

The Monthly Dirt

December 2017

A Monthly Newsletter on the California Construction General Permit
By WGR Southwest, Inc.

The Pre-Storm Warm-up

With the holidays come bowl games ... but before the big game starts, commentators take to the air on a pre-game show to talk about what to expect from the players and coaches and to speculate on the outcome. One of the longest running pre-game shows is CBS's "**The NFL Today**" which first aired on September 17, 1961. Some of the show's more famous hosts included Brent Musburger, Greg Gumbel, and Terry Bradshaw. Storm events are like big holiday bowl games in that they also need to have a type of warm-up show in which the storm water expert (QSP) speculates on how the erosion and sediment game will play out and what will be the outcome for the site. In this edition of **The Monthly Dirt**, we will talk about the role and purpose of the pre-storm inspection and provide analysis of how the BMP team can best prepare for the event.

The Construction General Permit requires the following ... *within 2 business days (48 hours) prior to each qualifying rain event, dischargers shall visually observe (inspect):*

- i. *All storm water drainage areas to identify any spills, leaks, or uncontrolled pollutant sources. If needed, the discharger shall implement appropriate corrective actions.*
- ii. *All BMPs to identify whether they have been properly implemented in accordance with the SWPPP. If needed, the discharger shall implement appropriate corrective actions.*
- iii. *Any storm water storage and containment areas to detect leaks and ensure maintenance of adequate freeboard.*

Pre-Game Analysis: Specifically, the pre-storm inspections should review the following to make sure that the project is ready for rain:

- 1. Look for pollutant sources.** Pre-storm inspections should look for oil and chemical spills, stains, and residue on the ground or on containers. Good places to look include under parked vehicles and equipment, around waste bins and port-a-potties, near material storage areas and fueling tanks, and concrete and paint washout areas. Trades and contractors to closely monitor during the pre-storm inspection include civil – earth moving contractors (especially their equipment); concrete delivery and pumping operations; saw cutting and grinding contractors and the resulting slurry from their activities; stucco, masonry, and tile contractors; painters; and landscapers. In particular, look for signs of spills or for spent absorbent that has not yet been cleaned up. Make sure that waste containers are covered at the end of each day and during storm events. Inspect material storage areas to ascertain that lids and caps are securely in place on containers, residue is not on the outside of the container, and materials are kept under cover.
- 2. Evaluate the Readiness of BMPs for the Storm Event.** When BMPs are still on the pallet and are the only thing covered by plastic, the project site is most likely not going to perform well in the storm event. Pre-storm inspections should evaluate both sediment and erosion controls. Sediment controls that should be placed before the rain event include perimeter controls, linear slope controls, drain inlet protection, track out control measures, and sediment traps / basins. The pre-storm inspection should verify that these devices have been properly installed and are in good condition. Accumulated sediment needs to be removed and any damaged sections should be replaced. Disturbed soil is ready for rain when it is covered. Exposed soil will perform poorly on "game day". The covering can be temporary or permanent but most likely will take a different form at various places around the site. Small areas can be easily covered with hand-scattered straw, wood mulch, or erosion control blankets. Larger areas should have a sprayed-on application of hydromulch.

3. Inspect basins and containment. Some projects rely on storm water basins to capture runoff and to settle out solids. When this is the case, the pre-storm inspection should verify that the basin is in good repair and ready to receive runoff water. It may be necessary to de-water the basin ahead of the storm to make room for the next storm. Also, inspect for excessive sediment that may have filled the basin and reduced its holding capacity. It may be necessary to remove some of the accumulated sediment. Containment structures vary from large fueling areas to relatively small containment trays under portable sanitary facilities. Containment is also found in material storage and contractor staging areas.

Pre-Game Report: It is important to get the information gathered during the pre-game analysis into the appropriate hands. Just as scouting reports and analysis of the opponent's previous games need to be filtered to coaches and players, so do the pre-storm inspection results. With Risk Level 2 and 3 projects this is accomplished through the use of the Rain Event Action Plan (REAP). The pre-storm inspection findings are used to populate the REAP form which needs to be completed within 48 hours of the anticipated storm event and needs to be physically present on site within 24 hours. The intent of the permit is to not have it placed in a binder on site in 24 hours; but rather have it available to and read by key construction staff in order to make the necessary adjustments to their site before the rain event. Risk Level 1 and LUP projects are not required to prepare REAPs, but should use the pre-storm inspection reports just like a REAP to help them prepare for rain.

Pre-Game Warm-up: Before the game, there is a lot of activity happening on the field. Players are stretching out, warming-up, and going over last-minute preparations. Grounds crews are preparing the field and equipment making sure that everything is in place and functioning properly for the sporting event. On construction sites, the 24-hours before a rain event should be equally as active making preparations for "game day". Crews should be knocking out the punch list on the REAP and/or pre-storm inspection report. They should be covering exposed materials and soil, removing accumulations of sediment, securing sediment control devices, sweeping roadways, covering waste and concrete wash-out bins, and cleaning up any spills.

Kick-off: After all the warm-ups and pre-game festivities, it is finally game time. When the storm moves in, you will be able to relax knowing that your pre-game preparations have paid off. Now you can watch erosion and sediment controls slug it out with the forces of nature in a battle for compliance. Certainly there will be lessons to learn and areas that did not go as planned. But those can be the subject of the next pre-storm warm-up. **MD**

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Please contact us if you have any questions ...

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