



GUIDE

**National Emissions Standard for
Hazardous Air Pollutants
(NESHAP)**

MISCELLANEOUS SURFACE COATING OPERATIONS AT AREA SOURCES IN IOWA

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Iowa Department of Natural Resources

Air Quality Bureau

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WHY THIS RULE IS NEEDED

The U.S. Environmental Protection Agency (EPA) and the Iowa Department of Natural Resources (DNR) are required by law to reduce exposure to hazardous air pollutants (HAP), also known as “air toxics.” HAP are known or suspected to cause cancer or other serious health effects such as birth defects. Coatings used in automobile and mobile equipment refinishing contain HAP and therefore may pose a risk to public health in the vicinity of the operations, especially in urban areas.

Area Sources. An “Area Source,” sometimes called a “minor source” or a “small source,” is defined as a facility that emits or has the potential to emit less than 10 tons of any single HAP and less than 25 tons of any combination of HAP per year.

Source Categories. Types of operations identified by EPA as needing regulation are referred to as “source categories”. There are 68 area source categories that EPA has identified as needing regulation. Three of these are included in the *National Emission Standards for Hazardous Air Pollutants (NESHAP): Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources* [40 Code of Federal Regulations (CFR) Part 63, Subpart HHHHHH], sometimes called “6H” or “6H NESHAP”. For brevity, the term “6H NESHAP” is used to refer to this regulation throughout the rest of this document.

- ❖ Paint stripping operations that use methylene chloride (MeCl) to remove dried paint from wood, plastic, metal or other substrates. **NOTE:** This source category is **not** covered in this guide. A separate fact sheet summarizing the paint stripping regulations is available from the DNR upon request.
- ❖ Motor vehicle and mobile equipment spray-applied surface coating operations
- ❖ Miscellaneous surface coating of plastic and metal parts using spray application of coatings containing compounds of chromium (Cr); lead (Pb), manganese (Mn), Nickel (Ni) and Cadmium (Cd).

WHO IS INCLUDED

The 6H NESHAP regulations apply to any operation that does the following:

- Applies surface coatings to motor vehicles and/or roadway use equipment; or
- Sprays liquid coatings on plastic and/or metal substrates (underlying material) which contain the **Target HAP**. For the 6H NESHAP, the Target HAP are compounds of **chromium (Cr), lead (Pb), manganese (Mn), nickel (Ni) and cadmium (Cd)**. Coatings are considered to contain the Target HAP if:
 - ❖ The coating contains Cr, Pb, Ni, or Cd at a concentration equal to or greater than percent by mass; or
 - ❖ The coating contains Mn at a concentration equal to or greater than 1.0 percent by mass.

The information on the concentration of a Target HAP in a coating material can be found on the most recent Safety Data Sheet (SDS) or by contacting the coating material manufacturer.

WHO MAY BE EXEMPTED

- Motor vehicle and mobile equipment surface coating operations using coatings that do **not** contain the Target HAP must submit an initial notification in addition to an exemption notification. The form found at the end of this guide covers both the initial notification and exemption notification. These notifications must be submitted to the Iowa DNR by paper and to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI). Copies of these notifications are also available at: iowadnr.gov/Environmental-Protection/Air-Quality/Air-Toxics-NESHAP.
- Miscellaneous surface coating operations that spray liquid coatings on plastic or metal substrates which do **not** contain Target HAP are automatically exempt. No exemption notification is required. Surface coating operations that coat substrates other than plastic or metal are not subject to this rule.

WHAT IS EXEMPTED

Exempted Coating Operations

- Surface coating performed on site at installations owned or operated by the U.S. Armed Forces, NASA or the National Nuclear Security Administration.
- Surface coating of military munitions manufactured by or for the U.S. Armed Forces or equipment directly and

exclusively used for the purposes of transporting military munitions.

- Coating performed by an individual on personal vehicles, possessions, or property, either for hobby/maintenance, provided that no more than two motor vehicles or pieces of mobile equipment are coated per year. This exemption also applies when these operations are performed by individuals for others without compensation.
- Surface coating that meets the definition of “research and laboratory activities” in the 6H NESHAP.
- Surface coating that meets the definition of “quality control activities” in the 6H NESHAP.
- Surface coating activities that are covered under a different NESHAP, such as the area source NESHAP for metal fabrication and finishing (40 CFR Part 63, Subpart XXXXXX).

Exempted Applications

- Spray applied protective oils for metal, bases, or acids (or a combination of these substances)
- Adhesives, sealants, maskants, or caulking materials
- Temporary protective coatings, lubricants, or surface preparation materials
- In-mold coatings spray applied in the manufacture of reinforced plastic composite parts.
- Coatings applied from a hand-held device with a paint cup capacity that is equal to or less than 3.0 fluid ounces. Repeatedly refilling and reusing a 3.0 fluid ounce cup or cup liner or using multiple 3.0 fluid ounce cup liners to complete a single spray applied coating operation as a means of avoiding rule applicability will be considered an attempt to circumvent the requirements of this subpart.
- Surface coating application using powder coating, hand-held, nonrefillable aerosol containers, or nonatomizing application technology, including, but not limited to, paint brushes, rollers, hand wiping, flow coating, dip coating, electrodeposition coating, web coating, coil coating, touch-up markers, or marking pens.
- Thermal spray operations (also known as metalizing, flame spray, plasma arc spray, and electric arc spray, among other names).

Facility Maintenance

Spray coating applications defined as facility maintenance are **not** subject to this rule. Examples of facility maintenance are:

- Surface coating performed as part of the routine repair or renovation of the tools, equipment, machinery, and structures that comprise the infrastructure of the affected facility and that are necessary for the facility to function in its intended capacity.
- Surface coating associated with the installation of new equipment or structures, and the application of any surface coating as part of janitorial activities.
- Application of coatings to stationary structures or their additions at the site of installation, to portable buildings at the site of installation, to pavements, or to curbs.
- The refinishing of mobile equipment in the field or at the site where they are used in service and at which they are intended to remain indefinitely after refinishing. Such mobile equipment includes, but is not limited to, farm equipment and mining equipment for which it is not practical or feasible to move to a dedicated mobile equipment refinishing facility. Such mobile equipment also includes items such as fork trucks, that are used in a manufacturing facility and which are refinished in that same facility.

Not Included as Facility Maintenance

Surface coating of motor vehicles, mobile equipment, or items that routinely leave and return to the facility, such as delivery trucks, rental equipment, or containers used to transport, deliver, distribute, or dispense commercial products to customers, such as compressed gas canisters. ***These activities must be considered for possible 6H NESHAP applicability.***

If your facility or operation does not meet any of the exemptions listed above, please read the rest of this document to learn what is required to comply with the 6H NESHAP.

REQUIREMENTS

This guide is designed to help facilities understand and comply with the requirements in 40 CFR Part 63, Subpart HHHHHH (6H NESHAP). For specific requirements including the complete federal regulation, refer to: epa.gov/stationary-sources-air-pollution/paint-stripping-and-miscellaneous-surface-coating-operations.

Notifications

- An initial notification and a notification of compliance must be submitted by all affected facilities to the Iowa DNR and to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI). The same document can be used for these notifications. These forms are included in this guide and are also available at iowadnr.gov/Environmental-Protection/Air-Quality/Air-Toxics-NESHAP.
- An annual notification of changes report must be submitted by March 1 of each calendar year, if any of the information submitted in the initial notification has changed.

Spray Applied Coatings

- All spray-applied coatings must use high-volume low-pressure (HVLP), air-assisted airless, airless, or electrostatic spray guns. An alternative may be used if the spray gun manufacturer demonstrates that it has a transfer efficiency (TE) comparable to the spray guns listed above and written approval has been obtained from the DNR.
- Painters must be certified once every five years that they have received training on proper spray application, equipment setup and equipment maintenance. Minimal training includes:
 - ❖ Hands-on and classroom instruction on spray gun; equipment selection, set up and operation;
 - ❖ Training on spray techniques designed to improve transfer efficiency;
 - ❖ Training on routine spray booth maintenance and filter selection, installation and maintenance; and
 - ❖ Environmental compliance with respect to the 6H NESHAP.
- Facilities may develop their own in-house training program which can be certified by the facility owner. All painting personnel must receive refresher training for recertification every five years.
- All spray areas must be fitted with a filter technology demonstrated to achieve a 98 percent capture efficiency of paint overspray. This requirement does not apply to waterwash spray booths that are operated and maintained according to the manufacturer's specifications.
- All spray-applied coatings must be applied in a spray booth, preparation station, or mobile enclosure.
- Spray booths and preparation stations used to refinish
- complete motor vehicles or mobile equipment must be fully enclosed with a full roof, four complete walls or complete
- side curtains, and be ventilated under negative pressure.
- However, fully enclosed spray booths equipped with door/opening seals and an automatic pressure balancing
- system may operate up to 0.05 inches water gauge positive pressure.
- Spray booths and preparation stations used for coating miscellaneous parts or vehicle subassemblies must have a full roof, at least three complete walls or complete side curtains, and must be ventilated so air is drawn into the booth. Booths may have opening for conveyors and parts that pass through the booth for finishing.
- Mobile ventilated enclosures used to perform spot repairs must enclose the surface around the area being coated so overspray is retained in the enclosure and directed to a filter (for overspray capture).
- All spray-gun cleaning must be done so that an atomized mist or spray of cleaning solvent/residual paint is not created outside the container used for collecting the cleaning solvent/residual paint. Spray gun cleaning may be accomplished by hand cleaning, use of an enclosed gun wash unit, or by flushing equipment with solvent (provided the solvent is not atomized outside the container used for solvent collection).

Compliance Dates

Affected Sources:

If your facility performs surface coating operations the compliance date is the date of start-up. Existing facilities should comply with this regulation *immediately*.

Painter training/certification:

Must be completed within **180 days after hiring**. Painters must be re-certified once every five years.

Recordkeeping

Records should be maintained in a form suitable and readily available for expeditious review. Affected facilities must keep the following records to document compliance:

- Training certification records for painters. These records must include the initial training
- date and the most recent refresher training date for each painter, as well as the hire date of any painter hired after the source's compliance date.
- Filter efficiency documentation demonstrating that filters meet or exceed the 98 percent capture efficiency requirement.
- When the facility uses something other than HVLP, air-assisted airless, airless, or electrostatic application equipment, documentation stating the spray gun has been determined by the DNR to achieve a TE equivalent to an HVLP spray gun.
- Copies of all notifications and reports submitted to the DNR.
- Documentation of any deviations from the requirements and the corrective action taken.

Compliance Summary

- Use high efficiency spray guns
- Train and certify operators
- Enclose spraying areas
- Capture at least 98 percent of overspray
- Capture paint and solvent when cleaning

AIR CONSTRUCTION PERMITS

The DNR issues air construction permits to ensure that facilities are meeting air quality requirements. Prior to initiating construction, installation, reconstruction or alteration of equipment, a permit is required unless a specific exemption applies [567 Iowa Administrative Code (IAC) 22.1].

Note: The Small Unit Exemption IAC 567-22.1(2)w cannot be used if the spray booth is subject to the 6H NESHAP.

- Facilities that spray less than 3 gallons per day facility-wide may use the DNR Permit-by- Rule (PBR) Notification for all booths at the facility. Facilities will need to use Iowa Easy Air to apply for a PBR. The PBR certification through Iowa Easy Air serves as the Initial Notification to the DNR for new facilities.
- Facilities that spray 3 gallons per day or more facility-wide are required to either obtain an air quality construction permit for each booth or show that each spray booth qualifies for an exemption. Air quality permit applications must be submitted using Iowa Easy Air.
- Iowa Easy Air Website: programs.iowadnr.gov/easyair/Public/GovEnt/Shared/Pages/Main/Login.aspx.
- Facilities located within Polk or Linn counties must obtain the applicable air permits from their local air pollution control agency.

Polk County Public Works - Air Quality Division
5885 NE 14th Street
Des Moines, IA 50313
Phone: 515-286-3705
Website: polkcountyiowa.gov/public-works/air-quality/

Linn County Public Health - Air Quality Division
1020 6th St SE
Cedar Rapids, IA 52405
Phone: 319-892-6000
Website: linncountyiowa.gov/1429/Air-Quality

DNR FORM

Initial Notification/Notification of Compliance Status/Exemption Notification



Iowa Department of Natural Resources
Air Quality Bureau

**Initial Notification/Notification of
Compliance Status/Exemption Notification**
Miscellaneous Surface Coating Area Source Rule
40 Code of Federal Regulations (CFR) 63.11169 – 63.11180
(Subpart HHHHHH)

DNR Use Only
Con 10-1 /
Fac. #:
CO / MA

This is a multi-purpose notification form that may be used to fulfill the requirements for 1) Initial Notification; 2) Notification of Compliance Status; or 3) Exemption Notification. The questions below indicate the information that is required for each type of notification.

1. Facility Information (required for all notifications)

Facility Name: _____ Facility Number (if known): _____

Facility Address: _____

City: _____ State: _____ Zip: _____

Owner's Name: _____ Owner's Title: _____

Mailing Address (if different): _____

City: _____ State: _____ Zip: _____

Phone number: _____ Email: _____

Operator's Name: _____ Operator's Title: _____

Mailing Address (if different): _____

City: _____ State: _____ Zip: _____

Phone number: _____ Email: _____

Is the facility a motor vehicle or mobile equipment surface coating operation that repairs vehicles at the customer's location, rather than at a fixed location? Yes No

2. Identification of Standard (required for all notifications):

Yes, this facility is subject to 40 CFR Part 63, Subpart HHHHHH (6H NESHAP), National Emission Standards for Hazardous Air Pollutants: Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources (6H NESHAP), because this facility fits one of the following descriptions:

- An area source surface coating operation that coats metal and/or plastic products, motor vehicles, or mobile equipment is subject to the 6H NESHAP if the operation uses coatings that contain the Target HAP (lead, chromium, nickel, cadmium, manganese).
- An area source motor vehicle or mobile equipment surface coating operation that does **not** use the Target HAP is considered subject to the 6H NESHAP until an exemption notification has been submitted to the DNR and the EPS. This notification form may be used as an exemption request. ***If your source is in this category, complete sections 3 and 4 and skip section 5.***

3. Brief description of the operation (required for Initial Notification and Notification of Compliance Status):

a. This facility has a (check all that apply):

- Motor Vehicle or Mobile Equipment Surface Coating Operation
- Miscellaneous Surface Coating Operation

b. Number of spray booths: _____

c. Number of preparation stations: _____

d. Number of painters usually employed: _____

4. Compliance Status, please check one (required for Initial Notification):

For surface coating operations, the relevant requirements are specified in the 6H NESHAP, 40 CFR 63.11173(e) through (g). The main compliance elements for this standard are: operator training (repeated every five years), HVLP or equivalent spray guns, enclosed spray area, 98% efficient filters, and non-atomized spray gun cleaning.

- This facility is already **in compliance** with each of the relevant requirements.
- This facility **will be in compliance** with each of the relevant requirements by the date of startup.
- This facility does not use coating that contain the Target HAPs and is therefore exempt from the 6H NESHAP

NOTE: New facilities must submit the Initial Notification within 180 days of startup.

5. Certification of Compliance Status, please check one (required for Notification of Compliance Status, facilities submitting an exemption notification may skip this section):

- This facility is a **new source** (initial startup was on or after September 17, 2007).

Startup Date: _____

- If the source is a new source, a responsible official must certify below that the source is in compliance with each of the relevant requirements of the 6H NESHAP. *NOTE: New facilities must submit the Notification of Compliance Status within 180 days of start-up.*

- This facility is an **existing source** (initial startup was before September 17, 2007).

Startup Date: _____

- If the source is an existing source, a responsible official must certify below that the source is already in compliance with each of the relevant requirements of the 6H NESHAP.

Responsible Official Certification

(check all that apply)

- I certify the truth, accuracy, and completeness of this notification.
- The source is a motor vehicle and mobile equipment surface coating operation, but does not use the Target HAP. With this certification, the facility is requesting an exemption from the 6H NESHAP.
- The source has complied with all the relevant standards of the 6H NESHAP. This notification also serves as the Notification of Compliance Status.

Responsible Official Signature: _____ Date: _____

Responsible Official Name: _____

Submit this notification to the following agency(ies):

- Iowa Department of Natural Resources, NESHAP Coordinator, 502 E 9th St, Des Moines IA 50319
- Environmental Protection Agency (EPA) via the Compliance and Emissions Data Reporting Interface (CEDRI) <https://cdx.epa.gov/>
- If the facility is located in either Linn County or Polk County, this notification shall also be submitted to the appropriate county office:

Polk County Public Works – Air Quality Division
5885 NE 14th St, Des Moines IA 50313

Linn County Public Health - Air Quality Division
1020 6th St SE, Cedar Rapids IA 52405