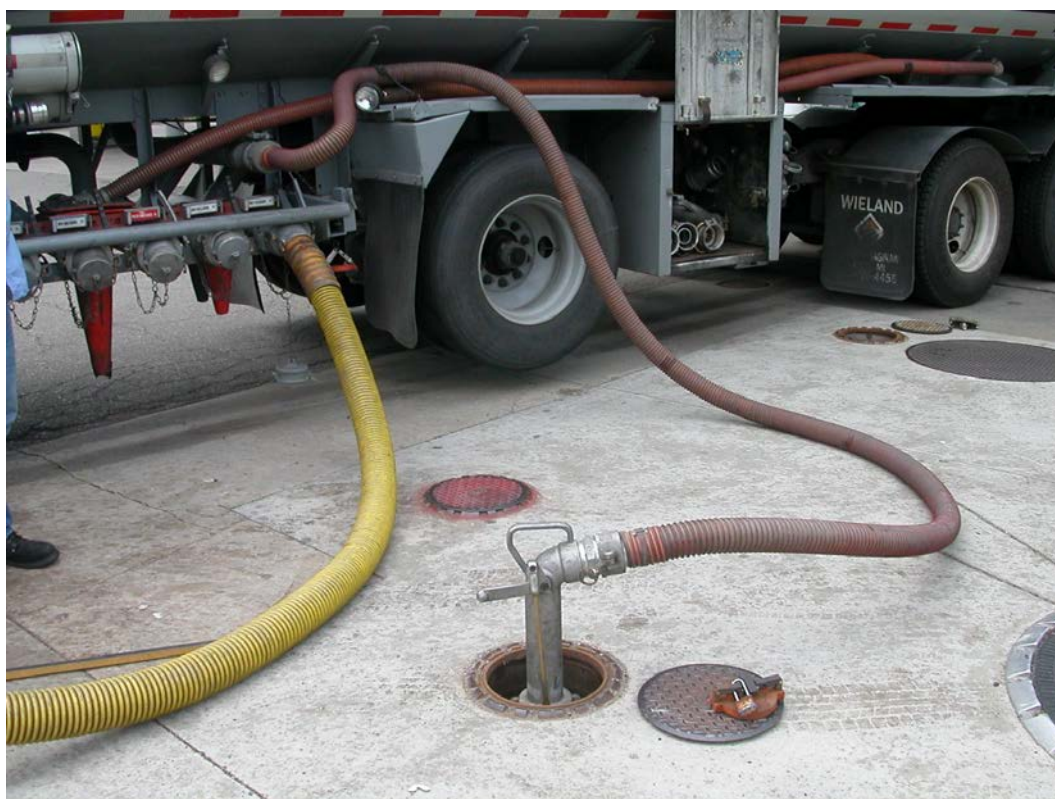


Frequently Asked Questions

Vapor Balance Requirements for Gasoline Dispensing Facilities



Michigan Department of Environmental Quality
Office of Environmental Assistance
1-800-662-9278
www.michigan.gov/deq

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APPLICABILITY**A-1: Who is subject to the National Emission Standard for Hazardous Air Pollutants (NESHAP) - 40 CFR, Part 63, Subpart CCCCCC?**

A. Those subject to the requirements of this NESHAP are gasoline stations that fall under the North American Industry Classification System (NAICS) of 447110 or 447190, as well as any facility that dispenses gasoline into a fuel tank of a motor vehicle, motor vehicle engine, non-road vehicle, or non-road engine, including a non-road vehicle or non road engine used solely for competition. This includes all retail gasoline stations and many fleet vehicle refueling centers; facilities that dispense gasoline into on- and off-road, street, or highway motor vehicles, lawn equipment, boats, test engines, landscaping equipment, generators, pumps and other gasoline-fueled engines and equipment. Tanker trucks loading and unloading gasoline to these facilities, also referred to as gasoline dispensing facilities (GDFs), have responsibilities in the NESHAP.

A-2: What are gasoline dispensing facilities (GDFs) subject to the NESHAP required to do?

B. All Michigan GDFs, regardless of throughput, are subject to management requirements. The GDFs with a monthly throughput of 10,000 gallons or more are required to comply with the management and submerged filling requirements. All Michigan GDFs with a monthly throughput of 100,000 gallons or more must comply with the management and submerged filling requirements and use vapor balance systems that meet specific criteria when filling gasoline storage tanks. Those GDFs who were not subject to and complying with a state vapor balance requirement prior to January 10, 2008, are required to test the cracking pressure and leak rate of their pressure-vacuum vent valves and the static pressure of their storage tanks. GDFs are also subject to NESHAP notification, recordkeeping, and reporting requirements.

A-3: Who is subject to the existing state vapor balance requirements and what are they required to do?

A. All GDFs must have submerged fill pipes in their gasoline storage tanks. GDFs with an annual throughput of 120,000 gallons of gasoline or more in the counties of Livingston, Macomb, Monroe, Oakland, St. Clair, Washtenaw, and Wayne; GDFs with tanks placed in operation before July 1, 1979, with an annual throughput of 250,000 gallons or more located in the metropolitan areas of Flint, Lansing, or Grand Rapids; or GDFs with tanks installed on or after July 1, 1979, located in the metropolitan areas of Detroit, Flint, Lansing, or Grand Rapids must use a vapor balance system when their gasoline storage tanks are filled.

A-4: If my GDF is subject to the NESHAP, is the GDF still subject to the state vapor balance rules?

A. A GDF owner needs to review the state and federal requirements separately and comply with all the requirements that apply. They may be subject to more than one agency's requirements.

A-5: If a GDF is subject to a state vapor balance requirement but its throughput is less than 100,000 gallons per month, does the GDF still need to utilize vapor balance equipment?

A. Yes, for example, if a GDF is located in Wayne County and its monthly throughput is 90,000 gallons, the GDF is not subject to the vapor balance requirements under the NESHAP but is subject to the *state* vapor balance rules if their annual throughput of gasoline is 120,000 gallons or more.

A-6: If my GDF's monthly gasoline throughput exceeds 100,000 gallons in one month out of the year, is it subject to the NESHAP vapor balance requirements?

A. No, based on the final amendments to the NESHAP published on January 24, 2011, your monthly throughput is based on your past 365 days of gasoline throughput divided by 12. Therefore, if your monthly gasoline throughput is under 100,000 based on the final amendment calculation, then you will not be subject to the vapor balance system requirement of the NESHAP. A GDF's one-month gasoline throughput of 100,000 gallons or more will not automatically make them subject to the NESHAP vapor balance system requirements since the throughput is based on a 12-month rolling average.

A-7: How many Michigan GDFs are subject to the NESHAP?

A. There are approximately 6,000 gasoline dispensing facilities in the state of Michigan.

DEFINITIONS

D-1: How is "gasoline" defined in the NESHAP?

A. Gasoline is any petroleum distillate or petroleum distillate/alcohol blend having a Reid vapor pressure of 27.6 kilopascals (4 pounds per square inch of pressure (psi)) or greater that is used as a fuel for internal combustion engines. According to this definition, E85 and E10 are considered gasoline, and diesel and kerosene are not.

D-2: What is a gasoline dispensing facility (GDF)?

A. A gasoline dispensing facility (GDF) is any stationary facility dispensing gasoline into the fuel tank of a motor vehicle, motor vehicle engine, non-road vehicle, or non-road engine, including a non-road vehicle or non-road engine used solely for competition. This includes, but is not limited to, retail gasoline stations and many fleet vehicle refueling centers, facilities that dispense gasoline into on- and off-road, street, or highway motor vehicles, lawn equipment, boats, test engines, landscaping equipment, generators, pumps and other gasoline-fueled engines and equipment

D-3: How do you calculate a GDF's monthly gasoline throughput?

A. Monthly throughput is calculated by summing the volume of gasoline loaded into, or dispensed from, all gasoline storage tanks at the GDF during the current day, plus the total volume of gasoline loaded into, or dispensed from, all gasoline storage tanks at the GDF during the previous 364 days, and then dividing that sum by 12.

D-4: What is an existing source?

A. An existing source is a GDF that started construction on or before November 9, 2006.

D-5: What is a new source?

A. A new source is a GDF that started construction after November 9, 2006.

D-6: What is a reconstructed source?

A. A reconstructed source is an existing source that has replaced components to such an extent that the fixed capital cost of the new components exceeds 50 percent of the cost that would be required to construct a comparable new source. When making the determination of reconstruction, the costs associated with the new components should only pertain to the vapor balance system, which is composed of the gasoline storage tanks, piping including vents, and dispensing pumps. Therefore, the costs associated with new concrete, landscaping, and changes to the retail store would not enter in the determination of reconstruction. A reconstructed source's compliance deadlines are the same as a new source's deadlines.

ENFORCEMENT**E-1: How will the NESHAP be enforced? Who do I contact if I know of a GDF owner or tanker truck driver not operating in compliance with the NESHAP?**

A. Since the NESHAP is a federal rule and the Michigan Department of Environmental Quality (DEQ) will not be taking delegation of the rule, it will be enforced by the U.S. Environmental Protection Agency (U.S. EPA). The following Web site can be used to report suspected violations of a federal environmental regulation: www.epa.gov/compliance/complaints. Even though the DEQ is not enforcing this particular NESHAP, part of the DEQ outreach will include educating fire marshals about these requirements since they regulate GDFs and tanker trucks as well. An extensive educational campaign should result in increased rates of compliance with the NESHAP.

The DEQ will continue to follow up on any complaints pertaining to other environmental regulations applicable to gasoline stations. Those complaints can be called into the appropriate DEQ District Office or the Environmental Assistance Center at 1-800-662-9278.

E-2: How will enforcement agencies find GDF owners or tanker truck drivers who are not operating in compliance with the NESHAP?

A. Typically, GDFs and tanker trucks not operating in compliance will be found through complaints from neighbors, by employees who are concerned about their safety, and by competitors who are concerned about the cost of unequal enforcement. The following Web site can be used to report suspected violations of a federal environmental regulation: www.epa.gov/compliance/complaints.

E-3: What are the penalties for not complying with the NESHAP?

A. The penalties depend on several factors, such as the gravity of the offense, the economic benefit that the business gained by not complying, the business' effort to comply, the size of the business, the actual or potential harm the offense caused, how long the offense occurred, etc. Under the Clean Air Act (CAA), the U.S. EPA is allowed to assess penalties of up to \$37,500 per day. Please refer to the CAA Stationary Civil Penalties Policy to understand the formula used to assess penalties, which is located at www.epa.gov/compliance. Click on "Policy & Guidance," and then scroll down to "Penalty Policy Compendium." Scroll down to "Clean Air Act Stationary Source Civil Penalties Policy" under the heading "Clean Air Act (CAA)." The U.S. EPA also has the option to pursue violations as criminal offenses – generally if the offense involves intentional environmental crimes.

E-4: I wasn't able to retrofit my GDF by the deadline. What should I do?

A. Your first step is to communicate with the U.S. EPA Region 5 regarding your non-compliance for your GDF and your plan to obtain compliance with the federal standard. Your communication should be done as soon as possible. The compliance deadline for existing GDFs loading gasoline into motor vehicles was January 10, 2011. The compliance deadline for existing GDFs loading gasoline into tanks other than motor vehicles is January 24, 2014. This open communication may help reduce or avoid penalties that are associated with your GDF's non-compliance.

Please send communication to the following U.S. EPA address: U.S. EPA Region 5
 Compliance Tracker (AE-17J)
 77 West Jackson Blvd.
 Chicago, IL 60604

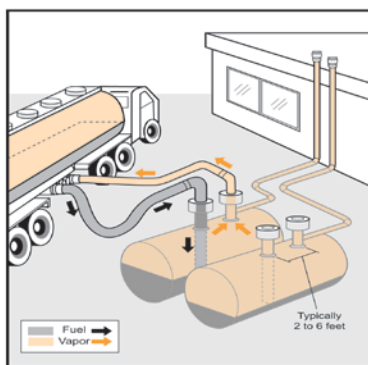
EQUIPMENT

EQ-1: Can GDFs who are required to install vapor balance systems due to the NESHAP have coaxial connections?

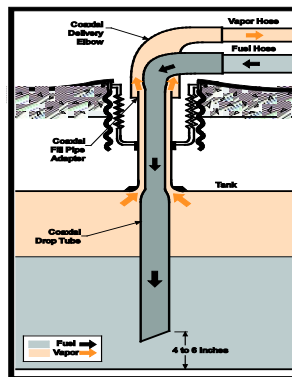
A. Yes, existing GDF gasoline storage tanks are allowed to have coaxial connections. However, if the tank is *new or reconstructed*, then the tank will need to be changed to a dual-point connection. The GDFs subject to and complying with the state vapor balance requirements prior to January 10, 2008, can keep their coaxial systems.

EQ-2: Why does the NESHAP favor dual-point vapor balancing systems?

A. Dual-point connections are considered more effective in recovering gasoline vapors, and therefore the NESHAP requires new and reconstructed sources to have dual-point. The U.S. EPA document, "Design Criteria For Stage I Vapor Control Systems Gasoline Service Stations (November 1975)," states "coaxial fittings provide less cross-sectional area in the vapor return passage than do separate connectors and tend to reduce vapor recovery efficiency to some extent." The document also describes dual-point systems as "... the most effective method of conducting displaced vapors from the underground tank to the truck."



Dual Point Connection



Coaxial Connection

EQ-3: What is the average cost of reconstructing a gasoline storage tank from a coaxial connection to a dual point connection?

A. Based on a local Michigan equipment supplier, the cost estimate varies based on the needs of the specific GDF in reconstructing their gasoline storage tank from a coaxial to a dual point connection. For example, if the GDF only needs a dry-break retrofit and a new overfill drop tube, without breaking concrete, the cost estimate is approximately \$ 1,500 per tank. However, if the gasoline tank needs trench cutting and most of the tank needs to be exposed to find the opening, or if the tank needs to be dewatered or handled for contaminated soils/water then the approximate cost could be as high as \$15,000 for each tank.

EQ-4: What is the average cost of retrofitting an existing storage tank with a vapor balance system?

A. Based on cost analysis from the Texas Commission on Environmental Quality, it will cost an existing GDF approximately \$4,000-\$5,000 to retrofit each tank with a vapor balance system. This is based on the average cost of vapor balance systems from several manufacturers.

EQ-5: Which GDFs need to have pressure-vacuum vent valves?

A. All GDFs subject to vapor balance requirements are required to have a pressure-vacuum vent valve on each gasoline vent pipe in order to achieve at least a 90% vapor recovery with their vapor balance system.



Pressure-Vacuum Vent Valve

MANAGEMENT PRACTICES

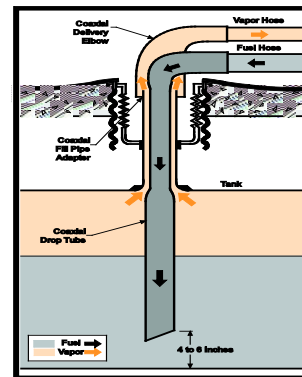
M-1: What are the required management practices for a GDF with a monthly gasoline throughput under 10,000 gallons?

A. If your monthly gasoline throughput is less than 10,000 gallons then you need to comply with four conditions that are best management practices:

- i. Minimize gasoline spills.
- ii. Clean up spills as expeditiously as practicable.
- iii. Cover all open gasoline containers and gasoline storage tank fill pipes with gasketed seals when not in use.
- iv. Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators.

M-2: What are the required management practices for a GDF with a monthly gasoline throughput of 10,000 gallons or more, but less than 100,000 gallons?

A. If your monthly gasoline throughput is 10,000 or more and less than 100,000 gallons, then you must comply with the best management practices mentioned in M-1, and utilize submerged filling when loading a gasoline storage tank with a capacity of 250 gallons or more.



Submerged Filling

M-3: What are the required management practices for a GDF with a monthly gasoline throughput of 100,000 gallons or more?

A. If your monthly gasoline throughput is 100,000 gallons or more then you must comply with the best management practices mentioned in M-1, the submerged filling requirement noted in M-2, and you are required to utilize vapor balance equipment when gasoline is loaded into a storage tank. For more information on the requirements, please refer to the “Michigan Gasoline Station Owners and Tanker Truck Drivers: What You Should Know About Vapor Balance Systems,” 2nd Edition, located at www.michigan.gov/environmentalassistance. Select “Clean Air Assistance,” under “Related Links,” and then scroll down to “Gasoline Dispensing Facilities” under “Federal Regulations.”

NOTIFICATIONS

N-1: Do I have to use a specific state or U.S. EPA notification form, or is any format acceptable as long as the appropriate information is provided?

A. You do not have to use the state or the U.S. EPA-provided form. Any format is acceptable as long as it contains the required information provided below, found in Section 63.11124(a) of the federal standard:

1. The name and address of the owner and the operator.
2. The physical address of the GDF.
3. A statement that the notification is being submitted in response to this subpart (40 CFR, Part 63 Subpart CCCCCC) and identifying the requirements that your GDF is subject to as referenced in 63.11117 (for the initial notification) and the requirements your GDF is subject to as reference in 63.11118 (for the compliance status notification).
4. The notification must be signed by a responsible official who must certify its accuracy and must indicate whether the GDF has complied with the requirements of this subpart.

The image shows a form titled 'INITIAL NOTIFICATION AND NOTIFICATION OF COMPLIANCE STATUS FOR GASOLINE DISPENSING FACILITIES (GDFs)'. It includes sections for 'Company Information', 'Owner/Operator Information', and 'Facility Location Information'. The form has various fields for name, address, telephone, fax, email, and zip code. There are also checkboxes for 'Initial Notification' and 'Notification of Compliance Status'. A large watermark 'DEQ' is visible over the form.

To obtain the “Initial Notification and Notification of Compliance Status” form created by the Michigan DEQ, go to www.michigan.gov/environmentalassistance. Select “Clean Air Assistance,” under “Related Links,” and then scroll down to “Gasoline Dispensing Facilities” under “Federal Regulations.”

N-2: Who do GDFs submit initial notification and notification of compliance forms to?

A. Michigan businesses need to send the forms to the U.S. EPA at the following address:

U.S. EPA Region 5
Compliance Tracker (AE-17J)
77 West Jackson Blvd.
Chicago, IL 60604

N-3: How will GDF owners be informed about the NESHAP?

A. All applicable GDFs must comply with the regulation whether or not they are directly contacted by the U.S. EPA. The DEQ's Office of Environmental Assistance has mailed postcards to subject GDFs informing them of the NESHAP and is coordinating the dissemination of information through the Michigan Petroleum Association. To repeat, a GDF is not absolved of responsibility for compliance simply because it has not been contacted directly by a government agency.

OTHER**O-1: Where can I find a copy of the NESHAP?**

A. The NESHAP published January 10, 2008 (pages 1945-1953), and the final amendments to the NESHAP can be accessed at www.epa.gov/ttn/atw/gasdist/gasdispg.html. The notice is published in Title 40, Part 63, Subpart CCCCCC of the Code of Federal Regulations (40 CFR 63).

O-2: By what date does the NESHAP have to be met?

A. New GDFs (i.e., commenced construction after November 9, 2006) had to achieve compliance on January 10, 2008, or upon startup, whichever is later. Existing GDFs (i.e., commenced construction on or before November 9, 2006) loading into motor vehicles had to achieve compliance by January 10, 2011. Existing GDFs only loading gasoline into tanks other than motor vehicles must comply by January 24, 2014.

O-3: What is the annual estimated cost to a GDF to comply with the NESHAP?

A. The U.S. EPA has estimated the cost to comply with the NESHAP monitoring, reporting, and recordkeeping requirements to be approximately \$340 annually, which does not include the installation of a vapor balance system.

O-4: What if I have questions about the state requirements and the NESHAP?

A. Please refer to the publication entitled, "Gasoline Station Owners & Tanker Truck Drivers: What You Should Know About Vapor Balance Systems" if you have any questions about the state vapor balance requirements or the NESHAP. The publication is located at the DEQ's Web site at www.michigan.gov/environmentalassistance. Select "Clean Air Assistance," under "Related Links," and then scroll down to "Gasoline Dispensing Facilities" under "Federal Regulations." Additional questions can be directed to the DEQ's Office of Environmental Assistance at 800-662-9278.

The Web site contains links to the above publication; a listing of tanker truck testing companies; the Initial Notification and Notification of Compliance form and instructions; the Notification of Performance Testing form; acceptable testing methods; state rules; and the NESHAP.

O-5: Which fuels do I include in my monthly gasoline throughput calculations? Does diesel fuel need to be included? How about ethanol – E85 or E10?

A. Based on the definition of gasoline in the NESHAP, diesel fuel and their respective storage tanks are not subject to the NESHAP; however, E85 and E10 fuel and their respective storage tanks are subject to the NESHAP.

RECORDKEEPING

R-1: What records do I have to keep if my GDF is not subject to the vapor balance requirements of the NESHAP?

A. If you own a GDF with a monthly gasoline throughput under 100,000 gallons, then you must have records of the monthly gasoline throughput in order to document that the GDF is not subject to the vapor balance requirements of the NESHAP. If your GDF monthly gasoline throughput is 100,000 gallons or more then you are not required to maintain records of your monthly throughput, however, you are required to maintain your testing records and copies of all required notifications.

SOURCE TYPE

S-1: Is an existing source that is purchased by another business after November 9, 2006, considered a new source?

A. No, unless the new owner upgrades or makes modifications to the facility so it becomes a reconstructed source as described in the answer to question D-6 above (page 3).

TESTING

T-1: How much will it cost to do the testing required by the NESHAP?

A. The cost estimate to perform the California Air Resources Board (CARB) Test 201.1E (Leak Rate and Cracking Pressure of Pressure/Vacuum Vent Valves) is approximately \$50 to \$75 per tank. The cost estimate to perform CARB Test 201.3 (Determination of two-inch WC Static Pressure Performance of Vapor Recovery Systems) is approximately \$350 to \$450 per GDF. The cost estimate of CARB Test 201.1 (Volumetric Efficiency for Phase I Vapor Recovery Systems), which ensures that the vapor balance equipment meets a 95% vapor recovery, is approximately \$300 to \$600 per GDF.

T-2: Is the CARB 201.3 the same test the DLARA Storage Tank Division requires upon tank installation?

A. No, the test the DLARA requires upon storage tank installation is not the same test as CARB 201.3.

TANKER TRUCK REQUIREMENTS

TT-1: Does the DLARA maintain a list of certified tanker truck pressure/vacuum testers?

A. Yes, the DLARA maintains a list of all certified tanker truck pressure/vacuum testers. This list is available at www.michigan.gov/lara. Click on “Licensing & Regulations,” and scroll down to “Fire Services,” and then scroll down to “Storage Tanks Division” and click on “Gasoline Tank Truck Test (Rule 627 Program).”

TT-2: What records do you need to have with the tanker trucks?

A. Tanker truck drivers need to have a copy of their most recent annual pressure/vacuum test in the truck. Tanker truck drivers must also have access to the previous four years of their annual pressure/vacuum tests if a U.S. EPA inspector should ask. This can be done through hard copies in the truck or scanned copies on a readily available electronic device.

TT-3: What are the responsibilities of the distributor and tanker truck driver?

A. Drivers must use vapor balance equipment at all GDFs subject to the state vapor balance rules and/or the NESHP. Pressure/vacuum tests must be conducted annually on all tanker trucks and the results should be submitted to the DLARA, Storage Tanks Division. The Division will review the results and provide certification.

TT-4: What do I need to do to become certified to perform the pressure/vacuum leak test on tanker trucks?

A. Individuals/companies need to comply with federal U.S. Department of Transportation (U.S. DOT) regulation to become certified to perform the pressure/vacuum leak test. Certified testers must follow [U.S. EPA Method 27](#) (Determination of Vapor Tightness of Gasoline Delivery Tank Using Pressure Vacuum Test) to test tanker trucks and guarantee that the tanker truck is vapor tight. This test is also known as a pressure/vacuum test.

For more information on how to become certified, go to www.gpoaccess.gov/cfr/retrieve.html. Under “Title” type “49,” under “Part” type “180,” and under “Section” type “409.” If you have any questions about how to become certified, please call the US DOT at 517-853-5990.