

# **ENVIRONMENTAL BEST MANAGEMENT PRACTICE**

## **BMP No. 319**

### **PVC Insulators, Edge Strips, Mist Balls, and Paraliners**

---

#### **WHAT ARE MIST BALLS?**

Mist balls are defined as polyethylene balls that assist with heat retention and the reduction of acid mist inside the tankhouses.

#### **WHAT ARE PVC INSULATORS AND STRIPS?**

Edge strips are used on the stainless steel blanks to prevent copper from plating around the edge of the blank and the insulators are used on the anodes to prevent contact between the anode and cathode.

#### **WHAT ARE PARALINERS?**

Plastic liners placed inside the non-polymer concrete electrowinning cells.

#### **ARE ANY OF THESE REGULATED AS A HAZARDOUS WASTE?**

These materials, generated by the electrowinning process, are exempt from hazardous waste regulations because they are a beneficiation waste of the electrowinning process; however, these materials must be properly disposed of at an approved solid waste landfill.

#### **WHAT DO I DO WITH SPENT INSULATORS, STRIPS, OR PARALINERS?**

All of these are to be placed in roll-off bins designated for these wastes.

#### **WHAT ARE THE MANAGEMENT GUIDELINES FOR INSULATORS, STRIPS, AND PARALINERS?**

- PVC insulators, edge strips and paraliner must be stored in a manner to prevent disposal onto the ground or into surface waters.
- All PVC insulators, edge strips and paraliner handling, storage, and shipment pickups will be completed at the tankhouse where they are generated.
- All the tankhouses shall have a DOT approved roll-off container designated for PVC insulators, edge strips and paraliners.
- When taken out of service, all PVC insulators, edge strips and paraliners shall be rinsed and then placed into the approved roll-off container. These materials must be rinsed to ensure all electrolyte residues are removed from the waste.
- **PVC insulators, edge strips and paraliners should never be placed on the ground, stored in drums or placed in garbage bins intended for the county landfill.**
- Only dry or slightly moist insulators, strips and paraliners may be placed in the roll-off container. Under no circumstances should free liquids be placed in the roll-off container. **According to the United States Department of Transportation (DOT), special**

## **ENVIRONMENTAL BEST MANAGEMENT PRACTICE**

### **BMP No. 319**

### **PVC Insulators, Edge Strips, Mist Balls, and Paraliners**

---

**provisions section of HM-181, no free liquids may be present at the time the material is loaded into the roll-off container, when the roll-off container is closed or when the container is in transit.**

- The roll-off container shall only be used for PVC insulators, edge strips, and paraliners. Debris such as trash, wood, metal, etc. shall not be placed in the bin.
- When the roll-off container is full, contact the Environmental Services Department who will arrange to have the roll-off transported to an approved landfill.

#### **WHAT DO I DO WITH SPENT MIST BALLS?**

All used mist balls should be cleaned and re-used in the electrowinning cells. If any mist balls become unusable, they should be collected with the PVC strips, insulators and paraliners in the designated roll-off containers.

#### **WHAT ARE THE MANAGEMENT GUIDELINES FOR MIST BALLS?**

- Mist balls must be stored in a manner to prevent disposal onto the ground or into surface waters.
- All mist ball handling, storage and shipment pickups will be completed at the tankhouse they are generated.
- Used mist balls shall be stored in a container until ready for reuse.
- The container that is used for storage must be kept closed except when adding or removing mist balls from the container.
- Containers must be properly labeled with the words, "Used Mist Balls."
- Containers used to store the used mist balls shall not be used to store any other materials.
- Containers stored outdoors must be on a pallet, concrete, asphalt, or other similar material to prevent precipitation from pooling around the bottom of the container.
- All used mist balls that cannot be reused in the tankhouse, must be placed into the roll-off container used to collect the PVC strips, insulators and paraliners.

#### **EMPLOYEE TRAINING**

All personnel shall receive training or at the least have access to this BMP when dealing with spent PVC insulators, edge strips and Paraliners on Morenci property.

Training will be provided by Supervisor and/or Team Environmental Coordinators.

***ENVIRONMENTAL BEST MANAGEMENT PRACTICE***  
**BMP No. 319**  
**PVC Insulators, Edge Strips, Mist Balls,  
 and Paraliners**

---

**QUESTIONS OR NEED HELP? CONTACT:**

**Division Representatives**

**Enviro Representatives Phone Ext:**      Jon Anderson ..... **865-6009**  
   Shanna Holguin (Townsite) ..... **865-6225**  
   Bryan Taylor ..... **865-6697**

**Enviro Representatives Cell Phones:**      Jon Anderson ..... **215-2730**  
   Shanna Holguin (Townsite) ..... **965-0245**  
   Bryan Taylor ..... **965-2777**

**Environmental Services Office:**              **865-6000**

*Distribution and Use of this material is limited to Authorized Recipients only --*  
*This document and all supporting material has been written or compiled by the Freeport-McMoRan Morenci Inc. Environmental Services Department, and is being distributed only for the exclusive use by the intended recipients and may contain information that may be privileged, confidential or copyrighted under applicable law. If you are not the intended recipient, you are hereby formally notified that any use, copying or distribution of this material, in whole or in part, is strictly prohibited.*