

Stormwater: Category 9 BMPs – Outdoor Material Storage and Handling

Department: Environmental Protection

Program: Stormwater

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Authority: ES&H Manual, Chapter 26, Stormwater

Category 9 best management practices (BMPs) prevent stormwater runoff from materials that are handled and stored outdoors, such as chemicals, construction and aggregate materials, radiological shielding materials, metal stock and staged equipment from becoming contaminated.

BMPs

- 9.1 During the wet season, store the material in one of these ways:
 - Store on a paved surface with a roof or covering so no direct rainfall contacts them, with appropriate berms or mounding, or store up on pallets, to prevent run-on of stormwater.
 - Where a roof is not feasible, store material on a paved area that is designed to minimize water pooling (1.5 percent slope). Prevent runoff and run-on with berms or curbs. Material known to pollute stormwater must be stored in areas with blind sumps where water can be tested and documented before release.
 - As a temporary measure, place material on a paved surface and cover with tarps or plastic sheeting, secured with weights or ropes. Use sand bags and/or wattles to create temporary berms or place material on pallets to prevent run-on of stormwater through the material. Move the material to permanent storage as soon as possible.
- 9.2 Maintain outdoor storage containers and covers in good condition. Inspect them periodically for signs of deterioration and remedy as needed.
- 9.3 Implement good housekeeping practices in outdoor storage areas. Such practices include keeping the area clean by sweeping and removing debris, and staying organized by placing small items in containers and avoiding indefinite storage of unused items.
- 9.4 In the event of any spill or release, refer to Chapter 16, “Spills”.¹⁾
- 9.5 Provide training in spill response procedures for personnel who handle hazardous material.
- 9.6 Protect any potentially polluting material that could release particles through sloughing or corrosion or be mobilized by rain or wind from rain, wind dispersal, run-on and runoff using the BMPs outlined above or measures at least equally effective.

1 *SLAC Environment, Safety, and Health Manual* (SLAC-I-720-0A29Z-001), Chapter 16, “Spills”, <http://www-group.slac.stanford.edu/esh/environment/spills/policies.htm>

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- 9.7 Survey areas around the outdoor staging or storing of radioactive material or waste for radioactivity. If loose radioactivity is found, the area must be cleaned (vacuuming) as soon as possible.
- 9.8 Maintain grounds to minimize contact of debris with activated material.
- 9.9 Place roof down-spouts to direct water away from storage areas.

Note For a complete list of all BMP categories, see Stormwater: Best Management Practices Index.²

² Stormwater: Best Management Practices Index (SLAC-I-750-0A16V-001), <http://www-group.slac.stanford.edu/esh/eshmanual/references/stormIndexBMP.pdf>