ACTIVITY: Structure Construction and Painting

Targeted Constituents

<table>
<thead>
<tr>
<th>Targeted Constituents</th>
<th>● Significant Benefit</th>
<th>○ Partial Benefit</th>
<th>○ Low or Unknown Benefit</th>
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<tbody>
<tr>
<td></td>
<td>○ Sediment</td>
<td>○ Heavy Metals</td>
<td>● Floatable Materials</td>
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<td></td>
<td>○ Nutrients</td>
<td>○ Toxic Materials</td>
<td>○ Oil &amp; Grease</td>
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Description

Prevent or reduce the discharge of pollutants to stormwater system and natural streams from structure construction and painting by enclosing, covering, or berming building material storage areas, using good housekeeping practices, using safer alternative products, and training employees and subcontractors. This management practice is likely to cause a significant reduction in floatable materials and construction wastes and also a partial reduction of toxic materials.

Approach

Construction and painting activities can generate pollutants that can reach stormwater if proper care is not taken. The sources of these contaminants may be solvents, paints, paint and varnish removers, finishing residues, spent thinners, soap cleaners, kerosene, asphalt and concrete materials, adhesive residues, and old asbestos insulation.

Educate employees and subcontractors of the importance of keeping pollutants out of the stormwater system. Inform subcontractors of company policy on these matters and include appropriate provisions in subcontracts to make certain that proper housekeeping and disposal practices are implemented.

Ensure that good housekeeping practices are being followed. Cleanup at the end of each shift or at the end of the workday. Proper disposal and recycling of wastes is heavily dependent upon having enough waste containers. For a quick reference on disposal alternatives for specific wastes, see the Table AM-01-1 presented in the Employee Training BMP fact sheet.

Structure Construction

- Keep the work site clean and orderly. Remove debris in a timely fashion. Sweep the area regularly. If the construction work exposes areas of soil, employ the appropriate soil erosion and control BMPs as needed.

- Properly store and dispose waste materials generated from construction activities. Consult the following BMPs for guidelines:
  - AM-06, Material Delivery and Storage
  - AM-08, Waste Management and Recycling
  - AM-18, Concrete Waste Management
- Buy recycled products to the maximum extent practicable. Use less hazardous products if there is a choice.

- Carefully install all plumbing and stormwater systems, including roof drains. Cross-connections between the sanitary and storm drain systems, as well as any other connections into the stormwater system from inside a building, are illegal and may be prosecuted. Color code or flag pipes on the project site to prevent such connections, and explain identification system to all construction personnel.

- Protect stormwater pollutants from entering roof drainage systems, including gutters. Sweep or wash gutters to collect dust particles at the outlet of the downspout. A sock or geofabric placed over the outlet may effectively trap small particles. If the downspout is lined tight, place a temporary plug at the first convenient point in the storm drain system and pump out the water with a vacuum truck and then clean the access point where the plug was placed.

- Protect storm drainage inlets and channels. Clean the storm drainage system in the immediate area after each stage of construction is completed.

**Painting**

- Never clean paintbrushes or rinse paint containers into a street, gutter, storm drain or watercourse. Make sure that nearby storm drains are well marked to minimize the chance of inadvertent disposal of residual paints and other liquids.

- Conduct painting operations consistent with local air quality and OSHA regulations.

- Enclose areas that contain painting operation in order to minimize drift. Use temporary scaffolding to hang drop cloths.

- Use the proper equipment for painting that minimizes over-application and waste. Cleanup spills and drips immediately.

- Properly store paints and solvents. Properly store and dispose waste materials using guidelines contained in Table AM-01-1 of the Employee Training BMP fact sheet. Recycle residual paints, solvents, lumber, and other materials to the maximum extent practicable.

- If painting requires scraping or sand blasting of the existing surface, use a drop cloth to collect paint chips. Dispose the residue properly. If the paint contains lead or tributyl tin, it is considered a hazardous waste, which cannot be disposed as regular solid waste.

- Mix paint indoors, in a containment area, or in a flat unpaved area not subject to significant erosion. Do so even during dry weather because cleanup of a spill will never be 100% effective. Dried paint will erode from sloped surfaces and be washed away by storms.

- If using water-based paints, clean the application equipment in a sink that is connected to the sanitary sewer or in a containment area where the dried paint can be readily removed. Remove as much paint as possible prior to washing. Store leftover paints to be kept for the next job or dispose paint properly.

- Latex paint and paint cans, used brushes, rags, absorbent materials, and drop cloths, when thoroughly dry and are no longer hazardous, may be disposed of with other construction debris.

- For oil-based paints, paint out brushes to the extent practical, and filter and reuse thinners and solvents. Dispose of any paint, thinners, residue and sludges that cannot
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<tr>
<th>Maintenance</th>
<th>Spot check employees and subcontractors daily throughout the work day to ensure that good housekeeping practices are being employed. Inspect nearby open channels and drainage inlets to ensure that pollution is not entering the stormwater drainage system.</th>
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<td>Most jobs and projects require the foreman or building supervisor to inspect a job site daily for safety considerations. Any formalized checklist should also include inspections for stormwater quality, waste management and pollution prevention.</td>
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<td>Limitations</td>
<td>Safer alternative products may not be available, suitable, or effective in every case.</td>
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<td>Hazardous waste that cannot be recycled must be disposed by a licensed hazardous waste hauler.</td>
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<tr>
<td>References</td>
<td>30, 31, 33, 34, 35, 100 (see BMP Manual Chapter 10 for list)</td>
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