

INFORMATION SHEET

ORDER R5-2017-XXXX
U.S. DEPARTMENT OF AGRICULTURE, FOREST SERVICE
& PELORIA MARINAS, LLC, DBA - DIGGER BAY MARINA
SHASTA COUNTY

Background

Peloria Marinas, LLC, dba Digger Bay Marina, (facility operator), and the US Department of Agriculture, Forest Service (USFS) (land owner); hereafter "Discharger(s)" are jointly responsible for compliance with these Waste Discharge Requirements (WDRs). On 15 September 2016, the Discharger submitted a Report of Waste Discharge (RWD) to apply for renewal of Waste Discharge Requirements (WDRs) for an existing privately owned wastewater treatment Facility. Additional information was submitted 8 November 2016 and 15 December 2016. The RWD was deemed complete 12 January 2017.

This facility was initially permitted in 1987 under WDR Order 87-218 and updated in 1994 under current WDR Order 94-077. In efforts to reduce and eliminate graywater discharges within Shasta Lake from this and other similar facilities around Lake Shasta the Central Valley Water Board also adopted Resolution No. 5-01-2011 *Authorizing the Executive Officer to enter into a Memorandum of Understanding with the U.S. Department of Agriculture, Forest Service to Eliminate Graywater Discharges from houseboats to Shasta Lake*, adopted 6 September 2001.

In 1994 the marina moored 40 houseboats for rental and was an independently active marina. In 2013 Digger Bay Marina was purchased by Peloria Marinas, LLC and began being managed as part of the larger operations of Bridge Bay Marina, also owned by Peloria Marinas, LLC. Under this new management, operations have changed. Digger Bay has become more of a long term moorage facility for less frequently used boating customers, and overflow houseboat rentals of the Bridge Bay facility. Digger Bay is still technically a full-service marina with 143 moorage slips; small convenience store, and fuel sales for privately owned houseboats, smaller fishing and leisure boats. However, Digger Bay Marina now only provides limited rental of houseboats (10) and a limited variety of smaller watercraft and sees much more infrequent boating traffic than it did prior to 2013.

EXISTING FACILITY

During the Marina's peak operating season the disposal system received an average of 385 gpd of wastewater from the facility (2013-2016). Blackwater and graywater generated by houseboat pumpouts, floating restroom facilities, and the convenience store restrooms are discharged via flexible coupled septage lines that are either suspended or submerged within the lake into a 4,000-gallon floating holding tank. Septage is then pumped from the floating holding tank to a 15,000-gallon septic tank located on the shore. Liquid effluent from the septic tank flows to a 2,500-gallon pump station where it is pumped to 860 lineal feet of leachfield, consisting of 8, 4 inch lines, using two pumps operating on float controls. The float controls are set for a maximum one-hour discharge of 1,500 gallons per hour to the leachfield system. The leachfield system is located at the top of the hill above the marina at the southeast corner of the property. Due to the location of the leachfield and shallow soils beneath the Facility, an interceptor trench was constructed downgradient of the leachfield. This interceptor trench was designed as a backup system that would collect any excess leachate that might discharge over shallow

bedrock that underlies the Facility, should the leachfield ever become saturated. Any excess leachate generated would be collected in a 10,000 gallon percolate holding tank and then re-dispersed on top of the leachfield via small spray irrigation nozzles. The automatic backup system is operated by a float mechanism; however float controls indicate it has never been activated by a high level float event. Based upon calculations provided by the Dischargers consultant, potential peak flows could be as high as 3,283 gpd, and the leachfield has an estimated design capacity of at least 4,644 gpd.

Constituents of concern that have the potential to degrade groundwater include salts (primarily TDS, sodium, and chloride), and nutrients as summarized below:

Constituent	Concentrations (mg/L)			
	Effluent ¹	Background Groundwater ²	Water supply well ³	Potential Water Quality Objective
TDS	361	--	--	450 ⁴ to 1,500 ⁸
FDS	250	--	--	--
Nitrate Nitrogen	0.10	ND	ND	10 ⁶
Total Nitrogen	72.8	--	--	--
Sulfate	36.2	108	--	250 ⁷
Sodium	31.8	--	8	69 ⁴
Chloride	--	--	--	106 ⁴ - 600 ⁸

Sample from 1/6/17.

² Compiled from UST data collected from 1999-2014.

³ Onsite Water supply well sampled 5/17/16.

⁴ Lowest agricultural water quality goal.

⁶ Primary Maximum Contaminant Level.

⁷ Secondary Maximum Contaminant Level.

⁸ Secondary Maximum Contaminant Level range

GROUNDWATER CONDITIONS

Depth to groundwater in the vicinity of the marina has been measured from 24 ft. to 89 ft. below ground surface. Groundwater level is variable and lake level dependent. However, these measurements were taken approximately 200 ft. lower in elevation than the leachfield itself. Direction of groundwater flow is predominantly north towards Lake Shasta. No shallow background/baseline wells have been installed around the leachfields. The facility had 7 groundwater monitoring wells for a UST case at the Facility that were monitored from 1999 to 2014 and abandoned in 2014; currently the site has no monitoring wells. Some groundwater samples were collected for the UST case but those samples were not in the vicinity of the leachfield, and samples were collected primarily for petroleum related COCs.

MONITORING REQUIREMENTS

Section 13267 of the Water Code authorizes the Central Valley Water Board to require the Discharger to submit monitoring and technical reports as necessary to investigate the impact of a waste discharge on waters of the State.

The proposed Order includes Influent, septic tank, surface water, and solids/bio-solids and monitoring. This monitoring is necessary to monitor the discharge, evaluate compliance with limitations prescribed by this Order.

REOPENER

The conditions of discharge in the proposed Order were developed based on currently available technical information and applicable water quality laws, regulations, policies, and plans, and are intended to assure conformance with them. The proposed Order would set limitations based on the information provided thus far. If applicable laws and regulations change, or once new information is obtained that will change the overall discharge and its potential to impact groundwater, it may be appropriate to reopen the order.

LEGAL EFFECT OF RESCISSION OF PRIOR WDRS OR ORDERS ON EXISTING VIOLATIONS

The Board's rescission of prior waste discharge requirements and/or monitoring and reporting orders does not extinguish any violations that may have occurred during the time those waste discharge requirements or orders were in effect. The Central Valley Water Board reserves the right to take enforcement actions to address violations of prior prohibitions, limitations, specifications, requirements, or provisions of rescinded waste discharge requirements or orders as allowed by law.