

February 4, 2010

**Notice of Consideration of Coverage Under
General NPDES Permit No. CA0024902
Waste Discharge Requirements Order No. R1-2009-0045 for
Low Threat Discharges to Surface Waters in the North Coast Region**

For

**Town of Windsor
Bluebird Well Installation Project**

On January 5, 2010, the North Coast Regional Water Quality Control Board (Regional Water Board) received a Notice of Intent from Leslie Dumas, RMC Water and Environment on behalf of the Town of Windsor (Applicant), requesting enrollment under Order No. R1-2009-0045, General NPDES Permit No. CA0024902, Waste Discharge Requirements for Low Threat Discharges to Surface Waters in the North Coast Region (hereinafter General Low Threat Permit) for the Bluebird Well Installation Project.

Site Background

The project site is located in the Town of Windsor (APN# 164-120-048) on Town-owned property on Bluebird Court. Currently the property contains one inactive municipal water supply well (Bluebird Well) that is installed to a depth of approximately 319 feet below ground surface. The Bluebird Well was operated between 1972 and 2006. In 2006 the drinking water standard for arsenic was lowered from 50 µg/L to 10µg/L. Production ceased due to arsenic concentrations in the well (average historical arsenic concentration in the Bluebird Well was 12 µg/L) exceeding the drinking water standard of 10 µg/L.

Proposed Activities

The Applicant proposes to drill an exploratory borehole to determine hydrologic conditions at greater depths than the current Bluebird Well and will develop the borehole into a domestic water supply well if the desired hydrologic conditions are found. The Applicant intends to complete construction activities between February and May of 2010. Discharges to surface waters will be restricted to the allowed surface water discharge season allowed by the Water Quality Control Plan for the North Coast Region (Basin Plan) which is October 1 to May 14 of each year.

Drilling, well construction, and well development activities are projected to generate a large quantity of water (Tables 1 and 2) over a short period of time. The existing 6 inch sewer line that services Bluebird Court does not have the capacity to receive the entire discharge from site activities. The Applicant proposes to discharge the majority of the water generated during drilling, well construction and well development activities to an unnamed drainage channel that is tributary to Windsor Creek.

Table 1. Borehole/Well Installation Data

Activity	Width	Depth	Estimated Discharge Volume
Exploratory Borehole	6 inch	1000 foot	35,000 to 60,000 gallons
Proposed Well	10 inch	500-800 foot	12,500 to 25,000 gallons
TOTAL			47,500 to 85,000 gallons

Table 2. Well Development Activities Data.

Activity	Duration of Discharge	Maximum Flowrate	Estimated Discharge
Pre Well Development	-	-	120,000 gallons
Well Development	8 hours	300 gallons per minute (gpm)	150,000 gallons
Step Drawdown Pump Testing	1 hour per step	100-600 gpm (steps of 100)	96,000 gallons
Constant Rate Pump Testing	~72 hours	~400 gpm	1,700,000 to 2,600,000 gallons
TOTAL			2,066,000 to 2,966,000 gallons

The discharge from the Bluebird Well Project has the potential to exceed one-percent of the flow of the receiving stream. The Applicant submitted information to document that the discharge meets the requirements of section II.A.3 of Order No. R1-2009-0045 including a demonstration that (a) the wastewater treatment facility shall be reliable; (b) the discharge of waste shall be limited to rates and constituent levels which protect the beneficial uses of the receiving waters; (c) the exception shall be limited to that increment of wastewater which remains after reasonable alternatives for reclamation have been addressed; and (d) the exception shall comply with State Water Board Resolution No. 68-16, "Statement of Policy with Respect to Maintaining High Quality Waters in California", and the federal regulations covering anitdegradation (40CFR section 131.12). The following four paragraphs summarize the information submitted by the Applicant to make this demonstration.

The primary pollutant of concern from discharges related to the well installation and development at the project site is sediment. The Applicant proposes the use of settling tanks and sediment filters to remove sediment from the proposed discharge. This treatment system has demonstrated reliability for removing sediment and thus meets the reliability requirement.

The Applicant will implement Best Management Practices (BMPs) such as silt fences & waddles, protection of the creek bank with plastic and the preservation of thick vegetation to protect beneficial uses of receiving water. The Low Threat Permit requires the Applicant to conduct well installation and development activities in a manner that will not adversely affect water quality.

Arsenic in groundwater above the drinking water maximum contaminant level (MCL) of 10 µg/L is present in groundwater pumped from existing 319' well. The Town of Windsor must demonstrate that arsenic is not present at levels above the drinking water MCL prior to any discharge to surface waters. If the Applicant is unable to demonstrate during the borehole/well installation and development process that arsenic concentrations will remain consistently below 10 µg/L in the Bluebird Well, then enrollment of the Bluebird Well Project under the Low Threat Permit will not be authorized.

The Applicant has researched alternatives to discharging to surface waters and will discharge a limited volume of water into the sanitary sewer as capacity allows. The Applicant has demonstrated that no other alternatives exist for avoiding the need to discharge to surface waters. Only high quality water that meets all water quality objectives, including those for turbidity and arsenic will be allowed to discharge for a limited period of time (up to a total discharge of 2,871,000 gallons of over a 13 day period). The rate of discharge may reach 600 gpm over the course of the discharge at the project site.

The information contained in this public notice is a summary of the Applicant's proposed activities. The Notice of Intent for Coverage under the General Low Threat Permit in the Regional Water Board's file contains additional details about the proposed project including maps and water quality data.

On the basis of preliminary staff review and application of lawful standards and regulations, the California Regional Water Quality Control Board, North Coast Region, intends to enroll the Facility under *General NPDES Permit No. CA0024902, Waste Discharge Requirements for Low Threat Discharges to Surface Waters in the North Coast Region* (Order No. R1-2009-0045) with an exception to the one-percent discharge limitation as provided in section II.A 3 of Order No. R1-2009-0045 and discussed above.

Any interested party may contact Cathleen Goodwin with the Regional Water Board staff at (707) 576-2687 or submit comments to her attention to the Regional Water Board office at 5550 Skylane Boulevard, Suite A, Santa Rosa, CA 95403. Order No. R1-2009-0045, related documents, and any comments received are on file and may be inspected or copied at the Regional Water Board office Monday through Friday from 8:00 a.m. to 5:00 p.m. Appointments are recommended for file review and can be made by calling (707) 576-2220. The public comment period will be completed on March 5, 2010.

Catherine Kuhlman
Executive Officer