Public Notice for Section 401 Water Quality Certification and/or Waste Discharge Requirements

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

Mendocino County

On November 29, 2005, the North Coast Regional Water Quality Control Board (Regional Water Board) received an application from Ms. Susan Leroy, representing the California Department of Transportation (applicant) requesting Federal Clean Water Act, Section 401, Water Quality Certification for activities related to construction of two new bridges and a new section of highway to bypass the ongoing landslide problems near Confusion Hill. The proposed new bridges are located on Highway 101 and will cross the South Fork Eel River in Mendocino County, California. The proposed projects will cause disturbances to waters of the United States associated with the South Fork Eel River in the Benbow Hydrologic Subarea No. 111.32.

The proposed 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 highway has regularly experienced closures due to roadway slip outs, retaining wall failures, and debris flows. Debris flows and road closures have been occurring with greater frequency and magnitude within the last few years. Geotechnical studies indicate that the landslide is progressively losing strength and debris will continue fall onto the highway, resulting in continued closures and more extensive highway repairs in the near future. Ten road closures occurred during the 2002/03 winter season. Road closures discourage tourism, prevent students and teachers from reaching their schools, and hinder emergency response actions and the general transportation of goods. A catastrophic slide at Confusion Hill could close Highway 101 in both directions for an extended period. Complete closure of the highway could require a 205-mile detour and cost an estimated 7.1 million dollars per month in travel delay and added vehicle costs.

The purpose of the proposed 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. The existing section of highway will be de-commissioned following completion of the bypass. Relocating the highway requires construction of two new bridges and a new section of highway between the new bridges. 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 are necessary 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 but all the proposed bridges are designed to allow for fish passage and passage for recreational boating.

The use of a portable concrete batch plant is anticipated for this project. The 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 also 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 will not permanently impact waters of the United States.

The new section of highway will cross the hillside on the west side of the river. This new alignment will place the highway in large through-cut. Approximately 385,000 cubic yards of excess excavation material will be generated. The applicant has identified five areas above the elevation of the 100-year storm event where permanent disposal of the excess excavation material will occur. All five locations are located along Highway 101 near the north end of the project. Best Management Practices (BMPs) for sediment and turbidity control will be implemented in the disposal areas during construction activities and all the disposal areas will be planted with native shrubs upon completion of the project.

The project has been designed to minimize impacts to threatened and endangered species. The National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NOAA Fisheries) has analyzed the effect of the proposed highway relocation project on coho salmon, chinook salmon, steelhead, and designated critical habitat for those species, in accordance with the Endangered Species Act (ESA). In their biological opinion, NOAA Fisheries' concludes that the proposed project will adversely affect listed salmonids and take of listed species is anticipated. However, the proposed project is not likely to jeopardize the continued existence of

ESA listed salmonids or destroy or adversely modify designated critical habitat for these species. An incidental take statement with terms and conditions is included in the biological opinion. In addition, to compensate for potential impacts this project may have on ESA listed salmonids, the applicant has agreed to fund a culvert repair project on Red Mountain Creek to restore fish passage and provide access to historic spawning and rearing habitat. Noncompensatory mitigation for this project will include the use of BMPs for waste handling, sediment and turbidity control, and heavy equipment and concrete use near waterways.

The applicant has proposed an expedited schedule to complete this project and is planning to begin construction as soon as possible. The project is expected to take three to four years to construct and will be completed by October 2009 or 2010. Construction activities near the river are proposed to be conducted between May 15 and October 31. 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.

The applicant has applied to the United States Army Corps of Engineers for authorization to perform the project under Nationwide Permit No. 33, pursuant to Clean Water Act, Section 404. 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. The applicant has applied for a Lake or Streambed Alteration Agreement (1600 Permit) from the California Department of Fish and Game.

Regional Water Board staff are proposing to regulate this project pursuant to Section 401 of the Clean Water Act (33 USC 1341) and/or Porter-Cologne Water Quality Control Act authority. In addition, staff will consider all comments received during a 21-day comment period that begins on the first date of issuance of this letter. If you have any questions or comments, please contact staff member Dean Prat at (707) 576-2801 within 21 days of the posting of this notice.

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