

August 26, 2011

**NOTICE OF CONSIDERATION OF COVERAGE UNDER
GENERAL WASTE DISCHARGE REQUIREMENTS Order No. R1-2009-0045,
National Pollutant Discharge Elimination System Permit and Waste Discharge
Requirements for Low Threat Discharges to Surface Waters**

The City of Eureka
Martin Slough Interceptor Pipeline Project:
WDID No. 1B08072WNSO

Humboldt County

On August 11, 2011, the North Coast Regional Water Quality Control Board (Regional Water Board) received a Notice of Intent from AMEC Geomatrix, Inc. on the behalf of the California City of Eureka requesting enrollment under Order No. R1-2009-0045, General National Pollutant Discharge Elimination System (NPDES) Permit No. CA0024902, Waste Discharge Requirements for Low Threat Discharges to Surface Waters in the North Coast Region (hereinafter Low Threat Discharge Permit) for the Martin Slough Interceptor Project (project). The proposed project will discharge groundwater to waters of the United States (U.S.) and waters of the State, Martin Slough and its tributaries.

The project is located within the City of Eureka city limits and surrounding unincorporated neighborhoods that serve the Humboldt Community Services District. The project is located within the Martin Slough drainage basin adjacent to the Martin Slough drainage. The Martin Slough drainage basin is tributary to the Swain Slough, which discharges to the Elk River and ultimately Humboldt Bay. Within the vicinity of the project, land cover vegetation along Martin Slough consists primarily of riparian corridors, wetlands, and grassy meadows with some redwood forest. Development of Martin Slough Valley, adjacent to the project, comprises low density/rural single family homes and associated infrastructure (paved and rock roads, utilities, hard/soft landscaping). The Eureka Municipal Golf Course occupies the southern down gradient extent of the project. The purpose of the project is to construct an interceptor pipeline that will transport excess wastewater from the O Street lift station to the Golf Course lift station.

Along the length of the project, Martin Slough is primarily an open low gradient perennial stream. Bank heights are one to five feet high with slopes between less than ten percent to vertical. Banks are vegetated with riparian and/or grass vegetation. Sand, silt, and clay are the dominant sediment load of the Martin Slough with occasional pockets of gravel. The receiving water flow is continuous but will decrease with the progression of the summer months. The estimated receiving water flows for the Martin Slough is approximately 0.45 cfs to an average of 3 cfs. The field measurements for the receiving waters of Martin Slough on June 16, 2011 are as follows: pH was measured at 6.50, temperature was measured at 12.0 C, turbidity was measured at 28 NTU, and specific conductivity was measured at 180 $\mu\text{s}/\text{cm}$.

The proposed actions for the project will consist of the installation of approximately 7,800 feet of eighteen to twenty-four inch sewer pipeline, construction of new manholes, construction of 2,600 feet of new access roads, and the installation of approximately six hundred feet of eight inch collector piping. Dewatering operations will consist of groundwater being pumped from excavations made during installation trenches and exploratory pits, required for the construction of the new sanitary sewer line. The groundwater will be pumped from the excavations using a submersible pump

The City of Eureka is seeking coverage under the Low Threat Discharge Permit to dispose of excess groundwater encountered during construction of a new sanitary sewer line. The primary option to dispose of construction water is dispersal to land into vegetated ground surfaces following the treatment for sediment. Vegetation is anticipated to dissipate energy and flow rates of water that does not immediately infiltrate into the ground surfaces. The currently identified dewatering infiltration areas are at least one-hundred feet away from Martin Slough. If infiltration is not an option, the contractor has received permission from the City of Eureka and Humboldt County Services District to use the sanitary sewer for the disposal of construction water.

The primary water discharge process will include pumping the water through a dewatering filter bag, prior to being released to the ground for re-infiltration. The groundwater will be conveyed from the sump pump to the dewatering filter bag using a solid PVC pipe or flexible PVC layflat hose. The dewatering filter bag will be an Ultra-Dewatering Bag®, or similar device, made of polypropylene geotextile fabric.

Construction activities to date have only produced minimal amounts of water that have been effectively disposed of to the ground or the sewer. The ground in the upper reaches of the project north of Campton Road is not anticipated to produce enough water to require discharge to surface water in addition to the primary disposal options. The middle portion of the project, between Fairway Drive and Campton Road is also not expected to produce enough water to require discharge to surface water. It is anticipated, however, that the lower reaches of the project, adjacent to the Golf Course, will produce greater volumes of groundwater due to greater depth of the trenches in this area coupled with a lack of available sanitary sewer line or infiltration area.

When discharge to the surface waters of the Martin Slough are necessary, the discharge will be treated for sediment using the dewatering filter bag and then allowed to flow through vegetation prior to flowing over the bank of the stream and into the surface water. The expected discharge rate into the Martin Slough is between zero and two-hundred gallons per minutes. It is also anticipated that discharge rates may exceed one percent of the receiving water flow during the late summer and fall months when the base flow of Martin Slough is at its minimum. Once construction activities reach this lower portion of the project site effluent samples of the discharge will be analyzed for the following pollutants listed in Tables B-1 and B-2: organachlorine pesticides and total recoverable metals.

Once analytical results characterizing the discharge are submitted to the Regional Water Board that demonstrates compliance with applicable Water Quality Objectives and other applicable State policies, The City of Eureka will be authorized to discharge to Martin Slough. In addition, effluent discharge and receiving water upstream and downstream sampling and monitoring will be conducted to ensure compliance with Basin Plan and applicable water quality objectives.

The City of Eureka has researched alternatives to discharging to surface waters and will discharge a limited volume of water on site for dust control. Depending on the water volumes and space limitations at certain locations along the project, alternative methods or containers may need to be used in place of ground infiltration, sewer system disposal, or surface water disposal. These alternatives include: storage tanks, sediment desilting basins, and/or water filters. As a secondary option to the dewatering filter bag, a settling basin with walls constructed out of straw bales and the basin lined with filter fabric and gravel may be used. If there are space/distance limitations and/or the quality of the water flowing over the ground and into surface water is not able to meet effluent and receiving water limits, an active filtration system may be set up that will pump water through appropriate filters and discharge directly to the surface water with a velocity dissipation device to prevent erosion to the stream banks. Additionally, the overland flow path of discharged water may be equipped with velocity dissipating devices, and erosion and sediment control Best Management Practices (BMPs) such as washed gravel, sand bags, straw, and/or silt fences as necessary.

The primary expected potential pollutant is sediment for this project and proposed discharge will be treated to remove sediment. Located two-hundred feet from the project site is the Fairway Market groundwater cleanup site identified by the Regional Water Board. Due to the limited extent of gasoline-contaminated groundwater measured in the vicinity of Fairway Market, pumping activities at the project are not anticipated to capture contaminated groundwater identified by the Regional Water Board or the Humboldt County of Environmental Health Local Oversight Program. The golf course adjacent to the project site is known to use fertilizer, herbicides, fungicides, and pesticides that could be potential groundwater contaminants. However, the use of these chemicals is very limited to select areas and is infrequent in occurrence. Surface water runoff from the golf course to the excavation pits that require dewatering is not expected and it is unlikely that these chemicals would be transported to the pits through groundwater due to their relatively low solubility and limited use.

Regional Water Board staff is proposing to regulate this project pursuant to section 402 of the Federal Clean Water Act (CWA), implementing regulations adopted by the U.S. Environmental Protection Agency (USEPA), and chapter 5.5, division 7 of the Porter-Cologne Water Quality Control Act (commencing with section 13370). Staff will consider all phone calls and comments submitted in writing and received within a 30-day comment period that begins on the first date of issuance of this letter and ends at 5:00 p.m. on the last day of the comment period. If you have any questions or

comments, please contact staff member Cathleen Goodwin at (707) 576-2687 or CGoodwin@waterboards.ca.gov within 30 days of the posting of this notice.

The information contained in this public notice is only a summary of the applicant's proposed activities. The application for the Low Threat Discharge Permit in the Regional Water Board's file contains additional details about the proposed project including maps and design drawings. The related documents and comments received are on file and may be reviewed or copied at the Regional Water Board office, 5550 Skylane Boulevard, Suite A, Santa Rosa, California. Appointments are recommended for document review. Appointments can be made by calling (707) 576-2220.

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