

Storm Water Inspections during Storm Events

October and November signal the start of the rainy season in most parts of the state. With predictions of rain and snow come the requirement to conduct pre-storm, intra-storm and post-storm inspections of construction sites. This bulletin reviews inspection requirements and strategies for ensuring contractor compliance with inspection requirements.

Who and When?

The National Pollutant Discharge Elimination System (NPDES) Statewide Construction Permit requires Storm Water Pollution Prevention Plan (SWPPP) construction projects to be inspected when a storm is predicted or occurs.

The contract special provisions require the contractor to include an inspection plan in the SWPPP or Water Pollution Control Program (WPCP) and to conduct inspections in accordance with the approved plan. At a minimum, the plan must require inspections:

- Before a predicted storm event,
- After a storm event,
- At 24-hour intervals during extended storms, and
- As specified in the project special provisions.

During the course of work, the Caltrans Construction Manual requires the Resident Engineer to inspect the contractor's operations for compliance with the project SWPPP/WPCP, including deployment of Best Management Practices (BMPs), and to ensure that the contractor adheres to the inspection schedule set forth in the SWPPP/WPCP.

Pre-Storm Inspection Strategy

The RE should inspect the disturbed soil areas (DSAs) of the project to determine if any areas require protection.

Non-active DSAs are to be protected within 14 days of cessation of activity or one day prior to the onset of precipitation, whichever occurs first. The recommended combinations of soil stabilization, sediment controls, and barriers for non-active DSAs are shown in Table 2-2 of the Construction Site RA4P.7 Manual.

Active DSAs are to be protected prior to the onset of precipitation and throughout each day precipitation is forecast. Recommended combinations of soil stabilization, sediment controls, and barriers are shown in Table 2-3 of the BMPs Manual.

The RE also reviews the project for compliance with non-storm water BMPs. Prior to the storm, ensure that the contractor:

- Covers secondary containment areas.
- Maintains concrete washouts to comply with minimum freeboard requirements.
- Cleans up oil and material spills.
- Inspects/maintains equipment.
- Maintains project ingress and egress points and sweeps paved areas to prevent sediment or debris from being tracked or transported from the construction site.

Intra-Storm Inspections

For extended storms, the contractor is required to inspect the project at 24-hour intervals. The contractor's inspection report should include an evaluation of BMP effectiveness, and note any failures, corrective actions, or sampling events that occurred.

Post-Storm Inspections

Following the storm, the contractor is required to inspect the project to determine the adequacy of the deployed BMPs and identify maintenance that may be needed. The contractor's



Ensure that soil binder BMPs deployed before a predicted storm have adequate time to cure per manufacturer's specifications.



This concrete washout has been cleaned in preparation for a rain event to provide adequate holding capacity.

Reminder:

On SWPPP projects, if there is the potential for the discharge of non-visible pollutants from the construction site, the contractor is required to monitor discharges in accordance with the Sampling

inspection report should note the following:

and Analysis Plan in the Project SwPPP.

- Effective areas, as well as deficient areas. This helps to document which measures are effective.
- Rills in slopes. Rills may indicate that soil stabilization or top-of-slope diversion BMPs are not adequate.
- Any failure of a linear barrier and the probable cause (improper installation, lack of maintenance, etc.).
- Any failure in secondary containment facilities or covers.

For BMP failures that result in an uncontrolled discharge of storm water, ensure that the contractor submits a Notice of Discharge to the RE.

Inspection Reports

All contractor inspection checklists and reports must be submitted to the RE or Storm Water Inspector within 24 hours.

- Review the report for completeness and signature of the contractor's Water Pollution Control Manager.
- If the report indicates that BMP maintenance and/or repair is needed, ensure that the contractor completes and documents the work in a follow-up report.
- Place all inspection reports in the project Category 20 file.

