



# CONSTRUCTION STORM WATER POLLUTION PREVENTION BULLETIN

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## Materials Storage and Handling

Improper materials storage and handling has been identified as the number 4 most common deficiency on construction sites. Proper controls must be used to control materials from entering storm drains or watercourses. This bulletin reviews common challenges and recommends corrective actions to better manage the storage and handling of materials.


- ◆ Include BMPs to manage materials storage and handling that are specific to the project.
- ◆ The resident engineer is responsible for reviewing and approving the SWPPP.
- ◆ The SWPPP inspection checklist should be tailored to include specific questions to prompt the contractor to properly handle and store materials.



**Materials should not be placed on the ground directly near conveyance systems**



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**The National Pollutant Discharge Elimination System (NPDES) Construction General Permit for Storm Water Discharges Associated with Construction Activity requires the use of BMPs to minimize or eliminate exposure of stormwater to contaminants. [Section A.5.b(5)]**

## Secondary Containment Facilities

Construction sites often lack adequate secondary containment facilities.

- ◆ Liquids, petroleum products, and substances listed in CFR Title 40, Parts 110, 117, and 302 should be stored within secondary containment facilities.
- ◆ During the rainy season, each containment facility should have a cover to prevent overflows or loss of storage capacity.



**Inadequate secondary containment**

## Contract Documents

The contract documents can pave the way for effective storm water pollution prevention. The inclusion of specific requirements for installation, maintenance, inspection and corrective action in the standard special provisions (SSPs) and *Standard Plans* provide a mechanism for enforcing effective storage and handling of materials. Look for BMPs and SSPs that may apply to projects that have potential discharge materials during storage and handling.

- ◆ 07-340, Water Pollution Control
- ◆ 07-345, Water Pollution Control
- ◆ 07-346, Construction Site Management
- ◆ S5-630, Relations with California Regional Water Quality Control Board

## Storm Water Pollution Prevention Plan

Check the Storm Water Pollution Prevention Plan (SWPPP).

## Bagged and Boxed Material

Bagged and boxed material must also be properly stored.

- ◆ Store materials on pallets and do not allow them to accumulate on the ground.
- ◆ Protect from wind and rain during the rainy season and prior to predicted storm events.

## Training

Training is absolutely required.

- ◆ SSP 07-346 requires that the contractor train employees and subcontractors on proper material storage and handling practices.
- ◆ The contractor is also required to conduct regular meetings to reinforce effective practices.

## Effective Inspections

Inspections are most effective when conducted jointly by the contractor and Caltrans inspectors.

- ◆ Minimum inspection frequency is defined in the project specifications. Deficiencies should prompt corrective action and SWPPP amendment, if necessary. For example, if inspection shows the secondary containment area was constructed using material that is degraded by the stored material, then the secondary containment material should be replaced immediately.

## Enforcement Procedures

If the contractor does not respond to requests for improvement in storing and handling materials, the resident engineer must prepare a mandatory non-compliance letter. If the contractor is not responsive, execute appropriate contract enforcement mechanisms to ensure that the contractor complies.



Questions or comments may be directed to Hamid Hakim, HQ Construction Storm Water Coordinator, [hamid\\_hakim@dot.ca.gov](mailto:hamid_hakim@dot.ca.gov), or your local Construction Storm Water Coordinator.

