

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL VALLEY REGION

ADMINISTRATIVE CIVIL LIABILITY COMPLAINT R5-2009-0558  
IN THE MATTER OF

THE CALIFORNIA DEPARTMENT OF TRANSPORTATION  
STATE ROUTE 65 LINCOLN BYPASS PROJECT  
PLACER COUNTY

This Complaint is issued to the California Department of Transportation (hereafter Discharger) pursuant to California Water Code (CWC) section 13385, which authorizes the imposition of Administrative Civil Liability, and CWC section 13323, which authorizes the Executive Officer to issue this Complaint. This Complaint is based on findings that the Discharger violated provisions of the General Permit for Storm Water Discharges from the State of California, Department of Transportation Properties, Facilities, and Activities, Order 99-06-DWQ (NPDES No. CAS000003)(Caltrans Storm Water Permit).

The Executive Officer of the Central Valley Regional Water Quality Control Board (Central Valley Water Board or Board) finds the following:

**BACKGROUND**

1. The Discharger is responsible for the design, construction, management, and maintenance of the State's highway system, including freeways, bridges, maintenance facilities, and related properties. The State Route 65 Lincoln Bypass Project (Lincoln Bypass Project) consists of the construction of 12.8 miles of new freeway around the City of Lincoln in Placer County. This project includes nine new bridge crossings over natural streams and is anticipated to take four years to complete, from 2008 to 2012. The portions of the project at issue in this complaint are construction areas around the South Ingram Slough (SIS), North Ingram Slough (NIS), Moore Road, and Ferrari Ranch Road.
2. The Caltrans Storm Water Permit regulates storm water discharges from all Caltrans properties, facilities, and activities, including construction activities. The Caltrans Storm Water Permit requires the Discharger to prepare and implement a Construction Management Program in compliance with the General Permit for Storm Water Discharges Associated with Construction Activities, Order 99-08-DWQ (NPDES No. CAS000002) (Construction General Permit).
3. The Caltrans Storm Water Permit also requires development of a comprehensive Storm Water Management Plan, submittal of a Notice of Construction prior to construction activities, and development and implementation of a Storm Water Pollution Prevention Plan (SWPPP), as required by the Construction General Permit.
4. The Construction General Permit requires the implementation of best management practices (BMPs), using best available technology economically achievable (BAT) and best conventional control technology (BCT) to reduce pollution from storm water runoff

from construction sites. The Construction General Permit also includes a section with SWPPP requirements. Section A of the Construction General Permit requires the SWPPP to be amended if the discharger violates any condition of the Construction General Permit or if the discharger does not achieve the general objective of reducing or eliminating pollutants in storm water discharges.

5. In August 2008, on behalf of the Discharger, DeSilva Gates and FCI Constructors submitted the SWPPP for "*Placer County near Lincoln from 0.6 KM North of Twelve Bridges Overcrossing to 1.3 KM South of Bear River*" (Lincoln Bypass Project). DeSilva Gates Construction and FCI Constructors are the Discharger's primary contractors for the Lincoln Bypass Project.
6. The Lincoln Bypass Project SWPPP requires storm water discharges to be documented using a Notice of Discharge form, which is then submitted to the Board. The SWPPP states that one condition requiring documentation is when storm water from a disturbed soil area is discharged to a waterway without treatment by an effective combination of temporary erosion and sediment control BMPs. The Discharger must also document when storm water is discharged to a waterway or a storm drain system where the control measures have been overwhelmed or have not properly been maintained or installed.
7. On 4 September 2008, the Discharger submitted a *Notice of Construction for the Lincoln Bypass Project*, as required by the Caltrans Storm Water Permit. The Notice of Construction includes brief project information, project and construction contacts, a project map, and lists the tentative start date as 15 August 2008 and the tentative end date of 12 December 2013.
8. The annual average precipitation in the Lincoln area is approximately 22 inches per year, with the majority of precipitation falling between January and March. To estimate storm water runoff volumes for discharges at the Lincoln Bypass Project site, Board staff used the Lincoln Airport and the Teal Hollow (Lincoln) weather stations for precipitation data.

## **PERMIT REQUIREMENTS**

9. The Caltrans Storm Water Permit states, in part, the following:

### *A. GENERAL DISCHARGE PROHIBITIONS*

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6. The discharge of sand, silt, clay, or other earthen materials from any activity, including land grading and construction, in quantities which cause deleterious bottom deposits, turbidity, or discoloration in waters of the State or which unreasonably affect or threaten to affect beneficial uses of such waters, is prohibited.

### *C-2. RECEIVING WATER LIMITATIONS FOR CONSTRUCTION ACTIVITIES*

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2. The SWPPP developed for the construction activity covered by this NPDES Permit shall be designed and implemented such that storm water discharges and authorized nonstorm water discharges shall not cause or contribute to an exceedance of any applicable water quality standards contained in a Statewide Water Quality Control Plan and/or the applicable RWQCB's Basin Plan.
3. Should it be determined by Caltrans, SWRCB or RWQCB staff that storm water discharges and/or authorized nonstorm water discharges are causing or contributing to an exceedance of an applicable water quality standard, Caltrans shall:
  - a. Implement corrective measures immediately following discovery that water quality standards were exceeded, followed by notification of the RWQCB by telephone as soon as possible but no later than 48 hours after the discharge has been discovered. This notification shall be followed by a report within 14 days to the appropriate RWQCB, unless otherwise directed by the RWQCB, describing (1) the nature and case of the water quality standard exceedance; (2) the BMPs currently being implemented; (3) any additional BMPs which will be implemented to prevent or reduce pollutants that are causing or contributing to the exceedance of water quality standards; and (4) any maintenance or repair of BMPs. This report shall include an implementation schedule for corrective actions and shall describe the actions taken to reduce the pollutants causing or contributing to the exceedance.
  - b. Caltrans shall revise its SWPPP and monitoring program immediately after the report to the RWQCB to incorporate the additional BMPs that have been and will be implemented, the implementation schedule, and any additional monitoring needed.
  - c. Nothing in this section shall prevent the appropriate RWQCB from enforcing any provisions of this permit while Caltrans prepares and implements the above report.

#### H. CONSTRUCTION PROGRAM MANAGEMENT

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2. The Construction Management program shall be in compliance with requirements of the NPDES General Permit for Construction Activities (Construction General Permit) not including NOI filing. The current Construction General Permit is SWRCB Board Order 99-08-DWQ.

#### 10. The Construction General Permit states, in part, the following:

##### A. DISCHARGE PROHIBITIONS

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3. *Storm water discharges shall not cause or threaten to cause pollution, contamination or nuisance.*

##### SECTION A: STORM WATER POLLUTION PREVENTION PLAN

6. *At a minimum, the discharger/operator must implement an effective combination of erosion and sediment control on all disturbed areas during the rainy season.*

## CHRONOLOGY

11. Board staff conducted seven inspections of the Lincoln Bypass Project between 11 December 2008 and 5 May 2009. All inspection reports with representative photographs are attached to this complaint as follows:

Date	Description	Attachment
11 December 2008	Field Meeting/Site Inspection	A1
23 December 2008	Site Inspection	A2
2 January 2009	Site Inspection	A3
22 January 2009	Wet Weather Inspection	A4
13 February 2009	Wet Weather Inspection	A5
23 February 2009	Wet Weather Inspection	A6
5 May 2009	Site Inspection	A7

12. The Discharger submitted 17 Notice of Discharge reports for discharges of storm water and sediment to surface waters and/or City of Lincoln storm water systems. A summary table of these discharges is included as Attachment A8.
13. On 11 December 2008, Board staff met with Caltrans and DeSilva Gates (Caltrans' contractor) and reviewed construction activities at the SIS Bridge, the Ferrari Ranch Road overcrossing, and the NIS Bridge. On this date, the contractor was track walking the slope of Abutment #1 immediately south of SIS by running a small Caterpillar tractor up and down the slope, then covering bare soil areas with an erosion blanket. A single silt fence was placed at the base of the slope, which was approximately ten feet from the water's edge. The opposite slope north of the slough was stabilized with a straw mat and blanket and then weighted down with rock bags. Board staff discussed the BMPs being implemented and expressed concern that they might not be effective in stabilizing the disturbed clay soils on the steep slopes adjacent to the sensitive water bodies.
14. On 23 December 2008, Board staff inspected the construction area near the SIS. This inspection followed a Notice of Discharge report submitted by the Discharger on 21 December 2008, describing a discharge of approximately 13,315 gallons of storm water and sediment to the SIS. During the inspection, Board staff identified the top of Abutment #1, located immediately south of the SIS, as an area of concern for storm water management. The top of Abutment #1 consists of compacted fill, and no erosion control measures had been installed on the exposed clay soils. A berm had been constructed around much of the perimeter of the abutment to contain runoff. Board staff observed the area where the berm and erosion blanket BMPs failed when storm water collected near the abutment face and flowed under the erosion blanket, down the abutment face and into the SIS. Board staff also observed sediment-laden storm water collecting on the dirt access road north of SIS, which could potentially flow into the SIS. Board staff met Caltrans and DeSilva Gates in the field and discussed storm water management problems identified during the inspection.

15. On 2 January 2009, Board staff accompanied Caltrans staff on an inspection of the SIS and NIS construction areas. The inspection was conducted after a week of intermittent showers, and the soils on-site were saturated. At SIS, no erosion control BMPs had been installed on top of Abutment #1; however, a flexible pipe had been installed to drain the abutment surface into the roadside drainage ditch west of the construction area. At the NIS, sediment-laden storm water flowing in the roadside drainage ditch near the slough discharged into an existing pond that is connected to NIS. The drainage ditch was sparsely covered with vegetation; however, there were no erosion control measures on the nearby graded areas, resulting in sediment-laden storm water discharging to the roadside drainage ditch. Board staff discussed the need for soil stabilization with Caltrans staff.
16. On 16 January 2009, Board staff met with Caltrans staff at the Rocklin Field Office to discuss storm water management problems at the Lincoln Bypass Project. This meeting followed two Board staff inspections of the site and three Notices of Discharge from Caltrans (SIS discharges on 21 December 2008 and 24 December 2008; NIS discharge on 24 December 2008). Board staff discussed the need for additional soil stabilization work, covering active work areas prior to rainfall events, and the need for treatment systems. Caltrans staff stated that they would work on soil stabilization items with their contractor and that they had ProTech GCS, Inc. ready to treat discharge water if needed.
17. On 22 January 2009, Board staff inspected the SIS and the NIS construction areas during a storm event and observed significant storm water management problems. At SIS, sediment-laden water was observed discharging into the slough at three locations. Storm water runoff from the exposed soils on top of Abutment #1 drained to a flexible pipe that extended over the side of the abutment and into a roadside drainage ditch. Rock bag check dams and silt fence dams were placed in the ditch to provide small detention basins; however, sediment-laden water continued to discharge from this drainage ditch into SIS. Storm water also collected in the roadside drainage ditch west of Abutment #3 and discharged through a culvert into SIS. Storm water runoff from the un-surfaced access road leading to the top of Abutment #1 concentrated in the inside ditch and flowed over the silt fence and other sediment control BMPs and into SIS. At the NIS crossing, sediment-laden storm water runoff was observed discharging into the slough and along the slough downstream from the crossing. Sediment-laden water had discharged from the NIS construction area into the slough, and storm water collecting in the roadside drainage ditch discharged sediment into a pond adjacent to the slough and then into NIS.

Generally, disturbed soils and active construction sites within the Lincoln Bypass Project area had not been effectively stabilized to prevent the suspension of fine sediment in storm water runoff and alternative filtration methods had not been employed to protect surface waters. Staff noted that the project presents a significant threat to water quality due to the inadequate and ineffective erosion and sediment control BMPs installed at the site, the extensive disturbed soil areas, and the proximity of construction activities to surface waters.

Board staff met with members of DeSilva Gates Construction Company in the field and discussed storm water management problems identified during the inspection.

18. On 4 February 2009, a Notice of Violation was issued to the Discharger for the violations observed during the 22 January 2009 inspection. (A copy of this Notice of Violation is included as Attachment A9 to this Complaint.)
19. On 13 February 2009, Board staff inspected the Ferrari Ranch Road and SIS construction areas during a storm event. At Ferrari Ranch Road, sediment-laden water was observed flowing off the curb near the construction entrance and flowing down the gutter to a City of Lincoln storm drain inlet. Disturbed soil areas adjacent to the construction entrance were not stabilized with erosion control BMPs, and sediment controls were limited to a section of silt fence and construction entrance gravels. Board staff collected a grab sample at the drain inlet on Ferrari Ranch Road and analyzed it for turbidity. Turbidity results are provided below.

Sediment-laden water was also observed discharging into SIS from the roadside drainage ditches north and south of the slough and along the temporary access bridge. Board staff collected six grab water samples on 13 February 2009 and analyzed these samples for turbidity as follows:

<b>Results of Turbidity Field Measurements taken on 13 February 2009</b>		
<u>Date</u>	<u>Location</u>	<u>Turbidity (NTU)</u>
2/13/09	SIS –upstream of construction area. This is the background sample for SIS during this storm event.	9
2/13/09	SIS –300 feet downstream of construction area	88
2/13/09	SIS –outfall of the north roadside drainage	1,428
2/13/09	SIS –outfall of the south roadside drainage	258
2/13/09	SIS –outfall from below the RR tracks east of Abutment #1	714
2/13/09	Ferrari Ranch Road –storm drain inlet south and east of the new overcrossing	1,850
NTU = Nephelometric Turbidity Units		

Caltrans submitted Notice of Discharge reports for the discharges at SIS and NIS on 12 February and 13 February 2009; however, Caltrans did not provide a Notice of Discharge report for the discharge of sediment-laden water into the City of Lincoln storm drain system on Ferrari Ranch Road on 13 February 2009. Board staff did not meet with Caltrans or DeSilva Gates staff during the 13 February 2009 inspection.

20. On 20 February 2009, in preparation of a forecasted storm event, the Discharger mobilized three water treatment systems onto the Lincoln Bypass Project site. One system was set up north of SIS, one system was set up south of NIS, and the third system was set up at Moore Road. Although the treatment systems were intended to be operational prior to the forecasted storm event, the system at SIS did not begin operating until 23 February 2009, and the systems at NIS and Moore Road did not begin operating

until 25 February 2009. Based on precipitation data from the Lincoln Airport and the Teal Hollow weather stations, 0.99 to 1.32 inches of rain fell in the Lincoln area between 22 February and 23 February 2009.

21. On 23 February 2009, staff inspected the SIS and NIS construction areas during a storm event and again observed significant storm water management problems. As stated above, approximately one inch of rain fell in the Lincoln area between 22 February and 23 February 2009, and sediment-laden water discharged into SIS, NIS, and a storm drain on Ferrari Ranch Road. At Moore Road where sediment-laden storm water collected east of the roadway and rose to a level where it was blocking the eastern lane on Moore Road, the Discharger pumped approximately 145,000 gallons of sediment-laden water into a City of Lincoln storm water vault that flows to Auburn Ravine. Auburn Ravine is an anadromous fish-bearing stream.

Board staff collected six grab water samples on 23 February 2009 and analyzed these samples for turbidity as follows:

<b>Results of Turbidity Field Measurements taken on 23 February 2009</b>		
<u>Date</u>	<u>Location</u>	<u>Turbidity (NTU)</u>
2/23/09	NIS –upstream of construction area	60
2/23/09	NIS –outfall from the pond adjacent to the North Ingram Slough	1,040
2/23/09	SIS –outfall of the north roadside drainage	798
2/23/09	Auburn Ravine –upstream of the 54-inch culvert outfall. This is the background sample of Auburn Ravine during the storm event.	21
2/23/09	Moore Road –sample at the pump intake	548
2/23/09	Auburn Ravine –outfall from the 54-inch culvert	385

22. On 27 February 2009, the Discharger responded to the 4 February 2009 Notice of Violation stating that the Discharger recognized the need for appropriate upgraded BMPs to reduce pollutants in storm water discharges from the construction site in order to proceed with the construction of bridges and sound walls during the rainy season. The Discharger also stated that (a) additional resources were authorized to install and maintain BMPs to meet the BAT/BCT requirements, (b) the accumulated storm water was being pumped into detention basins to keep this water from discharging to surface waters, and (c) construction for the treatment systems started on 19 February 2009.
23. On 11 March 2009, a second Notice of Violation was issued to the Discharger for both the violations observed during the 23 February 2009 inspection and the discharge of sediment-laden water to the City of Lincoln's storm water vault. (A copy of this Notice of Violation is included as Attachment A10 to this Complaint.)
24. On 27 March 2009, the Discharger responded to the 11 March 2009 Notice of Violation stating that the dewatering occurrence at Moore Road was an emergency activity to

protect public health, safety and property and not a deliberate discharge. The Discharger also stated that the contractor continued to address active construction areas prior to forecast rain events in accordance with Caltrans Storm Water permits, plans and programs, and that Caltrans consulted with an outside third party storm water consultant to provide recommendations for storm water improvements, and a number of these suggestions had been implemented.

25. On 5 May 2009, staff inspected the SIS, the NIS, and the Moore Road construction areas. Approximately 1.39 inches of rain fell between 1 and 5 May 2009, and soils were saturated during the site inspection. A diversion was constructed at SIS to divert flow around the construction area, and work had started to construct the second set of piers at SIS. Dirt and debris had been cleaned off the temporary bridge over the SIS, approaches to the temporary bridge were rocked, and the access road extending up to the top of Abutment #1 had been covered with plastic. The top of Abutment #1 still had not been stabilized and storm water runoff from this area was still being directed into a flexible pipe that drains to the roadside drainage ditch west of Abutment #1. No water was flowing in this drainage ditch during the inspection.

A second set of piers were also being constructed at NIS. A section of Moore Road had been covered with fill to extend the freeway, and Caltrans staff reported that this work was completed as of 15 April 2009

26. On 15 July 2009, the California Department of Fish and Game (DFG) provided a memorandum to staff stating that the discharge of silt and sediment to the NIS, the SIS, and Auburn Ravine was deleterious to aquatic life. A copy of the DFG memorandum is included as Attachment A11 of this Complaint.

### **VIOLATIONS**

27. The Discharger violated Section A.6 and H.2 of the Caltrans Storm Water Permit by discharging sediment-laden water to surface waters on the days described in Finding No. 33. These discharges affected the beneficial uses in waters of the State and caused pollution, contamination or nuisance. The discharges were a result of the lack of implementation of an effective combination of erosion and sediment control on all disturbed areas during the rainy season.
28. The Discharger violated Receiving Water Limitations C-2-2 and C-2-3 of the Caltrans Storm Water Permit. Field measurements taken by Board staff show that discharges from the Lincoln Bypass Project contributed to the exceedance of the turbidity water quality objective in the SIS and the NIS, in violation of Receiving Water Limitation C-2-2. The Discharger then failed to comply with the requirements of Receiving Water Limitation C-2-3 to submit discharge reports and amend the SWPPP. The Discharger generally notified Board staff of discharges, but failed to follow-up with the required report in the 14 day reporting period. Of the reports received, many were incomplete and did not fully describe the nature and extent of the discharge. In addition, Board staff has

not received any amendments to the SWPPP to document corrective measures that have been implemented in response to the violations.

29. The Discharger also violated Receiving Water Limitations C-2-2 by not completing the required sampling outlined in Section 600.4.2 of the SWPPP, and not completing data evaluation and BMP repair as outlined in Section 600.4.8 of the SWPPP, as described below:

Section 600.4.2 of the SWPPP states that upstream, downstream, discharge, and run-on samples, if applicable, shall be collected for Sedimentation/Siltation and/or Turbidity during the first two hours of discharge from rain events that result in a direct discharge from the project site to NIS and SIS.

Section 600.4.8 of the SWPPP states that an evaluation of the water quality sample analytical results, including figures with sample locations, shall be submitted to the RE [Resident Engineer] with the water quality analytical results and the QA/QC data for every event that samples are collected. Should the downstream sample concentrations exceed the upstream sample concentrations or dewatering discharge concentrations exceed applicable water quality standards, then the WPCM [Water Pollution Control Manager] or other personnel shall evaluate the BMPs, site conditions, surrounding influences (including run-on sample analysis), and other site factors to determine the probable cause for the increase. As determined by the data and project evaluation, appropriate BMPs shall be repaired or modified to mitigate increases in sediment and/or turbidity concentrations in the water body. Any revisions to the BMPs shall be recorded as an amendment to the SWPPP.

30. The Discharger violated Section C-2-2 of the Caltrans Storm Water Permit by not completing the required discharge reporting outlined in Section 600.2 of the SWPPP. The Discharger failed to submit a Notice of Discharge Report for the discharge of sediment-laden water discharged into the City of Lincoln storm drain system at the Ferrari Ranch Road construction entrance on 13 February 2009 (see Attachment A5).

### **Regulatory Considerations**

31. The *Water Quality Control Plan Central Valley Region—Sacramento River and San Joaquin River Basins, Fourth Edition* (hereafter Basin Plan), designates beneficial uses, establishes water quality objectives, and contains implementation plans and policies for all waters of the Basin. The Basin Plan does not specifically identify beneficial uses for Ingram Slough or Auburn Ravine, but does identify present uses for the Sacramento River, to which Ingram Slough via Orchard Creek, and Auburn Ravine via the East Side Canal and the Cross Canal, are tributary. The beneficial uses for the Sacramento River from Colusa Basin Drain to the “I” Street Bridge are municipal and domestic supply, agricultural supply for irrigation, contact water recreation, other non-contact water recreation, warm and cold freshwater aquatic habitat, warm and cold fish migration habitat, warm and cold spawning habitat, wildlife habitat, and navigation.

32. Issuance of this Administrative Civil Liability Complaint to enforce CWC Division 7, Chapter 5.5 is exempt from the provisions of the California Environmental Quality Act (Pub. Resources Code section 21000 et seq.), in accordance with California Code of Regulations, title 14, section 15321(a)(2).

### Violations under CWC section 13385

33. Administrative civil liability may be imposed for violations of the Caltrans Storm Water Permit pursuant to CWC section 13385, which states, in part,
- (a) Any person who violates any of the following shall be liable civilly in accordance with this section:
- (1) Section 13375 or 13376
- (2) Any waste discharge requirements or dredged and fill material permit.
- \*\*\*\*\*
- (5) Any requirements of Sections 301, 302, 306, 307, 308, 318, or 405 of the Federal Water Pollution Control Act as amended.
- \*\*\*\*\*
- (c) Civil liability may be imposed administratively by the State Board or a Regional Board pursuant to Article 2.5 (commencing with Section 13323) of Chapter 5 in an amount not to exceed the... following:
- (1) Ten thousand dollars (\$10,000) for each day in which the violation occurs.
- (2) Where there is discharge, any portion of which is not susceptible to cleanup or is not cleaned up, and the volume discharged but not cleaned up exceeds 1,000 gallons, an additional liability not to exceed ten dollars (\$10) multiplied by the number of gallons by which the volume discharged but not cleaned up exceeds 1,000 gallons.
- \*\*\*\*\*
- (e) In determining the amount of liability imposed under this section, the regional board, the state board, or the superior court, as the case may be, shall take into account the nature, circumstances, extent, and gravity of the violation, or violations, whether the discharge is susceptible to cleanup or abatement, the degree of toxicity of the discharge, and, with respect to the violator, the ability to pay, the effect on its ability to continue its business, any voluntary cleanup efforts undertaken, any prior history of violations, the degree of culpability, economic benefits or savings, if any, resulting from the violation, and other matters that justice may require. At a minimum, liability shall be assessed at a level that recovers the economic benefits, if any, derived from the acts that constitute the violation.
34. **Maximum Civil Liability.** Pursuant to CWC section 13385(c), the Discharger's failure to implement appropriate BMPs during rainfall events where turbid water discharged from the site has resulted in a maximum civil liability of \$3,160,000. This maximum liability is based on 14 days of violation of the Caltrans Storm Water Permit and the discharge of 302,000 gallons of sediment-laden storm water discharged from the site.

However, Findings Nos. 27 through 29 describe additional violations related to these discharges, which include the failure to submit monitoring reports and the failure to submit reports documenting repairs to BMPs. The Central Valley Water Board intends to resolve these violations through this enforcement action, although liability for these reporting failures has not been factored in to the calculation of the maximum liability.

The 17 Notice of Discharge reports that were submitted by Caltrans showed that discharges occurred when the daily precipitation was equal to or exceeded 0.27 inches, and this occurred on 14 separate days. The 14 days in which precipitation was equal to or exceeded 0.27 inches between 11 December 2008 (staff's initial site visit) and 31 May 2009 are: 21, 24, and 25 December 2008; 22 January 2009; 11, 13, 17, and 22 February 2009; 1, 2 and 3 March 2009; 7 and 9 April 2009; and 1 May 2009. On each of these days, the Discharger was in violation of the Caltrans Storm Water Permit because the Discharger had inadequate BMPs and sediment-laden storm water discharged from the site. At \$10,000 per day of violation, the maximum liability for 14 days of violation is \$140,000 (14 days x \$10,000 per day), plus an additional amount representing the number of gallons discharged on these days.

In the 17 Notices of Discharge submitted (summarized in Attachment A8), the Discharger estimated that 319,000 gallons of sediment-laden storm water discharged from the site into surface waters and/or into the City of Lincoln storm drain systems. At \$10 a gallon for each gallon over 1,000 gallons per storm event not susceptible to cleanup, the maximum penalty for the discharges is \$3,020,000 (302,000 gallons x \$10 per gallon).

The maximum liability is the sum of the liability for days of violation (\$140,000) and the liability for gallons discharged that was not susceptible to cleanup (\$3,020,000) for a total of \$3,160,000.

35. **Minimum Civil Liability.** Pursuant to CWC section 13385(e), at a minimum, liability shall be assessed at a level that recovers the economic benefits derived from the acts that constitute the violation. The Central Valley Water Board estimates that the Discharger gained an economic benefit estimated at \$125,000 by not implementing adequate BMPs in the active construction areas and not providing treatment for the turbid discharges.

**CALIFORNIA DEPARTMENT OF TRANSPORTATION IS HEREBY GIVEN NOTICE THAT:**

1. The Executive Officer of the Central Valley Water Board charges the Discharger with an administrative civil liability in the amount of **five hundred twenty four thousand one hundred dollars (\$524,100)**. The amount of the proposed liability is based upon a review of the factors cited in California Water Code section 13385(e), as well as the State Water Resources Control Board's Water Quality Enforcement Policy, and includes consideration of the economic benefit or savings resulting from the violations.

2. A hearing on this matter will be held at the Central Valley Water Board meeting scheduled on **7/8/9 October 2009**, unless the Discharger does either of the following by **24 August 2009**:
  - a) Waives the hearing by completing the attached form (checking off the box next to item #4) and returning it to the Central Valley Water Board, along with payment for the proposed civil liability of **five hundred twenty four thousand one hundred dollars (\$524,100)**; or
  - b) Agrees to enter into settlement discussions with the Central Valley Water Board and requests that any hearing on the matter be delayed by signing the enclosed waiver (checking off the box next to item #5) and returning it to the Central Valley Water Board along with a letter describing the issues to be discussed.
3. If a hearing is conducted, the Central Valley Water Board will consider whether to affirm, reject, or modify the proposed Administrative Civil Liability, or whether to refer the matter to the Attorney General for recovery of judicial civil liability.

Original signed by Joe Karkoski for  
PAMELA C. CREEDON, Executive Officer

23 July 2009

Date

Attachment A1: Photographs from the 11 December 2008 inspection  
Attachment A2: Photographs from the 23 December 2008 inspection  
Attachment A3: Photographs from the 2 January 2009 inspection  
Attachment A4: Photographs from the 22 January 2009 inspection  
Attachment A5: Photographs from the 13 February 2009 inspection  
Attachment A6: Photographs from the 23 February 2009 inspection  
Attachment A7: Photographs from the 5 May 2009 inspection  
Attachment A8: Summary table of Caltrans Notice of Discharges  
Attachment A9: Notice of Violation issued on 4 February 2009  
Attachment A10: Second Notice of Violation issued on 11 March 2009  
Attachment A11: California Department of Fish and Game Memo

WMH/SYM: 23 July 2009

## Storm Water Construction General Permit Inspection Report Central Valley Regional Water Quality Control Board

Insp. Date & Time:	11 December 2008 1130	Inspected By:	M. Hartzell and Sue McConnell
Contract #	03-3338U4	Site County:	Placer
Owner Name:	California Department of Transportation		
Site Name:	Lincoln Bypass Project		
Site Address:	Highway 65, Post Mile 12-24, Lincoln		

Inspection Type: <input checked="" type="checkbox"/> Compliance <input type="checkbox"/> Follow-up <input type="checkbox"/> Termination <input type="checkbox"/> Other (describe)			
SWPPP on site? Unknown	Evidence of Erosion?	No	
Photos Taken? Yes	Evidence of Tracking?	No	
Weather: Cool and Clear	Evidence of Non-SW Discharge?	No	

### Inspection Summary / Comments:

Meet with Caltrans staff (Carl Berexa -Resident Engineer, Brahim Oulad Daoud -Assistant RE, Dusty Shell - SW Coordinator), and DeSilva Gates staff (Dan Stoloski –SWPPP manager) at the South Ingram Slough temporary bridge.

The contractor was track-walking the south slope abutment (Abutment #1) adjacent to the South Ingram Slough. The contractor was also actively covering soils on the slope with blanket (slope design is at 1½ to 1). A single silt fence was installed at the toe of the slope, which is approximately ten feet from the waters edge and appears to be within the high water mark of the slough. It is uncertain if these BMPs will be effective on steep, clay soils, especially installed so late in the season.

On the north abutment (Abutment #3), the slopes were covered with temporary BMPs consisting of straw mat and blanket, and then weighted down with rock bags. No horizontal BMPs were being installed on the slopes north or south of the South Ingram Slough. “Pro-wattles” have been installed on the side slopes and the disturbed soils have been sprayed with hydro-mulch.

At the Ferrari Ranch Road overcrossing, the contractor was constructing piers in the road median. The south slope was covered with plastic due to a minor slip a few days before. At the North Ingram Slough, the channel was rocked as mitigation to previous work. Minor flow was observed in the slough.

Following the inspection, we requested Caltrans staff to notify us of discharges and to complete appropriate quantification and reporting of any discharge.

Signature <u>Marty Hartzell</u>	Date <u>9 June 2009</u>	Date Entered: _____ Entered By: _____ Senior Review: _____
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Photo 1. South Ingram Slough looking west. BMPs have been placed within the high water mark of the Slough.



Photo 2. View of the slopes adjacent to the South Ingram Slough, and the temporary access bridge.



Photo 3. View of Abutment #3 that has been stabilized with straw mat, blanket, and rock bags. No horizontal BMPs.



Photo 4. View of pro-wattles and hydro-mulch applied on the side slopes of Abutment #3.



Photo 5. View of construction work within the median of Ferrari Ranch Road.



Photo 6. The face of Abutment #1 at Ferrari Ranch Road has been covered with plastic following a small slip.

## Storm Water Construction General Permit Inspection Report Central Valley Regional Water Quality Control Board

Insp. Date & Time:	23 December 2008 1040	Inspected By:	M. Hartzell
Contract #	03-3338U4	Site County:	Placer
Owner Name:	California Department of Transportation		
Site Name:	Lincoln Bypass Project		
Site Address:	Highway 65, Post Mile 12-24, Lincoln		

Inspection Type: <input type="checkbox"/> Compliance <input checked="" type="checkbox"/> Follow-up <input type="checkbox"/> Termination <input type="checkbox"/> Other (describe)			
SWPPP on site? Unknown	Evidence of Erosion? Yes		
Photos Taken? Yes	Evidence of Tracking? No		
Weather: Cool and clear	Evidence of Non-SW Discharge? No		

### Inspection Summary / Comments:

South Ingram Slough. I observed the BMP failure identified by Caltrans on 12/21/08 at the South Ingram Slough Bridge crossing. It appears that rain water ponded on top of Abutment #1 then washed over the abutment face into the South Ingram Slough. It also appears that a majority of the sediment was trapped by a silt fence installed at the toe of the slope, but a wedge of sediment was observed at the waters edge measuring approximately three feet wide. Water flowing through the South Ingram Slough was clear above and below the construction area. I met with Eric DeLonge (CalTrans), and Brian Connolly (De Silva Gates Construction) during my site visit, and they informed me that a ditch was being constructed on top of Abutment #1 to drain storm water away from the abutment face and into a flexible pipe that extends over the side of the abutment. Workers were also installing a second silt fence between the existing silt fence and the South Ingram Slough.

Rain water is also ponding on the road surface north of the South Ingram Slough, and workers shoveled a small ditch into the roadside ditch that extends parallel with the fence line behind Home Depot. This water was noticeably turbid and I notified Eric and Brian that this water must be prevented from discharging into South Ingram Slough.

Moore Road. T-posts and orange fencing has been erected adjacent to the construction area east of Moore Road to prevent vehicles from entering the graded area. Some water was observed ponding in this area.

Groveland Drive. Some tracking was observed at the DeSilva Gate construction entrance near Ferrari Ranch Road.

Signature <u>Marty Hartzell</u> Date <u>9 June 2009</u>	Date Entered: _____ Entered By: _____ Senior Review: _____
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Photo 1. View of the South Ingram Slough (SIS) from the temporary access bridge.



Photo 2. View from the top of Abutment #1 towards SIS where sediment washed into the SIS.



Photo 3. Sediment washed under the erosion blanket and backed up behind the silt fence at the toe of the slope.



Photo 4. Sediment behind silt fence near the SIS.



Photo 5. DeSilva Gates workers installing another line of silt fencing.



Photo 6. Water ponding on the roadway north of the SIS.

## Storm Water Construction General Permit Inspection Report Central Valley Regional Water Quality Control Board

Insp. Date & Time:	2 January 2009 1230	Inspected By:	M. Hartzell
Contract #	03-3338U4	Site County:	Placer
Owner Name:	California Department of Transportation		
Site Name:	Lincoln Bypass Project		
Site Address:	Highway 65, Post Mile 12-24, Lincoln		

Inspection Type: <input type="checkbox"/> Compliance <input checked="" type="checkbox"/> Follow-up <input type="checkbox"/> Termination <input type="checkbox"/> Other (describe)	
SWPPP on site? <input type="checkbox"/> Unknown	Evidence of Erosion? <input type="checkbox"/> No
Photos Taken? <input checked="" type="checkbox"/> Yes	Evidence of Tracking? <input type="checkbox"/> No
Weather: wet, overcast, and cold	Evidence of Non-SW Discharge? <input type="checkbox"/> No

**Inspection Summary / Comments:**

Meet with Brahim Oulad Daoud. It had rained earlier in the day and the soils were wet.

Hay bales have been placed along a portion of the silt fencing near the SIS. A slope failure near the Railroad tracks was mixing with rain water and contributing some turbid water to the wetland areas south of the SIS.

A pond adjacent to the NIS was very turbid and it appears that drainage from the construction site carried turbid water into the pond. Brahim stated that the contractor is uncertain how the turbid water made it to the pond. The pond drains directly into the NIS.

Signature <u>    Marty Hartzell    </u> Date <u>    9 June 2009    </u>	Date Entered: _____ Entered By: _____ Senior Review: _____
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Photo 1. View of the SIS. Hay bales have been placed along a portion of the silt fence.



Photo 2. Top of Abutment #1 at the SIS. Runoff is being directed over the side of the abutment –see Photo 3.



Photo 3. Storm water from the top of SIS Abutment #1 flows to a roadside drainage ditch and then to the SIS.



Photo 4. View of a storm water storage area north of the SIS.



Photo 5. View of the NIS construction site. The NIS channel is on the left of the photograph.



Photo 6. A pond adjacent to the NIS where turbid water ponded following a rain event.

# Storm Water Construction General Permit Inspection Report Central Valley Regional Water Quality Control Board

Insp. Date & Time:	22 January 2009 1330	Inspected By:	M. Hartzell
Contract #	03-3338U4	Site County:	Placer
Owner Name:	California Department of Transportation		
Site Name:	Lincoln Bypass Project		
Site Address:	Highway 65, Post Mile 12-24, Lincoln		

Inspection Type: <input type="checkbox"/> Compliance <input checked="" type="checkbox"/> Follow-up <input type="checkbox"/> Termination <input type="checkbox"/> Other (describe)			
SWPPP on site? Unknown	Evidence of Erosion?	Yes	
Photos Taken? Yes	Evidence of Tracking?	Yes -Ferrari Ranch Rd.	
Weather: Rain, Cool and Overcast	Evidence of Non-SW Discharge?	No	

**Inspection Summary / Comments:**

Construction work was active at the Ferrari Ranch Road and the South Ingram Slough crossings.

Turbid water was observed discharging into the North Ingram Slough (NIS) near the NIS crossing. Rain water falling onto the construction area at the NIS carried sediment into the slough, and storm water collecting in a drainage swale near the NIS discharged turbid water into a pond adjacent to the slough and then into the NIS. Workers were placing wattles at the low end of the drainage swale during my inspection.

Turbid water was also observed discharging into the South Ingram Slough (SIS) at three locations near the SIS crossing. Rain water impacting the exposed soils on the top of Abutment 1 at SIS drain to a flexible pipe that extends over the abutment fill and into a drainage swale. Rock bag check dams and a silt fence have been placed in this channel to provide small detention basins; however, turbid water continued to discharge from this drainage swale towards the SIS. Storm water also collected in the drainage swale west of Abutment #3 and discharged through a culvert to a side channel and then into the SIS. Evidence of a discharge was also identified beneath the bridge crossing of SIS. Water flowing down the un-surfaced access road concentrated in the inside ditch and flowed over the silt fence and other BMPs into the SIS.

Generally, disturbed soils at the Lincoln Bypass Project have not been effectively stabilized to prevent the production of fine sediment in storm water runoff and alternative filtration methods have not been employed to protect surface waters. The project site represents a continued threat to water quality due to the inadequate and ineffective erosion and sediment controls, the amount of disturbed area, and the proximity of construction activities to surface waters.

Signature <u>          Marty Hartzell          </u> Date <u>  9 June 2009  </u>	Date Entered: _____ Entered By: _____ Senior Review: _____
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Photo 1. Storm water discharge from the construction area at North Ingram Slough (NIS).



Photo 2. Turbid water drains through large angular rock and into the NIS.



Photo 3. Unmaintained BMPs at the edge of NIS.



Photo 4. Storm water discharge from the construction area at NIS.



Photo 5. Turbid water detained behind a silt fence adjacent to the NIS.



Photo 6. Turbid water discharging into the NIS at the end of the silt fence BMP.



Photo 7. Drainage swale west of the NIS crossing. NIS crossing in background.



Photo 8. Drainage swale flows to a DI and culvert that extends under the bike trail and into a pond.



Photo 9. Pond adjacent to the NIS.



Photo 10. Turbid water discharging from the pond to the NIS.



Photo 11. Turbid water from the pond mixing with water in the NIS that has already been impacted with fine sediment from an upstream discharge.



Photo 12. Water in an adjacent pond without connectivity to the project area.



Photo 13. Inlet into a flexible pipe on top of Abutment 1 at SIS.



Photo 14. The flexible pipe extends over the abutment fill and discharges into a drainage swale.



Photo 15. Multiple rock bag dams and a silt fence were installed across the drainage swale.



Photo 16. The drainage swale carries storm water and sediment to the SIS.



Photo 17. Turbid water was observed flowing towards the SIS and into a channel adjacent to the slough.



Photo 18. Turbid water discharging into the SIS downstream of the SIS crossing.



Photo 19. Drainage swale adjacent to Abutment 3 at the SIS.



Photo 20. Discharge of turbid water from the drainage swale shown in Photo 19.



Photo 21. The turbid water discharges into a side channel east of the SIS.



Photo 22. The SIS and the side channel run parallel for approximately 100 yards.



Photo 23. Turbid water mixing with SIS water in the side channel.



Photo 24. View from Abutment 1. Drainage swale shown in the center right, and side channel with turbid water shown in the center of the photograph.



Photo 25. Un-surfaced access road leading from the SIS bridge crossing to the top of Abutment 1.



Photo 26. Discharge of turbid water on the west side of the SIS bridge crossing.



Photo 27. Close-up of Photo 26.



Photo 28. Excavation at Abutment 1 of the SIS crossing that was not stabilized prior to a rain event.



Photo 29. View looking back towards the SIS bridge. Hay bales have been installed behind the silt fence.



Photo 30. Location of the 21 December 2008 discharge to the SIS. Hay bales are placed at the water's edge.

# Storm Water Construction General Permit Inspection Report Central Valley Regional Water Quality Control Board

Insp. Date & Time:	13 February 2009 0730	Inspected By:	M. Hartzell
Contract #	03-3338U4	Site County:	Placer
Owner Name:	California Department of Transportation		
Site Name:	Lincoln Bypass Project		
Site Address:	Highway 65, Post Mile 12-24, Lincoln		

Inspection Type: <input type="checkbox"/> Compliance <input checked="" type="checkbox"/> Follow-up <input type="checkbox"/> Termination <input type="checkbox"/> Other (describe)			
SWPPP on site? Unknown		Evidence of Erosion? Yes	
Photos Taken? Yes		Evidence of Tracking? No	
Weather: Cold and Overcast, rained earlier		Evidence of Non-SW Discharge? No	

**Inspection Summary / Comments:**

I observed sediment laden water flowing off the Lincoln Bypass construction site west of Ferrari Ranch Road and discharging into a City of Lincoln storm drain on Ferrari Ranch Road. I collected a grab water sample (**FRR-1**) at the drain inlet on Ferrari Ranch Road and analyzed it for turbidity with a Hach Model 2100 portable turbidimeter. The turbidity meter was calibrated to the 20NTU, 100NTU, and 800NTU standards prior to measurements. Grab water Sample **FRR-1 = 1,850 NTU.**

Sediment laden water was also observed discharging into the South Ingram Slough (SIS) from the east drainage, the west drainage, the railroad tracks area, and along the temporary bridge. Grab water samples were collected from the three drainage areas and from above and below the SIS project areas.

- **SIS-1**, collected at ~100 yards downstream of the SIS crossing = **88.0 NTU.**
- **SIS-2**, collected at the north drainage into the SIS = **1,428 NTU.**
- **SIS-3**, collected at the south drainage into the SIS = **258 NTU.**
- **SIS-4**, collected at the edge of the SIS wetland below the RR tracks = **714 NTU.**
- **SIS-5**, collected at ~200 yards upstream of the temporary bridge = **9.01 NTU.**

All samples were analyzed as above.

Additional sediment laden water was observed discharging into the North Ingram Slough, but no samples were collected for turbidity. See attached photographs.

Signature <u>    Marty Hartzell    </u>	Date <u>    9 June 2009    </u>	Date Entered: _____ Entered By: _____ Senior Review: _____
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Photo 1. Construction entrance for the Lincoln Bypass Construction site west of Ferrari Ranch Road.



Photo 2. Disturbed soils adjacent to Ferrari Ranch Road.



Photo 3. Sediment laden water flowing towards Ferrari Ranch Road.



Photo 4. Sediment laden water from the construction site discharging to Ferrari Ranch Road.



Photo 5. Sediment laden water sheet flowing across the sidewalk and into the gutter on Ferrari Ranch Road.



Photo 6. Sediment laden water discharging into the storm drain on Ferrari Ranch Road. Sample location FRR-1.



Photo 7. Abutment 1 at SIS on 2/13/09.



Photo 8. View of SIS approximately 100 yards downstream of the SIS crossing. Sample location SIS-1.



Photo 9. Drainage swale east of the SIS. The inlet is in the center of the silt fence circle.



Photo 10. Discharge from the drainage swale in Photo 9 to a side channel parallel to the SIS.



Photo 11. The culvert outlet is plugged, but sediment laden water continues to flow around the culvert. Sample location SIS-2.



Photo 12. Sediment laden water flowing in the channel parallel to the SIS.



Photo 13. Active construction areas on top of Abutment 1 at the SIS.



Photo 14. Ponded water drains through a flexible pipe to a drainage swale west of SIS.



Photo 15. Drainage swale with sediment laden water flowing over silt fencing.



Photo 16. Sediment laden water discharging into a side channel parallel to the SIS.



Photo 17. Approximately 100 yards downstream of Photo 16, the sediment laden water discharges into the SIS.



Photo 18. Sediment laden water discharging into the SIS on 2/13/09. Sample location SIS-3.



Photo 19. Active construction work adjacent to the RR tracks.



Photo 20. Ponded water between the RR tracks and the construction site.



Photo 21. Sediment laden water discharging towards the SIS.



Photo 22. Water drains into a hole and flows under the riprap protection.



Photo 23. Sediment laden water discharging into the wetland west of SIS. Sample location SIS-4.



Photo 24. View of wetland area adjacent to Photo 23.



Photo 25. Eastern approach to the temporary bridge on the SIS.



Photo 26. Western approach to the temporary bridge on the SIS.



Photo 27. Mud collected on the temporary bridge over the SIS.



Photo 28. Sediment laden water ponding under the temporary bridge over the SIS.



Photo 29. View of the active construction at the SIS.



Photo 30. View of the SIS upstream of the construction site. Sample location SIS-5 approx. 200 yds upstream.

# Storm Water Construction General Permit Inspection Report

## Central Valley Regional Water Quality Control Board

Insp. Date & Time:	23 February 2009 1045	Inspected By:	M. Hartzell
Contract #	03-3338U4	Site County:	Placer
Owner Name:	California Department of Transportation		
Site Name:	Lincoln Bypass Project		
Site Address:	Highway 65, Post Mile 12-24, Lincoln		

Inspection Type: <input type="checkbox"/> Compliance <input checked="" type="checkbox"/> Follow-up <input type="checkbox"/> Termination <input type="checkbox"/> Other (describe)			
SWPPP on site?	Unknown	Evidence of Erosion?	Yes
Photos Taken?	Yes	Evidence of Tracking?	No
Weather: Rain, Cold and Overcast		Evidence of Non-SW Discharge?	No

### Inspection Summary / Comments:

North Ingram Slough (NIS). The pond adjacent to the NIS is turbid and being fed by runoff from the construction project. A detention pond has been constructed, and a treatment system with four baker tanks has been set up near the drainage swale. The system was not operation at the time of my inspection. Two grab water samples were collected and analyzed it for turbidity with a Hach Model 2100 portable turbidimeter. Turbidity standards were checked prior to measurements: 20NTU =22.9 NTU, 100NTU =99.7 NTU and 800NTU =796 NTU.

- **NIS-1, discharge point from the pond into the NIS = 1,040 NTU.**
- **NIS-2, NIS upstream of the discharge point = 60.9 NTU.**

South Ingram Slough (SIS). Flow in the SIS was much higher on this date. Sediment-laden water was observed discharging into the SIS at the north drainage ditch and along the temporary bridge. The inlet to the flexible pipe on top of Abutment 1 was plugged and turbid water was ponding on the disturbed soil surface. One grab water sample (**SIS-1**) was collected at the outlet of the north drainage ditch where it discharge into the SIS and analyzed it for turbidity as above. Grab water Sample **SIS-1 = 798 NTU.**

Moore Road. At approximately 1330, I arrived at the Moore Road location. Upon my arrival, I observed two trash pumps pumping sediment-laden water from the construction area on the east side of Moore Road into a storm drain vault on the west side of Moore Road. Two discharge lines carried the untreated storm water across the road surface and into the storm drain vault. One of the City of Lincoln employees stated that Caltrans started pumping water into the storm drain at 1245, and the two pumps are each rated at 300 gpm. The sediment laden water was discharged into the City of Lincoln 54-inch storm drain that flows directly into the Auburn Ravine. I collected three grab water samples and analyzed them for turbidity as above.

- **MR-1, sample of water at the discharge from the 54-inch culvert = 385 NTU.**
- **MR-2, sample of water from Auburn Ravine upstream of the discharge point = 21.9 NTU.**
- **MR-3, sample of water at the intake of the two trash pumps = 548 NTU.**

Signature <u>Marty Hartzell</u> Date <u>9 June 2009</u>	Date Entered: _____ Entered By: _____ Senior Review: _____
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Photo 1. Drainage swale upslope of the North Ingram Slough.



Photo 2. A recently constructed detention pond and rocky pad for the treatment system.



Photo 3. View of disturbed soils on the construction site adjacent to the NIS treatment system.



Photo 4. Drainage from the construction site flows to this drain inlet and into the pond.



Photo 5. The pond adjacent to the NIS.



Photo 6. The discharge of sediment laden water into the NIS. This is the sample location for NIS-1.



Photo 7. View of the east drainage swale that discharges into the SIS.



Photo 8. Discharge from the east drainage swale into the SIS.



Photo 9. The culvert has been plugged; however, sediment-laden water is flowing around the culvert.



Photo 10. View of sediment-laden water flowing into the SIS. Sample location for SIS-1.



Photo 11. Road drainage west of the temporary bridge flows down the inside ditch and into the SIS.



Photo 12. SIS looking downstream from the temporary bridge.



Photo 13. Sediment-laden water collecting on the access road east of the temporary bridge.



Photo 14. Sediment-laden water flowing towards the SIS.



Photo 15. Sediment-laden water following tire tracks in the mud.



Photo 16. Sediment-laden water flowing off the edge of the temporary bridge.



Photo 17. Sediment-laden water collecting under the temporary bridge.



Photo 18. View of the access road adjacent to the SIS.



Photo 19. View of the flooding at Moore Road prior to pumping water into the storm drain.



Photo 20. View of the water treatment system at Moore Rd. The system was not operational during my inspection.



Photo 21. View of the Moore Road area after Caltrans initiated pumping into the City of Lincoln storm drain.



Photo 22. View of the 54-inch storm drain outlet at Auburn Ravine.



Photo 23. Sample location for MR-1 grab water sample.



Photo 24. Sediment-laden water discharging into Auburn Ravine.



Photo 25. Plume of sediment-laden water mixing into Auburn Ravine.



Photo 26. View of Auburn Ravine looking upstream.



Photo 27. Sample location for MR-2 grab water sample.



Photo 28. Sample location for MR-3 grab water sample was at the pump inlet in the foreground.



Photo 29. View of Moore Road flooding area after traffic control was set up.



Photo 30. Grab water samples collected for turbidity analysis. Background Auburn Ravine sample is on the left.

## Storm Water Construction General Permit Inspection Report Central Valley Regional Water Quality Control Board

Insp. Date & Time:	5 May 2009 0520	Inspected By:	M. Hartzell
Contract #	03-3338U4	Site County:	Placer
Owner Name:	California Department of Transportation		
Site Name:	Lincoln Bypass Project		
Site Address:	Highway 65, Post Mile 12-24, Lincoln		

Inspection Type: <input type="checkbox"/> Compliance <input checked="" type="checkbox"/> Follow-up <input type="checkbox"/> Termination <input type="checkbox"/> Other (describe)			
SWPPP on site? Unknown	Evidence of Erosion? No		
Photos Taken? Yes	Evidence of Tracking? No		
Weather: Overcast, cool, rained earlier	Evidence of Non-SW Discharge? No		

### Inspection Summary / Comments:

The precipitation data for Teal Hollow in Lincoln ([www.wunderground.com](http://www.wunderground.com)) shows that rainfall started on Friday, May 1 with a daily precipitation total of 0.83 inches. Rainfall totals for May 2 through May 5 were 0.18, 0.16, 0.13, and 0.09, respectively, with a total of 1.39 inches over five days. DeSilva Construction crews were not working on May 5 and I was notified that they did not work on May 2 through May 4, thus the conditions observed on May 5 existed throughout the five day rainfall event.

South Ingram Slough –A diversion has been constructed to route water around the piers that are being installed within the SIS channel. As reported to me by Dusty Shell, the sheet pile and sand bag barriers were placed prior to May 1<sup>st</sup>. Dirt and debris has been cleaned off the access bridge, the approaches to the bridge have been rocked, and the access road extending up the hill has been covered with plastic.

The top of Abutment #1 is an active construction area and it has not been stabilized prior to the rain event. Runoff from this area flows through a flexible pipe to the roadside drainage swale where multiple rock bag check dams have been constructed in the center of the swale to slow down the flow. Storm water is directed into a silt fence dam and through a riprap apron before it flows into the SIS. No flow was observed discharging into the SIS during my inspection on this date.

Turbid water collecting in the roadside drainage ditch north of the SIS drains into a drain inlet and discharges into the SIS. The contractor placed an air plug in the culvert outlet at the discharge point; however, minor piping around the culvert has allowed turbid water to discharge into the SIS. Turbid water was observed at the culvert outlet during my inspection, but I did not collect any samples to quantify the turbidity.

North Ingram Slough –piers are being constructed within the channel of the NIS. Minor BMPs were observed between the construction area and the slough. The pond near the NIS was clear on this date.

Auburn Ravine –Moore Road was reportedly removed on 15 April 2009 and the area has been graded for freeway construction. No construction was observed within 150 feet of Auburn Ravine.

Signature <u>Marty Hartzell</u>	Date <u>9 June 2009</u>	Date Entered: _____ Entered By: _____ Senior Review: _____
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Photo 1. View of the SIS looking west through the construction area.



Photo 2. View of the diverted SIS from the temporary access bridge.

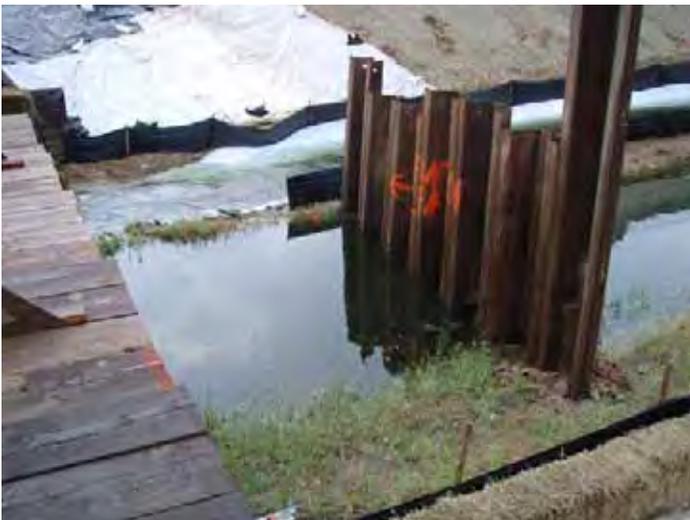


Photo 3. Sheet pilings placed in the SIS to divert the slough around the pier construction area.



Photo 4. A sand bag barrier is placed in the SIS downstream of the temporary access bridge.



Photo 5. The approaches to the temporary bridge at the SIS have been rocked and the access road surface was covered with plastic.



Photo 6. The construction area on top of Abutment #1 was not stabilized prior to rain.



Photo 7. Storm water runoff from the top of Abutment #1 drains into a flexible pipe.



Photo 8. The flexible pipe shown in Photo 7 extends into the roadside drainage swale.



Photo 9. Turbid water from the top of Abutment #1 flows through multiple check dams before draining into the SIS.



Photo 10. Turbid water from Photo 9 drains through the riprap shown and into the SIS. No flow on this date.



Photo 11. Turbid water collected in the roadside drainage swale north of SIS.



Photo 12. Water from Photo 11 drains to this culvert outlet in the SIS. An air plug has been placed in the culvert, but water flows around the culvert and into the SIS.



Photo 13. View of the NIS upstream of the construction area. Riprap was placed prior to construction activity.



Photo 14. View of the NIS area through the construction area. Piers are being constructed in the excavations.



Photo 15. Minor BMPs placed around the excavation area.



Photo 16. View of the pond adjacent to the NIS. Pond water was clear on this date.



Photo 17. View of Moore Road east of the Bypass construction area.



Photo 18. Construction area south of Auburn Ravine. No constr. work was observed within 150 feet of the ravine.

Table 1. Summary of Lincoln Bypass Notice of Discharge (NOD) Reports

NOD No.	Date Start	Date End	Location	Description	Runoff Coefficient	Catrans Reported Precipitation (inches)	Teal Hollow Daily Precipitation (inches)	Drainage Area (square feet)	Catrans Estimated Discharge Volume (gallons)	Adjusted Discharge [÷,000] (gallons)	Turbidity Results	Total Suspended Solids Results (mg/L)	Settleable Solids Results (mL/L)
1	11/3/08		SIS	"Storm water overwhelmed BMP's"	n/a	n/a	0.13	900	3,366	2,366	None	None	None
2	12/21/08		SIS	A discharge over the abutment face and into the SIS.	0.5	0.56	0.64	75,750	13,315	12,315	None	None	None
3	12/24/08	12/25/08	SIS	Turbid water from Abutment #3 flowed to a ponded area adjacent to the SIS.	0.5	0.54	0.58	12,000	1,272	272	None	None	None
4	12/24/08	12/25/08	NIS	A discharge from a drainage swale to a pond to the NIS.	0.48	0.54	0.58	30,400	4,912	3,912	None	None	None
5	1/22/09		SIS	Discharges from the north and south drainage swales into the SIS.	0.5	0.46	0.84	102,950	16,173	15,173	None	upstream <50 downstream <50	upstream <0.20 downstream <0.20
6	1/22/09		NIS	A discharge from a drainage swale to a pond to the NIS.	0.48	0.46	0.84	30,400	4,584	3,584	None	upstream <50 downstream <50	upstream <0.20 downstream <0.20
7	2/12/09	2/13/09	NIS	A discharge from a drainage swale to a pond to the NIS.	0.42	0.43	0.81	43,600	4,932	3,932	None	upstream = 20 downstream = 25	None
8	2/12/09	2/13/09	SIS	Discharges from the north and south drainage swales into the SIS.	0.5	0.43	0.81	92,950	12,515	11,515	None	upstream <5 downstream = 7	None
9	2/17/09		NIS	A discharge from a drainage swale to a pond to the NIS.	0.42	0.38	0.8	43,400	4,360	3,360	None	None	None
10	2/17/09		SIS	A discharge of sediment from multiple locations into the SIS.	0.5	0.38	0.8	82,950	9,928	8,928	None	None	None
11	2/22/09	2/23/09	NIS	A discharge from a drainage swale to a pond to the NIS.	0.42	0.99	1.32	43,400	11,317	10,317	0900Hrs: Up=17NTU, Down=137NTU; 1400Hrs: Up=26, Down=272	upstream = 48 downstream = 200	upstream <0.20 downstream = 0.20
12	2/22/09	2/23/09	SIS	Discharges from the north and south drainage swales into the SIS.	0.5	0.99	1.32	97,950	24,798	23,798	0830Hrs: Up=9NTU, Down=21NTU; 1430Hrs: Up=50, Down=482	upstream = 18 downstream = 19	upstream <0.20 downstream = 0.20
13	2/23/09		Ferrari Ranch Road	Discharge to a storm drain near the construction entrance on the south side of Ferrari Ranch Road.	0.44	0.99	1.32	29,250	7,943	6,943	None	None	None

**Table 1. Summary of Lincoln Bypass Notice of Discharge (NOD) Reports**

NOD No.	Date Start	Date End	Location	Description	Runoff Coefficient	Caitrans Reported Precipitation (inches)	Teal Hollow Daily Precipitation (inches)	Drainage Area (square feet)	Caitrans Estimated Discharge Volume (gallons)	Adjusted Discharge [-1,000] (gallons)	Turbidity Results	Total Suspended Solids Results (mg/L)	Settleable Solids Results (mL/L)
14	2/23/09		Moore Road	Turbid water pumped to the storm drain that discharges to Auburn Ravine.	n/a	n/a	0.29	n/a	145,500	144,500	None	None	None
15	3/2/09	3/3/09	SIS	A discharge at the temporary bridge and also at the north drainage swale.	0.5	0.9	1.33	82,950	17,659	16,659	0730Hrs: Up=11NTU, Down=44NTU; 1130Hrs: Up=19, Down=54	Upstream = <10 Downstream = 11	Upstream = <0.20 Downstream = <0.20
16	3/2/09		NIS	A discharge was observed at the two ponds east and west of the NIS.	0.42	0.48	0.65	26,756	3,362	2,362	1430Hrs: Up=20NTU, Down=94NTU	Upstream = <10 Downstream = 18	Upstream = <0.20 Downstream = <0.20
17	3/4/09		Industrial Ave	Turbid water was leaving the site through a culvert pipe running underneath Industrial Avenue.	0.32	0.9	0.08	563,200	34,003	33,003	None	None	None

Volume Discharged (gallons) = 319,939 302,939



# California Regional Water Quality Control Board Central Valley Region

Karl E. Longley, ScD, P.E., Chair



Arnold  
Schwarzenegger  
Governor

11020 Sun Center Drive #200, Rancho Cordova, California 95670-6114  
Phone (916) 464-3291 • FAX (916) 464-4645  
<http://www.waterboards.ca.gov/centralvalley>

Linda S. Adams  
Secretary for  
Environmental Protection

4 February 2009

**CERTIFIED MAIL**  
**7008 1140 0002 8805 4615**

Jody Jones, District 3 Director  
California Department of Transportation  
Post Office Box 911  
Marysville, CA 95901

***NOTICE OF VIOLATION, STATE OF CALIFORNIA, DEPARTMENT OF  
TRANSPORTATION, DISTRICT #3, STATE ROUTE 65 LINCOLN BYPASS PROJECT,  
CONTRACT NUMBER 03-3338U4, PLACER COUNTY***

Starting in December 2008 and continuing through January 2009, Water Board staff inspected the Lincoln Bypass Project in Placer County to evaluate compliance with the National Pollutant Discharge Elimination System (NPDES) Permit No. CAS000003 (Order No. 99-06-DWQ) for Storm Water Discharges from the State of California, Department of Transportation (Caltrans) Properties, Facilities, and Activities (Caltrans Storm Water Permit).

During the multiple site inspections, Water Board staff observed that the site lacked an effective combination of erosion and sediment control Best Management Practices (BMPs). On 22 January 2009, staff observed multiple discharges of turbid water to surface waters due to inadequate BMPs at the site. Caltrans and their primary contractor, DeSilva Gates Construction, have chosen to continue construction activities at the Lincoln Bypass Project through the winter period, and this active construction has exposed many acres of Lincoln area clay soils to the weather. Water Board staff has documented the following discharges of sediment-laden water to surface waters at the Lincoln Bypass Project site:

- On 22 December 2008, rain water collecting on top of Abutment 1 at the South Ingram Slough washed under the straw mat on the steep slope of the abutment face and concentrated saturated sediment behind a silt fence that eventually failed and discharged sediment into the South Ingram Slough.
- On 22 January 2009, rain water collecting in a drainage swale near the North Ingram Slough discharged sediment-laden water into a pond adjacent to the slough and then into the North Ingram Slough.
- Also on 22 January 2009, rain water collecting in two drainage swales east of the project at South Ingram Slough discharged sediment-laden water into South Ingram Slough. Turbid water also discharged into the South Ingram Slough at the bridge crossing after traveling down the native soil surface access road that leads to Abutment 1.

Generally, disturbed soils at the Lincoln Bypass Project have not been effectively stabilized to prevent the production of fine sediment in storm water runoff (see attached 22 January 2009 Inspection Report and inspection photographs).

The Caltrans Storm Water Permit, Part H.2. states, in part: *"The Construction Management Program shall be in compliance with requirements of the NPDES General Permit for Construction Activities (Construction General Permit)."* As stated earlier, Caltrans failed to

***California Environmental Protection Agency***

comply with Section A.6 of the Construction General Permit which states, "At a minimum, the discharger/operator must implement an effective combination of erosion and sediment control on all disturbed areas during the rainy season." It is the rainy season, and through inspections and documentation of multiple discharges to surface waters, Water Board staff identified that the Lincoln Bypass Project site does not exhibit an effective combination of erosion and sediment control BMPs. Therefore, Caltrans has violated Part H.2 of the Caltrans Storm Water Permit by failing to comply with the Construction General Permit.

## Response

In response to this Notice of Violation, **Caltrans must ensure immediate implementation of appropriate and effective erosion and sediment control measures to reduce the threat of sediment discharges to surface waters.** Caltrans must implement appropriate erosion and sediment controls to reduce all pollutants in storm water discharges from the construction site to the Best Available Technology Economically Achievable (BAT) and Best Conventional Pollutant Control Technology (BCT) to reduce or eliminate storm water pollution.

By **18 February 2009**, please submit the following items to the Water Board Office:

- A written explanation and schedule of how Caltrans will install and maintain an effective combination of erosion and sediment control BMPs throughout the construction site;
- A written explanation of how Caltrans will install and maintain BMPs to meet the BAT/BCT requirements of the Construction Storm Water Permit;
- An updated SWPPP map showing all BMPs installed on the project.
- Copies of Caltrans and contractor inspection reports as required by the Caltrans Storm Water Permit from 1 November 2008 through January 2009.

Violations of the Caltrans Storm Water Permit have exposed Caltrans to potential administrative civil liabilities of up to \$10,000 per day under Section 13385 of the California Water Code. Should the violations result in a discharge of waste to surface waters of the United States, the Regional Board can also impose administrative civil liabilities of up to \$10 per gallon of waste discharged.

Please contact Marty Hartzell at (916) 464-4630 with questions or comments.

*ORIGINAL SIGNED BY*

Sue Y. McConnell  
Chief, Storm Water Compliance and Enforcement Unit

Enclosure: Inspection Report and Photographs

cc: Walt Shannon, State Water Resources Control Board, Sacramento  
Doug Coleman, Caltrans Chief Environmental Engineering (South), Marysville  
Carl Berexa, Caltrans Senior Resident Engineer, Rocklin  
Dusty Shell, Caltrans District Storm Water Coordinator, Sacramento  
Brian Connolly, DeSilva Gates Construction, Dublin



# California Regional Water Quality Control Board Central Valley Region

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11 March 2009

Jody Jones, District 3 Director  
California Department of Transportation  
Post Office Box 911  
Marysville, CA 95901

**CERTIFIED MAIL**  
**7008 1140 0002 8805 4653**

***SECOND NOTICE OF VIOLATION, STATE OF CALIFORNIA, DEPARTMENT OF  
TRANSPORTATION, DISTRICT #3, STATE ROUTE 65 LINCOLN BYPASS PROJECT, CONTRACT  
NUMBER 03-3338U4, PLACER COUNTY***

Central Valley Water Board staff continues to inspect the Lincoln Bypass Project in Placer County to evaluate compliance with the National Pollutant Discharge Elimination System (NPDES) Permit No. CAS000003 (Order No. 99-06-DWQ) for Storm Water Discharges from the State of California, Department of Transportation (Caltrans) Properties, Facilities, and Activities (Caltrans Storm Water Permit). On 23 February 2009, Water Board staff observed Caltrans and DeSilva Gates Construction employees deliberately discharging sediment-laden water to a City of Lincoln storm water vault on the west side of Moore Road in Lincoln (see attached 23 February 2009 Inspection Report and inspection photographs). Storm water had accumulated on the east side of Moore Road, and due to the high rainfall through the weekend, the water was blocking the eastern lane on Moore Road. The City of Lincoln storm water vault connects to a 54-inch diameter culvert, which discharges directly into Auburn Ravine. This is one of the many violations identified during the recent high rainfall events.

As reported to Water Board staff by Caltrans employees, a water treatment system was delivered to the Moore Road location on 20 February 2009; however, the system was not operational between 20 February and 23 February when the area received heavy rainfall. The area east of Moore Road had been mass graded in earlier months, and the site was unprepared for the storm events. This combination of unprotected soils with high rainfall events resulted in a large volume of sediment-laden water accumulating along the eastern perimeter of Moore Road and nowhere for it to naturally drain. We view this deliberate discharge to Auburn Ravine as particularly egregious because Caltrans staff was notified multiple times by Water Board staff that they should limit the area of disturbed soils, and that water treatment systems would be needed at discharge points because of the high clay content of Lincoln area soils. On 16 January, Water Board staff met with the Resident Engineer and his staff to discuss our concerns regarding the site. During this meeting, Water Board staff stressed the importance of having the water treatment systems in place and operational prior to the next significant storm event. Caltrans staff assured us that the treatment systems would be mobilized and operational in time to address any significant events. Unfortunately, this did not occur.

The Amended Water Quality Certification for the State Route 65 Lincoln Bypass Project (Water Quality Certification) dated 26 September 2008 outlines conditions for Caltrans to follow for any activities resulting in deposition of material into surface waters. Caltrans is required to submit a complete report to the Water Board within 14 days of discharge, and as of the date of this letter, a complete report has not been received by Water Board staff.

***California Environmental Protection Agency***

**Response**

In response to this Notice of Violation, Caltrans must complete the following items and submit a response to the Water Board by **27 March 2009**:

1. Caltrans needs to increase the overall management of the site by stabilizing disturbed soils and by following the requirements of the Caltrans Storm Water Permit and the Water Quality Certification by implementing appropriate and effective erosion and sediment control measures to reduce all pollutants in storm water discharges from the Lincoln Bypass construction site to the Best Available Technology Economically Achievable (BAT) and Best Conventional Pollutant Control Technology (BCT).
2. Complete and submit a biological assessment of the Auburn Ravine downstream of the discharge point to determine the effects of the discharge of sediment-laden water to the waterway and evaluate if cleanup or restoration activities are necessary. This work must be completed by a biological professional that is proficient in this work.
3. Submit a complete report of the deliberate discharge of sediment-laden water to the Auburn Ravine. In addition to the Attachment K – Caltrans Notice of Discharge Report – the report must include the following items:
  - A summary of the incident;
  - An account of the construction work in the Moore Road area prior to 23 February 2009;
  - An accurate account of the volume of sediment-laden water discharged (in gallons);
  - Turbidity and settleable material sample results including a scaled map with sample locations identified;
  - A calculation of the total volume of sediment discharged to the Auburn Ravine; and
  - A hard copy of the report signed by the appropriate Caltrans staff.

Violations of the Caltrans Storm Water Permit have exposed Caltrans to potential administrative civil liabilities of up to \$10,000 per day under Section 13385 of the California Water Code. Since the violations result in a discharge of waste to surface waters of the United States, the Regional Board may also impose administrative civil liabilities of up to \$10 per gallon of waste discharged in excess of 1,000 gallons.

Please contact Marty Hartzell at (916) 464-4630 with questions or comments.

*Original Signed By*

Sue Y. McConnell  
Chief, Storm Water Compliance and Enforcement Unit

Enclosure: Inspection Report and Photographs

cc: Walt Shannon, State Water Resources Control Board, Sacramento  
Donald Tanner, National Marine Fisheries Service, Sacramento  
Doug Coleman, Caltrans Chief Environmental Engineering (South), Marysville  
Leslie Case, Caltrans NPDES Coordinator, Marysville  
Carl Berexa, Caltrans Senior Resident Engineer, Rocklin  
Dusty Shell, Caltrans District Storm Water Coordinator, Sacramento  
Brian Connolly, DeSilva Gates Construction, Dublin

**State of California  
Department of Fish and Game**

**M e m o r a n d u m**

**Date:** 7/15/09

**To:** Marty Hartzell  
Central Valley Regional Water Quality Control Board  
11020 Sun Center Dr., #200  
Rancho Cordova, Ca 95670

**From:** Carol Oz, Staff Environmental Scientist  
California Department of Fish and Game-Region 2  
1701 Nimbus Road  
Rancho Cordova, CA 95670

**Subject:** Sediment Pollution in Auburn Ravine, North Ingram Slough, and the South Ingram Slough, Caltrans Lincoln Bypass Project, Placer County, California.

On 6/11/09, I received information from you regarding multiple discharges of turbid storm water to surface waters in the vicinity of the Caltrans Lincoln Bypass Construction Project (Project) near the City of Lincoln. As reported to me, storm water best management practices were not implemented at the site, which resulted in multiple acres of disturbed soil areas and thousands of gallons of turbid water being discharged to surface waters surrounding the construction area. Photographs taken by Central Valley Water Board staff during discharge events plainly show the highly turbid water discharging from construction site locations, entering and mixing with clearer surface waters in the North Ingram Slough, South Ingram Slough, and Auburn Ravine. Other information I reviewed that you provided includes a document titled "Lincoln Bypass Notice of Discharge (NOD) Report". In this report, Caltrans documented 17 sediment discharge incidents at the Project from early Nov. 2008 through March 2009. Also included in this report are the days of the of discharges and a brief description of the NOD, gallons discharged, turbidity, Total Suspended Solids, and Settleable Solids results, if collected.

The table below provides the results of grab water samples collected and analyzed by Central Valley Water Board staff at three different stream locations at the Project on 2/13/09 and 2/23/09, at the Lincoln Bypass site. Results show that the turbidity NTU in South Ingram Slough water at the time the discharge was approximately 200 times higher than the background normal water conditions; turbidity that entered North Ingram Slough water was approx. 17 times higher than background conditions, and; turbidity in Auburn Ravine water at the time of discharge was approx. 26 times higher than background stream water conditions.

<b>Table 1. Turbidity Field Measurements at the Lincoln Bypass site.</b> (shaded results are control locations)		
<u>Date</u>	<u>Location</u>	<u>Turbidity (NTU)</u>
2/13/09	SIS –upstream of construction area (Background sample of the SIS during this storm event.)	9
2/13/09	SIS –300 feet downstream of construction area	88
2/13/09	SIS –outfall of the north roadside drainage	1,428
2/13/09	SIS –outfall of the south roadside drainage	258
2/13/09	SIS –outfall from below the RR tracks east of Abutment #1	714
2/13/09	Ferrari Ranch Road –storm drain inlet south and east of the new overcrossing	1,850
2/23/09	NIS –upstream of construction area	60
2/23/09	NIS –outfall from the pond adjacent to North Ingram Slough	1,040
2/23/09	SIS –outfall of the north roadside drainage	798
2/23/09	Auburn Ravine –upstream of the 54-inch culvert outfall (Background sample of Auburn Ravine during storm event)	21
2/23/09	Moore Road –sample at the pump intake	548
2/23/09	Auburn Ravine –outfall from the 54-inch culvert	385
NTU = Nephelometric Turbidity Units SIS = South Ingram Slough NIS = North Ingram Slough		

### **Deleterious Effect of Turbidity on Aquatic Life**

Turbidity is a condition of water resulting from the presence of suspended particles (Welch 1952), such as clay, silt, finely divided organic matter, bacteria, plankton, and other microscopic organisms. As an expression of the optical property of water, which causes light to be scattered and absorbed rather than transmitted in straight lines through the sample, turbidity is commonly measured optically with the use of a special light meter. Data is commonly reported as NTU, or Nephelometric Turbidity Units. Excessive turbidity is deleterious to fish and aquatic resources in several ways. The most obvious effect is that it reduces light penetration into the water and, therefore, reduces photosynthesis by phytoplankton organisms, attached algae, and submersed vegetation which are essential for food chain development and support. Second, excessive turbidity may inhibit normal feeding behavior for sight feeders, such as trout and other freshwater species of fish and nanoplankton. Lastly, excessive turbidity can cause gill irritation, increase mucous secretion, and respiratory and physiologic distress.

Buck (1956) investigated several farm ponds, hatchery ponds, and reservoirs over a 2-year period in which he measured fish production. He observed that the maximum production of 161.7 lb/acre occurred in farm ponds when the average turbidity was less than 25 NTU; between 25 and 100 NTU fish yield dropped 41.7 percent to 94 lb/acre, and in muddy ponds, where turbidity exceeded 100 NTU, the yield was only 29.3 lb/acre or 18.2 percent of clear ponds.

Death of fish and aquatic invertebrates exposed to “inert” particulates, which cause increased turbidity, is not usually the result of classic toxic response, but rather the effect of physical abrasion, gill clogging and ultimately suffocation. Silt that is churned up into suspended particles in the water column can seriously compromise respiratory tissues. Natural weathered sediments tend to clog spaces between sensitive gill tissue, while un-weathered mineral solids, coat the actual gill filaments, and thus impede water contact and proper gas exchange, resulting in asphyxiation (Sherk 1971). Among the biological effects due to suspended sediments are shading, abrasion, smothering, and reduced feeding due to increased turbidity (Berry, et al, 2003). Suspended sediment can be abrasive and may damage the fine gills and mouthparts of macroinvertebrates. It may also make it harder for predatory macroinvertebrates to see their food. Macroinvertebrates that feed on algae may have to spend more time feeding because fine sediment sticks to the algae, reducing nutritional value. Increased sedimentation can disrupt the food web by influencing the distribution and abundance of fish, macroinvertebrates, plants and algae (Till and Trayler, 2000).

### **Resources at Risk**

The North Ingram Slough and the South Ingram Slough are tributaries to Orchard Creek, which in turn is a tributary to Auburn Ravine. Auburn Ravine is an anadromous fish bearing stream and sections of the stream provide spawning and rearing habitat for Chinook salmon and steelhead. Numerous fish and wildlife species and plants are found in the vicinity of the project. Sensitive species include Ricksecker’s water scavenger beetle, vernal pool fairy shrimp, California linderiella, dwarf downingia, Swainson’s hawk, grasshopper sparrow, burrowing owl, and tricolored blackbird.

### **Conclusions**

It is my opinion that the discharge of silt and sediment to the North Ingram Slough, the South Ingram Slough, and Auburn Ravine was deleterious to aquatic life. Cloudiness and turbidity of waters that would otherwise have been clear would have deleterious impacts on fish and aquatic macroinvertebrates such as clogging and abrasion of the gills, behavioral changes in fish, including movement and migration; decreased resistance to disease; impairment of feeding; poor egg and fry development, and; fatal impacts to small aquatic animals that are food for fish. Prior to this pollution incident, the stream would have provided habitat for benthic macroinvertebrates. Sediment discharge in the stream at and below the construction site would displace or kill macroinvertebrates, which in turn would reduce food supply for downstream fish species such as trout and sensitive species.

Please contact me at (916) 358-2918 if you have any questions.

cc: Kent Smith-DFG Habitat Conservation Program Manager

## REFERENCES

Berry, Rubinstein, Melzian and Hill. 2003. The Biological Effects of Suspended and Bedded Sediment (SABS) in Aquatic Systems: A Review (Internal Report). USEPA.

Buck, D.H. 1956. Effects of turbidity on fish and fishing. Oklahoma Fisheries Research Laboratory, Report Number 56. Norman, Oklahoma, 62pp.

Sherk, J.A., Jr. 1971. The effects of suspended and deposited sediments on the estuarine organisms, literature summary and research needs. Nat. Res. Inst., Univ. Maryland, Chesapeake Biol. Lab., Control No. 443, Solomons, Maryland. 73 pp.

Till, B. and Trayler, K. 2000. Sediment in Streams *in* Water Notes. WN17. Water and Rivers Commission, Western Australia.

Welch, P.S. 1952. Limnology, Second Edition, McGraw-Hill Book company, Inc. 538pp.



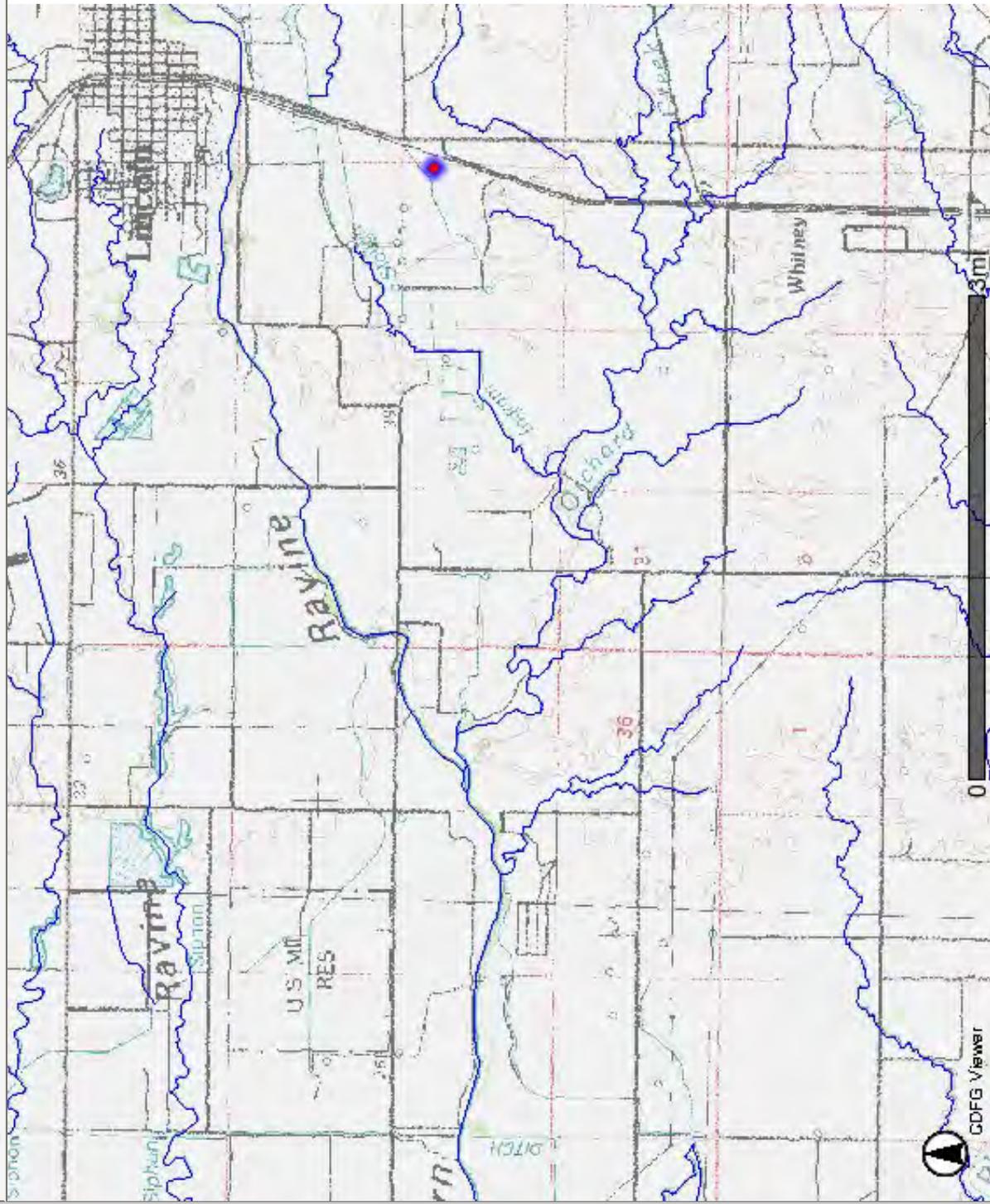
Lincoln Bypass  
Site Map

Author: C.Oz

Date: 7/14/2009 4:28 PM

Map Legend

- Hydrography (100K)
- Western States
- Mexico



GDFG Viewer

**ADMINISTRATIVE CIVIL LIABILITY COMPLAINT R5-2009-0558  
CONSIDERATION OF FACTORS PURSUANT TO CWC SECTION 13385**

California Water Code (CWC) Section 13385 (e) states: *“In determining the amount of civil liability, the regional board...shall take into consideration the nature, circumstance, extent and gravity of the violation or violations, whether the discharge is susceptible to cleanup or abatement, the degree of toxicity of the discharge, and, with respect to the violator, the ability to pay, the effect on ability to continue in business, any voluntary cleanup efforts undertaken, any prior history of violations, the degree of culpability, economic benefit or savings, if any, resulting from the violation, and other matters as justice may require. At a minimum, liability shall be assessed at a level that recovers the economic benefits, if any, derived from the acts that constitute the violation.”*

In preparing the Administrative Civil Liability Complaint, Central Valley Water Board staff considered the following:

**Nature and Extent of Violations:** California Department of Transportation is responsible for the construction and management of the State Route 65 Lincoln Bypass Project. It is a four-year project to construct 12.8 miles of new freeway with nine new bridge crossings around the City of Lincoln in Placer County. The portions of the project at issue are construction areas around South Ingram Slough (SIS), North Ingram Slough (NIS), Moore Road, and Ferrari Ranch Road.

The Discharger violated Section A.6 and H.2 of the Caltrans Storm Water Permit by discharging sediment-laden water to surface waters, which threatened to affect the beneficial uses in waters of the State and threatened to cause pollution, contamination or nuisance. The discharges were a result of not implementing an effective combination of erosion and sediment control on all disturbed areas during the rainy season.

**Circumstances:** Although Board staff completed multiple inspections, held meetings with Caltrans staff, and issued two Notices of Violation to show the severity of storm water management problems at the Lincoln Bypass site, the site continued to have storm water management problems throughout the wet season.

**Gravity:** The Discharger did not come into compliance with the Caltrans Storm Water Permit and caused discharges of sediment-laden storm water into the SIS, the NIS and into Auburn Ravine. From 21 December 2008 to 5 May 2009, Board staff’s inspections documented that the site lacked adequate BMPs, and during that period, there were 14 days of adequate precipitation to produce runoff. Board staff conducted field turbidity measurements at individual discharge points from the construction areas of the site as well as of the SIS and the NIS and found that the turbidity of surface waters increased through these construction areas.

The Lincoln Bypass Project is estimated to take four years to complete, and the next stage of work is to construct temporary and permanent bridges across Auburn Ravine and Coon Creek. Board staff does not want to see continued turbid discharges to surface waters.

**Toxicity:** Board staff collected upstream, downstream, and discharge point grab samples at the Lincoln Bypass Project site during two rainfall events in February 2009. The samples were analyzed for turbidity using a Hatch 2100P portable turbidity meter in the field. The field measurements are compiled in the tables below.

<b>Results of Turbidity Field Measurements taken on 13 February 2009</b>		
<u>Date</u>	<u>Location</u>	<u>Turbidity (NTU)</u>
2/13/09	SIS –upstream of construction area. This is the background sample of the SIS during this storm event.	9
2/13/09	SIS –300 feet downstream of construction area	88
2/13/09	SIS –outfall of the north roadside drainage	1,428
2/13/09	SIS –outfall of the south roadside drainage	258
2/13/09	SIS –outfall from below the RR tracks east of Abutment #1	714
2/13/09	Ferrari Ranch Road –storm drain inlet south and east of the new overcrossing	1,850

Field measurements from 13 February 2009 show that turbidity increased by a factor of nine through the construction area along the South Ingram Slough. The turbidity measurements of the discharges into South Ingram Slough were from 28 to 158 times higher than that of the upstream water in the Slough.

<b>Results of Turbidity Field Measurements taken on 23 February 2009</b>		
<u>Date</u>	<u>Location</u>	<u>Turbidity (NTU)</u>
2/23/09	NIS –upstream of construction area	60
2/23/09	NIS –outfall from the pond adjacent to the North Ingram Slough	1,040
2/23/09	SIS –outfall of the north roadside drainage	798
2/23/09	Auburn Ravine –upstream of the 54-inch culvert outfall. This is the background sample of Auburn Ravine during the storm event.	21
2/23/09	Moore Road –sample at the pump intake	548
2/23/09	Auburn Ravine –outfall from the 54-inch culvert	385

Field measurements from 23 February 2009 show that the turbidity of the water being pumped into the City of Lincoln storm water vault, which discharges to Auburn Ravine, is 25 times higher than the background water sample collected from Auburn Ravine. California Department of Fish and Game determined the discharges to SIS, NIS and Auburn Ravine to be deleterious to aquatic life.

**Susceptibility of the Discharge to Cleanup:** Once the turbid runoff entered SIS, NIS and Auburn Ravine, there was no practical way to clean up the water to avoid impacts to water quality or beneficial uses.

**Degree of Culpability:** The Discharger prepared and submitted a SWPPP and a Notice of Construction, and notified Board staff of discharges to surface waters as required by the Caltrans Storm Water Permit. Although the Discharger had a contract in place to employ treatment systems if needed, the Discharger did not employ treatment systems until 23 February 2009, after approximately 264,000 gallons of sediment-laden water had been discharged to surface waters. Board staff met with the Discharger repeatedly to discuss measures to effectively stabilize the site and protect water quality prior to this enforcement action.

**Degree of Cooperation:** The Discharger was cooperative in meetings with Board staff, but did not implement adequate BMPs on all disturbed areas throughout the rainy season. Advanced treatment measures were implemented only after multiple turbid discharges had occurred. The Discharger verbally indicated that the treatment systems were effective and that millions of gallons of storm water were treated between 23 February 2009, when the systems were installed, and 15 April 2009, when the systems were removed from the Lincoln Bypass site.

**Prior History of Violations:** Board staff has issued several other enforcement letters to the Discharger for multiple construction projects in the Caltrans District 3 area.

**Economic Benefit**

Active Construction Areas

The Discharger saved approximately \$50,000 by not providing a protective work surface on Abutment #1 at the SIS. The Discharger allowed the contractor to work throughout the winter on clay soils without providing adequate stabilization for the working areas and the access road. Installing crushed rock across the active construction area on top of Abutment #1 and on the access road leading up to Abutment #1 at the SIS is one of several BMPs that would have stabilized this active work area. Approximately two and one half acres of land on top of Abutment #1 (including the access road) was utilized for construction activity during the wet weather period. Based on an estimate from a crushed rock supplier in the Sacramento area, it would cost approximately \$49,912 to supply a four inch thick rock base over 2.5 acres as follows:

2.5 acres	X	43,560 ft <sup>2</sup>	X	0.33 feet	X	Yard	X	Truck	X	\$600	=	\$49,912
		1 acre				27 ft <sup>3</sup>		16 yards		Truck		

The entire area on top of Abutment #1 at the SIS did not have any BMPs installed throughout the wet weather period, and storm water runoff from this area flowed into the SIS.

The Discharger saved approximately \$35,000 by not stabilizing soils at Abutment #1 of the SIS (~1 acre), the NIS construction area (~1 acre), the Ferrari Ranch Road construction entrance (~3 acres), and the Moore Road (near Auburn Ravine) grading area (~5 acres). Based on a survey of consultants, approximately \$2,000 to \$6,000 per acre is needed to provide the necessary erosion and sediment control measures for construction sites depending on the slope and soil type. The construction site has erodible soils and steep slopes; therefore, an effective combination of both erosion and sediment control BMPs is critical to protect the site. Since only perimeter BMPs were installed at the active construction areas, the economic benefit received by the Discharger by not installing and maintaining an effective combination of erosion and sediment control BMPs at

this site was estimated to be \$3,500 per acre. The economic benefit was estimated by multiplying 10 acres by \$3,500 per acre equals \$35,000.

### Treatment Systems

The Discharger saved approximately \$40,000 by not treating the 319,939 gallons of storm water and sediment identified in the Notices of Discharge reports that discharged to surface waters and/or into the City of Lincoln storm drain systems. Board staff reviewed the precipitation data, drainage area calculations, and runoff coefficients used by Caltrans to estimate the volume of discharge, and agree that the 319,939 gallons estimated to be discharged to surface waters is within an appropriate range.

Three treatment systems were mobilized onto the Lincoln Bypass site on 20 February 2009. The SIS treatment system was operational on 23 February 2009, and the SIS and Moore Road treatment systems were operational on 25 February 2009. According to preliminary reports, three million gallons of storm water was treated at the Lincoln Bypass site at a cost of approximately \$300,000, plus added pumping costs of \$85,000. Therefore, \$385,000 to treat 3,000,000 gallons equals \$0.128 per gallon to treat turbid water, and 319,000 gallons times \$0.128 equals \$40,832 or approximately \$40,000.

Therefore, the total economic benefit that the Discharger accrued in not complying with their permit is estimated to be \$50,000 plus \$35,000 plus \$40,000 equals \$125,000.

### **Other Matters as Justice May Require**

- a. **Staff Costs:** Board staff spent approximately 350 hours investigating this incident and preparing this Complaint. The total cost for Board staff time is \$52,500 based on a rate of \$150 per hour.
- b. **Ability of the Discharger to Pay:** Board staff is not aware of any reason why the Discharger is unable to pay the liability. The total cost of Lincoln Bypass Project is \$325 million.



Linda S. Adams  
Secretary for  
Environmental Protection

# California Regional Water Quality Control Board Central Valley Region

Karl E. Longley, ScD, P.E., Chair

11020 Sun Center Drive #200, Rancho Cordova, California 95670-6114  
Phone (916) 464-3291 • FAX (916) 464-4645  
<http://www.waterboards.ca.gov/centralvalley>



Arnold  
Schwarzenegger  
Governor

23 July 2009

Ms. Jody Jones, District 3 Director  
California Department of Transportation  
Post Office Box 911  
Marysville, CA 95901

**CERTIFIED MAIL**  
**70081140000288054684**

**ADMINISTRATIVE CIVIL LIABILITY COMPLAINT R5-2009-0558, STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION, DISTRICT #3, STATE ROUTE 65 LINCOLN BYPASS  
PROJECT, PLACER COUNTY**

Enclosed is an Administrative Civil Liability Complaint (Complaint), issued pursuant to California Water Code (CWC) sections 13385 and 13323. The Complaint charges the California Department of Transportation (Discharger) with civil liability in the amount of **five hundred twenty four thousand one hundred dollars (\$524,100)** for violations of the General Permit for Storm Water Discharges from the State of California, Department of Transportation Properties, Facilities, and Activities, Order 99-06-DWQ (NPDES No. CAS000003)(Caltrans Storm Water Permit). The violations occurred at the State Route 65 Lincoln Bypass Project in Placer County.

Pursuant to CWC section 13323, the Discharger may:

- Pay the assessed civil liability and waive its right to a hearing before the Central Valley Water Board by signing the enclosed waiver (checking off the box next to item #4) and submitting it to this office by **24 August 2009**, along with payment for the full amount;
- Agree to enter into settlement discussions with the Central Valley Water Board and request that any hearing on the matter be delayed by signing the enclosed waiver (checking off the box next to item #5) and submitting both the waiver and a letter describing the issues to be discussed to this office by **24 August 2009**; or
- Contest the Complaint and/or enter into settlement discussions with the Central Valley Water Board without signing the enclosed waiver.

If the Discharger chooses to sign the waiver and pay the assessed civil liability, this will be considered a tentative settlement of the violations in the Complaint. This settlement will be considered final pending a 30-day comment period, starting from the date of this Complaint, during which time interested parties may comment on this proposed settlement by submitting information to this office, attention Sue McConnell. Should the Central Valley Water Board receive new information or comments during this comment period, the Central Valley Water Board's Executive Officer may withdraw the complaint, return payment, and issue a new complaint. If the Central Valley Water Board does not hold a hearing on the matter, and if the terms of the final settlement are not significantly different from those proposed in the enclosed

**California Environmental Protection Agency**

Complaint, then there will not be additional opportunities for public comment on the proposed settlement.

If the Central Valley Water Board does not receive a signed waiver by **24 August 2009**, then a hearing will be scheduled for the **7/8/9 October 2009** Central Valley Water Board meeting in Rancho Cordova. The Central Valley Water Board's Prosecution Team has proposed the enclosed draft Hearing Procedures to govern the conduct of such a hearing. Any objections to these draft Hearing Procedures must be received by Lori Okun, whose contact information is listed in the enclosed draft Hearing procedures, by **5 p.m. on 3 August 2009**.

Any comments or evidence concerning the enclosed Complaint must be submitted in accordance with the deadlines contained in the enclosed draft Hearing Procedures, unless these deadlines are changed by the Central Valley Water Board's Adjudicatory Team, either on their own accord or upon request.

In order to conserve resources, this letter transmits paper copies of the documents to the Discharger only. Interested persons may download the documents from the Central Valley Water Board's Internet website at:

[http://www.waterboards.ca.gov/centralvalley/board\\_decisions/tentative\\_orders](http://www.waterboards.ca.gov/centralvalley/board_decisions/tentative_orders)

Copies of these documents can also be obtained by contacting the Central Valley Water Board's office at 11020 Sun Center Drive, #200, Rancho Cordova, California 95670-6114, weekdays between 8:00 a.m. and 5:00 p.m.

For your information, we have attached a description of the factors that were considered, pursuant to California Water Code section 13385(e), in assessing this civil liability.

If you have any questions regarding the enclosed Complaint, please contact Marty Hartzell at (916) 464-4630 or Sue McConnell at (916) 464-4798.

WENDY WYELS  
Environmental Program Manager  
Compliance and Enforcement Section

Encl: CWC Factors Considered in Assessing Liability  
Administrative Civil Liability Complaint R5-2009-0558  
Hearing Waiver  
Draft Hearing Procedures

cc: see next page

cc w/o encl: Mr. Eugene Bromley, U.S. EPA, Region IX, San Francisco  
Mr. Patrick Pulupa, Office of Chief Counsel, SWRCB, Sacramento  
Ms. Lori Okun, Office of Chief Counsel, SWRCB, Sacramento  
Ms. Emel Wadhvani, Office of Chief Counsel, SWRCB, Sacramento  
Mr. Reed Sato, Office of Enforcement, SWRCB, Sacramento  
Mr. Ken Landau, Central Valley Water Board, Sacramento  
Mr. Dan Radulescu, Central Valley Water Board, Rancho Cordova  
Ms. Carol Oz, California Department of Fish and Game, Rancho Cordova  
Mr. Walt Shannon, State Water Resources Control Board, Sacramento  
Mr. Donald Tanner, National Marine Fisheries Service, Sacramento  
Mr. Doug Coleman, Caltrans Chief Environmental Engineering (South), Marysville  
Ms. Leslie Case, Caltrans NPDES Coordinator, Marysville  
Mr. Carl Berexa, Caltrans Senior Resident Engineer, Rocklin  
Ms. Dusty Shell, Caltrans District Storm Water Coordinator, Sacramento  
Mr. Brian Connolly, DeSilva Gates Construction, Dublin