# California Regional Water Quality Control Board
## North Coast Region
John W. Corbett, Chairman

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**Alan C. Lloyd, Ph.D.**
*Agency Secretary*

**Arnold Schwarzenegger**
*Governor*


February 16, 2006

Ms. Susan Leroy
CDOT Eureka
1656 Union Street
Eureka, CA 95501

Dear Ms. Leroy:

Subject: Issuance of Clean Water Act Section 401 Certification (Water Quality Certification) for the Confusion Hill Bypass Project

File: CDOT – Hwy 101, Confusion Hill Bypass
WDID No. 1B05153WNME

This Order by the California Regional Water Quality Control Board, North Coast Region (Regional Water Board), is being issued pursuant to Section 401 of the Clean Water Act (33 USC 1341), in response to your request, on behalf of the California Department of Transportation (applicant), for Water Quality Certification for activities related to the Confusion Hill Bypass Project in Mendocino County. On November 29, 2005, the Regional Water Board received your application and a $500.00 processing fee. On December 29, 2005, we sent you a letter stating the application was incomplete. You submitted additional information during the first week of January 2006, including a Notice of Determination and maps that show the area of potential impact from the project is larger than the area that was used to calculate the initial fee. On January 11, 2006, we deemed the application complete and posted information describing the project on the Regional Water Board's website for a 21-day public review and comment period. We did not receive any comments on this project. On January 12, 2006, we received an additional $6510.00 that covers the remaining balance of the application fee.

Project Description: The project is located approximately 18.5 miles south of Garberville and 8 miles north of Leggett. Highway 101 currently bisects an ancient and active rockslide in the area known as Confusion Hill. The purpose of the project is to provide a safe and reliable transportation route around the landslide area by relocating the highway from the east side of the South Fork Eel River to the west side. Relocating the highway requires construction of two new bridges and a new section of highway between the new bridges. The existing section of highway will be de-commissioned following completion of the bypass.

The south bridge will be a segmental, cast-in-place, pre-stressed box girder structure. The south bridge will be 43 feet wide, 1355 feet long, and 255 feet above the center of the river channel. The foundation for the south bridge will be constructed on cast-in-drilled-hole piles. The north bridge will be a cast-in-place pre-stressed box girder structure with pier shaft foundations. The north bridge will be 43 feet wide, 580 feet long, and 150 feet above the center of the river. Both bridges are designed such that all piers and associated foundations will be located above the 100-year flood elevation of the river and the new section of highway will be at least 150-feet above the river.

Temporary access roads and temporary bridges will be constructed at each end of the project to allow access for personnel and various construction equipment including cranes, drill rigs, and excavation equipment. The applicant has identified two 1.5-acre areas near each end of the project as places where activities related to construction of access roads and temporary bridges could impact waters of the United States. The temporary bridges will be constructed 3 feet above the elevation of the 100-year storm event or they will be designed to withstand the 100-year storm event and would be overtopped at the elevation of a 50-year storm event. Activities related to construction of the temporary bridges include rotating, vibrating, drilling or a combination of these methods to install sheet piles or casings and drilling holes into the bedrock to build support piers for the temporary bridges.

A seasonal temporary bridge may also be installed near the south bridge. A railroad flatcar or similar bridge deck will be placed on river rock abutments; or wooden, steel or concrete piles will be placed in the channel to support a wood deck. The river rock abutments may extend several feet into the channel. All the bridges are designed to allow for fish passage and passage for recreational boating.

A portable concrete batch plant will be located near the southern end of Route 271 at an elevation above the 100-year storm event. A concrete pipeline or “slick line” may be used to transport concrete from the batch plant. A typical slick line is made of 6-inch diameter steel pipe; a secondary containment pipe or trough would be used to contain any concrete spills. All concrete wastes and water that contacts fresh concrete must be fully contained and disposed of properly in order to prevent any discharge to surface water or ground water.

All permanent and temporary impacts to waters of the United States from this project will occur within two designated 1.5-acre areas; however, the actual area of impact to waters of the United States is anticipated to be much smaller. The area of anticipated temporary impacts to waters of the United States from access road and temporary bridge placement and removal activities will be approximately 0.16-acre at each end of the project. All support piers installed for the temporary bridges will be removed to the level of bedrock. The only area of permanent impact to waters of the United States is anticipated to be from the sections of temporary bridge piers that will remain below the top of bedrock following removal of the temporary bridges. The area of permanent impact to waters of the United States from these pier remnants will be less than 0.01 acre. The new bridges and new highway section will not permanently impact waters of the United States.

The new section of highway will be placed in a large through-cut. Approximately 385,000 cubic yards of excess earthen material will be generated by excavation of the through-cut. The applicant has identified five areas along Highway 101 near the north end of the project that are above the elevation of the 100-year storm event where permanent disposal of the excess excavation material will occur. Best Management Practices (BMPs) for sediment and turbidity control will be implemented at the disposal areas during construction activities and all the disposal areas will be planted with native shrubs upon completion of the project.

The proposed project will not affect any wetlands. Existing vegetation will be preserved to the maximum extent possible and all disturbed areas will be seeded and replanted. To compensate for potential impacts this project may have on salmonids, a culvert modification project will be implemented on Red Mountain Creek to restore fish passage and provide access to historic spawning and rearing habitat.

Receiving Waters: South Fork Eel River in the Benbow Hydrologic Subarea No. 111.32.

Filled or Excavated Area: Area Temporarily Impacted: 0.32 acres of stream bank and stream channel
Area Permanently Impacted: 0.01 acre of stream channel

Total Linear Impacts: Length temporarily impacted: 150 feet
Length permanently impacted: none

Federal Permit: U.S. Army Corps of Engineers Nationwide Permit No. 33

Compensatory Mitigation: To compensate for potential impacts to salmonids as a result of the Confusion Hill Bypass project construction activities, the applicant will fund a project to improve fish passage through the culvert at Red Mountain Creek. Highway 101 crosses Red Mountain Creek at the north end of the project where the new alignment will conform to the existing alignment. During a wide range of typical stream flows, the existing culvert at Red Mountain Creek prevents salmonids from accessing historic spawning and rearing habitat located upstream of the culvert. The fish passage improvement project will incorporate National Marine Fisheries Service and California Department of Fish and Game (CDF&G) fish passage criteria. The mitigation project is subject to approval by those agencies.

Modifications to improve fish passage through the existing culvert will likely include installation of concrete/rock weirs (baffles) in the bottom of the culvert to reduce flow velocities through the culvert. The baffles are likely to be composed of large rocks and concrete. The existing road leading to the culvert outlet will be used to gain access to through the culvert and inlet area.

Noncompensatory Mitigation: Noncompensatory mitigation for this project includes the use of BMPs for waste handling, sediment and turbidity control, and heavy equipment use and concrete use near a waterway. The applicant has applied for a Lake or Streambed Alteration Agreement (1600 Permit) from the CDF&G.

CEQA Compliance: The California Department of Transportation, as the lead agency for CEQA, certified an Environmental Impact Report (SCH# 200405201) for this project on December 15, 2005.

Standard Conditions: Pursuant to Title 23, California Code of Regulations, Section 3860 (23 CCR 3860), the following three standard conditions shall apply to this project:

1) This certification action is subject to modification or revocation upon administrative or judicial review, including review and amendment pursuant to Section 13330 of the California Water Code and 23 CCR 3867.

2) This certification action is not intended and shall not be construed to apply to any discharge from any activity involving a hydroelectric facility requiring a Federal Energy

Regulatory Commission (FERC) license or an amendment to a FERC license unless the pertinent certification application was filed pursuant to 23 CCR 3855(b) and the application specifically identified that a FERC license or amendment to a FERC license for a hydroelectric facility was being sought.

3) The validity of any nondenial certification action (actions 1 and 2) shall be conditioned upon total payment of the full fee required under 23 CCR 3833, unless otherwise stated in writing by the certifying agency.

Additional Conditions: Pursuant to 23 CCR 3859(a), the applicant shall comply with the following additional conditions:

1) The applicant shall notify the Regional Water Board in writing at least five working days (working days are Monday – Friday) prior to the commencement of the project, with details regarding the schedule of operations, to allow staff the opportunity to be present onsite and to answer any public inquiries that may arise regarding the project.

2) All conditions listed in this Water Quality Certification must be included in the Plans and Specifications prepared by the applicant for the Contractor. All conditions shall be implemented according to the submitted application and this Water Quality Certification.

3) A copy of this permit must be provided to the contractor and all subcontractors conducting the work, and a copy must be in their possession at the work site. It is the applicant's responsibility to ensure that the contractor and all subcontractors are provided a copy of this permit.

4) A copy of the Storm Water Pollution Prevention Plan (SWPPP) shall be submitted to the attention of Regional Water Board staff Dean Prat at least 30 days prior to the start of the project.

5) The Red Mountain Creek mitigation project shall be completed by October 31, 2010. The applicant shall notify the Regional Water Board in writing at least five working days (working days are Monday – Friday) prior to the commencement of the Red Mountain Creek mitigation project, with details regarding the schedule of operations, to allow staff the opportunity to be present onsite and to answer any public inquiries that may arise regarding the project.

6) The Red Mountain Creek mitigation project shall comply with all conditions in this Water Quality Certification.

7) Adequate BMPs for sediment and turbidity control shall be implemented and in place prior to, during, and after construction in order to ensure that no silt or sediment enters surface waters.

8) If, at any time, an unauthorized discharge to surface waters occurs, or any water quality problem arises, the project shall cease immediately and Regional Water Board staff shall be notified promptly.

9) No debris, soil, silt, sand, bark, slash, sawdust, rubbish, cement or concrete washings, oil or petroleum products, or other organic or earthen material from any construction or associated activity of whatever nature, other than that authorized by this permit, shall be allowed to enter into or be placed where it may be washed by rainfall into waters of the State.

10) All materials used for cleaning concrete from tools and equipment, and any wastes generated by this activity, shall be adequately contained to prevent contact with soil and surface water and shall be disposed of properly.

11) When operations are completed, any excess material or debris shall be removed from the work area and disposed of properly. No rubbish shall be deposited within 150 feet of the high water mark of any stream.

12) If construction dewatering is found to be necessary, the applicant will use a method of water disposal other than disposal to surface waters (such as land disposal) or the applicant shall apply for coverage under the General Construction Dewatering Permit and receive notification of coverage to discharge to surface waters.

13) Fueling, lubrication, maintenance, operation, storage and staging of vehicles and equipment shall be outside of waters of the United States and shall not result in a discharge or a threatened discharge to waters of the United States. At no time shall the applicant use any vehicle or equipment, which leaks any substance that may impact water quality.

14) Project activities shall comply with provisions in the North Coast Region Water Quality Control Plan (Basin Plan).

15) The project site may be visited and assessed by Regional Water Board staff to document compliance with this certification.

16) All work within waters of the United States shall not commence until May 15th and shall be completed prior to October 31st.

17) All activities, BMPs, and associated mitigation will be conducted as described in this Permit and the application submitted by the applicant for this project.

18) The applicant shall take photos of all areas disturbed by project activities, including all excess materials disposal areas, after the first rainfall event that generates visible runoff from these areas in order to demonstrate that erosion control measures have been successful. A report containing these photos shall be submitted within 60 days of the first rainfall event that generates runoff from the disturbed areas.

19) Visual observations of the South Fork Eel River shall be conducted whenever a project activity has the potential to mobilize sediment and increase the turbidity of the South Fork Eel River. Field turbidity measurements shall be collected whenever a project activity causes turbidity of the South Fork Eel River to be increased above background concentrations in order to demonstrate compliance with receiving water limitations.

Whenever turbidity in the South Fork Eel River is increased above background as a result of project activities, turbidity measurements shall be collected upstream (within 50 feet) of project activities (background) and downstream (within 100 feet) of the source of turbidity. The frequency of turbidity monitoring shall be a minimum of every hour during periods of increased turbidity and shall continue until turbidity measurements demonstrate compliance with receiving water limitations and turbidity levels are no longer increasing as a result of project activities. If turbidity levels are greater than 20 percent above background 100 feet downstream of the source of turbidity, all necessary steps shall be taken to install, repair, and/or modify BMPs to control the source(s) of sediment and the overall distance from the source of

turbidity to the downstream extent of the increased turbidity (20 percent above background) shall be measured.

Turbidity monitoring results shall be reported to appropriate Regional Water Board staff by telephone within 1 hour of taking any turbidity measurement that shows turbidity levels are 20 percent above background 100 feet or more downstream of the source of turbidity. All recorded visual observation and all field turbidity measurements collected for the purpose of this condition shall be submitted in a report to the Regional Water Board by November 15th each year and within 45 days of project completion.

20) This Order is not transferable. In the event of any change in control of ownership of land presently owned or controlled by the applicant, the applicant shall notify the successor-in-interest of the existence of this Order by letter and shall forward a copy of the letter to the Regional Water Board at the above address.

To discharge dredged or fill material under this Order, the successor-in-interest must send to the Regional Water Board Executive Officer a written request for transfer of the Order. The request must contain the requesting entity's full legal name, the state of incorporation if a corporation, address, and telephone number of the person(s) responsible for contact with the Regional Water Board. The request must also describe any changes to the Project proposed by the successor-in-interest or confirm that the successor-in-interest intends to implement the Project as described in this Order.

Water Quality Certification: I hereby issue an order [23 CCR Subsection 3831(e)] certifying that any authorized discharge from the Confusion Hill Bypass Project, (Facility No. 1B05153WNME) will comply with the applicable provisions of sections 301 ("Effluent Limitations"), 302 ("Water Quality Related Effluent Limitations"), 303 ("Water Quality Standards and Implementation Plans"), 306 ("National Standards of Performance"), and 307 (" Toxic and Pretreatment Effluent Standards") of the Clean Water Act [33 USC Subsection 1341 (a)(1)], and with other applicable requirements of State law. This discharge is also regulated under State Water Resources Control Board Order No. 2003 - 0017 - DWQ, "General Waste Discharge Requirements for Dredge and Fill Discharges That Have Received State Water Quality Certification" which requires compliance with all conditions of this Water Quality Certification.

Except as may be modified by any preceding conditions, all certification actions are contingent on: a) the discharge being limited and all proposed mitigation being completed in strict compliance with the applicant's project description, and b) compliance with all applicable requirements of the Regional Water Board's Water Quality Control Plan for the North Coast Region (Basin Plan).

Expiration: The authorization of this certification for any dredge and fill activities expires on February 16, 2011. Conditions and monitoring requirements outlined in this certification are not subject to the expiration date outlined above, and remain in full effect and are enforceable.

Please notify Dean Prat of our staff at (707) 576-2801 prior to construction (pursuant to Additional Condition No. 1 above) so that we can answer any public inquiries about the work.

Sincerely,

Catherine Kuhlman
Executive Officer

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Enclosure:
State Water Resources Control Board Order No. 2003-0017 - DWQ, "General Waste Discharge Requirements for Dredge and Fill Discharges That Have Received State Water Quality Certification"

cc: Ms. Jane Hicks, U.S. Army Corps of Engineers, Regulatory Functions, 333 Market Street, San Francisco, CA 94599
U.S. Army Corps of Engineers, District Engineer, P.O. Box 4863, Eureka, CA 95502