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Concrete Waste Management

mproper management of concrete waste has been identified as the No. 2 most common deficiency on construction sites. Proper controls must be used to prevent concrete waste from entering storm drains or watercourses. This bulletin reviews common challenges and recommends corrective actions to better control concrete waste.



The National Pollutant Discharge Elimination System (NPDES) Construction General Permit for Storm Water Discharges Associated with Construction Activity requires the use of (BMPs) to eliminate or reduce non-stormwater discharges. (Section A.9)

Contract Documents

Contract documents can pave the way for effective storm water pollution prevention. Including specific requirements for installation, maintenance, inspection and corrective action in the standard special provisions (SSPs) and *Standard Plans* provide the means for enforcing effective concrete waste management. Look for BMPs and SSPs that may apply to projects that have potential for concrete waste management.

- ♦ 07-346, Construction Site Management
- 07-405, Temporary Concrete Washout Facility
- 07-406, Temporary Concrete Washout (Portable)
- ♦ S5-630, Relations with California Regional Water Quality Control Board
- ♦ 07-340, Water Pollution Control
- ♦ 07-345, Water Pollution Control
- Standard Plan T59

Storm Water Pollution Prevention Plan

Check the Storm Water Pollution Prevention Plan (SWPPP).

- Include BMPs to manage concrete waste.
- The resident engineer (RE) is responsible for reviewing and approving the SWPPP.
- Maintenance of concrete washouts is essential to sustain effectiveness.
- The SWPPP inspection checklist should be tailored to include specific questions to prompt the contractor when maintenance is required.

Spills or Washouts from Designated Washout Facility

Spills and washouts can be managed effectively.

- A concrete washout sign must be installed at each temporary concrete washout facility to inform concrete equipment operators to use the designated facilities.
- The RE should ensure that the signage is properly installed and visible to the operators.
- Many concrete pumps and hoses leak during use. Temporary impermeable containment should be provided during these operations, and also when pump hoses need to be cleaned away from the designated concrete washout facility.
- Immediately contain the spread of the spill, recover spilled materials, clean the area, and properly dispose of materials. A stockpile of sand bags and a shovel or broom should be kept on site for use when containing spills.

Installation

Proper installation of the temporary concrete washout facility, as detailed in Standard Plan T59, is important to assure its effectiveness.

- Locate the washout facility 50 feet from storm drain inlets, drainage facilities, and watercourses.
- Construct using watertight material (refer to SSP 07-405 and 07-406, and SP T59)



Improperly constructed washout

Maintenance

To be effective, concrete washouts need to meet specifications and be maintained.

- Clean or construct new facilities when filled to 75% of its capacity.
- Cover during rain events to prevent overflows.

Inspections

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

- Minimum inspection frequency is defined in the project specifications. At minimum inspect daily during concrete pouring operations.
- Inspect for damage (i.e., tears in liner, breaks in structure, etc.). The facility should be promptly repaired as needed to assure that it is watertight.

Enforcement Procedures

If the contractor does not respond to requests for improvement in controlling concrete waste management, the resident engineer should prepare a mandatory non-compliance letter. If the contractor is not responsive, execute appropriate contract enforcement mechanisms to ensure the contractor complies.



