

# 2005 Air Toxics Workshop

Plastic Parts and Products  
MACT Training

Presented By  
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This presentation will cover:

- Part 1: Scope of Subpart PPPP
- Part 2: MACT Requirements & Compliance Options
- Part 3: Initial Compliance Dates
- Part 4: Continuous Compliance Requirements
- Part 5: Monitoring, Recordkeeping & Reporting
- Part 6: Important Dates
- Part 7: Applicability Case Studies

## Part One:

### Scope of Subpart PPPP

*How do I tell if my facility is covered by the Plastic Parts MACT?*



## Scope of Subpart PPPP

This section will cover:

- Industry overview
- Primary Products
- Applicability
- Exemptions
- Affected source
- Alternative Emission Limitations

## Scope of Subpart PPPP

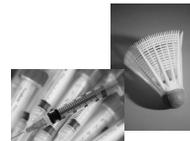
### Industry Overview

- Covers many industry sectors
- Plastic components of many products or products themselves formed of synthetic polymers

## Scope of Subpart PPPP

### Primary Products Include:

- Sporting and recreational goods
- Toys
- Business Machines
- Parts and accessories for automobiles, trucks, and RVs
- Lab and medical equipment
- Household and other consumer products



## Scope of Subpart PPPP

To be subject to Subpart PPPP your facility must:

- Apply surface coating to **plastic parts & products**
- Be a **Major Source**
  - Potential to Emit  $\geq 10$  tpy of any one HAP or  $\geq 25$  tpy of multiple HAP
- Use  $\geq 100$  gal/year of coatings that contain HAP
- Include **Affected Sources**

## Scope of Subpart PPPP

What is surface coating?

- The application of coating to a substrate
- Includes associated activities directly related to coating application:
  - Surface preparation
  - Cleaning
  - Mixing
  - Storage

## Scope of Subpart PPPP

What is surface coating? (continued)

- The following are not considered coating operations:
  - Handheld non-refillable aerosol containers
  - Touchup markers
  - Marking pens
  - Application of paper or plastic film which may be coated with an adhesive

## Scope of Subpart PPPP

Exemptions

- Facilities that use  $< 100$  gal/yr of HAP-containing coatings
  - Do not include non-HAP coatings to determine coating usage
  - Non-HAP coating:
    - No more than 0.1% by weight of any individual organic HAP considered an OSHA-defined carcinogen OR
    - No more than 1.0% by weight for any other individual HAP

## Scope of Subpart PPPP

Exemptions (continued)

- Facilities that use only non-HAP coatings, thinners and other additives, and cleaning materials
- Coating operations that occur at research or laboratory facilities, janitorial, buildings & facility maintenance operations, or noncommercial hobby shops
- Coating operations performed at US Armed Forces Installations or NASA



## Scope of Subpart PPPP

Exemptions (continued)

- Surface coating of military munitions manufactured by or for the US Armed Forces
- Operations where plastic is extruded onto plastic parts or products to form a coating
- Coating of magnet wire



## Scope of Subpart PPPP

### Exemptions (continued)

- In-mold or gel coating operations in the manufacture of reinforced plastic composite parts that meet the applicability criteria of Reinforced Plastics Composite NESHAP (subpart WWWW)
- Plastic parts intended for use in an aerospace vehicle using specialty coatings (defined in Appendix A of subpart GG)

## Scope of Subpart PPPP

### Exemptions (continued)

Coating operations which meet the applicability criteria for the following MACT standards:

- Wood Furniture Mfg (Subpart JJ)
- Large Appliances (Subpart NNNN)
- Metal Furniture (Subpart RRRR)
- Boat Mfg (Subpart VVVV)
  - except post-mold coating on all or parts of personal watercraft
- Aerospace Mfg and Rework (Subpart GG)
- Shipbuilding and ship repair (Subpart II)
- Wood Building Products (Subpart QQQQ)
- POWC (Subpart JJJJ)

## Scope of Subpart PPPP

### Affected Source

The **collection** of all of the following:

- All coating operations
- All storage containers and mixing vessels used for coatings, thinners and/or other additives, and cleaning materials
- All manual and automated conveying equipment and containers used for coatings, thinners and/or other additives, and cleaning materials
- All waste storage containers and all manual and automated waste conveying equipment

## Scope of Subpart PPPP

- Different limits for new and existing sources

- New Sources: construction commenced after December 4, 2002
- Existing Sources: not a new source

- Different Limits for four subcategories

- Automotive lamp coating
- Thermoplastic olefin (TPO) coating
- Assembled on-road vehicle coating
- General use coating

## Scope of Subpart PPPP

Alternatives for affected sources that meet applicability criteria of more than one MACT standard

- Auto and Light-Duty Trucks (subpart IIII)
- Other coating NESHAP

## Scope of Subpart PPPP

### Auto and Light-duty Trucks (subpart IIII)

- Include plastic parts coating operations as part of the affected source under subpart IIII for all plastic parts used in auto or light-duty truck mfg instead of complying with each subpart separately
- Coating operations on plastic parts or products not intended for auto or light-duty trucks cannot be made part of the affected source under subpart IIII

## Scope of Subpart PPPP

### Other Coating NESHAP

Affected sources that meet the applicability criteria of other coating NESHAP (excluding Subpart IIII)

- Comply with criteria of each NESHAP separately for each coating operation
- Comply with emission limitation that represents the **predominant activity** at a facility
- Comply with a **facility-specific emission limit**

## Scope of Subpart PPPP

### Predominant Activity:

- Coating operation that accounts for  $\geq$  90% the coating activities at a facility
- Cannot be assembled on-road vehicle or automotive lamp coating operations
- If you are in compliance with the emission limit represented by the predominant activity you are in compliance with Subpart PPPP

## Scope of Subpart PPPP

### Predominant Activity (continued):

- Predominant activity is determined by:
  - Including coating activities that meet the applicability criteria of other coating NESHAP and comprise  $\geq$  1% of total coating activities at a facility
  - Coating activities that comprise <1% of coating activities still have to be included in compliance calculations
  - Use kg solids as a measure of relative coating activity over a representative period of operation (at least one year)
  - Include coating activities that reflect current and projected coating operations (must be verifiable)
- Submit determination with the initial notification and reevaluate annually

## Scope of Subpart PPPP

### CAUTION!

- Subpart PPPP allows coating operations subject to other NESHAP to be considered the predominant activity
  - Compliance with the emission limits related to the predominant activity means you are in compliance with Subpart PPPP
- Other rules must contain “import” language to allow coating operations subject to Subpart PPPP to be considered the predominant activity.
  - Compliance with Subpart PPPP does not always mean you are in compliance with other NESHAP

## Scope of Subpart PPPP

### Rules that contain “import” language

If you are in compliance with subpart PPPP, you are in compliance with:

- Miscellaneous Metal Parts (Subpart MMMM) IF:
  - Plastic parts is your predominant activity
- Wood Building Products (Subpart QQQQ) IF:
  - Surface coating of plastic parts and products must result in > 95% of total annual coating usage
- Large Appliances (Subpart NNNN) IF:
  - The total HAP emissions determined using Subpart PPPP emission limits are < total HAP emissions that result from compliance with each rule separately

## Scope of Subpart PPPP

### Rules that do not contain “import” language:

- Aerospace (Subpart GG)
- Ship Building and Repair (Subpart II)
- Wood Furniture (Subpart JJ)
- Automobile and Light Duty Trucks (Subpart IIII)
- POWC (Subpart JJJJ)
- Metal can (Subpart KKKK)
- Fabric (Subpart OOOO)
- Metal Furniture (Subpart RRRR)
- Metal Coil (Subpart SSSS)
- Boat Manufacturing (Subpart VVVV)
- Reinforced Plastic Composites (Subpart WWWW)

### Scope of Subpart P PPP

#### Facility-specific Emission Limit

- Calculated from relative amount of coating activity subject to each emission limit
- Include coating activities that meet the applicability criteria of other NESHAP and constitute > 1% of total coating activities
- Coating activities that comprise < 1% of total coating activities still need to be included in compliance calculations

### Scope of Subpart P PPP

#### Facility-Specific Emission Limit (continued)

- If you comply with the facility-specific emission limit and the emission limits in Subpart P PPP for all surface coating operations then you are in compliance with Subpart P PPP and other applicable surface coating NESHAP

### Part Two: MACT Requirements & Compliance Options

*Now that I know my facility has emission sources subject to the rule, what does the rule require?*



### MACT Requirements & Compliance Options

This section will cover:

- Emission limits
- Operating limits
- Other standards
- Compliance options

### MACT Requirements & Compliance Options

#### Emission Limits

- Expressed as the mass of organic HAP per mass of coating solids used during each 12-month compliance period
- Subcategory-specific

### MACT Requirements & Compliance Options

#### Automotive Lamp Coating

- Coating of plastic components of the body of exterior automotive lamps:
  - Headlamps
  - Tail lamps
  - Turn Signals
  - Marker (clearance) lamps
- Emission Limits:
  - New Sources: 0.26 kg organic HAP/kg solids
  - Existing Sources: 0.45 kg organic HAP/kg solids
- Does not include coating of interior automotive lamps (e.g., dome lamps, instrument panel lamps)

## MACT Requirements & Compliance Options

### Thermoplastic Olefin (TPO) Coating

- Coating of polyolefins
  - Blends of polypropylene, polyethylene, and its copolymers
  - Includes blends of TPO with polypropylene and polypropylene alloys
- Emission Limits:
  - New Sources: 0.22 kg organic HAP/kg solids
  - Existing Sources: 0.26 kg organic HAP/kg solids
- Does not include coating of TPO substrates on fully assembled on-road vehicles

## MACT Requirements & Compliance Options

### Assembled On-road Vehicle Coating

Coating applied to the surface of fully assembled motor vehicles and trailers intended for on-road use:

- Automobiles & Light-duty trucks (that have been repaired after a collision and otherwise repainted)
- Fleet delivery trucks
- Motor homes & Other recreational vehicles (including camping vehicles and fifth wheels)



## MACT Requirements & Compliance Options

### Assembled On-road Vehicle Coating (cont.)

- Emission Limits:
  - New Sources: 1.34 kg organic HAP/kg solids
  - Existing Sources: 1.34 kg organic HAP/kg solids

## MACT Requirements & Compliance Options

### Assembled On-road Vehicle Coating (cont.)

- Includes incidental coating of parts that are removed from a fully assembled vehicle
- Does not include
  - coating of parts prior to attachment to an on-road vehicle on an OEM assembly line
  - the use of adhesives, sealants, caulks, body fillers (to correct small surface defects) and rubbing compounds (to remove surface scratches)
  - operations that meet the applicability of the Automobile and Light Duty Truck NESHAP (Subpart IIII)

## MACT Requirements & Compliance Options

### General Use Coatings

- All coating operations that are NOT:
  - Automotive lamp coating;
  - TPO coating; or
  - Assembled on-road vehicle coating
- Emission Limits:
  - New Sources: 0.16 kg organic HAP/kg solids
  - Existing Sources: 0.16 kg organic HAP/kg solids

## MACT Requirements & Compliance Options

### Alternative Emission Limits

- If you have more than one subcategory you may:
  - Comply with limits for each subcategory separately
  - Comply with emission limits of the predominant activity (general use and TPO only)
  - Comply with a facility-specific emission limit

## MACT Requirements & Compliance Options

### Operating Limits

- Required for capture systems & add-on control devices
  - Except solvent recovery system for which a liquid-liquid material balance is performed

## MACT Requirements & Compliance Options

### Operating Limits (continued)

Site-specific parameters determined during performance test

- Each capture system (not permanent total enclosures)
  - Average volumetric flow rate or duct static pressure limit
- Each capture system (permanent total enclosures)
  - Average facial velocity or pressure drop across openings
  - Air direction must be into the enclosure

## MACT Requirements & Compliance Options

### Operating Limits (continued)

More site-specific parameters for add-on controls:

- Thermal oxidizers
  - Combustion temperature
- Catalytic oxidizers
  - Catalyst bed inlet and outlet temperature
  - Catalyst bed inlet or outlet temperature and inspection and maintenance plan
- Regenerative carbon adsorber
  - Carbon bed temperature
  - Amount of steam or nitrogen used to desorb bed

## MACT Requirements & Compliance Options

### Operating Limits (continued)

More site-specific parameters

- Condensers
  - Outlet gas temperature
- Concentrators
  - Temperature of desorption concentrate stream
  - Pressure drop of the dilute stream across concentrator

## MACT Requirements & Compliance Options

### Other Standards

- Work practice standards
- Startup, shutdown, and malfunction plan

## MACT Requirements & Compliance Options

### Work Practice Standards

- Only required for capture system and add-on control devices
- Existing documented plans may be used to satisfy this requirement

## MACT Requirements & Compliance Options

### Work Practice Standards (continued)

- Minimize organic HAP emissions from
  - Mixing
  - Storage tanks or other containers
  - Handling operations for coatings, thinners and/or additives, cleaning and waste materials

## MACT Requirements & Compliance Options

### Startup, Shutdown, and Malfunction Plan

- Capture system and add-on control devices
- Operate under plan during periods of startup, shutdown and malfunction
- Address startup, shutdown, and corrective actions for capture and control device malfunctions
- Address coating equipment that would increase emissions or decrease capture efficiency if equipment malfunctions

## MACT Requirements & Compliance Options

### Compliance Options

- Three compliance options:
  - Compliant material
  - Emission rate without add-on controls
  - Emission rate with add-on controls

## MACT Requirements & Compliance Options

### Compliant material option

- Each coating used must meet the emission limit associated with the appropriate subcategory
- Thinners and/or other additives, cleaning materials used must contain no organic HAP
- Not required to meet operating limits and work practice standards

## MACT Requirements & Compliance Options

### Emission rate without add-on controls

- Organic HAP emission rate must meet the organic HAP emission limit for the applicable source category
  - Based on coatings, thinners and/or other additives, and cleaning materials used
  - Calculate as a 12-month rolling average, determined monthly
- Not required to meet operating limits and work practice standards

## MACT Requirements & Compliance Options

### Emission rate with add-on controls

- Organic HAP emission rate must meet the organic HAP emission limit for the applicable source category
  - Based on coatings, thinners and/or other additives, and cleaning materials used AND emission reduction achieved by capture and add-on controls
  - Calculate as a 12-month rolling average, determined monthly

## MACT Requirements & Compliance Options

### Emission rate with add-on controls (cont.)

- All capture systems and add-on controls must meet operating limits
  - Except for solvent recovery systems for which liquid-liquid material balance is conducted
- Must meet work practice standards

## Part Three:

### Initial Compliance Requirements

*What must I do to show initial compliance with the requirements?*



## Initial Compliance Requirements

This section will cover:

- Initial compliance period
- Initial compliance demonstrations for each compliance option
  - Compliant material
  - Emission rate without add-on controls
  - Emission rate with add-on controls

## Initial Compliance Requirements

### Initial compliance period

- Existing sources
  - Begins: April 19, 2007
  - Ends: April 30, 2008
- New Sources
  - Begins: April 19, 2004 or startup (whichever is later)
  - Ends: Last day of the 12<sup>th</sup> full month after the compliance date (as early as April 30, 2005)
    - If **compliance date** occurs on any day other than the first day of the month, the compliance period extends through that month & the next 12 months

## Initial Compliance Requirements

### Initial compliance requirements

- Demonstrate you are meeting the emission limits for the initial compliance period
- Demonstrations differ for each compliance option

## Initial Compliance Requirements

### Compliant Material Option

- Calculations and supporting documentation:
  - Showing that organic HAP content of coatings met the emission limit
  - Showing that thinners and/or other additives or cleaning materials contained no organic HAP

## Initial Compliance Requirements

### Compliant Material Option (continued)

- Separate compliance demonstration required for each coating subcategory or source category OR
- Demonstrate compliance with predominant activity emission limit OR
- Demonstrate compliance with facility-specific emission limit

## Initial Compliance Requirements

### Compliant Material Option (continued)

- Perform demonstration on each material in condition received prior to any alteration
- Perform the following:
  - Determine mass fraction of organic HAP for each material used
  - Determine mass fraction of coating solids for each coating
  - Calculate the organic HAP content of each coating

## Initial Compliance Requirements

### Compliant Material Option (continued)

- You do not have to redetermine the organic HAP content of reclaimed or reused coatings, thinners and other additives, and cleaning materials if:
  - You have documentation that materials reclaimed offsite are the same that were sent offsite
  - The reclaimed and reused materials in the condition they were received were in compliance

## Initial Compliance Requirements

### Compliant Material Option (continued)

- Determine the organic HAP mass fraction for each material:
  - EPA test methods
  - Information from the supplier or manufacturer
  - Solvent Blend method using default values
  - Alternative methods require approval

## Initial Compliance Requirements

### Compliant Material Option (continued)

- Determine mass fraction of coating solids:
  - EPA Test methods
  - Information from material supplier or manufacturer
  - Alternative method (approval required)

## Initial Compliance Requirements

### Compliant Material Option (continued)

- Calculate organic HAP content of each coating based on:
  - Organic HAP mass fraction
  - Mass fraction of solids



## Initial Compliance Requirements

### Compliant Material Option (continued)

You have demonstrated initial compliance if during the initial compliance period:

- The organic HAP content for each coating used is less than the emission limit
- Each thinner and/or other additive, and cleaning material contains no organic HAP
- You have kept records and submitted the appropriate notifications and reports



## Initial Compliance Requirements Emission Rate Without Add-on Controls

### ■ Similar demonstration to Compliant Material Option

- 12-month initial compliance period
- Compliance demonstrated for:
  - Each subcategory or source category separately; OR
  - The predominant activity; OR
  - The facility-specific emission limit

## Initial Compliance Requirements Emission Rate Without Add-on Controls (cont.)

- Perform the following using the same methodology as compliant material option:
  - Determine mass fraction of organic HAP of each material used
  - Determine mass fraction of coating solids of each coating

## Initial Compliance Requirements Emission Rate Without Add-on Controls (cont.)

- For each material used:
  - Determine the density each month using
    - ASTM Method D1475-98
    - Information from the supplier or manufacturer
    - Reference sources
  - Determine the volume by:
    - Measurement or usage records
    - Does not need to be determined if materials are purchased or monitored by weight instead of volume

## Initial Compliance Requirements Emission Rate Without Add-on Controls (cont.)

- Calculate the mass of organic HAP emissions
  - Combined mass of organic HAP contained in all coatings, thinners and/or other additives, and cleaning materials
  - Does not include certain waste materials sent to a regulated TSDF
- Calculate the total mass of coating solids for all coating used

## Initial Compliance Requirements Emission Rate Without Add-on Controls (cont.)

- Calculate the organic HAP emission rate for the compliance period based on:
  - Total mass of organic HAP emissions used during the month
  - Mass of coating solids used during the month



### Initial Compliance Requirements Emission Rate Without Add-on Controls (cont.)

You have demonstrated initial compliance if during the initial compliance period:

- The organic HAP emission rate is less than the emission limit
- You have kept records and submitted the appropriate notifications and reports



### Initial Compliance Requirements Emission Rate With Add-on Controls

- Different requirements for new and existing sources
- Compliance with:
  - Emission limits
  - Operating limits
  - Work practice requirements

### Initial Compliance Requirements Emission Rate With Add-on Controls (continued)

- New Sources:
  - Install capture and control systems no later than the **compliance date**
  - Conduct performance test no later than 180 days after the **compliance date**
    - First material balance must be initiated for solvent recovery system liquid/liquid material balance by the **compliance date**
  - Develop and implement work practice plan no later than the **compliance date**

### Initial Compliance Requirements Emission Rate With Add-on Controls (continued)

- New Sources:
  - Establish operating limits no later than 180 days after the **compliance date**
    - Operating limits determined during the performance test
    - Do not have to comply with operating limits until after performance test
    - Must maintain logs during the period between the compliance date and the performance test

### Initial Compliance Requirements Emission Rate With Add-on Controls (continued)

- Existing sources
  - Install Capture and add-on control systems no later than **April 19, 2007**
  - Conduct performance test and establish operating limits no later than **April 19, 2007**
  - Develop and implement work practice plan no later than **April 19, 2007**

### Initial Compliance Requirements Emission Rate With Add-on Controls (continued)

- Previously conducted tests can be use in lieu of initial performance test if:
  - Approved by Administrator
  - Used specified methods and conditions
  - No process or equipment changes were made that affect compliance
  - Operating parameters can be established

Initial Compliance Requirements  
Emission Rate With Add-on Controls  
(continued)

- Same procedures for **emission rate without add-on controls option** to determine:
  - Mass fraction of organic HAP
  - Density
  - Volume used
  - Mass fraction of coating solids
  - Total mass of organic HAP emissions before add-on controls

Initial Compliance Requirements  
Emission Rate With Add-on Controls  
(continued)

- Similar demonstration to Emission Rate without Add-on Controls
  - 12-month initial compliance period
  - Compliance demonstrated for:
    - Each subcategory or source category separately; OR
    - The predominant activity; OR
    - The facility-specific emission limit

Initial Compliance Requirements  
Emission Rate With Add-on Controls  
(continued)

- Calculate organic HAP emission reduction for each controlled operation
  - Not using liquid-liquid material balance: Apply emission capture system efficiency and add-on control device efficiency to mass of organic HAP
  - OR
  - Using liquid-liquid material balance: Apply volatile organic matter collection and recovery efficiency to mass of organic HAP

Initial Compliance Requirements  
Emission Rate With Add-on Controls  
(continued)

- Calculate mass of organic HAP emissions for each month
- Calculate HAP emission rate

Initial Compliance Requirements  
Emission Rate With Add-on Controls  
(continued)

- You have demonstrated initial compliance if during the initial compliance period:
- The organic HAP emission rate is less than the emission limit
  - You have kept records and submitted the appropriate notifications and reports



Part Four:  
Continuous Compliance  
Requirements

*What must I do to show continuous compliance with the requirements?*



## Continuous Compliance Requirements

- Demonstrated by performing compliance calculations each month for subsequent 12-month compliance periods
- Submit semiannual compliance reports
- Keep records
- Monitor operating limits for add-on controls

## Part Five:

## Monitoring, Recordkeeping & Reporting

*What other requirements does the facility have to comply with?*



## Monitoring, Recordkeeping & Reporting

This section will cover:

- Monitoring requirements
- Records
- Content of reports



## Monitoring, Recordkeeping & Reporting

### Continuous Parameter Monitoring System (CPMS) Requirements

- One reading every 15 minutes
- 4 equally spaced readings per hour
- Average all recorded readings for each successive 3-hour period
- Record inspection, calibration, and validation check results
- Maintain CPMS and have spare parts available

## Monitoring, Recordkeeping & Reporting

### CPMS for Capture System Bypass Line

- Monitor or secure valve or closure mechanism using one of the following:
  - Flow position indicator
  - Car-seal or lock-and-key valve closure
  - Valve closure monitoring
  - Automatic shutdown system
  - Flow position indicator

## Monitoring, Recordkeeping & Reporting

### CPMS for Add-on Control Devices

- Thermal Oxidizer
  - Gas temperature monitor
- Catalytic Oxidizer
  - Gas temperature monitor
- Regenerative carbon Adsorber
  - Desorbing gas mass flow monitor

## Monitoring, Recordkeeping & Reporting

### CPMS for Add-on Control Devices (continued)

- Condensers
  - Condenser outlet gas temperature monitor
- Concentrator
  - Desorption gas temperature monitor
  - Pressure drop monitor across the zeolite wheel or rotary carbon bed

## Monitoring, Recordkeeping & Reporting

### CPMS for Capture System

- Permanent total enclosure (PTE): direction of air flow and either facial velocity of air through NDOs or pressure drop across enclosure
- Non-PTE: average gas flow rate or duct static pressure in each duct

## Monitoring, Recordkeeping & Reporting

### Recordkeeping

- All monitoring data
- Copies of notifications and reports
- All data used in compliance calculations
- Keep records for 5 years, last 2 years kept on site

## Monitoring, Recordkeeping & Reporting

### Reports

- Initial Notification
  - Name, address (facility and owner)
  - Relevant standard
  - Brief description of operations, emission points, emissions
  - Major or area source

## Monitoring, Recordkeeping & Reporting

### Reports (continued)

- Initial Notification (continued)
  - Include statement if complying with Automobile and Light Duty Truck NESHAP to demonstrate with Subpart PPPP
    - No other notifications are required under Subpart PPPP
  - Include statement if complying with other NESHAP as the predominant activity
    - No other notifications are required under subpart PPPP

## Monitoring, Recordkeeping & Reporting

### Reports (continued)

- Notification of Performance Test
  - Name, address (facility and owner)
  - Why testing is being performed
  - Type of test and sources to be tested
  - Date of test
  - Whether site-specific test plan completed

## Monitoring, Recordkeeping & Reporting Reports (continued)

- Notification of Compliance Status
  - Name, address (facility and owner)
  - Compliance method and results of performance tests
  - Methods for continuous compliance
  - Type and quantity of HAP emissions
  - Description of control methods, devices
  - Statement of whether in compliance

## Monitoring, Recordkeeping & Reporting Reports (continued)

- Semiannual Compliance Report
  - Covers six-month periods ending on June 30, or December 31
  - Due every January 31 and July 31
  - Name and address (facility and owner)
  - Reporting period
  - Statement that there were no deviations, or
  - Details about each deviation

## Monitoring, Recordkeeping & Reporting Reports (continued)

- Startup, Shutdown, and Malfunction Report
  - Name, address (facility and owner)
  - Statement that all activities were consistent, or
  - Number, duration, description of each type of malfunction

## Part Six: Important Dates

*What are the important dates I need to know for when the rule starts taking effect?*



## Important Dates

This section will cover:

- Effective Date
- Initial Notification
- Compliance Date
- Performance Tests
- Notification of Compliance Demonstration



## Important Dates

Effective Date

April 19, 2004

Initial Notification

- New sources
  - 120 days after initial startup or **August 17, 2004**, whichever is later
- Existing sources
  - No later than **April 19, 2005**

## Important Dates

### Compliance Date

- New Sources:
  - **April 19, 2004** OR initial startup, whichever is later
- Existing Sources:
  - **April 19, 2007**

## Important Dates

### Performance Tests

- Capture systems and add-on controls only
- Notification of Performance Test
  - At least 60 days prior to the test
- Conduct Performance Test
  - New Sources: No later than 180 days after the **compliance date**
  - Existing Sources: No later than **April 19, 2007**
- Performance Test Reports:
  - Within 60 days after completing the test

## Important Dates

### Notification of Compliance Status

- No later than 30 calendar days following the end of the **initial compliance period**

### Semiannual Compliance Reports

- First report covers the first semiannual reporting period
  - Begins the day after the end of the initial compliance period
  - Ends on June 30 or December 31, whichever is first after the end of the initial compliance period

## Important Dates

### Semiannual Compliance Reports (continued)

- Subsequent reports cover the reporting period from January 1 through June 30 or from July 1 through December 31
- Reports must be postmarked no later than July 31 or January 31 whichever is the first date after the reporting period

## Where can I get more information?

EPA's Rules and Implementation Web Site  
[www.epa.gov/ttn/atw/eparules.html](http://www.epa.gov/ttn/atw/eparules.html)

- National Emission Standards for Hazardous Air Pollutants
- NESHAP Implementation Tools
- Coatings Coordinated Rule Development
- Area Source Standards
- Potential to Emit
- Text of CAA Section 112

## Where can I get more information?

- Coatings Coordinated Rule Development  
[www.epa.gov/ttn/atw/coat/coat.html](http://www.epa.gov/ttn/atw/coat/coat.html)
- Plastic Parts  
[www.epa.gov/ttn/atw/plastic/plasticpg.html](http://www.epa.gov/ttn/atw/plastic/plasticpg.html)

## Part Seven:

### Case Study



## Case Study

Facility XYZ is a contract coating facility that paints various substrates, including plastic, metal, and wood.

### Case Study (continued)

Facility XYZ uses 1,000,000 pounds solids in the following coating operations:

- A wood building products (WBP) coating operation (10,000 lb coating solids or 1.0%);
- A small metal parts (MP) coating operation (75,000 lb coating solids or 7.5%); and
- A plastic parts (PP) coating operation (915,000 lb coating solids or 91.5%)

### Case Study (continued)

Coating Operation	Emissions (lb)
WBP	100
MP	22,500
PP	135,500
Total	158,100 (79 tpy)

### Case Study (continued)

Is this facility subject to the Plastic Parts and Products Rule?

### Case Study (continued)

- Facility is a Major Source
  - Emits more than 25 tpy HAP
- The plastic parts coating line would be subject to subpart PPPP.
- The remaining coating lines would also be subject to the wood building products and miscellaneous metal parts rules. Unless....

### Case Study (continued)

- Facility XYZ decides to comply with the facility-specific emission limit option
  - Calculated using relative mass of coating solids
  - Not required to include coating operations that comprise less than 1% of coating activities
  - Other operations must meet applicability criteria of other surface coating NESHAP
  - Convert volume solids emission limit to mass solids emission limit using default density of 12.5 lb solids/gallon

### Facility-Specific Emission Limit Calculation

Category	A Percent Coating Operations	B Emission Limit (lb HAP/lb solids)	A * B
WBP	1.0%	0.0048	0.000048
MP	7.5%	0.208	0.0156
PP	91.5%	0.160	0.1464
Facility-Specific Emission Limit			0.16205

### Facility XYZ 100,000 Pounds Solids Total Use

Source Category	A Pounds of Solids	B Emission Limit	C Allowable HAP Emissions (lb) A * B	D Actual HAP Emissions	E Actual Emission Rate D ÷ A
WBP	10,000	0.0048	48	100	0.01
MP	75,000	0.208	15,600	22,500	0.300
PP	915,000	0.16	146,400	135,500	0.1480
<b>Total</b>	<b>1,000,000</b>	<b>0.16205</b>	<b>166,800</b>	<b>158,100</b>	<b>0.16</b>

### Case Study (continued)

- Facility XYZ complies with the emission limits under subpart PPPP for all coating activities at the facility
  - NOTE: wood building products and metal parts coating lines are out of compliance with individual NESHAP limits