

PURPOSE

This BMP provides general spray painting requirements and specific spray painting requirements for shovels, haul trucks, drill rigs, containment or outside spray painting. This BMP also encourages research of new products and technologies that may reduce negative impacts on the environment. **This BMP does not cover spray painting performed using aerosol cans** (refer to BMP 325 – Aerosol Can Management for proper disposal of aerosol cans).

SCOPE

Morenci Air Quality NON-POINT SOURCE MONITORING PLAN PROVISIONS FOR SPRAY PAINTING

Environmental Services must be notified 72 hours prior to any spray painting activities. Environmental Services will perform the following tasks:

- Ensure that the paint being used in the spray painting activity does not contain photochemically reactive solvents (PRS)¹ in excess of 20% of its total volume
- No paint containing photochemically reactive solvents may be employed, applied, evaporated, or dried at the Morenci site
- No architectural coating may be thinned or diluted with a PRS
- Conduct a Method 9 Observation during spray painting activities to ensure that emissions do not exceed 20% opacity

Per the Non-Point Source Monitoring Plan, at least one of the following control methods will be utilized at all times during any spray painting activity:

- Using high volume low pressure (HVLP) spray guns
- Airless spray techniques
- Other good modern practices
- See highlighted “yellow” section for shovel spray, haul truck and drill rig painting requirements

GENERAL PROCEDURE

At all times:

- Review and utilize current technologies for reducing emissions to ensure best practices are being used.
- Contact Environmental Services and the Industrial Hygiene Department for paint product approval
- Use at least one of the control methods listed in the Freeport-McMoRan Morenci Inc. Non-point Source-Monitoring Plan during any spray painting activity
- Contact Environmental Services to conduct a Method 9 visual observation to ensure emissions generated during spray painting activities do not exceed 20% opacity

Except for architectural and spot painting, all painting activities shall be conducted in an enclosed area equipped with control equipment that captures at least 96% of the overspray. Architectural painting may be performed outdoors, but must adhere to the scope and procedure defined previously. For maintenance purposes, portions of large equipment can be painted outdoors under the definition of spot painting, but must adhere to the scope and procedure defined previously.

PAINT DISPOSAL

Paints that would be considered hazardous waste when disposed of must be managed according to **BMP 303 Hazardous Waste Paints**.

Shovel, Haul Truck and Drill Rig Spray Painting Procedure

Shovel, haul truck and drill rig painting can be performed outdoors, but must meet the following criteria:

- Paints used in spray painting activity must adhere to the photochemically reactive reagent guidelines defined in the BMP Scope
- Spray painting shall be performed using equipment designed to minimize overspray
- A drip cloth, plastic drop cloth, or other barrier must be placed under the area to be painted in such a fashion as to protect ground surface and minimize overspray and drips from contacting the underlying surface or ground
- Shovels, haul trucks and drill rigs must only be spray painted within the confines of the pit area
- Shovels, haul trucks and drill rigs must be located in an isolated area of the pit with minimal large equipment traffic, light vehicle traffic or personnel not directly involved with the spray painting activity
- Sandblasting employed to clean and/or prep the area to be painted shall follow all guidelines as defined by BMP 114 – Sand & Abrasive Blasting Activities
- Clean-up material, PPE and/or debris resulting from the preparation and/or spray painting activity must be collected and placed into approved waste containers for proper disposal
- The Environmental Service Department must be contacted before any large equipment is spray painted and before clean-up materials and/or debris resulting from spray painting are disposed
- Any paint, cleaning materials or products brought on site by a contractor must be pre-approved before use on Morenci property by both the Environmental Services and Industrial Hygiene Departments
- Spent cleanup products must be captured to the extent practicable and stored in a properly labeled container(s) for disposal. Please refer to BMP 313 for Drum and Container Management requirements
- To minimize evaporation, all products shall be kept in sealed containers except for short periods when product is being transferred from one container to another container. Open paint cans are not permitted to be left open to the atmosphere so as to evaporate and/or dry the excess paint before disposing of the can. This also includes any paint trays/pans, brushes, rollers or other utensils used while painting
- Waste paint is defined as any used, left over, or obsolete paint. Please refer to BMP 303 – Hazardous Waste Paint for waste paint management procedures

A photochemically reactive solvent shall be any solvent with an aggregate of more than 20 percent of its total volume composed of the chemical compounds classified in the conditions below, or which exceeds any of the following percentage composition limitations, referred to the total volume of solvent:
[A.A.C.R18-2-727.C]



ENVIRONMENTAL BEST MANAGEMENT PRACTICE
BMP No. 100
Spray Painting Activities

1. *A combination of the following types of compounds having an olefinic or cyclo-olefinic type of unsaturation-hydrocarbons, alcohols, aldehydes, esters, ethers, or ketones: 5 percent.*
2. *A combination of aromatic compounds with eight or more carbon atoms to the molecule except ethylbenzene: 8 percent.*
3. *A combination of ethylbenzene, ketones having branched hydrocarbon structures, trichloroethylene or toluene: 20 percent.*

Whenever any organic solvent or any constituent of an organic solvent may be classified from its chemical structure into more than one of the groups of organic compounds described in the conditions above, it shall be considered to be a member of the group having the least allowable percent of the total volume of solvents.

RECORDKEEPING REQUIREMENTS

Architectural coating and spot painting projects do not require recordkeeping provided the project follows the spray painting plan outlined in the Non-Point Source Monitoring Plan, which is available through the Environmental SharePoint. A Spray painting log must be filled for projects that do not come under architectural coating and spot painting.

TRAINING

All employees involved in painting activities should be provided proper training by their respective departments.

QUESTIONS OR NEED HELP? CONTACT ENVIRONMENTAL SERVICES