

EXECUTIVE OFFICER'S SUMMARY REPORT
9:00 a.m., April 24, 2008
The Sons of Italy Weed Lodge No. 1269
155 Clay Street
Weed, California

ITEM: 11

SUBJECT: Klamath Ranch Resort and Blue Heron RV Park On-site Wastewater Treatment and Disposal Facilities– Issuance of Waste Discharge Requirements (WDRs)

DISCUSSION

James Burney owns and operates the Klamath Ranch Resort and Blue Heron RV Park (Resort), a 562-acre Resort located on the north side of the Klamath River, approximately 7 miles east of Interstate 5, at 6930 Copco Road, Hornbrook. The Resort currently consists of the existing 27-space Blue Heron RV Park, the Fish Hook Restaurant, and a three-bedroom home that serves as the Resort Manager's residence. The discharge of domestic waste from the Blue Heron RV Park and uncompleted housing and commercial facilities on the property is currently regulated under Waste Discharge Requirements Order No. R1-2006-0085. On September 7, 2007, Mr. Burney submitted a request to modify the existing waste discharge permit to incorporate the final expansion plan for the Resort, which is to include a lodge and other new residential accommodations for up to a total of 22 bedrooms, an equestrian arena and stables, and picnicking areas.

The Blue Heron RV Park on-site wastewater treatment and disposal system was first subject to general waste discharge requirements issued on April 24, 2003 (General Waste Discharge Requirements for Discharges to Land by Small Domestic Wastewater Treatment Systems, State Water Resources Control Board Order No. 97-10-DWQ, or "General Order"). As required by the General Order, the Discharger monitored septic tank effluent and groundwater quality downgradient of the RV Park disposal field under a separate monitoring and reporting order (Monitoring and Reporting Program (MRP) No. R1-2003-0058), issued by the Regional Water Board Executive Officer on April 24, 2003.

On November 29, 2006, the Regional Water Board adopted Waste Discharge Requirements Order No. R1-2006-0085 to regulate proposed wastewater discharges from the Blue Heron RV Park and new discharges from a proposed commercial building, a lodge, two duplex suites, six cabins, an equestrian arena and stables, picnicking areas, and walking and equestrian trails. The proposed on-site wastewater treatment and disposal system for the new facilities was to include wastewater pretreatment in an aerobic treatment unit and final disposal to a subsurface drip irrigation system. Due to financial constraints and other circumstances beyond the Discharger's control, the Discharger did not construct

these proposed facilities or the new wastewater treatment and disposal system as described in Order No. R1-2006-0085.

On September 7, 2007, Mr. Burney submitted a request for modification of Order No. R1-2006-0085 that would reflect his desire to begin the expansion of the Resort to include a lodge and other new residential accommodations for up to a total of 22 bedrooms, an equestrian arena and stables, and picnicking areas, but use a different septic system design than was approved previously by the Regional Water Board. As an alternative to the previously-approved system, the Discharger proposes to construct the lodge, other residential accommodations, the equestrian arena and stables, and picnicking areas, and for waste disposal to rely on two new septic tank and leachfield systems that will be constructed in the northeast area and north central area of the property. The domestic and commercial wastewater generated at the existing Blue Heron RV Park, the Fish Hook Restaurant, and the Resort Manager's residence will continue to discharge to their existing on-site wastewater treatment and disposal systems. The plan to construct the commercial building regulated under Order R1-2006-0085 has been postponed and is not included in the current facility expansion plan.

The existing on-site systems for the Blue Heron RV Park, the Fish Hook Restaurant, and the Resort Manager's residence are separate and located on a terrace adjacent to the Klamath River at a distance of at least 100 feet away from the river. The waste disposal systems for the Blue Heron R V Park and Resort Manager's residence each consist of a 1,500-gallon septic tank followed by leachfield installed at a pipe depth of 20 inches. No reliable information is available for the on-site system for the Fish Hook Restaurant. Septic tanks for these systems are pumped annually and there are no known reports of system failures.

The new on-site wastewater treatment and disposal systems will be located in separate areas on the Discharger's property. The site investigation for the area designated as the Northeast Leachfield Area was completed in 2007. The disposal capacity of this leachfield was determined by the Discharger to be 2,000 gallons per day at an application rate of approximately 0.45 gallons per day per square foot of trench bottom area. The original site investigation for the North Central Leachfield Area was completed in 2003 as part of the required environmental review prior to adoption of Order No. R1-2006-0085. In follow-up testing conducted in 2007 by the Discharger, the disposal capacity of this leachfield was determined to be 1,200 gallons per day at an application rate of approximately 0.2 gallons per day per square foot of trench bottom area.

Although Basin Plan compliant, soils in the Northeast Leachfield and Central Leachfield Areas are considered by Regional Board staff to be of marginal quality for on-site wastewater treatment and disposal because upper soil horizons consist of tightly-packed clay of low permeability and these shallow soils are underlain by fractured bedrock. However, groundwater is generally encountered at a depth of about 80 feet on the river plain and up to 500 feet on the higher terrain. In the proposed leachfield areas, groundwater was determined to be from 180 to 240 feet below the ground surface.

The soil profile in the vicinity of the existing on-site system leachfields for the Blue Heron RV Park, the Fish Hook Restaurant, and the Resort Manager's residence is described as a sandy loam with seasonal high groundwater conditions that provide a minimum separation of seven feet from the bottom of the disposal field trenches. An impervious layer is present at 37-38 feet below the ground surface.

Discharge Specific Water Quality Concerns

1. The Klamath River from Iron Gate Dam to the estuary is currently listed for nutrients, organic enrichment/low dissolved oxygen, and temperature. The on-site wastewater treatment and disposal facilities for the Blue Heron RV Park, the Fish Hook Restaurant, and the Resort Manager's residence were installed in poor soils with moderately high seasonal groundwater conditions. The relatively large discharge of waste from these facilities to land adjacent to this designated reach has the potential to contribute nutrients to the already impaired waterway. The Monitoring and Reporting Program includes effluent and groundwater quality monitoring for discharges to the Blue Heron RV Park, which is the largest of the Klamath Ranch Resort's on-site discharges near the Klamath River. Should a discharge to these on-site systems reach the ground surface, degrade groundwater quality, or cause groundwater seepage to the extent that the seepage causes pollution or nuisance conditions, then Mr. Burney is required to modify the discharge or otherwise bring the discharge into compliance with this Order.
2. Wastes from recreational vehicles (RVs) or other mobile waste systems may contain formaldehyde, other phenol-based deodorants, and heavy metals such as zinc. Although the Discharger prohibits guests from discharging chemical toilet waste containing formaldehyde and other phenol-based deodorants to its waste disposal system, unauthorized discharges of these pollutants may occur, affecting efficient operation of the septic tank treatment units and contaminating groundwater. There is evidence from monitoring of the septic tank at the Blue Heron RV Park that discharges of these pollutants have occurred within the last three years. Monitoring results for Blue Heron RV Park effluent indicate concentrations of formaldehyde ranging from < 10 to 110 µg/L and concentrations of phenol ranging from < 0.02 to 1.00 mg/L from samples collected from April 2005 to July 2007. This Order requires the Discharger to continue monitoring the RV Park septic tank effluent and groundwater for these pollutants at least once annually. Evidence that the presence of these pollutants is causing failure of the on-site system or that these pollutants are migrating to groundwater is a violation of this Order.

A draft Permit was provided to the discharger on February 5, 2008. The Discharger suggested a minor correction to the draft permit on February 19, 2008. To the extent allowed by state law and best professional judgment, the draft permit was revised to incorporate the Discharger's comments and recommendations.

PRELIMINARY STAFF

RECOMMENDATION: Adopt the Waste Discharge Requirements Order as proposed.