Air Quality Requirements for Paint Stripping and Surface Coating Operations

Background
In January 2008 the EPA finalized a rule for controlling hazardous air pollutant emissions (toxic metal HAPs) from area sources engaged in paint stripping, surface coating of motor vehicles and mobile equipment, and miscellaneous surface coating operations. DEQ adopted this federal rule by reference in December 2009. This rule establishes emission standards in the form of generally available control technologies and management practices to reduce the emission of toxic metals from the industry.

Does this rule apply to my facility?
The requirements of the rule apply to facilities where the following activities occur:

- Paint stripping using chemicals containing methylene chloride (MeCl) to remove dried paint from wood, metal, plastic and other substrates.
- Spray application of coatings containing toxic metal HAPs [compounds of chromium (Cr), cadmium (Cd), lead (Pb), nickel (Ni) or manganese (Mn)] to the following:
  - Motor vehicles and mobile equipment (mobile equipment includes heavy duty trucks, buses, airplanes, construction and agricultural equipment, self-propelled vehicles, and other equipment that may be drawn and/or driven on a roadway)
  - Any part or product made of metal or plastic that has a HAP spray applied coating.

If you can demonstrate you do not spray-apply coatings containing any toxic metal HAPs you could be exempt.

- Motor vehicle or mobile equipment:
  Submit a petition for exemption from the rule to DEQ. Your petition must be approved by DEQ to be exempt.
- Miscellaneous surface coating operations that do not spray HAPs:
  A petition for exemption is not required, however you should submit an exemption declaration form and you must keep records on site for verification such as Material Safety Data Sheets (MSDSs).

The rule does not apply to:
- Operations performed on site at installations owned or operated by the armed forces.
- Operations that produce military munitions or equipment directly or exclusively used for transporting military munitions.
- Spray application performed by individuals on personal vehicles, property or possessions either as a hobby or for maintenance, provided they coat no more than two vehicles or pieces of mobile equipment per year. You must keep records readily available on site to verify that your activities are within the required limits.
- Activities meeting the definition of “research and laboratory activities” or “quality control activities”.
- Spray application of coatings using “only” non-refillable aerosol cans and/or three ounce or smaller paint cups.

What are the requirements of the rule?

Paint Stripping
Implement management practices that minimize emissions of MeCl:

- Evaluate the need for paint stripping and when available use alternative methods
  - Non or low MeCl-containing chemicals
  - Mechanical stripping/blasting (dry or wet)
  - Thermal
  - Cryogenic decomposition
- Optimize application conditions by using lower temperatures
- Reduce the time strippers are exposed to the air
- Perform proper storage and disposal activities
- Maintain annual usage records of MeCl containing paint strippers

Operations using more than one ton of MeCl annually* must also comply with the following:

- Develop written MeCl minimization plan
- Review plan annually and update based on previous year experiences and availability of new stripping methods.
- Keep copy of plan, reviews and changes made on file.
Surface Coating

Paint booths, prep stations and enclosures:
For complete motor vehicles or mobile equipment:
• A full roof, four complete walls or side curtains and ventilated at negative pressure
  o If booth has seals on all doors and openings and an automatic pressure balancing system it may be operated up to 0.05 inches water gauge positive pressure
For the surface coating of miscellaneous parts or products or vehicle subassemblies:
• A full roof, at least three complete walls or side curtains, and ventilated so that air is drawn into the booth.
For mobile painting operations:
• All applicable requirements apply unless exclusively using 3 oz. cups or less. Mobile enclosures can be used.
For all surface coating operations
• Install and operate filter technology that is rated by the manufacturer at 98 percent or greater capture efficiency.
• Train anyone who sprays coatings on all painter training requirements of the rule. Consult 73 FR 1738, pg.1762, section 63.11173(f)(2)(i)-(iv) covering spray gun equipment selection, spray techniques, maintenance, environmental compliance, etc.
• Apply coatings with a high volume, low pressure spray gun (HVLP), electrostatic application, airless or air-assisted airless spray gun, or equivalent technology appropriate for the application it is being used for.
  o Equivalency must be approved by DEQ.
• Clean spray guns so that an atomized mist or spray of solvent is not created outside of the container for collecting the used solvent. Gun cleaners or hand cleaning are best.
• Train all new painters no later than 180 days after hire date and perform refresher training for all painters every five years and maintain record of training on-site.

What are registration requirements?
You must be registered with NWCAA unless you qualify for, apply for, and receive an exemption from both NESHAP 6H (via an Exemption Declaration Form) and pursuant to NWCAA Section 321.5.

What are my reporting requirements?
Initial Notification
• Existing facilities: past due
• New facilities: 180 calendar days after startup
Notification of Compliance
• Existing facilities: Spraying performed prior to 9/17/2007 – past due
• New facilities: Spraying performed on/after 9/17/2007 - As part of Initial Notification
• Annual notification of changes report
  Required by March 1 of any year in which changes in notifications or past reports occur

Other recordkeeping requirements?
In addition to the records mentioned, the following should be accurate and readily available for review onsite for five years:
• Notifications, reports, supporting documentation and records showing compliance with all management practices, rule requirements and P2 practices
• Painter training certification and supporting documentation
• Filter efficiency documentation and change out logs
• Spray gun transfer efficiency
• Safety Data Sheets for verification of nonmetal HAP use