



Air Toxics Area Source Program

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Presentation Overview

- Background – Basis for Regulations
- Status of Area Source Program and Source Category List
- Overview of Two Recent Rules
- Resources for More Information



Background

- July 19, 1999 Urban Air Toxics Strategy
 - EPA required to list 30 Hazardous Air Pollutants (HAPs) from area sources which pose the greatest potential public health threat in urban areas
 - EPA must regulate area sources categories accounting for 90 percent of the emissions of 30 listed HAPs
 - EPA listed 70 area source categories



Area Sources – What are they?

- Small stationary sources of air toxics
- Any Source that emits some hazardous air pollutant (HAP) but is not a major source HAP
- “Has a potential to emit less than 10 tpy for a single HAP or less than 25 tpy for combined HAP”



Generally Available Control Technology (GACT)

- Methods, practices and techniques which are commercially available and appropriate for application by sources in the category considering economic impacts and the technical capabilities of the firms to operate and maintain the emissions control systems



Program Status

- 70 source categories will be subject to regulation
- 60 source categories have been promulgated; 10 remain to complete
- All rules to be completed by December 16, 2010



Categories listed prior to June 2007

- Chromium Anodizing and Electroplating
- Commercial Sterilization
- Halogenated Solvent Degreasing
- Dry Cleaning
- PVC & Copolymer Production
- Portland Cement
- Incineration - Hazardous, Municipal, Medical, Commercial/Industrial, and Other Waste (T5)
- Mercury Cell Chlor-Alkali Plants (T5)
- Publicly Owned Treatment Works
- Oil & Natural Gas Production
- Primary (T5) and Secondary Copper
- Primary Nonferrous Metal
- Secondary Lead
- Secondary Aluminum

(T5) - Indicates a Title V Permit is required if subject



Recently Promulgated Rules

- Flexible Polyurethane Foam Fabrication and Production
- Acrylic/Modacrylic Fibers Production
- Carbon Black Production (T5)
- Chromium Compounds Manufacturing
- Lead Acid Battery Manufacturing
- Wood Preserving
- Stainless and Non-stainless Steel Manufacturing (Electric Arc Furnaces) (T5)
- Clay Ceramics Manufacture
- Pressed & Blown Glass Manufacture (T5)
- Iron and Steel Foundries
- Secondary Nonferrous Metals

(T5) - Indicates a Title V Permit is required if subject



Recently Promulgated Rules

- Gasoline Distribution and Dispensing
- Stationary Internal Combustion Engines
- Metal Fabrication and Finishing
- Plating and Polishing
- Paint Stripping, Miscellaneous Surface coating
- Hospital Sterilizers
- Foundries - Aluminum, Other Nonferrous Metals, Copper
- Chemical Manufacturing (T5 – certain sources)

(T5) - Indicates a Title V Permit is required if subject



Future Rules

- **Source Categories delayed until November 16, 2009 and December 16, 2009**
- Paint and Allied Products
- Asphalt Processing and Asphalt Roofing Manufacturing
- Chemical Preparation
- Prepared Feeds
- **Source Categories delayed until December 16, 2010**
- Industrial Boilers
- Institutional/Commercial Boilers
- Sewage Sludge Incineration
- Brick and structural Clay



NESHAP: Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources

- 40 CFR Part 63 Subpart HHHHHH (Subpart 6H)
- Published in the Federal Register on January 9, 2008 (73 FR 1738)



Subpart 6H Affected Source Categories

- Paint stripping operations
 - using Methylene Chloride (MeCl) to remove dried paint from wood, plastic, metal or other
- Miscellaneous surface coating
 - spray application of coatings containing Cr, Pb, Mn, Ni, or Cd (target HAPs) to any metal or plastic parts or products that are not motor vehicles or mobile equipment
- Motor vehicle and mobile equipment spray-applied surface coating operations
 - Can petition for exemption if using coatings without target HAP



Subpart 6H New Sources

- A source is new if
 - Source commenced construction after September 17, 2007 by installing new equipment; and
 - the new equipment is used at a source not actively engaged in paint stripping and/or surface coating prior to September 17, 2007
 - construction of new paint booths, enclosed spray gun cleaners, paint stripping equipment to reduce MeCl emissions, or spray guns to comply with the rule does not make an existing source new



Subpart 6H Compliance Dates

- New sources must comply by January 9, 2008 or start-up of operations
- Existing sources must comply by January 10, 2011



Paint Stripping Overview

- Minimize emissions of MeCl using management practices
- If operation uses more than one ton of MeCl in a year
 - develop and implement a written MeCl minimization plan
 - post the plan in areas where activity occurs



Subpart 6H Surface Coating Overview

- All spray applied coatings must be applied in a spray booth or preparation station
 - Fitted with filters achieving 98% capture of paint overspray, or use waterwash spray booths
- All spray applied coatings must be applied using
 - High-volume low pressure (HVLP) guns, electrostatic application, airless, air-assisted airless, or equivalent transfer efficiency
- Spray Gun Cleaning Requirements
- Requires Painter Training and Certification




Subpart 6H Reports

- Initial Notification due
 - new sources - 180 days after start up, or January 9, 2008, whichever is later
 - existing sources - by January 11, 2010
- Notification of Compliance status
 - Existing sources due by March 11, 2011
 - New sources due with initial notification
- Annual notification of changes report
 - Required if information previously reported has changed or a deviation from rule requirements occurred



Subpart 6H Records

- records of paint strippers containing MeCl
- copy of MeCL minimization plan kept on site, if required
- records of any deviations from requirements in the rule
- painter training certification
- documentation of filter efficiency
- copies of all notifications and reports required
- documentation of any approved spray gun technology alternatives



NESHAP: Area Source Standards for Nine Metal Fabrication and Finishing Source Categories

- 40 CFR Part 63 Subpart XXXXXX
(Subpart 6X)
- Published in the Federal Register on
July 23, 2008 (73 FR 42978)



Subpart 6X Affected Source Categories

9 Metal Fabrication and Finishing Categories (15 NAICS codes)

- Electrical and Electronic Equipment Finishing Operations
 - Electric Machinery, Equipment, and Supplies, not elsewhere classified
 - Motors and Generators Manufacturing
- Fabricated Metal Products, not elsewhere classified
- Fabricated Plate Work (Boiler Shops)
- Fabricated Structural Metal Manufacturing
- Heating Equipment, except Electric
- Industrial Machinery and Equipment: Finishing Operations
 - Construction Machinery Manufacturing
 - Oil and Gas Field Machinery Manufacturing
 - Pumps and Pumping Equipment Manufacturing
- Iron and Steel Forging
- Primary Metals Products Manufacturing
- Valves and Pipe Fittings, not elsewhere classified



Subpart 6X Applicability

- Rule applies to any facility “primarily engaged” in one of the 9 source categories
- Only applies to operations that use target metal HAP above levels:
 - 0.1 percent Cd, Cr, Ni, Pb*
 - 1.0 percent Mn*
 - From MSDS or other similar information provided by suppliers

* As the metal on weight/weight basis



Subpart 6X Affected Sources

(1) Dry Abrasive Blasting

- Small enclosed unvented blast chambers
- Products in chambers vented to control devices
- Products not enclosed
 - >8 feet in size, inside as well as outside

(2) Dry grinding & polishing (large stationary machines)

(3) Machining

(4) Spray-painting (of coatings containing target metal HAP)

- Products in spray booths
- Products not in spray booths
 - >15 feet or at Fabricated Structural Metal facilities

(5) Welding

- Welding rod use > 2,000 lb
- Welding rod use ≤ 2,000 lb



Subpart 6X Compliance Dates

- Source is “new” if construction, reconstruction of affected source began after April 3, 2008
- New sources must achieve compliance by July 23, 2008, or upon initial startup of the affected source, whichever is later
- Existing sources must achieve compliance by July 25, 2011



Subpart 6X Abrasive Blasting Operations Standards and Management Practices

(1) Small totally-enclosed unvented blast chambers

- Management practices to minimize emissions
 - Minimize dust generation during emptying of abrasive blasting enclosures
 - Operate all dry abrasive blasting operations according to manufacturers instructions

(2) Products in chambers in vented enclosures

- Capture emissions and vent to filtration control device
- Management practices to minimize emissions
 - Minimize excess dust, as practicable
 - Enclose dusty abrasive material storage areas and holding bins, seal chutes, and conveyors that transport abrasive materials
 - Operate all dry abrasive blasting operations according to manufacturers instructions



Subpart 6X Abrasive Blasting Operations Standards and Management Practices

(3) Objects greater than 8 feet and products not vented to a control device

- Management practices to minimize emissions
 - Minimize excess dust, as practicable
 - Enclose dusty abrasive material storage areas and holding bins, seal chutes, and conveyors that transport abrasive materials
 - Operate all dry abrasive blasting operations according to manufacturers instructions
 - Do not reuse blasting media unless contaminants have been removed and the blast media returns to its original size
 - Switch from high PM-emitting blast media (e.g., sand) to low PM-emitting blast media (e.g., crushed glass, specular hematite, steel shot, aluminum oxide), whenever practicable
- Visible emission monitoring (Method 22) in graduated schedule (Daily/Weekly/Monthly/Quarterly)



Subpart 6X Machining Standards and Management Practices

- Management practices to minimize emissions (only)
 - Minimize dust in surrounding area, to extent practicable
 - Operate all machining equipment according to manufacturers instructions



Subpart 6X Dry Grinding and Polishing Standards and Management Practices

- Capture emissions and vent to a control device
- Management practices to minimize emissions
 - Minimize excess dust in surrounding area, to extent practicable
 - Operate all equipment according to manufacturers instructions
- Applies to large stationary machines only



Subpart 6X Spray Painting Standards and Management Practices

- Spray paint in spray booths or spray rooms
 - Fitted with paint overspray filters (98% capture)
 - Regular inspections and replacement of filters according to manufacturers instructions
 - OR operate a spray booth or spray room with a water curtain and achieve 98% control of target metal HAP
- HVLP spray guns, electrostatic application, airless, air-assisted airless, or equivalent transfer efficiency
- All painters must be certified to have completed training every 5 years
- Management Practices

- **Except Products >15 feet or at Fabricated Structural Metal facilities**
 - HVLP spray gun use, training, management practices (only)



Subpart 6X Welding Standards and Management Practices

Two welding categories:

- Use **<2,000 lb** welding rod or wire*
 - Management practices only
- Use **≥2,000 lb** welding rod or wire*
 - Management practices
 - Monitoring for visible emissions (VE) or opacity ≤20% in graduated schedule (D/W/M/Q)
 - 3-Tier compliance monitoring

* MFHAP-containing at levels 0.1/1% of metal.



Subpart 6X Welding Standards and Management Practices

Management practices, as practicable to the type of welding/product, while maintaining required welding quality using sound engineering judgment

- Use welding processes with reduced fume generation capabilities (*e.g.*, Gas metal arc welding (GMAW))
- Use welding process variations (*e.g.*, pulsed GMAW, which can reduce fume generation rates)
- Use welding filler metals, shielding gases, carrier gases, or other process materials which are capable of reduced welding fume generation
- Optimize welding process variables (*e.g.*, electrode diameter, voltage, amperage, welding angle, shield gas flow rate, travel speed) to reduce the amount of welding fume generated
- Use of fume capture and control system



Subpart 6X Reporting

- Initial Notification due
 - new sources - 120 days after start up, or November 20, 2008, whichever is later
 - existing sources – by July 25, 2011
- Notification of Compliance Status Report
 - new sources - 120 days after start up, or November 20, 2008, whichever is later
 - existing sources – by November 22, 2011
- Annual Certification and Compliance Reports due January 31, 2012 and each year thereafter



Subpart 6X Records

- Notifications and reports
- Applicability determinations
- Visual emissions records
- Visual opacity emissions records
- Spray paint booth filter records
- HVLP gun or other high transfer technology records
- Painter training documentation
- Site specific welding emissions management plan, if required
- Manufacturers instructions



Where to Send Notifications and Reports

- Sources in New England send notifications to:
U.S. EPA – New England
Air Compliance Clerk
1 Congress Street
Suite 1100 (SEA)
Boston MA 02114



For More Information

- For Sources in New England:

Susan Lancey

U.S. EPA New England

617-918-1656

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For More Information

<http://www.epa.gov/ttn/atw/area/arearules.html>

- Brochures
- One-page summaries
- Flow charts
- Example Notification forms
- List of potential facilities
- Other resources (e.g., list of SIC/NAICS for applicability determinations for nine metal fabricating source categories)