

National Emission Standards for Hazardous Air Pollutants



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National Emission Standards for Hazardous Air Pollutants

GOAL

Understand the purpose of a NESHAP

How to read a NESHAP

Overview of specific NESHAPs



National Emission Standards for Hazardous Air Pollutants

AGENDA

NESHAP Background

NESHAP Examples

For More Information



Overview of NESHAPs

- Federal rules that regulate emissions of toxic air pollutants from a list of industrial sources referred to as “source categories.”
 - Toxic Air pollutants = Hazardous Air Pollutants (HAPs)



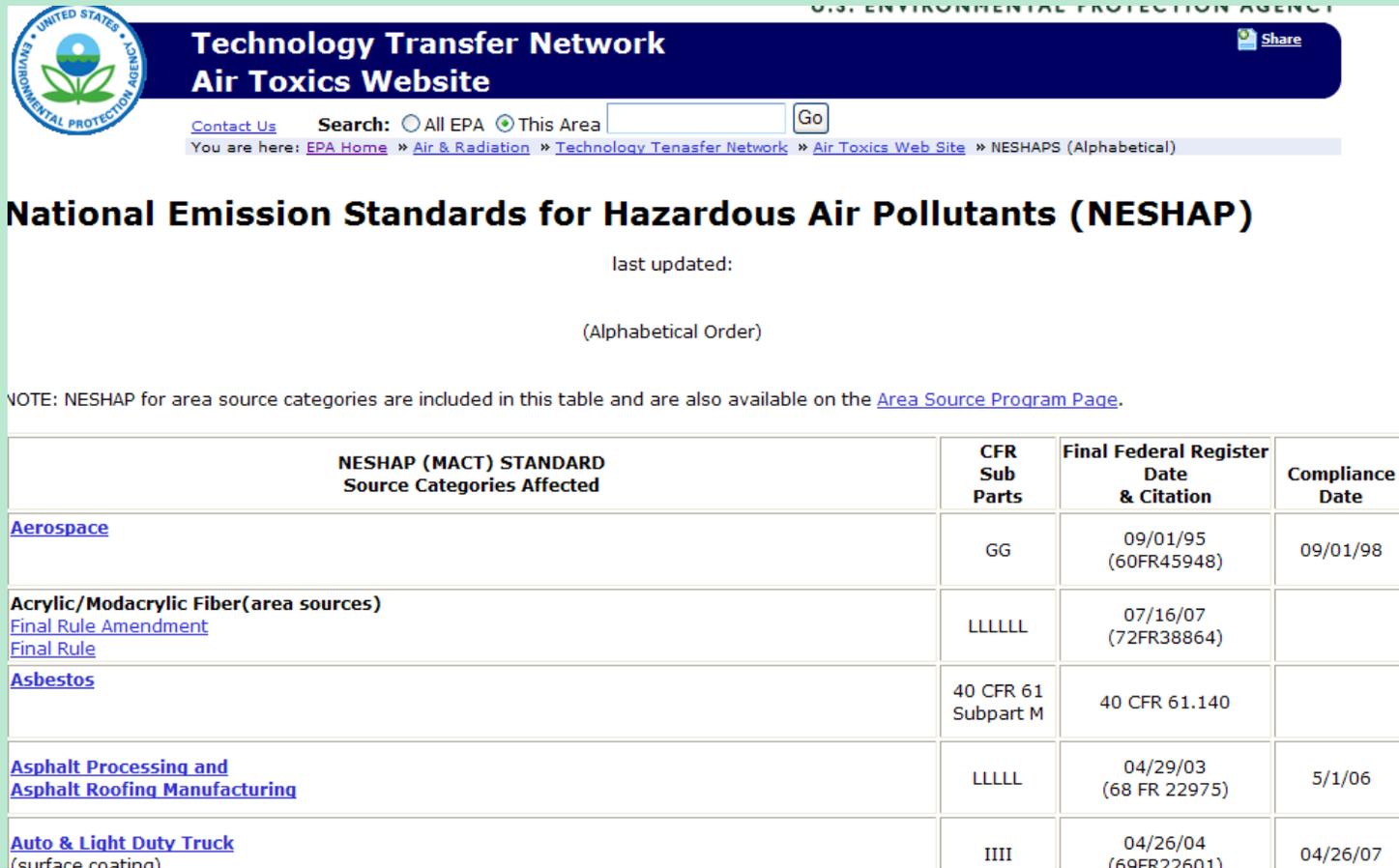
Who's Subject

- Businesses that fall into the regulated source category and meet the applicability requirements.
- Can include both Major Sources and Area (non major) Sources



Who's Subject

- www.epa.gov/ttn/atw/eparules.html



The screenshot shows the EPA Technology Transfer Network Air Toxics Website. The page title is "National Emission Standards for Hazardous Air Pollutants (NESHAP)". It includes a search bar, navigation links, and a table of standards. The table has four columns: "NESHAP (MACT) STANDARD Source Categories Affected", "CFR Sub Parts", "Final Federal Register Date & Citation", and "Compliance Date".

NESHAP (MACT) STANDARD Source Categories Affected	CFR Sub Parts	Final Federal Register Date & Citation	Compliance Date
Aerospace	GG	09/01/95 (60FR45948)	09/01/98
Acrylic/Modacrylic Fiber (area sources) Final Rule Amendment Final Rule	LLLLLL	07/16/07 (72FR38864)	
Asbestos	40 CFR 61 Subpart M	40 CFR 61.140	
Asphalt Processing and Asphalt Roofing Manufacturing	LLLLL	04/29/03 (68 FR 22975)	5/1/06
Auto & Light Duty Truck (surface coating)	IIII	04/26/04 (69FR22601)	04/26/07



Who's Subject

- Major Sources
 - ≥ 10 tons of single HAP
 - ≥ 25 tons of combination of HAPs
 - i.e., iron and steel foundries



Who's Subject

- Area Sources
 - <10 tons of single HAP
 - <25 tons of combination of HAPs
 - i.e., auto body shops, gasoline stations, dry cleaners



Who's Subject

- **Potential to Emit** = Maximum amount of air contaminants that your source could emit if:
 - Operate at 100% of design capacity;
 - Operated 24hrs/day, 365 days/yr
 - Worse-case materials used or processed 100% of the time
 - No air pollution control equipment



AREA Source NESHAPs

Clean Air Act requires EPA to:

- Identify at least 30 HAPs that pose the greatest potential health threat in urban areas
- Identify the area source categories that represent 90% of the emissions of the 30 urban air toxics
- Subject those area source categories to standards under the CAA



AREA Source NESHAPs

- EPA has identified 70 area source categories which represent 90% of the emissions of the 30 listed air toxics (see page ? of handout)



NESHAP For Paint Stripping and Miscellaneous Surface Coating Operations

40 CFR 63,
Subpart HHHHHH



Target Hazardous Air Pollutants: Paint Stripping & Surface Coating (6Hs)

Methylene Chloride

Nickel

Chromium

Manganese

Lead

Cadmium



NESHAP - 6Hs

Regulates Painting Operations at Auto Body Shops & Job Shops

Activities:

- Paint stripping using methylene chloride
- Surface coating of motor vehicles and mobile equipment
- Surface coating of miscellaneous metal and plastic parts



NESHAP - 6Hs

General Requirements

- Enclosures and filters
- Type and cleaning of application equipment
- Training

Paperwork Requirements

- Notifications
- Recordkeeping



NESHAP - 6Hs

Requirements:

- Enclosures
- Filters
- Type of spray guns
- Cleaning of spray guns
- Training
- Notifications
- Recordkeeping



NESHAP - 6Hs

- More information go to www.michigan.gov/air
(click on “Clean Air Assistance” then scroll down to “Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources”)



NESHAP for Gasoline Dispensing Facilities

40 CFR 63,
Subpart CCCCCC



Target Hazardous Air Pollutants: Gasoline Dispensing Facilities (6Cs)

Benzene

**Ethylene Dichloride
(EDC)**

**Ethylbenzene, hexane, toluene, xylenes, isooctane,
naphthalene, cumene, methyl tert-butyl ether**

***36% of all benzene emissions are from
the loading of gasoline into storage
tanks***

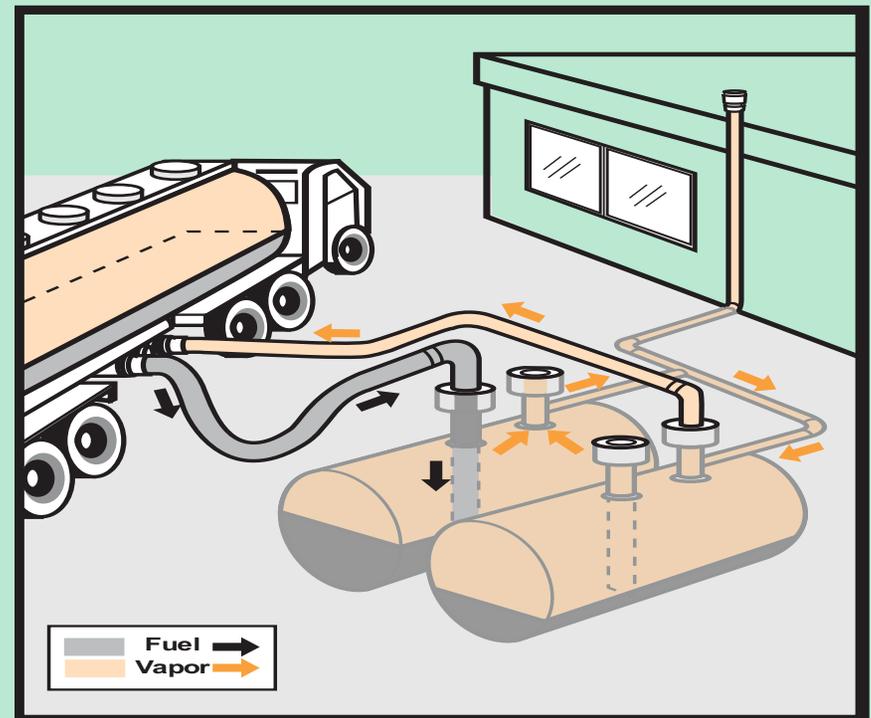


NESHAP – 6Cs

Regulates Gasoline Dispensing Facilities & Tanker Truck Owners/Drivers

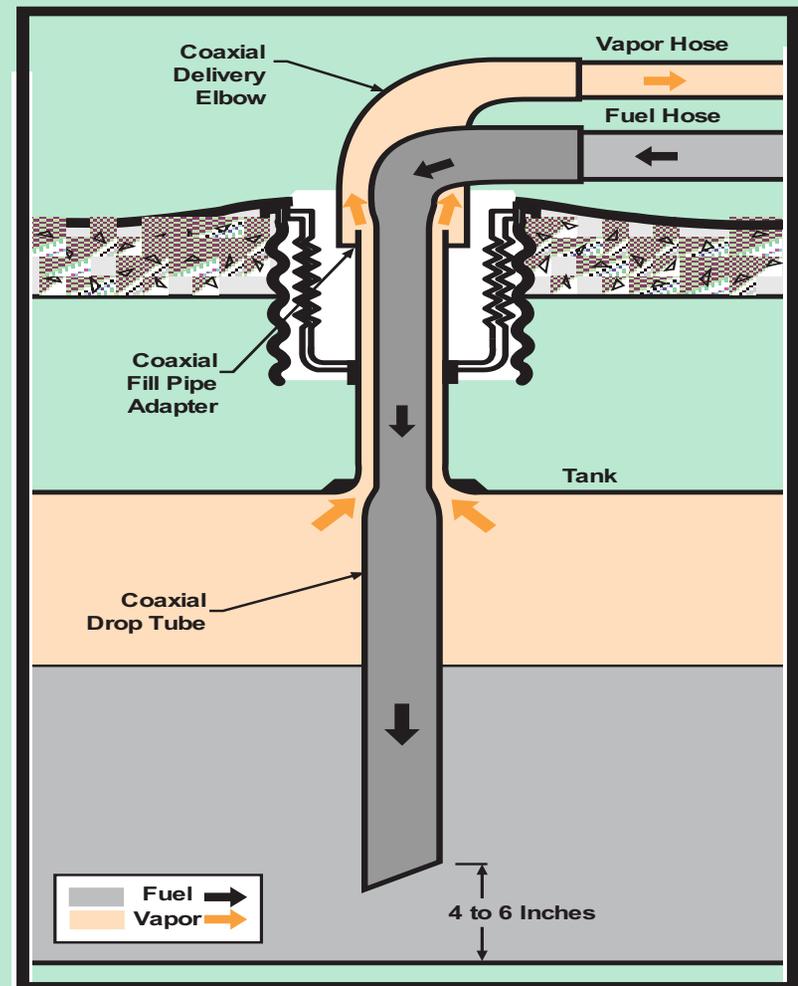
Activities:

- BMPs
- Submerged Filling
- Vapor Balance Equipment (Stage I)



NESHAP – 6Cs

- Vapor Balance



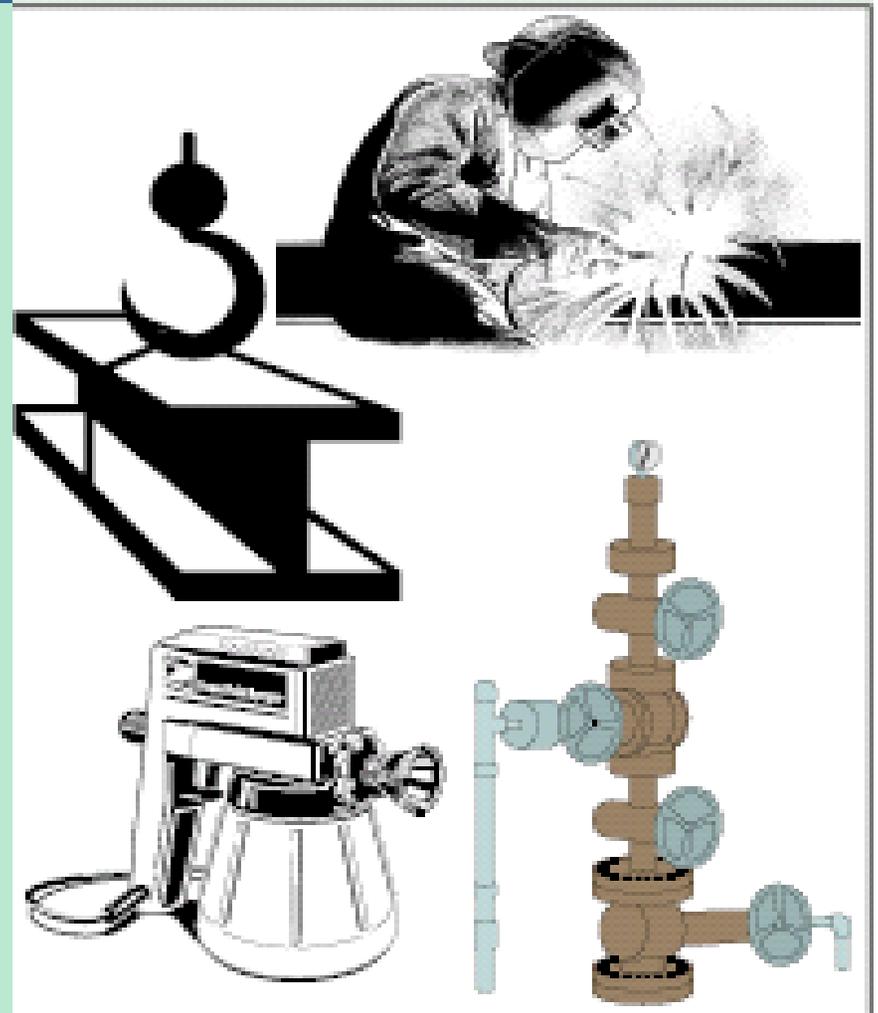
NESHAP – 6Cs

- Compliance with the requirements should be met by **January 10, 2011**.
- The State is not taking delegation of this NESHAP. The enforcing agency is EPA and all forms need to be sent to EPA.



NESHAP for Metal Fabrication and Finishing

40 CFR 63,
Subpart XXXXXX



NESHAP – 6Xs

- Targeted HAPs include compounds of:
 - Cadmium
 - Chromium
 - Lead
 - Manganese
 - Nickel



NESHAP – 6Xs

- Applies only to area sources, where primary activity is one of the following:
 - Electrical & Electronic Equipment Finishing;
 - Fabricated Metals Products;
 - Fabricated Plate Work (Boiler Shops);
 - Fabricated Structural Metal Manufacturing;
 - Heating Equipment (except electric);
 - Industrial Machinery & Equipment Finishing;
 - Iron & Steel Forging;
 - Primary Metal Products Manufacturing;
 - Valves and Pipe Fittings



NESHAP – 6Xs

Requirements for:

- Dry abrasive blasting
- Dry grinding and dry polishing with machines
- Dry machining
- Spray painting
- Welding



NESHAP – 6Xs

- Rule only applies to operations that use or emit these metals.
- Processes using low HAP metals may not be regulated (refer to rule for low HAP levels)



NESHAP – 6Xs

- Existing Sources must be in compliance by July 25, 2011



NESHAP for Reciprocating Internal Combustion Engines

40 CFR 63,
Subpart ZZZZ



Target Hazardous Air Pollutants: (RICE MACT)

Formaldehyde

Acetaldehyde

Acrolein

Methanol



NESHAP - 4Zs

- Affects Both Major and Area Sources
- Originally promulgated -June 15, 2004
- Deadline to Finalize -August 10, 2010
- Requirements vary by size, construction date and location (major or area source).



SAVE THE DATE!

National Emission Standards for Hazardous Air Pollutants (NESHAP) for Reciprocating Internal Combustion Engines (RICE) Webinar

Wednesday, June 23, 2010, 10:00-11:00 CDT

Attend this event and learn:

- Does this rule apply to you?
- What are the requirements of the rule?
- When are the initial notification and compliance dates?

Cost: FREE

Location: Your personal computer

**RSVP online at www.sbeap.org.
Look for the link in the yellow
box OR call 1-800-578-8898.**



Who should attend?

Any industry using a stationary internal combustion engine, including—

- Natural gas liquids producers
- Natural gas transmission
- Crude petroleum and natural gas production
- Medical and surgical hospitals



No cost to participate. Paid for in part by the
Kansas Department of Health and
Environment (KDHE).



NESHAP for Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks (Chrome NESHAP).



40 CFR 63, Subpart N



Chrome NESHAP

Applicability

- facilities that use chromium electroplating tanks, regardless of size.
- Requirements depend upon the size of the operation and the type of process (hard, decorative, or anodizing).



Chrome NESHAP

Requirements

- Emission limits
- Work practice standards
- Performance testing
- Monitoring
- Recordkeeping & Reporting



Chrome NESHAP

- www.michigan.gov/air (“Clean Air Assistance” scroll down to “Chromium Electroplaters”)
- Guidance Documents
- Recordkeeping Forms
- Reporting Forms



NESHAP for Asbestos

40 CFR 61,
Subpart M



Asbestos NESHAP

- Who Regulates it?
 - DNRE, Asbestos Program
 - MIOSHA



Asbestos NESHAP

- Demolition: removing load-supporting member
- Renovation: removal of asbestos from components
- Work Practice Standards
- Notification of Intent to Renovate/Demolish Form



Asbestos NESHAP

- Notification of Intent to Renovate/Demolish

NOTIFICATION OF INTENT TO RENOVATE/DEMOLISH

DEQ MICHIGAN DEPT. OF ENVIRONMENTAL QUALITY (MDEQ)
AIR QUALITY DIVISION, NESHAP, 40 CFR Part 61, Subpart M, (\$27,500 penalty per day per violation for failure to comply)

DL MICHIGAN DEPARTMENT OF LABOR AND ECONOMIC GROWTH (MLEG), ASBESTOS PROGRAM, P.A. 135 OF 1989, AS AMENDED, SECTION 220 (1-4) or (8)

MDEQ/MLEG USE ONLY

Pre-mark Date: ___/___/___ Rec'd Date: ___/___/___

Ok Send Def Ltr. Date of Def Ltr: ___/___/___

FOLLOW UP: ___/___/___ Spoke w/ _____

Comments: _____

Notification No. _____ Trans No. _____

Calculate MLEG Asbestos Project Fee: (1% Project Fee)
Total Project Cost: _____ × 0.01 = _____
Type of Contractor: _____ License No.: _____
Licensing Authority: _____

1. NOTIFICATION:
Date of Notification: _____
Date of Revision(s): _____
Notification Type: Original Revised Canceled Annual
Mark appropriate boxes: (both NESHAP and MLEG may apply):
NESHAP (MDEQ) (260 sq. ft. or more is threshold)
 Planned Renovation – 10 working days notice
 Emergency Renovation
 Scheduled Demolition – 10 working days notice
 Intentional Burn – 10 working days notice
 Ordered Demolition
MLEG (Will not accept annual notifications)
 Demo, Reno, Encap. (>10 sq. ft./75 sq. ft.) 10 calendar days notice
 Emergency Renovation/Encapsulation

2. PROJECT SCHEDULE:

	START DATE	END DATE
* Renovation	_____	_____
+Asb. Removal	_____	_____
+Demolition:	_____	_____
Encapsulation:	_____	_____

Work Schedule: Please indicate the anticipated days of the week and work hours for the purpose of scheduling a compliance inspection.

Days of the Week	Work Hours
Asb. Removal:	_____
Demolition:	_____
Encapsulation:	_____

* Includes setup, build enclosure, asbestos removal, demobilizing, etc.
* Include only those dates you are conducting asbestos removal/demo.
 Check here if this is a multi-phased project, attach a schedule showing the start/end date of each phase.

3. ABATEMENT CONTRACTOR: Internal Project #: _____
Name: _____
Mailing Address: _____
City/State/Zip: _____
Contact: _____ Phone: _____

4. DEMOLITION CONTRACTOR: Internal Project #: _____
Name: _____
Mailing Address: _____
City/State/Zip: _____
Contact: _____ Phone: _____

5. FACILITY OWNER: ("Facility" includes Bridges)
Name: _____
Mailing Address: _____
City/State/Zip: _____
Contact: _____ Phone: _____

6. FACILITY DESCRIPTION:
Facility Name: _____
Location Address/Description: _____
If Apt. # of units: _____
City/Twp. _____ State: _____ Zip Code: _____
County: _____ Nearest Crossroad: _____
Size: (sq. ft.) _____ No. of Floors: _____ Floor No.: _____
Age: _____ Present Use: _____ Prior Use: _____
Specific Location(s) in Facility: _____

7. DISPOSAL SITE:
Name: _____
Location Address: _____
City/State/Zip: _____

8. WASTE TRANSPORTER 1: **WASTE TRANSPORTER 2:**
Name: _____
Address: _____
City/State/Zip: _____
Phone: _____

9. ORDERED DEMOLITIONS: (See NESHAP regulations for definition of "Ordered Demolition.") A copy of the official Order must accompany this notification.
GOVT AGENCY Ordering Demo:
Name/Title of Person Signing Order: _____
Date of Order: _____ Date Ordered to Begin: _____

10. IS ASBESTOS PRESENT? Yes No

Estimate the amount of asbestos: include RACM (Regulated Asbestos Containing Material) to be removed, encapsulated, etc. Also include the amount and type (floor tile, roofing, etc.) of non-friable Category I and/or Category II ACM that will not be removed prior to demolition. (NOTE: in a demolition, conspicuous ACM cannot remain in a structure, as it is likely to become regulated in the demolition/handling process. It must be removed prior to demolition.)

RACM to be Removed	RACM to be Encapsulated	Non-friable ACM <u>not</u> removed prior to demo.		Units of Measure	
		Category I	Category II	Ln. Ft.	Sq. Ft.
_____	_____	_____	_____	<input type="checkbox"/> Ln. Ft.	<input type="checkbox"/> Ln. M.
_____	_____	_____	_____	<input type="checkbox"/> Sq. Ft.	<input type="checkbox"/> Sq. M.
_____	_____	_____	_____	<input type="checkbox"/> Cu. Ft.*	<input type="checkbox"/> Cu.M.*

*Volume (cubic ft. meters) should be used only if unable to measure by linear/square measure (example: asbestos has fallen off of surface).

(continued on reverse side)



Asbestos NESHAP

- DNRE, Asbestos Program
- Receive and review notifications.
- Conduct inspections of asbestos removal projects and demolition projects to determine compliance with the NESHAP regulations.
- www.michigan.gov/air (click on “compliance” then “asbestos NESHAP”)



NESHAP for Dry Cleaning Facilities

40 CFR 63,
Subpart M



NESHAP for Dry Cleaners

- Targeted HAP – Perchloroethylene (perc)
- All perc dry cleaner subject
- Requirements
 - Control equipment
 - Maintenance
 - Recordkeeping
 - Work practice standards



Other NESHAPs

Area Source NESHAPs

- Iron and Steel Foundries
- Electric Arc Furnace Steelmaking Facilities
- Paints and Allied Products Manufacturing
- Ethylene Oxide Sterilizers

FUTURE - 12/16/2010

- Boilers – Industrial & Institutional/Commercial
- Sewage Sludge Incineration



Does a NESHAP Apply to You?

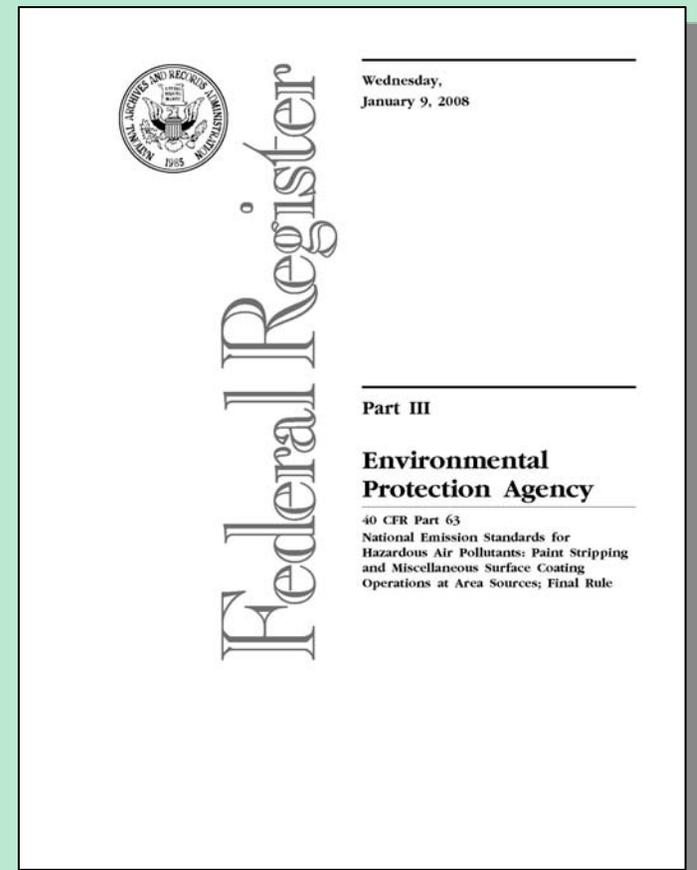
1. Review list of Source Categories subject to NESHAP
www.epa.gov/ttn/atw/eparules.html
2. Determine if NESHAP applies to area sources or major sources
 - Area sources = everyone
 - Major sources = determine if you are a major HAP source
3. Review applicability requirements



NESHAP Basics

Basic NESHAP Information to Know:

- Who is subject
- When you are subject
- What you need to do



NESHAP Basics

- Who is subject:
 - Major or Area Source
 - Existing or new
 - Installation/construction dates
 - Look in applicability section

Subpart CCCCCC—National Emission Standards for Hazardous Air Pollutants for Area Sources: Paints and Allied Products Manufacturing

Applicability and Compliance Dates

§ 63.11599 Am I subject to this subpart?

(a) You are subject to this subpart if you own or operate a facility that performs paints and allied products manufacturing that is an area source of hazardous air pollutant (HAP) emissions and processes, uses, or generates materials containing HAP, as defined in § 63.11607.

(b) The affected source consists of all paints and allied products manufacturing processes that process, use, or generate materials containing HAP at the facility.

(1) An affected source is existing if you commenced construction or reconstruction of the affected source on or before June 1, 2009.

(2) An affected source is new if you commenced construction or



NESHAP Basics

- **When you are subject**
 - Promulgation date
 - Compliance date
 - Initial notification date
 - Compliance notification date
 - Testing dates

§ 63.11600 What are my compliance dates?

(a) If you own or operate an existing affected source, you must achieve compliance with the applicable provisions in this subpart by December 3, 2012.

(b) If you own or operate a new affected source, you must achieve compliance with the applicable provisions of this subpart by December 3, 2009, or upon startup of your affected source, whichever is later.

(c) If you own or operate a facility that becomes an affected source in accordance with § 63.11599(b)(3) after the applicable compliance date in paragraphs (a) or (b) of this section, you must achieve compliance with the applicable provisions of this subpart by the date that you commence processing, using, or generating materials containing HAP, as defined in § 63.11607.



NESHAP Basics

- What you need to do
 - Initial notification
 - Notification of compliance
 - Recordkeeping & reporting
 - Work practice standards
 - Control equipment

§ 63.11173 What are my general requirements for complying with this subpart?

(a) Each paint stripping operation that is an affected area source must implement management practices to

Notifications, Reports, and Records

§ 63.11175 What notifications must I submit?

(a) Initial Notification. If you are the owner or operator of a paint stripping operation using paint strippers containing MeCl and/or a surface coating operation subject to this subpart, you must submit the initial notification required by § 63.9(b). For a new affected source, you must submit the Initial Notification no later than 180 days after initial startup or July 7, 2008, whichever is later. For an existing affected source, you must submit the initial notification no later than January 11, 2010. The initial notification must provide the information specified in paragraphs (a)(1) through (8) of this section.



NESHAP and Your Air Permit

- Requirements incorporated into your permit...eventually.
 - PTI – incorporation depends
 - ROP – incorporation upon renewal
- Still subject to requirements regardless of whether in permit or not.

**STATE OF MICHIGAN
RENEWABLE OPERATING PERMIT**

IS HEREBY ISSUED TO

Sample Corporation
SEN: Z9999

LOCATED AT

123 Main Street
Anytown, MI 49000-0007

Permit Number: 199600543
Effective Date: July 18, 2001
Expiration Date: July 18, 2006

This permit is issued in accordance with and subject to Part 5506(3) of Article II, Chapter 1, Part 55 (Air Pollution Control) of P. A. 451 of 1994. Pursuant to Air Pollution Control Rule 336.1210(1), this permit constitutes the permittee's authority to operate the major stationary source identified above in accordance with the general conditions, special conditions and attachments contained herein. Operation of the major stationary source and all emission unit/process groups listed in the permit are subject to all applicable future or amended rules and regulations pursuant to P. A. 451 and the Clean Air Act.

This permit does not relieve the permittee from the responsibility to obtain the necessary permits to install pursuant to Air Pollution Control Rule 336.1201 for new or modified process or process equipment. In addition, issuance of this Renewable Operating Permit does not obviate the necessity of obtaining such permits or approvals from other units of government as required by law.

Michigan Department of Environmental Quality

Heidi G. Hollenbach
Grand Rapids District Supervisor



NESHAP Enforcement

- How are NESHAPs Enforced?
 - State - DNRE
 - US EPA – Regional Offices



Why Comply?

- Healthier work environment
- Reduce solvent and paint purchases
- Reduce waste disposal
- Improved quality of product
- Keep your property clean which reduces liabilities and risk
- Reduce complaints
- Reduce fear of inspections



Need Help?

www.michigan.gov/air

select “Clean Air Assistance” and scroll down to the heading “Federal Regulations” for more information on the NESHAPs.

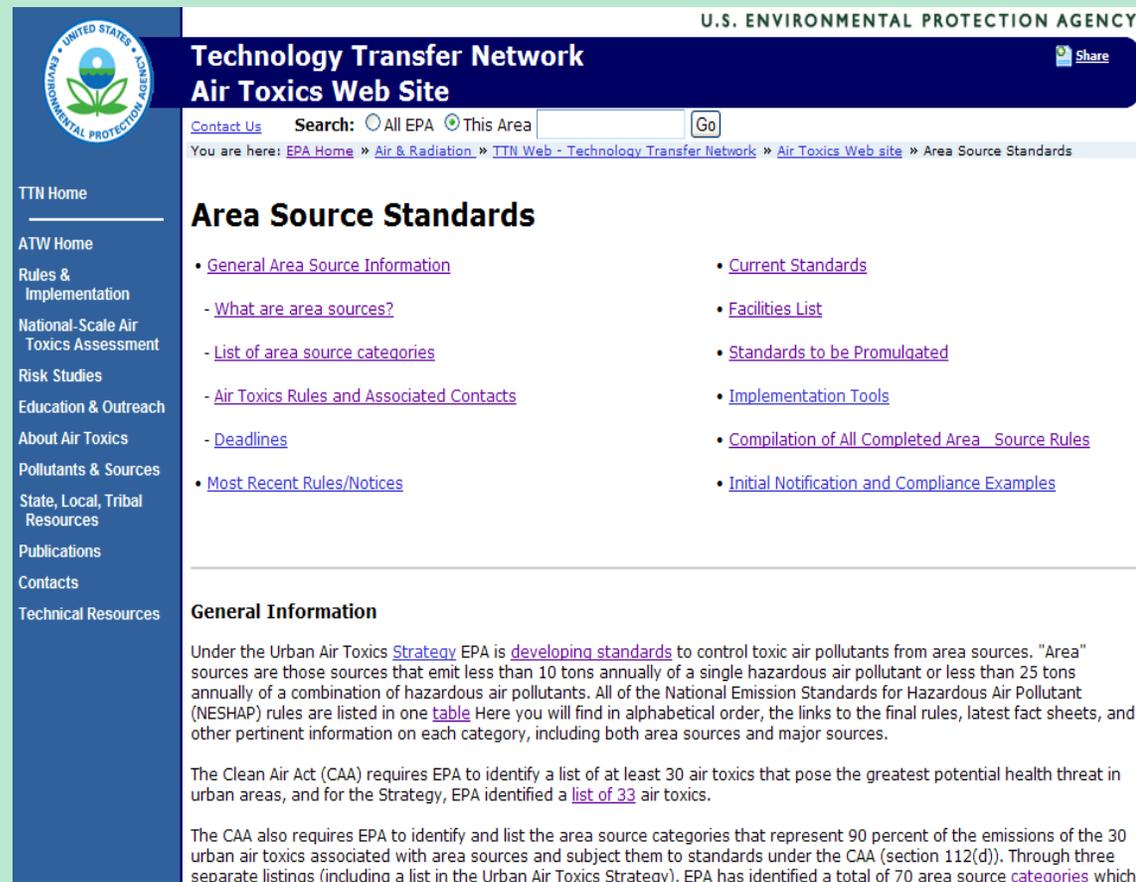
Federal Regulations

- Asbestos
- Chromium Electroplaters
- Electric Arc Furnace Steelmaking Area Sources
- Gasoline Dispensing Facilities (NESHAP)
- Iron and Steel Foundry Area Sources
- Miscellaneous Metal Parts Coating
- NSPS - Boilers
- Oil and Gas Industry
- Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources
- Plastic Parts Coating
- Solvent Degreasing
- Wood Furniture Manufacturing



Need Help?

www.epa.gov/ttn/atw/area/arearules.html



The screenshot shows the EPA Technology Transfer Network Air Toxics Web Site. The page title is "Area Source Standards". The left sidebar contains a navigation menu with the following items: TTN Home, ATW Home, Rules & Implementation, National-Scale Air Toxics Assessment, Risk Studies, Education & Outreach, About Air Toxics, Pollutants & Sources, State, Local, Tribal Resources, Publications, Contacts, and Technical Resources. The main content area is titled "Area Source Standards" and contains a list of links: General Area Source Information, Current Standards, What are area sources?, Facilities List, List of area source categories, Standards to be Promulgated, Air Toxics Rules and Associated Contacts, Implementation Tools, Deadlines, Compilation of All Completed Area Source Rules, and Most Recent Rules/Notices, Initial Notification and Compliance Examples. Below the list is a section titled "General Information" which contains two paragraphs of text. The first paragraph discusses the EPA's strategy for controlling toxic air pollutants from area sources, mentioning the Urban Air Toxics Strategy and the National Emission Standards for Hazardous Air Pollutant (NESHAP) rules. The second paragraph discusses the Clean Air Act (CAA) requirements for identifying a list of at least 30 air toxics that pose the greatest potential health threat in urban areas, and for the Strategy, EPA identified a list of 33 air toxics. The third paragraph discusses the CAA requirements for identifying and listing the area source categories that represent 90 percent of the emissions of the 30 urban air toxics associated with area sources and subject them to standards under the CAA (section 112(d)). Through three separate listings (including a list in the Urban Air Toxics Strategy), EPA has identified a total of 70 area source categories which





Thank You!

Contact:
Environmental Assistance Program
800-662-9278