
North Coast Regional Water Quality Control Board

April 24, 2015

Mr. Charlie Fielder, District 1 Director
California Department of Transportation
P.O. Box 3700
Eureka, CA 95501-3700
Charlie.Fielder@dot.ca.gov

Dear Mr. Fielder:

Subject: **Notice of Violation, Caltrans State Route 101 Willits Bypass Project**

Files: Highway 101- Willits Bypass Project
WDID No. 123C366419
ECM PIN Numbers: SM-820804, CW-750104

We find that the California Department of Transportation (Caltrans) has violated the Statewide Construction General Permit (State Water Resources Control Board Order No. 2012-0006-DWQ) (CGP). This notice of violation is supported by Active Treatment System (ATS) data submitted to the Storm Water Multi-Application and Report Tracking System (SMARTS), the Willits Bypass Project's December 2014 Monthly Monitoring Report, and the February 6, 2015, site inspection conducted by State and Regional Water Board staff.

Violations

The following CGP requirements were violated:

1. Provision III.B- Discharge Prohibitions:

All discharges are prohibited except for the storm water and non-storm water discharges specifically authorized by this General Permit or another NPDES permit.

Caltrans violated this condition by allowing an unauthorized non-storm water discharge to South Haehl Creek on December 11, 2014. The Daily Observation and Inspection Report for December 11th, 2014, indicates that "The ATS experienced technical issues and was temporarily shut down; accumulated storm water in the basins overflowed through temporary DS-15 to Haehl Creek. The plug at temporary

DS-15 outlet had been removed to allow storm water from the basins to flow to Haehl Creek. Pump at DS-23 continued operating sending storm water to Basin 1 where it overflowed to DS-15 and on into Haehl Creek.” This is an unauthorized non-storm water discharge because the collected storm water intended for treatment was discharged untreated.

2. Attachment F, Provision M.2.g- Operational and Compliance Monitoring:

Effluent shall be monitored and recorded for residual chemical/additive levels;

Attachment F, Provision H.3- ATS Instrumentation:

Systems shall be equipped with a data recording system, such as data loggers or webserver-based systems, which records each measurement on a frequency no longer than once every 15 minutes.

Caltrans violated this condition by failing to test residual chemical (i.e., chitosan) at required intervals. Operation and Maintenance Monitoring Logs indicate that residual chitosan was consistently not being measured at required intervals, if at all. For instance, between February 4, 2015 and February 9, 2015, residual chemical should have been tested 156 times, but was only tested 9 times. Between November 24, 2014, and December 9, 2014, residual chemical should have been tested 182 times, but was only tested 4 times.

Additionally, Section 1.a of the September 15, 2015, ATS Monitoring, Sampling, and Reporting Plan submitted by Caltrans as part of the Operations and Maintenance Plan pursuant to Attachment F, Provision J of the CGP, notes that “Residual chemical field testing for polymer will be performed hourly during operation of the ATS systems.” However, residual chemical testing consistently did not meet this standard. For instance, between February 4th, 2015, and the 9th, 2015, residual chemical should have been tested at least 38 times according to the one-hour standard, but was tested only 9 times. Between November 24, 2014, and December 9, 2014, residual chemical should have been tested 60 times by the one hour standard, but was tested only 4 times. In several instances, residual chemical was not tested at all, even during discharge periods as long as 7 hours.

3. Attachment F, Provision I.2.b- ATS Effluent Discharge:

NELs for discharges from an ATS: Residual Chemical shall be <10% of MATC for the most sensitive species of the chemical used.

Caltrans violated these conditions by:

- 1) Failing to properly test for residual chitosan, as discussed in item 2, above; and
- 2) Failing to accurately report residual chitosan in effluent on February 6, 2015.

During the State Water Board's February 6, 2015, Willits Bypass Field Inspection, residual chitosan was tested and colorimetrically indicated, but reported as "ND" (non-detect) in the field log (SMARTS Attachment ID 1369223, page 8, and described in the "Field Inspection" section of the February 6, 2015, Inspection Report, Page 30).

According to the test method performed on February 6, 2015, the test result indicated residual chitosan concentration between 0.1 and 1 parts per million (ppm), a range of concentration that potentially exceeds the 0.4 ppm concentration that is less than 10% of the Maximum Acceptable Toxicant Concentration (MATC). Please refer to the February 6, 2015, Inspection Report for a detailed explanation of the residual chemical test methodology and interpretation.

This detection of chitosan should have triggered recirculation of the effluent while a sample was sent to a laboratory to determine if residual chitosan was less than 10% of the MATC (i.e., 0.4 ppm or less) per Provision I.2.b. However, because the apparent detection of chitosan did not trigger this process, Caltrans cannot effectively demonstrate that residual chemical levels were less than 10% of the MATC.

4. Attachment F, Provision M.4- Active Treatment System (ATS) Reporting and Recordkeeping:

At a minimum, every 30 days a LRP representing the discharger shall access the State Water Boards Storm Water Multi-Application and Report Tracking System (SMARTS) and electronically upload field data from the ATS. Records must be kept for three years after the project is completed.

Caltrans violated this condition by failing to upload field data for ATS operations to SMARTS within the 30 day minimum requirement. SMARTS records indicate that sampling data acquired during November 11, 2014 to December 2, 2014 were submitted on February 10, 2015; Operations and Maintenance Reports acquired during the same period were submitted on February 11, 2015. SMARTS records indicate that sampling data acquired on January 5, 16, and 17, 2015, were submitted on February 20, 2015; Operations and Maintenance Reports acquired on January 16 and 17, 2015, were submitted on February 20, 2015.

We understand that Caltrans intends to keep the ATS system available for operation until the end of May 2015. Caltrans must implement the following requirements for any subsequent use of the ATS:

- 1) Conduct residual chitosan testing no less than each hour of operation when discharge is occurring;
- 2) Submit photographic results of residual chitosan testing for every other hourly test, starting with the first test after start-up. The photographic results shall be included in the monthly data reports uploaded to SMARTS; and

- 3) The monthly data reports must record the start and end time of batch treatment as well as the associated batch treatment toxicity testing results required prior to discharge. Previous ATS operations may have switched to batch treatment mode; data submissions do not clearly record this information nor demonstrate compliance with the associated batch toxicity testing.

If you have any questions, please contact Brendan Thompson of my staff, at Brendan.Thompson@waterboards.ca.gov or (707) 576-2699.

Sincerely,

Original electronically signed by

David Leland
Assistant Executive Officer

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cc: U.S. Army Corps of Engineers, Regulatory Functions - San Francisco District
Sahrye.E.Cohen@usace.army.mil
Holly.N.Costa@usace.army.mil
California Department of Fish and Wildlife, Bay Delta Region
JoAnn.Dunn@wildlife.ca.gov
Caltrans
David.Melendrez@dot.ca.gov
Alex.Arevalo@dot.ca.gov
Geoffrey.Wright@dot.ca.gov
Michael.McKeon@dot.ca.gov
Regional Water Board
Brendan.Thompson@waterboards.ca.gov
Mona.Dougherty@waterboards.ca.gov
Stephen.Bargsten@waterboards.ca.gov
Fred.Blatt@waterboards.ca.gov
Shin-Roei.Lee@waterboards.ca.gov