three years from the date of the employee's first performance of safety-sensitive duties for you.
- (j) As the employer, you must also ask the employee whether he or she has tested positive, or refused to test, on any pre-employment drug or alcohol test administered by an employer to which the employee applied for, but did not obtain, safety-sensitive transportation work covered by DOT agency drug and alcohol testing rules during the past two years. If the employee admits that he or she had a positive test or a refusal to test, you must not use the employee to perform safety-sensitive functions for you, until and unless the employee documents successful completion of the return-to-duty process (see paragraphs (b)(5) and (e) of this section).

§40.26 What form must an employer use to report Management Information System (MIS) data to a DOT agency?

As an employer, when you are required to report MIS data to a DOT agency, you must use the form and instructions at appendix H to part 40. You must submit the MIS report in accordance with rule requirements (*e.g.*, dates for submission; selection of companies required to submit, and method of reporting) established by the DOT agency regulating your operation.

[68 FR 43952, July 25, 2003]

§40.27 May an employer require an employee to sign a consent or release in connection with the DOT drug and alcohol testing program?

No, as an employer, you must not require an employee to sign a consent, release, waiver of liability, or indemnification agreement with respect to any part of the drug or alcohol testing process covered by this part (including, but not limited to, collections, laboratory testing, MRO and SAP services).

[66 FR 41950, Aug. 9, 2001]

§40.29 Where is other information on employer responsibilities found in this regulation?

You can find other information on the responsibilities of employers in the following sections of this part:

§40.3—Definition.

§40.35—Information about DERs that employers must provide collectors.

§40.45—Modifying CCFs, Use of foreign-language CCFs.

§40.47—Use of non-Federal forms for DOT tests or Federal CCFs for non-DOT tests.

§40.67—Requirements for direct observation.

§§40.103-40.105—Blind specimen requirements.

§40.173—Responsibility to ensure test of split specimen.

§40.193—Action in “shy bladder” situations.

§40.197—Actions following report of a dilute specimen.

§40.207—Actions following a report of a cancelled drug test.

§40.209—Actions following and consequences of non-fatal flaws in drug tests.

§40.215—Information about DERs that employers must provide BATs and STTs.

§40.225—Modifying ATFs; use of foreign-language ATFs.

§40.227—Use of non-DOT forms for DOT tests or DOT ATFs for non-DOT tests.

§40.235 (c) and (d)—responsibility to follow instructions for ASDs.

§40.255 (b)—receipt and storage of alcohol test information.

§40.265 (c)-(e)—actions in “shy lung” situations.

§40.267—Cancellation of alcohol tests.

§40.271—Actions in “correctable flaw” situations in alcohol tests.

§40.273—Actions following cancelled tests in alcohol tests.

§40.275—Actions in “non-fatal flaw” situations in alcohol tests.

§§40.287-40.289—Responsibilities concerning SAP services.

§§40.295-40.297—Prohibition on seeking second SAP evaluation or changing SAP recommendation.

§40.303—Responsibilities concerning aftercare recommendations.

§40.305—Responsibilities concerning return-to-duty decision.

§40.309—Responsibilities concerning follow-up tests.

§40.321—General confidentiality requirement.

§40.323—Release of confidential information in litigation.

§40.331—Other circumstances for the release of confidential information.

§40.333—Record retention requirements.

§40.345—Choice of who reports drug testing information to employers.

[65 FR 79526, Dec. 19, 2000. Redesignated at 66 FR 41950, Aug. 9, 2001]

DRAFT

Subpart C - Urine Collection Personnel

§40.31 Who may collect urine specimens for DOT drug testing?

- (a) Collectors meeting the requirements of this subpart are the only persons authorized to collect urine specimens for DOT drug testing.
- (b) A collector must meet training requirements of §40.33.
- (c) As the immediate supervisor of an employee being tested, you may not act as the collector when that employee is tested, unless no other collector is available and you are permitted to do so under DOT agency drug and alcohol regulations.
- (d) You must not act as the collector for the employee being tested if you work for a HHS-certified laboratory (e.g., as a technician or accessioner) and could link the employee with a urine specimen, drug testing result, or laboratory report.

§40.33 What training requirements must a collector meet?

To be permitted to act as a collector in the DOT drug testing program, you must meet each of the requirements of this section:

- (a) *Basic information.* You must be knowledgeable about this part, the current “DOT Urine Specimen Collection Procedures Guidelines,” and DOT agency regulations applicable to the employers for whom you perform collections, and you must keep current on any changes to these materials. The DOT Urine Specimen Collection Procedures Guidelines document is available from ODAPC (Department of Transportation, 1200 New Jersey Avenue, SE, Washington DC, 20590, 202-366-3784, or on the ODAPC web site (<http://www.dot.gov/ost/dapc>)).
- (b) *Qualification training.* You must receive qualification training meeting the requirements of this paragraph. Qualification training must provide instruction on the following subjects:
 - (1) All steps necessary to complete a collection correctly and the proper completion and transmission of the CCF;
 - (2) “Problem” collections (e.g., situations like “shy bladder” and attempts to tamper with a specimen);
 - (3) Fatal flaws, correctable flaws, and how to correct problems in collections; and
 - (4) The collector's responsibility for maintaining the integrity of the collection process, ensuring the privacy of employees being tested, ensuring the security of the specimen, and avoiding conduct or statements that could be viewed as offensive or inappropriate;
- (c) *Initial Proficiency Demonstration.* Following your completion of qualification training under paragraph (b) of this section, you must demonstrate proficiency in collections under this part by completing five consecutive error-free mock collections.
 - (1) The five mock collections must include two uneventful collection scenarios, one insufficient quantity of urine scenario, one temperature out of range scenario, and one scenario in which the employee refuses to sign the CCF and initial the specimen bottle tamper-evident seal.

- (2) Another person must monitor and evaluate your performance, in person or by a means that provides real-time observation and interaction between the instructor and trainee, and attest in writing that the mock collections are “error-free.” This person must be a qualified collector who has demonstrated necessary knowledge, skills, and abilities by—
 - (i) Regularly conducting DOT drug test collections for a period of at least a year;
 - (ii) Conducting collector training under this part for a year; or
 - (iii) Successfully completing a “train the trainer” course.
- (d) *Schedule for qualification training and initial proficiency demonstration.* The following is the schedule for qualification training and the initial proficiency demonstration you must meet:
 - (1) If you became a collector before August 1, 2001, and you have already met the requirements of paragraphs (b) and (c) of this section, you do not have to meet them again.
 - (2) If you became a collector before August 1, 2001, and have yet to meet the requirements of paragraphs (b) and (c) of this section, you must do so no later than January 31, 2003.
 - (3) If you become a collector on or after August 1, 2001, you must meet the requirements of paragraphs (b) and (c) of this section before you begin to perform collector functions.
- (e) *Refresher training.* No less frequently than every five years from the date on which you satisfactorily complete the requirements of paragraphs (b) and (c) of this section, you must complete refresher training that meets all the requirements of paragraphs (b) and (c) of this section.
- (f) *Error Correction Training.* If you make a mistake in the collection process that causes a test to be cancelled (*i.e.*, a fatal or uncorrected flaw), you must undergo error correction training. This training must occur within 30 days of the date you are notified of the error that led to the need for retraining.
 - (1) Error correction training must be provided and your proficiency documented in writing by a person who meets the requirements of paragraph (c)(2) of this section.
 - (2) Error correction training is required to cover only the subject matter area(s) in which the error that caused the test to be cancelled occurred.
 - (3) As part of the error correction training, you must demonstrate your proficiency in the collection procedures of this part by completing three consecutive error-free mock collections. The mock collections must include one uneventful scenario and two scenarios related to the area(s) in which your error(s) occurred. The person providing the training must monitor and evaluate your performance and attest in writing that the mock collections were “error-free.”
- (g) *Documentation.* You must maintain documentation showing that you currently meet all requirements of this section. You must provide this documentation on request to DOT agency representatives and to employers and C/TPAs who are using or negotiating to use your services.

[65 FR 79526, Dec. 19, 2000; 66 FR 3885, Jan. 17, 2001, as amended at 66 FR 41950, Aug. 9, 2001]

§40.35 What information about the DER must employers provide to collectors?

As an employer, you must provide to collectors the name and telephone number of the appropriate DER (and C/TPA, where applicable) to contact about any problems or issues that may arise during the testing process.

§40.37 Where is other information on the role of collectors found in this regulation?

You can find other information on the role and functions of collectors in the following sections of this part:

§40.3—Definition.

§40.43—Steps to prepare and secure collection sites.

§§40.45-40.47—Use of CCF.

§§40.49-40.51—Use of collection kit and shipping materials.

§§40.61-40.63—Preliminary steps in collections.

§40.65—Role in checking specimens.

§40.67—Role in directly observed collections.

§40.69—Role in monitored collections.

§40.71—Role in split specimen collections.

§40.73—Chain of custody completion and finishing the collection process.

§40.103—Processing blind specimens.

§40.191—Action in case of refusals to take test.

§40.193—Action in “shy bladder” situations.

§40.199-40.205—Collector errors in tests, effects, and means of correction.

Subpart D - Collection Sites, Forms, Equipment and Supplies Used in DOT Urine Collections

§40.41 Where does a urine collection for a DOT drug test take place?

- (a) A urine collection for a DOT drug test must take place in a collection site meeting the requirements of this section.
- (b) If you are operating a collection site, you must ensure that it meets the security requirements of §40.43.
- (c) If you are operating a collection site, you must have all necessary personnel, materials, equipment, facilities and supervision to provide for the collection, temporary storage, and shipping of urine specimens to a laboratory, and a suitable clean surface for writing.
- (d) Your collection site must include a facility for urination described in either paragraph (e) or paragraph (f) of this section.
- (e) The first, and preferred, type of facility for urination that a collection site may include is a single-toilet room, having a full-length privacy door, within which urination can occur.
 - (1) No one but the employee may be present in the room during the collection, except for the observer in the event of a directly observed collection.
 - (2) You must have a source of water for washing hands, that, if practicable, should be external to the closed room where urination occurs. If an external source is not available, you may meet this requirement by securing all sources of water and other substances that could be used for adulteration and substitution (*e.g.*, water faucets, soap dispensers) and providing moist towelettes outside the closed room.
- (f) The second type of facility for urination that a collection site may include is a multistall restroom.
 - (1) Such a site must provide substantial visual privacy (*e.g.*, a toilet stall with a partial-length door) and meet all other applicable requirements of this section.
 - (2) If you use a multi-stall restroom, you must either—
 - (i) Secure all sources of water and other substances that could be used for adulteration and substitution (*e.g.*, water faucets, soap dispensers) and place bluing agent in all toilets or secure the toilets to prevent access; or
 - (ii) Conduct all collections in the facility as monitored collections (see §40.69 for procedures). This is the only circumstance in which you may conduct a monitored collection.
 - (3) No one but the employee may be present in the multistall restroom during the collection, except for the monitor in the event of a monitored collection or the observer in the event of a directly observed collection.
- (g) A collection site may be in a medical facility, a mobile facility (*e.g.*, a van), a dedicated collection facility, or any other location meeting the requirements of this section.

§40.43 What steps must operators of collection sites take to protect the security and integrity of urine collections?

- (a) Collectors and operators of collection sites must take the steps listed in this section to prevent unauthorized access that could compromise the integrity of collections.
- (b) As a collector, you must do the following before each collection to deter tampering with specimens:
 - (1) Secure any water sources or otherwise make them unavailable to employees (*e.g.*, turn off water inlet, tape handles to prevent opening faucets);
 - (2) Ensure that the water in the toilet is blue;
 - (3) Ensure that no soap, disinfectants, cleaning agents, or other possible adulterants are present;
 - (4) Inspect the site to ensure that no foreign or unauthorized substances are present;
 - (5) Tape or otherwise secure shut any movable toilet tank top, or put bluing in the tank;
 - (6) Ensure that undetected access (*e.g.*, through a door not in your view) is not possible;
 - (7) Secure areas and items (*e.g.*, ledges, trash receptacles, paper towel holders, under-sink areas) that appear suitable for concealing contaminants; and
 - (8) Recheck items in paragraphs (b)(1) through (7) of this section following each collection to ensure the site's continued integrity.
- (c) If the collection site uses a facility normally used for other purposes, like a public rest room or hospital examining room, you must, as a collector, also ensure before the collection that:
 - (1) Access to collection materials and specimens is effectively restricted; and
 - (2) The facility is secured against access during the procedure to ensure privacy to the employee and prevent distraction of the collector. Limited-access signs must be posted.
- (d) As a collector, you must take the following additional steps to ensure security during the collection process:
 - (1) To avoid distraction that could compromise security, you are limited to conducting a collection for only one employee at a time. However, during the time one employee is in the period for drinking fluids in a “shy bladder” situation (see §40.193(b)), you may conduct a collection for another employee.
 - (2) To the greatest extent you can, keep an employee's collection container within view of both you and the employee between the time the employee has urinated and the specimen is sealed.
 - (3) Ensure you are the only person in addition to the employee who handles the specimen before it is poured into the bottles and sealed with tamper-evident seals.
 - (4) In the time between when the employee gives you the specimen and when you seal the specimen, remain within the collection site.
 - (5) Maintain personal control over each specimen and CCF throughout the collection process.
- (e) If you are operating a collection site, you must implement a policy and procedures to prevent unauthorized personnel from entering any part of the site in which urine specimens are collected or stored.

- (1) Only employees being tested, collectors and other collection site workers, DERs, employee and employer representatives authorized by the employer (*e.g.*, employer policy, collective bargaining agreement), and DOT agency representatives are authorized persons for purposes of this paragraph (e).
 - (2) Except for the observer in a directly observed collection or the monitor in the case of a monitored collection, you must not permit anyone to enter the urination facility in which employees provide specimens.
 - (3) You must ensure that all authorized persons are under the supervision of a collector at all times when permitted into the site.
 - (4) You or the collector may remove any person who obstructs, interferes with, or causes a delay in the collection process.
- (f) If you are operating a collection site, you must minimize the number of persons handling specimens.

§40.45 What form is used to document a DOT urine collection?

- (a) The Federal Drug Testing Custody and Control Form (CCF) must be used to document every urine collection required by the DOT drug testing program. You may view this form on the Department's Web site (<http://www.dot.gov/odapc>) or the HHS Web site (<http://www.workplace.samhsa.gov>).
- (b) You must not use a non-Federal form or an expired CCF to conduct a DOT urine collection. As a laboratory, C/TPA or other party that provides CCFs to employers, collection sites, or other customers, you must not provide copies of an expired CCF to these participants. You must also affirmatively notify these participants that they must not use an expired CCF (*e.g.*, that after November 30, 2011, they must not use an expired CCF for DOT urine collections).
- (c) As a participant in the DOT drug testing program, you are not permitted to modify or revise the CCF except as follows:
 - (1) You may include, in the area outside the border of the form, other information needed for billing or other purposes necessary to the collection process.
 - (2) The CCF must include the names, addresses, telephone numbers and fax numbers of the employer and the MRO, which may be preprinted, typed, or handwritten. The MRO information must include the specific physician's name and address, as opposed to only a generic clinic, health care organization, or company name. This information is required, and it is prohibited for an employer, collector, service agent or any other party to omit it. In addition, a C/TPA's name, address, fax number, and telephone number may be included, but is not required. The employer may use a C/TPA's address in place of its own, but must continue to include its name, telephone number, and fax number.
 - (3) As an employer, in Step 1-D of the CCF you may preprint the box for the DOT Agency under whose authority the test will occur.
 - (4) As a collector, you may use a CCF with your name, address, telephone number, and fax number preprinted, but under no circumstances may you sign the form before the collection event.
 - (5) When using an electronic CCF, you must establish adequate confidentiality and security measures to ensure that confidential employee records are not available to unauthorized persons. This includes

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protecting the physical security of records, access controls, and computer security measures to safeguard confidential data in electronic form.

- (d) Under no circumstances may the CCF transmit personal identifying information about an employee (other than a social security number (SSN) or other employee identification (ID) number) to a laboratory.
- (e) As an employer, you may use an equivalent foreign-language version of the CCF approved by ODAPC. You may use such a non-English language form only in a situation where both the employee and collector understand and can use the form in that language.
- (f) An employer who uses an electronic CCF must ensure that the collection site, the primary and split laboratories, and MRO have compatible systems, and that the employee and any other program participants in the testing process will receive a legible copy of the CCF.

[65 FR 79526, Dec. 19, 2000, as amended at 66 FR 41950, Aug. 9, 2001; 75 FR 59107, Sept. 27, 2010; 76 FR 59577, Sept. 27, 2011; 80 FR 19553, Apr. 13, 2015]

§40.47 May employers use the CCF for non-Federal collections or non-Federal forms for DOT collections?

- (a) No, as an employer, you are prohibited from using the CCF for non-Federal urine collections. You are also prohibited from using non-Federal forms for DOT urine collections. Doing either subjects you to enforcement action under DOT agency regulations.
- (b) (1) In the rare case where the collector, either by mistake or as the only means to conduct a test under difficult circumstances (*e.g.*, post-accident or reasonable suspicion test with insufficient time to obtain the CCF), uses a non-Federal form for a DOT collection, the use of a non-Federal form does not present a reason for the laboratory to reject the specimen for testing or for an MRO to cancel the result.
(2) The use of the non-Federal form is a “correctable flaw.” As an MRO, to correct the problem you must follow the procedures of §40.205(b)(2).

[65 FR 79526, Dec. 19, 2000, as amended at 66 FR 41950, Aug. 9, 2001]

§40.49 What materials are used to collect urine specimens?

For each DOT drug test, you must use a collection kit meeting the requirements of Appendix A of this part.

§40.51 What materials are used to send urine specimens to the laboratory?

- (a) Except as provided in paragraph (b) of this section, you must use a shipping container that adequately protects the specimen bottles from shipment damage in the transport of specimens from the collection site to the laboratory.
- (b) You are not required to use a shipping container if a laboratory courier hand-delivers the specimens from the collection site to the laboratory.

Subpart E - Urine Specimen Collections

§40.61 What are the preliminary steps in the collection process?

As the collector, you must take the following steps before actually beginning a collection:

(a) When a specific time for an employee's test has been scheduled, or the collection site is at the employee's work site, and the employee does not appear at the collection site at the scheduled time, contact the DER to determine the appropriate interval within which the DER has determined the employee is authorized to arrive. If the employee's arrival is delayed beyond that time, you must notify the DER that the employee has not reported for testing. In a situation where a C/TPA has notified an owner/operator or other individual employee to report for testing and the employee does not appear, the C/TPA must notify the employee that he or she has refused to test (see §40.191(a)(1)).

(b) Ensure that, when the employee enters the collection site, you begin the testing process without undue delay. For example, you must not wait because the employee says he or she is not ready or is unable to urinate or because an authorized employer or employee representative is delayed in arriving.

(1) If the employee is also going to take a DOT alcohol test, you must, to the greatest extent practicable, ensure that the alcohol test is completed before the urine collection process begins.

Example to paragraph (b)(1): An employee enters the test site for both a drug and an alcohol test.

Normally, the collector would wait until the BAT had completed the alcohol test process before beginning the drug test process. However, there are some situations in which an exception to this normal practice would be reasonable. One such situation might be if several people were waiting for the BAT to conduct alcohol tests, but a drug testing collector in the same facility were free. Someone waiting might be able to complete a drug test without unduly delaying his or her alcohol test.

Collectors and BATs should work together, however, to ensure that post-accident and reasonable suspicion alcohol tests happen as soon as possible (*e.g.*, by moving the employee to the head of the line for alcohol tests).

(2) If the employee needs medical attention (*e.g.*, an injured employee in an emergency medical facility who is required to have a post-accident test), do not delay this treatment to collect a specimen.

(3) You must not collect, by catheterization or other means, urine from an unconscious employee to conduct a drug test under this part. Nor may you catheterize a conscious employee. However, you must inform an employee who normally voids through self-catheterization that the employee is required to provide a specimen in that manner.

(4) If, as an employee, you normally void through self-catheterization, and decline to do so, this constitutes a refusal to test.

(c) Require the employee to provide positive identification. You must see a photo ID issued by the employer (other than in the case of an owner-operator or other self-employed individual) or a Federal, state, or local government (*e.g.*, a driver's license). You may not accept faxes or photocopies of identification. Positive identification by an employer representative (not a co-worker or another employee being tested) is also acceptable. If the employee cannot produce positive identification, you must contact a DER to verify the identity of the employee.

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- (d) If the employee asks, provide your identification to the employee. Your identification must include your name and your employer's name, but does not have to include your picture, address, or telephone number.
- (e) Explain the basic collection procedure to the employee, including showing the employee the instructions on the back of the CCF.
- (f) Direct the employee to remove outer clothing (*e.g.*, coveralls, jacket, coat, hat) that could be used to conceal items or substances that could be used to tamper with a specimen. You must also direct the employee to leave these garments and any briefcase, purse, or other personal belongings with you or in a mutually agreeable location. You must advise the employee that failure to comply with your directions constitutes a refusal to test.
 - (1) If the employee asks for a receipt for any belongings left with you, you must provide one.
 - (2) You must allow the employee to keep his or her wallet.
 - (3) You must not ask the employee to remove other clothing (*e.g.*, shirts, pants, dresses, underwear), to remove all clothing, or to change into a hospital or examination gown (unless the urine collection is being accomplished simultaneously with a DOT agency-authorized medical examination).
 - (4) You must direct the employee to empty his or her pockets and display the items in them to ensure that no items are present which could be used to adulterate the specimen. If nothing is there that can be used to adulterate a specimen, the employee can place the items back into his or her pockets. As the employee, you must allow the collector to make this observation.
 - (5) If, in your duties under paragraph (f)(4) of this section, you find any material that could be used to tamper with a specimen, you must:
 - (i) Determine if the material appears to be brought to the collection site with the intent to alter the specimen, and, if it is, conduct a directly observed collection using direct observation procedures (see §40.67); or
 - (ii) Determine if the material appears to be inadvertently brought to the collection site (*e.g.*, eye drops), secure and maintain it until the collection process is completed and conduct a normal (*i.e.*, unobserved) collection.
- (g) You must instruct the employee not to list medications that he or she is currently taking on the CCF. (The employee may make notes of medications on the back of the employee copy of the form for his or her own convenience, but these notes must not be transmitted to anyone else.)

§40.63 What steps does the collector take in the collection process before the employee provides a urine specimen?

As the collector, you must take the following steps before the employee provides the urine specimen:

- (a) Complete Step 1 of the CCF.
- (b) Instruct the employee to wash and dry his or her hands at this time. You must tell the employee not to wash his or her hands again until after delivering the specimen to you. You must not give the employee any further access to water or other materials that could be used to adulterate or dilute a specimen.

- (c) Select, or allow the employee to select, an individually wrapped or sealed collection container from collection kit materials. Either you or the employee, with both of you present, must unwrap or break the seal of the collection container. You must not unwrap or break the seal on any specimen bottle at this time. You must not allow the employee to take anything from the collection kit into the room used for urination except the collection container.
- (d) Direct the employee to go into the room used for urination, provide a specimen of at least 45 mL, not flush the toilet, and return to you with the specimen as soon as the employee has completed the void.
 - (1) Except in the case of an observed or a monitored collection (see §§40.67 and 40.69), neither you nor anyone else may go into the room with the employee.
 - (2) As the collector, you may set a reasonable time limit for voiding.
- (e) You must pay careful attention to the employee during the entire collection process to note any conduct that clearly indicates an attempt to tamper with a specimen (*e.g.*, substitute urine in plain view or an attempt to bring into the collection site an adulterant or urine substitute). If you detect such conduct, you must require that a collection take place immediately under direct observation (*see* §40.67) and complete Step 2 by noting the conduct in the “Remarks” line of the CCF and the fact that the collection was observed by checking the “Observed” box. You must also, as soon as possible, inform the DER and collection site supervisor that a collection took place under direct observation and the reason for doing so.

[65 FR 79526, Dec. 19, 2000, as amended at 75 FR 59107, Sept. 27, 2010]

§40.65 What does the collector check for when the employee presents a specimen?

As a collector, you must check the following when the employee gives the collection container to you:

- (a) **Sufficiency of specimen.** You must check to ensure that the specimen contains at least 45 mL of urine.
 - (1) If it does not, you must follow “shy bladder” procedures (*see* §40.193(b)).
 - (2) When you follow “shy bladder” procedures, you must discard the original specimen, unless another problem (*i.e.*, temperature out of range, signs of tampering) also exists.
 - (3) You are never permitted to combine urine collected from separate voids to create a specimen.
 - (4) You must discard any excess urine.
- (b) **Temperature.** You must check the temperature of the specimen no later than four minutes after the employee has given you the specimen.
 - (1) The acceptable temperature range is 32-38 °C/90-100 °F.
 - (2) You must determine the temperature of the specimen by reading the temperature strip attached to the collection container.
 - (3) If the specimen temperature is within the acceptable range, you must mark the “Yes” box on the CCF (Step 2).
 - (4) If the specimen temperature is outside the acceptable range, you must mark the “No” box and enter in the “Remarks” line (Step 2) your findings about the temperature.

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- (5) If the specimen temperature is outside the acceptable range, you must immediately conduct a new collection using direct observation procedures (see §40.67).
- (6) In a case where a specimen is collected under direct observation because of the temperature being out of range, you must process both the original specimen and the specimen collected using direct observation and send the two sets of specimens to the laboratory. This is true even in a case in which the original specimen has insufficient volume but the temperature is out of range. You must also, as soon as possible, inform the DER and collection site supervisor that a collection took place under direct observation and the reason for doing so.
- (7) In a case where the employee refuses to provide another specimen (see §40.191(a)(3)) or refuses to provide another specimen under direct observation (see §40.191(a)(4)), you must notify the DER. As soon as you have notified the DER, you must discard any specimen the employee has provided previously during the collection procedure.
- (c) **Signs of tampering.** You must inspect the specimen for unusual color, presence of foreign objects or material, or other signs of tampering (*e.g.*, if you notice any unusual odor).
 - (1) If it is apparent from this inspection that the employee has tampered with the specimen (*e.g.*, blue dye in the specimen, excessive foaming when shaken, smell of bleach), you must immediately conduct a new collection using direct observation procedures (see §40.67).
 - (2) In a case where a specimen is collected under direct observation because of showing signs of tampering, you must process both the original specimen and the specimen collected using direct observation and send the two sets of specimens to the laboratory. This is true even in a case in which the original specimen has insufficient volume but it shows signs of tampering. You must also, as soon as possible, inform the DER and collection site supervisor that a collection took place under direct observation and the reason for doing so.
 - (3) In a case where the employee refuses to provide a specimen under direct observation (see §40.191(a)(4)), you must discard any specimen the employee provided previously during the collection procedure. Then you must notify the DER as soon as practicable.

[65 FR 79526, Dec. 19, 2000, as amended at 66 FR 41950, Aug. 9, 2001]

§40.67 When and how is a directly observed collection conducted?

- (a) As an employer, you must direct an immediate collection under direct observation with no advance notice to the employee, if:
 - (1) The laboratory reported to the MRO that a specimen is invalid, and the MRO reported to you that there was not an adequate medical explanation for the result;
 - (2) The MRO reported to you that the original positive, adulterated, or substituted result had to be cancelled because the test of the split specimen could not be performed; or
 - (3) The laboratory reported to the MRO that the specimen was negative-dilute with a creatinine concentration greater than or equal to 2 mg/dL but less than or equal to 5 mg/dL, and the MRO reported the specimen to you as negative-dilute and that a second collection must take place under direct observation (see §40.197(b)(1)).

- (b) As an employer, you must direct a collection under direct observation of an employee if the drug test is a return-to-duty test or a follow-up test.
- (c) As a collector, you must immediately conduct a collection under direct observation if:
 - (1) You are directed by the DER to do so (see paragraphs (a) and (b) of this section); or
 - (2) You observed materials brought to the collection site or the employee's conduct clearly indicates an attempt to tamper with a specimen (see §§40.61(f)(5)(i) and 40.63(e)); or
 - (3) The temperature on the original specimen was out of range (see §40.65(b)(5)); or (4) The original specimen appeared to have been tampered with (see §40.65(c)(1)).
- (d)(1) As the employer, you must explain to the employee the reason for a directly observed collection under paragraph (a) or (b) of this section.
 - (2) As the collector, you must explain to the employee the reason, if known, under this part for a directly observed collection under paragraphs (c)(1) through (3) of this section.
- (e) As the collector, you must complete a new CCF for the directly observed collection.
 - (1) You must mark the “reason for test” block (Step 1) the same as for the first collection.
 - (2) You must check the “Observed, (Enter Remark)” box and enter the reason (see §40.67(b)) in the “Remarks” line (Step 2).
- (f) In a case where two sets of specimens are being sent to the laboratory because of suspected tampering with the specimen at the collection site, enter on the “Remarks” line of the CCF (Step 2) for each specimen a notation to this effect (*e.g.*, collection 1 of 2, or 2 of 2) and the specimen ID number of the other specimen.
- (g) As the collector, you must ensure that the observer is the same gender as the employee. You must never permit an opposite gender person to act as the observer. The observer can be a different person from the collector and need not be a qualified collector.
- (h) As the collector, if someone else is to observe the collection (*e.g.*, in order to ensure a same gender observer), you must verbally instruct that person to follow procedures at paragraphs (i) and (j) of this section. If you, the collector, are the observer, you too must follow these procedures.
- (i) As the observer, you must request the employee to raise his or her shirt, blouse, or dress/skirt, as appropriate, above the waist; and lower clothing and underpants to show you, by turning around, that they do not have a prosthetic device. After you have determined that the employee does not have such a device, you may permit the employee to return clothing to its proper position for observed urination.
- (j) As the observer, you must watch the employee urinate into the collection container. Specifically, you are to watch the urine go from the employee's body into the collection container.
- (k) As the observer but not the collector, you must not take the collection container from the employee, but you must observe the specimen as the employee takes it to the collector.
- (l) As the collector, when someone else has acted as the observer, you must include the observer's name in the “Remarks” line of the CCF (Step 2).
- (m) As the employee, if you decline to allow a directly observed collection required or permitted under this section to occur, this is a refusal to test.

- (n) As the collector, when you learn that a directly observed collection should have been collected but was not, you must inform the employer that it must direct the employee to have an immediate recollection under direct observation.

[65 FR 79526, Dec. 19, 2000, as amended at 66 FR 41950, Aug. 9, 2001; 68 FR 31626, May 28, 2003; 69 FR 64867, Nov. 9, 2004; 73 FR 35970, June 25, 2008; 73 FR 50223, Aug. 26, 2008; 73 FR 62910, Oct. 22, 2008; 73 FR 70284, Nov. 20, 2008; 74 FR 37952, July 30, 2009]

§40.69 How is a monitored collection conducted?

- (a) As the collector, you must secure the room being used for the monitored collection so that no one except the employee and the monitor can enter it until after the collection has been completed.
- (b) As the collector, you must ensure that the monitor is the same gender as the employee, unless the monitor is a medical professional (e.g., nurse, doctor, physician's assistant, technologist, or technician licensed or certified to practice in the jurisdiction in which the collection takes place). The monitor can be a different person from the collector and need not be a qualified collector.
- (c) As the collector, if someone else is to monitor the collection (e.g., in order to ensure a same-gender monitor), you must verbally instruct that person to follow the procedures of paragraphs (d) and (e) of this section. If you, the collector, are the monitor, you must follow these procedures.
- (d) As the monitor, you must not watch the employee urinate into the collection container. If you hear sounds or make other observations indicating an attempt to tamper with a specimen, there must be an additional collection under direct observation (see §§40.63(e), 40.65(c), and 40.67(b)).
- (e) As the monitor, you must ensure that the employee takes the collection container directly to the collector as soon as the employee has exited the enclosure.
- (f) As the collector, when someone else has acted as the monitor, you must note that person's name in the "Remarks" line of the CCF (Step 2).
- (g) As the employee being tested, if you decline to permit a collection authorized under this section to be monitored, it is a refusal to test.

[65 FR 79526, Dec. 19, 2000, as amended at 66 FR 41951, Aug. 9, 2001]

§40.71 How does the collector prepare the specimens?

- (a) All collections under DOT agency drug testing regulations must be split specimen collections.
- (b) As the collector, you must take the following steps, in order, after the employee brings the urine specimen to you. You must take these steps in the presence of the employee.
 - (1) Check the box on the CCF (Step 2) indicating that this was a split specimen collection.
 - (2) You, not the employee, must first pour at least 30 mL of urine from the collection container into one specimen bottle, to be used for the primary specimen.
 - (3) You, not the employee, must then pour at least 15 mL of urine from the collection container into the second specimen bottle to be used for the split specimen.

- (4) You, not the employee, must place and secure (*i.e.*, tighten or snap) the lids/caps on the bottles.
- (5) You, not the employee, must seal the bottles by placing the tamper-evident bottle seals over the bottle caps/lids and down the sides of the bottles.
- (6) You, not the employee, must then write the date on the tamper-evident bottle seals.
- (7) You must then ensure that the employee initials the tamper-evident bottle seals for the purpose of certifying that the bottles contain the specimens he or she provided. If the employee fails or refuses to do so, you must note this in the “Remarks” line of the CCF (Step 2) and complete the collection process.
- (8) You must discard any urine left over in the collection container after both specimen bottles have been appropriately filled and sealed. There is one exception to this requirement: you may use excess urine to conduct clinical tests (e.g., protein, glucose) if the collection was conducted in conjunction with a physical examination required by a DOT agency regulation. Neither you nor anyone else may conduct further testing (such as adulteration testing) on this excess urine and the employee has no legal right to demand that the excess urine be turned over to the employee.

[65 FR 79526, Dec. 19, 2000, as amended at 66 FR 41951, Aug. 9, 2001]

§40.73 How is the collection process completed?

- (a) As the collector, when using the paper CCF, you must do the following things to complete the collection process. You must complete the steps called for in paragraphs (a)(1) through (7) of this section in the employee's presence.
 - (1) Direct the employee to read and sign the certification statement on Copy 2 (Step 5) of the CCF and provide date of birth, printed name, and day and evening contact telephone numbers. If the employee refuses to sign the CCF or to provide date of birth, printed name, or telephone numbers, you must note this in the “Remarks” line (Step 2) of the CCF, and complete the collection. If the employee refuses to fill out any information, you must, as a minimum, print the employee's name in the appropriate place.
 - (2) Complete the chain of custody on the CCF (Step 4) by printing your name (note: you may pre-print your name), recording the time and date of the collection, signing the statement, and entering the name of the delivery service transferring the specimen to the laboratory,
 - (3) Ensure that all copies of the CCF are legible and complete.
 - (4) Remove Copy 5 of the CCF and give it to the employee.
 - (5) Place the specimen bottles and Copy 1 of the CCF in the appropriate pouches of the plastic bag.
 - (6) Secure both pouches of the plastic bag.
 - (7) Advise the employee that he or she may leave the collection site.
 - (8) To prepare the sealed plastic bag containing the specimens and CCF for shipment you must:
 - (i) Place the sealed plastic bag in a shipping container (*e.g.*, standard courier box) designed to minimize the possibility of damage during shipment. (More than one sealed plastic bag can be placed into a single shipping container if you are doing multiple collections.)
 - (ii) Seal the container as appropriate.

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- (iii) If a laboratory courier hand-delivers the specimens from the collection site to the laboratory, prepare the sealed plastic bag for shipment as directed by the courier service.
- (9) Send Copy 2 of the CCF to the MRO and Copy 4 to the DER. You must fax or otherwise transmit these copies to the MRO and DER within 24 hours or during the next business day. Keep Copy 3 for at least 30 days, unless otherwise specified by applicable DOT agency regulations.
- (b) As a collector, when using other forms of the CCF as approved by the Office of Management and Budget, you must follow the procedures approved for that form.
- (c) As a collector or collection site, you must ensure that each specimen you collect is shipped to a laboratory as quickly as possible, but in any case, within 24 hours or during the next business day.

[65 FR 79526, Dec. 19, 2000, as amended at 71 FR 49384, Aug. 23, 2006; 80 FR 19553, Apr. 13, 2015]

DRAFT

Subpart F - Drug Testing Laboratories

§40.81 What laboratories may be used for DOT drug testing?

- (a) As a drug testing laboratory located in the U.S., you are permitted to participate in DOT drug testing only if you are certified by HHS under the National Laboratory Certification Program (NLCP) for all testing required under this part.
- (b) As a drug testing laboratory located in Canada or Mexico which is not certified by HHS under the NLCP, you are permitted to participate in DOT drug testing only if:
 - (1) The DOT, based on a written recommendation from HHS, has approved your laboratory as meeting HHS laboratory certification standards or deemed your laboratory fully equivalent to a laboratory meeting HHS laboratory certification standards for all testing required under this part; or
 - (2) The DOT, based on a written recommendation from HHS, has recognized a Canadian or Mexican certifying organization as having equivalent laboratory certification standards and procedures to those of HHS, and the Canadian or Mexican certifying organization has certified your laboratory under those equivalent standards and procedures.
- (c) As a laboratory participating in the DOT drug testing program, you must comply with the requirements of this part. You must also comply with all applicable requirements of HHS in testing DOT specimens, whether or not the HHS requirements are explicitly stated in this part.
- (d) If DOT determines that you are in noncompliance with this part, you could be subject to PIE proceedings under Subpart R of this part. If the Department issues a PIE with respect to you, you are ineligible to participate in the DOT drug testing program even if you continue to meet the requirements of paragraph (a) or (b) of this section.

§40.83 How do laboratories process incoming specimens?

As the laboratory, you must do the following when you receive a DOT specimen:

- (a) You are authorized to receive only Copy 1 of the CCF. You are not authorized to receive other copies of the CCF or any copies of the alcohol testing form.
- (b) You must comply with applicable provisions of the HHS Guidelines concerning accessioning and processing urine drug specimens.
- (c) You must inspect each specimen and CCF for the following “fatal flaws:”
 - (1) The specimen ID numbers on the specimen bottle and the CCF do not match;
 - (2) The specimen bottle seal is broken or shows evidence of tampering, unless a split specimen can be redesignated (see paragraph (h) of this section);
 - (3) The collector's printed name *and* signature are omitted from the CCF; and
 - (4) There is an insufficient amount of urine in the primary bottle for analysis, unless the specimens can be redesignated (see paragraph (h) of this section).

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- (d) When you find a specimen meeting the criteria of paragraph (c) of this section, you must document your findings and stop the testing process. Report the result in accordance with §40.97(a)(3).
- (e) You must inspect each CCF for the presence of the collector's signature on the certification statement in Step 4 of the CCF. Upon finding that the signature is omitted, document the flaw and continue the testing process.
 - (1) In such a case, you must retain the specimen for a minimum of 5 business days from the date on which you initiated action to correct the flaw.
 - (2) You must then attempt to correct the flaw by following the procedures of §40.205(b)(1).
 - (3) If the flaw is not corrected, report the result as rejected for testing in accordance with §40.97(a)(3).
- (f) If you determine that the specimen temperature was not checked and the "Remarks" line did not contain an entry regarding the temperature being outside of range, you must then attempt to correct the problem by following the procedures of §40.208.
 - (1) In such a case, you must continue your efforts to correct the problem for five business days, before you report the result.
 - (2) When you have obtained the correction, or five business days have elapsed, report the result in accordance with §40.97(a).
- (g) If you determine that a CCF that fails to meet the requirements of §40.45(a) (e.g., a non-Federal form or an expired Federal form was used for the collection), you must attempt to correct the use of the improper form by following the procedures of §40.205(b)(2).
 - (1) In such a case, you must retain the specimen for a minimum of 5 business days from the date on which you initiated action to correct the problem.
 - (2) If the problem(s) is not corrected, you must reject the test and report the result in accordance with §40.97(a)(3).
- (h) If the CCF is marked indicating that a split specimen collection was collected and if the split specimen does not accompany the primary, has leaked, or is otherwise unavailable for testing, you must still test the primary specimen and follow appropriate procedures outlined in §40.175(b) regarding the unavailability of the split specimen for testing.
 - (1) The primary specimen and the split specimen can be redesignated (*i.e.*, Bottle B is redesignated as Bottle A, and vice-versa) if:
 - (i) The primary specimen appears to have leaked out of its sealed bottle and the laboratory believes a sufficient amount of urine exists in the split specimen to conduct all appropriate primary laboratory testing; or
 - (ii) The primary specimen is labeled as Bottle B, and the split specimen as Bottle A; or
 - (iii) The laboratory opens the split specimen instead of the primary specimen, the primary specimen remains sealed, and the laboratory believes a sufficient amount of urine exists in the split specimen to conduct all appropriate primary laboratory testing; or

(iv) The primary specimen seal is broken but the split specimen remains sealed and the laboratory believes a sufficient amount of urine exists in the split specimen to conduct all appropriate primary laboratory testing.

(2) In situations outlined in paragraph (g)(1) of this section, the laboratory shall mark through the “A” and write “B,” then initial and date the change. A corresponding change shall be made to the other bottle by marking through the “B” and writing “A,” and initialing and dating the change.

(i) A notation shall be made on Copy 1 of the CCF (Step 5a) and on any laboratory internal chain of custody documents, as appropriate, for any fatal or correctable flaw.

[65 FR 79526, Dec. 19, 2000, as amended at 66 FR 41951, Aug. 9, 2001; 71 FR 49384, Aug. 23, 2006; 73 FR 35970, June 25, 2008; 75 FR 59107, Sept. 27, 2010]

§40.85 What drugs do laboratories test for?

As a laboratory, you must test for the following five drugs or classes of drugs in a DOT drug test. You must not test “DOT specimens” for any other drugs.

- (a) Marijuana metabolites.
- (b) Cocaine metabolites.
- (c) Amphetamines.
- (d) Opiate metabolites.
- (e) Phencyclidine (PCP).

§40.87 What are the cutoff concentrations for drug tests?

(a) As a laboratory, you must use the cutoff concentrations displayed in the following table for initial and confirmatory drug tests. All cutoff concentrations are expressed in nanograms per milliliter (ng/mL). The table follows:

Initial test analyte	Initial test cutoff concentration	Confirmatory test analyte	Confirmatory test cutoff concentration
Marijuana metabolites	50 ng/mL	THCA1	15 ng/mL.
Cocaine metabolites	150 ng/mL	Benzoylcegonine	100 ng/mL.
Opiate metabolites			
Codeine/Morphine ²	2000 ng/mL	Codeine	2000 ng/mL.
		Morphine	2000 ng/mL.
6–Acetylmorphine	10 ng/mL	6–Acetylmorphine	10 ng/mL.
Phencyclidine	25 ng/mL	Phencyclidine	25 ng/mL.
Amphetamines ³			
AMP/MAMP ⁴	500 ng/mL	Amphetamine	250 ng/mL.

Initial test analyte	Initial test cutoff concentration	Confirmatory test analyte	Confirmatory test cutoff concentration
		Methamphetamine ⁵	250 ng/mL.
MDMA ⁶	500 ng/mL	MDMA	250 ng/mL.
		MDA ⁷	250 ng/mL.
		MDEA ⁸	250 ng/mL

¹Delta-9-tetrahydrocannabinol-9-carboxylic acid (THCA).

²Morphine is the target analyte for codeine/morphine testing.

³Either a single initial test kit or multiple initial test kits may be used provided the single test kit detects each target analyte independently at the specified cutoff.

⁴Methamphetamine is the target analyte for amphetamine/methamphetamine testing.

⁵To be reported positive for methamphetamine, a specimen must also contain amphetamine at a concentration equal to or greater than 100 ng/mL.

⁶Methylenedioxymethamphetamine (MDMA).

⁷Methylenedioxyamphetamine (MDA).

⁸Methylenedioxyethylamphetamine (MDEA).

(b) On an initial drug test, you must report a result below the cutoff concentration as negative. If the result is at or above the cutoff concentration, you must conduct a confirmation test.

(c) On a confirmation drug test, you must report a result below the cutoff concentration as negative and a result at or above the cutoff concentration as confirmed positive.

(d) You must report quantitative values for morphine or codeine at 15,000 ng/mL or above.

[65 FR 79526, Dec. 19, 2000, as amended at 75 FR 49862, Aug. 16, 2010; 77 FR 26473, May 4, 2012]

§40.89 What is validity testing, and are laboratories required to conduct it?

(a) Specimen validity testing is the evaluation of the specimen to determine if it is consistent with normal human urine. The purpose of validity testing is to determine whether certain adulterants or foreign substances were added to the urine, if the urine was diluted, or if the specimen was substituted.

(b) As a laboratory, you must conduct validity testing.

[65 FR 79526, Dec. 19, 2000, as amended at 66 FR 41951, Aug. 9, 2001; 73 FR 35970, June 25, 2008]

§40.91 What validity tests must laboratories conduct on primary specimens?

As a laboratory, when you conduct validity testing under §40.89, you must conduct it in accordance with the requirements of this section.

(a) You must determine the creatinine concentration on each primary specimen. You must also determine its specific gravity if you find the creatinine concentration to be less than 20 mg/dL.

- (b) You must determine the pH of each primary specimen.
- (c) You must perform one or more validity tests for oxidizing adulterants on each primary specimen.
- (d) You must perform additional validity tests on the primary specimen when the following conditions are observed:
 - (1) Abnormal physical characteristics;
 - (2) Reactions or responses characteristic of an adulterant obtained during initial or confirmatory drug tests (*e.g.*, non-recovery of internal standards, unusual response); or
 - (3) Possible unidentified interfering substance or adulterant.
- (e) If you determine that the specimen is invalid and HHS guidelines direct you to contact the MRO, you must contact the MRO and together decide if testing the primary specimen by another HHS certified laboratory would be useful in being able to report a positive or adulterated test result.

[65 FR 79526, Dec. 19, 2000, as amended at 69 FR 64867, Nov. 9, 2004]

§40.93 What criteria do laboratories use to establish that a specimen is dilute or substituted?

- (a) As a laboratory, you must consider the primary specimen to be dilute when:
 - (1) The creatinine concentration is greater than or equal to 2 mg/dL but less than 20 mg/dL, and
 - (2) The specific gravity is greater than 1.0010 but less than 1.0030 on a single aliquot.
- (b) As a laboratory, you must consider the primary specimen to be substituted when the creatinine concentration is less than 2 mg/dL and the specific gravity is less than or equal to 1.0010 or greater than or equal to 1.0200 on both the initial and confirmatory creatinine tests and on both the initial and confirmatory specific gravity tests on two separate aliquots.

[69 FR 64867, Nov. 9, 2004]

§40.95 What are the adulterant cutoff concentrations for initial and confirmation tests?

- (a) As a laboratory, you must use the cutoff concentrations for the initial and confirmation adulterant testing as required by the HHS Mandatory Guidelines and you must use two separate aliquots—one for the initial test and another for the confirmation test.
- (b) As a laboratory, you must report results at or above the cutoffs (or for pH, at or above or below the values, as appropriate) as adulterated and provide the numerical value that supports the adulterated result.

[73 FR 35970, June 25, 2008]

§40.96 What criteria do laboratories use to establish that a specimen is invalid?

- (a) As a laboratory, you must use the invalid test result criteria for the initial and confirmation testing as required by the HHS Mandatory Guidelines, and you must use two separate aliquots—one for the initial test and another for the confirmation test.

- (b) As a laboratory, for a specimen having an invalid result for one of the reasons outlined in the HHS Mandatory Guidelines, you must contact the MRO to discuss whether sending the specimen to another HHS certified laboratory for testing would be useful in being able to report a positive or adulterated result.
- (c) As a laboratory, you must report invalid results in accordance with the invalid test result criteria as required by the HHS Guidelines and provide the numerical value that supports the invalid result, where appropriate, such as pH.
- (d) As a laboratory, you must report the reason a test result is invalid.

[73 FR 35970, June 25, 2008]

§40.97 What do laboratories report and how do they report it?

- (a) As a laboratory, you must report the results for each primary specimen. The result of a primary specimen will fall into one of the following three categories. However, as a laboratory, you must report the actual results (and not the categories):
 - (1) Category 1: Negative Results. As a laboratory, when you find a specimen to be negative, you must report the test result as being one of the following, as appropriate:
 - (i) Negative, or
 - (ii) Negative-dilute, with numerical values for creatinine and specific gravity.
 - (2) Category 2: Non-negative Results. As a laboratory, when you find a specimen to be non-negative, you must report the test result as being one or more of the following, as appropriate:
 - (i) Positive, with drug(s)/metabolite(s) noted, with numerical values for the drug(s) or drug metabolite(s).
 - (ii) Positive-dilute, with drug(s)/metabolite(s) noted, with numerical values for the drug(s) or drug metabolite(s) and with numerical values for creatinine and specific gravity;
 - (iii) Adulterated, with adulterant(s) noted, with confirmatory test values (when applicable), and with remark(s);
 - (iv) Substituted, with confirmatory test values for creatinine and specific gravity; or
 - (v) Invalid result, with remark(s). Laboratories will report actual values for pH results.
 - (3) Category 3: Rejected for Testing. As a laboratory, when you reject a specimen for testing, you must report the result as being Rejected for Testing, with remark(s).
- (b) As a laboratory, you must report laboratory results directly, and only, to the MRO at his or her place of business. You must not report results to or through the DER or a service agent (*e.g.*, C/TPA).
 - (1) Negative results: You must fax, courier, mail, or electronically transmit a legible image or copy of the fully-completed Copy 1 of the CCF which has been signed by the certifying scientist, or you may provide the laboratory results report electronically (*i.e.*, computer data file).
 - (i) If you elect to provide the laboratory results report, you must include the following elements, as a minimum, in the report format:

- (A) Laboratory name and address;
 - (B) Employer's name (you may include I.D. or account number);
 - (C) Medical review officer's name;
 - (D) Specimen I.D. number;
 - (E) Donor's SSN or employee I.D. number, if provided;
 - (F) Reason for test, if provided;
 - (G) Collector's name and telephone number;
 - (H) Date of the collection;
 - (I) Date received at the laboratory;
 - (J) Date certifying scientist released the results;
 - (K) Certifying scientist's name;
 - (L) Results (e.g., positive, adulterated) as listed in paragraph (a) of this section; and
 - (M) Remarks section, with an explanation of any situation in which a correctable flaw has been corrected.
- (ii) You may release the laboratory results report only after review and approval by the certifying scientist. It must reflect the same test result information as contained on the CCF signed by the certifying scientist. The information contained in the laboratory results report may not contain information that does not appear on the CCF.
 - (iii) The results report may be transmitted through any means that ensures accuracy and confidentiality. You, as the laboratory, together with the MRO, must ensure that the information is adequately protected from unauthorized access or release, both during transmission and in storage.
- (2) Non-negative and Rejected for Testing results: You must fax, courier, mail, or electronically transmit a legible image or copy of the fully-completed Copy 1 of the CCF that has been signed by the certifying scientist. In addition, you may provide the electronic laboratory results report following the format and procedures set forth in paragraphs (b)(1)(i) and (ii) of this section.
- (c) In transmitting laboratory results to the MRO, you, as the laboratory, together with the MRO, must ensure that the information is adequately protected from unauthorized access or release, both during transmission and in storage. If the results are provided by fax, the fax connection must have a fixed telephone number accessible only to authorized individuals.
 - (d) You must transmit test results to the MRO in a timely manner, preferably the same day that review by the certifying scientist is completed.
 - (e)(1) You must provide quantitative values for confirmed positive drug test results to the MRO.
 - (2) You must provide the numerical values that support the adulterated (when applicable) or substituted result, without a request from the MRO.
 - (3) You must also provide to the MRO numerical values for creatinine and specific gravity for the negative-dilute test result, without a request from the MRO.

- (f) You must provide quantitative values for confirmed opiate results for morphine or codeine at 15,000 ng/mL or above, even if the MRO has not requested quantitative values for the test result.

[65 FR 79526, Dec. 19, 2000, as amended at 66 FR 41951, Aug. 9, 2001; 68 FR 31626, May 28, 2003; 69 FR 64867, Nov. 9, 2004; 73 FR 35970, June 25, 2008; 75 FR 49862, Aug. 16, 2010; 75 FR 59107, Sept. 27, 2010; 77 FR 26473, May 4, 2012]

§40.99 How long does the laboratory retain specimens after testing?

- (a) As a laboratory testing the primary specimen, you must retain a specimen that was reported with positive, adulterated, substituted, or invalid results for a minimum of one year.
- (b) You must keep such a specimen in secure, long-term, frozen storage in accordance with HHS requirements.
- (c) Within the one-year period, the MRO, the employee, the employer, or a DOT agency may request in writing that you retain a specimen for an additional period of time (*e.g.*, for the purpose of preserving evidence for litigation or a safety investigation). If you receive such a request, you must comply with it. If you do not receive such a request, you may discard the specimen at the end of the year.
- (d) If you have not sent the split specimen to another laboratory for testing, you must retain the split specimen for an employee's test for the same period of time that you retain the primary specimen and under the same storage conditions.
- (e) As the laboratory testing the split specimen, you must meet the requirements of paragraphs (a) through (d) of this section with respect to the split specimen.

§40.101 What relationship may a laboratory have with an MRO?

- (a) As a laboratory, you may not enter into any relationship with an MRO that creates a conflict of interest or the appearance of a conflict of interest with the MRO's responsibilities for the employer. You may not derive any financial benefit by having an employer use a specific MRO.
- (b) The following are examples of relationships between laboratories and MROs that the Department regards as creating conflicts of interest, or the appearance of such conflicts. This following list of examples is not intended to be exclusive or exhaustive:
- (1) The laboratory employs an MRO who reviews test results produced by the laboratory;
 - (2) The laboratory has a contract or retainer with the MRO for the review of test results produced by the laboratory;
 - (3) The laboratory designates which MRO the employer is to use, gives the employer a slate of MROs from which to choose, or recommends certain MROs;
 - (4) The laboratory gives the employer a discount or other incentive to use a particular MRO;
 - (5) The laboratory has its place of business co-located with that of an MRO or MRO staff who review test results produced by the laboratory; or
 - (6) The laboratory permits an MRO, or an MRO's organization, to have a financial interest in the laboratory.

§40.103 What are the requirements for submitting blind specimens to a laboratory?

- (a) As an employer or C/TPA with an aggregate of 2000 or more DOT-covered employees, you must send blind specimens to laboratories you use. If you have an aggregate of fewer than 2000 DOT-covered employees, you are not required to provide blind specimens.
- (b) To each laboratory to which you send at least 100 specimens in a year, you must transmit a number of blind specimens equivalent to one percent of the specimens you send to that laboratory, up to a maximum of 50 blind specimens in each quarter (*i.e.*, January-March, April-June, July-September, October-December). As a C/TPA, you must apply this percentage to the total number of DOT-covered employees' specimens you send to the laboratory. Your blind specimen submissions must be evenly spread throughout the year. The following examples illustrate how this requirement works:

Example 1 to paragraph (b). You send 2500 specimens to Lab X in Year 1. In this case, you would send 25 blind specimens to Lab X in Year 1. To meet the even distribution requirement, you would send 6 in each of three quarters and 7 in the other.

Example 2 to paragraph (b). You send 2000 specimens to Lab X and 1000 specimens to Lab Y in Year 1. In this case, you would send 20 blind specimens to Lab X and 10 to Lab Y in Year 1. The even distribution requirement would apply in a similar way to that described in Example 1.

Example 3 to paragraph (b). Same as Example 2, except that you also send 20 specimens to Lab Z. In this case, you would send blind specimens to Labs X and Y as in Example 2. You would not have to send any blind specimens to Lab Z, because you sent fewer than 100 specimens to Lab Z.

Example 4 to paragraph (b). You are a C/TPA sending 2000 specimens to Lab X in Year 1. These 2000 specimens represent 200 small employers who have an average of 10 covered employees each. In this case you—not the individual employers—send 20 blind specimens to Lab X in Year 1, again ensuring even distribution. The individual employers you represent are not required to provide any blind specimens on their own.

Example 5 to paragraph (b). You are a large C/TPA that sends 40,000 specimens to Lab Y in Year 1. One percent of that figure is 400. However, the 50 blind specimen per quarter “cap” means that you need send only 50 blind specimens per quarter, rather than the 100 per quarter you would have to send to meet the one percent rate. Your annual total would be 200, rather than 400, blind specimens.

- (c) Approximately 75 percent of the specimens you submit must be negative (*i.e.*, containing no drugs, nor adulterated or substituted). Approximately 15 percent must be positive for one or more of the five drugs involved in DOT tests, and approximately 10 percent must either be adulterated with a substance cited in HHS guidance or substituted (*i.e.*, having specific gravity and creatinine meeting the criteria of §40.93(b)).
- (1) All negative, positive, adulterated, and substituted blind specimens you submit must be certified by the supplier and must have supplier-provided expiration dates.
 - (2) Negative specimens must be certified by immunoassay and GC/MS to contain no drugs.
 - (3) Drug positive blind specimens must be certified by immunoassay and GC/MS to contain a drug(s)/metabolite(s) between 1.5 and 2 times the initial drug test cutoff concentration.
 - (4) Adulterated blind specimens must be certified to be adulterated with a specific adulterant using appropriate confirmatory validity test(s).

- (5) Substituted blind specimens must be certified for creatinine concentration and specific gravity to satisfy the criteria for a substituted specimen using confirmatory creatinine and specific gravity tests, respectively.
- (d) You must ensure that each blind specimen is indistinguishable to the laboratory from a normal specimen.
 - (1) You must submit blind specimens to the laboratory using the same channels (*e.g.*, via a regular collection site) through which employees' specimens are sent to the laboratory.
 - (2) You must ensure that the collector uses a CCF, places fictional initials on the specimen bottle label/seal, indicates for the MRO on Copy 2 that the specimen is a blind specimen, and discards Copies 4 and 5 (employer and employee copies).
 - (3) You must ensure that all blind specimens include split specimens.

[65 FR 79526, Dec. 19, 2000, as amended at 73 FR 35971, June 25, 2008]

§40.105 What happens if the laboratory reports a result different from that expected for a blind specimen?

- (a) If you are an employer, MRO, or C/TPA who submits a blind specimen, and if the result reported to the MRO is different from the result expected, you must investigate the discrepancy.
- (b) If the unexpected result is a false negative, you must provide the laboratory with the expected results (obtained from the supplier of the blind specimen), and direct the laboratory to determine the reason for the discrepancy.
- (c) If the unexpected result is a false positive, adulterated, or substituted result, you must provide the laboratory with the expected results (obtained from the supplier of the blind specimen), and direct the laboratory to determine the reason for the discrepancy. You must also notify ODAPC of the discrepancy by telephone (202-366-3784) or e-mail (addresses are listed on the ODAPC Web site, <http://www.dot.gov/ost/dapc>). ODAPC will notify HHS who will take appropriate action.

[65 FR 79526, Dec. 19, 2000, as amended at 73 FR 35971, June 25, 2008]

§40.107 Who may inspect laboratories?

As a laboratory, you must permit an inspection, with or without prior notice, by ODAPC, a DOT agency, or a DOT-regulated employer that contracts with the laboratory for drug testing under the DOT drug testing program, or the designee of such an employer.

§40.109 What documentation must the laboratory keep, and for how long?

- (a) As a laboratory, you must retain all records pertaining to each employee urine specimen for a minimum of two years.
- (b) As a laboratory, you must also keep for two years employer-specific data required in §40.111.
- (c) Within the two-year period, the MRO, the employee, the employer, or a DOT agency may request in writing that you retain the records for an additional period of time (*e.g.*, for the purpose of preserving

evidence for litigation or a safety investigation). If you receive such a request, you must comply with it. If you do not receive such a request, you may discard the records at the end of the two-year period.

§40.111 When and how must a laboratory disclose statistical summaries and other information it maintains?

- (a) As a laboratory, you must transmit an aggregate statistical summary, by employer, of the data listed in Appendix B to this part to the employer on a semi-annual basis.
 - (1) The summary must not reveal the identity of any employee.
 - (2) In order to avoid sending data from which it is likely that information about an employee's test result can be readily inferred, you must not send a summary if the employer has fewer than five aggregate tests results.
 - (3) The summary must be sent by January 20 of each year for July 1 through December 31 of the prior year.
 - (4) The summary must also be sent by July 20 of each year for January 1 through June 30 of the current year.
- (b) When the employer requests a summary in response to an inspection, audit, or review by a DOT agency, you must provide it unless the employer had fewer than five aggregate test results. In that case, you must send the employer a report indicating that not enough testing was conducted to warrant a summary. You may transmit the summary or report by hard copy, fax, or other electronic means.
- (c) You must also release information to appropriate parties as provided in §§40.329 and 40.331.
- (d) As a laboratory, you must transmit an aggregate statistical summary of the data listed in Appendix C to this part to DOT on a semi-annual basis. The summary must be sent by January 31 of each year for July 1 through December 31 of the prior year; it must be sent by July 31 of each year for January 1 through June 30 of the current year.

[65 FR 79526, Dec. 19, 2000, as amended at 73 FR 35971, June 25, 2008]

§40.113 Where is other information concerning laboratories found in this regulation?

You can find more information concerning laboratories in several sections of this part:

§40.3—Definition.

§40.13—Prohibition on making specimens available for other purposes.

§40.31—Conflicts of interest concerning collectors.

§40.47—Laboratory rejections of test for improper form.

§40.125—Conflicts of interest concerning MROs.

§40.175—Role of first laboratory in split specimen tests.

§40.177—Role of second laboratory in split specimen tests (drugs).

§40.179—Role of second laboratory in split specimen tests (adulterants).

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§40.181—Role of second laboratory in split specimen tests (substitution).

§§40.183-40.185—Transmission of split specimen test results to MRO.

§§40.201-40.205—Role in correcting errors.

§40.329—Release of information to employees.

§40.331—Limits on release of information.

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DRAFT

Subpart G - Medical Review Officers and the Verification Process

§40.121 Who is qualified to act as an MRO?

To be qualified to act as an MRO in the DOT drug testing program, you must meet each of the requirements of this section:

- (a) *Credentials*. You must be a licensed physician (Doctor of Medicine or Osteopathy). If you are a licensed physician in any U.S., Canadian, or Mexican jurisdiction and meet the other requirements of this section, you are authorized to perform MRO services with respect to all covered employees, wherever they are located. For example, if you are licensed as an M.D. in one state or province in the U.S., Canada, or Mexico, you are not limited to performing MRO functions in that state or province, and you may perform MRO functions for employees in other states or provinces without becoming licensed to practice medicine in the other jurisdictions.
- (b) *Basic knowledge*. You must be knowledgeable in the following areas:
- (1) You must be knowledgeable about and have clinical experience in controlled substances abuse disorders, including detailed knowledge of alternative medical explanations for laboratory confirmed drug test results.
 - (2) You must be knowledgeable about issues relating to adulterated and substituted specimens as well as the possible medical causes of specimens having an invalid result.
 - (3) You must be knowledgeable about this part, the DOT MRO Guidelines, and the DOT agency regulations applicable to the employers for whom you evaluate drug test results, and you must keep current on any changes to these materials. The DOT MRO Guidelines document is available from ODAPC (Department of Transportation, 1200 New Jersey Avenue, SE, Washington, DC 20590, 202-366-3784, or on the ODAPC web site (<http://www.dot.gov/ost/dapc>)).
- (c) *Qualification training*. You must receive qualification training meeting the requirements of this paragraph (c).
- (1) Qualification training must provide instruction on the following subjects:
 - (i) Collection procedures for urine specimens;
 - (ii) Chain of custody, reporting, and recordkeeping;
 - (iii) Interpretation of drug and validity tests results;
 - (iv) The role and responsibilities of the MRO in the DOT drug testing program;
 - (v) The interaction with other participants in the program (*e.g.*, DERs, SAPs); and
 - (vi) Provisions of this part and DOT agency rules applying to employers for whom you review test results, including changes and updates to this part and DOT agency rules, guidance, interpretations, and policies affecting the performance of MRO functions, as well as issues that MROs confront in carrying out their duties under this part and DOT agency rules.
 - (2) Following your completion of qualification training under paragraph (c)(1) of this section, you must satisfactorily complete an examination administered by a nationally-recognized MRO certification

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board or subspecialty board for medical practitioners in the field of medical review of DOT-mandated drug tests. The examination must comprehensively cover all the elements of qualification training listed in paragraph (c)(1) of this section.

(3) The following is the schedule for qualification training you must meet:

- (i) If you became an MRO before August 1, 2001, and have already met the qualification training requirement, you do not have to meet it again.
- (ii) If you became an MRO before August 1, 2001, but have not yet met the qualification training requirement, you must do so no later than January 31, 2003.
- (iii) If you become an MRO on or after August 1, 2001, you must meet the qualification training requirement before you begin to perform MRO functions.

(d) *Requalification training.* During each five-year period from the date on which you satisfactorily completed the examination under paragraph (c)(2) of this section or have successfully completed the required continuing education requirements which were mandatory prior to October 1, 2010, you must complete requalification training.

- (1) This requalification training must meet the requirements of the qualification training under paragraph (c)(1) of this section.
- (2) Following your completion of requalification training, you must satisfactorily complete an examination administered by a nationally-recognized MRO certification board or subspecialty board for medical practitioners in the field of medical review of DOT-mandated drug tests. The examination must comprehensively cover all the elements of qualification training listed in paragraph (c)(1) of this section.

(e) *Documentation.* You must maintain documentation showing that you currently meet all requirements of this section. You must provide this documentation on request to DOT agency representatives and to employers and C/TPAs who are using or negotiating to use your services.

[65 FR 79526, Dec. 19, 2000, as amended at 66 FR 41951, Aug. 9, 2001; 75 FR 49862, Aug. 16, 2010]

§40.123 What are the MRO's responsibilities in the DOT drug testing program?

As an MRO, you have the following basic responsibilities:

- (a) Acting as an independent and impartial “gatekeeper” and advocate for the accuracy and integrity of the drug testing process.
- (b) Providing a quality assurance review of the drug testing process for the specimens under your purview. This includes, but is not limited to:
 - (1) Ensuring the review of the CCF on all specimen collections for the purposes of determining whether there is a problem that may cause a test to be cancelled (see §§40.199-40.203). As an MRO, you are not required to review laboratory internal chain of custody documentation. No one is permitted to cancel a test because you have not reviewed this documentation;
 - (2) Providing feedback to employers, collection sites and laboratories regarding performance issues where necessary; and

- (3) Reporting to and consulting with the ODAPC or a relevant DOT agency when you wish DOT assistance in resolving any program issue. As an employer or service agent, you are prohibited from limiting or attempting to limit the MRO's access to DOT for this purpose and from retaliating in any way against an MRO for discussing drug testing issues with DOT.
- (c) You must determine whether there is a legitimate medical explanation for confirmed positive, adulterated, substituted, and invalid drug tests results from the laboratory.
- (d) While you provide medical review of employees' test results, this part does not deem that you have established a doctor-patient relationship with the employees whose tests you review.
- (e) You must act to investigate and correct problems where possible and notify appropriate parties (*e.g.*, HHS, DOT, employers, service agents) where assistance is needed, (*e.g.*, cancelled or problematic tests, incorrect results, problems with blind specimens).
- (f) You must ensure the timely flow of test results and other information to employers.
- (g) You must protect the confidentiality of the drug testing information.
- (h) You must perform all your functions in compliance with this part and other DOT agency regulations.

§40.125 What relationship may an MRO have with a laboratory?

As an MRO, you may not enter into any relationship with an employer's laboratory that creates a conflict of interest or the appearance of a conflict of interest with your responsibilities to that employer. You may not derive any financial benefit by having an employer use a specific laboratory. For examples of relationships between laboratories and MROs that the Department views as creating a conflict of interest or the appearance of such a conflict, see §40.101(b).

§40.127 What are the MRO's functions in reviewing negative test results?

As the MRO, you must do the following with respect to negative drug test results you receive from a laboratory, prior to verifying the result and releasing it to the DER:

- (a) Review Copy 2 of the CCF to determine if there are any fatal or correctable errors that may require you to initiate corrective action or to cancel the test (see §§40.199 and 40.203).
- (b) Review the negative laboratory test result and ensure that it is consistent with the information contained on the CCF.
- (c) Before you report a negative test result, you must have in your possession the following documents:
 - (1) Copy 2 of the CCF, a legible copy of it, or any other CCF copy containing the employee's signature; and
 - (2) A legible copy (fax, photocopy, image) of Copy 1 of the CCF or the electronic laboratory results report that conveys the negative laboratory test result.
- (d) If the copy of the documentation provided to you by the collector or laboratory appears unclear, you must request that the collector or laboratory send you a legible copy.
- (e) On Copy 2 of the CCF, place a check mark in the "Negative" box (Step 6), provide your name, and sign, initial, or stamp and date the verification statement.

- (f) Report the result in a confidential manner (see §§40.163-40.167).
- (g) Staff under your direct, personal supervision may perform the administrative functions of this section for you, but only you can cancel a test. If you cancel a laboratory-confirmed negative result, check the “Test Cancelled” box (Step 6) on Copy 2 of the CCF, make appropriate annotation in the “Remarks” line, provide your name, and sign, initial or stamp and date the verification statement.
 - (1) On specimen results that are reviewed by your staff, you are responsible for assuring the quality of their work.
 - (2) You are required to personally review at least 5 percent of all CCFs reviewed by your staff on a quarterly basis, including all results that required a corrective action. However, you need not review more than 500 negative results in any quarter.
 - (3) Your review must, as a minimum, include the CCF, negative laboratory test result, any accompanying corrective documents, and the report sent to the employer. You must correct any errors that you discover. You must take action as necessary to ensure compliance by your staff with this part and document your corrective action. You must attest to the quality assurance review by initialing the CCFs that you review.
 - (4) You must make these CCFs easily identifiable and retrievable by you for review by DOT agencies.

[65 FR 79526, Dec. 19, 2000, as amended at 66 FR 41951, Aug. 9, 2001]

§40.129 What are the MRO's functions in reviewing laboratory confirmed non-negative drug test results?

- (a) As the MRO, you must do the following with respect to confirmed positive, adulterated, substituted, or invalid drug tests you receive from a laboratory, before you verify the result and release it to the DER:
 - (1) Review Copy 2 of the CCF to determine if there are any fatal or correctable errors that may require you to cancel the test (see §§40.199 and 40.203). Staff under your direct, personal supervision may conduct this administrative review for you, but only you may verify or cancel a test.
 - (2) Review Copy 1 of the CCF and ensure that it is consistent with the information contained on Copy 2, that the test result is legible, and that the certifying scientist signed the form. You are not required to review any other documentation generated by the laboratory during their analysis or handling of the specimen (e.g., the laboratory internal chain of custody).
 - (3) If the copy of the documentation provided to you by the collector or laboratory appears unclear, you must request that the collector or laboratory send you a legible copy.
 - (4) Except in the circumstances spelled out in §40.133, conduct a verification interview. This interview must include direct contact in person or by telephone between you and the employee. You may initiate the verification process based on the laboratory results report.
 - (5) Verify the test result, consistent with the requirements of §§40.135 through 40.145, 40.159, and 40.160, as:
 - (i) Negative; or
 - (ii) Cancelled; or
 - (iii) Positive, and/or refusal to test because of adulteration or substitution.

- (b) Before you report a verified negative, positive, test cancelled, refusal to test because of adulteration or substitution, you must have in your possession the following documents:
 - (1) Copy 2 of the CCF, a legible copy of it, or any other CCF copy containing the employee's signature; and
 - (2) A legible copy (fax, photocopy, image) of Copy 1 of the CCF, containing the certifying scientist's signature.
- (c) With respect to verified positive test results, place a checkmark in the "Positive" box in Step 6 on Copy 2 of the CCF, indicate the drug(s)/metabolite(s) verified positive, and sign and date the verification statement.
- (d) If you cancel a laboratory confirmed positive, adulterated, substituted, or invalid drug test report, check the "test cancelled" box (Step 6) on Copy 2 of the CCF, make appropriate annotation in the "Remarks" line, sign, provide your name, and date the verification statement.
- (e) Report the result in a confidential manner (see §§40.163-40.167).
- (f) With respect to adulteration or substitution test results, check the "refusal to test because:" box (Step 6) on Copy 2 of the CCF, check the "Adulterated" or "Substituted" box, as appropriate, make appropriate annotation in the "Remarks" line, sign and date the verification statement.
- (g) As the MRO, your actions concerning reporting confirmed positive, adulterated, or substituted results to the employer before you have completed the verification process are also governed by the stand-down provisions of §40.21.
 - (1) If an employer has a stand-down policy that meets the requirements of §40.21, you may report to the DER that you have received an employee's laboratory confirmed positive, adulterated, or substituted test result, consistent with the terms of the waiver the employer received. You must not provide any further details about the test result (e.g., the name of the drug involved).
 - (2) If the employer does not have a stand-down policy that meets the requirements of §40.21, you must not inform the employer that you have received an employee's laboratory confirmed positive, adulterated, or substituted test result until you verify the test result. For example, as an MRO employed directly by a company, you must not tell anyone on the company's staff or management that you have received an employee's laboratory confirmed test result.

[65 FR 79526, Dec. 19, 2000, as amended at 66 FR 41952, Aug. 9, 2001; 73 FR 35971, June 25, 2008; 75 FR 59107, Sept. 27, 2010]

§40.131 How does the MRO or DER notify an employee of the verification process after receiving laboratory confirmed non-negative drug test results?

- (a) When, as the MRO, you receive a confirmed positive, adulterated, substituted, or invalid test result from the laboratory, you must contact the employee directly (*i.e.*, actually talk to the employee), on a confidential basis, to determine whether the employee wants to discuss the test result. In making this contact, you must explain to the employee that, if he or she declines to discuss the result, you will verify the test as positive or as a refusal to test because of adulteration or substitution, as applicable.
- (b) As the MRO, staff under your personal supervision may conduct this initial contact for you.

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- (1) This staff contact must be limited to scheduling the discussion between you and the employee and explaining the consequences of the employee's declining to speak with you (*i.e.*, that the MRO will verify the test without input from the employee). If the employee declines to speak with you, the staff person must document the employee's decision, including the date and time.
 - (2) A staff person must not gather any medical information or information concerning possible explanations for the test result.
 - (3) A staff person may advise an employee to have medical information (*e.g.*, prescriptions, information forming the basis of a legitimate medical explanation for a confirmed positive test result) ready to present at the interview with the MRO.
 - (4) Since you are required to speak personally with the employee, face-to-face or on the phone, your staff must not inquire if the employee wishes to speak with you.
- (c) As the MRO, you or your staff must make reasonable efforts to reach the employee at the day and evening telephone numbers listed on the CCF. Reasonable efforts include, as a minimum, three attempts, spaced reasonably over a 24-hour period, to reach the employee at the day and evening telephone numbers listed on the CCF. If you or your staff cannot reach the employee directly after making these efforts, you or your staff must take the following steps:
- (1) Document the efforts you made to contact the employee, including dates and times. If both phone numbers are incorrect (*e.g.*, disconnected, wrong number), you may take the actions listed in paragraph (c)(2) of this section without waiting the full 24-hour period.
 - (2) Contact the DER, instructing the DER to contact the employee.
 - (i) You must simply direct the DER to inform the employee to contact you.
 - (ii) You must not inform the DER that the employee has a confirmed positive, adulterated, substituted, or invalid test result.
 - (iii) You must document the dates and times of your attempts to contact the DER, and you must document the name of the DER you contacted and the date and time of the contact.
- (d) As the DER, you must attempt to contact the employee immediately, using procedures that protect, as much as possible, the confidentiality of the MRO's request that the employee contact the MRO. If you successfully contact the employee (*i.e.*, actually talk to the employee), you must document the date and time of the contact, and inform the MRO. You must inform the employee that he or she should contact the MRO immediately. You must also inform the employee of the consequences of failing to contact the MRO within the next 72 hours (see §40.133(a)(2)).
- (1) As the DER, you must not inform anyone else working for the employer that you are seeking to contact the employee on behalf of the MRO.
 - (2) If, as the DER, you have made all reasonable efforts to contact the employee but failed to do so, you may place the employee on temporary medically unqualified status or medical leave. Reasonable efforts include, as a minimum, three attempts, spaced reasonably over a 24-hour period, to reach the employee at the day and evening telephone numbers listed on the CCF.
 - (i) As the DER, you must document the dates and times of these efforts.

- (ii) If, as the DER, you are unable to contact the employee within this 24-hour period, you must leave a message for the employee by any practicable means (*e.g.*, voice mail, e-mail, letter) to contact the MRO and inform the MRO of the date and time of this attempted contact.

[65 FR 79526, Dec. 19, 2000, as amended at 66 FR 41952, Aug. 9, 2001; 68 FR 31626, May 28, 2003; 69 FR 64867, Nov. 9, 2004]

§40.133 Without interviewing the employee, under what circumstances may the MRO verify a test result as positive, or as a refusal to test because of adulteration or substitution, or as cancelled because the test was invalid?

- (a) As the MRO, you normally may verify a confirmed positive test (for any drug or drug metabolite, including opiates), or as a refusal to test because of adulteration or substitution, only after interviewing the employee as provided in §§40.135-40.145 . However, there are three circumstances in which you may verify such a result without an interview:
 - (1) You may verify a test result as a positive or refusal to test, as applicable, if the employee expressly declines the opportunity to discuss the test with you. You must maintain complete documentation of this occurrence, including notation of informing, or attempting to inform, the employee of the consequences of not exercising the option to speak with the you.
 - (2) You may verify a test result as a positive or refusal to test, as applicable, if the DER has successfully made and documented a contact with the employee and instructed the employee to contact you and more than 72 hours have passed since the time the DER contacted the employee.
 - (3) You may verify a test result as a positive or refusal to test, as applicable, if neither you nor the DER, after making and documenting all reasonable efforts, has been able to contact the employee within ten days of the date on which the MRO receives the confirmed test result from the laboratory.
- (b) As the MRO, you may verify an invalid test result as cancelled (with instructions to recollect immediately under direct observation) without interviewing the employee, as provided at §40.159:
 - (1) If the employee expressly declines the opportunity to discuss the test with you;
 - (2) If the DER has successfully made and documented a contact with the employee and instructed the employee to contact you and more than 72 hours have passed since the time the DER contacted the employee; or
 - (3) If neither you nor the DER, after making and documenting all reasonable efforts, has been able to contact the employee within ten days of the date on which you received the confirmed invalid test result from the laboratory.
- (c) As the MRO, after you verify a test result as a positive or as a refusal to test under this section, you must document the date and time and reason, following the instructions in §40.163. For a cancelled test due to an invalid result under this section, you must follow the instructions in §40.159(a)(5).
- (d) As the MRO, after you have verified a test result under this section and reported the result to the DER, you must allow the employee to present information to you within 60 days of the verification to document that serious illness, injury, or other circumstances unavoidably precluded contact with the MRO and/or DER in the times provided. On the basis of such information, you may reopen the

verification, allowing the employee to present information concerning whether there is a legitimate medical explanation of the confirmed test result.

[65 FR 79526, Dec. 19, 2000, as amended at 73 FR 35971, June 25, 2008]

§40.135 What does the MRO tell the employee at the beginning of the verification interview?

- (a) As the MRO, you must tell the employee that the laboratory has determined that the employee's test result was positive, adulterated, substituted, or invalid, as applicable. You must also tell the employee of the drugs for which his or her specimen tested positive, or the basis for the finding of adulteration or substitution.
- (b) You must explain the verification interview process to the employee and inform the employee that your decision will be based on information the employee provides in the interview.
- (c) You must explain that, if further medical evaluation is needed for the verification process, the employee must comply with your request for this evaluation and that failure to do so is equivalent of expressly declining to discuss the test result.
- (d) As the MRO, you must warn an employee who has a confirmed positive, adulterated, substituted or invalid test that you are required to provide to third parties drug test result information and medical information affecting the performance of safety-sensitive duties that the employee gives you in the verification process without the employee's consent (see §40.327).
 - (1) You must give this warning to the employee before obtaining any medical information as part of the verification process.
 - (2) For purposes of this paragraph (d), medical information includes information on medications or other substances affecting the performance of safety-sensitive duties that the employee reports using or medical conditions the employee reports having.
 - (3) For purposes of this paragraph (d), the persons to whom this information may be provided include the employer, a SAP evaluating the employee as part of the return to duty process (see §40.293(g)), DOT, another Federal safety agency (*e.g.*, the NTSB), or any state safety agency as required by state law.
- (e) You must also advise the employee that, after informing any third party about any medication the employee is using pursuant to a legally valid prescription under the Controlled Substances Act, you will allow 5 days for the employee to have the prescribing physician contact you to determine if the medication can be changed to one that does not make the employee medically unqualified or does not pose a significant safety risk. If, as an MRO, you receive such information from the prescribing physician, you must transmit this information to any third party to whom you previously provided information about the safety risks of the employee's other medication.

[65 FR 79526, Dec. 19, 2000, as amended at 66 FR 41952, Aug. 9, 2001]

§40.137 On what basis does the MRO verify test results involving marijuana, cocaine, amphetamines, or PCP?

- (a) As the MRO, you must verify a confirmed positive test result for marijuana, cocaine, amphetamines, and/or PCP unless the employee presents a legitimate medical explanation for the presence of the drug(s)/metabolite(s) in his or her system.
- (b) You must offer the employee an opportunity to present a legitimate medical explanation in all cases.
- (c) The employee has the burden of proof that a legitimate medical explanation exists. The employee must present information meeting this burden at the time of the verification interview. As the MRO, you have discretion to extend the time available to the employee for this purpose for up to five days before verifying the test result, if you determine that there is a reasonable basis to believe that the employee will be able to produce relevant evidence concerning a legitimate medical explanation within that time.
- (d) If you determine that there is a legitimate medical explanation, you must verify the test result as negative. Otherwise, you must verify the test result as positive.
- (e) In determining whether a legitimate medical explanation exists, you may consider the employee's use of a medication from a foreign country. You must exercise your professional judgment consistently with the following principles:
 - (1) There can be a legitimate medical explanation only with respect to a substance that is obtained legally in a foreign country.
 - (2) There can be a legitimate medical explanation only with respect to a substance that has a legitimate medical use. Use of a drug of abuse (*e.g.*, heroin, PCP, marijuana) or any other substance (see §40.151(f) and (g)) that cannot be viewed as having a legitimate medical use can never be the basis for a legitimate medical explanation, even if the substance is obtained legally in a foreign country.
 - (3) Use of the substance can form the basis of a legitimate medical explanation only if it is used consistently with its proper and intended medical purpose.
 - (4) Even if you find that there is a legitimate medical explanation under this paragraph (e) and verify a test negative, you may have a responsibility to raise fitness-for-duty considerations with the employer (see §40.327).

§40.139 On what basis does the MRO verify test results involving opiates?

As the MRO, you must proceed as follows when you receive a laboratory confirmed positive opiate result:

- (a) If the laboratory confirms the presence of 6-acetylmorphine (6-AM) in the specimen, you must verify the test result positive.
- (b) In the absence of 6-AM, if the laboratory confirms the presence of either morphine or codeine at 15,000 ng/mL or above, you must verify the test result positive unless the employee presents a legitimate medical explanation for the presence of the drug or drug metabolite in his or her system, as in the case of other drugs (see §40.137). Consumption of food products (*e.g.*, poppy seeds) must not be considered a legitimate medical explanation for the employee having morphine or codeine at these concentrations.

- (c) For all other opiate positive results, you must verify a confirmed positive test result for opiates only if you determine that there is clinical evidence, in addition to the urine test, of unauthorized use of any opium, opiate, or opium derivative (i.e., morphine, heroin, or codeine).
- (1) As an MRO, it is your responsibility to use your best professional and ethical judgement and discretion to determine whether there is clinical evidence of unauthorized use of opiates. Examples of information that you may consider in making this judgement include, but are not limited to, the following:
- (i) Recent needle tracks;
 - (ii) Behavioral and psychological signs of acute opiate intoxication or withdrawal;
 - (iii) Clinical history of unauthorized use recent enough to have produced the laboratory test result;
 - (iv) Use of a medication from a foreign country. See §40.137(e) for guidance on how to make this determination.
- (2) In order to establish the clinical evidence referenced in paragraphs (c)(1)(i) and (ii) of this section, personal observation of the employee is essential.
- (i) Therefore, you, as the MRO, must conduct, or cause another physician to conduct, a face-to-face examination of the employee.
 - (ii) No face-to-face examination is needed in establishing the clinical evidence referenced in paragraph (c)(1)(iii) or (iv) of this section.
- (3) To be the basis of a verified positive result for opiates, the clinical evidence you find must concern a drug that the laboratory found in the specimen. (For example, if the test confirmed the presence of codeine, and the employee admits to unauthorized use of hydrocodone, you do not have grounds for verifying the test positive. The admission must be for the substance that was found).
- (4) As the MRO, you have the burden of establishing that there is clinical evidence of unauthorized use of opiates referenced in this paragraph (c). If you cannot make this determination (e.g., there is not sufficient clinical evidence or history), you must verify the test as negative. The employee does not need to show you that a legitimate medical explanation exists if no clinical evidence is established.

[77 FR 26473, May 4, 2012]

§40.141 How does the MRO obtain information for the verification decision?

As the MRO, you must do the following as you make the determinations needed for a verification decision:

- (a) You must conduct a medical interview. You must review the employee's medical history and any other relevant biomedical factors presented to you by the employee. You may direct the employee to undergo further medical evaluation by you or another physician.
- (b) If the employee asserts that the presence of a drug or drug metabolite in his or her specimen results from taking prescription medication, you must review and take all reasonable and necessary steps to verify the authenticity of all medical records the employee provides. You may contact the employee's physician or other relevant medical personnel for further information.

§40.143 [Reserved]**§40.145 On what basis does the MRO verify test results involving adulteration or substitution?**

- (a) As an MRO, when you receive a laboratory report that a specimen is adulterated or substituted, you must treat that report in the same way you treat the laboratory's report of a confirmed positive for a drug or drug metabolite.
- (b) You must follow the same procedures used for verification of a confirmed positive test for a drug or drug metabolite (see §§40.129-40.135, 40.141, 40.151), except as otherwise provided in this section.
- (c) In the verification interview, you must explain the laboratory findings to the employee and address technical questions or issues the employee may raise.
- (d) You must offer the employee the opportunity to present a legitimate medical explanation for the laboratory findings with respect to presence of the adulterant in, or the creatinine and specific gravity findings for, the specimen.
- (e) The employee has the burden of proof that there is a legitimate medical explanation.
 - (1) To meet this burden in the case of an adulterated specimen, the employee must demonstrate that the adulterant found by the laboratory entered the specimen through physiological means.
 - (2) To meet this burden in the case of a substituted specimen, the employee must demonstrate that he or she did produce or could have produced urine through physiological means, meeting the creatinine concentration criterion of less than 2 mg/dL and the specific gravity criteria of less than or equal to 1.0010 or greater than or equal to 1.0200 (see §40.93(b)).
 - (3) The employee must present information meeting this burden at the time of the verification interview. As the MRO, you have discretion to extend the time available to the employee for this purpose for up to five days before verifying the specimen, if you determine that there is a reasonable basis to believe that the employee will be able to produce relevant evidence supporting a legitimate medical explanation within that time.
- (f) As the MRO or the employer, you are not responsible for arranging, conducting, or paying for any studies, examinations or analyses to determine whether a legitimate medical explanation exists.
- (g) As the MRO, you must exercise your best professional judgment in deciding whether the employee has established a legitimate medical explanation.
 - (1) If you determine that the employee's explanation does not present a reasonable basis for concluding that there may be a legitimate medical explanation, you must report the test to the DER as a verified refusal to test because of adulteration or substitution, as applicable.
 - (2) If you believe that the employee's explanation may present a reasonable basis for concluding that there is a legitimate medical explanation, you must direct the employee to obtain, within the five-day period set forth in paragraph (e)(3) of this section, a further medical evaluation. This evaluation must be performed by a licensed physician (the "referral physician"), acceptable to you, with expertise in the medical issues raised by the employee's explanation. (The MRO may perform this evaluation if the MRO has appropriate expertise.)

- (i) As the MRO or employer, you are not responsible for finding or paying a referral physician. However, on request of the employee, you must provide reasonable assistance to the employee's efforts to find such a physician. The final choice of the referral physician is the employee's, as long as the physician is acceptable to you.
- (ii) As the MRO, you must consult with the referral physician, providing guidance to him or her concerning his or her responsibilities under this section. As part of this consultation, you must provide the following information to the referral physician:
 - (A) That the employee was required to take a DOT drug test, but the laboratory reported that the specimen was adulterated or substituted, which is treated as a refusal to test;
 - (B) The consequences of the appropriate DOT agency regulation for refusing to take the required drug test;
 - (C) That the referral physician must agree to follow the requirements of paragraphs (g)(3) through (g)(4) of this section; and
 - (D) That the referral physician must provide you with a signed statement of his or her recommendations.
- (3) As the referral physician, you must evaluate the employee and consider any evidence the employee presents concerning the employee's medical explanation. You may conduct additional tests to determine whether there is a legitimate medical explanation. Any additional urine tests must be performed in an HHS-certified laboratory.
- (4) As the referral physician, you must then make a written recommendation to the MRO about whether the MRO should determine that there is a legitimate medical explanation. As the MRO, you must seriously consider and assess the referral physician's recommendation in deciding whether there is a legitimate medical explanation.
- (5) As the MRO, if you determine that there is a legitimate medical explanation, you must cancel the test and inform ODAPC in writing of the determination and the basis for it (*e.g.*, referral physician's findings, evidence produced by the employee).
- (6) As the MRO, if you determine that there is not a legitimate medical explanation, you must report the test to the DER as a verified refusal to test because of adulteration or substitution.
- (h) The following are examples of types of evidence an employee could present to support an assertion of a legitimate medical explanation for a substituted result.
 - (1) Medically valid evidence demonstrating that the employee is capable of physiologically producing urine meeting the creatinine and specific gravity criteria of §40.93(b).
 - (i) To be regarded as medically valid, the evidence must have been gathered using appropriate methodology and controls to ensure its accuracy and reliability.
 - (ii) Assertion by the employee that his or her personal characteristics (*e.g.*, with respect to race, gender, weight, diet, working conditions) are responsible for the substituted result does not, in itself, constitute a legitimate medical explanation. To make a case that there is a legitimate medical explanation, the employee must present evidence showing that the cited personal characteristics actually result in the physiological production of urine meeting the creatinine and specific gravity criteria of §40.93(b).

- (2) Information from a medical evaluation under paragraph (g) of this section that the individual has a medical condition that has been demonstrated to cause the employee to physiologically produce urine meeting the creatinine and specific gravity criteria of §40.93(b).
 - (i) A finding or diagnosis by the physician that an employee has a medical condition, in itself, does not constitute a legitimate medical explanation.
 - (ii) To establish there is a legitimate medical explanation, the employee must demonstrate that the cited medical condition actually results in the physiological production of urine meeting the creatinine and specific gravity criteria of §40.93(b).

[65 FR 79526, Dec. 19, 2000, as amended at 68 FR 31626, May 28, 2003; 69 FR 64867, Nov. 9, 2004]

§40.147 [Reserved]

§40.149 May the MRO change a verified drug test result?

(a) As the MRO, you may change a verified test result only in the following situations:

- (1) When you have reopened a verification that was done without an interview with an employee (see §40.133(d)).
- (2) If you receive information, not available to you at the time of the original verification, demonstrating that the laboratory made an error in identifying (*e.g.*, a paperwork mistake) or testing (*e.g.*, a false positive or negative) the employee's primary or split specimen. For example, suppose the laboratory originally reported a positive test result for Employee X and a negative result for Employee Y. You verified the test results as reported to you. Then the laboratory notifies you that it mixed up the two test results, and X was really negative and Y was really positive. You would change X's test result from positive to negative and contact Y to conduct a verification interview.
- (3) If, within 60 days of the original verification decision—
 - (i) You receive information that could not reasonably have been provided to you at the time of the decision demonstrating that there is a legitimate medical explanation for the presence of drug(s)/metabolite(s) in the employee's specimen; or
 - (ii) You receive credible new or additional evidence that a legitimate medical explanation for an adulterated or substituted result exists.

Example to paragraph (a)(3): If the employee's physician provides you a valid prescription that he or she failed to find at the time of the original verification, you may change the test result from positive to negative if you conclude that the prescription provides a legitimate medical explanation for the drug(s)/metabolite(s) in the employee's specimen.

- (4) If you receive the information in paragraph (a)(3) of this section after the 60-day period, you must consult with ODAPC prior to changing the result.
 - (5) When you have made an administrative error and reported an incorrect result.
- (b) If you change the result, you must immediately notify the DER in writing, as provided in §§40.163-40.165.

- (c) You are the only person permitted to change a verified test result, such as a verified positive test result or a determination that an individual has refused to test because of adulteration or substitution. This is because, as the MRO, you have the sole authority under this part to make medical determinations leading to a verified test (e.g., a determination that there was or was not a legitimate medical explanation for a laboratory test result). For example, an arbitrator is not permitted to overturn the medical judgment of the MRO that the employee failed to present a legitimate medical explanation for a positive, adulterated, or substituted test result of his or her specimen.

[65 FR 79526, Dec. 19, 2000, as amended at 66 FR 41952, Aug. 9, 2001; 73 FR 35971, June 25, 2008]

§40.151 What are MROs prohibited from doing as part of the verification process?

As an MRO, you are prohibited from doing the following as part of the verification process:

- (a) You must not consider any evidence from tests of urine samples or other body fluids or tissues (e.g., blood or hair samples) that are not collected or tested in accordance with this part. For example, if an employee tells you he went to his own physician, provided a urine specimen, sent it to a laboratory, and received a negative test result or a DNA test result questioning the identity of his DOT specimen, you are required to ignore this test result.
- (b) It is not your function to make decisions about factual disputes between the employee and the collector concerning matters occurring at the collection site that are not reflected on the CCF (e.g., concerning allegations that the collector left the area or left open urine containers where other people could access them).
- (c) It is not your function to determine whether the employer should have directed that a test occur. For example, if an employee tells you that the employer misidentified her as the subject of a random test, or directed her to take a reasonable suspicion or post-accident test without proper grounds under a DOT agency drug or alcohol regulation, you must inform the employee that you cannot play a role in deciding these issues.
- (d) It is not your function to consider explanations of confirmed positive, adulterated, or substituted test results that would not, even if true, constitute a legitimate medical explanation. For example, an employee may tell you that someone slipped amphetamines into her drink at a party, that she unknowingly ingested a marijuana brownie, or that she traveled in a closed car with several people smoking crack. MROs are unlikely to be able to verify the facts of such passive or unknowing ingestion stories. Even if true, such stories do not present a legitimate medical explanation. Consequently, you must not declare a test as negative based on an explanation of this kind.
- (e) You must not verify a test negative based on information that a physician recommended that the employee use a drug listed in Schedule I of the Controlled Substances Act. (e.g., under a state law that purports to authorize such recommendations, such as the “medical marijuana” laws that some states have adopted).
- (f) You must not accept an assertion of consumption or other use of a hemp or other non-prescription marijuana-related product as a basis for verifying a marijuana test negative. You also must not accept such an explanation related to consumption of coca teas as a basis for verifying a cocaine test result as negative. Consuming or using such a product is not a legitimate medical explanation.

- (g) You must not accept an assertion that there is a legitimate medical explanation for the presence of PCP, 6-AM, MDMA, MDA, or MDEA in a specimen.
- (h) You must not accept, as a legitimate medical explanation for an adulterated specimen, an assertion that soap, bleach, or glutaraldehyde entered a specimen through physiological means. There are no physiological means through which these substances can enter a specimen.
- (i) You must not accept, as a legitimate medical explanation for a substituted specimen, an assertion that an employee can produce urine with no detectable creatinine. There are no physiological means through which a person can produce a urine specimen having this characteristic.

[65 FR 79526, Dec. 19, 2000, as amended at 66 FR 41952, Aug. 9, 2001; 75 FR 49863, Aug. 16, 2010]

§40.153 How does the MRO notify employees of their right to a test of the split specimen?

- (a) As the MRO, when you have verified a drug test as positive for a drug or drug metabolite, or as a refusal to test because of adulteration or substitution, you must notify the employee of his or her right to have the split specimen tested. You must also notify the employee of the procedures for requesting a test of the split specimen.
- (b) You must inform the employee that he or she has 72 hours from the time you provide this notification to him or her to request a test of the split specimen.
- (c) You must tell the employee how to contact you to make this request. You must provide telephone numbers or other information that will allow the employee to make this request. As the MRO, you must have the ability to receive the employee's calls at all times during the 72 hour period (*e.g.*, by use of an answering machine with a "time stamp" feature when there is no one in your office to answer the phone).
- (d) You must tell the employee that if he or she makes this request within 72 hours, the employer must ensure that the test takes place, and that the employee is not required to pay for the test from his or her own funds before the test takes place. You must also tell the employee that the employer may seek reimbursement for the cost of the test (see §40.173).
- (e) You must tell the employee that additional tests of the specimen *e.g.*, DNA tests) are not authorized.

§40.155 What does the MRO do when a negative or positive test result is also dilute?

- (a) When the laboratory reports that a specimen is dilute, you must, as the MRO, report to the DER that the specimen, in addition to being negative or positive, is dilute.
- (b) You must check the "dilute" box (Step 6) on Copy 2 of the CCF.
- (c) When you report a dilute specimen to the DER, you must explain to the DER the employer's obligations and choices under §40.197, to include the requirement for an immediate recollection under direct observation if the creatinine concentration of a negative-dilute specimen was greater than or equal to 2mg/dL but less than or equal to 5mg/dL.
- (d) If the employee's recollection under direct observation, in paragraph (c) of this section, results in another negative-dilute, as the MRO, you must:

- (1) Review the CCF to ensure that there is documentation that the recollection was directly observed.
- (2) If the CCF documentation shows that the recollection was directly observed as required, report this result to the DER as a negative-dilute result.
- (3) If CCF documentation indicates that the recollection was not directly observed as required, do not report a result but again explain to the DER that there must be an immediate recollection under direct observation.

[65 FR 79526, Dec. 19, 2000, as amended at 66 FR 41952, Aug. 9, 2001; 68 FR 31626, May 28, 2003; 69 FR 64867, Nov. 9, 2004; 73 FR 35971, June 25, 2008]

§40.157 [Reserved]

§40.159 What does the MRO do when a drug test result is invalid?

- (a) As the MRO, when the laboratory reports that the test result is an invalid result, you must do the following:
- (1) Discuss the laboratory results with a certifying scientist to determine if the primary specimen should be tested at another HHS certified laboratory. If the laboratory did not contact you as required by §§40.91(e) and 40.96(c), you must contact the laboratory.
 - (2) If you and the laboratory have determined that no further testing is necessary, contact the employee and inform the employee that the specimen was invalid. In contacting the employee, use the procedures set forth in §40.131.
 - (3) After explaining the limits of disclosure (see §§40.135(d) and 40.327), you must determine if the employee has a medical explanation for the invalid result. You must inquire about the medications the employee may have taken.
 - (4) If the employee gives an explanation that is acceptable, you must:
 - (i) Place a check mark in the “Test Cancelled” box (Step 6) on Copy 2 of the CCF and enter “Invalid Result” and “direct observation collection not required” on the “Remarks” line.
 - (ii) Report to the DER that the test is cancelled, the reason for cancellation, and that no further action is required unless a negative test result is required (*i.e.*, pre-employment, return-to-duty, or follow-up tests).
 - (iii) If a negative test result is required and the medical explanation concerns a situation in which the employee has a permanent or long-term medical condition that precludes him or her from providing a valid specimen, as the MRO, you must follow the procedures outlined at §40.160 for determining if there is clinical evidence that the individual is an illicit drug user.
 - (5) If the employee is unable to provide an explanation and/or a valid prescription for a medication that interfered with the immunoassay test but denies having adulterated the specimen, you must:
 - (i) Place a check mark in the “Test Cancelled” box (Step 6) on Copy 2 of the CCF and enter “Invalid Result” and “direct observation collection required” on the “Remarks” line.

- (ii) Report to the DER that the test is cancelled, the reason for cancellation, and that a second collection must take place immediately under direct observation.
 - (iii) Instruct the employer to ensure that the employee has the minimum possible advance notice that he or she must go to the collection site.
- (6) When the test result is invalid because pH is greater than or equal to 9.0 but less than or equal to 9.5 and the employee has no other medical explanation for the pH, you should consider whether there is evidence of elapsed time and increased temperature that could account for the pH value.
- (i) You are authorized to consider the temperature conditions that were likely to have existed between the time of collection and transportation of the specimen to the laboratory, and the length of time between the specimen collection and arrival at the laboratory.
 - (ii) You may talk with the collection site and laboratory to discuss time and temperature issues, including any pertinent information regarding specimen storage.
 - (iii) If you determine that time and temperature account for the pH value, you must cancel the test and take no further action, as provided at paragraph (a)(4) of this section.
 - (iv) If you determine that time and temperature fail to account for the pH value, you must cancel the test and direct another collection under direct observation, as provided at paragraph (a)(5) of this section.
- (b) You may only report an invalid test result when you are in possession of a legible copy of Copy 1 of the CCF. In addition, you must have Copy 2 of the CCF, a legible copy of it, or any other copy of the CCF containing the employee's signature.
- (c) If the employee admits to having adulterated or substituted the specimen, you must, on the same day, write and sign your own statement of what the employee told you. You must then report a refusal to test in accordance with §40.163.
- (d) If the employee admits to using a drug, you must, on the same day, write and sign your own statement of what the employee told you. You must then report that admission to the DER for appropriate action under DOT Agency regulations. This test will be reported as cancelled with the reason noted.
- (e) If the employee's recollection (required at paragraph (a)(5) of this section) results in another invalid result for the same reason as reported for the first specimen, as the MRO, you must:
- (1) Review the CCF to ensure that there is documentation that the recollection was directly observed.
 - (2) If the CCF review indicates that the recollection was directly observed as required, document that the employee had another specimen with an invalid result for the same reason.
 - (3) Follow the recording and reporting procedures at (a)(4)(i) and (ii) of this section.
 - (4) If a negative result is required (i.e., pre-employment, return-to-duty, or follow-up tests), follow the procedures at §40.160 for determining if there is clinical evidence that the individual is an illicit drug user.
 - (5) If the recollection was not directly observed as required, do not report a result but again explain to the DER that there must be an immediate recollection under direct observation.

- (f) If the employee's recollection (required at paragraph (a)(5) of this section) results in another invalid result for a different reason than that reported for the first specimen, as the MRO, you must:
- (1) Review the CCF to ensure that there is documentation that the recollection was directly observed.
 - (2) If the CCF review indicates that the recollection was directly observed as required, document that the employee had another specimen with an invalid result for a different reason.
 - (3) As the MRO, you should not contact the employee to discuss the result, but rather direct the DER to conduct an immediate recollection under direct observation without prior notification to the employee.
 - (4) If the CCF documentation indicates that the recollection was not directly observed as required, do not report a result but again explain to the DER that there must be an immediate recollection under direct observation.
- (g) If, as the MRO, you receive a laboratory invalid result in conjunction with a positive, adulterated, and/or substituted result and you verify any of those results as being a positive and/or refusal to test, you do not report the invalid result unless the split specimen fails to reconfirm the result(s) of the primary specimen.

[65 FR 79526, Dec. 19, 2000, as amended at 73 FR 35972, June 25, 2008; 75 FR 49863, Aug. 16, 2010]

§40.160 What does the MRO do when a valid test result cannot be produced and a negative result is required?

- (a) If a valid test result cannot be produced and a negative result is required, (under §40.159 (a)(5)(iii) and (e)(4)), as the MRO, you must determine if there is clinical evidence that the individual is currently an illicit drug user. You must make this determination by personally conducting, or causing to be conducted, a medical evaluation. In addition, if appropriate, you may also consult with the employee's physician to gather information you need to reach this determination.
- (b) If you do not personally conduct the medical evaluation, as the MRO, you must ensure that one is conducted by a licensed physician acceptable to you.
- (c) For purposes of this section, the MRO or the physician conducting the evaluation may conduct an alternative test (e.g., blood) as part of the medically appropriate procedures in determining clinical evidence of drug use.
- (d) If the medical evaluation reveals no clinical evidence of drug use, as the MRO, you must report this to the employer as a negative test result with written notations regarding the medical examination. The report must also state why the medical examination was required (i.e., either the basis for the determination that a permanent or long-term medical condition exists or because the recollection under direct observation resulted in another invalid result for the same reason, as appropriate) and for the determination that no signs and symptoms of drug use exist.
- (1) Check "Negative" (Step 6) on the CCF.
 - (2) Sign and date the CCF.
- (e) If the medical evaluation reveals clinical evidence of drug use, as the MRO, you must report the result to the employer as a cancelled test with written notations regarding the results of the medical examination. The report must also state why the medical examination was required (i.e., either the basis for the

determination that a permanent or long-term medical condition exists or because the recollection under direct observation resulted in another invalid result for the same reason, as appropriate) and state the reason for the determination that signs and symptoms of drug use exist. Because this is a cancelled test, it does not serve the purpose of an actual negative test result (i.e., the employer is not authorized to allow the employee to begin or resume performing safety-sensitive functions, because a negative test result is needed for that purpose).

[73 FR 35972, June 25, 2008]

§40.161 What does the MRO do when a drug test specimen is rejected for testing?

As the MRO, when the laboratory reports that the specimen is rejected for testing (*e.g.*, because of a fatal or uncorrected flaw), you must do the following:

- (a) Place a check mark in the “Test Cancelled” box (Step 6) on Copy 2 of the CCF and enter the reason on the “Remarks” line.
- (b) Report to the DER that the test is cancelled and the reason for cancellation, and that no further action is required unless a negative test is required (*e.g.*, in the case of a pre-employment, return-to-duty, or follow-up test).
- (c) You may only report a test cancelled because of a rejected for testing test result when you are in possession of a legible copy of Copy 1 of the CCF. In addition, you must have Copy 2 of the CCF, a legible copy of it, or any other copy of the CCF containing the employee's signature.

§40.162 What must MROs do with multiple verified results for the same testing event?

- (a) If the testing event is one in which there was one specimen collection with multiple verified non-negative results, as the MRO, you must report them all to the DER. For example, if you verified the specimen as being positive for marijuana and cocaine and as being a refusal to test because the specimen was also adulterated, as the MRO, you should report the positives and the refusal to the DER.
- (b) If the testing event was one in which two separate specimen collections (*e.g.*, a specimen out of temperature range and the subsequent observed collection) were sent to the laboratory, as the MRO, you must:
 - (1) If both specimens were verified negative, report the result as negative.
 - (2) If either of the specimens was verified negative and the other was verified as one or more non-negative(s), report the non-negative result(s) only. For example, if you verified one specimen as negative and the other as a refusal to test because the second specimen was substituted, as the MRO you should report only the refusal to the DER.
 - (i) If the first specimen is reported as negative, but the result of the second specimen has not been reported by the laboratory, as the MRO, you should hold—not report—the result of the first specimen until the result of the second specimen is received.
 - (ii) If the first specimen is reported as non-negative, as the MRO, you should report the result immediately and not wait to receive the result of the second specimen.

- (3) If both specimens were verified non-negative, report all of the non-negative results. For example, if you verified one specimen as positive and the other as a refusal to test because the specimen was adulterated, as the MRO, you should report the positive and the refusal results to the DER.
 - (c) As an exception to paragraphs (a) and (b) of this section, as the MRO, you must follow procedures at §40.159(f) when any verified non-negative result is also invalid.
- [73 FR 35972, June 25, 2008]

§40.163 How does the MRO report drug test results?

- (a) As the MRO, it is your responsibility to report all drug test results to the employer.
- (b) You may use a signed or stamped and dated legible photocopy of Copy 2 of the CCF to report test results.
- (c) If you do not report test results using Copy 2 of the CCF for this purpose, you must provide a written report (e.g., a letter) for each test result. This report must, as a minimum, include the following information:
 - (1) Full name, as indicated on the CCF, of the employee tested;
 - (2) Specimen ID number from the CCF and the donor SSN or employee ID number;
 - (3) Reason for the test, if indicated on the CCF (e.g., random, post-accident);
 - (4) Date of the collection;
 - (5) Date you received Copy 2 of the CCF;
 - (6) Result of the test (i.e., positive, negative, dilute, refusal to test, test cancelled) and the date the result was verified by the MRO;
 - (7) For verified positive tests, the drug(s)/metabolite(s) for which the test was positive;
 - (8) For cancelled tests, the reason for cancellation; and
 - (9) For refusals to test, the reason for the refusal determination (e.g., in the case of an adulterated test result, the name of the adulterant).
- (d) As an exception to the reporting requirements of paragraph (b) and (c) of this section, the MRO may report negative results using an electronic data file.
 - (1) If you report negatives using an electronic data file, the report must contain, as a minimum, the information specified in paragraph (c) of this section, as applicable for negative test results.
 - (2) In addition, the report must contain your name, address, and phone number, the name of any person other than you reporting the results, and the date the electronic results report is released.
- (e) You must retain a signed or stamped and dated copy of Copy 2 of the CCF in your records. If you do not use Copy 2 for reporting results, you must maintain a copy of the signed or stamped and dated letter in addition to the signed or stamped and dated Copy 2. If you use the electronic data file to report negatives, you must maintain a retrievable copy of that report in a format suitable for inspection and auditing by a DOT representative.
- (f) You must not use Copy 1 of the CCF to report drug test results.

- (g) You must not provide quantitative values to the DER or C/TPA for drug or validity test results. However, you must provide the test information in your possession to a SAP who consults with you (see §40.293(g)).
- (h) You must maintain reports and records related to negatives and cancelled results for one year; you must maintain reports and records related to positives and refusals for five years, unless otherwise specified by applicable DOT agency regulations.

[66 FR 41952, Aug. 9, 2001, as amended at 75 FR 49863, Aug. 16, 2010; 75 FR 59107, Sept. 27, 2010; 76 FR 59578, Sept. 27, 2011]

§40.165 To whom does the MRO transmit reports of drug test results?

- (a) As the MRO, you must report all drug test results to the DER, except in the circumstances provided for in §40.345.
- (b) If the employer elects to receive reports of results through a C/TPA, acting as an intermediary as provided in §40.345, you must report the results through the designated C/TPA.

§40.167 How are MRO reports of drug results transmitted to the employer?

As the MRO or C/TPA who transmits drug test results to the employer, you must comply with the following requirements:

- (a) You must report the results in a confidential manner.
- (b) You must transmit to the DER on the same day the MRO verifies the result or the next business day all verified positive test results, results requiring an immediate collection under direct observation, adulterated or substituted specimen results, and other refusals to test.
 - (1) Direct telephone contact with the DER is the preferred method of immediate reporting. Follow up your phone call with appropriate documentation (see §40.163).
 - (2) You are responsible for identifying yourself to the DER, and the DER must have a means to confirm your identification.
 - (3) The MRO's report that you transmit to the employer must contain all of the information required by §40.163.
- (c) You must transmit the MRO's report(s) of verified tests to the DER so that the DER receives it within two days of verification by the MRO.
 - (1) You must fax, courier, mail, or electronically transmit a legible image or copy of either the signed or stamped and dated Copy 2 or the written report (see §40.163(b) and (c)).
 - (2) Negative results reported electronically (i.e., computer data file) do not require an image of Copy 2 or the written report.
- (d) In transmitting test results, you or the C/TPA and the employer must ensure the security of the transmission and limit access to any transmission, storage, or retrieval systems.

(e) MRO reports are not subject to modification or change by anyone other than the MRO, as provided in §40.149(c).

[65 FR 79526, Dec. 19, 2000, as amended at 66 FR 41953, Aug. 9, 2001]

§40.169 Where is other information concerning the role of MROs and the verification process found in this regulation?

You can find more information concerning the role of MROs in several sections of this part:

§40.3—Definition.

§§40.47-40.49—Correction of form and kit errors.

§40.67—Role in direct observation and other atypical test situations.

§40.83—Laboratory handling of fatal and correctable flaws.

§40.97—Laboratory handling of test results and quantitative values.

§40.99—Authorization of longer laboratory retention of specimens.

§40.101—Relationship with laboratories; avoidance of conflicts of interest.

§40.105—Notification of discrepancies in blind specimen results.

§40.171—Request for test of split specimen.

§40.187—Action concerning split specimen test results.

§40.193—Role in “shy bladder” situations.

§40.195—Role in cancelling tests.

§§40.199-40.203—Documenting errors in tests.

§40.327—Confidentiality and release of information.

§40.347—Transfer of records.

§40.353—Relationships with service agents.

Subpart H - Split Specimen Tests

§40.171 How does an employee request a test of a split specimen?

- (a) As an employee, when the MRO has notified you that you have a verified positive drug test and/or refusal to test because of adulteration or substitution, you have 72 hours from the time of notification to request a test of the split specimen. The request may be verbal or in writing. If you make this request to the MRO within 72 hours, you trigger the requirements of this section for a test of the split specimen. There is no split specimen testing for an invalid result.
- (b)(1) If, as an employee, you have not requested a test of the split specimen within 72 hours, you may present to the MRO information documenting that serious injury, illness, lack of actual notice of the verified test result, inability to contact the MRO (e.g., there was no one in the MRO's office and the answering machine was not working), or other circumstances unavoidably prevented you from making a timely request.
- (2) As the MRO, if you conclude from the employee's information that there was a legitimate reason for the employee's failure to contact you within 72 hours, you must direct that the test of the split specimen take place, just as you would when there is a timely request.
- (c) When the employee makes a timely request for a test of the split specimen under paragraphs (a) and (b) of this section, you must, as the MRO, immediately provide written notice to the laboratory that tested the primary specimen, directing the laboratory to forward the split specimen to a second HHS-certified laboratory. You must also document the date and time of the employee's request.

[65 FR 79526, Dec. 19, 2000, as amended at 73 FR 35972, June 25, 2008]

§40.173 Who is responsible for paying for the test of a split specimen?

- (a) As the employer, you are responsible for making sure (e.g., by establishing appropriate accounts with laboratories for testing split specimens) that the MRO, first laboratory, and second laboratory perform the functions noted in §§40.175-40.185 in a timely manner, once the employee has made a timely request for a test of the split specimen.
- (b) As the employer, you must not condition your compliance with these requirements on the employee's direct payment to the MRO or laboratory or the employee's agreement to reimburse you for the costs of testing. For example, if you ask the employee to pay for some or all of the cost of testing the split specimen, and the employee is unwilling or unable to do so, you must ensure that the test takes place in a timely manner, even though this means that you pay for it.
- (c) As the employer, you may seek payment or reimbursement of all or part of the cost of the split specimen from the employee (e.g., through your written company policy or a collective bargaining agreement). This part takes no position on who ultimately pays the cost of the test, so long as the employer ensures that the testing is conducted as required and the results released appropriately.

§40.175 What steps does the first laboratory take with a split specimen?

- (a) As the laboratory at which the primary and split specimen first arrive, you must check to see whether the split specimen is available for testing.
- (b) If the split specimen is unavailable or appears insufficient, you must then do the following:
 - (1) Continue the testing process for the primary specimen as you would normally. Report the results for the primary specimen without providing the MRO information regarding the unavailable split specimen.
 - (2) Upon receiving a letter from the MRO instructing you to forward the split specimen to another laboratory for testing, report to the MRO that the split specimen is unavailable for testing. Provide as much information as you can about the cause of the unavailability.
- (c) As the laboratory that tested the primary specimen, you are not authorized to open the split specimen under any circumstances (except when the split specimen is redesignated as provided in §40.83).
- (d) When you receive written notice from the MRO instructing you to send the split specimen to another HHS-certified laboratory, you must forward the following items to the second laboratory:
 - (1) The split specimen in its original specimen bottle, with the seal intact;
 - (2) A copy of the MRO's written request; and
 - (3) A copy of Copy 1 of the CCF, which identifies the drug(s)/metabolite(s) or the validity criteria to be tested for.
- (e) You must not send to the second laboratory any information about the identity of the employee. Inadvertent disclosure does not, however, cause a fatal flaw.
- (f) This subpart does not prescribe who gets to decide which HHS-certified laboratory is used to test the split specimen. That decision is left to the parties involved.

§40.177 What does the second laboratory do with the split specimen when it is tested to reconfirm the presence of a drug or drug metabolite?

- (a) As the laboratory testing the split specimen, you must test the split specimen for the drug(s)/drug metabolite(s) detected in the primary specimen.
- (b) You must conduct this test without regard to the cutoff concentrations of §40.87.
- (c) If the test fails to reconfirm the presence of the drug(s)/drug metabolite(s) that were reported positive in the primary specimen, you must conduct validity tests in an attempt to determine the reason for being unable to reconfirm the presence of the drug(s)/metabolite(s). You should conduct the same validity tests as you would conduct on a primary specimen set forth in §40.91.
- (d) In addition, if the test fails to reconfirm the presence of the drug(s)/ drug metabolite(s) reported in the primary specimen, you may send the specimen or an aliquot of it for testing at another HHS-certified laboratory that has the capability to conduct another reconfirmation test.

[65 FR 79526, Dec. 19, 2000, as amended at 73 FR 35972, June 25, 2008]

§40.179 What does the second laboratory do with the split specimen when it is tested to reconfirm an adulterated test result?

- (a) As the laboratory testing the split specimen, you must test the split specimen for the adulterant detected in the primary specimen, using the confirmatory test for the adulterant and using criteria in §40.95 and confirmatory cutoff levels required by the HHS Mandatory Guidelines.
- (b) In addition, if the test fails to reconfirm the adulterant result reported in the primary specimen, you may send the specimen or an aliquot of it for testing at another HHS-certified laboratory that has the capability to conduct another reconfirmation test.

[73 FR 35973, June 25, 2008]

§40.181 What does the second laboratory do with the split specimen when it is tested to reconfirm a substituted test result?

As the laboratory testing the split specimen, you must test the split specimen using the confirmatory tests for creatinine and specific gravity, and using the confirmatory criteria set forth in §40.93(b).

[73 FR 35973, June 25, 2008]

§40.183 What information do laboratories report to MROs regarding split specimen results?

- (a) As the laboratory responsible for testing the split specimen, you must report split specimen test results by checking the “Reconfirmed” box and/or the “Failed to Reconfirm” box (Step 5(b)) on Copy 1 of the CCF, as appropriate, and by providing clarifying remarks using current HHS Mandatory Guidelines requirements.
- (b) As the laboratory certifying scientist, enter your name, sign, and date the CCF.

[65 FR 79526, Dec. 19, 2000, as amended at 73 FR 35972, June 25, 2008]

§40.185 Through what methods and to whom must a laboratory report split specimen results?

- (a) As the laboratory testing the split specimen, you must report laboratory results directly, and only, to the MRO at his or her place of business. You must not report results to or through the DER or another service agent (e.g., a C/TPA).
- (b) You must fax, courier, mail, or electronically transmit a legible image or copy of the fully-completed Copy 1 of the CCF, which has been signed by the certifying scientist.
- (c) You must transmit the laboratory result to the MRO immediately, preferably on the same day or next business day as the result is signed and released.

§40.187 What does the MRO do with split specimen laboratory results?

As the MRO, the split specimen laboratory results you receive will fall into five categories. You must take the following action, as appropriate, when a laboratory reports split specimen results to you.

- (a) *Category 1:* The laboratory reconfirmed one or more of the primary specimen results. As the MRO, you must report to the DER and the employee the result(s) that was/were reconfirmed.
- (1) In the case of a reconfirmed positive test(s) for drug(s) or drug metabolite(s), the positive is the final result.
 - (2) In the case of a reconfirmed adulterated or substituted result, the refusal to test is the final result.
 - (3) In the case of a combination positive and refusal to test results, the final result is both positive and refusal to test.
- (b) *Category 2:* The laboratory failed to reconfirm all of the primary specimen results because, as appropriate, drug(s)/drug metabolite(s) were not detected; adulteration criteria were not met; and/or substitution criteria were not met. As the MRO, you must report to the DER and the employee that the test must be cancelled.
- (1) As the MRO, you must inform ODAPC of the failure to reconfirm using the format in Appendix D to this part.
 - (2) In a case where the split failed to reconfirm because the substitution criteria were not met and the split specimen creatinine concentration was equal to or greater than 2mg/dL but less than or equal to 5mg/dL, as the MRO, you must, in addition to step (b)(1) of this paragraph, direct the DER to ensure the immediate collection of another specimen from the employee under direct observation, with no notice given to the employee of this collection requirement until immediately before the collection.
 - (3) In a case where the split failed to reconfirm and the primary specimen's result was also invalid, direct the DER to ensure the immediate collection of another specimen from the employee under direct observation, with no notice given to the employee of this collection requirement until immediately before the collection.
- (c) *Category 3:* The laboratory failed to reconfirm all of the primary specimen results, and also reported that the split specimen was invalid, adulterated, and/or substituted.
- (1) In the case where the laboratory failed to reconfirm all of the primary specimen results and the split was reported as invalid, as the MRO, you must:
 - (i) Report to the DER and the employee that the test must be cancelled and the reason for the cancellation.
 - (ii) Direct the DER to ensure the immediate collection of another specimen from the employee under direct observation, with no notice given to the employee of this collection requirement until immediately before the collection.
 - (iii) Inform ODAPC of the failure to reconfirm using the format in Appendix D to this part.
 - (2) In the case where the laboratory failed to reconfirm any of the primary specimen results, and the split was reported as adulterated and/or substituted, as the MRO, you must:
 - (i) Contact the employee and inform the employee that the laboratory has determined that his or her split specimen is adulterated and/or substituted, as appropriate.
 - (ii) Follow the procedures of §40.145 to determine if there is a legitimate medical explanation for the laboratory finding of adulteration and/or substitution, as appropriate.

- (iii) If you determine that there is a legitimate medical explanation for the adulterated and/or substituted test result, report to the DER and the employee that the test must be cancelled; and inform ODAPC of the failure to reconfirm using the format in Appendix D to this part.
- (iv) If you determine that there is not a legitimate medical explanation for the adulterated and/or substituted test result, you must take the following steps:
 - (A) Report the test to the DER and the employee as a verified refusal to test. Inform the employee that he or she has 72 hours to request a test of the primary specimen to determine if the adulterant found in the split specimen is also present in the primary specimen and/or to determine if the primary specimen meets appropriate substitution criteria.
 - (B) Except when the request is for a test of the primary specimen and is being made to the laboratory that tested the primary specimen, follow the procedures of §§40.153, 40.171, 40.173, 40.179, 40.181, and 40.185, as appropriate.
 - (C) As the laboratory that tests the primary specimen to reconfirm the presence of the adulterant found in the split specimen and/or to determine that the primary specimen meets appropriate substitution criteria, report your result to the MRO on a photocopy (faxed, mailed, scanned, couriered) of Copy 1 of the CCF.
 - (D) If the test of the primary specimen reconfirms the adulteration and/or substitution finding of the split specimen, as the MRO you must report the result as a refusal to test as provided in paragraph (a)(2) of this section.
 - (E) If the test of the primary specimen fails to reconfirm the adulteration and/or substitution finding of the split specimen, as the MRO you must cancel the test, following procedures in paragraph (b) of this section.
- (d) *Category 4:* The laboratory failed to reconfirm one or more but not all of the primary specimen results, and also reported that the split specimen was invalid, adulterated, and/or substituted. As the MRO, in the case where the laboratory reconfirmed one or more of the primary specimen result(s), you must follow procedures in paragraph (a) of this section and:
 - (1) Report that the split was also reported as being invalid, adulterated, and/or substituted (as appropriate).
 - (2) Inform the DER to take action only on the reconfirmed result(s).
- (e) *Category 5:* The split specimen was not available for testing or there was no split laboratory available to test the specimen. As the MRO, you must:
 - (1) Report to the DER and the employee that the test must be cancelled and the reason for the cancellation;
 - (2) Direct the DER to ensure the immediate recollection of another specimen from the employee under direct observation, with no notice given to the employee of this collection requirement until immediately before the collection; and
 - (3) Notify ODAPC of the failure to reconfirm using the format in appendix D to this part.
- (f) For all split specimen results, as the MRO you must in Step 7 of Copy 2 of the CCF:

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- (1) Report split specimen test results by checking the “Reconfirmed” box and/or the “Failed to Reconfirm” box, or the “Test Cancelled” box, as appropriate.
- (2), Enter your name, sign, and date.
- (3) Send a legible copy of Copy 2 of the CCF (or a signed and dated letter, see §40.163) to the employer and keep a copy for your records. Transmit the document as provided in §40.167.

[73 FR 35973, June 25, 2008, as amended at 75 FR 59108, Sept. 27, 2010]

§40.189 Where is other information concerning split specimens found in this regulation?

You can find more information concerning split specimens in several sections of this part:

§40.3—Definition.

§40.65—Quantity of split specimen.

§40.67—Directly observed test when split specimen is unavailable.

§§40.71-40.73—Collection process for split specimens.

§40.83—Laboratory accessioning of split specimens.

§40.99—Laboratory retention of split specimens.

§40.103—Blind split specimens.

§40.153—MRO notice to employees on tests of split specimen.

§§40.193 and 40.201—MRO actions on insufficient or unavailable split specimens.

APPENDIX D TO PART 40—REPORT FORMAT FOR SPLIT SPECIMEN FAILURE TO RECONFIRM.

Subpart I—Problems in Drug Tests

§40.191 What is a refusal to take a DOT drug test, and what are the consequences?

(a) As an employee, you have refused to take a drug test if you:

- (1) Fail to appear for any test (except a pre-employment test) within a reasonable time, as determined by the employer, consistent with applicable DOT agency regulations, after being directed to do so by the employer. This includes the failure of an employee (including an owner-operator) to appear for a test when called by a C/TPA (see §40.61(a));
- (2) *Fail to remain at the testing site until the testing process is complete; Provided, That an employee who leaves the testing site before the testing process commences (see §40.63 (c)) for a pre-employment test is not deemed to have refused to test;*
- (3) Fail to provide a urine specimen for any drug test required by this part or DOT agency regulations; *Provided, That an employee who does not provide a urine specimen because he or she has left the testing site before the testing process commences (see §40.63 (c)) for a pre-employment test is not deemed to have refused to test;*
- (4) In the case of a directly observed or monitored collection in a drug test, fail to permit the observation or monitoring of your provision of a specimen (see §§40.67(l) and 40.69(g));
- (5) Fail to provide a sufficient amount of urine when directed, and it has been determined, through a required medical evaluation, that there was no adequate medical explanation for the failure (see §40.193(d)(2));
- (6) Fail or decline to take an additional drug test the employer or collector has directed you to take (see, for instance, §40.197(b));
- (7) Fail to undergo a medical examination or evaluation, as directed by the MRO as part of the verification process, or as directed by the DER under §40.193(d). In the case of a pre-employment drug test, the employee is deemed to have refused to test on this basis only if the pre-employment test is conducted following a contingent offer of employment. If there was no contingent offer of employment, the MRO will cancel the test; or
- (8) Fail to cooperate with any part of the testing process (e.g., refuse to empty pockets when directed by the collector, behave in a confrontational way that disrupts the collection process, fail to wash hands after being directed to do so by the collector).
- (9) For an observed collection, fail to follow the observer's instructions to raise your clothing above the waist, lower clothing and underpants, and to turn around to permit the observer to determine if you have any type of prosthetic or other device that could be used to interfere with the collection process.
- (10) Possess or wear a prosthetic or other device that could be used to interfere with the collection process.
- (11) Admit to the collector or MRO that you adulterated or substituted the specimen.

- (b) As an employee, if the MRO reports that you have a verified adulterated or substituted test result, you have refused to take a drug test.
- (c) As an employee, if you refuse to take a drug test, you incur the consequences specified under DOT agency regulations for a violation of those DOT agency regulations.
- (d) As a collector or an MRO, when an employee refuses to participate in the part of the testing process in which you are involved, you must terminate the portion of the testing process in which you are involved, document the refusal on the CCF (including, in the case of the collector, printing the employee's name on Copy 2 of the CCF), immediately notify the DER by any means (e.g., telephone or secure fax machine) that ensures that the refusal notification is immediately received. As a referral physician (e.g., physician evaluating a “shy bladder” condition or a claim of a legitimate medical explanation in a validity testing situation), you must notify the MRO, who in turn will notify the DER.
 - (1) As the collector, you must note the refusal in the “Remarks” line (Step 2), and sign and date the CCF.
 - (2) As the MRO, you must note the refusal by checking the “Refusal to Test” box in Step 6 on Copy 2 of the CCF, checking whether the specimen was adulterated or substituted and, if adulterated, noting the adulterant/reason. If there was another reason for the refusal, check “Other” in Step 6 on Copy 2 of the CCF, and note the reason next to the “Other” box and on the “Remarks” lines, as needed. You must then sign and date the CCF.
- (e) As an employee, when you refuse to take a non-DOT test or to sign a non-DOT form, you have not refused to take a DOT test. There are no consequences under DOT agency regulations for refusing to take a non-DOT test.

[65 FR 79526, Dec. 19, 2000, as amended at 66 FR 41953, Aug. 9, 2001; 68 FR 31626, May 28, 2003; 71 FR 49384, Aug. 23, 2006; 73 FR 35974, June 25, 2008; 75 FR 59108, Sept. 27, 2010]

§40.193 What happens when an employee does not provide a sufficient amount of urine for a drug test?

- (a) This section prescribes procedures for situations in which an employee does not provide a sufficient amount of urine to permit a drug test (*i.e.*, 45 mL of urine).
- (b) As the collector, you must do the following:
 - (1) Discard the insufficient specimen, except where the insufficient specimen was out of temperature range or showed evidence of adulteration or tampering (see §40.65(b) and (c)).
 - (2) Urge the employee to drink up to 40 ounces of fluid, distributed reasonably through a period of up to three hours, or until the individual has provided a sufficient urine specimen, whichever occurs first. It is not a refusal to test if the employee declines to drink. Document on the Remarks line of the CCF (Step 2), and inform the employee of, the time at which the three-hour period begins and ends.
 - (3) If the employee refuses to make the attempt to provide a new urine specimen or leaves the collection site before the collection process is complete, you must discontinue the collection, note the fact on the “Remarks” line of the CCF (Step 2), and immediately notify the DER. This is a refusal to test.
 - (4) If the employee has not provided a sufficient specimen within three hours of the first unsuccessful attempt to provide the specimen, you must discontinue the collection, note the fact on the “Remarks” line of the CCF (Step 2), and immediately notify the DER.

- (5) Send Copy 2 of the CCF to the MRO and Copy 4 to the DER. You must send or fax these copies to the MRO and DER within 24 hours or the next business day.
- (c) As the DER, when the collector informs you that the employee has not provided a sufficient amount of urine (see paragraph (b)(4) of this section), you must, after consulting with the MRO, direct the employee to obtain, within five days, an evaluation from a licensed physician, acceptable to the MRO, who has expertise in the medical issues raised by the employee's failure to provide a sufficient specimen. (The MRO may perform this evaluation if the MRO has appropriate expertise.)
- (1) As the MRO, if another physician will perform the evaluation, you must provide the other physician with the following information and instructions:
- (i) That the employee was required to take a DOT drug test, but was unable to provide a sufficient amount of urine to complete the test;
 - (ii) The consequences of the appropriate DOT agency regulation for refusing to take the required drug test;
 - (iii) That the referral physician must agree to follow the requirements of paragraphs (d) through (g) of this section.
- (2) [Reserved]
- (d) As the referral physician conducting this evaluation, you must recommend that the MRO make one of the following determinations:
- (1) A medical condition has, or with a high degree of probability could have, precluded the employee from providing a sufficient amount of urine. As the MRO, if you accept this recommendation, you must:
 - (i) Check "Test Cancelled" (Step 6) on the CCF; and
 - (ii) Sign and date the CCF.
 - (2) There is not an adequate basis for determining that a medical condition has, or with a high degree of probability could have, precluded the employee from providing a sufficient amount of urine. As the MRO, if you accept this recommendation, you must:
 - (i) Check the "Refusal to Test" box and "Other" box in Step 6 on Copy 2 of the CCF and note the reason next to the "Other" box and on the "Remarks" lines, as needed.
 - (ii) Sign and date the CCF.
- (e) For purposes of this paragraph, a medical condition includes an ascertainable physiological condition (e.g., a urinary system dysfunction) or a medically documented pre-existing psychological disorder, but does not include unsupported assertions of "situational anxiety" or dehydration.
- (f) As the referral physician making the evaluation, after completing your evaluation, you must provide a written statement of your recommendations and the basis for them to the MRO. You must not include in this statement detailed information on the employee's medical condition beyond what is necessary to explain your conclusion.
- (g) If, as the referral physician making this evaluation in the case of a pre-employment test, you determine that the employee's medical condition is a serious and permanent or long-term disability that is highly

likely to prevent the employee from providing a sufficient amount of urine for a very long or indefinite period of time, you must set forth your determination and the reasons for it in your written statement to the MRO. As the MRO, upon receiving such a report, you must follow the requirements of §40.195, where applicable.

- (h) As the MRO, you must seriously consider and assess the referral physician's recommendations in making your determination about whether the employee has a medical condition that has, or with a high degree of probability could have, precluded the employee from providing a sufficient amount of urine. You must report your determination to the DER in writing as soon as you make it.
- (i) As the employer, when you receive a report from the MRO indicating that a test is cancelled as provided in paragraph (d)(1) of this section, you take no further action with respect to the employee. The employee remains in the random testing pool.

[65 FR 79526, Dec. 19, 2000, as amended at 66 FR 41953, Aug. 9, 2001; 75 FR 59108, Sept. 27, 2010]

§40.195 What happens when an individual is unable to provide a sufficient amount of urine for a pre-employment follow-up or return-to-duty test because of a permanent or long-term medical condition?

- (a) This section concerns a situation in which an employee has a medical condition that precludes him or her from providing a sufficient specimen for a pre-employment follow-up or return-to-duty test and the condition involves a permanent or long-term disability. As the MRO in this situation, you must do the following:
 - (1) You must determine if there is clinical evidence that the individual is an illicit drug user. You must make this determination by personally conducting, or causing to be conducted, a medical evaluation and through consultation with the employee's physician and/or the physician who conducted the evaluation under §40.193(d).
 - (2) If you do not personally conduct the medical evaluation, you must ensure that one is conducted by a licensed physician acceptable to you.
 - (3) For purposes of this section, the MRO or the physician conducting the evaluation may conduct an alternative test (*e.g.*, blood) as part of the medically appropriate procedures in determining clinical evidence of drug use.
- (b) If the medical evaluation reveals no clinical evidence of drug use, as the MRO, you must report the result to the employer as a negative test with written notations regarding results of both the evaluation conducted under §40.193(d) and any further medical examination. This report must state the basis for the determination that a permanent or long-term medical condition exists, making provision of a sufficient urine specimen impossible, and for the determination that no signs and symptoms of drug use exist.
 - (1) Check "Negative" (Step 6) on the CCF.
 - (2) Sign and date the CCF.
- (c) If the medical evaluation reveals clinical evidence of drug use, as the MRO, you must report the result to the employer as a cancelled test with written notations regarding results of both the evaluation conducted under §40.193(d) and any further medical examination. This report must state that a permanent or long-term medical condition exists, making provision of a sufficient urine specimen impossible, and state the reason for the determination that signs and symptoms of drug use exist.

Because this is a cancelled test, it does not serve the purposes of a negative test (*i.e.*, the employer is not authorized to allow the employee to begin or resume performing safety-sensitive functions, because a negative test is needed for that purpose).

(d) For purposes of this section, permanent or long-term medical conditions are those physiological, anatomic, or psychological abnormalities documented as being present prior to the attempted collection, and considered not amenable to correction or cure for an extended period of time, if ever.

(1) Examples would include destruction (any cause) of the glomerular filtration system leading to renal failure; unrepaired traumatic disruption of the urinary tract; or a severe psychiatric disorder focused on genito-urinary matters.

(2) Acute or temporary medical conditions, such as cystitis, urethritis or prostatitis, though they might interfere with collection for a limited period of time, cannot receive the same exceptional consideration as the permanent or long-term conditions discussed in paragraph (d)(1) of this section.

[65 FR 79526, Dec. 19, 2000, as amended at 66 FR 41953, Aug. 9, 2001]

§40.197 What happens when an employer receives a report of a dilute specimen?

(a) As the employer, if the MRO informs you that a positive drug test was dilute, you simply treat the test as a verified positive test. You must not direct the employee to take another test based on the fact that the specimen was dilute.

(b) As an employer, if the MRO informs you that a negative test was dilute, take the following action:

(1) If the MRO directs you to conduct a recollection under direct observation (*i.e.*, because the creatinine concentration of the specimen was equal to or greater than 2mg/dL, but less than or equal to 5 mg/dL (see §40.155(c)), you must do so immediately.

(2) Otherwise (*i.e.*, if the creatinine concentration of the dilute specimen is greater than 5 mg/dL), you may, but are not required to, direct the employee to take another test immediately.

(i) Such recollections must not be collected under direct observation, unless there is another basis for use of direct observation (see §40.67 (b) and (c)).

(ii) You must treat all employees the same for this purpose. For example, you must not retest some employees and not others. You may, however, establish different policies for different types of tests (*e.g.*, conduct retests in pre-employment situations, but not in random test situations). You must inform your employees in advance of your decisions on these matters.

(c) The following provisions apply to all tests you direct an employee to take under paragraph (b) of this section:

(1) You must ensure that the employee is given the minimum possible advance notice that he or she must go to the collection site;

(2) You must treat the result of the test you directed the employee to take under paragraph (b) of this section—and not a prior test—as the test result of record, on which you rely for purposes of this part;

- (3) If the result of the test you directed the employee to take under paragraph (b)(1) of this section is also negative and dilute, you are not permitted to make the employee take an additional test because the result was dilute.
- (4) If the result of the test you directed the employee to take under paragraph (b)(2) of this section is also negative and dilute, you are not permitted to make the employee take an additional test because the result was dilute. Provided, however, that if the MRO directs you to conduct a recollection under direct observation under paragraph (b)(1) of this section, you must immediately do so.
- (5) If the employee declines to take a test you directed him or her to take under paragraph (b) of this section, the employee has refused the test for purposes of this part and DOT agency regulations.

[68 FR 31626, May 28, 2003, as amended at 69 FR 64867, Nov. 9, 2004; 73 FR 35974, June 25, 2008]

§40.199 What problems always cause a drug test to be cancelled?

- (a) As the MRO, when the laboratory discovers a “fatal flaw” during its processing of incoming specimens (see §40.83), the laboratory will report to you that the specimen has been “Rejected for Testing” (with the reason stated). You must always cancel such a test.
- (b) The following are “fatal flaws”:
 - (1) There is no printed collector's name *and* no collector's signature;
 - (2) The specimen ID numbers on the specimen bottle and the CCF do not match;
 - (3) The specimen bottle seal is broken or shows evidence of tampering (and a split specimen cannot be redesignated, see §40.83(g)); and
 - (4) Because of leakage or other causes, there is an insufficient amount of urine in the primary specimen bottle for analysis and the specimens cannot be redesignated (see §40.83(g)).
- (c) You must report the result as provided in §40.161.

§40.201 What problems always cause a drug test to be cancelled and may result in a requirement for another collection?

As the MRO, you must cancel a drug test when a laboratory reports that any of the following problems have occurred. You must inform the DER that the test was cancelled. You must also direct the DER to ensure that an additional collection occurs immediately, if required by the applicable procedures specified in paragraphs (a) through (e) of this section.

- (a) The laboratory reports an “Invalid Result.” You must follow applicable procedures in §40.159 (recollection under direct observation may be required).
- (b) The laboratory reports the result as “Rejected for Testing.” You must follow applicable procedures in §40.161 (a recollection may be required).
- (c) The laboratory reports that the split specimen failed to reconfirm all of the primary specimen results because the drug(s)/drug metabolite(s) were not detected; adulteration criteria were not met; and/or substitution criteria were not met. You must follow the applicable procedures in §40.187(b)—no recollection is required in this case, unless the split specimen creatinine concentration for a substituted

primary specimen was greater than or equal to 2mg/dL but less than or equal to 5mg/ dL, or the primary specimen had an invalid result which was not reported to the DER. Both these cases require recollection under direct observation.

- (d) The laboratory reports that the split specimen failed to reconfirm all of the primary specimen results, and that the split specimen was invalid. You must follow the procedures in §40.187(c)(1)—recollection under direct observation is required in this case.
- (e) The laboratory reports that the split specimen failed to reconfirm all of the primary specimen results because the split specimen was not available for testing or there was no split laboratory available to test the specimen. You must follow the applicable procedures in §40.187(e)—recollection under direct observation is required in this case.
- (f) The examining physician has determined that there is an acceptable medical explanation of the employee's failure to provide a sufficient amount of urine. You must follow applicable procedures in §40.193(d)(1) (no recollection is required in this case).

[65 FR 79526, Dec. 19, 2000, as amended at 73 FR 35974, June 25, 2008]

§40.203 What problems cause a drug test to be cancelled unless they are corrected?

- (a) As the MRO, when a laboratory discovers a “correctable flaw” during its processing of incoming specimens (see §40.83), the laboratory will attempt to correct it. If the laboratory is unsuccessful in this attempt, it will report to you that the specimen has been “Rejected for Testing” (with the reason stated).
- (b) The following is a “correctable flaw” that laboratories must attempt to correct: The collector's signature is omitted on the certification statement on the CCF.
- (c) As the MRO, when you discover a “correctable flaw” during your review of the CCF, you must cancel the test unless the flaw is corrected.
- (d) The following are correctable flaws that you must attempt to correct:
 - (1) The employee's signature is omitted from the certification statement, unless the employee's failure or refusal to sign is noted on the “Remarks” line of the CCF.
 - (2) The certifying scientist's signature is omitted on Copy 1 of the CCF for a positive, adulterated, substituted, or invalid test result.
 - (3) The collector uses a non-Federal form or an expired CCF for the test. This flaw may be corrected through the procedure set forth in §40.205(b)(2), provided that the collection testing process has been conducted in accordance with the procedures of this part in an HHS-certified laboratory. During the period of October 1, 2010-November 30, 2011, you are not required to cancel a test because of the use of an old CCF. Beginning December 1, 2011, if the problem is not corrected, you must cancel the test.

[65 FR 79526, Dec. 19, 2000, as amended at 66 FR 41954, Aug. 9, 2001; 75 FR 59108, Sept. 27, 2010; 76 FR 59578, Sept. 27, 2011]

§40.205 How are drug test problems corrected?

(a) As a collector, you have the responsibility of trying to successfully complete a collection procedure for each employee.

(1) If, during or shortly after the collection process, you become aware of any event that prevents the completion of a valid test or collection (*e.g.*, a procedural or paperwork error), you must try to correct the problem promptly, if doing so is practicable. You may conduct another collection as part of this effort.

(2) If another collection is necessary, you must begin the new collection procedure as soon as possible, using a new CCF and a new collection kit.

(b) If, as a collector, laboratory, MRO, employer, or other person implementing these drug testing regulations, you become aware of a problem that can be corrected (see §40.203), but which has not already been corrected under paragraph (a) of this section, you must take all practicable action to correct the problem so that the test is not cancelled.

(1) If the problem resulted from the omission of required information, you must, as the person responsible for providing that information, supply in writing the missing information and a statement that it is true and accurate. For example, suppose you are a collector, and you forgot to make a notation on the “Remarks” line of the CCF that the employee did not sign the certification. You would, when the problem is called to your attention, supply a signed statement that the employee failed or refused to sign the certification and that your statement is true and accurate. You must supply this information on the same business day on which you are notified of the problem, transmitting it by fax or courier.

(2) If the problem is the use of a non-Federal form or an expired Federal form, you must provide a signed statement (*i.e.*, a memorandum for the record). It must state that the incorrect form contains all the information needed for a valid DOT drug test, and that the incorrect form was used inadvertently or as the only means of conducting a test, in circumstances beyond your control. The statement must also list the steps you have taken to prevent future use of non-Federal forms or expired Federal forms for DOT tests. For this flaw to be corrected, the test of the specimen must have occurred at a HHS-certified laboratory where it was tested consistent with the requirements of this part. You must supply this information on the same business day on which you are notified of the problem, transmitting it by fax or courier.

(3) You must maintain the written documentation of a correction with the CCF.

(4) You must mark the CCF in such a way (*e.g.*, stamp noting correction) as to make it obvious on the face of the CCF that you corrected the flaw.

(c) If the correction does not take place, as the MRO you must cancel the test.

[65 FR 79526, Dec. 19, 2000, as amended at 66 FR 41954, Aug. 9, 2001]

§40.207 What is the effect of a cancelled drug test?

(a) A cancelled drug test is neither positive nor negative.

- (1) As an employer, you must not attach to a cancelled test the consequences of a positive test or other violation of a DOT drug testing regulation (*e.g.*, removal from a safety-sensitive position).
- (2) As an employer, you must not use a cancelled test for the purposes of a negative test to authorize the employee to perform safety-sensitive functions (*i.e.*, in the case of a pre-employment, return-to-duty, or follow-up test).
- (3) However, as an employer, you must not direct a recollection for an employee because a test has been cancelled, except in the situations cited in paragraph (a)(2) of this section or other provisions of this part that require another test to be conducted (*e.g.*, §§40.159(a)(5) and 40.187(b)(2), (c)(1), and (e)).
- (b) A cancelled test does not count toward compliance with DOT requirements (*e.g.*, being applied toward the number of tests needed to meet the employer's minimum random testing rate).
- (c) A cancelled DOT test does not provide a valid basis for an employer to conduct a non-DOT test (*i.e.*, a test under company authority).

[65 FR 79526, Dec. 19, 2000, as amended at 73 FR 35975, June 25, 2008]

§40.208 What problem requires corrective action but does not result in the cancellation of a test?

- (a) If, as a laboratory, collector, employer, or other person implementing the DOT drug testing program, you become aware that the specimen temperature on the CCF was not checked and the “Remarks” line did not contain an entry regarding the temperature being out of range, you must take corrective action, including securing a memorandum for the record explaining the problem and taking appropriate action to ensure that the problem does not recur.
- (b) This error does not result in the cancellation of the test.
- (c) As an employer or service agent, this error, even though not sufficient to cancel a drug test result, may subject you to enforcement action under DOT agency regulations or Subpart R of this part.

[66 FR 41954, Aug. 9, 2001]

§40.209 What procedural problems do not result in the cancellation of a test and do not require correction?

- (a) As a collector, laboratory, MRO, employer or other person administering the drug testing process, you must document any errors in the testing process of which you become aware, even if they are not considered problems that will cause a test to be cancelled as listed in this subpart. Decisions about the ultimate impact of these errors will be determined by other administrative or legal proceedings, subject to the limitations of paragraph (b) of this section.
- (b) No person concerned with the testing process may declare a test cancelled based on an error that does not have a significant adverse effect on the right of the employee to have a fair and accurate test. Matters that do not result in the cancellation of a test include, but are not limited to, the following:
 - (1) A minor administrative mistake (*e.g.*, the omission of the employee's middle initial, a transposition of numbers in the employee's social security number, the omission of the DOT Agency in Step 1-D of the CCF.)

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- (2) An error that does not affect employee protections under this part (*e.g.*, the collector's failure to add bluing agent to the toilet bowl, which adversely affects only the ability of the collector to detect tampering with the specimen by the employee);
 - (3) The collection of a specimen by a collector who is required to have been trained (see §40.33), but who has not met this requirement;
 - (4) A delay in the collection process (see §40.61(a));
 - (5) Verification of a test result by an MRO who has the basic credentials to be qualified as an MRO (see §40.121(a) through (b)) but who has not met training and/or documentation requirements (see §40.121(c) through (e));
 - (6) The failure to directly observe or monitor a collection that the rule requires or permits to be directly observed or monitored, or the unauthorized use of direct observation or monitoring for a collection;
 - (7) The fact that a test was conducted in a facility that does not meet the requirements of §40.41;
 - (8) If the specific name of the courier on the CCF is omitted or erroneous;
 - (9) Personal identifying information is inadvertently contained on the CCF (*e.g.*, the employee signs his or her name on Copy 1); or
 - (10) Claims that the employee was improperly selected for testing.
- (c) As an employer or service agent, these types of errors, even though not sufficient to cancel a drug test result, may subject you to enforcement action under DOT agency regulations or action under Subpart R of this part.

[65 FR 79526, Dec. 19, 2000, as amended at 66 FR 41954, Aug. 9, 2001; 75 FR 59108, Sept. 27, 2010]

Subpart J - Alcohol Testing Personnel

§40.211 Who conducts DOT alcohol tests?

- (a) Screening test technicians (STTs) and breath alcohol technicians (BATs) meeting their respective requirements of this subpart are the only people authorized to conduct DOT alcohol tests.
- (b) An STT can conduct only alcohol screening tests, but a BAT can conduct alcohol screening and confirmation tests.
- (c) As a BAT- or STT-qualified immediate supervisor of a particular employee, you may not act as the STT or BAT when that employee is tested, unless no other STT or BAT is available and DOT agency regulations do not prohibit you from doing so.

§40.213 What training requirements must STTs and BATs meet?

To be permitted to act as a BAT or STT in the DOT alcohol testing program, you must meet each of the requirements of this section:

- (a) *Basic information.* You must be knowledgeable about the alcohol testing procedures in this part and the current DOT guidance. These documents and information are available from ODAPC (Department of Transportation, 1200 New Jersey Avenue, SE., Washington DC, 20590, 202-366-3784, or on the ODAPC web site, <http://www.dot.gov/ost/dapc>).
- (b) *Qualification training.* You must receive qualification training meeting the requirements of this paragraph (b).
 - (1) Qualification training must be in accordance with the DOT Model BAT or STT Course, as applicable. The DOT Model Courses are available from ODAPC (Department of Transportation, 1200 New Jersey Avenue, SE, Washington DC, 20590, 202-366-3784, or on the ODAPC web site, <http://www.dot.gov/ost/dapc>). The training can also be provided using a course of instruction equivalent to the DOT Model Courses. On request, ODAPC will review BAT and STT instruction courses for equivalency.
 - (2) Qualification training must include training to proficiency in using the alcohol testing procedures of this part and in the operation of the particular alcohol testing device(s) (*i.e.*, the ASD(s) or EBT(s)) you will be using.
 - (3) The training must emphasize that you are responsible for maintaining the integrity of the testing process, ensuring the privacy of employees being tested, and avoiding conduct or statements that could be viewed as offensive or inappropriate.
 - (4) The instructor must be an individual who has demonstrated necessary knowledge, skills, and abilities by regularly conducting DOT alcohol tests as an STT or BAT, as applicable, for a period of at least a year, who has conducted STT or BAT training, as applicable, under this part for a year, or who has successfully completed a “train the trainer” course.

- (c) *Initial Proficiency Demonstration.* Following your completion of qualification training under paragraph (b) of this section, you must demonstrate proficiency in alcohol testing under this part by completing seven consecutive error-free mock tests (BATs) or five consecutive error-free tests (STTs).
- (1) Another person must monitor and evaluate your performance, in person or by a means that provides real-time observation and interaction between the instructor and trainee, and attest in writing that the mock collections are “error-free.” This person must be an individual who meets the requirements of paragraph (b)(4) of this section.
 - (2) These tests must use the alcohol testing devices (e.g., EBT(s) or ASD(s)) that you will use as a BAT or STT.
 - (3) If you are an STT who will be using an ASD that indicates readings by changes, contrasts, or other readings in color, you must demonstrate as part of the mock test that you are able to discern changes, contrasts, or readings correctly.
- (d) *Schedule for qualification training and initial proficiency demonstration.* The following is the schedule for qualification training and the initial proficiency demonstration you must meet:
- (1) If you became a BAT or STT before August 1, 2001, you were required to have met the requirements set forth in paragraphs (b) and (c) of this section, and you do not have to meet them again.
 - (2) If you become a BAT or STT on or after August 1, 2001, you must meet the requirements of paragraphs (b) and (c) of this section before you begin to perform BAT or STT functions.
- (e) *Refresher training.* No less frequently than every five years from the date on which you satisfactorily complete the requirements of paragraphs (b) and (c) of this section, you must complete refresher training that meets all the requirements of paragraphs (b) and (c) of this section. If you are a BAT or STT who completed qualification training before January 1, 1998, you are not required to complete refresher training until January 1, 2003.
- (f) *Error Correction Training.* If you make a mistake in the alcohol testing process that causes a test to be cancelled (i.e., a fatal or uncorrected flaw), you must undergo error correction training. This training must occur within 30 days of the date you are notified of the error that led to the need for retraining.
- (1) Error correction training must be provided and your proficiency documented in writing by a person who meets the requirements of paragraph (b)(4) of this section.
 - (2) Error correction training is required to cover only the subject matter area(s) in which the error that caused the test to be cancelled occurred.
 - (3) As part of the error correction training, you must demonstrate your proficiency in the alcohol testing procedures of this part by completing three consecutive error-free mock tests. The mock tests must include one uneventful scenario and two scenarios related to the area(s) in which your error(s) occurred. The person providing the training must monitor and evaluate your performance and attest in writing that the mock tests were error-free.
- (g) *Documentation.* You must maintain documentation showing that you currently meet all requirements of this section. You must provide this documentation on request to DOT agency representatives and to employers and C/TPAs who are negotiating to use your services.

- (h) *Other persons who may serve as BATs or STTs.* (1) Anyone meeting the requirements of this section to be a BAT may act as an STT, provided that the individual has demonstrated initial proficiency in the operation of the ASD that he or she is using, as provided in paragraph (c) of this section.
- (2) Law enforcement officers who have been certified by state or local governments to conduct breath alcohol testing are deemed to be qualified as BATs. They are not required to also complete the training requirements of this section in order to act as BATs. In order for a test conducted by such an officer to be accepted under DOT alcohol testing requirements, the officer must have been certified by a state or local government to use the EBT or ASD that was used for the test.

[65 FR 79526, Dec. 19, 2000, as amended at 66 FR 41954, Aug. 9, 2001; 75 FR 5244, Feb. 2, 2010]

§40.215 What information about the DER do employers have to provide to BATs and STTs?

As an employer, you must provide to the STTs and BATs the name and telephone number of the appropriate DER (and C/TPA, where applicable) to contact about any problems or issues that may arise during the testing process.

§40.217 Where is other information on the role of STTs and BATs found in this regulation?

You can find other information on the role and functions of STTs and BATs in the following sections of this part:

§40.3—Definitions.

§40.223—Responsibility for supervising employees being tested.

§§40.225-40.227—Use of the alcohol testing form.

§§40.241-40.245—Screening test procedures with ASDs and EBTs.

§§40.251-40.255—Confirmation test procedures.

§40.261—Refusals to test.

§§40.263-40.265—Insufficient saliva or breath.

§40.267—Problems requiring cancellation of tests.

§§40.269-40.271—Correcting problems in tests.

Subpart K - Testing Sites, Forms, Equipment and Supplies Used in Alcohol Testing

§40.221 Where does an alcohol test take place?

- (a) A DOT alcohol test must take place at an alcohol testing site meeting the requirements of this section.
- (b) If you are operating an alcohol testing site, you must ensure that it meets the security requirements of §40.223.
- (c) If you are operating an alcohol testing site, you must ensure that it provides visual and aural privacy to the employee being tested, sufficient to prevent unauthorized persons from seeing or hearing test results.
- (d) If you are operating an alcohol testing site, you must ensure that it has all needed personnel, materials, equipment, and facilities to provide for the collection and analysis of breath and/or saliva samples, and a suitable clean surface for writing.
- (e) If an alcohol testing site fully meeting all the visual and aural privacy requirements of paragraph (c) is not readily available, this part allows a reasonable suspicion or post-accident test to be conducted at a site that partially meets these requirements. In this case, the site must afford visual and aural privacy to the employee to the greatest extent practicable.
- (f) An alcohol testing site can be in a medical facility, a mobile facility (*e.g.*, a van), a dedicated collection facility, or any other location meeting the requirements of this section.

§40.223 What steps must be taken to protect the security of alcohol testing sites?

- (a) If you are a BAT, STT, or other person operating an alcohol testing site, you must prevent unauthorized personnel from entering the testing site.
 - (1) The only people you are to treat as authorized persons are employees being tested, BATs, STTs, and other alcohol testing site workers, DERs, employee representatives authorized by the employer (*e.g.*, on the basis of employer policy or labor-management agreement), and DOT agency representatives.
 - (2) You must ensure that all persons are under the supervision of a BAT or STT at all times when permitted into the site.
 - (3) You may remove any person who obstructs, interferes with, or causes unnecessary delay in the testing process.
- (b) As the BAT or STT, you must not allow any person other than you, the employee, or a DOT agency representative to actually witness the testing process (see §§40.241-40.255).
- (c) If you are operating an alcohol testing site, you must ensure that when an EBT or ASD is not being used for testing, you store it in a secure place.
- (d) If you are operating an alcohol testing site, you must ensure that no one other than BATs or other employees of the site have access to the site when an EBT is unsecured.

- (e) As a BAT or STT, to avoid distraction that could compromise security, you are limited to conducting an alcohol test for only one employee at a time.
 - (1) When an EBT screening test on an employee indicates an alcohol concentration of 0.02 or higher, and the same EBT will be used for the confirmation test, you are not allowed to use the EBT for a test on another employee before completing the confirmation test on the first employee.
 - (2) As a BAT who will conduct both the screening and the confirmation test, you are to complete the entire screening and confirmation process on one employee before starting the screening process on another employee.
 - (3) You are not allowed to leave the alcohol testing site while the testing process for a given employee is in progress, except to notify a supervisor or contact a DER for assistance in the case an employee or other person who obstructs, interferes with, or unnecessarily delays the testing process.

§40.225 What form is used for an alcohol test?

- (a) The DOT Alcohol Testing Form (ATF) must be used for every DOT alcohol test. The ATF must be a three-part carbonless manifold form. The ATF is found in Appendix G to this part. You may view this form on the ODAPC web site (<http://www.dot.gov/ost/dapc>).
- (b) As an employer in the DOT alcohol testing program, you are not permitted to modify or revise the ATF except as follows:
 - (1) You may include other information needed for billing purposes, outside the boundaries of the form.
 - (2) You may use a ATF directly generated by an EBT which omits the space for affixing a separate printed result to the ATF, provided the EBT prints the result directly on the ATF.
 - (3) You may use an ATF that has the employer's name, address, and telephone number preprinted. In addition, a C/TPA's name, address, and telephone number may be included, to assist with negative results.
 - (4) You may use an ATF in which all pages are printed on white paper. You may modify the ATF by using colored paper, or have clearly discernable borders or designation statements on Copy 2 and Copy 3. When colors are used, they must be green for Copy 2 and blue for Copy 3.
 - (5) As a BAT or STT, you may add, on the "Remarks" line of the ATF, the name of the DOT agency under whose authority the test occurred.
 - (6) As a BAT or STT, you may use a ATF that has your name, address, and telephone number preprinted, but under no circumstances can your signature be preprinted.
- (c) As an employer, you may use an equivalent foreign-language version of the ATF approved by ODAPC. You may use such a non-English language form only in a situation where both the employee and BAT/STT understand and can use the form in that language.

[65 FR 79526, Dec. 19, 2000, as amended at 66 FR 41954, Aug. 9, 2001; 75 FR 8529, Feb. 25, 2010; 75 FR 13009, Mar. 18, 2010]

§40.227 May employers use the ATF for non-DOT tests, or non-DOT forms for DOT tests?

- (a) No, as an employer, BAT, or STT, you are prohibited from using the ATF for non-DOT alcohol tests. You are also prohibited from using non-DOT forms for DOT alcohol tests. Doing either subjects you to enforcement action under DOT agency regulations.
- (b) If the STT or BAT, either by mistake, or as the only means to conduct a test under difficult circumstances (*e.g.*, post-accident test with insufficient time to obtain the ATF), uses a non-DOT form for a DOT test, the use of a non-DOT form does not, in and of itself, require the employer or service agent to cancel the test. However, in order for the test to be considered valid, a signed statement must be obtained from the STT or BAT in accordance with §40.271(b).

§40.229 What devices are used to conduct alcohol screening tests?

EBTs and ASDs on the NHTSA conforming products lists (CPL) for evidential and non-evidential devices are the only devices you are allowed to use to conduct alcohol screening tests under this part. You may use an ASD that is on the NHTSA CPL for DOT alcohol tests only if there are instructions for its use in this part. An ASD can be used only for screening tests for alcohol, and may not be used for confirmation tests.

[65 FR 79526, Dec. 19, 2000, as amended at 66 FR 41954, Aug. 9, 2001]

§40.231 What devices are used to conduct alcohol confirmation tests?

- (a) EBTs on the NHTSA CPL for evidential devices that meet the requirements of paragraph (b) of this section are the only devices you may use to conduct alcohol confirmation tests under this part. Note that, among devices on the CPL for EBTs, only those devices listed without an asterisk (*) are authorized for use in confirmation testing in the DOT alcohol testing program.
- (b) To conduct a confirmation test, you must use an EBT that has the following capabilities:
 - (1) Provides a printed triplicate result (or three consecutive identical copies of a result) of each breath test;
 - (2) Assigns a unique number to each completed test, which the BAT and employee can read before each test and which is printed on each copy of the result;
 - (3) Prints, on each copy of the result, the manufacturer's name for the device, its serial number, and the time of the test;
 - (4) Distinguishes alcohol from acetone at the 0.02 alcohol concentration level;
 - (5) Tests an air blank; and
 - (6) Performs an external calibration check.

§40.233 What are the requirements for proper use and care of EBTs?

- (a) As an EBT manufacturer, you must submit, for NHTSA approval, a quality assurance plan (QAP) for your EBT before NHTSA places the EBT on the CPL.

- (1) Your QAP must specify the methods used to perform external calibration checks on the EBT, the tolerances within which the EBT is regarded as being in proper calibration, and the intervals at which these checks must be performed. In designating these intervals, your QAP must take into account factors like frequency of use, environmental conditions (*e.g.*, temperature, humidity, altitude) and type of operation (*e.g.*, stationary or mobile).
- (2) Your QAP must also specify the inspection, maintenance, and calibration requirements and intervals for the EBT.
- (b) As the manufacturer, you must include, with each EBT, instructions for its use and care consistent with the QAP.
- (c) As the user of the EBT (*e.g.*, employer, service agent), you must do the following:
 - (1) You must follow the manufacturer's instructions (see paragraph (b) of this section), including performance of external calibration checks at the intervals the instructions specify.
 - (2) In conducting external calibration checks, you must use only calibration devices appearing on NHTSA's CPL for "Calibrating Units for Breath Alcohol Tests."
 - (3) If an EBT fails an external check of calibration, you must take the EBT out of service. You may not use the EBT again for DOT alcohol testing until it is repaired and passes an external calibration check.
 - (4) You must maintain records of the inspection, maintenance, and calibration of EBTs as provided in §40.333(a)(2).
 - (5) You must ensure that inspection, maintenance, and calibration of the EBT are performed by its manufacturer or a maintenance representative certified either by the manufacturer or by a state health agency or other appropriate state agency.

§40.235 What are the requirements for proper use and care of ASDs?

- (a) As an ASD manufacturer, you must submit, for NHTSA approval, a QAP for your ASD before NHTSA places the ASD on the CPL. Your QAP must specify the methods used for quality control checks, temperatures at which the ASD must be stored and used, the shelf life of the device, and environmental conditions (*e.g.*, temperature, altitude, humidity) that may affect the ASD's performance.
- (b) As a manufacturer, you must include with each ASD instructions for its use and care consistent with the QAP. The instructions must include directions on the proper use of the ASD, and, where applicable the time within which the device must be read, and the manner in which the reading is made.
- (c) As the user of the ADS (*e.g.*, employer, STT), you must follow the QAP instructions.
- (d) You are not permitted to use an ASD that does not pass the specified quality control checks or that has passed its expiration date.
- (e) As an employer, with respect to breath ASDs, you must also follow the device use and care requirements of §40.233.

Subpart L—Alcohol Screening Tests

§40.241 What are the first steps in any alcohol screening test?

As the BAT or STT you will take the following steps to begin all alcohol screening tests, regardless of the type of testing device you are using:

- (a) When a specific time for an employee's test has been scheduled, or the collection site is at the employee's worksite, and the employee does not appear at the collection site at the scheduled time, contact the DER to determine the appropriate interval within which the DER has determined the employee is authorized to arrive. If the employee's arrival is delayed beyond that time, you must notify the DER that the employee has not reported for testing. In a situation where a C/TPA has notified an owner/operator or other individual employee to report for testing and the employee does not appear, the C/TPA must notify the employee that he or she has refused to test.
- (b) Ensure that, when the employee enters the alcohol testing site, you begin the alcohol testing process without undue delay. For example, you must not wait because the employee says he or she is not ready or because an authorized employer or employee representative is delayed in arriving.
 - (1) If the employee is also going to take a DOT drug test, you must, to the greatest extent practicable, ensure that the alcohol test is completed before the urine collection process begins.
 - (2) If the employee needs medical attention (*e.g.*, an injured employee in an emergency medical facility who is required to have a post-accident test), do not delay this treatment to conduct a test.
- (c) Require the employee to provide positive identification. You must see a photo ID issued by the employer (other than in the case of an owner-operator or other self-employer individual) or a Federal, state, or local government (*e.g.*, a driver's license). You may not accept faxes or photocopies of identification. Positive identification by an employer representative (not a co-worker or another employee being tested) is also acceptable. If the employee cannot produce positive identification, you must contact a DER to verify the identity of the employee.
- (d) If the employee asks, provide your identification to the employee. Your identification must include your name and your employer's name but is not required to include your picture, address, or telephone number.
- (e) Explain the testing procedure to the employee, including showing the employee the instructions on the back of the ATF.
- (f) Complete Step 1 of the ATF.
- (g) Direct the employee to complete Step 2 on the ATF and sign the certification. If the employee refuses to sign this certification, you must document this refusal on the "Remarks" line of the ATF and immediately notify the DER. This is a refusal to test.

§40.243 What is the procedure for an alcohol screening test using an EBT or non-evidential breath ASD?

As the BAT or STT, you must take the following steps:

- (a) Select, or allow the employee to select, an individually wrapped or sealed mouthpiece from the testing materials.
- (b) Open the individually wrapped or sealed mouthpiece in view of the employee and insert it into the device in accordance with the manufacturer's instructions.
- (c) Instruct the employee to blow steadily and forcefully into the mouthpiece for at least six seconds or until the device indicates that an adequate amount of breath has been obtained.
- (d) Show the employee the displayed test result.
- (e) If the device is one that prints the test number, testing device name and serial number, time, and result directly onto the ATF, you must check to ensure that the information has been printed correctly onto the ATF.
- (f) If the device is one that prints the test number, testing device name and serial number, time and result, but on a separate printout rather than directly onto the ATF, you must affix the printout of the information to the designated space on the ATF with tamper-evident tape or use a self-adhesive label that is tamper-evident.
- (g) If the device is one that does not print the test number, testing device name and serial number, time, and result, or it is a device not being used with a printer, you must record this information in Step 3 of the ATF.

§40.245 What is the procedure for an alcohol screening test using a saliva ASD or a breath tube ASD?

- (a) As the STT or BAT, you must take the following steps when using the saliva ASD:
 - (1) Check the expiration date on the device or on the package containing the device and show it to the employee. You may not use the device after its expiration date.
 - (2) Open an individually wrapped or sealed package containing the device in the presence of the employee.
 - (3) Offer the employee the opportunity to use the device. If the employee uses it, you must instruct the employee to insert it into his or her mouth and use it in a manner described by the device's manufacturer.
 - (4) If the employee chooses not to use the device, or in all cases in which a new test is necessary because the device did not activate (see paragraph (a)(7) of this section), you must insert the device into the employee's mouth and gather saliva in the manner described by the device's manufacturer. You must wear single-use examination or similar gloves while doing so and change them following each test.
 - (5) When the device is removed from the employee's mouth, you must follow the manufacturer's instructions regarding necessary next steps in ensuring that the device has activated.
 - (6)(i) If you were unable to successfully follow the procedures of paragraphs (a)(3) through (a)(5) of this section (*e.g.*, the device breaks, you drop the device on the floor), you must discard the device and conduct a new test using a new device.
 - (ii) The new device you use must be one that has been under your control or that of the employee before the test.

- (iii) You must note on the “Remarks” line of the ATF the reason for the new test. (Note: You may continue using the same ATF with which you began the test.)
 - (iv) You must offer the employee the choice of using the device or having you use it unless the employee, in the opinion of the STT or BAT, was responsible (*e.g.*, the employee dropped the device) for the new test needing to be conducted.
 - (v) If you are unable to successfully follow the procedures of paragraphs (a)(3) through (a)(5) of this section on the new test, you must end the collection and put an explanation on the “Remarks” line of the ATF.
 - (vi) You must then direct the employee to take a new test immediately, using an EBT for the screening test.
- (7) If you are able to successfully follow the procedures of paragraphs (a)(3)-(a)(5) of this section, but the device does not activate, you must discard the device and conduct a new test, in the same manner as provided in paragraph (a)(6) of this section. In this case, you must place the device into the employee's mouth to collect saliva for the new test.
- (8) You must read the result displayed on the device no sooner than the device's manufacturer instructs. In all cases the result displayed must be read within 15 minutes of the test. You must then show the device and its reading to the employee and enter the result on the ATF.
- (9) You must never re-use devices, swabs, gloves or other materials used in saliva testing.
- (10) You must note the fact that you used a saliva ASD in Step 3 of the ATF.
- (b) As the STT or BAT, you must take the following steps when using the breath tube ASD:
- (1) Check the expiration date on the detector device and the electronic analyzer or on the package containing the device and the analyzer and show it to the employee. You must not use the device or the analyzer after their expiration date. You must not use an analyzer which is not specifically pre-calibrated for the device being used in the collection.
 - (2) Remove the device from the package and secure an inflation bag onto the appropriate end of the device, as directed by the manufacturer on the device's instructions.
 - (3) Break the tube's ampoule in the presence of the employee.
 - (4) Offer the employee the opportunity to use the device. If the employee chooses to use (*e.g.* hold) the device, instruct the employee to blow forcefully and steadily into the blowing end of device until the inflation bag fills with air (approximately 12 seconds).
 - (5) If the employee chooses not to hold the device, you must hold it and provide the use instructions in paragraph (b)(4) of this section.
 - (6) When the employee completes the breath process, take the device from the employee (or if you were holding it, remove it from the employee's mouth), remove the inflation bag, and prepare the device to be read by the analyzer in accordance with the manufacturer's directions.
 - (7)(i) If you were unable to successfully follow the procedures of paragraphs (b)(4) through (b)(6) of this section (*e.g.*, the device breaks apart, the employee did not fill the inflation bag), you must discard the device and conduct a new test using a new one.

- (ii) The new device you use must be one that has been under your control or that of the employer before the test.
- (iii) You must note on the “Remarks” line of the ATF the reason for the new test. (Note: You may continue using the same ATF with which you began the test.)
- (iv) You must offer the employee the choice of holding the device or having you hold it unless the employee, in the your opinion, was responsible (*e.g.*, the employee failed to fill the inflation bag) for the new test needing to be conducted.
- (v) If you are unable to successfully follow the procedures of paragraphs (b)(4) through (b)(6) of this section on the new test, you must end the collection and put an explanation on the “Remarks” line of the ATF.
- (vi) You must then direct the employee to take a new test immediately, using another type of ASD (*e.g.*, saliva device) or an EBT.
- (8) If you were able to successfully follow the procedures of paragraphs (b)(4) through (b)(6) of this section and after having waited the required amount of time directed by the manufacturer for the detector device to incubate, you must place the device in the analyzer in accordance with the manufacturer's directions. The result must be read from the analyzer no earlier then the required incubation time of the device. In all cases, the result must be read within 15 minutes of the test.
- (9) You must follow the manufacturer's instructions for determining the result of the test. You must show the analyzer result to the employee and record the result on Step 3 of the ATF.
- (10) You must never re-use detector devices or any gloves used in breath tube testing. The inflation bag must be voided of air following removal from a device. Inflation bags and electronic analyzers may be re-used but only in accordance with the manufacturer's directions.
- (11) You must note the fact that you used a breath tube device in Step 3 of the ATF.

[67 FR 61522, Oct. 1, 2002, as amended at 72 FR 1299, Jan. 11, 2007]

§40.247 What procedures does the BAT or STT follow after a screening test result?

- (a) If the test result is an alcohol concentration of less than 0.02, as the BAT or STT, you must do the following:
 - (1) Sign and date Step 3 of the ATF; and
 - (2) Transmit the result to the DER in a confidential manner, as provided in §40.255.
- (b) If the test result is an alcohol concentration of 0.02 or higher, as the BAT or STT, you must direct the employee to take a confirmation test.
 - (1) If you are the BAT who will conduct the confirmation test, you must then conduct the test using the procedures beginning at §40.251.
 - (2) If you are not the BAT who will conduct the confirmation test, direct the employee to take a confirmation test, sign and date Step 3 of the ATF, and give the employee Copy 2 of the ATF.
 - (3) If the confirmation test will be performed at a different site from the screening test, you must take the following additional steps:

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- (i) Advise the employee not to eat, drink, put anything (*e.g.*, cigarette, chewing gum) into his or her mouth, or belch;
 - (ii) Tell the employee the reason for the waiting period required by §40.251(a) (*i.e.*, to prevent an accumulation of mouth alcohol from leading to an artificially high reading);
 - (iii) Explain that following your instructions concerning the waiting period is to the employee's benefit;
 - (iv) Explain that the confirmation test will be conducted at the end of the waiting period, even if the instructions have not been followed;
 - (v) Note on the “Remarks” line of the ATF that the waiting period instructions were provided;
 - (vi) Instruct the person accompanying the employee to carry a copy of the ATF to the BAT who will perform the confirmation test; and
 - (vii) Ensure that you or another BAT, STT, or employer representative observe the employee as he or she is transported to the confirmation testing site. You must direct the employee not to attempt to drive a motor vehicle to the confirmation testing site.
- (c) If the screening test is invalid, you must, as the BAT or STT, tell the employee the test is cancelled and note the problem on the “Remarks” line of the ATF. If practicable, repeat the testing process (see §40.271).

Subpart M - Alcohol Confirmation Tests

§40.251 What are the first steps in an alcohol confirmation test?

As the BAT for an alcohol confirmation test, you must follow these steps to begin the confirmation test process:

- (a) You must carry out a requirement for a waiting period before the confirmation test, by taking the following steps:
 - (1) You must ensure that the waiting period lasts at least 15 minutes, starting with the completion of the screening test. After the waiting period has elapsed, you should begin the confirmation test as soon as possible, but not more than 30 minutes after the completion of the screening test.
 - (i) If the confirmation test is taking place at a different location from the screening test (see §40.247(b)(3)) the time of transit between sites counts toward the waiting period if the STT or BAT who conducted the screening test provided the waiting period instructions.
 - (ii) If you cannot verify, through review of the ATF, that waiting period instructions were provided, then you must carry out the waiting period requirement.
 - (iii) You or another BAT or STT, or an employer representative, must observe the employee during the waiting period.
 - (2) Concerning the waiting period, you must tell the employee:
 - (i) Not to eat, drink, put anything (*e.g.*, cigarette, chewing gum) into his or her mouth, or belch;
 - (ii) The reason for the waiting period (*i.e.*, to prevent an accumulation of mouth alcohol from leading to an artificially high reading);
 - (iii) That following your instructions concerning the waiting period is to the employee's benefit; and
 - (iv) That the confirmation test will be conducted at the end of the waiting period, even if the instructions have not been followed.
 - (3) If you become aware that the employee has not followed the instructions, you must note this on the "Remarks" line of the ATF.
- (b) If you did not conduct the screening test for the employee, you must require positive identification of the employee, explain the confirmation procedures, and use a new ATF. You must note on the "Remarks" line of the ATF that a different BAT or STT conducted the screening test.
- (c) Complete Step 1 of the ATF.
- (d) Direct the employee to complete Step 2 on the ATF and sign the certification. If the employee refuses to sign this certification, you must document this refusal on the "Remarks" line of the ATF and immediately notify the DER. This is a refusal to test.
- (e) Even if more than 30 minutes have passed since the screening test result was obtained, you must begin the confirmation test procedures in §40.253, not another screening test.

- (f) You must note on the “Remarks” line of the ATF the time that elapsed between the two events, and if the confirmation test could not begin within 30 minutes of the screening test, the reason why.
- (g) Beginning the confirmation test procedures after the 30 minutes have elapsed does not invalidate the screening or confirmation tests, but it may constitute a regulatory violation subject to DOT agency sanction.

§40.253 What are the procedures for conducting an alcohol confirmation test?

As the BAT conducting an alcohol confirmation test, you must follow these steps in order to complete the confirmation test process:

- (a) In the presence of the employee, you must conduct an air blank on the EBT you are using before beginning the confirmation test and show the reading to the employee.
 - (1) If the reading is 0.00, the test may proceed. If the reading is greater than 0.00, you must conduct another air blank.
 - (2) If the reading on the second air blank is 0.00, the test may proceed. If the reading is greater than 0.00, you must take the EBT out of service.
 - (3) If you take an EBT out of service for this reason, no one may use it for testing until the EBT is found to be within tolerance limits on an external check of calibration.
 - (4) You must proceed with the test of the employee using another EBT, if one is available.
- (b) You must open a new individually wrapped or sealed mouthpiece in view of the employee and insert it into the device in accordance with the manufacturer's instructions.
- (c) You must ensure that you and the employee read the unique test number displayed on the EBT.
- (d) You must instruct the employee to blow steadily and forcefully into the mouthpiece for at least six seconds or until the device indicates that an adequate amount of breath has been obtained.
- (e) You must show the employee the result displayed on the EBT.
- (f) You must show the employee the result and unique test number that the EBT prints out either directly onto the ATF or onto a separate printout.
- (g) If the EBT provides a separate printout of the result, you must attach the printout to the designated space on the ATF with tamper-evident tape, or use a self-adhesive label that is tamper-evident.

[65 FR 79526, Dec. 19, 2000, as amended at 66 FR 41954, Aug. 9, 2001]

§40.255 What happens next after the alcohol confirmation test result?

- (a) After the EBT has printed the result of an alcohol confirmation test, you must, as the BAT, take the following additional steps:
 - (1) Sign and date Step 3 of the ATF.
 - (2) If the alcohol confirmation test result is lower than 0.02, nothing further is required of the employee. As the BAT, you must sign and date Step 3 of the ATF.

- (3) If the alcohol confirmation test result is 0.02 or higher, direct the employee to sign and date Step 4 of the ATF. If the employee does not do so, you must note this on the “Remarks” line of the ATF. However, this is not considered a refusal to test.
- (4) If the test is invalid, tell the employee the test is cancelled and note the problem on the “Remarks” line of the ATF. If practicable, conduct a re-test. (see §40.271).
- (5) Immediately transmit the result directly to the DER in a confidential manner.
 - (i) You may transmit the results using Copy 1 of the ATF, in person, by telephone, or by electronic means. In any case, you must immediately notify the DER of any result of 0.02 or greater by any means (*e.g.*, telephone or secure fax machine) that ensures the result is immediately received by the DER. You must not transmit these results through C/TPAs or other service agents.
 - (ii) If you do not make the initial transmission in writing, you must follow up the initial transmission with Copy 1 of the ATF.
- (b) As an employer, you must take the following steps with respect to the receipt and storage of alcohol test result information:
 - (1) If you receive any test results that are not in writing (*e.g.*, by telephone or electronic means), you must establish a mechanism to establish the identity of the BAT sending you the results.
 - (2) You must store all test result information in a way that protects confidentiality.

Subpart N - Problems in Alcohol Testing

§40.261 What is a refusal to take an alcohol test, and what are the consequences?

- (a) As an employee, you are considered to have refused to take an alcohol test if you:
- (1) Fail to appear for any test (except a pre-employment test) within a reasonable time, as determined by the employer, consistent with applicable DOT agency regulations, after being directed to do so by the employer. This includes the failure of an employee (including an owner-operator) to appear for a test when called by a C/TPA (see §40.241(a));
 - (2) Fail to remain at the testing site until the testing process is complete; *Provided*, That an employee who leaves the testing site before the testing process commences (see §40.243(a)) for a pre-employment test is not deemed to have refused to test;
 - (3) Fail to provide an adequate amount of saliva or breath for any alcohol test required by this part or DOT agency regulations; *Provided*, That an employee who does not provide an adequate amount of breath or saliva because he or she has left the testing site before the testing process commences (see §40.243(a)) for a pre-employment test is not deemed to have refused to test;
 - (4) Fail to provide a sufficient breath specimen, and the physician has determined, through a required medical evaluation, that there was no adequate medical explanation for the failure (see §40.265(c));
 - (5) Fail to undergo a medical examination or evaluation, as directed by the employer as part of the insufficient breath procedures outlined at §40.265(c);
 - (6) Fail to sign the certification at Step 2 of the ATF (see §§40.241(g) and 40.251(d)); or
 - (7) Fail to cooperate with any part of the testing process.
- (b) As an employee, if you refuse to take an alcohol test, you incur the same consequences specified under DOT agency regulations for a violation of those DOT agency regulations.
- (c) As a BAT or an STT, or as the physician evaluating a “shy lung” situation, when an employee refuses to test as provided in paragraph (a) of this section, you must terminate the portion of the testing process in which you are involved, document the refusal on the ATF (or in a separate document which you cause to be attached to the form), immediately notify the DER by any means (*e.g.*, telephone or secure fax machine) that ensures the refusal notification is immediately received. You must make this notification directly to the DER (not using a C/TPA as an intermediary).
- (d) As an employee, when you refuse to take a non-DOT test or to sign a non-DOT form, you have not refused to take a DOT test. There are no consequences under DOT agency regulations for such a refusal.

[65 FR 79526, Dec. 19, 2000, as amended at 66 FR 41954, Aug. 9, 2001]

§40.263 What happens when an employee is unable to provide a sufficient amount of saliva for an alcohol screening test?

- (a) As the STT, you must take the following steps if an employee is unable to provide sufficient saliva to complete a test on a saliva screening device (*e.g.*, the employee does not provide sufficient saliva to activate the device).
 - (1) You must conduct a new screening test using a new screening device.
 - (2) If the employee refuses to make the attempt to complete the new test, you must discontinue testing, note the fact on the “Remarks” line of the ATF, and immediately notify the DER. This is a refusal to test.
 - (3) If the employee has not provided a sufficient amount of saliva to complete the new test, you must note the fact on the “Remarks” line of the ATF and immediately notify the DER.
- (b) As the DER, when the STT informs you that the employee has not provided a sufficient amount of saliva (see paragraph (a)(3) of this section), you must immediately arrange to administer an alcohol test to the employee using an EBT or other breath testing device.

§40.265 What happens when an employee is unable to provide a sufficient amount of breath for an alcohol test?

- (a) If an employee does not provide a sufficient amount of breath to permit a valid breath test, you must take the steps listed in this section.
- (b) As the BAT or STT, you must instruct the employee to attempt again to provide a sufficient amount of breath and about the proper way to do so.
 - (1) If the employee refuses to make the attempt, you must discontinue the test, note the fact on the “Remarks” line of the ATF, and immediately notify the DER. This is a refusal to test.
 - (2) If the employee again attempts and fails to provide a sufficient amount of breath, you may provide another opportunity to the employee to do so if you believe that there is a strong likelihood that it could result in providing a sufficient amount of breath.
 - (3) When the employee's attempts under paragraph (b)(2) of this section have failed to produce a sufficient amount of breath, you must note the fact on the “Remarks” line of the ATF and immediately notify the DER.
 - (4) If you are using an EBT that has the capability of operating manually, you may attempt to conduct the test in manual mode.
 - (5) If you are qualified to use a saliva ASD and you are in the screening test stage, you may change to a saliva ASD only to complete the screening test.
- (c) As the employer, when the BAT or STT informs you that the employee has not provided a sufficient amount of breath, you must direct the employee to obtain, within five days, an evaluation from a licensed physician who is acceptable to you and who has expertise in the medical issues raised by the employee's failure to provide a sufficient specimen.

- (1) You are required to provide the physician who will conduct the evaluation with the following information and instructions:
 - (i) That the employee was required to take a DOT breath alcohol test, but was unable to provide a sufficient amount of breath to complete the test;
 - (ii) The consequences of the appropriate DOT agency regulation for refusing to take the required alcohol test;
 - (iii) That the physician must provide you with a signed statement of his or her conclusions; and
 - (iv) That the physician, in his or her reasonable medical judgment, must base those conclusions on one of the following determinations:
 - (A) A medical condition has, or with a high degree of probability could have, precluded the employee from providing a sufficient amount of breath. The physician must not include in the signed statement detailed information on the employee's medical condition. In this case, the test is cancelled.
 - (B) There is not an adequate basis for determining that a medical condition has, or with a high degree of probability could have, precluded the employee from providing a sufficient amount of breath. This constitutes a refusal to test.
 - (C) For purposes of paragraphs (c)(1)(iv)(A) and (B) of this section, a medical condition includes an ascertainable physiological condition (*e.g.*, a respiratory system dysfunction) or a medically documented pre-existing psychological disorder, but does not include unsupported assertions of “situational anxiety” or hyperventilation.
- (2) As the physician making the evaluation, after making your determination, you must provide a written statement of your conclusions and the basis for them to the DER directly (and not through a C/TPA acting as an intermediary). You must not include in this statement detailed information on the employee's medical condition beyond what is necessary to explain your conclusion.
- (3) Upon receipt of the report from the examining physician, as the DER you must immediately inform the employee and take appropriate action based upon your DOT agency regulations.

§40.267 What problems always cause an alcohol test to be cancelled?

As an employer, a BAT, or an STT, you must cancel an alcohol test if any of the following problems occur. These are “fatal flaws.” You must inform the DER that the test was cancelled and must be treated as if the test never occurred. These problems are:

- (a) In the case of a screening test conducted on a saliva ASD or a breath tube ASD:
 - (1) The STT or BAT reads the result either sooner than or later than the time allotted by the manufacturer and this Part (see §40.245(a)(8) for the saliva ASD and §40.245(b)(8) for the breath tube ASD).
 - (2) The saliva ASD does not activate (*see* §40.245(a)(7); or
 - (3) The device is used for a test after the expiration date printed on the device or on its package (see §40.245(a)(1) for the saliva ASD and §40.245(b)(1) for the breath tube ASD).

- (4) The breath tube ASD is tested with an analyzer which has not been pre-calibrated for that device's specific lot (see §40.245(b)(1)).
- (b) In the case of a screening or confirmation test conducted on an EBT, the sequential test number or alcohol concentration displayed on the EBT is not the same as the sequential test number or alcohol concentration on the printed result (see §40.253(c), (e) and (f)).
- (c) In the case of a confirmation test:
 - (1) The BAT conducts the confirmation test before the end of the minimum 15-minute waiting period (see §40.251(a)(1));
 - (2) The BAT does not conduct an air blank before the confirmation test (see §40.253(a));
 - (3) There is not a 0.00 result on the air blank conducted before the confirmation test (see §40.253(a)(1) and (2));
 - (4) The EBT does not print the result (see §40.253(f)); or
 - (5) The next external calibration check of the EBT produces a result that differs by more than the tolerance stated in the QAP from the known value of the test standard. In this case, every result of 0.02 or above obtained on the EBT since the last valid external calibration check is cancelled (see §40.233(a)(1) and (c)(3)).

[65 FR 79526, Dec. 19, 2000, as amended at 67 FR 61522, Oct. 1, 2002; 71 FR 49384, Aug. 23, 2006; 72 FR 1299, Jan. 11, 2007]

§40.269 What problems cause an alcohol test to be cancelled unless they are corrected?

As a BAT or STT, or employer, you must cancel an alcohol test if any of the following problems occur, unless they are corrected. These are “correctable flaws.” These problems are:

- (a) The BAT or STT does not sign the ATF (see §§40.247(a)(1) and 40.255(a)(1)).
- (b) The BAT or STT fails to note on the “Remarks” line of the ATF that the employee has not signed the ATF after the result is obtained (see §40.255(a)(3)).
- (c) The BAT or STT uses a non-DOT form for the test (see §40.225(a)).

[65 FR 79526, Dec. 19, 2000, as amended at 71 FR 49384, Aug. 23, 2006]

§40.271 How are alcohol testing problems corrected?

- (a) As a BAT or STT, you have the responsibility of trying to complete successfully an alcohol test for each employee.
 - (1) If, during or shortly after the testing process, you become aware of any event that will cause the test to be cancelled (see §40.267), you must try to correct the problem promptly, if practicable. You may repeat the testing process as part of this effort.
 - (2) If repeating the testing process is necessary, you must begin a new test as soon as possible. You must use a new ATF, a new sequential test number, and, if needed, a new ASD and/or a new EBT.

It is permissible to use additional technical capabilities of the EBT (*e.g.*, manual operation) if you have been trained to do so in accordance with §40.213(c).

- (3) If repeating the testing process is necessary, you are not limited in the number of attempts to complete the test, provided that the employee is making a good faith effort to comply with the testing process.
- (4) If another testing device is not available for the new test at the testing site, you must immediately notify the DER and advise the DER that the test could not be completed. As the DER who receives this information, you must make all reasonable efforts to ensure that the test is conducted at another testing site as soon as possible.
- (b) If, as an STT, BAT, employer or other service agent administering the testing process, you become aware of a “correctable flaw” (see §40.269) that has not already been corrected, you must take all practicable action to correct the problem so that the test is not cancelled.
 - (1) If the problem resulted from the omission of required information, you must, as the person responsible for providing that information, supply in writing the missing information and a signed statement that it is true and accurate. For example, suppose you are a BAT and you forgot to make a notation on the “Remarks” line of the ATF that the employee did not sign the certification. You would, when the problem is called to your attention, supply a signed statement that the employee failed or refused to sign the certification after the result was obtained, and that your signed statement is true and accurate.
 - (2) If the problem is the use of a non-DOT form, you must, as the person responsible for the use of the incorrect form, certify in writing that the incorrect form contains all the information needed for a valid DOT alcohol test. You must also provide a signed statement that the incorrect form was used inadvertently or as the only means of conducting a test, in circumstances beyond your control, and the steps you have taken to prevent future use of non-DOT forms for DOT tests. You must supply this information on the same business day on which you are notified of the problem, transmitting it by fax or courier.
- (c) If you cannot correct the problem, you must cancel the test.

§40.273 What is the effect of a cancelled alcohol test?

- (a) A cancelled alcohol test is neither positive nor negative.
 - (1) As an employer, you must not attach to a cancelled test the consequences of a test result that is 0.02 or greater (*e.g.*, removal from a safety-sensitive position).
 - (2) As an employer, you must not use a cancelled test in a situation where an employee needs a test result that is below 0.02 (*e.g.*, in the case of a return-to-duty or follow-up test to authorize the employee to perform safety-sensitive functions).
 - (3) As an employer, you must not direct a recollection for an employee because a test has been cancelled, except in the situations cited in paragraph (a)(2) of this section or other provisions of this part.
- (b) A cancelled test does not count toward compliance with DOT requirements, such as a minimum random testing rate.

- (c) When a test must be cancelled, if you are the BAT, STT, or other person who determines that the cancellation is necessary, you must inform the affected DER within 48 hours of the cancellation.
- (d) A cancelled DOT test does not provide a valid basis for an employer to conduct a non-DOT test (*i.e.*, a test under company authority).

§40.275 What is the effect of procedural problems that are not sufficient to cancel an alcohol test?

- (a) As an STT, BAT, employer, or a service agent administering the testing process, you must document any errors in the testing process of which you become aware, even if they are not “fatal flaws” or “correctable flaws” listed in this subpart. Decisions about the ultimate impact of these errors will be determined by administrative or legal proceedings, subject to the limitation of paragraph (b) of this section.
- (b) No person concerned with the testing process may declare a test cancelled based on a mistake in the process that does not have a significant adverse effect on the right of the employee to a fair and accurate test. For example, it is inconsistent with this part to cancel a test based on a minor administrative mistake (*e.g.*, the omission of the employee's middle initial) or an error that does not affect employee protections under this part. Nor does the failure of an employee to sign in Step 4 of the ATF result in the cancellation of the test. Nor is a test to be cancelled on the basis of a claim by an employee that he or she was improperly selected for testing.
- (c) As an employer, these errors, even though not sufficient to cancel an alcohol test result, may subject you to enforcement action under DOT agency regulations.

§40.277 Are alcohol tests other than saliva or breath permitted under these regulations?

No, other types of alcohol tests (*e.g.*, blood and urine) are not authorized for testing done under this part. Only saliva or breath for screening tests and breath for confirmation tests using approved devices are permitted.

Subpart O - Substance Abuse Professionals and the Return-to-Duty Process

§40.281 Who is qualified to act as a SAP?

To be permitted to act as a SAP in the DOT drug and alcohol testing program, you must meet each of the requirements of this section:

(a) **Credentials.** You must have one of the following credentials:

- (1) You are a licensed physician (Doctor of Medicine or Osteopathy);
- (2) You are a licensed or certified social worker;
- (3) You are a licensed or certified psychologist;
- (4) You are a licensed or certified employee assistance professional;
- (5) You are a state-licensed or certified marriage and family therapist; or
- (6) You are a drug and alcohol counselor certified by the National Association of Alcoholism and Drug Abuse Counselors Certification Commission (NAADAC); or by the International Certification Reciprocity Consortium/Alcohol and Other Drug Abuse (ICRC); or by the National Board for Certified Counselors, Inc. and Affiliates/Master Addictions Counselor (NBCC).

(b) **Basic knowledge.** You must be knowledgeable in the following areas:

- (1) You must be knowledgeable about and have clinical experience in the diagnosis and treatment of alcohol and controlled substances-related disorders.
- (2) You must be knowledgeable about the SAP function as it relates to employer interests in safety-sensitive duties.
- (3) You must be knowledgeable about this part, the DOT agency regulations applicable to the employers for whom you evaluate employees, and the DOT SAP Guidelines, and you keep current on any changes to these materials. These documents are available from ODAPC (Department of Transportation, 1200 New Jersey Avenue, SE, Washington DC, 20590 (202-366-3784), or on the ODAPC web site (<http://www.dot.gov/ost/dapc>).

(c) **Qualification training.** You must receive qualification training meeting the requirements of this paragraph (c).

- (1) Qualification training must provide instruction on the following subjects:
 - (i) Background, rationale, and coverage of the Department's drug and alcohol testing program;
 - (ii) 49 CFR Part 40 and DOT agency drug and alcohol testing rules;
 - (iii) Key DOT drug testing requirements, including collections, laboratory testing, MRO review, and problems in drug testing;
 - (iv) Key DOT alcohol testing requirements, including the testing process, the role of BATs and STTs, and problems in alcohol tests;
 - (v) SAP qualifications and prohibitions;

- (vi) The role of the SAP in the return-to-duty process, including the initial employee evaluation, referrals for education and/or treatment, the follow-up evaluation, continuing treatment recommendations, and the follow-up testing plan;
 - (vii) SAP consultation and communication with employers, MROs, and treatment providers;
 - (viii) Reporting and recordkeeping requirements;
 - (ix) Issues that SAPs confront in carrying out their duties under the program.
- (2) Following your completion of qualification training under paragraph (c)(1) of this section, you must satisfactorily complete an examination administered by a nationally-recognized professional or training organization. The examination must comprehensively cover all the elements of qualification training listed in paragraph (c)(1) of this section.
- (3) The following is the schedule for qualification training you must meet:
- (i) If you became a SAP before August 1, 2001, you must meet the qualification training requirement no later than December 31, 2003.
 - (ii) If you become a SAP between August 1, 2001, and December 31, 2003, you must meet the qualification training requirement no later than December 31, 2003.
 - (iii) If you become a SAP on or after January 1, 2004, you must meet the qualification training requirement before you begin to perform SAP functions.
- (d) *Continuing education.* During each three-year period from the date on which you satisfactorily complete the examination under paragraph (c)(2) of this section, you must complete continuing education consisting of at least 12 professional development hours (e.g., CEUs) relevant to performing SAP functions.
- (1) This continuing education must include material concerning new technologies, interpretations, recent guidance, rule changes, and other information about developments in SAP practice, pertaining to the DOT program, since the time you met the qualification training requirements of this section.
 - (2) Your continuing education activities must include documentable assessment tools to assist you in determining whether you have adequately learned the material.
- (e) *Documentation.* You must maintain documentation showing that you currently meet all requirements of this section. You must provide this documentation on request to DOT agency representatives and to employers and C/TPAs who are using or contemplating using your services.

[65 FR 79526, Dec. 19, 2000, as amended at 69 FR 3022, Jan. 22, 2004; 71 FR 49384; Aug. 23, 2006; 71 FR 55347, Sept. 22, 2006]

§40.283 How does a certification organization obtain recognition for its members as SAPs?

- (a) If you represent a certification organization that wants DOT to authorize its certified drug and alcohol counselors to be added to §40.281(a)(6), you may submit a written petition to DOT requesting a review of your petition for inclusion.
- (b) You must obtain the National Commission for Certifying Agencies (NCCA) accreditation before DOT will act on your petition.

- (c) You must also meet the minimum requirements of Appendix E to this part before DOT will act on your petition.

[65 FR 79526, Dec. 19, 2000, as amended at 71 FR 49384, Aug. 23, 2006]

§40.285 When is a SAP evaluation required?

- (a) As an employee, when you have violated DOT drug and alcohol regulations, you cannot again perform any DOT safety-sensitive duties for any employer until and unless you complete the SAP evaluation, referral, and education/treatment process set forth in this subpart and in applicable DOT agency regulations. The first step in this process is a SAP evaluation.
- (b) For purposes of this subpart, a verified positive DOT drug test result, a DOT alcohol test with a result indicating an alcohol concentration of 0.04 or greater, a refusal to test (including by adulterating or substituting a urine specimen) or any other violation of the prohibition on the use of alcohol or drugs under a DOT agency regulation constitutes a DOT drug and alcohol regulation violation.

§40.287 What information is an employer required to provide concerning SAP services to an employee who has a DOT drug and alcohol regulation violation?

As an employer, you must provide to each employee (including an applicant or new employee) who violates a DOT drug and alcohol regulation a listing of SAPs readily available to the employee and acceptable to you, with names, addresses, and telephone numbers. You cannot charge the employee any fee for compiling or providing this list. You may provide this list yourself or through a C/TPA or other service agent.

§40.289 Are employers required to provide SAP and treatment services to employees?

- (a) As an employer, you are not required to provide a SAP evaluation or any subsequent recommended education or treatment for an employee who has violated a DOT drug and alcohol regulation.
- (b) However, if you offer that employee an opportunity to return to a DOT safety-sensitive duty following a violation, you must, before the employee again performs that duty, ensure that the employee receives an evaluation by a SAP meeting the requirements of §40.281 and that the employee successfully complies with the SAP's evaluation recommendations.
- (c) Payment for SAP evaluations and services is left for employers and employees to decide and may be governed by existing management-labor agreements and health care benefits.

§40.291 What is the role of the SAP in the evaluation, referral, and treatment process of an employee who has violated DOT agency drug and alcohol testing regulations?

- (a) As a SAP, you are charged with:
 - (1) Making a face-to-face clinical assessment and evaluation to determine what assistance is needed by the employee to resolve problems associated with alcohol and/or drug use;
 - (2) Referring the employee to an appropriate education and/or treatment program;

- (3) Conducting a face-to-face follow-up evaluation to determine if the employee has actively participated in the education and/or treatment program and has demonstrated successful compliance with the initial assessment and evaluation recommendations;
 - (4) Providing the DER with a follow-up drug and/or alcohol testing plan for the employee; and
 - (5) Providing the employee and employer with recommendations for continuing education and/or treatment.
- (b) As a SAP, you are not an advocate for the employer or employee. Your function is to protect the public interest in safety by professionally evaluating the employee and recommending appropriate education/treatment, follow-up tests, and aftercare.

§40.293 What is the SAP's function in conducting the initial evaluation of an employee?

As a SAP, for every employee who comes to you following a DOT drug and alcohol regulation violation, you must accomplish the following:

- (a) Provide a comprehensive face-to-face assessment and clinical evaluation.
- (b) Recommend a course of education and/or treatment with which the employee must demonstrate successful compliance prior to returning to DOT safety-sensitive duty.
 - (1) You must make such a recommendation for every individual who has violated a DOT drug and alcohol regulation.
 - (2) You must make a recommendation for education and/or treatment that will, to the greatest extent possible, protect public safety in the event that the employee returns to the performance of safety-sensitive functions.
- (c) Appropriate education may include, but is not limited to, self-help groups (*e.g.*, Alcoholics Anonymous) and community lectures, where attendance can be independently verified, and bona fide drug and alcohol education courses.
- (d) Appropriate treatment may include, but is not limited to, in-patient hospitalization, partial in-patient treatment, out-patient counseling programs, and aftercare.
- (e) You must provide a written report directly to the DER highlighting your specific recommendations for assistance (see §40.311(c)).
- (f) For purposes of your role in the evaluation process, you must assume that a verified positive test result has conclusively established that the employee committed a DOT drug and alcohol regulation violation. You must not take into consideration in any way, as a factor in determining what your recommendation will be, any of the following:
 - (1) A claim by the employee that the test was unjustified or inaccurate;
 - (2) Statements by the employee that attempt to mitigate the seriousness of a violation of a DOT drug or alcohol regulation (*e.g.*, related to assertions of use of hemp oil, “medical marijuana” use, “contact positives,” poppy seed ingestion, job stress); or
 - (3) Personal opinions you may have about the justification or rationale for drug and alcohol testing.

- (g) In the course of gathering information for purposes of your evaluation in the case of a drug-related violation, you may consult with the MRO. As the MRO, you are required to cooperate with the SAP and provide available information the SAP requests. It is not necessary to obtain the consent of the employee to provide this information.

§40.295 May employees or employers seek a second SAP evaluation if they disagree with the first SAP's recommendations?

- (a) As an employee with a DOT drug and alcohol regulation violation, when you have been evaluated by a SAP, you must not seek a second SAP's evaluation in order to obtain another recommendation.
- (b) As an employer, you must not seek a second SAP's evaluation if the employee has already been evaluated by a qualified SAP. If the employee, contrary to paragraph (a) of this section, has obtained a second SAP evaluation, as an employer you may not rely on it for any purpose under this part.

§40.297 Does anyone have the authority to change a SAP's initial evaluation?

- (a) Except as provided in paragraph (b) of this section, no one (*e.g.*, an employer, employee, a managed-care provider, any service agent) may change in any way the SAP's evaluation or recommendations for assistance. For example, a third party is not permitted to make more or less stringent a SAP's recommendation by changing the SAP's evaluation or seeking another SAP's evaluation.
- (b) The SAP who made the initial evaluation may modify his or her initial evaluation and recommendations based on new or additional information (*e.g.*, from an education or treatment program).

§40.299 What is the SAP's role and what are the limits on a SAP's discretion in referring employees for education and treatment?

- (a) As a SAP, upon your determination of the best recommendation for assistance, you will serve as a referral source to assist the employee's entry into an education and/or treatment program.
- (b) To prevent the appearance of a conflict of interest, you must not refer an employee requiring assistance to your private practice or to a person or organization from which you receive payment or to a person or organization in which you have a financial interest. You are precluded from making referrals to entities with which you are financially associated.
- (c) There are four exceptions to the prohibitions contained in paragraph (b) of this section. You may refer an employee to any of the following providers of assistance, regardless of your relationship with them:
 - (1) A public agency (*e.g.*, treatment facility) operated by a state, county, or municipality;
 - (2) The employer or a person or organization under contract to the employer to provide alcohol or drug treatment and/or education services (*e.g.*, the employer's contracted treatment provider);
 - (3) The sole source of therapeutically appropriate treatment under the employee's health insurance program (*e.g.*, the single substance abuse in-patient treatment program made available by the employee's insurance coverage plan); or

- (4) The sole source of therapeutically appropriate treatment reasonably available to the employee (*e.g.*, the only treatment facility or education program reasonably located within the general commuting area).

§40.301 What is the SAP's function in the follow-up evaluation of an employee?

- (a) As a SAP, after you have prescribed assistance under §40.293, you must re-evaluate the employee to determine if the employee has successfully carried out your education and/or treatment recommendations.
 - (1) This is your way to gauge for the employer the employee's ability to demonstrate successful compliance with the education and/or treatment plan.
 - (2) Your evaluation may serve as one of the reasons the employer decides to return the employee to safety-sensitive duty.
- (b) As the SAP making the follow-up evaluation determination, you must:
 - (1) Confer with or obtain appropriate documentation from the appropriate education and/or treatment program professionals where the employee was referred; and
 - (2) Conduct a face-to-face clinical interview with the employee to determine if the employee demonstrates successful compliance with your initial evaluation recommendations.
- (c) (1) If the employee has demonstrated successful compliance, you must provide a written report directly to the DER highlighting your clinical determination that the employee has done so with your initial evaluation recommendation (see §40.311(d)).
 - (2) You may determine that an employee has successfully demonstrated compliance even though the employee has not yet completed the full regimen of education and/or treatment you recommended or needs additional assistance. For example, if the employee has successfully completed the 30-day in-patient program you prescribed, you may make a “successful compliance” determination even though you conclude that the employee has not yet completed the out-patient counseling you recommended or should continue in an aftercare program.
- (d)(1) As the SAP, if you believe, as a result of the follow-up evaluation, that the employee has not demonstrated successful compliance with your recommendations, you must provide written notice directly to the DER (see §40.311(e)).
 - (2) As an employer who receives the SAP's written notice that the employee has not successfully complied with the SAP's recommendations, you must not return the employee to the performance of safety-sensitive duties.
 - (3) As the SAP, you may conduct additional follow-up evaluation(s) if the employer determines that doing so is consistent with the employee's progress as you have reported it and with the employer's policy and/or labor-management agreements.
 - (4) As the employer, following a SAP report that the employee has not demonstrated successful compliance, you may take personnel action consistent with your policy and/or labor-management agreements.

§40.303 What happens if the SAP believes the employee needs additional treatment, aftercare, or support group services even after the employee returns to safety-sensitive duties?

- (a) As a SAP, if you believe that ongoing services (in addition to follow-up tests) are needed to assist an employee to maintain sobriety or abstinence from drug use after the employee resumes the performance of safety-sensitive duties, you must provide recommendations for these services in your follow-up evaluation report (see §40.311(d)(10)).
- (b) As an employer receiving a recommendation for these services from a SAP, you may, as part of a return-to-duty agreement with the employee, require the employee to participate in the recommended services. You may monitor and document the employee's participation in the recommended services. You may also make use of SAP and employee assistance program (EAP) services in assisting and monitoring employees' compliance with SAP recommendations. Nothing in this section permits an employer to fail to carry out its obligations with respect to follow-up testing (see §40.309).
- (c) As an employee, you are obligated to comply with the SAP's recommendations for these services. If you fail or refuse to do so, you may be subject to disciplinary action by your employer.

§40.305 How does the return-to-duty process conclude?

- (a) As the employer, if you decide that you want to permit the employee to return to the performance of safety-sensitive functions, you must ensure that the employee takes a return-to-duty test. This test cannot occur until after the SAP has determined that the employee has successfully complied with prescribed education and/or treatment. The employee must have a negative drug test result and/or an alcohol test with an alcohol concentration of less than 0.02 before resuming performance of safety-sensitive duties.
- (b) As an employer, you must not return an employee to safety-sensitive duties until the employee meets the conditions of paragraph (a) of this section. However, you are not required to return an employee to safety-sensitive duties because the employee has met these conditions. That is a personnel decision that you have the discretion to make, subject to collective bargaining agreements or other legal requirements.
- (c) As a SAP or MRO, you must not make a "fitness for duty" determination as part of this re-evaluation unless required to do so under an applicable DOT agency regulation. It is the employer, rather than you, who must decide whether to put the employee back to work in a safety-sensitive position.

§40.307 What is the SAP's function in prescribing the employee's follow-up tests?

- (a) As a SAP, for each employee who has committed a DOT drug or alcohol regulation violation, and who seeks to resume the performance of safety-sensitive functions, you must establish a written follow-up testing plan. You do not establish this plan until after you determine that the employee has successfully complied with your recommendations for education and/or treatment.
- (b) You must present a copy of this plan directly to the DER (see §40.311(d)(9)).
- (c) You are the sole determiner of the number and frequency of follow-up tests and whether these tests will be for drugs, alcohol, or both, unless otherwise directed by the appropriate DOT agency regulation. For example, if the employee had a positive drug test, but your evaluation or the treatment program

professionals determined that the employee had an alcohol problem as well, you should require that the employee have follow-up tests for both drugs and alcohol.

- (d) However, you must, at a minimum, direct that the employee be subject to six unannounced follow-up tests in the first 12 months of safety-sensitive duty following the employee's return to safety-sensitive functions.
 - (1) You may require a greater number of follow-up tests during the first 12-month period of safety-sensitive duty (*e.g.*, you may require one test a month during the 12-month period; you may require two tests per month during the first 6-month period and one test per month during the final 6-month period).
 - (2) You may also require follow-up tests during the 48 months of safety-sensitive duty following this first 12-month period.
 - (3) You are not to establish the actual dates for the follow-up tests you prescribe. The decision on specific dates to test is the employer's.
 - (4) As the employer, you must not impose additional testing requirements (*e.g.*, under company authority) on the employee that go beyond the SAP's follow-up testing plan.
- (e) The requirements of the SAP's follow-up testing plan "follow the employee" to subsequent employers or through breaks in service.

Example 1 to paragraph (e): The employee returns to duty with Employer A. Two months afterward, after completing the first two of six follow-up tests required by the SAP's plan, the employee quits his job with Employer A and begins to work in a similar position for Employer B. The employee remains obligated to complete the four additional tests during the next 10 months of safety-sensitive duty, and Employer B is responsible for ensuring that the employee does so. Employer B learns of this obligation through the inquiry it makes under §40.25.

Example 2 to paragraph (e): The employee returns to duty with Employer A. Three months later, after the employee completes the first two of six follow-up tests required by the SAP's plan, Employer A lays the employee off for economic or seasonal employment reasons. Four months later, Employer A recalls the employee. Employer A must ensure that the employee completes the remaining four follow-up tests during the next nine months.

- (f) As the SAP, you may modify the determinations you have made concerning follow-up tests. For example, even if you recommended follow-up testing beyond the first 12-months, you can terminate the testing requirement at any time after the first year of testing. You must not, however, modify the requirement that the employee take at least six follow-up tests within the first 12 months after returning to the performance of safety-sensitive functions.

§40.309 What are the employer's responsibilities with respect to the SAP's directions for follow-up tests?

- (a) As the employer, you must carry out the SAP's follow-up testing requirements. You may not allow the employee to continue to perform safety-sensitive functions unless follow-up testing is conducted as directed by the SAP.

- (b) You should schedule follow-up tests on dates of your own choosing, but you must ensure that the tests are unannounced with no discernable pattern as to their timing, and that the employee is given no advance notice.
- (c) You cannot substitute any other tests (*e.g.*, those carried out under the random testing program) conducted on the employee for this follow-up testing requirement.
- (d) You cannot count a follow-up test that has been cancelled as a completed test. A cancelled follow-up test must be recollected.

§40.311 What are the requirements concerning SAP reports?

- (a) As the SAP conducting the required evaluations, you must send the written reports required by this section in writing directly to the DER and not to a third party or entity for forwarding to the DER (except as provided in §40.355(e)). You may, however, forward the document simultaneously to the DER and to a C/TPA.
- (b) As an employer, you must ensure that you receive SAP written reports directly from the SAP performing the evaluation and that no third party or entity changed the SAP's report in any way.
- (c) The SAP's written report, following an initial evaluation that determines what level of assistance is needed to address the employee's drug and/or alcohol problems, must be on the SAP's own letterhead (and not the letterhead of another service agent) signed and dated by the SAP, and must contain the following delineated items:
 - (1) Employee's name and SSN;
 - (2) Employer's name and address;
 - (3) Reason for the assessment (specific violation of DOT regulations and violation date);
 - (4) Date(s) of the assessment;
 - (5) SAP's education and/or treatment recommendation; and
 - (6) SAP's telephone number.
- (d) The SAP's written report concerning a follow-up evaluation that determines the employee has demonstrated successful compliance must be on the SAP's own letterhead (and not the letterhead of another service agent), signed by the SAP and dated, and must contain the following items:
 - (1) Employee's name and SSN;
 - (2) Employer's name and address;
 - (3) Reason for the initial assessment (specific violation of DOT regulations and violation date);
 - (4) Date(s) of the initial assessment and synopsis of the treatment plan;
 - (5) Name of practice(s) or service(s) providing the recommended education and/or treatment;
 - (6) Inclusive dates of employee's program participation;
 - (7) Clinical characterization of employee's program participation;
 - (8) SAP's clinical determination as to whether the employee has demonstrated successful compliance;

- (9) Follow-up testing plan;
 - (10) Employee's continuing care needs with specific treatment, aftercare, and/or support group services recommendations; and
 - (11) SAP's telephone number.
- (e) The SAP's written report concerning a follow-up evaluation that determines the employee has not demonstrated successful compliance must be on the SAP's own letterhead (and not the letterhead of another service agent), signed by the SAP and dated, and must contain the following items:
- (1) Employee's name and SSN;
 - (2) Employer's name and address;
 - (3) Reason for the initial assessment (specific DOT violation and date);
 - (4) Date(s) of initial assessment and synopsis of treatment plan;
 - (5) Name of practice(s) or service(s) providing the recommended education and/or treatment;
 - (6) Inclusive dates of employee's program participation;
 - (7) Clinical characterization of employee's program participation;
 - (8) Date(s) of the first follow-up evaluation;
 - (9) Date(s) of any further follow-up evaluation the SAP has scheduled;
 - (10) SAP's clinical reasons for determining that the employee has not demonstrated successful compliance; and
 - (11) SAP's telephone number.
- (f) As a SAP, you must also provide these written reports directly to the employee if the employee has no current employer and to the gaining DOT regulated employer in the event the employee obtains another transportation industry safety-sensitive position.
- (g) As a SAP, you are to maintain copies of your reports to employers for 5 years, and your employee clinical records in accordance with Federal, state, and local laws regarding record maintenance, confidentiality, and release of information. You must make these records available, on request, to DOT agency representatives (*e.g.*, inspectors conducting an audit or safety investigation) and representatives of the NTSB in an accident investigation.
- (h) As an employer, you must maintain your reports from SAPs for 5 years from the date you received them.

§40.313 Where is other information on SAP functions and the return-to-duty process found in this regulation?

You can find other information on the role and functions of SAPs in the following sections of this part:

§40.3—Definition.

§40.347—Service agent assistance with SAP-required follow-up testing.

§40.355—Transmission of SAP reports.

Section Five: Subpart O – §40.313

§40.329(c)—Making SAP reports available to employees on request.

APPENDIX E TO PART 40—SAP EQUIVALENCY REQUIREMENTS FOR CERTIFICATION ORGANIZATIONS.

DRAFT

Subpart P - Confidentiality and Release of Information

§40.321 What is the general confidentiality rule for drug and alcohol test information?

Except as otherwise provided in this subpart, as a service agent or employer participating in the DOT drug or alcohol testing process, you are prohibited from releasing individual test results or medical information about an employee to third parties without the employee's specific written consent.

- (a) A **“third party”** is any person or organization to whom other subparts of this regulation do not explicitly authorize or require the transmission of information in the course of the drug or alcohol testing process.
- (b) **“Specific written consent”** means a statement signed by the employee that he or she agrees to the release of a particular piece of information to a particular, explicitly identified, person or organization at a particular time. “Blanket releases,” in which an employee agrees to a release of a category of information (*e.g.*, all test results) or to release information to a category of parties (*e.g.*, other employers who are members of a C/TPA, companies to which the employee may apply for employment), are prohibited under this part.

§40.323 May program participants release drug or alcohol test information in connection with legal proceedings?

- (a) As an employer, you may release information pertaining to an employee's drug or alcohol test without the employee's consent in certain legal proceedings.
 - (1) These proceedings include a lawsuit (*e.g.*, a wrongful discharge action), grievance (*e.g.*, an arbitration concerning disciplinary action taken by the employer), or administrative proceeding (*e.g.*, an unemployment compensation hearing) brought by, or on behalf of, an employee and resulting from a positive DOT drug or alcohol test or a refusal to test (including, but not limited to, adulterated or substituted test results).
 - (2) These proceedings also include a criminal or civil action resulting from an employee's performance of safety-sensitive duties, in which a court of competent jurisdiction determines that the drug or alcohol test information sought is relevant to the case and issues an order directing the employer to produce the information. For example, in personal injury litigation following a truck or bus collision, the court could determine that a post-accident drug test result of an employee is relevant to determining whether the driver or the driver's employer was negligent. The employer is authorized to respond to the court's order to produce the records.
- (b) In such a proceeding, you may release the information to the decision maker in the proceeding (*e.g.*, the court in a lawsuit). You may release the information only with a binding stipulation that the decision maker to whom it is released will make it available only to parties to the proceeding.
- (c) If you are a service agent, and the employer requests its employee's drug or alcohol testing information from you to use in a legal proceeding as authorized in paragraph (a) of this section (*e.g.*, the laboratory's data package), you must provide the requested information to the employer.

- (d) As an employer or service agent, you must immediately notify the employee in writing of any information you release under this section.

§40.325 [Reserved]

§40.327 When must the MRO report medical information gathered in the verification process?

- (a) As the MRO, you must, except as provided in paragraph (c) of this section, report drug test results and medical information you learned as part of the verification process to third parties without the employee's consent if you determine, in your reasonable medical judgment, that:
- (1) The information is likely to result in the employee being determined to be medically unqualified under an applicable DOT agency regulation; or
 - (2) The information indicates that continued performance by the employee of his or her safety-sensitive function is likely to pose a significant safety risk.
- (b) The third parties to whom you are authorized to provide information by this section include the employer, a physician or other health care provider responsible for determining the medical qualifications of the employee under an applicable DOT agency safety regulation, a SAP evaluating the employee as part of the return to duty process (see §40.293(g)), a DOT agency, or the National Transportation Safety Board in the course of an accident investigation.
- (c) If the law of a foreign country (*e.g.*, Canada) prohibits you from providing medical information to the employer, you may comply with that prohibition.

§40.329 What information must laboratories, MROs, and other service agents release to employees?

- (a) As an MRO or service agent you must provide, within 10 business days of receiving a written request from an employee, copies of any records pertaining to the employee's use of alcohol and/or drugs, including records of the employee's DOT-mandated drug and/or alcohol tests. You may charge no more than the cost of preparation and reproduction for copies of these records.
- (b) As a laboratory, you must provide, within 10 business days of receiving a written request from an employee, and made through the MRO, the records relating to the results of the employee's drug test (*i.e.*, laboratory report and data package). You may charge no more than the cost of preparation and reproduction for copies of these records.
- (c) As a SAP, you must make available to an employee, on request, a copy of all SAP reports (see §40.311). However, you must redact follow-up testing information from the report before providing it to the employee.

[65 FR 79526, Dec. 19, 2000, as amended at 66 FR 41954, Aug. 9, 2001]

§40.331 To what additional parties must employers and service agents release information?

As an employer or service agent you must release information under the following circumstances:

- (a) If you receive a specific, written consent from an employee authorizing the release of information about that employee's drug or alcohol tests to an identified person, you must provide the information to the identified person. For example, as an employer, when you receive a written request from a former employee to provide information to a subsequent employer, you must do so. In providing the information, you must comply with the terms of the employee's consent.
- (b) If you are an employer, you must, upon request of DOT agency representatives, provide the following:
 - (1) Access to your facilities used for this part and DOT agency drug and alcohol program functions.
 - (2) All written, printed, and computer-based drug and alcohol program records and reports (including copies of name-specific records or reports), files, materials, data, documents/documentation, agreements, contracts, policies, and statements that are required by this part and DOT agency regulations. You must provide this information at your principal place of business in the time required by the DOT agency.
 - (3) All items in paragraph (b)(2) of this section must be easily accessible, legible, and provided in an organized manner. If electronic records do not meet these standards, they must be converted to printed documentation that meets these standards.
- (c) If you are a service agent, you must, upon request of DOT agency representatives, provide the following:
 - (1) Access to your facilities used for this part and DOT agency drug and alcohol program functions.
 - (2) All written, printed, and computer-based drug and alcohol program records and reports (including copies of name-specific records or reports), files, materials, data, documents/documentation, agreements, contracts, policies, and statements that are required by this part and DOT agency regulations. You must provide this information at your principal place of business in the time required by the DOT agency.
 - (3) All items in paragraph (c)(2) of this section must be easily accessible, legible, and provided in an organized manner. If electronic records do not meet these standards, they must be converted to printed documentation that meets these standards.
- (d) If requested by the National Transportation Safety Board as part of an accident investigation, you must provide information concerning post-accident tests administered after the accident.
- (e) If requested by a Federal, state or local safety agency with regulatory authority over you or the employee, you must provide drug and alcohol test records concerning the employee.
- (f) Except as otherwise provided in this part, as a laboratory you must not release or provide a specimen or a part of a specimen to a requesting party, without first obtaining written consent from ODAPC. If a party seeks a court order directing you to release a specimen or part of a specimen contrary to any provision of this part, you must take necessary legal steps to contest the issuance of the order (*e.g.*, seek to quash a subpoena, citing the requirements of §40.13). This part does not require you to disobey a court order, however.
- (g) Notwithstanding any other provision of this Part, as an employer of Commercial Motor Vehicle (CMV) drivers holding commercial driving licenses (CDLs) or as a third party administrator for owner-operator

CMV drivers with CDLs, you are authorized to comply with State laws requiring you to provide to State CDL licensing authorities information about all violations of DOT drug and alcohol testing rules (including positive tests and refusals) by any CMV driver holding a CDL.

[65 FR 79526, Dec. 19, 2000, as amended at 66 FR 41955, Aug. 9, 2001; 73 FR 33737, June 13, 2008]

§40.333 What records must employers keep?

(a) As an employer, you must keep the following records for the following periods of time:

(1) You must keep the following records for five years:

- (i) Records of alcohol test results indicating an alcohol concentration of 0.02 or greater;
- (ii) Records of verified positive drug test results;
- (iii) Documentation of refusals to take required alcohol and/or drug tests (including substituted or adulterated drug test results);
- (iv) SAP reports; and
- (v) All follow-up tests and schedules for follow-up tests.

(2) You must keep records for three years of information obtained from previous employers under §40.25 concerning drug and alcohol test results of employees.

(3) You must keep records of the inspection, maintenance, and calibration of EBTs, for two years.

(4) You must keep records of negative and cancelled drug test results and alcohol test results with a concentration of less than 0.02 for one year.

(b) You do not have to keep records related to a program requirement that does not apply to you (*e.g.*, a maritime employer who does not have a DOT-mandated random alcohol testing program need not maintain random alcohol testing records).

(c) You must maintain the records in a location with controlled access.

(d) A service agent may maintain these records for you. However, you must ensure that you can produce these records at your principal place of business in the time required by the DOT agency. For example, as a motor carrier, when an FMCSA inspector requests your records, you must ensure that you can provide them within two business days.

(e) If you store records electronically, where permitted by this part, you must ensure that the records are easily accessible, legible, and formatted and stored in an organized manner. If electronic records do not meet these criteria, you must convert them to printed documentation in a rapid and readily auditable manner, at the request of DOT agency personnel.

[65 FR 79526, Dec. 19, 2000, as amended at 66 FR 41955, Aug. 9, 2001]

Subpart Q - Roles and Responsibilities of Service Agents

§40.341 Must service agents comply with DOT drug and alcohol testing requirements?

- (a) As a service agent, the services you provide to transportation employers must meet the requirements of this part and the DOT agency drug and alcohol testing regulations.
- (b) If you do not comply, DOT may take action under the Public Interest Exclusions procedures of this part (see Subpart R of this part) or applicable provisions of other DOT agency regulations.

§40.343 What tasks may a service agent perform for an employer?

As a service agent, you may perform for employers the tasks needed to comply with DOT agency drug and alcohol testing regulations, subject to the requirements and limitations of this part.

§40.345 In what circumstances may a C/TPA act as an intermediary in the transmission of drug and alcohol testing information to employers?

- (a) As a C/TPA or other service agent, you may act as an intermediary in the transmission of drug and alcohol testing information in the circumstances specified in this section only if the employer chooses to have you do so. Each employer makes the decision about whether to receive some or all of this information from you, acting as an intermediary, rather than directly from the service agent who originates the information (e.g., an MRO or BAT).
- (b) The specific provisions of this part concerning which you may act as an intermediary are listed in Appendix F to this part. These are the only situations in which you may act as an intermediary. You are prohibited from doing so in all other situations.
- (c) In every case, you must ensure that, in transmitting information to employers, you meet all requirements (e.g., concerning confidentiality and timing) that would apply if the service agent originating the information (e.g., an MRO or collector) sent the information directly to the employer. For example, if you transmit drug testing results from MROs to DERs, you must transmit each drug test result to the DER in compliance with the MRO requirements set forth in §40.167.

§40.347 What functions may C/TPAs perform with respect to administering testing?

As a C/TPA, except as otherwise specified in this part, you may perform the following functions for employers concerning random selection and other selections for testing.

- (a) You may operate random testing programs for employers and may assist (i.e., through contracting with laboratories or collection sites, conducting collections) employers with other types of testing (e.g., pre-employment, post-accident, reasonable suspicion, return-to-duty, and follow-up).
- (b) You may combine employees from more than one employer or one transportation industry in a random pool if permitted by all the DOT agency drug and alcohol testing regulations involved.

- (1) If you combine employees from more than one transportation industry, you must ensure that the random testing rate is at least equal to the highest rate required by each DOT agency.
- (2) Employees not covered by DOT agency regulations may not be part of the same random pool with DOT covered employees.
- (c) You may assist employers in ensuring that follow-up testing is conducted in accordance with the plan established by the SAP. However, neither you nor the employer are permitted to randomly select employees from a “follow-up pool” for follow-up testing.

§40.349 What records may a service agent receive and maintain?

- (a) Except where otherwise specified in this part, as a service agent you may receive and maintain all records concerning DOT drug and alcohol testing programs, including positive, negative, and refusal to test individual test results. You do not need the employee's consent to receive and maintain these records.
- (b) You may maintain all information needed for operating a drug/alcohol program (*e.g.*, CCFs, ATFs, names of employees in random pools, random selection lists, copies of notices to employers of selected employees) on behalf of an employer.
- (c) If a service agent originating drug or alcohol testing information, such as an MRO or BAT, sends the information directly to the DER, he or she may also provide the information simultaneously to you, as a C/TPA or other service agent who maintains this information for the employer.
- (d) If you are serving as an intermediary in transmitting information that is required to be provided to the employer, you must ensure that it reaches the employer in the same time periods required elsewhere in this part.
- (e) You must ensure that you can make available to the employer within two business days any information the employer is asked to produce by a DOT agency representative.
- (f) On request of an employer, you must, at any time on the request of an employer, transfer immediately all records pertaining to the employer and its employees to the employer or to any other service agent the employer designates. You must carry out this transfer as soon as the employer requests it. You are not required to obtain employee consent for this transfer. You must not charge more than your reasonable administrative costs for conducting this transfer. You may not charge a fee for the release of these records.
- (g) If you are planning to go out of business or your organization will be bought by or merged with another organization, you must immediately notify all employers and offer to transfer all records pertaining to the employer and its employees to the employer or to any other service agent the employer designates. You must carry out this transfer as soon as the employer requests it. You are not required to obtain employee consent for this transfer. You must not charge more than your reasonable administrative costs for conducting this transfer. You may not charge a fee for the release of these records.

[65 FR 79526, Dec. 19, 2000, as amended at 66 FR 41955, Aug. 9, 2001]

§40.351 What confidentiality requirements apply to service agents?

Except where otherwise specified in this part, as a service agent the following confidentiality requirements apply to you:

- (a) When you receive or maintain confidential information about employees (*e.g.*, individual test results), you must follow the same confidentiality regulations as the employer with respect to the use and release of this information.
- (b) You must follow all confidentiality and records retention requirements applicable to employers.
- (c) You may not provide individual test results or other confidential information to another employer without a specific, written consent from the employee. For example, suppose you are a C/TPA that has employers X and Y as clients. Employee Jones works for X, and you maintain Jones' drug and alcohol test for X. Jones wants to change jobs and work for Y. You may not inform Y of the result of a test conducted for X without having a specific, written consent from Jones. Likewise, you may not provide this information to employer Z, who is not a C/TPA member, without this consent.
- (d) You must not use blanket consent forms authorizing the release of employee testing information.
- (e) You must establish adequate confidentiality and security measures to ensure that confidential employee records are not available to unauthorized persons. This includes protecting the physical security of records, access controls, and computer security measures to safeguard confidential data in electronic data bases.

§40.353 What principles govern the interaction between MROs and other service agents?

As a service agent other than an MRO (*e.g.*, a C/TPA), the following principles govern your interaction with MROs:

- (a) You may provide MRO services to employers, directly or through contract, if you meet all applicable provisions of this part.
- (b) If you employ or contract for an MRO, the MRO must perform duties independently and confidentially. When you have a relationship with an MRO, you must structure the relationship to ensure that this independence and confidentiality are not compromised. Specific means (including both physical and operational measures, as appropriate) to separate MRO functions and other service agent functions are essential.
- (c) Only your staff who are actually under the day-to-day supervision and control of an MRO with respect to MRO functions may perform these functions. This does not mean that those staff may not perform other functions at other times. However, the designation of your staff to perform MRO functions under MRO supervision must be limited and not used as a subterfuge to circumvent confidentiality and other requirements of this part and DOT agency regulations. You must ensure that MRO staff operate under controls sufficient to ensure that the independence and confidentiality of the MRO process are not compromised.
- (d) Like other MROs, an MRO you employ or contract with must personally conduct verification interviews with employees and must personally make all verification decisions. Consequently, your staff cannot perform these functions.

§40.355 What limitations apply to the activities of service agents?

As a service agent, you are subject to the following limitations concerning your activities in the DOT drug and alcohol testing program.

- (a) You must not require an employee to sign a consent, release, waiver of liability, or indemnification agreement with respect to any part of the drug or alcohol testing process covered by this part (including, but not limited to, collections, laboratory testing, MRO, and SAP services). No one may do so on behalf of a service agent.
- (b) You must not act as an intermediary in the transmission of drug test results from the laboratory to the MRO. That is, the laboratory may not send results to you, with you in turn sending them to the MRO for verification. For example, a practice in which the laboratory transmits results to your computer system, and you then assign the results to a particular MRO, is not permitted.
- (c) You must not transmit drug test results directly from the laboratory to the employer (by electronic or other means) or to a service agent who forwards them to the employer. All confirmed laboratory results must be processed by the MRO before they are released to any other party.
- (d) You must not act as an intermediary in the transmission of alcohol test results of 0.02 or higher from the STT or BAT to the DER.
- (e) Except as provided in paragraph (f) of this section, you must not act as an intermediary in the transmission of individual SAP reports to the actual employer. That is, the SAP may not send such reports to you, with you in turn sending them to the actual employer. However, you may maintain individual SAP summary reports and follow-up testing plans after they are sent to the DER, and the SAP may transmit such reports to you simultaneously with sending them to the DER.
- (f) As an exception to paragraph (e) of this section, you may act as an intermediary in the transmission of SAP report from the SAP to an owner-operator or other self-employed individual.
- (g) Except as provided in paragraph (h) of this section, you must not make decisions to test an employee based upon reasonable suspicion, post-accident, return-to-duty, and follow-up determination criteria. These are duties the actual employer cannot delegate to a C/TPA. You may, however, provide advice and information to employers regarding these testing issues and how the employer should schedule required testing.
- (h) As an exception to paragraph (g) of this section, you may make decisions to test an employee based upon reasonable suspicion, post-accident, return-to-duty, and follow-up determination criteria with respect to an owner-operator or other self-employed individual.
- (i) Except as provided in paragraph (j) of this section, you must not make a determination that an employee has refused a drug or alcohol test. This is a non-delegable duty of the actual employer. You may, however, provide advice and information to employers regarding refusal-to-test issues.
- (j) As an exception to paragraph (i) of this section, you may make a determination that an employee has refused a drug or alcohol test, if:
 - (1) You schedule a required test for an owner-operator or other self-employed individual, and the individual fails to appear for the test without a legitimate reason; or
 - (2) As an MRO, you determine that an individual has refused to test on the basis of adulteration or substitution.

- (k) You must not act as a DER. For example, while you may be responsible for transmitting information to the employer about test results, you must not act on behalf of the employer in actions to remove employees from safety-sensitive duties.
- (l) In transmitting documents to laboratories, you must ensure that you send to the laboratory that conducts testing only Copy 1 of the CCF. You must not transmit other copies of the CCF or any ATFs to the laboratory.
- (m) You must not impose conditions or requirements on employers that DOT regulations do not authorize. For example, as a C/TPA serving employers in the pipeline or motor carrier industry, you must not require employers to have provisions in their DOT plans that PHMSA or FMCSA regulations do not require.
- (n) You must not intentionally delay the transmission of drug or alcohol testing-related documents concerning actions you have performed, because of a payment dispute or other reasons.

Example 1 to paragraph (n): A laboratory that has tested a specimen must not delay transmitting the documentation of the test result to an MRO because of a billing or payment dispute with the MRO or a C/TPA.

Example 2 to paragraph (n): An MRO or SAP who has interviewed an employee must not delay sending a verified test result or SAP report to the employer because of such a dispute with the employer or employee.

Example 3 to paragraph (n): A collector who has performed a urine specimen collection must not delay sending the drug specimen and CCF to the laboratory because of a payment or other dispute with the laboratory or a C/TPA.

Example 4 to paragraph (n): A BAT who has conducted an alcohol test must not delay sending test result information to an employer or C/TPA because of a payment or other dispute with the employer or C/TPA.

- (o) While you must follow the DOT agency regulations, the actual employer remains accountable to DOT for compliance, and your failure to implement any aspect of the program as required in this part and other applicable DOT agency regulations makes the employer subject to enforcement action by the Department.

[65 FR 79526, Dec. 19, 2000, as amended at 66 FR 41955, Aug. 9, 2001; 71 FR 49384, Aug. 23, 2006; 75 FR 59108, Sept. 27, 2010]

Subpart R - Public Interest Exclusions

§40.361 What is the purpose of a public interest exclusion (PIE)?

- (a) To protect the public interest, including protecting transportation employers and employees from serious noncompliance with DOT drug and alcohol testing rules, the Department's policy is to ensure that employers conduct business only with responsible service agents.
- (b) The Department therefore uses PIEs to exclude from participation in DOT's drug and alcohol testing program any service agent who, by serious noncompliance with this part or other DOT agency drug and alcohol testing regulations, has shown that it is not currently acting in a responsible manner.
- (c) A PIE is a serious action that the Department takes only to protect the public interest. We intend to use PIEs only to remedy situations of serious noncompliance. PIEs are not used for the purpose of punishment.
- (d) Nothing in this subpart precludes a DOT agency or the Inspector General from taking other action authorized by its regulations with respect to service agents or employers that violate its regulations.

§40.363 On what basis may the Department issue a PIE?

- (a) If you are a service agent, the Department may issue a PIE concerning you if we determine that you have failed or refused to provide drug or alcohol testing services consistent with the requirements of this part or a DOT agency drug and alcohol regulation.
- (b) The Department also may issue a PIE if you have failed to cooperate with DOT agency representatives concerning inspections, complaint investigations, compliance and enforcement reviews, or requests for documents and other information about compliance with this part or DOT agency drug and alcohol regulations.

§40.365 What is the Department's policy concerning starting a PIE proceeding?

- (a) It is the Department's policy to start a PIE proceeding only in cases of serious, uncorrected noncompliance with the provisions of this part, affecting such matters as safety, the outcomes of test results, privacy and confidentiality, due process and fairness for employees, the honesty and integrity of the testing program, and cooperation with or provision of information to DOT agency representatives.
- (b) The following are examples of the kinds of serious noncompliance that, as a matter of policy, the Department views as appropriate grounds for starting a PIE proceeding. These examples are not intended to be an exhaustive or exclusive list of the grounds for starting a PIE proceeding. We intend them to illustrate the level of seriousness that the Department believes supports starting a PIE proceeding. The examples follow:
 - (1) For an MRO, verifying tests positive without interviewing the employees as required by this part or providing MRO services without meeting the qualifications for an MRO required by this part;

- (2) For a laboratory, refusing to provide information to the Department, an employer, or an employee as required by this part; failing or refusing to conduct a validity testing program when required by this part; or a pattern or practice of testing errors that result in the cancellation of tests. (As a general matter of policy, the Department does not intend to initiate a PIE proceeding concerning a laboratory with respect to matters on which HHS initiates certification actions under its laboratory guidelines.);
- (3) For a collector, a pattern or practice of directly observing collections when doing so is unauthorized, or failing or refusing to directly observe collections when doing so is mandatory;
- (4) For collectors, BATs, or STTs, a pattern or practice of using forms, testing equipment, or collection kits that do not meet the standards in this part;
- (5) For a collector, BAT, or STT, a pattern or practice of “fatal flaws” or other significant uncorrected errors in the collection process;
- (6) For a laboratory, MRO or C/TPA, failing or refusing to report tests results as required by this part or DOT agency regulations;
- (7) For a laboratory, falsifying, concealing, or destroying documentation concerning any part of the drug testing process, including, but not limited to, documents in a “litigation package;”
- (8) For SAPs, providing SAP services while not meeting SAP qualifications required by this part or performing evaluations without face-to-face interviews;
- (9) For any service agent, maintaining a relationship with another party that constitutes a conflict of interest under this part (*e.g.*, a laboratory that derives a financial benefit from having an employer use a specific MRO);
- (10) For any service agent, representing falsely that the service agent or its activities is approved or certified by the Department or a DOT agency;
- (11) For any service agent, disclosing an employee's test result information to any party this part or a DOT agency regulation does not authorize, including by obtaining a “blanket” consent from employees or by creating a data base from which employers or others can retrieve an employee's DOT test results without the specific consent of the employee;
- (12) For any service agent, interfering or attempting to interfere with the ability of an MRO to communicate with the Department, or retaliating against an MRO for communicating with the Department;
- (13) For any service agent, directing or recommending that an employer fail or refuse to implement any provision of this part; or
- (14) With respect to noncompliance with a DOT agency regulation, conduct that affects important provisions of Department-wide concern (*e.g.*, failure to properly conduct the selection process for random testing).

§40.367 Who initiates a PIE proceeding?

The following DOT officials may initiate a PIE proceeding:

- (a) The drug and alcohol program manager of a DOT agency;

- (b) An official of ODAPC, other than the Director; or
- (c) The designee of any of these officials.

§40.369 What is the discretion of an initiating official in starting a PIE proceeding?

- (a) Initiating officials have broad discretion in deciding whether to start a PIE proceeding.
- (b) In exercising this discretion, the initiating official must consider the Department's policy regarding the seriousness of the service agent's conduct (see §40.365) and all information he or she has obtained to this point concerning the facts of the case. The initiating official may also consider the availability of the resources needed to pursue a PIE proceeding.
- (c) A decision not to initiate a PIE proceeding does not necessarily mean that the Department regards a service agent as being in compliance or that the Department may not use other applicable remedies in a situation of noncompliance.

§40.371 On what information does an initiating official rely in deciding whether to start a PIE proceeding?

- (a) An initiating official may rely on credible information from any source as the basis for starting a PIE proceeding.
- (b) Before sending a correction notice (see §40.373), the initiating official informally contacts the service agent to determine if there is any information that may affect the initiating official's determination about whether it is necessary to send a correction notice. The initiating official may take any information resulting from this contact into account in determining whether to proceed under this subpart.

§40.373 Before starting a PIE proceeding, does the initiating official give the service agent an opportunity to correct problems?

- (a) If you are a service agent, the initiating official must send you a correction notice before starting a PIE proceeding.
- (b) The correction notice identifies the specific areas in which you must come into compliance in order to avoid being subject to a PIE proceeding.
- (c) If you make and document changes needed to come into compliance in the areas listed in the correction notice to the satisfaction of the initiating official within 60 days of the date you receive the notice, the initiating official does not start a PIE proceeding. The initiating official may conduct appropriate fact finding to verify that you have made and maintained satisfactory corrections. When he or she is satisfied that you are in compliance, the initiating official sends you a notice that the matter is concluded.

§40.375 How does the initiating official start a PIE proceeding?

- (a) As a service agent, if your compliance matter is not correctable (see §40.373(a)), or if have not resolved compliance matters as provided in §40.373(c), the initiating official starts a PIE proceeding by sending you a notice of proposed exclusion (NOPE). The NOPE contains the initiating official's recommendations concerning the issuance of a PIE, but it is not a decision by the Department to issue a PIE.

(b) The NOPE includes the following information:

- (1) A statement that the initiating official is recommending that the Department issue a PIE concerning you;
- (2) The factual basis for the initiating official's belief that you are not providing drug and/or alcohol testing services to DOT-regulated employers consistent with the requirements of this part or are in serious noncompliance with a DOT agency drug and alcohol regulation;
- (3) The factual basis for the initiating official's belief that your noncompliance has not been or cannot be corrected;
- (4) The initiating official's recommendation for the scope of the PIE;
- (5) The initiating official's recommendation for the duration of the PIE; and
- (6) A statement that you may contest the issuance of the proposed PIE, as provided in §40.379.

(c) The initiating official sends a copy of the NOPE to the ODAPC Director at the same time he or she sends the NOPE to you.

§40.377 Who decides whether to issue a PIE?

- (a) The ODAPC Director, or his or her designee, decides whether to issue a PIE. If a designee is acting as the decision maker, all references in this subpart to the Director refer to the designee.
- (b) To ensure his or her impartiality, the Director plays no role in the initiating official's determination about whether to start a PIE proceeding.
- (c) There is a “firewall” between the initiating official and the Director. This means that the initiating official and the Director are prohibited from having any discussion, contact, or exchange of information with one another about the matter, except for documents and discussions that are part of the record of the proceeding.

§40.379 How do you contest the issuance of a PIE?

- (a) If you receive a NOPE, you may contest the issuance of the PIE.
- (b) If you want to contest the proposed PIE, you must provide the Director information and argument in opposition to the proposed PIE in writing, in person, and/or through a representative. To contest the proposed PIE, you must take one or more of the steps listed in this paragraph (b) within 30 days after you receive the NOPE.
 - (1) You may request that the Director dismiss the proposed PIE without further proceedings, on the basis that it does not concern serious noncompliance with this part or DOT agency regulations, consistent with the Department's policy as stated in §40.365.
 - (2) You may present written information and arguments, consistent with the provisions of §40.381, contesting the proposed PIE.
 - (3) You may arrange with the Director for an informal meeting to present your information and arguments.

- (c) If you do not take any of the actions listed in paragraph (b) of this section within 30 days after you receive the NOPE, the matter proceeds as an uncontested case. In this event, the Director makes his or her decision based on the record provided by the initiating official (*i.e.*, the NOPE and any supporting information or testimony) and any additional information the Director obtains.

§40.381 What information do you present to contest the proposed issuance of a PIE?

- (a) As a service agent who wants to contest a proposed PIE, you must present at least the following information to the Director:
 - (1) Specific facts that contradict the statements contained in the NOPE (see §40.375(b)(2) and (3)). A general denial is insufficient to raise a genuine dispute over facts material to the issuance of a PIE;
 - (2) Identification of any existing, proposed or prior PIE; and
 - (3) Identification of your affiliates, if any.
- (b) You may provide any information and arguments you wish concerning the proposed issuance, scope and duration of the PIE (see §40.375(b)(4) and (5)).
- (c) You may provide any additional relevant information or arguments concerning any of the issues in the matter.

§40.383 What procedures apply if you contest the issuance of a PIE?

- (a) DOT conducts PIE proceedings in a fair and informal manner. The Director may use flexible procedures to allow you to present matters in opposition. The Director is not required to follow formal rules of evidence or procedure in creating the record of the proceeding.
- (b) The Director will consider any information or argument he or she determines to be relevant to the decision on the matter.
- (c) You may submit any documentary evidence you want the Director to consider. In addition, if you have arranged an informal meeting with the Director, you may present witnesses and confront any person the initiating official presents as a witness against you.
- (d) In cases where there are material factual issues in dispute, the Director or his or her designee may conduct additional fact-finding.
- (e) If you have arranged a meeting with the Director, the Director will make a transcribed record of the meeting available to you on your request. You must pay the cost of transcribing and copying the meeting record.

§40.385 Who bears the burden of proof in a PIE proceeding?

- (a) As the proponent of issuing a PIE, the initiating official bears the burden of proof.
- (b) This burden is to demonstrate, by a preponderance of the evidence, that the service agent was in serious noncompliance with the requirements of this part for drug and/or alcohol testing-related services or with the requirements of another DOT agency drug and alcohol testing regulation.

§40.387 What matters does the Director decide concerning a proposed PIE?

- (a) Following the service agent's response (see §40.379(b)) or, if no response is received, after 30 days have passed from the date on which the service agent received the NOPE, the Director may take one of the following steps:
- (1) In response to a request from the service agent (see §40.379(b)(1)) or on his or her own motion, the Director may dismiss a PIE proceeding if he or she determines that it does not concern serious noncompliance with this part or DOT agency regulations, consistent with the Department's policy as stated in §40.365.
 - (i) If the Director dismisses a proposed PIE under this paragraph (a), the action is closed with respect to the noncompliance alleged in the NOPE.
 - (ii) The Department may initiate a new PIE proceeding against you on the basis of different or subsequent conduct that is in noncompliance with this part or other DOT drug and alcohol testing rules.
 - (2) If the Director determines that the initiating official's submission does not have complete information needed for a decision, the Director may remand the matter to the initiating official. The initiating official may resubmit the matter to the Director when the needed information is complete. If the basis for the proposed PIE has changed, the initiating official must send an amended NOPE to the service agent.
- (b) The Director makes determinations concerning the following matters in any PIE proceeding that he or she decides on the merits:
- (1) Any material facts that are in dispute;
 - (2) Whether the facts support issuing a PIE;
 - (3) The scope of any PIE that is issued; and
 - (4) The duration of any PIE that is issued.

§40.389 What factors may the Director consider?

This section lists examples of the kind of mitigating and aggravating factors that the Director may consider in determining whether to issue a PIE concerning you, as well as the scope and duration of a PIE. This list is not exhaustive or exclusive. The Director may consider other factors if appropriate in the circumstances of a particular case. The list of examples follows:

- (a) The actual or potential harm that results or may result from your noncompliance;
- (b) The frequency of incidents and/or duration of the noncompliance;
- (c) Whether there is a pattern or prior history of noncompliance;
- (d) Whether the noncompliance was pervasive within your organization, including such factors as the following:
 - (1) Whether and to what extent your organization planned, initiated, or carried out the noncompliance;

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- (2) The positions held by individuals involved in the noncompliance, and whether your principals tolerated their noncompliance; and
- (3) Whether you had effective standards of conduct and control systems (both with respect to your own organization and any contractors or affiliates) at the time the noncompliance occurred;
- (e) Whether you have demonstrated an appropriate compliance disposition, including such factors as the following:
 - (1) Whether you have accepted responsibility for the noncompliance and recognize the seriousness of the conduct that led to the cause for issuance of the PIE;
 - (2) Whether you have cooperated fully with the Department during the investigation. The Director may consider when the cooperation began and whether you disclosed all pertinent information known to you;
 - (3) Whether you have fully investigated the circumstances of the noncompliance forming the basis for the PIE and, if so, have made the result of the investigation available to the Director;
 - (4) Whether you have taken appropriate disciplinary action against the individuals responsible for the activity that constitutes the grounds for issuance of the PIE; and
 - (5) Whether your organization has taken appropriate corrective actions or remedial measures, including implementing actions to prevent recurrence;
- (f) With respect to noncompliance with a DOT agency regulation, the degree to which the noncompliance affects matters common to the DOT drug and alcohol testing program;
- (g) Other factors appropriate to the circumstances of the case.

§40.391 What is the scope of a PIE?

- (a) The scope of a PIE is the Department's determination about the divisions, organizational elements, types of services, affiliates, and/or individuals (including direct employees of a service agent and its contractors) to which a PIE applies.
- (b) If, as a service agent, the Department issues a PIE concerning you, the PIE applies to all your divisions, organizational elements, and types of services that are involved with or affected by the noncompliance that forms the factual basis for issuing the PIE.
- (c) In the NOPE (see §40.375(b)(4)), the initiating official sets forth his or her recommendation for the scope of the PIE. The proposed scope of the PIE is one of the elements of the proceeding that the service agent may contest (see §40.381(b)) and about which the Director makes a decision (see §40.387(b)(3)).
- (d) In recommending and deciding the scope of the PIE, the initiating official and Director, respectively, must take into account the provisions of paragraphs (e) through (j) of this section.
- (e) The pervasiveness of the noncompliance within a service agent's organization (see §40.389(d)) is an important consideration in determining the scope of a PIE. The appropriate scope of a PIE grows broader as the pervasiveness of the noncompliance increases.
- (f) The application of a PIE is not limited to the specific location or employer at which the conduct that forms the factual basis for issuing the PIE was discovered.

- (g) A PIE applies to your affiliates, if the affiliate is involved with or affected by the conduct that forms the factual basis for issuing the PIE.
- (h) A PIE applies to individuals who are officers, employees, directors, shareholders, partners, or other individuals associated with your organization in the following circumstances:
 - (1) Conduct forming any part of the factual basis of the PIE occurred in connection with the individual's performance of duties by or on behalf of your organization; or
 - (2) The individual knew of, had reason to know of, approved, or acquiesced in such conduct. The individual's acceptance of benefits derived from such conduct is evidence of such knowledge, acquiescence, or approval.
- (i) If a contractor to your organization is solely responsible for the conduct that forms the factual basis for a PIE, the PIE does not apply to the service agent itself unless the service agent knew or should have known about the conduct and did not take action to correct it.
- (j) PIEs do not apply to drug and alcohol testing that DOT does not regulate.
- (k) The following examples illustrate how the Department intends the provisions of this section to work:

Example 1 to §40.391. Service Agent P provides a variety of drug testing services. P's SAP services are involved in a serious violation of this Part 40. However, P's other services fully comply with this part, and P's overall management did not plan or concur in the noncompliance, which in fact was contrary to P's articulated standards. Because the noncompliance was isolated in one area of the organization's activities, and did not pervade the entire organization, the scope of the PIE could be limited to SAP services.

Example 2 to §40.391. Service Agent Q provides a similar variety of services. The conduct forming the factual basis for a PIE concerns collections for a transit authority. As in Example 1, the noncompliance is not pervasive throughout Q's organization. The PIE would apply to collections at all locations served by Q, not just the particular transit authority or not just in the state in which the transit authority is located.

Example 3 to §40.391. Service Agent R provides a similar array of services. One or more of the following problems exists: R's activities in several areas—collections, MROs, SAPs, protecting the confidentiality of information—are involved in serious noncompliance; DOT determines that R's management knew or should have known about serious noncompliance in one or more areas, but management did not take timely corrective action; or, in response to an inquiry from DOT personnel, R's management refuses to provide information about its operations. In each of these three cases, the scope of the PIE would include all aspects of R's services.

Example 4 to §40.391. Service Agent W provides only one kind of service (*e.g.*, laboratory or MRO services). The Department issues a PIE concerning these services. Because W only provides this one kind of service, the PIE necessarily applies to all its operations.

Example 5 to §40.391. Service Agent X, by exercising reasonably prudent oversight of its collection contractor, should have known that the contractor was making numerous “fatal flaws” in tests. Alternatively, X received a correction notice pointing out these problems in its contractor's collections. In neither case did X take action to correct the problem. X, as well as the contractor, would be subject to a PIE with respect to collections.

Example 6 to §40.391. Service Agent Y could not reasonably have known that one of its MROs was regularly failing to interview employees before verifying tests positive. When it received a correction notice, Y immediately dismissed the erring MRO. In this case, the MRO would be subject to a PIE but Y would not.

Example 7 to §40.391. The Department issues a PIE with respect to Service Agent Z. Z provides services for DOT-regulated transportation employers, a Federal agency under the HHS-regulated Federal employee testing program, and various private businesses and public agencies that DOT does not regulate. The PIE applies only to the DOT-regulated transportation employers with respect to their DOT-mandated testing, not to the Federal agency or the other public agencies and private businesses. The PIE does not prevent the non-DOT regulated entities from continuing to use Z's services.

§40.393 How long does a PIE stay in effect?

- (a) In the NOPE (see §40.375(b)(5)), the initiating official proposes the duration of the PIE. The duration of the PIE is one of the elements of the proceeding that the service agent may contest (see §40.381(b)) and about which the Director makes a decision (see §40.387(b)(4)).
- (b) In deciding upon the duration of the PIE, the Director considers the seriousness of the conduct on which the PIE is based and the continued need to protect employers and employees from the service agent's noncompliance. The Director considers factors such as those listed in §40.389 in making this decision.
- (c) The duration of a PIE will be between one and five years, unless the Director reduces its duration under §40.407.

§40.395 Can you settle a PIE proceeding?

At any time before the Director's decision, you and the initiating official can, with the Director's concurrence, settle a PIE proceeding.

§40.397 When does the Director make a PIE decision?

The Director makes his or her decision within 60 days of the date when the record of a PIE proceeding is complete (including any meeting with the Director and any additional fact-finding that is necessary). The Director may extend this period for good cause for additional periods of up to 30 days.

§40.399 How does the Department notify service agents of its decision?

If you are a service agent involved in a PIE proceeding, the Director provides you written notice as soon as he or she makes a PIE decision. The notice includes the following elements:

- (a) If the decision is not to issue a PIE, a statement of the reasons for the decision, including findings of fact with respect to any material factual issues that were in dispute.
- (b) If the decision is to issue a PIE—
 - (1) A reference to the NOPE;

- (2) A statement of the reasons for the decision, including findings of fact with respect to any material factual issues that were in dispute;
- (3) A statement of the scope of the PIE; and
- (4) A statement of the duration of the PIE.

§40.401 How does the Department notify employers and the public about a PIE?

- (a) The Department maintains a document called the “List of Excluded Drug and Alcohol Service Agents.” This document may be found on the Department's web site (<http://www.dot.gov/ost/dapc>). You may also request a copy of the document from ODAPC.
- (b) When the Director issues a PIE, he or she adds to the List the name and address of the service agent, and any other persons or organizations, to whom the PIE applies and information about the scope and duration of the PIE.
- (c) When a service agent ceases to be subject to a PIE, the Director removes this information from the List.
- (d) The Department also publishes a FEDERAL REGISTER notice to inform the public on any occasion on which a service agent is added to or taken off the List.

§40.403 Must a service agent notify its clients when the Department issues a PIE?

- (a) As a service agent, if the Department issues a PIE concerning you, you must notify each of your DOT-regulated employer clients, in writing, about the issuance, scope, duration, and effect of the PIE. You may meet this requirement by sending a copy of the Director's PIE decision or by a separate notice. You must send this notice to each client within three business days of receiving from the Department the notice provided for in §40.399(b).
- (b) As part of the notice you send under paragraph (a) of this section, you must offer to transfer immediately all records pertaining to the employer and its employees to the employer or to any other service agent the employer designates. You must carry out this transfer as soon as the employer requests it.

[65 FR 79526, Dec. 19, 2000, as amended at 66 FR 41955, Aug. 9, 2001]

§40.405 May the Federal courts review PIE decisions?

The Director's decision is a final administrative action of the Department. Like all final administrative actions of Federal agencies, the Director's decision is subject to judicial review under the Administrative Procedure Act (5 U.S.C. 551 *et. seq*).

§40.407 May a service agent ask to have a PIE reduced or terminated?

- (a) Yes, as a service agent concerning whom the Department has issued a PIE, you may request that the Director terminate a PIE or reduce its duration and/or scope. This process is limited to the issues of duration and scope. It is not an appeal or reconsideration of the decision to issue the PIE.
- (b) Your request must be in writing and supported with documentation.

- (c) You must wait at least nine months from the date on which the Director issued the PIE to make this request.
- (d) The initiating official who was the proponent of the PIE may provide information and arguments concerning your request to the Director.
- (e) If the Director verifies that the sources of your noncompliance have been eliminated and that all drug or alcohol testing-related services you would provide to DOT-regulated employers will be consistent with the requirements of this part, the Director may issue a notice terminating or reducing the PIE.

§40.409 What does the issuance of a PIE mean to transportation employers?

- (a) As an employer, you are deemed to have notice of the issuance of a PIE when it appears on the List mentioned in §40.401(a) or the notice of the PIE appears in the FEDERAL REGISTER as provided in §40.401(d). You should check this List to ensure that any service agents you are using or planning to use are not subject to a PIE.
- (b) As an employer who is using a service agent concerning whom a PIE is issued, you must stop using the services of the service agent no later than 90 days after the Department has published the decision in the FEDERAL REGISTER or posted it on its web site. You may apply to the ODAPC Director for an extension of 30 days if you demonstrate that you cannot find a substitute service agent within 90 days.
- (c) Except during the period provided in paragraph (b) of this section, you must not, as an employer, use the services of a service agent that are covered by a PIE that the Director has issued under this subpart. If you do so, you are in violation of the Department's regulations and subject to applicable DOT agency sanctions (*e.g.*, civil penalties, withholding of Federal financial assistance).
- (d) You also must not obtain drug or alcohol testing services through a contractor or affiliate of the service agent to whom the PIE applies.

Example to paragraph (d): Service Agent R was subject to a PIE with respect to SAP services. As an employer, not only must you not use R's own SAP services, but you also must not use SAP services you arrange through R, such as services provided by a subcontractor or affiliate of R or a person or organization that receives financial gain from its relationship with R.

- (e) This section's prohibition on using the services of a service agent concerning which the Director has issued a PIE applies to employers in all industries subject to DOT drug and alcohol testing regulations.

Example to paragraph (e): The initiating official for a PIE was the FAA drug and alcohol program manager, and the conduct forming the basis of the PIE pertained to the aviation industry. As a motor carrier, transit authority, pipeline, railroad, or maritime employer, you are also prohibited from using the services of the service agent involved in connection with the DOT drug and alcohol testing program.

- (f) The issuance of a PIE does not result in the cancellation of drug or alcohol tests conducted using the service agent involved before the issuance of the Director's decision or up to 90 days following its publication in the FEDERAL REGISTER or posting on the Department's web site, unless otherwise specified in the Director's PIE decision or the Director grants an extension as provided in paragraph (b) of this section.

Example to paragraph (f): The Department issues a PIE concerning Service Agent N on September 1. All tests conducted using N's services before September 1, and through November 30, are valid for all purposes under DOT drug and alcohol testing regulations, assuming they meet all other regulatory requirements.

§40.411 What is the role of the DOT Inspector General's office?

- (a) Any person may bring concerns about waste, fraud, or abuse on the part of a service agent to the attention of the DOT Office of Inspector General.
- (b) In appropriate cases, the Office of Inspector General may pursue criminal or civil remedies against a service agent.
- (c) The Office of Inspector General may provide factual information to other DOT officials for use in a PIE proceeding.

§40.413 How are notices sent to service agents?

- (a) If you are a service agent, DOT sends notices to you, including correction notices, notices of proposed exclusion, decision notices, and other notices, in any of the ways mentioned in paragraph (b) or (c) of this section.
- (b) DOT may send a notice to you, your identified counsel, your agent for service of process, or any of your partners, officers, directors, owners, or joint venturers to the last known street address, fax number, or e-mail address. DOT deems the notice to have been received by you if sent to any of these persons.
- (c) DOT considers notices to be received by you—
 - (1) When delivered, if DOT mails the notice to the last known street address, or five days after we send it if the letter is undeliverable;
 - (2) When sent, if DOT sends the notice by fax or five days after we send it if the fax is undeliverable; or
 - (3) When delivered, if DOT sends the notice by e-mail or five days after DOT sends it if the e-mail is undeliverable.

Appendix A to Part 40—DOT Standards for Urine Collection Kits

The Collection Kit Contents

1. *Collection Container*

- a. Single-use container, made of plastic, large enough to easily catch and hold at least 55 mL of urine voided from the body.
- b. Must have graduated volume markings clearly noting levels of 45 mL and above.
- c. Must have a temperature strip providing graduated temperature readings 32-38 °C/90-100 °F, that is affixed or can be affixed at a proper level on the outside of the collection container. Other methodologies (*e.g.*, temperature device built into the wall of the container) are acceptable provided the temperature measurement is accurate and such that there is no potential for contamination of the specimen.
- d. Must be individually wrapped in a sealed plastic bag or shrink wrapping; or must have a peelable, sealed lid or other easily visible tamper-evident system.
- e. May be made available separately at collection sites to address shy bladder situations when several voids may be required to complete the testing process.

2. *Plastic Specimen Bottles*

- a. Each bottle must be large enough to hold at least 35 mL; or alternatively, they may be two distinct sizes of specimen bottles provided that the bottle designed to hold the primary specimen holds at least 35 mL of urine and the bottle designed to hold the split specimen holds at least 20 mL.
- b. Must have screw-on or snap-on caps that prevent seepage of the urine from the bottles during shipment.
- c. Must have markings clearly indicating the appropriate levels (30 mL for the primary specimen and 15 mL for the split) of urine that must be poured into the bottles.
- d. Must be designed so that the required tamper-evident bottle seals made available on the CCF fit with no damage to the seal when the employee initials it nor with the chance that the seal overlap would conceal printed information.
- e. Must be wrapped (with caps) together in a sealed plastic bag or shrink wrapping separate from the collection container; or must be wrapped (with cap) individually in sealed plastic bags or shrink wrapping; or must have peelable, sealed lid or other easily visible tamper-evident system.
- f. Plastic material must be leach resistant.

3. *Leak-Resistant Plastic Bag*

- a. Must have two sealable compartments or pouches which are leak-resistant; one large enough to hold two specimen bottles and the other large enough to hold the CCF paperwork.
- b. The sealing methodology must be such that once the compartments are sealed, any tampering or attempts to open either compartment will be evident.

4. *Absorbent material*

Each kit must contain enough absorbent material to absorb the entire contents of both specimen bottles.

Absorbent material must be designed to fit inside the leak-resistant plastic bag pouch into which the specimen bottles are placed.

5. *Shipping Container*

- a. Must be designed to adequately protect the specimen bottles from shipment damage in the transport of specimens from the collection site to the laboratory (*e.g.*, standard courier box, small cardboard box, plastic container).
- b. May be made available separately at collection sites rather than being part of an actual kit sent to collection sites.
- c. A shipping container is not necessary if a laboratory courier hand-delivers the specimen bottles in the plastic leak-proof bags from the collection site to the laboratory.

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Appendix B to Part 40—DOT Drug Testing Semi-Annual Laboratory Report to Employers

The following items are required on each laboratory report:

Reporting Period: (inclusive dates)

Laboratory Identification: (name and address)

Employer Identification: (name; may include Billing Code or ID code)

C/TPA Identification: (where applicable; name and address)

1. Specimen Results Reported (total number)

By Test Reason

(a) Pre-employment (number)

(b) Post-Accident (number)

(c) Random (number)

(d) Reasonable Suspicion/Cause (number)

(e) Return-to-Duty (number)

(f) Follow-up (number)

(g) Type of Test Not Noted on CCF (number)

2. Specimens Reported

(a) Negative (number)

(b) Negative and Dilute (number)

3. Specimens Reported as Rejected for Testing (total number)

By Reason

(a) Fatal flaw (number)

(b) Uncorrected Flaw (number)

4. Specimens Reported as Positive (total number) By Drug

(a) Marijuana Metabolite (number)

(b) Cocaine Metabolite (number)

(c) Opiates (number)

(1) Codeine (number)

(2) Morphine (number)

(3) 6-AM (number)

(d) Phencyclidine (number)

(e) Amphetamines (number)

(1) Amphetamine (number)

(2) Methamphetamine (number)

(3) MDMA (number)

(4) MDA (number)

(5) MDEA (number)

5. Adulterated (number)

6. Substituted (number)

7. Invalid Result (number)

[75 FR 49863, Aug. 16, 2010]

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Appendix C to Part 40—DOT Drug Testing Semi-Annual Laboratory Report to DOT

Mail, fax, or e-mail to: U.S. Department of Transportation, Office of Drug and Alcohol Policy and Compliance, W62-300, 1200 New Jersey Avenue, SE., Washington, DC 20590. Fax: (202) 366-3897. E-mail:

ODAPCWebMail@dot.gov.

The following items are required on each report:

Reporting Period: (inclusive dates)

Laboratory Identification: (name and address)

1. DOT Specimen Results Reported (total number)

2. Negative Results Reported (total number)

Negative (number)

Negative-Dilute (number)

3. Rejected for Testing Results Reported (total number)

By Reason

(a) Fatal flaw (number)

(b) Uncorrected Flaw (number)

4. Positive Results Reported (total number)

By Drug

(a) Marijuana Metabolite (number)

(b) Cocaine Metabolite (number)

(c) Opiates (number)

(1) Codeine (number)

(2) Morphine (number)

(3) 6-AM (number)

(d) Phencyclidine (number)

(e) Amphetamines (number)

(1) Amphetamine (number)

(2) Methamphetamine (number)

(3) MDMA (number)

(4) MDA (number)

(5) MDEA (number)

5. Adulterated Results Reported (total number)

By Reason (number)

6. Substituted Results Reported (total number)

7. Invalid Results Reported (total number)

By Reason (number)

[75 FR 49864, Aug. 16, 2010]

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Appendix D to Part 40—Report Format: Split Specimen Failure To Reconfirm

Mail, fax, or submit electronically to: U.S. Department of Transportation, Office of Drug and Alcohol Policy and Compliance, W62-300, 1200 New Jersey Avenue, SE., Washington, DC 20590, Fax: (202) 366-3897, Submit Electronically: http://www.dot.gov/ost/dapc/mro_split.html.

The following items are required on each report:

1. MRO name, address, phone number, and fax number.
2. Collection site name, address, and phone number.
3. Date of collection.
4. Specimen I.D. number.
5. Laboratory accession number.
6. Primary specimen laboratory name, address, and phone number.
7. Date result reported or certified by primary laboratory.
8. Split specimen laboratory name, address, and phone number.
9. Date split specimen result reported or certified by split specimen laboratory.
10. Primary specimen results (e.g., name of drug, adulterant) in the primary specimen.
11. Reason for split specimen failure-to-reconfirm result (e.g., drug or adulterant not present, specimen invalid, split not collected, insufficient volume).
12. Actions taken by the MRO (e.g., notified employer of failure to reconfirm and requirement for recollection).
13. Additional information explaining the reason for cancellation.
14. Name of individual submitting the report (if not the MRO).

[73 FR 35975, June 25, 2008]

Appendix E to Part 40—SAP Equivalency Requirements for Certification Organizations

1. **Experience:** Minimum requirements are for three years of full-time supervised experience or 6,000 hours of supervised experience as an alcoholism and/or drug abuse counselor. The supervision must be provided by a licensed or certified practitioner. Supervised experience is important if the individual is to be considered a professional in the field of alcohol and drug abuse evaluation and counseling.
2. **Education:** There exists a requirement of 270 contact hours of education and training in alcoholism and/or drug abuse or related training. These hours can take the form of formal education, in-service training, and professional development courses. Part of any professional counselor's development is participation in formal and non-formal education opportunities within the field.
3. **Continuing Education:** The certified counselor must receive at least 40-60 hours of continuing education units (CEU) during each two year period. These CEUs are important to the counselor's keeping abreast of changes and improvements in the field.
4. **Testing:** A passing score on a national test is a requirement. The test must accurately measure the application of the knowledge, skills, and abilities possessed by the counselor. The test establishes a national standard that must be met to practice.
5. **Testing Validity:** The certification examination must be reviewed by an independent authority for validity (examination reliability and relationship to the knowledge, skills, and abilities required by the counseling field). The reliability of the exam is paramount if counselor attributes are to be accurately measured. The examination passing score point must be placed at an appropriate minimal level score as gauged by statistically reliable methodology.
6. **Measurable Knowledge Base:** The certification process must be based upon measurable knowledge possessed by the applicant and verified through collateral data and testing. That level of knowledge must be of sufficient quantity to ensure a high quality of SAP evaluation and referral services.
7. **Measurable Skills Base:** The certification process must be based upon measurable skills possessed by the applicant and verified through collateral data and testing. That level of skills must be of sufficient quality to ensure a high quality of SAP evaluation and referral services.
8. **Quality Assurance Plan:** The certification agency must ensure that a means exists to determine that applicant records are verified as being true by the certification staff. This is an important check to ensure that true information is being accepted by the certifying agency.
9. **Code of Ethics:** Certified counselors must pledge to adhere to an ethical standard for practice. It must be understood that code violations could result in de-certification. These standards are vital in maintaining the integrity of practitioners. High ethical standards are required to ensure quality of client care and confidentiality of client information as well as to guard against inappropriate referral practices.
10. **Re-certification Program:** Certification is not just a one-time event. It is a continuing privilege with continuing requirements. Among these are continuing education, continuing state certification, and concomitant adherence to the code of ethics. Re-certification serves as a protector of client interests by removing poor performers from the certified practice.

11. ***Fifty State Coverage:*** Certification must be available to qualified counselors in all 50 states and, therefore, the test must be available to qualified applicants in all 50 states. Because many companies are multi-state operators, consistency in SAP evaluation quality and opportunities is paramount. The test need not be given in all 50 states but should be accessible to candidates from all states.
12. ***National Commission for Certifying Agencies (NCCA) Accreditation:*** Having NCCA accreditation is a means of demonstrating to the Department of Transportation that your certification has been reviewed by a panel of impartial experts that have determined that your examination(s) has met stringent and appropriate testing standards.

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Appendix F to Part 40—Drug and Alcohol Testing Information that C/TPAs May Transmit to Employers

1. If you are a C/TPA, you may, acting as an intermediary, transmit the information in the following sections of this part to the DER for an employer, if the employer chooses to have you do so. These are the only items that you are permitted to transmit to the employer as an intermediary. The use of C/TPA intermediaries is prohibited in all other cases, such as transmission of laboratory drug test results to MROs, the transmission of medical information from MROs to employers, the transmission of SAP reports to employers, the transmission of positive alcohol test results, and the transmission of medical information from MROs to employers.
2. In every case, you must ensure that, in transmitting the information, you meet all requirements (*e.g.*, concerning confidentiality and timing) that would apply if the party originating the information (*e.g.*, an MRO or collector) sent the information directly to the employer. For example, if you transmit MROs' drug testing results to DERs, you must transmit each drug test result to the DER in compliance with the requirements for MROs set forth in §40.167.

Drug Testing Information

§40.25: Previous two years' test results

§40.35: Notice to collectors of contact information for DER

§40.61(a): Notification to DER that an employee is a "no show" for a drug test

§40.63(e): Notification to DER of a collection under direct observation

§40.65(b)(6) and (7) and (c)(2) and (3): Notification to DER of a refusal to provide a specimen or an insufficient specimen

§40.73(a)(9): Transmission of CCF copies to DER (However, MRO copy of CCF must be sent by collector directly to the MRO, not through the C/TPA.)

§40.111(a): Transmission of laboratory statistical report to employer

§40.127(f): Report of test results to DER

§§40.127(g), 40.129(d), 40.159(a)(4)(ii); 40.161(b): Reports to DER that test is cancelled

§40.129 (d): Report of test results to DER

§40.129(g)(1): Report to DER of confirmed positive test in stand-down situation

§§40.149(b): Report to DER of changed test result

§40.155(a): Report to DER of dilute specimen

§40.167(b) and (c): Reports of test results to DER

§40.187(a)-(e) Reports to DER concerning the reconfirmation of tests

§40.191(d): Notice to DER concerning refusals to test

§40.193(b)(3): Notification to DER of refusal in shy bladder situation

§40.193(b)(4): Notification to DER of insufficient specimen

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§40.193(b)(5): Transmission of CCF copies to DER (not to MRO)

§40.199: Report to DER of cancelled test and direction to DER for additional collection

§40.201: Report to DER of cancelled test

Alcohol Testing Information

§40.215: Notice to BATs and STTs of contact information for DER

§40.241(b)(1): Notification to DER that an employee is a “no show” for an alcohol test

§40.247(a)(2): Transmission of alcohol screening test results only when the test result is less than 0.02

§40.255(a)(4): Transmission of alcohol confirmation test results only when the test result is less than 0.02

§40.263(a)(3) and 263(b)(3): Notification of insufficient saliva and failure to provide sufficient amount of breath

[65 FR 79526, Dec. 19, 2000, as amended at 66 FR 41955, Aug. 9, 2001; 73 FR 35975, June 25, 2008]

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Appendix G to Part 40—Alcohol Testing Form

The following form is the alcohol testing form required for use in the DOT alcohol testing program beginning January 1, 2011. Employers are authorized to use the form effective February 25, 2010.

[68 FR 43952, July 25, 2003, as amended 75 FR 8528, February 25, 2010; 75FR 38423, July 2, 2010]

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U.S. Department of Transportation (DOT) Alcohol Testing Form

(The instructions for completing this form are on the back of Copy 3)

Step 1: TO BE COMPLETED BY ALCOHOL TECHNICIAN

A: Employee Name _____
(Print) (First, M.I., Last)

B: SSN or Employee ID No. _____

C: Employer Name _____
Street _____
City, State, Zip _____

DER Name and Telephone No. _____
()
DER Name _____ DER Phone Number _____

D: Reason for Test: ☐ Random ☐ Reasonable Susp ☐ Post-Accident ☐ Return to Duty ☐ Follow-up ☐ Pre-employment

STEP 2: TO BE COMPLETED BY EMPLOYEE

I certify that I am about to submit to alcohol testing required by US Department of Transportation regulations and that the identifying information provided on the form is true and correct.

Signature of Employee Date Month Day Year

STEP 3: TO BE COMPLETED BY ALCOHOL TECHNICIAN

(If the technician conducting the screening test is not the same technician who will be conducting the confirmation test, each technician must complete their own form.) I certify that I have conducted alcohol testing on the above named individual in accordance with the procedures established in the US Department of Transportation regulation, 49 CFR Part 40, that I am qualified to operate the testing device(s) identified, and that the results are as recorded.

TECHNICIAN: ☐ BAT ☐ STT DEVICE: ☐ SALIVA ☐ BREATH* 15-Minute Wait: ☐ Yes ☐ No

SCREENING TEST: (For BREATH DEVICE* write in the space below only if the testing device is not designed to print.)

Test #	Testing Device Name	Device Serial # OR Lot # & Exp Date	Activation Time	Reading Time	Result

CONFIRMATION TEST: Results MUST be affixed to each copy of this form or printed directly onto the form.

REMARKS:

Alcohol Technician's Company _____ Company Street Address _____
(PRINT) Alcohol Technician's Name (First, M.I., Last) _____ Company City, State, Zip _____ Phone Number _____
Signature of Alcohol Technician _____ Date Month Day Year

STEP 4: TO BE COMPLETED BY EMPLOYEE IF TEST RESULT IS 0.02 OR HIGHER

I certify that I have submitted to the alcohol test, the results of which are accurately recorded on this form. I understand that I must not drive, perform safety-sensitive duties, or operate heavy equipment because the results are 0.02 or greater.

Signature of Employee Date Month Day Year

Print Screening Results
Here or Affix with
Tamper Evident Tape

Print Confirmation
Results Here or Affix
with Tamper Evident
Tape

Print Additional
Results Here or Affix
With Tamper Evident
Tape

U.S. Department of Transportation (DOT) Alcohol Testing Form

(The instructions for completing this form are on the back of Copy 3)

Step 1: TO BE COMPLETED BY ALCOHOL TECHNICIAN

A: Employee Name _____
(Print) (First, M.I., Last)

B: SSN or Employee ID No. _____

C: Employer Name _____
Street _____
City, State, Zip _____

DER Name and Telephone No. _____
DER Name _____ DER Phone Number _____

D: Reason for Test: ☐ Random ☐ Reasonable Susp ☐ Post-Accident ☐ Return to Duty ☐ Follow-up ☐ Pre-employment

Print Screening Results
Here or Affix with
Tamperevident Tape

STEP 2: TO BE COMPLETED BY EMPLOYEE

I certify that I am about to submit to alcohol testing required by US Department of Transportation regulations and that the identifying information provided on the form is true and correct.

Signature of Employee _____ Date _____/_____/_____
Month Day Year

Print Confirmation
Results Here or Affix
with Tamperevident
Tape

STEP 3: TO BE COMPLETED BY ALCOHOL TECHNICIAN

(If the technician conducting the screening test is not the same technician who will be conducting the confirmation test, each technician must complete their own form.) I certify that I have conducted alcohol testing on the above named individual in accordance with the procedures established in the US Department of Transportation regulation, 49 CFR Part 40, that I am qualified to operate the testing device(s) identified, and that the results are as recorded.

TECHNICIAN: ☐ BAT ☐ STT DEVICE: ☐ SALIVA ☐ BREATH* 15-Minute Wait: ☐ Yes ☐ No

SCREENING TEST: (For BREATH DEVICE* write in the space below only if the testing device is not designed to print.)

Test #	Testing Device Name	Device Serial # <u>OR</u> Lot # & Exp Date	Activation Time	Reading Time	Result
CONFIRMATION TEST: Results <u>MUST</u> be affixed to each copy of this form or printed directly onto the form.					

REMARKS:

Alcohol Technician's Company _____ Company Street Address _____
(PRINT) Alcohol Technician's Name (First, M.I., Last) _____ Company City, State, Zip _____ Phone Number _____

Signature of Alcohol Technician _____ Date _____/_____/_____
Month Day Year

Print Additional
Results Here or Affix
With Tamperevident
Tape

STEP 4: TO BE COMPLETED BY EMPLOYEE IF TEST RESULT IS 0.02 OR HIGHER

I certify that I have submitted to the alcohol test, the results of which are accurately recorded on this form. I understand that I must not drive, perform safety-sensitive duties, or operate heavy equipment because the results are 0.02 or greater.

Signature of Employee _____ Date _____/_____/_____
Month Day Year

Form DOT F 1380 (Rev. 5/2008)

OMB No. 2105-0529

COPY 2 – EMPLOYEE RETAINS

U.S. Department of Transportation (DOT) Alcohol Testing Form

(The instructions for completing this form are on the back of Copy 3)

Print Screening Results
Here or Affix with
Tamper Evident Tape

Step 1: TO BE COMPLETED BY ALCOHOL TECHNICIAN

A: Employee Name _____
(Print) (First, M.I., Last)

B: SSN or Employee ID No. _____

C: Employer Name _____
Street _____
City, State, Zip _____

DER Name and Telephone No. _____
DER Name _____ DER Phone Number _____

D: Reason for Test: ☐ Random ☐ Reasonable Susp ☐ Post-Accident ☐ Return to Duty ☐ Follow-up ☐ Pre-employment

STEP 2: TO BE COMPLETED BY EMPLOYEE

I certify that I am about to submit to alcohol testing required by US Department of Transportation regulations and that the identifying information provided on the form is true and correct.

Signature of Employee _____ Date _____/_____/_____
Month Day Year

Print Confirmation
Results Here or Affix
with Tamper Evident
Tape

STEP 3: TO BE COMPLETED BY ALCOHOL TECHNICIAN

(If the technician conducting the screening test is not the same technician who will be conducting the confirmation test, each technician must complete their own form.) I certify that I have conducted alcohol testing on the above named individual in accordance with the procedures established in the US Department of Transportation regulation, 49 CFR Part 40, that I am qualified to operate the testing device(s) identified, and that the results are as recorded.

TECHNICIAN: ☐ BAT ☐ STT DEVICE: ☐ SALIVA ☐ BREATH* 15-Minute Wait: ☐ Yes ☐ No

SCREENING TEST: (For BREATH DEVICE* write in the space below only if the testing device is not designed to print.)

Test #	Testing Device Name	Device Serial # OR Lot # & Exp Date	Activation Time	Reading Time	Result

CONFIRMATION TEST: Results MUST be affixed to each copy of this form or printed directly onto the form.

REMARKS:

Alcohol Technician's Company _____ Company Street Address _____
(PRINT) Alcohol Technician's Name (First, M.I., Last) _____ Company City, State, Zip _____ Phone Number _____

Signature of Alcohol Technician _____ Date _____/_____/_____
Month Day Year

Print Additional
Results Here or Affix
With Tamper Evident
Tape

STEP 4: TO BE COMPLETED BY EMPLOYEE IF TEST RESULT IS 0.02 OR HIGHER

I certify that I have submitted to the alcohol test, the results of which are accurately recorded on this form. I understand that I must not drive, perform safety-sensitive duties, or operate heavy equipment because the results are 0.02 or greater.

Signature of Employee _____ Date _____/_____/_____
Month Day Year

PAPERWORK REDUCTION ACT NOTICE (as required by 5 CFR 1320.21)

A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB Control Number. The OMB Control Number for this information collection is 2105-0529. Public reporting for this collection of information is estimated to be approximately 8 minutes per response, including the time for reviewing instructions, completing and reviewing the collection of information. All responses to this collection of information are mandatory. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to: Information Collection Clearance Officer, U.S. Department of Transportation, Office of Drug and Alcohol Policy and Compliance, 1200 New Jersey Avenue, SE, Suite W62-300, Washington, D.C. 20590.

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DRAFT

INSTRUCTIONS FOR COMPLETING THE U.S. DEPARTMENT OF TRANSPORTATION ALCOHOL TESTING FORM

NOTE: Use a ballpoint pen, press hard, and check all copies for legibility.

STEP 1 The Breath Alcohol Technician (BAT) or Screening Test Technician (STT) completes the information required in this step. Be sure to print the employee's name and check the box identifying the reason for the test.

NOTE: If the employee refuses to provide SSN or I.D. number, be sure to indicate this in the remarks section in STEP 3. Proceed with STEP 2.

STEP 2 Instruct the employee to read, sign, and date the employee certification statement in STEP 2.

NOTE: If the employee refuses to sign the certification statement, do not proceed with the alcohol test. Contact the designated employer representative.

STEP 3 The BAT or STT completes the information required in this step and checks the type of device (saliva or breath) being used. After conducting the alcohol screening test, do the following (as appropriate):

Enter the information for the screening test (test number, testing device name, testing device serial number or lot number and expiration date, time of test with any device-dependent activation times, and the results), on the front of the ATF. For a breath testing device capable of printing, the information may be part of the printed record.

NOTE: Be sure to enter the result of the test exactly as it is indicated on the breath testing device, e.g., 0.00, 0.02, 0.04, etc.

Affix the printed information to the front of the form in the space provided, or to the back of the form, in a tamper-evident manner (e.g., tape) such that it does not obscure the original printed information, or the device may print the results directly on the ATF. If the results of the screening test are less than 0.02, print, sign your name, and enter today's date in the space provided. The test process is complete.

If the results of the screening test are 0.02 or greater, a confirmation test must be administered in accordance with DOT regulations. An EVIDENTIAL BREATH TESTING device that is capable of printing confirmation test information must be used in conducting this test.

Ensure that a waiting period of at least 15 minutes occurs before the confirmation test begins. Check the box indicating that the waiting period lasted at least 15 minutes.

After conducting the alcohol confirmation test, affix the printed information to the front of the form in the space provided, or to the back of the form, in a tamper-evident manner (e.g., tape) such that it does not obscure the original information, or the device may print the results directly on the ATF. Print, sign your name, and enter the date in the space provided. Go to STEP 4.

STEP 4 If the employee has a breath alcohol confirmation test result of 0.02 or higher, instruct the employee to read, sign, and date the employee certification statement in STEP 4.

NOTE: If the employee refuses to sign the certification statement in STEP 4, be sure to indicate this in the remarks line in STEP 3.

Immediately notify the DER if the employee has a breath alcohol confirmation test result of 0.02 or higher.

Forward Copy 1 to the employer. Give Copy 2 to the employee. Retain Copy 3 for BAT/STT records.

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[75 FR 8529, Feb. 25, 2010, as amended at 75 FR 13009, Mar. 18, 2010; 75 FR 38423, July 2, 2010]

Appendix H to Part 40—DOT Drug and Alcohol Testing Management Information System (MIS) Data Collection Form

The following form is the MIS Data Collection form required for use beginning in 2011 to report calendar year 2010 MIS data.

U.S. DEPARTMENT OF TRANSPORTATION DRUG AND ALCOHOL TESTING MIS DATA COLLECTION FORM
Calendar Year Covered by this Report: _____ OMB No. 2105-0529
Form DOT F 1385 (Rev. 5/2008)

I. Employer:
Company Name: _____
Doing Business As (DBA) Name (if applicable): _____
Address: _____ E-mail: _____
Name of Certifying Official: _____ Signature: _____
Telephone: (____) _____ Date Certified: _____
Prepared by (if different): _____ Telephone: (____) _____
C/TPA Name and Telephone (if applicable): _____ (____) _____

Check the DOT agency for which you are reporting MIS data; and complete the information on that same line as appropriate:
 FMCSA – Motor Carrier: DOT #: _____ Owner-operator: (circle one) YES or NO Exempt (Circle One) YES or NO
 FAA – Aviation: Certificate # (if applicable): _____ Plan / Registration # (if applicable): _____
 PHMSA – Pipeline: (Check) Gas Gathering _____ Gas Transmission _____ Gas Distribution _____ Transport Hazardous Liquids _____ Transport Carbon Dioxide _____
 FRA – Railroad: Total Number of observed/documented Part 219 “Rule G” Observations for covered employees: _____
 USCG – Maritime: Vessel ID # (USCG- or State-Issued): _____ (If more than one vessel, list separately.)
 FTA – Transit _____

II. Covered Employees: (A) Enter Total Number Safety-Sensitive Employees In All Employee Categories: _____
(B) Enter Total Number of Employee Categories: _____

(C)

Employee Category	Total Number of Employees in this Category

If you have multiple employee categories, complete Sections I and II (A) & (B). Take that filled-in form and make one copy for each employee category and complete Sections II (C), III, and IV for each separate employee category.

III. Drug Testing Data:

	1	2	3	4	5	6	7	8	9	10	11	12	13	
Type of Test	Total Number Of Test Results (Should equal the sum of Columns 2, 3, 9, 10, 11, and 12)	Verified Negative Results	Verified Positive Results ~ For One Or More Drugs	Positive For Marijuana	Positive For Cocaine	Positive For PCP	Positive For Opiates	Positive For Amphetamines	Refusal Results					Canceled Results
Pre-Employment									Adulterated	Substituted	“Sly Bladder” ~ With No Medical Explanation	Other Refusals To Submit To Testing		
Random														
Post-Accident														
Reasonable Susp./Cause														
Return-to-Duty														
Follow-Up														
TOTAL														

IV. Alcohol Testing Data:

	1	2	3	4	5	6	7	8	9
Type of Test	Total Number Of Screening Test Results (Should equal the sum of Columns 2, 3, 7, and 8)	Screening Tests With Results Below 0.02	Screening Tests With Results 0.02 Or Greater	Number Of Confirmation Tests Results	Confirmation Tests With Results 0.02 Through 0.039	Confirmation Tests With Results 0.04 Or Greater	Refusal Results		
Pre-Employment							“Sly Lung” ~ With No Medical Explanation	Other Refusals To Submit To Testing	Canceled Results
Random									
Post-Accident									
Reasonable Susp./Cause									
Return-to-Duty									
Follow-Up									
TOTAL									

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Title 18, USC Section 1001, makes it a criminal offense subject to a maximum fine of \$10,000, or imprisonment for not more than 5 years, or both, to knowingly and willfully make or cause to be made any false or fraudulent statements of representations in any matter within the jurisdiction of any agency of the United States.

**U.S. DEPARTMENT OF TRANSPORTATION
DRUG AND ALCOHOL TESTING MIS DATA COLLECTION FORM
INSTRUCTION SHEET**

This Management Information System (MIS) form is made-up of four sections: employer information; covered employees (i.e., employees performing DOT regulated safety-sensitive duties) information; drug testing data; and alcohol testing data. The employer information needs only to be provided once per submission. However, you must submit a separate page of data for each employee category for which you report testing data. If you are preparing reports for more than one DOT agency then you must submit DOT agency-specific forms.

Please type or print entries legibly in black ink.

TIP ~ Read the entire instructions before starting. Please note that USCG-regulated employers do not report alcohol test results on the MIS form.

Calendar Year Covered by this Report: Enter the appropriate year.

Section I. Employer

1. Enter your company's name, to include when applicable, your "doing business as" name; current address, city, state, and zip code; and an e-mail address, if available.
2. Enter the printed name, signature, and complete telephone number of the company official certifying the accuracy of the report and the date that person certified the report as complete.
3. If someone other than the certifying official completed the MIS form, enter that person's name and phone number on the appropriate lines provided.
4. If a Consortium/Third Party Administrator (C/TPA) performs administrative services for your drug and alcohol program operation, enter its name and phone number on the appropriate lines provided.
5. DOT Agency Information: Check the box next to the DOT agency for which you are completing this MIS form. Again, if you are submitting to multiple DOT agencies, you must use separate forms for each DOT agency.
 - a. If you are completing the form for FMCSA, enter your FMCSA DOT Number, as appropriate. In addition, you must indicate whether you are an owner-operator (i.e., an employer who employs only himself or herself as a driver) and whether you are exempt from providing MIS data. Exemptions are noted in the FMCSA regulation at 382.103(d).
 - b. If you are completing the form for FAA, enter your FAA Certificate Number and FAA Antidrug Plan / Registration Number, when applicable.
 - c. If you are completing the form for PHMSA, check the additional box(s) indicating your type of operation.
 - d. If you are completing the form for FRA, enter the number of observed/documented Part 219 "Rule G" Observations for covered employees.
 - e. If you are submitting the form for USCG, enter the vessel ID number. If there is more than one number, enter the numbers separately.

Section II. Covered Employees

1. In Box II-A, enter the total number of covered employees (i.e., employees performing DOT regulated safety-sensitive duties) who work for your company. Then enter, in Box II-B, the total number of employee categories that number represents. If you have employees, some of whom perform duties under one DOT agency and others of whom perform duties under another DOT agency, enter only the number of those employees performing duties under the DOT agency for whom you are submitting the form. If you have covered employees who perform multi-DOT agency functions (e.g., an employee drives a commercial motor vehicle and performs pipeline maintenance duties for you), count the employee only on the MIS report for the DOT agency regulating more than 50 percent of the employee's safety sensitive function.

[Example: If you are submitting the information for the FRA and you have 2000 covered employees performing duties in all FRA-covered service categories – you would enter “2000” in the first box (II-A) and “5” in the second box (II-B), because FRA has five safety-sensitive employee categories and you have employees in all of these groups. If you have 1000 employees performing safety-sensitive duties in three FRA-covered service categories (e.g., engine service, train service, and dispatcher/operation), you would enter “1000” in the first box (II-A) and “3” in the second box (II-B).]

TIP ~ To calculate the total number of covered employees, add the total number of covered employees eligible for testing during each random testing selection period for the year and divide that total by the number of random testing periods. (However, no company will need to factor the average number of employees more often than once per month.) For instance, a company conducting random testing quarterly needs to add the total of covered employees they had in the random pool when each selection was made; then divide this number by 4 to obtain the yearly average number of covered employees. It is extremely important that you place all eligible employees into these random pools. [As an example, if Company A had 1500 employees in the first quarter random pool, 2250 in the second quarter, 2750 in the third quarter; and 1500 in the fourth quarter; $1500 + 2250 + 2750 + 1500 = 8000$; $8000 / 4 = 2000$; the total number of covered employees for the year would be reported as, “2000”.

If you conduct random selections more often than once per month (e.g., you select daily, weekly, bi-weekly), you do not need to compute this total number of covered employees rate more than on a once per month basis. Therefore, employers need not compute the covered employees rate more than 12 times per year.]

2. If you are reporting multiple employee categories, enter the specific employee category in box II-C; and provide the number of employees performing safety-sensitive duties in that specific category.

[Example: You are submitting data to the FTA and you have 2000 covered employees. You have 1750 personnel performing revenue vehicle operation and the remaining 250 are performing revenue vehicle and equipment maintenance. When you provide vehicle operation information, you would enter “Revenue Vehicle Operation” in the first II-C box and “1750” in the second II-C box. When you provide data on the maintenance personnel, you would enter “Revenue Vehicle and Equipment Maintenance” in the first II-C box and “250” in the second II-C box.]

TIP ~ A separate form for each employee category must be submitted. You may do this by filling out a single MIS form through Section II-B and then make one copy for each additional employee category you are reporting. [For instance, if you are submitting the MIS form for the FMCSA, you need only submit one form for all FMCSA covered employees working for you – your only category of employees is “driver.” If you are reporting testing data to the FAA and you employ only flight crewmembers, flight attendants, and aircraft maintenance workers, you need to complete one form each for category – three forms in all. If you are reporting to FAA and have all FAA categories of covered employees, you must submit eight forms.]

Here is a full listing of covered-employee categories:

FMCSA (one category): Driver

FAA (eight categories): Flight Crewmember; Flight Attendant; Flight Instructor; Aircraft Dispatcher; Aircraft Maintenance; Ground Security Coordinator; Aviation Screener; Air Traffic Controller

PHMSA (one category): Operation/Maintenance/Emergency Response

FRA (five categories): Engine Service; Train Service; Dispatcher/Operation; Signal Service; Other [Includes yardmasters, hostlers (non-engineer craft), bridge tenders; switch tenders, and other miscellaneous employees performing 49 CFR 228.5 (c) defined covered service.]

USCG (one category): Crewmember

FTA (five categories): Revenue Vehicle Operation; Revenue Vehicle and Equipment Maintenance; Revenue Vehicle Control/Dispatch; CDL/Non-Revenue Vehicle; Armed Security Personnel

Section III. Drug Testing Data

This section summarizes the drug testing results for all covered employees (to include applicants). The table in this section requires drug test data by test type and by result. The categories of test types are: Pre-Employment; Random; Post-Accident; Reasonable Suspicion / Reasonable Cause; Return-to-Duty, and Follow-Up.

The categories of type of results are: Total Number of Test Results [excluding cancelled tests and blind specimens]; Verified Negative; Verified Positive; Positive for Marijuana; Positive for Cocaine; Positive for PCP; Positive for Opiates; Positive for Amphetamines; Refusals due to Adulterated, Substituted, “Shy Bladder” with No Medical Explanation, and Other Refusals to Submit to Testing; and Cancelled Results.

TIP ~ Do not enter data on blind specimens submitted to laboratories. Be sure to enter all pre-employment testing data regardless of whether an applicant was hired or not. You do not need to separate reasonable suspicion and reasonable cause drug testing data on the MIS form. [Therefore, if you conducted only reasonable suspicion drug testing (i.e., FMCSA and FTA), enter that data; if you conducted only reasonable cause drug testing (i.e., FAA, PHMSA, and USCG); or if you conducted both under FRA drug testing rules, simply enter the data with no differentiation.] For USCG, enter any "Serious Marine Incident" testing in the Post-Accident row. For FRA, do not enter post accident data (the FRA does not collect this data on the MIS form). Finally, you may leave blank any row or column in which there were no results, or you may enter "0" (zero) instead. Please note that cancelled tests are not included in the "total number of test results" column.

Section III, Column 1. Total Number of Test Results ~ This column requires a count of the total number of test results in each testing category during the entire reporting year. Count the number of test results as the number of testing events resulting in negative, positive, and refusal results. Do not count cancelled tests and blind specimens in this total.

[Example: A company that conducted fifty pre-employment tests would enter "50" on the Pre-Employment row. If it conducted one hundred random tests, "100" would be entered on the Random row. If that company did no post-accident, reasonable suspicion, reasonable cause, return-to-duty, or follow-up tests, those categories will be left blank or zeros entered.]

Section III, Column 2. Verified Negative Results ~ This column requires a count of the number of tests in each testing category that the Medical Review Officer (MRO) reported as negative. Do not count a negative-dilute result if, subsequently, the employee underwent a second collection; the second test is the test of record.

[Example: If forty-seven of the company's fifty pre-employment tests were reported negative, "47" would be entered in Column 2 on the Pre-Employment row. If ninety of the company's one hundred random test results were reported negative, "90" would be entered in Column 2 on the Random row. Because the company did no other testing, those other categories would be left blank or zeros entered.]

Section III, Column 3. Verified Positive Results ~ For One Or More Drugs ~ This column requires a count of the number of tests in each testing category that the MRO reported as positive for one or more drugs. When the MRO reports a test positive for two drugs, it would count as one positive test.

[Example: If one of the fifty pre-employment tests was positive for two drugs, "1" would be entered in Column 3 on the Pre-Employment row. If four of the company's one hundred random test results were reported positive (three for one drug and one for two drugs), "4" would be entered in Column 3 on the Random row.]

■ **Section III, Columns 4 through 8. Positive** (for specific drugs) ~ These columns require entry of the by-drug data for which specimens were reported positive by the MRO.

[Example: The pre-employment positive test reported by the MRO was positive for marijuana, “1” would be entered in Column 4 on the Pre-Employment row. If three of the four positive results for random testing were reported by the MRO to be positive for marijuana, “3” would be entered in Column 4 on the Random row. If one of the four positive results for random testing was reported positive for both PCP and opiates, “1” would be entered in Column 6 on the Random row and “1” would be entered in Column 7 of the Random row.]

TIP ~ Column 1 should equal the sum of Columns 2, 3, 9, 10, 11, and 12. Remember you have not counted specimen results that were ultimately cancelled or were from blind specimens. So, $\text{Column 1} = \text{Column 2} + \text{Column 3} + \text{Column 9} + \text{Column 10} + \text{Column 11} + \text{Column 12}$. Certainly, double check your records to determine if your actual results count is reflective of all negative, positive, and refusal counts.

An MRO may report that a specimen is positive for more than one drug. When that happens, to use the company example above (i.e., one random test was positive for both PCP and opiates), the positive results should be recorded in the appropriate columns – PCP and opiates in this case. There is no expectation for Columns 4 through 8 numbers to add up to the numbers in Column 3 when you report multiple positives.

Section III, Columns 9 through 12. Refusal Results ~ The refusal section is divided into four refusal groups – they are: Adulterated; Substituted; “Shy Bladder” ~ With No Medical Explanation; and Other Refusals To Submit to Testing. The MRO reports two of these refusal types – adulterated and substituted specimen results – because of laboratory test findings.

When an individual does not provide enough urine at the collection site, the MRO conducts or causes to have conducted a medical evaluation to determine if there exists a medical reason for the person’s inability to provide the appropriate amount of urine. If there is no medical reason to support the inability, the MRO reports the result to the employer as a refusal to test. Refusals of this type are reported in the “Shy Bladder” ~ With No Medical Explanation category.

Finally, additional reasons exist for a test to be considered a refusal. Some examples are: the employee fails to report to the collection site as directed by the employer; the employee leaves the collection site without permission; the employee fails to empty his or her pockets at the collection site; the employee refuses to have a required shy bladder evaluation. Again, these are only four examples: there are more.

■ **Section III, Column 9. Adulterated** ~ This column requires the count of the number of tests reported by the MRO as refusals because the specimens were adulterated.

[Example: If one of the fifty pre-employment tests was adulterated, “1” would be entered in Column 9 of the Pre-Employment row.]

■ **Section III, Column 10. Substituted** ~ This column requires the count of the number of tests reported by the MRO as refusals because the specimens were substituted.

[Example: If one of the 100 random tests was substituted, “1” would be entered in Column 10 of the Random row.]

■ **Section III, Column 11. “Shy Bladder” ~ With No Medical Explanation** ~ This column requires the count of the number of tests reported by the MRO as being a refusal because there was no legitimate medical reason for an insufficient amount of urine.

[Example: If one of the 100 random tests was a refusal because of shy bladder, “1” would be entered in Column 11 of the Random row.]

■ **Section III, Column 12. Other Refusals To Submit To Testing** ~ This column requires the count of refusals other than those already entered in Columns 9 through 11.

[Example: If the company entered “100” as the number of random specimens collected, however it had five employees who refused to be tested without submitting specimens: two did not show up at the collection site as directed; one refused to empty his pockets at the collection site; and two left the collection site rather than submit to a required directly observed collection. Because of these five refusal events, “5” would be entered in Column 11 of the Random row.]

TIP ~ Even though some testing events result in a refusal in which no urine was collected and sent to the laboratory, a “refusal” is still a final test result. Therefore, your overall numbers for test results (in Column 1) will equal the total number of negative tests (Column 2); positives (Column 3); and refusals (Columns 9, 10, 11, and 12). Do not worry that no urine was processed at the laboratory for some refusals; all refusals are counted as a testing event for MIS purposes and for establishing random rates.

Section III, Column 13. Cancelled Tests ~ This column requires a count of the number of tests in each testing category that the MRO reported as cancelled. You must not count any cancelled tests in Column 1 or in any other column. For instance, you must not count a positive result (in Column 3) if it had ultimately been cancelled for any reason (e.g., specimen was initially reported positive, but the split failed to reconfirm).

[Example: If a pre-employment test was reported cancelled, “1” would be entered in Column 13 on the Pre-Employment row. If three of the company’s random test results were reported cancelled, “3” would be entered in Column 13 on the Random row.]

TOTAL Line. Columns 1 through 13 ~ This line requires you to add the numbers in each column and provide the totals.

Section IV. Alcohol Testing Data

This section summarizes the alcohol testing conducted for all covered employees (to include applicants). The table in this section requires alcohol test data by test type and by result. The categories of test types are: Pre-Employment; Random; Post-Accident; Reasonable Suspicion / Reasonable Cause; Return-to-Duty, and Follow-Up.

The categories of results are: Number of Screening Test Results; Screening Tests with Results Below 0.02; Screening Tests with Results 0.02 Or Greater; Number of Confirmation Test Results; Confirmation Tests with Results 0.02 through 0.039; Confirmation Tests with Results 0.04 Or Greater; Refusals due to “Shy Lung” with No Medical Explanation, and Other Refusals to Submit to Testing; and Cancelled Results.

TIP ~ Be sure to enter all pre-employment testing data regardless of whether an applicant was hired or not. Of course, for most employers pre-employment alcohol testing is optional, so you may not have conducted this type of testing. You do not need to separate “reasonable suspicion” and “reasonable cause” alcohol testing data on the MIS form. [Therefore, if you conducted only reasonable suspicion alcohol testing (i.e., FMCSA, FAA, FTA, and PHMSA), enter that data; if you conducted both reasonable suspicion and reasonable cause alcohol testing (i.e., FRA), simply enter the data with no differentiation.] PHMSA does not authorize “random” testing for alcohol. Finally, you may leave blank any row or column in which there were no results, or you may enter “0” (zero) instead. Please note that USCG-regulated employers do not report alcohol test results on the MIS form: Do not fill-out Section IV if you are a USCG-regulated employer.

Section IV, Column 1. Total Number of Screening Test Results ~ This column requires a count of the total number of screening test results in each testing category during the entire reporting year. Count the number of screening tests as the number of screening test events with final screening results of below 0.02, of 0.02 through 0.039, of 0.04 or greater, and all refusals. Do not count cancelled tests in this total.

[Example: A company that conducted twenty pre-employment tests would enter “20” on the Pre-Employment row. If it conducted fifty random tests, “50” would be entered. If that company did no post-accident, reasonable suspicion, reasonable cause, return-to-duty, or follow-up tests, those categories will be left blank or zeros entered.]

Section IV, Column 2. Screening Tests With Results Below 0.02 ~ This column requires a count of the number of tests in each testing category that the BAT or STT reported as being below 0.02 on the screening test.

[Example: If seventeen of the company’s twenty pre-employment screening tests were reported as being below 0.02, “17” would be entered in Column 2 on the Pre-Employment row. If forty-four of the company’s fifty random screening test results were reported as being below 0.02, “44” would be entered in Column 2 on the Random row. Because the company did no other testing, those other categories would be left blank or zeros entered.]

Section IV, Column 3. Screening Tests With Results 0.02 Or Greater ~ This column requires a count of the number of screening tests in each testing category that BAT or STT reported as being 0.02 or greater on the screening test.

[Example: If one of the twenty pre-employment tests was reported as being 0.02 or greater, “1” would be entered in Column 3 on the Pre-Employment row. If four of the company’s fifty random test results were reported as being 0.02 or greater, “4” would be entered in Column 3 on the Random row.]

Section IV, Column 4. Number of Confirmation Test Results ~ This column requires entry of the number of confirmation tests that were conducted by a BAT as a result of the screening tests that were found to be 0.02 or greater. In effect, all screening tests of 0.02 or greater should have resulted in confirmation tests. Ideally the number of tests in Column 3 and Column 4 should be the same. However, we know that this required confirmation test sometimes does not occur. In any case, the number of confirmation tests that were actually performed should be entered in Column 4.

[Example: If the one pre-employment screening test reported as 0.02 or greater had a subsequent confirmation test performed by a BAT, “1” would be entered in Column 4 on the Pre-Employment row. If three of the four random screening tests that were found to be 0.02 or greater had a subsequent confirmation test performed by a BAT, “3” would be entered in Column 4 on the Random row.]

Section IV, Column 5. Confirmation Tests With Results 0.02 Through 0.039 ~ This column requires entry of the number of confirmation tests that were conducted by a BAT that led to results that were 0.02 through 0.039.

[Example: If the one pre-employment confirmation test yielded a result of 0.042, Column 5 of the Pre-Employment row would be left blank or zeros entered. If two of the random confirmation tests yielded results of 0.03 and 0.032, “2” would be entered in Column 5 of the Random row.]

Section IV, Column 6. Confirmation Tests With Results 0.04 Or Greater ~ This column requires entry of the number of confirmation tests that were conducted by a BAT that led to results that were 0.04 or greater.

[Example: Because the one pre-employment confirmation test yielded a result of 0.042, “1” would be entered in Column 6 of the Pre-Employment row. If one of the random confirmation tests yielded a result of 0.04, “1” would be entered in Column 6 of the Random row.]

TIP ~ Column 1 should equal the sum of Columns 2, 3, 7, and 8. The number of screening tests results should reflect the number of screening tests you have no matter the result (below 0.02 or at or above 0.02, plus refusals to test), unless of course, the tests were ultimately cancelled. So, Column 1 = Column 2 + Column 3 + Column 7 + Column 8. Certainly, double check your records to determine if your actual screening results count is reflective of all these counts.

There is no need to record MIS confirmation tests results below 0.02: That is why we have no column for it on the form. [If the random test that screened 0.02 went to a confirmation test, and that confirmation test yielded a result below 0.02, there is no place for that confirmed result to be entered.] We assume that if a confirmation test was completed but not listed in either Column 5 or Column 6, the result was below 0.02. In addition, if the confirmation test ended up being cancelled, it should not have been included in Columns 1, 3, or 4 in the first place.

Section IV, Columns 7 and 8. Refusal Results ~ The refusal section is divided into two refusal groups – they are: Shy Lung ~ With No Medical Explanation; and Other Refusals To Submit to Testing. When an individual does not provide enough breath at the test site, the company requires the employee to have a medical evaluation to determine if there exists a medical reason for the person’s inability to provide the appropriate amount of breath. If there is no medical reason to support the inability as reported by the examining physician, the employer calls the result a refusal to test: Refusals of this type are reported in the “Shy Lung ~ With No Medical Explanation” category.

Finally, additional reasons exist for a test to be considered a refusal. Some examples are: the employee fails to report to the test site as directed by the employer; the employee leaves the test site without permission; the employee fails to sign the certification at Step 2 of the ATF; the employee refuses to have a required shy lung evaluation. Again, these are only four examples; there are more.

■ **Section IV, Column 7. “Shy Lung” ~ With No Medical Explanation** ~ This column requires the count of the number of tests in which there is no medical reason to support the employee’s inability to provide an adequate breath as reported by the examining physician; subsequently, the employer called the result a refusal to test.

[Example: If one of the 50 random tests was a refusal because of shy lung, “1” would be entered in Column 7 of the Random row.]

■ **Section IV, Column 8. Other Refusals To Submit To Testing** ~ This column requires the count of refusals other than those already entered in Columns 7.

[Example: The company entered “50” as the number of random specimens collected, however it had one employee who did not show up at the testing site as directed. Because of this one refusal event, “1” would be entered in Column 8 of the Random row.]

TIP ~ *Even though some testing events result in a refusal in which no breath (or saliva) was tested, there is an expectation that your overall numbers for screening tests (in Column 1) will equal the total number of screening tests with results below 0.02 (Column 2); screening tests with results 0.02 or greater (Column 3); and refusals (Columns 7 and 8). Do not worry that no breath (or saliva) was tested for some refusals; all refusals are counted as a screening test event for MIS purposes and for establishing random rates.*

Section IV, Column 9. Cancelled Tests ~ This column requires a count of the number of tests in each testing category that the BAT or STT reported as cancelled. Do not count any cancelled tests in Column 1 or in any other column other than Column 9. For instance, you must not count a 0.04 screening result or confirmation result in any column, other than Column 9, if the test was ultimately cancelled for some reason (e.g., a required air blank was not performed).

[Example: If a pre-employment test was reported cancelled, “1” would be entered in Column 9 on the Pre-Employment row. If three of the company’s random test results were reported cancelled, “3” would be entered in Column 13 on the Random row.]

TOTAL Line. Columns 1 through 9 ~ This line requires you to add the numbers in each column and provide the totals.

[75 FR 8535, Feb. 25, 2010]

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**GENERAL GAS SAFETY
*MICHIGAN ADMINISTRATIVE
CODE* (NOT ASSOCIATED WITH
A SPECIFIC CODE OF FEDERAL
REGULATION)**

SECTION SIX (6)

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GENERAL GAS SAFETY MICHIGAN ADMINISTRATIVE CODE
(Not associated with a specific Code of Federal Regulation)

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R 460.20606	<i>Pipeline and hazardous materials safety administration standards; adoption by reference.</i>
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PART 1. GENERAL PROVISIONS

R 460.20103 Adoption of documents by reference generally.

- (1) Any documents or parts of documents adopted by reference in these rules are a part of these rules as though set out in full. When only a portion of a document is referenced, the remainder is not adopted in these rules.*
- (2) Copies of all adopted documents are available at the addresses provided in R 460.20602.*
- (3) The full titles for the publications adopted by reference in these rules are provided in R 460.20603 to R 460.20606. Numbers in parentheses indicate applicable editions of the publications. Earlier editions of documents listed or editions of documents formerly listed in the Michigan gas safety code (R 460.14001 to R 460.14999) or these rules may be used for materials and components manufactured, designed, or installed in accordance with the earlier editions or earlier documents at the time they were listed. The user shall refer to the appropriate previous version of the Michigan gas safety code or these rules for a listing of the earlier listed editions or documents.*
- (4) Standards and specifications cited in R 460.20603 to R 460.20606 may be supplemented by specific requirements elsewhere in these rules. Users of these rules are advised against attempting direct application of any of these standards without carefully observing the rule's reference to that standard.*

History: 1998-2000 AACs.

R 460.201104 Rescission.¹

R 460.14001 to R 460.14999 of the Michigan Administrative Code, noted on page 1027 of the 1997 Annual Supplement to the 1979 Michigan Administrative Code and appearing on pages 630 to 642 of the 1986 Annual Supplement to the Code, pages 900 to 917, 919 to 921, and 923 to 925 of the 1991 Annual Supplement to the Code, and pages 1175 to 1199 of the 1995 Annual Supplement to the Code, are rescinded.

History: 1998-2000 AACs.

¹ Section number R 460.201104 has a typographical numbering error in the Michigan Administrative Rules section number itself; the correct section number should read **R 460.20104**.

PART 2. SAFETY STANDARDS AND TESTING REQUIREMENTS

R 460.20201 Pipeline safety standards; adoption by reference.

- (1) Except for 49 C.F.R. §192.1, an operator shall ensure that a gas pipeline is in compliance with all of the minimum safety standards contained in 49 C.F.R. part 192 entitled "Transportation of Natural and Other Gas by Pipeline: Minimum Federal Safety Standards," which are adopted by reference in R 460.20606.*
- (2) An operator shall ensure that a pipeline that is subject to the standards specified in subrule (1) of this rule is also in compliance with all of the additional safety standards contained in R 460.20301 to R 460.20338.*
- (3) In addition to the requirements imposed by subrules (1) and (2) of this rule, an operator shall ensure that a pipeline which transports sour gas is also in compliance with the additional safety standards contained in R 460.20401 to R 460.20431.*

History: 1998-2000 AACs; 2003 AACs; 2019 MR 1, Eff. Jan. 3, 2019.

PART 6. ADOPTION OF STANDARDS.

R 460.20601 Adoption by reference.

(1) *The publications listed in R 460.20603 to R 460.20606 are adopted by reference and are a part of these rules, except where they are inconsistent with these rules. Publications identified as published by a specific organization are available from the organization at the addresses specified in R 460.20602. The public service commission also has copies of the publications available for inspection and distribution at cost at its offices located 7109 W. Saginaw Hwy., Lansing, Michigan 48917-1120. The mailing address is Michigan Public Service Commission, P.O. Box 30221, Lansing, Michigan 48909-0221.*

(2) *The numbers in parentheses following the publications adopted by reference indicate the applicable editions.*

History: 1998-2000 AACCS; 2003 AACCS; 2019 MR 1, Eff. Jan. 3, 2019.

R 460.20602 Names, addresses, and phone numbers of organizations.

The names, addresses, and phone numbers of organizations that sponsor or publish documents that have been adopted by reference in these rules are as follows:

- (a) *American Petroleum Institute (API), 1220 L Street, NW, Washington, DC 20005, (202-682-8000).*
- (b) *American Society of Mechanical Engineers (ASME), Three Park Avenue, New York, New York, 10016-5990, (212-591-7000) or (800-843-2763), or contact its publishing division, 22 Law Drive, P.O. Box 2900, Fairfield, New Jersey, 07007, (973-882-1167).*
- (c) *National Association of Corrosion Engineers International (NACE), 1400 South Creek Drive, Houston, Texas 77084-4906, (281-228-6200) or (800-797-6223).*
- (d) *U.S. Department of Transportation Pipeline and Hazardous Materials Safety Administration (PHMSA), East Building, 2nd Floor, 1200 New Jersey Ave., SE, Washington, D.C., 20590, (202-366-4433). To order a standard published in the Code of Federal Regulations (C.F.R.), contact the Government Printing Office, Superintendent of Documents, Attention: New Orders, P.O.Box 371954, Pittsburgh, PA 15250-7954, (202-512-1803), or visit the website at <http://bookstore.gpo.gov>.*

History: 1998-2000 AACCS; 2003 AACCS; 2009 AACCS; 2010 AACCS; 2019 MR 1, Eff. Jan. 3, 2019.

R 460.20603 American petroleum institute standard; adoption by reference.

The following American petroleum institute standard is adopted by reference in these rules and is available at the price listed:

API standard 1104 titled “Welding of Pipelines and Related Facilities,” (20th edition, October 2005, including errata 1 (2007) and errata 2 (2008)), at a cost as of the time of adoption of these rules of \$345.00. Registered and authorized representatives of regulated pipeline operators may also view this edition of API standard 1104 without charge on the API website at www.api.org/.

History: 1998-2000 AACCS; 2003 AACCS; 2009 AACCS; 2010 AACCS; 2014 AACCS; 2019 MR 1, Eff. Jan. 3, 2019.

R 460.20604 American society of mechanical engineers standard; adoption by reference.

The following American society of mechanical engineers standard is adopted by reference in these rules and is available at the price listed:

ASME boiler and pressure vessel code, section IX, titled “Qualification Standard for Welding and Brazing Procedures, Welders, Brazers, and Welding and Brazing Operators” (2007 edition, July 1, 2007), at a cost as of the time of adoption of these rules of \$495.00.

History: 1998-2000 AACCS; 2003 AACCS; 2009 AACCS; 2014 AACCS; 2019 MR 1, Eff. Jan. 3, 2019.

R 460.20605 National association of corrosion engineers international standard; adoption by reference.

The following national association of corrosion engineers international standard is adopted by reference in these rules and is available at the price listed:

NACE MR0175/ISO 15156, 2015, titled “Petroleum and natural gas industries –Materials for use in H2S-containing environments in oil and gas production” at a cost as of the time of adoption of these rules of \$255.00.

History: 1998-2000 AACCS; 2003 AACCS; 2009 AACCS; 2010 AACCS; 2014 AACCS; 2019 MR 1, Eff. Jan. 3, 2019.

R 460.20606 Pipeline and hazardous materials safety administration standards; adoption by reference.

- (1) *The following pipeline and hazardous materials safety administration standard is adopted by reference in these rules and may be ordered from the U.S. government printing office via the internet at <http://bookstore.gpo.gov> at a cost at the time of adoption of these rules at the price listed. The standard is also available for public inspection and distribution at the price listed from the Michigan Public Service Commission, 7109 W. Saginaw Highway, Lansing, MI 48917: 49 C.F.R. part 40 entitled “Procedures for Transportation Workplace Drug and Alcohol Testing Programs,” (October 1, 2017 edition), at a cost as of the time of adoption of these rules of \$66.00.*
- (2) *The following office of pipeline and hazardous materials safety administration standards are adopted by reference in these rules and may be ordered from the U.S. government printing office via the internet at <http://bookstore.gpo.gov> at a cost at the time of adoption of these rules of \$70.00 for a single volume that contains all of the standards. The standards are also available for public inspection and distribution at the price listed from the Michigan Public Service Commission, 7109 W. Saginaw Highway, Lansing, MI 48917:*
- (a) 49 C.F.R. part 191 entitled “Transportation of Natural and Other Gas by Pipeline: Annual Reports, Incident Reports, and Safety-related Condition Reports,” (October 1, 2017 edition).*
 - (b) 49 C.F.R. part 192 entitled “Transportation of Natural and Other Gas by Pipeline: Minimum Federal Safety Standards,” (October 1, 2017 edition).*
 - (c) 49 C.F.R. part 199 entitled “Drug and Alcohol Testing,” (October 1, 2017 edition).*

History: 1998-2000 AACCS; 2001 AACCS; 2003 AACCS; 2006 AACCS; 2009 AACCS; 2010 AACCS; 2014 AACCS; 2019 MR 1, Eff. Jan. 3, 2019.



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COMMENTS

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COMMENTS

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