Chapter 26: Stormwater

Category 13 BMPs – Building Repair, Remodeling, and Construction

Category 13 best management practices (BMPs) help meet requirements for keeping pollutants associated with building repair and remodeling, utility line replacement, resurfacing, and construction out of the storm drainage system. Note that projects involving one acre or more require the following before any construction begins:

- A project-specific construction stormwater pollution and prevention plan (SWPPP) (to be developed by the subcontractor)
- A separate construction general permit from the State Water Resources Control Board

See Stormwater: General Requirements and Stormwater: Construction Requirements for more information on construction requirements, including obtaining construction general and other permits. For activities to which these and other BMP categories apply, see Stormwater: Best Management Practices Index.

Best Management Practices

General

13.1 Never dump any waste liquids down a storm drain – only clean stormwater and authorized non-stormwater discharges may enter the storm drainage system. Cleaning brushes and dumping paint or other hazardous substances into storm drains is prohibited.

13.2 Use soil erosion control techniques if ground will be temporarily laid bare.

13.3 Use permanent soil erosion control techniques with biodegradable materials if buildings will be cleared and not replaced.

13.4 Keep the work site clean and orderly by removing debris in a timely manner.

13.5 In the event of any spill or release, refer to Chapter 16, “Spills”.

13.6 Inform on-site subcontractors of all BMPs for wastes and discharges and ensure that they are followed.

13.7 Maintain good housekeeping practices for management and disposal of waste, discharges, and spills. Ensure that appropriate provisions are written into contracts to enforce these policies.

13.8 Protect nearby storm drains to minimize chances of inadvertent disposal of residual paint or liquid and sediment.
Building Materials and Waste Storage

13.9 Store building material under cover or in contained areas. For outdoor storage at a construction site:

- Minimize dust and debris from piles of wood, gravel, soil, or other materials.
- Use weighted tarps or other appropriate measure to protect from rain.
- Keep the storage area clean every day.
- Protect nearby storm drains.

13.10 Store generated waste in proper containers and keep the containers closed. Dispose of waste properly. (See Chapter 17, “Hazardous Waste”.)

Painting

Meet the following requirements when painting.

Before Painting

13.11 When scraping to remove old paint, spread a tarp to collect dust and paint chips. If the paint contains lead or tri-butyl tin, dispose of the paint chips as hazardous waste. (See Chapter 17, “Hazardous Waste”.)

13.12 Mix paints indoors before starting work, when possible.

13.13 Use tarps while you paint and place in-use paint buckets in a pan or on plastic sheeting.

13.14 At the end of the workday, store paint buckets and barrels of materials away from contact with stormwater.

During Paint Cleanup

13.15 If water-based paints are used, clean brushes and equipment in a sink connected to the sanitary sewer. Never discharge paint or rinse water to the storm drain or ground.

13.16 If oil-based paints are used, solvents used for cleaning brushes and equipment must be managed as a hazardous waste and may not be poured down the sink or to a storm drain.

13.17 Keep leftover paint, solvents, and other supplies for a later use, or deliver unused paints to a SLAC approved recycler or contact the Waste Management (WM) Group for disposal.

13.18 Empty paint cans and other containers may be a hazardous waste. Latex paint cans are not hazardous waste if the paint is dry. Contact WM for guidance.

Spray Painting

13.19 Use temporary scaffolding to hang drop cloths or draperies to shield you from the wind and to collect overspray. Arrange the draperies to minimize the spreading of windblown materials.

13.20 Be aware of air quality restrictions on spray paints that use volatile chemicals. Consider a water-based spray paint for better air quality compliance.
Outdoor Surface Treatments

13.21 Wood preservatives, pavement seal coating, and other outdoor surface treatments commonly contain metals, pesticides, solvents, or polymers that are hazardous materials. Handle and dispose of them properly, as follows:

- Apply only as much of the chemical as the surface can absorb or as needed to cover the paved area.
- Soak up excess chemicals with absorbent material or rags rather than allowing them to flow to the storm drains or soak into the soil.
- If the chemicals spill, clean up promptly using techniques described in Chapter 16, “Spills”.
- When sealing pavement, prevent the sealant from reaching the gutters or drains. Use absorbent booms, or stuff rags into storm drain openings.
- When treating a roof with wood preservative or sealant, line the gutters with rags. Dispose of the rags properly, as hazardous waste if the substances you are using are hazardous.
- If cleaning a roof or sidewalk before applying preservative, sweep thoroughly to remove loose particles first and then wash with water if necessary. Any wash water will need to be collected and discharged to the sanitary sewer, pending SLAC approval.
- Collect wash water from downspouts or drains where possible and remove particles.
- Avoid applying surface treatment chemicals during the wet weather season.

Concrete

13.22 Advise concrete truck drivers of the designated washout areas before they start the job.

13.23 Allow washout of concrete mixers only in designated washout areas. These must be away from storm drains and waterways. Whenever possible, recycle washout by pumping it back into mixers for reuse. Dispose or recycle settled, hardened concrete. Never dispose of washout into the street, storm drains, drainage ditches, or streams.

13.24 Secure bags of cement after they are open. Keep windblown cement powder away from gutters, storm drains, rainfall, and runoff.

13.25 When cleaning up after driveway or sidewalk construction use dry methods whenever possible. If water is needed, make sure runoff does not reach gutters or storm drains. If necessary, divert runoff with temporary berms.

13.26 Prevent aggregate wash from driveway/patio construction from entering storm drains. Either

- Hose aggregate wash onto dirt areas and spade into dirt;
- Drain onto a bermed surface, pump and dispose of it properly; or
- Block a storm drain inlet and vacuum wash water from a catchment.

13.27 Protect nearby storm drain inlets or channels when saw cutting to prevent concrete particles from entering the storm drainage system. Collect saw cutting fluids for proper disposal.

13.28 Protect applications of fresh concrete and mortar from rainfall and runoff until the material has dried.
Sand Blasting

13.29 Sand blasting can be controlled to keep particles off paved surfaces and out of storm drains as follows:

- Place tarps beneath the area being cleaned to capture the blasting medium and particles.
- Hang tarps or drop cloths to enclose the work area, using temporary scaffolding if necessary. Arrange the drop cloths to protect the work area from wind, and to capture airborne particles.
- Curtail operations during rainy or windy conditions.
- Collect dust and particles from the drop cloths frequently, before producing a pile too large to handle easily.

References

SLAC Environment, Safety, and Health Manual (SLAC-I-720-0A29Z-001)

- Chapter 26, “Stormwater”
  - Stormwater: Best Management Practices Index (SLAC-I-750-0A16V-001)
  - Stormwater: General Requirements (SLAC-I-750-0A16S-014)
  - Stormwater: Construction Requirements (SLAC-I-750-0A16S-009)

- Chapter 11, “Excavation Safety”
- Chapter 16, “Spills”
- Chapter 17, “Hazardous Waste”

Other SLAC Documents

- Water Resources
- Hazardous Waste Management