

Lahontan Regional Water Quality Control Board

February 5, 2015

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Facility Waste Generation and Discharge Systems Report, Crystal Geyser Roxane Olancha Water Bottling Facility, 1210 South Highway 395, Olancha, Inyo County

Lahontan Regional Water Quality Control Board (Water Board) staff has reviewed CG Roxane LLC's Facility Waste Generation and Discharge Systems Report, received October 21, 2014 in response to Water Board Investigative Order No. R6V-2014-0063 (Order). Following a brief summary, Water Board staff's comments and additional requirements are provided below.

Facility Report Summary

The Facility Report describes the use of numerous chemicals at the site, some of which are hazardous. The chemicals used are primarily those associated with processing bottled spring/source water for retail consumption and manufacturing plastic bottles (polyethylene terephthalate, or PET) used in the bottling process. The chemicals used include strong acids and bases (e.g., sulfuric acid, phosphoric acid, sodium hydroxide/caustic soda), quaternary ammonium, ozone, chlorine, etc., for various cleaning, disinfection, sanitization, dilution and neutralization processes at the site. Such processes generate numerous waste streams at the facility. Certain, specific wastes (e.g., solid wastes, septic waste, waste oils/inks/solvents) are disposed or recycled offsite by outside (third party) contract services.

In general, most other wastes generated at the site drain via floor "trench" drains and associated plumbing systems that discharge to one or more of three wastewater ponds at the site: the East (percolation) Pond, Arsenic Pond, and Fire Pond. CG Roxane LLC previously submitted a Site Investigation Work Plan and supplement addressing initial investigation of the wastewater ponds in two phases of investigation. Water Board staff issued a conditional acceptance letter dated November 12, 2014, which concurred with the proposed investigation and phased approach, and authorized implementation of Phase 1.

The Facility Report identifies additional waste discharges at the site other than those associated with the three wastewater ponds. Specifically, there are 12 industrial cooling tower units at the facility, each of which generates wastewater. The wastewater from

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some of the units discharges to the East Pond, however others are said to discharge wastewater directly to the ground. Additional investigation is necessary to determine whether adverse impacts may have resulted from the industrial cooling tower wastewater discharges to ground. Other additional requirements are described below.

Staff understands the Phase 1 investigation has commenced, and may be completed. The additional requirements, below, can be incorporated into Phase 2 investigation activities.

Comments/Additional Requirements

1. The Facility Report refers to "pH neutralization" processes that take place at numerous locations throughout the Olancho facilities. Please provide an appropriately scaled site plan that clearly depicts all locations where pH neutralization processes take place, including "in-line" neutralization locations. Please be sure that all elements shown on the plans are appropriately labeled and that all text is clearly legible at the scale provided, as some of the text on the Layout of Wastewater Discharge Systems plans provided was too small to be readable. Provide a table summarizing the chemicals/acids/bases/solutions that are used for neutralization at each location, along with the concentrations and quantities of each.
2. "Neutralization" is said to have been achieved when a waste solution reaches a pH value between 6 and 9. The "neutralized" wastes are then discharged to one of the three wastewater ponds at the site. In some cases, the wastes are neutralized "in-line" during discharge. For your information, the Water Board's Water Quality Control Plan for the Lahontan Region (Basin Plan) establishes water quality objectives (standards) for numerous water quality parameters, including pH. The Basin Plan specifies that waste discharges cannot cause changes in normal ambient pH levels greater than 0.5 units for surface waters with a designated beneficial use of COLD. The water quality objective applies to the wetlands adjacent to the Fire Pond, and therefore, the Fire Pond discharge to those wetlands. The water quality objectives specified by the Basin Plan can be found online at http://www.waterboards.ca.gov/lahontan/water_issues/programs/basin_plan/docs/ch3_wqobjectives.pdf.
3. The Layout of Wastewater Discharge Systems plans show numerous floor "trench" drains throughout the facilities. Please provide as-built plans, including cross sections, showing the a typical design and construction (including materials) of the floors, trench drains and underground plumbing systems, including plumbing/drainage system connections and other features. Be sure to specify the types of connections (e.g., flush-threaded piping, slip-collar joints, primer/glue) and any leak prevention/detection equipment, if any, (e.g., double-walled piping, etc.).
4. The Facility Report describes the valve distribution box (for directing wastewater flows to either the East Pond or the Arsenic Pond) as "fully-sealed". Please describe

the type and method of seal provided and the manner in which leakage from the distribution box can/would be detected.

5. Provide an appropriately scaled map showing the locations of the 12 industrial cooling towers at the site and identify the specific discharge location(s) for each. Clearly depict any and all location(s) where the cooling tower wastewater discharges directly to the ground, whether such discharges presently occur or have historically occurred in the past. For each location of direct discharge to ground, provide associated dates/time frames of discharges at each location.
6. Collect a representative, discrete sample of industrial cooling tower wastewater discharge and submit the sample for laboratory analysis of the list of constituents identified in Investigative Order No. R6V-2014-0063. Specifically, the cooling tower unit selected for sampling and analysis (and direct-push/hydropunch boring per Condition 7, below) should be one of the units that discharges to the ground. If no such units currently discharge to ground, this sample can be collected and results reported at a later date when such discharge is active and available for sampling.
7. Include one additional direct-push/hydropunch boring at the location of waste discharge to ground for the cooling tower unit specified per Condition 6, above. Conduct the same sampling and analyses for the additional boring as specified in the Site Investigation Work Plan for the other direct-push/hydropunch borings identified for the Phase 1 investigation.
8. The Facility Report also states that the ion exchange resin for the water "softeners" of each cooling tower unit is regenerated regularly and automatically (page 6) with a sea salt solution to remove retained calcium. Please describe and illustrate the location(s) where such regeneration wastewater is discharged.
9. The site plans/figures in the Facility Report identify a number of monitoring wells at the site. Please provide, in the Phase 1 investigation report, available well construction/design details for these existing monitoring wells (well depths, casing types, well elevations, sanitary seals (types/depths/thicknesses), well screen, filter pack media, screened intervals, etc.), and groundwater monitoring data (depths to water, groundwater flow direction, gradient, etc.). Additionally, please include well stabilization parameter measurements, well sampling forms, and any laboratory chemical analytical results of samples collected from these wells for water quality analyses, if available. Depending on the data received, and the results of the Phase 1 investigation, staff may require these wells to be monitored, purged and sampled for laboratory analysis at a later date.
10. Please send complete copies of all CG Roxane's submittals to date (Facility Waste Generation and Discharge Systems Report, Site Investigation Work Plan and its supplement), as well as all future correspondence, to each of the following for their review and files: California Department of Toxic Substances Control, Attn: Dave

Stuck; Inyo County Environmental Health Department, Attn: Marvin Moskowitz; and California Department of Fish and Wildlife, Attn: Heidi Calvert.

Please contact Lisa Scorallo at lisa.scorallo@waterboards.ca.gov (530.542.5452) or me at scott.ferguson@waterboards.ca.gov (530.542.5432) if you have any questions.



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