

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

ADMINISTRATIVE CIVIL LIABILITY ORDER R5-2010-0506
IN THE MATTER OF

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

This Administrative Civil Liability Order 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 7, which authorizes the delegation of the Executive Officer's authority to a deputy, in this case the Assistant Executive Officer. This Order is based on a settlement of claims presented in an Administrative Civil Liability Complaint, issued by the Executive Officer on 23 July 2009 (ACL Complaint), alleging 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 Assistant 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 Order 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 does not establish numeric effluent limitations for pollutants in storm water discharges from construction activities, but rather 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/FCI, a Joint Venture (Contractor), 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*". The Contractor is the Discharger's prime contractor 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 as 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*

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

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

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

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 ALLEGED IN COMPLAINT R5-2009-0558

11. 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 that occurred from 3 November 2008 through 4 March 2009.
12. Board staff conducted seven inspections of the Lincoln Bypass Project between 11 December 2008 and 5 May 2009. A summary of each of these inspections is presented below.
13. On 11 December 2008, Board staff met with Caltrans and 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 Contractor 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 on-site soils 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 the 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 the SIS. Storm water also collected in the roadside drainage ditch west of Abutment #3 and discharged through a culvert into the 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 the 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 the 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 Contractor 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.
19. On 13 February 2009, Board staff inspected the Ferrari Ranch Road and the 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 the 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:

Results of Turbidity Field Measurements taken on 13 February 2009		
<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 the SIS and the 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 Contractor 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 the SIS, one system was set up south of the 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 the SIS did not begin operating until 23 February 2009, and the systems at the 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 the 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 the 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:

Results of Turbidity Field Measurements taken on 23 February 2009		
<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.
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 was not a planned 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 the SIS to divert flow around the construction area, and work had started to construct the second set of piers at the 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 the 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.

VIOLATIONS ALLEGED IN COMPLAINT R5-2009-0558

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. 34. 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 implement corrective measures immediately and submit discharge reports. 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.
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 Finding No. 19).

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 Order 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 ALLEGED IN COMPLAINT R5-2009-0558

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. 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. 28 through 30 describe additional violations related to these discharges. 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, 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. 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.
36. On 23 July 2009, Executive Officer Pamela Creedon issued Administrative Civil Liability Complaint R5-2009-0558 to the Discharger. The Complaint proposed five hundred twenty-four thousand, one hundred dollars (\$524,100) in civil liability pursuant to CWC sections 13385 and 13323. The amount of the liability was established based on a review of the factors cited in CWC section 13385.
37. Following issuance of ACL Complaint, the Discharger and the Board's Prosecution Team conferred for the purpose of settling the violations. On 14 September 2009, after arms-length negotiations, the Discharger submitted a proposal to settle the ACL Complaint by paying three hundred twenty five thousand dollars (\$325,000). This settlement amount was accepted by the Executive Officer, acting as head of the Board's Prosecution Team. Pursuant to CWC section 13385, the Central Valley Water Board has considered the following factors,;

Nature and Extent: 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. The Discharger also violated Receiving Water Limitations C-2-2 and C-2-3 of the Caltrans Storm Water Permit.

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.

Susceptibility of the Discharge to Cleanup: Once the turbid runoff entered the 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 Toxicity of the Discharge: 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 with a portable turbidity meter in the field. Field measurements from 13 February 2009 show that turbidity increased by a factor of nine through the construction area along the SIS and turbidity measurements of the discharges into SIS ranged from 28 to 158 times higher than that of the upstream water in the Slough. 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.

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.

Voluntary Cleanup Efforts Undertaken: As stated earlier, there was no practical way to clean up the impacted waterways once the turbid runoff entered the SIS, NIS and Auburn Ravine.

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.

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 to discuss measures to effectively stabilize the site and protect water quality and issued two Notice of Violation letters to notify the Discharger of the severity of storm water management problems at the Lincoln Bypass site.

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.

Economic Benefit: The Discharger saved approximately \$125,000 by not implementing adequate BMPs and not providing treatment systems prior to 23 February 2009. The breakdown of the economic benefits is as follows:

- a) 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	43,560 ft ²	0.33 feet	Yard	Truck	\$600 =	\$49,912
	1 acre		27 ft ³	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.

- b) 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.
- c) 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.
- d) 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.

Staff Costs: Board staff spent approximately 350 hours investigating this incident and preparing this Order. The total cost for Board staff time is \$52,500 based on a rate of \$150 per hour.

38. On 23 April 2009, the Central Valley Water Board delegated the authority to issue Administrative Civil Liability Orders, where the matter is not contested by the Discharger, to the Executive Officer, or to an Assistant Executive Officer when the Executive Officer is serving as head of the Board's Prosecution Team (Resolution R5-2009-0027). Pamela Creedon is serving as the head of the Board's Prosecution Team for this matter, and therefore Assistant Executive Officer Kenneth D. Landau has the authority to issue this Order.

DISCHARGER'S CLAIMS: DEFENSES AND MITIGATING FACTORS

39. The Discharger responded to the ACL Complaint allegations by letter dated 20 August 2009, by an evidentiary submittal on 8 September 2009, and in a settlement meeting with members of the Prosecution Team at the Board's offices on 10 September 2009, denying the claims and allegations and asserting defenses and mitigating factors, as follows:
- a) The Discharger and Contractor engaged in good faith efforts to comply with Permit requirements, including preparing a Storm Water Pollution Prevention Plan (SWPPP) that included erosion control and storm water management Best Management Practices (BMPs). The amendments to the SWPPP were made reflecting iterative changes to implementing the storm water BMPs.
 - b) Additional BMPs were proposed by the Contractor and implemented following approval by the Discharger, including hydraulic straw, erosion control blankets and detention basins, after storm events that indicated the need to supplement existing BMPs and in consultation with Water Board. This iterative process of supplementing BMPs is contemplated by the Permit.
 - c) As an example of the additional BMPs mentioned in Finding No. 39.b, the Discharger issued Contract Change Order # 12 to place BMPs on the slopes at Industrial OH, South Ingram Slough, Ferrari Ranch OC and North Ingram Slough when it became apparent that additional measures were required for conditions that were more difficult to address than the original contract anticipated. In addition, contract item BMPs (temporary cover, silt fences, temporary check dams, silt fences, etc) were also installed. The access road on the side of the embankment received BMPs in accordance with the Caltrans construction manuals. The Contractor also placed a layer of rock on the access road approaching the area and lined the roadside ditch.
 - d) When it became evident during the last storm season that conventional supplemental BMPs were insufficient to adequately reduce turbidity, the Discharger approved the installation and operation of three water treatment systems. The Contractor installed the systems, and the Discharger has stated that these systems are expected to continue to be utilized during the upcoming storm season.
 - e) On past projects, the Discharger has implemented standard BMPs and continued to improve upon them, progressing through the available measures, consistent with Permit requirements. On this project the Discharger followed this operating practice. The Discharger's staff met with Board staff and explained the anticipated course of action to address storm water discharges at the project site.
 - f) In addition this project has very large areas to retain accumulated run off and avoid the need to discharge. To utilize this storage capacity, the Discharger

pumped from areas with less retention capacity to areas with greater retention capacity. The Discharger also tracked the remaining storage capacity on the project and planned to implement water treatment when the Discharger determined the capacity to be insufficient to contain the storm water onsite. The water treatment systems were ordered when the storage/retention capacity was reduced by 50%. The Discharger contends that there was no need to order and pay for the treatment systems until the onsite retention/storage capacity was significantly reduced.

g) On February 23, 2009, flooding occurred on Moore Road forcing the temporary closure of one lane. The Director of Public Works for the City of Lincoln was unwilling to close Moore Road to all but emergency traffic. This portion of Moore Road had a history of flooding unrelated to this project, and runoff from this area normally discharged to the same storm drain to which this discharge was directed. Additionally, disturbed areas of soil unrelated to the project contributed to the turbidity of water that flooded at Moore Road.

Faced with limited choices, the Discharger explored the options of discharging the flood (storm) water to the nearest sanitary sewer system, or into a nearby storm sewer connection at one time owned and operated by the City of Lincoln. The sanitary sewer connection was not feasible due to inadequate pumping capacity, and the storm sewer connection, with discharge to Auburn Ravine, had been disconnected by the City of Lincoln. The Discharger does not and did not at the time own or control Moore Road and did not believe that it was in a legal position to close the road against the wishes of the Director of Public Works for the City of Lincoln. This left the Discharger with no alternative other than to pump the flood waters into the closest storm drain across Moore Road from the flooded area, which was the same storm drain that normally manages flows from this area.

h) The conclusions reached by the Department of Fish and Game are disputed by a Caltrans' aquatic biologist. The Discharger denies the discharge from Moore Road was deleterious to aquatic life and was necessary to protect public safety. The Discharger contends that no anadromous fish were present in the ravine at the time of the discharge.

i) The Discharger and the Contractor actively sought to ensure compliance with the Permit, including maintaining and supplementing BMPs, as required to address the extraordinary soil conditions and the severe storm events of the past season. The Discharger and the Contractor had a reasonable and good faith belief that their efforts were sufficient to lawfully manage storm water at the site. The Discharger contends that such good faith efforts may be considered within the scope of "other matters as justice may require" in evaluating liability and in mitigation of any penalty pursuant to CWC section 13385(e).

j) The Discharger disputes the allegation that any of the discharges alleged to

have occurred were toxic in any way. The discharge was turbid water and this is not a toxic pollutant necessitating application of Best Available Technology Economically Achievable (BAT) under 40 CFR Parts 122,123, and 124. Turbidity is a conventional pollutant and not a toxic pollutant. The Discharger contends that this factor should be removed from the reasons for assessing liability. The Prosecution Team acknowledges that sediment is a conventional pollutant under the Clean Water Act, but interprets "toxicity" as contained in CWC section 13385(e) as referring to the potential lethal effects that a pollutant may have on all life, including fish.

k) The Discharger asserts that the Reports of Discharge provided to the Water Board comply with Section B.3.a of the GCP and C-2, 3.a. of the Caltrans MS4 NPDES permit.

40. Following the above-referenced settlement meeting on 10 September 2009, the Discharger and the Water Board's Prosecution Team reached an agreement. This Order documents the settlement of the alleged violations herein mentioned. Notice of this settlement was published on the Central Valley Water Board's website, in a newspaper of general circulation in the community, and was provided to all interested parties. The 30-day public notice and comment period mandated by Federal regulations (40 CFR 123.27) has expired.

IT IS HEREBY ORDERED THAT:

1. The California Department of Transportation shall pay an Administrative Civil Liability in the amount of **three hundred twenty five thousand dollars (\$325,000)**.
2. By **26 February 2010**, the Discharger shall remit payment of the \$325,000 by check made payable to the *State Water Pollution Cleanup and Abatement Account*. The check shall have written upon it the number of this ACL Order. This payment shall resolve the violations charged in ACL Complaint R5-2009-0558.
3. Should the Discharger fail to take the above action, the Assistant Executive Officer may refer the matter to the State Attorney General for enforcement of the terms of this Order.
4. The Discharger, together with Contractor DeSilva Gates/FCI, and its constituent joint venturers DeSilva Gates Construction L.P. and FCI Constructors, Inc., and each of them, are hereby released from further liability relating to the claims, allegations, alleged violations and causes of action that are the subject of the ACL Complaint R5-2009-0558.
5. This Order is final upon signature.

Any person aggrieved by this action of the Central Valley Water Board may petition the State Water Board to review the action in accordance with CWC section 13320 and California Code of Regulations, title 23, sections 2050 and following. The State Water Board must receive

the petition by 5:00 p.m., 30 days after the date of this Order, except that if the thirtieth day following the date of this Order falls on a Saturday, Sunday, or state holiday (including mandatory furlough days), the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the Internet at:

http://www.waterboards.ca.gov/public_notices/petitions/water_quality
or will be provided upon request.

KENNETH D. LANDAU, Assistant Executive Officer

27 January 2010

Date

WMH/SER: 15 October 2009
Revised 25 Jan 2010