

**Michigan Department of Environmental Quality
Air Quality Division**

INFORMATION REQUIRED FOR AN ADMINISTRATIVELY COMPLETE
PERMIT TO INSTALL APPLICATION FOR
A COATING¹ PROCESS

This document is designed to clarify the information requirements for an administratively complete application for a Permit to Install a **coating process**. This document supplements and should be used in conjunction with the AQD document entitled ASSEMBLY INSTRUCTIONS AND GENERAL INFORMATION REQUIREMENTS. The information requested in this document should be included in PART 2 - INSTRUCTIONS FOR ADDITIONAL SUPPORTING INFORMATION, Item A - Process Description and Item B - Regulatory Discussion. The information described in this document is not intended to be all inclusive. The requirements for an administratively complete application for a Permit to Install are designed to provide enough information for a permit reviewer to begin a technical review. Additional information beyond that identified may be required to complete the technical review of any individual application.

NOTE: Coating lines emitting up to 10 tons per year of volatile organic compounds may be eligible for a general permit. The use of a general permit provides a streamlined permitting alternative to the normal permitting process for processes that meet specified applicability criteria. Information for the general permit is available on the Internet at www.michigan.gov/degair. Select "Air Permits" then "Permit to Install/New Source Review".

A. Process Description

1. Describe the coating process including the type and number of booths, flashoff areas, application equipment, and associated clean-up solvents. Include a description of any parts washers and dry off or bake ovens to be used with the coating process, the method of heating, the amount of fuel to be used in an hour and a year, and the use and rates of any washing solutions.
2. Make, model number, and dimensions of the coating spray booth(s).
3. Describe the parts to be coated in the coating spray booth(s).
4. Describe each coating, reducer and clean-up solvent as received, consisting of the following information:
 - a) The density in pounds per gallon and the percent, by volume, of solids in the material before it is reduced.
 - b) A listing of each component² of the coating, reducer and clean-up solvent and the respective Chemical Abstract Service (CAS) number. Material Safety Data Sheets are acceptable provided they are complete.
 - c) For each specific component:
 - i. The specific chemical name, such as xylene, methanol or lead chromate. Generic names such as aromatic hydrocarbon, alcohol or chromium pigment are not acceptable unless a CAS number is identified.
 - ii. The percent of the component in the coating, reducer or clean-up solvent. Identify whether it is percent by volume or by weight. If by volume, include the density of the component.
5. The coating and reducer mixing ratio, by volume (one part of reducer is added to two parts of coating).
6. The normal amount of coating and reducer mixture which is to be applied in one hour and one year.
7. The maximum amount of coating and reducer mixture which is to be applied in one hour and one year.
8. Describe the paint overspray control system (dry filter, water wash, water curtain).

¹ "Coating" includes but is not limited to paint, lacquer, varnish, ink, shellac, enamel, sealer, glue, adhesive, and other materials applied to various surfaces.

² "Component" includes organic solvents, water, pigments, resins, catalysts, curing agents, accelerators, and other materials.

B. Regulatory Discussion

The following State and Federal air pollution control regulations may be applicable. You should review these regulations carefully to determine if they apply to your process. Please summarize the results of your review in your Permit to Install application.

- State of Michigan, Department of Environmental Quality, Act 451 of 1994, Natural Resources and Environmental Protection Act, Part 55 Air Pollution Control and the following promulgated rules:
 1. Rules 224 - 230 require the application of best available control technology for toxics (T-BACT) and limit the emission impact of toxic air contaminants.
 2. Rule 702 requires best available control technology (BACT) for new sources of volatile organic compounds (VOCs).

If the process is subject to one or both of these rules, a demonstration of compliance for the process is required. The demonstration must include an analysis of the coatings to be used, the application method to be employed and any add-on control alternatives. A handout describing the development of each type of demonstration is available upon request. As a minimum, provide the following for each of the add-on control alternatives:

- a) The capital cost, the amortized capital cost (a 10% interest rate should be used unless interest rates change significantly, and the life of the control equipment is assumed to be at least 10 years unless a demonstration to the contrary is provided), and the annual operating costs of the emission control system. The standard method used to determine the aforementioned costs is contained within the USEPA OAQPS Control Cost Manual. An electronic version of the method is available at the following website: <http://134.67.104.12/html/ctc/ctcsft.htm>. Provide all supporting assumptions, calculations and other documentation.
 - b) The expected emission reduction in tons per year.
- There are also subparts of the federal Standards of Performance for New Stationary Sources (NSPS), 40 CFR Part 60, which apply to various coating processes. These subparts are too numerous to list here, but these areas of the federal regulations should be consulted carefully to determine if any subparts apply to your process.
 - Federal Guidelines for MACT Determinations under Section 112(g) for individual and total Hazardous Air Pollutants greater than 10 and 25 tons per year, respectively.