

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION
ORDER R5-2017-0074

WASTE DISCHARGE REQUIREMENTS
FOR
U.S. DEPARTMENT OF AGRICULTURE, FOREST SERVICE
AND PELORIA MARINAS, LLC,
DBA
DIGGER BAY MARINA
SHASTA COUNTY

The California Regional Water Quality Control Board, Central Valley Region, (hereafter Central Valley Water Board) finds that:

1. On 15 September 2016, Peloria Marinas, LLC submitted a Report of Waste Discharge (RWD) to apply for renewal of Waste Discharge Requirements (WDRs) for an existing privately owned wastewater treatment facility (WWTF), which serves Digger Bay Marina (Facility) on Shasta Lake, with property owned by the U.S. Department of Agriculture, Forest Service. Additional information was submitted on 8 November 2016 and 15 December 2016. The RWD was deemed complete on 12 January 2017.
2. 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).
3. The Facility is located at 15090 Digger Bay Road, Shasta Lake, Section 12, T33N, R5W, MDB&M and during receding lake levels, may relocate to Section 11, T33N, R5W, MDB&M. The approximate latitude and longitude of the site are 40°43'27.98"N and 122°23'31.42"W. The Facility occupies Assessor's Parcel Number (APN) 065-630-001, as shown on Attachment A, which is attached hereto and made part of this Order by reference.
4. WDRs Order 94-077, adopted by the Central Valley Water Board on 25 March 1994, prescribes requirements for the Facility. Order 94-077 did not specify an average dry weather flow for the permitted system. WDR Order 94-077 will be rescinded and replaced with this Order.

Existing Facility and Discharge

5. The Facility collects blackwater and graywater generated by houseboat pumpouts, floating restroom facilities, and residences in a 4,000-gallon floating holding tank and then pumps that 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 eight, 4-inch lines, using two pumps operating on float controls. The leachfield system is located at the top of the hill above the marina at the southeast corner of the property as indicated on Attachment B which is

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incorporated herein and made part of this order. Based on calculations by the Discharger's consultant, the design capacity of the system is estimated to be 4,644 gallons per day.

6. 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.
7. Wastes have the potential to be discharged to Shasta Lake as a result of marina operations such as the refueling of vessels, storage of fuel, storage of chemicals, and maintenance of the facility itself (including cleaning, washing, and prepping of rental houseboats).
8. Petroleum products, are stored in a 10,000-gallon above ground split tank and are delivered to the marina dock dispensers through a series of underground and above ground piping. When the marina relocates during low water conditions, a number of fuel line extensions are used to deliver gasoline to the marina dock.
9. Minor boat repair, cleaning, and washing of rental boats can occur on the marina's floating service dock. However, vessels are transported to Peloria Marinas, LLC, and Bridge Bay Resort for major boat repair (including engine overhaul, the removal of aquatic growth, and loose paint from vessel hulls, and re-painting). Therefore, the Discharger has eliminated all industrial activities which were subject to the federal industrial storm water regulations at this facility.

Wastewater Collection System

10. The wastewater collection system consists of approximately one half mile of combined gravity pipe and force main which pumps effluent to the disposal leachfield. The float controls in the septic tank are set for a maximum one-hour discharge of 1,500 gallons per hour to the leachfield system. It is estimated that the system has a design flow of 4,644 gpd.
11. The wastewater collection system consists of solid and flexible sewer pipes, pumpouts, a floating collection tank and/or other conveyance system elements that direct raw sewage to the treatment facility. A "sanitary sewer overflow" (SSO) is defined as a discharge to ground or surface water from the sanitary sewer system at any point upstream of the treatment facility. Temporary storage and conveyance facilities (such as wet wells, regulated impoundments, tanks, highlines, etc.) may be part of a sanitary sewer system and discharges to these facilities are not considered

SSOs, provided that the waste is fully contained within these temporary storage/conveyance facilities.

12. SSOs consist of varying mixtures of domestic and commercial wastewater, depending on land uses in the sewage collection system. The most common causes of SSOs are grease blockages, root blockages, debris blockages, sewer line flood damage, manhole structure failures, vandalism, pump station mechanical failures, power outages, storm or groundwater inflow/infiltration, lack of capacity, and/or contractor-caused blockages.
13. SSOs often contain pathogenic organisms, toxic pollutants, nutrients, oxygen demanding organic compounds, oil and grease, suspended solids, and other pollutants. SSOs to surface waters can cause temporary exceedances of applicable water quality objectives, pose a threat to public health, adversely affect aquatic life, and impair recreational use and aesthetic enjoyment of surface waters in the area.
14. The Discharger is not required to obtain coverage under State Water Board Order 2006-0003-DWQ because neither the sewer system nor the wastewater treatment plant is publicly owned. Therefore, the Discharger is expected to take all necessary steps to adequately maintain, operate, and prevent overflows from its sanitary sewer system, and to comply with this Order with regard to responding to and reporting all SSOs.

Site-Specific Conditions

15. The Facility is located adjacent to Shasta Lake. The Facility's parcel is leased from the USFS under a special use permit. The parcel is mostly steep sloping, with man-made level areas for parking and a residential dwelling, and slopes to the north and west in the direction of Shasta Lake.
16. Elevations at the Facility range from approximately 1005 feet above mean sea level (MSL) to about 1,250 feet MSL. The majority of the project area is located in Zone X which is outside to the 100-year floodplain. The dock and part of the launch ramp are located in Zone A which has a 1 percent annual change in elevation with the rise and fall of lake levels.
17. Surface water on the project site flows toward Shasta Lake. There are no municipal storm drains at or adjacent to the Facility other than culverts crossing nearby under the Digger Bay access road. The nearest surface water bodies are Lake Shasta, Digger Creek, and an unnamed tributary to Shasta Lake. Neither Digger Creek nor the unnamed tributary is considered to be primary tributaries to Shasta Lake. Shasta Lake is located immediately adjacent to and north of, the Facility.
18. Shasta Dam Station No. 048135, located approximately 1.5 miles to the southwest, is the nearest climatology station to the site. Total precipitation at the Shasta Dam weather station averages 61.82 inches per year for the years of record between 1943 and 2016. Mean Class A pan evaporation at the Shasta Dam station is 68.3 inches

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per year, most of which occurs in the months of May through October (DWR, 1979). A 100-year storm of 24-hour duration at Shasta Dam is 11.65 inches (DWR, 1976).

19. Average daily minimum temperatures in the project area range from 38.9 degrees Fahrenheit (°F) in January to 68.3 °F in July. Average daily maximum temperatures range from 52.5 °F in January to 95.2 °F in July (WRCC, 2016).
20. The USDA has mapped the soils in the vicinity of the Digger Bay Marina. Soils at the project site are comprised of Holland family and Holland family deep complex soils. The soil unit is comprised 60 percent of Holland family soils and 30 percent of Holland family deep soils. Holland family soils occur on 40 to 60 percent slopes. These soils are well drained, and have low available water storage in profile (about 3.9 inches). Holland Family deep soils are well drained and have high available water storage of 13.7 inches. Depth to restrictive feature (paralithic bedrock) is 39 to 59 inches.
21. The Shasta County General Plan designation identifies the project site vicinity as Public Land. The Shasta County zoning designation identifies the project site as National Recreation Area, Shasta Unit (NRA-S). The NRA-S zoning establishes development standards in the Shasta Lake National Recreation Area which will be compatible with public recreation and enjoyment, the conservation of natural resources and scientific, historic and other values. Commercial development in NRA-S zoning is limited to that providing a public service, including food, lodging, automotive or marine maintenance facilities and services and other comparable business enterprises. Adjacent land uses include undeveloped Forest Service.

Groundwater Conditions

22. The site lies in the Klamath Mountains geomorphic province of California. According to Areal Geology of the Redding Quadrangle (Diller, 1906), the project is underlain by the late Jurassic to early Cretaceous Age batholith consisting of quartz hornblende-diorite stock and a stock of quartz-mica-diorite.
23. Geologic structures consist of faults, folds, bedding, foliation, joints, and other discontinuity orientations. No known active, potentially active, or inactive faults are known to exist within 1,000 feet of the site. The closest fault to the site is the Battle Creek Fault Zone, more than 20 miles south of the project area.
24. Seven monitoring wells and three piezometers were installed at the Facility in 1999 as part of an unrelated underground storage tank (UST) release case. The typical soil profile in the vicinity is reddish brown, decomposed rock ranging in grain size from silts to clays to large cobbles to a depth of approximately 45 to 50 feet below ground surface (bgs). Underlying the decomposed rock layer, a small gray shale layer was encountered. Underlying the shale layer was a very hard layer of rock. This hard rock layer is metamorphosed volcanic rock commonly known as greenstone or Copley Greenstone. This hard layer of Copley Greenstone extends down to 140 feet bgs and most likely extends for several hundred more feet. Fractures in the Copley

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Greenstone were encountered at varying depths. The water-bearing zones were located in these fractures within the soil borings.

25. The depth to groundwater in the monitoring wells at the Facility between 2000 and 2014 ranged from 24 to 89 feet bgs. Based on data collected between the above dates, the groundwater level in beneath the Facility is highly lake dependent and fluctuates sharply with the rise and fall of Shasta Lake levels. Groundwater generally flows to the north toward Shasta Lake. Monitoring wells were installed for monitoring an UST release. The UST case was closed and the wells abandoned in 2014.
26. The Facility requires approximately 2,100 gallons per week to satisfy its water needs. The water at the Facility is obtained from an onsite well. The domestic water system includes the well, a storage tank, and interconnected piping. The well is a public drinking water well operated by CR Water Treatment. The well is located at the center of the Facility and enclosed in a small shed about 500 feet from the Leachfield.
27. Limited groundwater water quality data was collected from monitoring wells associated with an unrelated UST investigation (1999 - 2014) and the sampling was primarily VOC related. Hence general background groundwater quality at the site is not well established.

Basin Plan, Beneficial Uses, and Regulatory Considerations

28. The *Water Quality Control Plan for the Sacramento River and San Joaquin River Basins*, Fourth Edition, revised July 2016 (hereafter Basin Plan) designates beneficial uses, establishes water quality objectives, contains implementation plans and policies for protecting waters of the basin, and incorporates by reference plans and policies adopted by the State Water Board. Pursuant to Water Code section 13263(a), waste discharge requirements must implement the Basin Plan.
29. Local drainage is to Shasta Lake. The beneficial uses of Shasta Lake, as stated in the Basin Plan, are Municipal and Domestic Supply (MUN), Agricultural Supply (AGR), Hydropower Generation (POW), Water Contact Recreation (REC-1) and Non-contact Water Recreation (REC-2), Freshwater Habitat (WARM & COLD), Warm & Cold (SPAWN), and Wildlife Habitat (WILD).
30. The beneficial uses of underlying groundwater as set forth in the Basin Plan are municipal and domestic supply, agricultural supply, industrial service supply and industrial process supply.
31. The Basin Plan establishes narrative water quality objectives for chemical constituents, tastes and odors, and toxicity in groundwater. It also sets forth a numeric objective for total coliform organisms.
32. The Basin Plan's numeric water quality objective for bacteria requires that the most probable number (MPN) of coliform organisms over any seven-day period shall be less than 2.2 per 100 mL in MUN groundwater.

33. The Basin Plan's narrative water quality objectives for chemical constituents, at a minimum, require waters designated as domestic or municipal supply to meet the MCLs specified in Title 22 of the California Code of Regulations (hereafter Title 22). The Basin Plan recognizes that the Central Valley Water Board may apply limits more stringent than MCLs to ensure that waters do not contain chemical constituents in concentrations that adversely affect beneficial uses.
34. The narrative toxicity objective requires that groundwater be maintained free of toxic substances in concentrations that produce detrimental physiological responses in human, animal, plant, or aquatic life associated with designated beneficial uses.
35. Quantifying a narrative water quality objective requires a site-specific evaluation of those constituents that have the potential to impact water quality and beneficial uses. The Basin Plan states that when compliance with a narrative objective is required to protect specific beneficial uses, the Central Valley Water Board will, on a case-by-case basis, adopt numerical limitations in order to implement the narrative objective.
36. In the absence of specific numerical water quality limits, the Basin Plan methodology is to consider any relevant published criteria. General salt tolerance guidelines, such as *Water Quality for Agriculture* by Ayers and Westcot and similar references indicate that yield reductions in nearly all crops are not evident when irrigation water has an EC less than 700 $\mu\text{mhos/cm}$. There is, however, an eight- to ten-fold range in salt tolerance for agricultural crops and the appropriate salinity values to protect agriculture in the Central Valley are considered on a case-by-case basis. It is possible to achieve full yield potential with waters having EC up to 3,000 $\mu\text{mhos/cm}$ if the proper leaching fraction is provided to maintain soil salinity within the tolerance of the crop.

Antidegradation Analysis

37. State Water Resources Control Board Resolution 68-16, the Statement of Policy with Respect to Maintaining High Quality of Waters in California (*Antidegradation Policy*) generally prohibits the Central Valley Water Board from authorizing activities that will result in the degradation of high-quality waters unless it has been shown that:
 - a. The degradation will not result in water quality less than that prescribed in state and regional policies, including violation of one or more water quality objectives;
 - b. The degradation will not unreasonably affect present and anticipated future beneficial uses;
 - c. The discharger will employ Best Practicable Treatment or Control (BPTC) to minimize degradation; and
 - d. The degradation is consistent with the maximum benefit to the people of the state.

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38. The Discharger had monitored some aspects of groundwater quality at the site from 2005 to 2014 related to a UST clean up case at the Facility. Clean up was successful, the UST case was closed and the monitoring wells were abandoned in 2014. Monitoring data indicate that groundwater has not been degraded beyond background groundwater quality by the previous discharge.
39. Constituents of concern that have the potential to degrade groundwater include salts (primarily TDS, sodium, and chloride), nutrients and coliform organisms, as discussed 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

¹ 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.

- a. Total Dissolved Solids. Effluent TDS concentration is approximately 361 mg/L, which is low for a typical domestic wastewater treatment facility and indicates that the Discharger's current control practices are effective. The TDS effluent quality of the existing WWTF is expected to remain the same. Therefore, the discharge is not likely to degrade groundwater quality due to increased salinity and a TDS effluent limit is not required to protect groundwater quality.
- b. Nitrate. For nutrients such as nitrate, the potential for degradation depends not only on the quality of the treated effluent, but the ability of the vadose zone below the effluent disposal ponds to provide an environment conducive to nitrification and denitrification to convert the effluent nitrogen to nitrate and the nitrate to nitrogen gas before it reaches the water table. The effluent nitrate nitrogen concentration was 0.10 mg/L and the background groundwater concentration was non-detect. The nitrate effluent quality of the existing WWTF is expected to remain the same. Therefore, the discharge is not likely to degrade groundwater quality due to increased nitrate and a nitrate effluent limit is not required to protect groundwater quality.
- c. Total Coliform Organisms. For coliform organisms, the potential for exceedance of the Basin Plan's numeric water quality objective depends on the ability of vadose

zone soils below the effluent disposal lines and saturated soils within the shallow water bearing zone to provide adequate filtration. The approximate 5-7 foot of unsaturated zone consisting of gravelly loam, gravelly clay loam and weathered bedrock below the leachfield is expected to be sufficient to filter out coliform organisms and to prevent groundwater degradation.

40. Degradation of groundwater by some of the typical waste constituents associated with discharges from the domestic wastewater discharge of a marina facility, after effective source control, treatment, and control measures are implemented, is consistent with the maximum benefit to the people of the state. The economic prosperity of valley communities and associated industry is of maximum benefit to the people of the State, and provides sufficient justification for allowing the limited groundwater degradation that may occur pursuant to this Order.
41. This Order establishes effluent and groundwater limitations for the WWTF that will not unreasonably threaten present and anticipated beneficial uses or result in groundwater quality that exceeds water quality objectives set forth in the Basin Plan.
42. The Discharger provides treatment and control of the discharge that incorporates: flexible collection lines, collection tanks, septic tanks, flow, and liquid depth monitoring, visual inspections of: collection lines, dock pumpouts, tanks; including scum levels & floating solids, system inspection including; dye testing and maintenance program. A leachfield underdrain collection system with spray dispersal lines that would redistribute any excess leachate back over top of the leachfield area has also been installed at the site. These treatment or control methodologies are considered BPTC for the wastes regulated by these waste discharge requirements.
43. This Order is consistent with the *Antidegradation Policy* since, (a) any limited degradation allowed by this Order is not expected to result in water quality less than water quality objectives, or unreasonably affect present and anticipated beneficial uses, (b) the Discharger has implemented BPTC to minimize degradation, and (c) any limited degradation is of maximum benefit to people of the State.

Other Regulatory Considerations

44. In compliance with Water Code section 106.3, it is the policy of the State of California that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes. This order promotes that policy by requiring discharges to meet maximum contaminant levels designed to protect human health and ensure that water is safe for domestic use.
45. Based on the threat and complexity of the discharge, the facility is determined to be classified as 2C as defined below:
 - a. Category 2 threat to water quality: "Those discharges of waste that could impair the designated beneficial uses of the receiving water, cause short-term violations

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of water quality objectives, cause secondary drinking water standards to be violated, or cause a nuisance.”

- b. Category C - Any discharger for which waste discharge requirements have been prescribed pursuant to Section 13263 of the Water Code not included in Category A or Category B as described above. Included are dischargers having no waste treatment systems or that must comply with best management practices, dischargers having passive treatment and disposal systems, or dischargers having waste storage systems with land disposal.”

46. Title 27 of the California Code of Regulations (hereafter Title 27) contains regulatory requirements for the treatment, storage, processing, and disposal of solid waste. However, Title 27 exempts certain activities from its provisions. Discharges regulated by this Order are exempt from Title 27 pursuant to provisions that exempt domestic sewage, wastewater, and reuse. Title 27, section 20090 states, in relevant part:

The following activities shall be exempt from the SWRCB-promulgated provisions of this subdivision, so long as the activity meets, and continues to meet, all preconditions listed:

(a) Sewage - Discharges of domestic sewage or treated effluent which are regulated by WDRs issued pursuant to Chapter 9, Division 3, Title 23 of this code, or for which WDRs have been waived, and which are consistent with applicable water quality objectives, and treatment or storage facilities associated with municipal wastewater treatment plants, provided that residual sludges or solid waste from wastewater treatment facilities shall be discharged only in accordance with the applicable SWRCB-promulgated provisions of this division.

(b) Wastewater - Discharges of wastewater to land, including but not limited to evaporation ponds, percolation ponds, or subsurface leachfields if the following conditions are met:

- (1) the applicable RWQCB has issued WDRs, reclamation requirements, or waived such issuance;
- (2) the discharge is in compliance with the applicable water quality control plan; and
- (3) the wastewater does not need to be managed according to Chapter 11, Division 4.5, Title 22 of this code as a hazardous waste.

(c) (...)

(i) Fully Enclosed Units - Waste treatment in fully enclosed facilities, such as tanks, or in concrete-lined facilities of limited areal extent, such as oil-water separators designed, constructed, and operated according to American Petroleum Institute specifications.

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47. The discharge authorized herein (except for the discharge of residual sludge and solid waste), and the treatment and storage facilities associated with the discharge, are exempt from the requirements of Title 27 as follows:
- a. The holding and septic tanks are exempt pursuant to Title 27, section 20090(a) because they are treatment and storage facilities associated with a municipal domestic wastewater treatment plant.
 - b. The Leachfield lines are exempt pursuant to Title 27, section 20090(b) because they are subsurface wastewater disposal lines and:
 - i. The Central Valley Water Board is issuing WDRs.
 - ii. The discharge is in compliance with the Basin Plan, and;
 - iii. The treated effluent discharged to the leachfield does not need to be managed as hazardous waste.
48. The U.S. EPA published *Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, Unified Guidance* (hereafter "Unified Guidance") in 2009. As stated in the Unified Guidance, the document:

...is tailored to the context of the RCRA groundwater monitoring regulations ... [however, t]here are enough commonalities with other regulatory groundwater monitoring programs ... to allow for more general use of the tests and methods in the Unified Guidance... Groundwater detection monitoring involves either a comparison between different monitoring stations ... or a contrast between past and present data within a given station... The Unified Guidance also details methods to compare background data against measurements from regulatory compliance points ... [as well as] techniques for comparing datasets against fixed numerical standards ... [such as those] encountered in many regulatory programs.

The statistical data analysis methods in the Unified Guidance are appropriate for determining whether the discharge complies with Groundwater Limitations of this Order.

49. The State Water Board adopted Order 2014-0057-DWQ (NPDES General Permit CAS000001) specifying waste discharge requirements for discharges of storm water associated with industrial activities, and requiring submittal of a Notice of Intent by all affected industrial dischargers. The General Permit for Storm Water Discharges associated with Industrial Activities is not applicable to discharges from this facility. Vessels from this facility are transported to Bridge Bay Resort for major boat repair (including overhaul, the removal of aquatic growth and lose paint from vessel hulls, and repainting). Therefore, the discharger has eliminated all industrial activities which are subject to the federal industrial stormwater regulations.
50. On 2 May 2006, the State Water Board adopted Statewide General Waste Discharge Requirements for Sanitary Sewer Systems General Order 2006-0003-DWQ (the General Order). The General Order requires all public agencies that own or operate

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sanitary sewer systems greater than one mile in length to comply with the Order. The Discharger's collection system does not exceed one mile in length and the Discharger is therefore exempt from enrollment under the General Order.

51. Water Code section 13267(b)(1) states:

In conducting an investigation specified in subdivision (a), the regional board may require that any person who has discharged, discharges, or who proposes to discharge waste within its region ... shall furnish, under penalty of perjury, technical or monitoring program reports which the board requires. The burden, including costs of these reports, shall bear a reasonable relationship to the need for the reports and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports.

The technical reports required by this Order and the attached Monitoring and Reporting Program R5-2017-0074 are necessary to ensure compliance with these waste discharge requirements. The Discharger owns and operates the facility that discharges the waste subject to this Order.

52. The California Department of Water Resources sets standards for the construction and destruction of groundwater wells (hereafter DWR Well Standards), as described in *California Well Standards Bulletin 74-90* (June 1991) and *Water Well Standards: State of California Bulletin 74-81* (December 1981). These standards, and any more stringent standards adopted by the state or county pursuant to Water Code section 13801, apply to all monitoring wells used to monitor the impacts of wastewater storage or disposal governed by this Order.
53. All wastewater management systems at the facility have already been installed and are currently in use. This Order places additional requirements on the continued operation of the facility in order to ensure the protection of waters of the state. The issuance of this Order is therefore exempt from the provisions of CEQA in accordance with California Code of Regulations, title 14, section 15301, which exempts the "operation, repair, maintenance, [and] permitting ... of existing public or private structures, facilities, mechanical equipment, or topographical features" from environmental review.
54. The United States Environmental Protection Agency (EPA) has promulgated biosolids reuse regulations in 40 CFR 503, *Standard for the Use or Disposal of Sewage Sludge*, which establishes management criteria for protection of ground and surface waters, sets application rates for heavy metals, and establishes stabilization and disinfection criteria.
55. The Central Valley Water Board is using the Standards in 40 CFR 503 as guidelines in establishing this Order, but the Central Valley Water Board is not the implementing agency for 40 CFR 503 regulations. The Discharger may have separate and/or additional compliance, reporting, and permitting responsibilities to the EPA.

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56. Pursuant to Water Code section 13263(g), discharge is a privilege, not a right, and adoption of this Order does not create a vested right to continue the discharge.

Public Notice

57. All the above and the supplemental information and details in the attached Information Sheet, which is incorporated by reference herein, were considered in establishing the following conditions of discharge.
58. The Discharger(s) and interested agencies and persons have been notified of the Central Valley Water Board's intent to prescribe waste discharge requirements for this discharge, and they have been provided an opportunity to submit written comments and an opportunity for a public hearing.
59. All comments pertaining to the discharge were heard and considered in a public hearing.

IT IS HEREBY ORDERED that 94-077 is rescinded except for purposes of enforcement, and, pursuant to Water Code sections 13263 and 13267, the Digger Bay Marina WWTF, its agents, successors, and assigns, in order to meet the provisions contained in Division 7 of the Water Code and regulations adopted hereunder, shall comply with the following:

A. Discharge Prohibitions

1. Discharge of wastes to surface waters or surface water drainage courses is prohibited.
2. Discharge of waste classified as 'hazardous', as defined in the California Code of Regulations, title 22, section 6626.1 et seq., is prohibited.
3. Treatment system bypass of untreated or partially treated waste is prohibited, except as allowed by Standard Provision E.2 of the *Standard Provisions and Reporting Requirements for Waste Discharge Requirements*.
4. Discharge of waste at a location or in a manner different from that described in the Findings is prohibited.
5. The Discharger shall not allow toxic substances to be discharged into the wastewater treatment system such that biological treatment mechanisms are disrupted.
6. Discharge of restaurant and grease trap waste, and other commercial or industrial waste into the septic system is prohibited.
7. Surfacing of waste within or downgradient of the leach fields is prohibited.
8. Surfacing of wastewater from the septic system is prohibited.

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9. Presence of leachate within one foot of ground surface elevation of the lowest leach field is prohibited.
10. Discharge of sewage, including gray water, to surface waters is prohibited.
11. Discharge of solid or liquid waste or pollutants, including solvents, oil, grease, or other petroleum products, to surface water, or surface water drainage courses is prohibited.

B. Flow Limitations

1. Effective immediately, influent flows to the WWTF shall not exceed the following limits:

Flow Measurement	Flow Limit
Average Annual Flow ¹	4,644 GPD

¹ As calculated by the Discharger's consultant.

C. Discharge Specifications

1. No waste constituent shall be released, discharged, or placed where it will cause a violation of the Groundwater Limitations of this Order.
2. Wastewater treatment, storage, and disposal shall not cause pollution or a nuisance as defined by Water Code section 13050.
3. The discharge shall remain within the permitted waste treatment/containment structures and land application areas at all times.
4. The Discharger shall operate all systems and equipment to optimize the quality of the discharge.
5. All conveyance, treatment, storage, and disposal systems shall be designed, constructed, operated, and maintained to prevent inundation or washout due to floods with a 100-year return frequency.
6. Public contact with wastewater at the WWTF shall be prevented through such means as fences, signs, or acceptable alternatives.
7. Objectionable odors shall not be perceivable beyond the limits of the WWTF property at an intensity that creates or threatens to create nuisance conditions.
8. Wastewater treatment and storage or structures shall have sufficient capacity to accommodate allowable wastewater flow, design seasonal precipitation, and ancillary inflow and infiltration during the winter while ensuring compliance with all requirements of this Order. Design seasonal precipitation shall be based on total

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annual precipitation using a return period of 100 years, distributed monthly in accordance with historical rainfall patterns.

9. Deodorizing chemicals and chemicals used for houseboat and facility maintenance shall be stored in containers designed to prevent discharges to groundwater, surface water, or surface water drainage courses.

D. Groundwater Limitations

Release of waste constituents from any portion of the WWTF shall not cause groundwater to:

1. Contain constituents in concentrations statistically greater than current background groundwater quality or that exceed either the Primary or Secondary MCLs established in Title 22 of the California Code of Regulations, whichever is greater.
2. Exceed a total coliform organism level of 2.2 MPN/100mL.
3. Exhibit a pH of less than 6.5 or greater than 8.5 pH units.
4. For constituents identified in Title 22, contain constituents in concentrations that exceed either the Primary or Secondary MCLs established therein.
5. Contain taste or odor-producing constituents, toxic substances, or any other constituents in concentrations that cause nuisance or adversely affect beneficial uses.

E. Subsurface Disposal System Specifications

1. The Discharger shall minimize discharges to the system from self-regenerating water softeners; acid and organic chemical solvent septic system additives; kitchen greases and oils; and toxic substances (including chemical pesticides and herbicides).
2. The Discharger shall prevent excessive use of in-sink garbage disposals; storm water inflow from roof drains, etc.; and draining of swimming pools into the system.
3. The Discharger shall implement pretreatment and/or best management practices as needed to prevent subsurface disposal system failure, including the installation and maintenance of interceptor/collector devices to control and capture fats, oil and grease.
4. Oil/water separators and other pretreatment systems shall be operated and maintained to prevent carryover into the septic system.
5. The Discharger shall remove settled solids and scum from the septic tank(s) whenever the solids clear space is less than three inches and/ or the scum clear space is less than eight inches.

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SHASTA COUNTY

6. The Discharger shall ensure that wastewater is evenly distributed to all of the disposal trenches and repair or modify the distribution system as necessary to optimize distribution.
7. Vegetation growing over subsurface disposal areas shall be cut and removed as needed to prevent root intrusion into drainage media.

F. Solids Disposal Specifications

Sludge, as used in this document, means the solid, semisolid, and liquid residues removed during primary, secondary, or advanced wastewater treatment processes. Solid waste refers to grit and screenings generated during preliminary treatment. Residual sludge means sludge that will not be subject to further treatment at the WWTF. Biosolids refers to sludge that has been treated and tested and shown to be capable of being beneficially used as a soil amendment for agriculture, silviculture, horticulture, and land reclamation activities pursuant to federal and state regulations .

1. Sludge and solid waste shall be removed from screens, sumps, ponds, and clarifiers as needed to ensure optimal plant operation.
2. Any handling and storage of residual sludge, solid waste, and biosolids at the WWTF shall be temporary (i.e., no longer than six months) and controlled and contained in a manner that minimizes leachate formation and precludes infiltration of waste constituents into soils in a mass or concentration that will violate the groundwater limitations of this Order.
3. Residual sludge, biosolids, and solid waste shall be disposed of in a manner approved by the Executive Officer and consistent with Title 27, division 2. Removal for further treatment, disposal, or reuse at disposal sites (i.e., landfills, WWTFs, composting sites, soil amendment sites) operated in accordance with valid waste discharge requirements issued by a Regional Water Board will satisfy this specification.
4. Use of biosolids as a soil amendment shall comply with valid waste discharge requirements issued by a regional water board or the State Water Board except in cases where a local (e.g., county) program has been authorized by a regional water board. In most cases, this will mean the General Biosolids Order (State Water Resources Control Board Water Quality Order 2004-12-DWQ, "General Waste Discharge Requirements for the Discharge of Biosolids to Land for Use as a Soil Amendment in Agricultural, Silvicultural, Horticultural, and Land Reclamation Activities"). For a biosolids use project to be covered by Order 2004-12-DWQ, the Discharger must file a complete Notice of Intent and receive a Notice of Applicability for each project.
5. Use and disposal of biosolids shall comply with the self-implementing federal regulations of 40 Code of Federal Regulations part 503, which are subject to enforcement by the U.S. EPA, not the Central Valley Water Board. If during the life

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of this Order, the State accepts primacy for implementation of part 503, the Central Valley Water Board may also initiate enforcement where appropriate.

6. Any proposed change in sludge use or disposal practice shall be reported in writing to the Executive Officer at least 90 days in advance of the change.

G. Provisions

1. A discharger whose waste flow has been increasing, or is projected to increase, shall estimate when flows will reach hydraulic and treatment capacities of its treatment, collection, and disposal facilities. The projections shall be made in January, based on the last three years' average dry weather flows, peak wet weather flows and total annual flows, as appropriate. When any projection shows that capacity of any part of the facilities may be exceeded in four years, the discharger shall notify the Central Valley Water Board by **31 January**.
2. In accordance with California Business and Professions Code sections 6735, 7835, and 7835.1, engineering and geologic evaluations and judgments shall be performed by or under the direction of registered professionals competent and proficient in the fields pertinent to the required activities. All technical reports specified herein that contain workplans for investigations and studies, that describe the conduct of investigations and studies, or that contain technical conclusions and recommendations concerning engineering and geology shall be prepared by or under the direction of appropriately qualified professional(s), even if not explicitly stated. Each technical report submitted by the Discharger shall bear the professional's signature and stamp.
3. The Discharger shall submit the technical reports and work plans required by this Order for consideration by the Executive Officer, and incorporate comments the Executive Officer may have in a timely manner, as appropriate. Unless expressly stated otherwise in this Order, the Discharger shall proceed with all work required by the foregoing provisions by the due dates specified.
4. The Discharger shall comply with Monitoring and Reporting Program R5-2017-0074, which is part of this Order, and any revisions thereto as ordered by the Executive Officer. The submittal dates of Discharger self-monitoring reports shall be no later than the submittal date specified in the MRP.
5. The Discharger shall comply with the "Standard Provisions and Reporting Requirements for Waste Discharge Requirements", dated 1 March 1991, which are attached hereto and made part of this Order by reference. This attachment and its individual paragraphs are commonly referenced as "Standard Provision(s)."
6. The Discharger shall comply with all conditions of this Order, including timely submittal of technical and monitoring reports. On or before each report due date, the Discharger shall submit the specified document to the Central Valley Water Board or, if appropriate, a written report detailing compliance or noncompliance

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with the specific schedule date and task. If noncompliance is being reported, then the Discharger shall state the reasons for such noncompliance and provide an estimate of the date when the Discharger will be in compliance. The Discharger shall notify the Central Valley Water Board in writing when it returns to compliance with the time schedule. Violations may result in enforcement action, including Central Valley Water Board or court orders requiring corrective action or imposing civil monetary liability, or in revision or rescission of this Order.

7. The Discharger shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that are installed or used by the Discharger to achieve compliance with the conditions of this Order. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems that are installed by the Discharger when the operation is necessary to achieve compliance with the conditions of this Order.
8. The Discharger shall use the best practicable cost-effective control technique(s) including proper operation and maintenance, to comply with this Order.
9. As described in the Standard Provisions, the Discharger shall report promptly to the Central Valley Water Board any material change or proposed change in the character, location, or volume of the discharge.
10. Upon the reduction, loss, or failure of the sanitary sewer system resulting in a sanitary sewer overflow, the Discharger shall take any necessary remedial action to (a) control or limit the volume of sewage discharged, (b) terminate the sewage discharge as rapidly as possible, and (c) recover as much as possible of the sewage discharged (including wash down water) for proper disposal. The Discharger shall implement all applicable remedial actions including, but not limited to, the following:
 - a. Interception and rerouting of sewage flows around the sewage line failure.
 - b. Vacuum truck recovery of sanitary sewer overflows and wash-down water.
 - c. Use of portable aerators where complete recovery of the sanitary sewer overflows are not practicable and where severe oxygen depletion is expected in surface waters.
 - d. Cleanup of sewage-related debris at the overflow site.
11. The Discharger shall report to the Central Valley Water Board any toxic chemical release data it reports to the State Emergency Response Commission within 15 days of reporting the data to the Commission pursuant to section 313 of the "Emergency Planning and Community Right to Know Act of 1986."
12. The Discharger shall not allow pollutant-free wastewater to be discharged into the wastewater collection, treatment, and disposal systems in amounts that

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significantly diminish the system's capability to comply with this Order. Pollutant-free wastewater means rainfall, groundwater, cooling waters, and condensates that are essentially free of pollutants.

13. At least **90 days** prior to termination or expiration of any lease, contract, or agreement involving disposal or recycling areas or off-site reuse of effluent, used to justify the capacity authorized herein and assure compliance with this Order, the Discharger shall notify the Central Valley Water Board in writing of the situation and of what measures have been taken or are being taken to assure full compliance with this Order.
14. In the event of any change in control or ownership of the WWTF, the Discharger must notify the succeeding owner or operator of the existence of this Order by letter, a copy of which shall be immediately forwarded to the Central Valley Water Board.
15. To assume operation as Discharger under this Order, the succeeding owner or operator must apply in writing to the Executive Officer requesting transfer of the Order. The request must contain the requesting entity's full legal name, the state of incorporation if a corporation, the name and address and telephone number of the persons responsible for contact with the Central Valley Water Board, and a statement. The statement shall comply with the signatory paragraph of Standard Provision B.3 and state that the new owner or operator assumes full responsibility for compliance with this Order. Failure to submit the request shall be considered a discharge without requirements, a violation of the Water Code. If approved by the Executive Officer, the transfer request will be submitted to the Central Valley Water Board for its consideration of transferring the ownership of this Order at one of its regularly scheduled meetings.
16. A copy of this Order including the MRP, Information Sheet, Attachments, and Standard Provisions, shall be kept at the discharge facility for reference by operating personnel. Key operating personnel shall be familiar with its contents.
17. The Central Valley Water Board will review this Order periodically and will revise requirements when necessary.

If, in the opinion of the Executive Officer, the Discharger fails to comply with the provisions of this Order, the Executive Officer may refer this matter to the Attorney General for judicial enforcement, may issue a complaint for administrative civil liability, or may take other enforcement actions. Failure to comply with this Order may result in the assessment of Administrative Civil Liability of up to \$10,000 per violation, per day, depending on the violation, pursuant to the Water Code, including sections 13268, 13350 and 13385. The Central Valley Water Board reserves its right to take any enforcement actions authorized by law.

Any person aggrieved by this action of the Central Valley Water Board may petition the State Water Board to review the action in accordance with Water Code section 13320 and California Code of Regulations, title 23, sections 2050 and following. The State Water

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Board must receive the petition by 5:00 p.m., 30 days after the date of this Order, except that if the thirtieth day following the date of this Order falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the Internet at:

http://www.waterboards.ca.gov/public_notices/petitions/water_quality

or will be provided upon request.

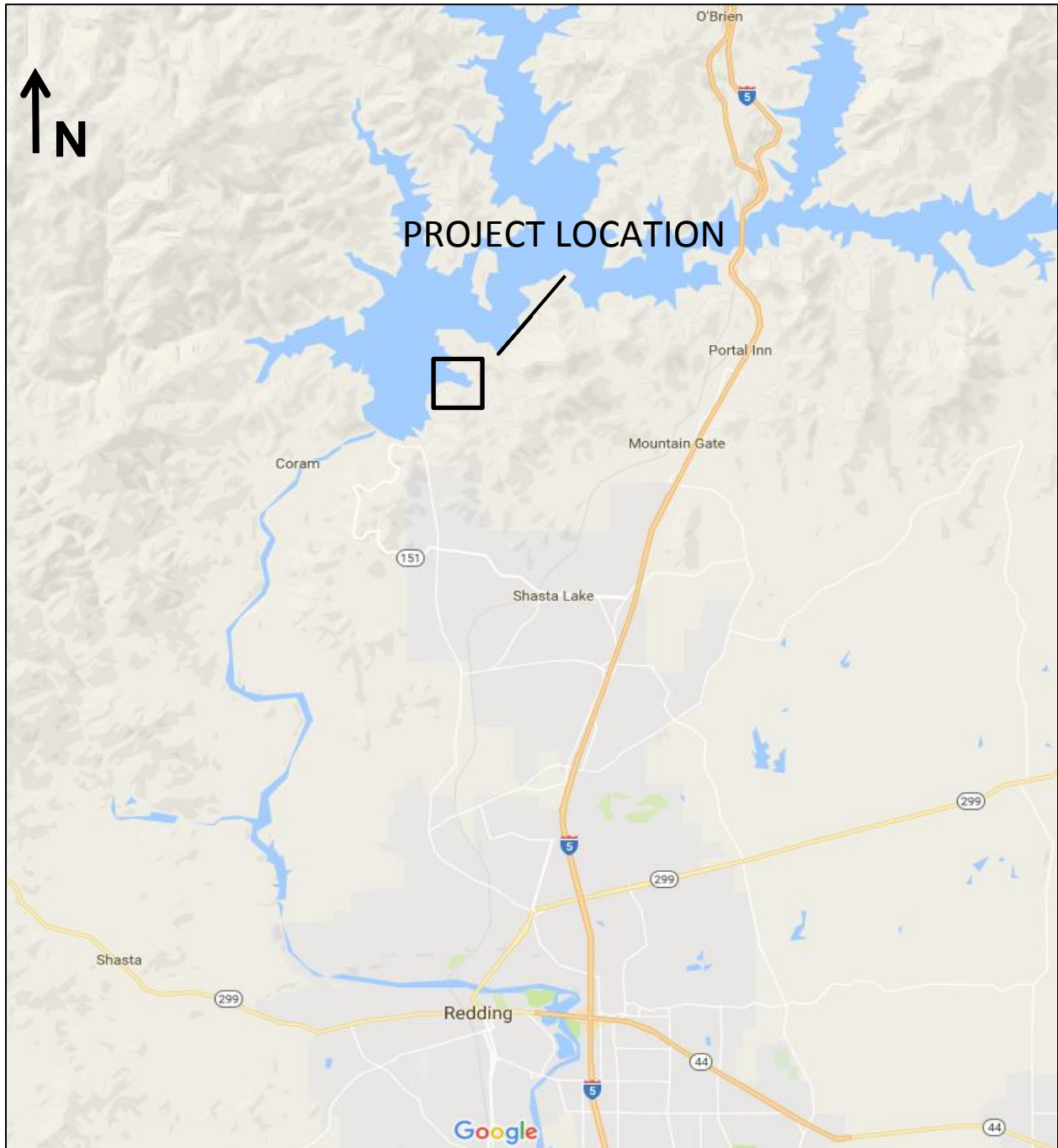
I, PAMELA C. CREEDON, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board on 9 June 2017.

Original Signed By

PAMELA C. CREEDON, Executive Officer

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WASTEWATER TREATMENT/DISPOSAL FACILITY
SHASTA COUNTY

ATTACHMENT A - LOCATION MAP

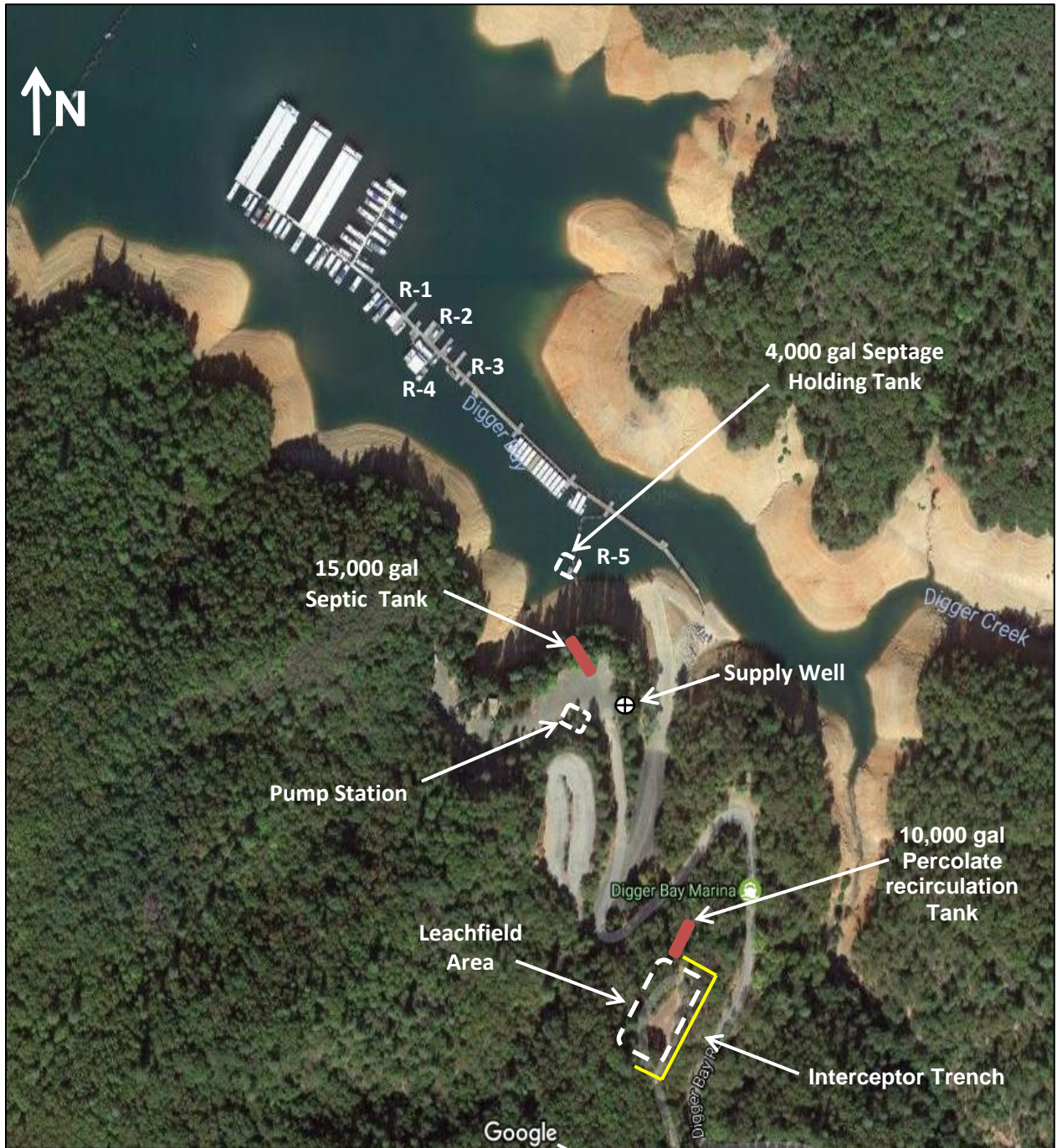


DRAWING REFERENCE:
GOOGLE EARTH
MAP DATA: © 2016 GOOGLE
NO SCALE

LOCATION MAP

DIGGER BAY MARINA
WASTEWATER TREATMENT/DISPOSAL FACILITY
SHASTA COUNTY

ATTACHMENT B – FACILITY MAP



DRAWING REFERENCE:
GOOGLE EARTH
MAP DATA: © 2016 GOOGLE
NO SCALE

FACILITY MAP
DIGGER BAY MARINA
WASTEWATER TREATMENT/DISPOSAL FACILITY
SHASTA COUNTY

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM R5-2017-0074

FOR

U.S. DEPARTMENT OF AGRICULTURE, FOREST SERVICE

AND

PELORIA MARINAS, LLC

DBA

DIGGER BAY MARINA

SHASTA COUNTY

This Monitoring and Reporting Program (MRP) describes requirements for monitoring a wastewater treatment system. This MRP is issued pursuant to Water Code section 13267. The Discharger shall not implement any changes to this MRP unless and until a revised MRP is issued by the Central Valley Regional Water Quality Control Board (Central Valley Water Board) Executive Officer.

A glossary of terms used in this MRP is included on the last page.

I. GENERAL MONITORING REQUIREMENTS

A. FLOW MONITORING

Hydraulic flow rates shall be measured at the monitoring points specified in this MRP. Central Valley Water Board staff shall approve any proposed changes to flow monitoring locations prior to implementation of the change. All flow monitoring systems shall be appropriate for the conveyance system (i.e., open channel flow or pressure pipeline) and liquid type. Unless otherwise specified, each flow meter shall be equipped with a flow totalizer to allow reporting of cumulative volume as well as instantaneous flow rate. Flow meters shall be calibrated at the frequency recommended by the manufacturer; typically at least once per year and records of calibration shall be maintained for review upon request.

B. MONITORING AND SAMPLING LOCATIONS

Samples shall be obtained at the monitoring points specified in this MRP. Central Valley Water Board staff shall approve any proposed changes to sampling locations prior to implementation of the change.

The Discharger shall monitor the following locations to demonstrate compliance with the requirements of this Order:

Monitoring Location Name	Monitoring Location Description
R-1	Shasta Lake, along the north side of the marina dock near pump out Station #1
R- 2	Shasta Lake, along the north side of the marina dock near pump out Station #2
R- 3	Shasta Lake, along the north side of the marina dock near pump out Station #3
R- 4	Shasta Lake, along the south side of the marina dock near maintenance building
R- 5	Shasta Lake, along the entrance to the marina dock

C. SAMPLING AND SAMPLE ANALYSIS

All samples shall be representative of the volume and nature of the discharge or matrix of material sampled. Except as specified otherwise in this MRP, grab samples will be considered representative of water, wastewater, soil, solids/sludges and groundwater.

The time, date, and location of each sample shall be recorded on the sample chain of custody form. All analyses shall be performed in accordance with the *Standard Provisions and Reporting Requirements for Waste Discharge Requirements*, dated 1 March 1991 (Standard Provisions).

Field test instruments (such as those used to measure pH, electrical conductivity, dissolved oxygen, wind speed, and precipitation) may be used provided that:

1. The operator is trained in proper use and maintenance of the instruments;
2. The instruments are field calibrated at the frequency recommended by the manufacturer;
3. The instruments are serviced and/or calibrated by the manufacturer at the recommended frequency; and
4. Field calibration reports are submitted as described in the "Reporting" section of this MRP.

Laboratory analytical procedures shall comply with the methods and holding times specified in the following (as applicable to the medium to be analyzed):

- *Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater* (EPA);
- *Test Methods for Evaluating Solid Waste* (EPA);
- *Methods for Chemical Analysis of Water and Wastes* (EPA);
- *Methods for Determination of Inorganic Substances in Environmental Samples* (EPA);
- *Standard Methods for the Examination of Water and Wastewater* (APHA/AWWA/WEF); and

- *Soil, Plant and Water Reference Methods for the Western Region (WREP 125).*

Approved editions shall be those that are approved for use by the United States Environmental Protection Agency or the California Department of Public Health’s Environmental Laboratory Accreditation Program (ELAP). The Discharger may propose alternative methods for approval. Where technically feasible, laboratory reporting limits shall be lower than the applicable water quality objectives for the constituents to be analyzed.

If monitoring consistently shows no significant variation in a constituent concentration or parameter after at least 12 months of monitoring, the Discharger may request this MRP be revised to reduce monitoring frequency. The proposal must include adequate technical justification for reduction in monitoring frequency. This monitoring program shall remain in effect unless and until a revised MRP is issued.

II. SPECIFIC MONITORING REQUIREMENTS

A. MARINA MONITORING

The Discharger shall use an approved dye tracer to test the sewage pump out system **monthly** for leaks and report whether dye was observed entering Shasta Lake during the test. In addition, the Discharger shall record daily and report the quantity of domestic waste pumped into the septic tank/leachfield system. When the septic tank is serviced, the quantity of sewage removed and ultimate disposal site shall be reported.

The Discharger shall inspect and dye test the holding tank beneath the floating rest room **quarterly** and report the condition of the tank each quarter.

B. INFLUENT MONITORING

Influent flow rates shall be monitored and influent samples collected upstream of the disposal system at a location before entering the leachfield. At a minimum, influent shall be monitored as specified below:

Constituent	Units	Sample Type	Sample Frequency	Reporting Frequency
Flow Rate ^a	gpd	Meter	Continuous	Quarterly

gpd denotes gallons per day. mg/L denotes milligrams per liter.

^a At a minimum, the total flow shall be measured monthly to calculate the average daily flow for the month.

C. SEPTIC TANK MONITORING

The Discharger shall monitor each septic tank as specified below:

Parameter	Units	Type of Measurement	Monitoring Frequency	Reporting Frequency
Sludge depth and layer thickness in the first compartment of each septic tank	Inches	Staff Gauge	Annually	Annually

Distance between bottom of scum layer and bottom of outlet device	Inches	Staff Gauge	Annually	Annually
Distance between top of sludge layer and bottom of outlet device	Inches	Staff Gauge	Annually	Annually
Evidence of tank damage, leakage, or other deterioration	--	Observation	Annually	Annually

The Discharger shall retain records of each inspection, noting the date, observations, measured readings and calculations. The Discharger shall also record when sludge/scum removal is required, the date that cleaning or repair occurred, and the name of the service contractor. Copies of the septage hauler receipts shall be retained for at least three years and shall be made available for review upon request.

D. LEACHFIELD MONITORING

The Discharger shall inspect the leachfield and note the presence or absence of saturated soils or standing liquid. The leachfield shall be inspected monthly during the period 1 October to 1 May and weekly during the remainder of the year.

E. SURFACE WATER MONITORING

Surface water samples shall be grab samples collected from Shasta Lake. Surface water samples shall be collected whether the marina is at its permanent location or is relocated during low water conditions. Surface water samples shall be collected around the marina docks, in the general areas described below and indicated on Attachment B. Samples must be collected, even if dock configuration changes, for the following:

<u>Sample</u>	<u>Description</u>
R-1	Shasta Lake, along the north side of the marina dock near pump out Station #1
R-2	Shasta Lake, along the north side of the marina dock near pump out Station #2
R-3	Shasta Lake, along the north side of the marina dock near pump out Station #3
R-4	Shasta Lake, along the south side of the marina dock near maintenance building
R-5	Shasta Lake, along the entrance to the marina dock

<u>Constituent</u>	<u>Analytical Method</u>	<u>Station</u>	<u>Sampling Frequency</u>
Fecal Coliform	Std. Method 9221 E, 5-5-5	R-1, R-2, R-3, R-4, R-5	Monthly ¹ during June, July, August, September

¹If any sample exceeds 400/100 ml during any 30-day period, the Discharger shall immediately re-analyze all receiving water stations and dye test the pump out system to determine the contamination source. Sampling shall continue until fecal coliform concentrations are below 400/100 ml.

F. SOLIDS/BIOSOLIDS DISPOSAL MONITORING

Sludge and/or biosolids monitoring shall be conducted as required in Title 40 of the Code of Federal Regulations (40 CFR), Part 503.8(b)(4) at the following frequency, depending on volume of sludge generated and removed from the wastewater treatment system for disposal or treated for beneficial reuse as biosolids:

<u>Volume Generated ¹ (dry metric tons/year)</u>	<u>Monitoring Frequency</u>	<u>Reporting Frequency</u>
0 to 290	Annually	Annually
290 to 1,500	Quarterly	Monthly
1,500 to 15,000	Bimonthly	Monthly
Greater than 15,000	Monthly	Monthly

¹For the purpose of this MRP, “generated” means produced as a separate waste stream by sludge wasting or pond cleanout. It does not apply to sludge that accumulates in treatment or storage ponds until the sludge is removed for treatment or disposal.

At a minimum, sludge/biosolids samples shall be analyzed to determine the total concentration in mg/Kg for arsenic, lead, nickel, cadmium, mercury, selenium, copper, molybdenum, zinc, total nitrogen, and total solids.

Sludge and/or biosolids monitoring records shall be retained for a minimum of five years in accordance with 40 CFR, Part 503.17. A log shall be kept of sludge quantities generated and of handling, application, and disposal activities. The frequency of entries is discretionary; however, the log should be complete enough to serve as a basis to report sludge monitoring.

The Discharger shall demonstrate that treated sludge (i.e., biosolids) meets Class A or Class B pathogen reduction levels by one of the methods listed in 40 CFR, Part 503.32, and shall maintain records of the operational parameters used to comply with the Vector Attraction Reduction requirements in 40 CFR, Part 503.33(b), as well as records of offsite disposal (quantity, date, disposal site).

The Discharger shall report the handling and disposal of all solids (e.g., screenings, grit, sludge, biosolids, etc.) generated at the wastewater system. Records shall include the

name/contact information for the hauling company, the type and amount of waste transported, the date removed from the wastewater system, the disposal facility name and address, and copies of analytical data required by the entity accepting the waste. These records shall be submitted as part of the annual monitoring report.

III. REPORTING REQUIREMENTS

All monitoring reports should be converted to a searchable Portable Document Format (PDF) and submitted electronically. Documents that are less than 50MB should be emailed to: centralvalleyredding@waterboards.ca.gov.

To ensure that your submittal is routed to the appropriate staff person, the following information should be included in the subject line of the email:

Digger Bay Marina/Shasta/WDR

Documents that are 50 MB or larger should be transferred to a CD, DVD, or flash drive and mailed to the following address:

Central Valley Regional Water Quality Control Board
364 Knollcrest Drive, Suite 205
Redding, CA 96002

A transmittal letter shall accompany each monitoring report. The letter shall include a discussion of all violations of the WDRs and this MRP during the reporting period and actions taken or planned for correcting each violation. If the Discharger has previously submitted a report describing corrective actions taken and/or a time schedule for implementing the corrective actions, reference to the previous correspondence will be satisfactory. Pursuant to Section B.3 of the Standard Provisions and General Reporting Requirements, the transmittal letter shall contain a statement by the Discharger or the Discharger's authorized agent certifying under penalty of perjury that the report is true, accurate and complete to the best of the signer's knowledge.

In reporting monitoring data, the Discharger shall arrange the data in tabular form so that the date, sample type (e.g., effluent, pond, etc.), and reported analytical result for each sample are readily discernible. The data shall be summarized in such a manner to clearly illustrate compliance with waste discharge requirements and spatial or temporal trends, as applicable. The results of any monitoring done more frequently than required at the locations specified in the Monitoring and Reporting Program shall be reported in the next scheduled monitoring report.

Laboratory analysis reports do not need to be included in the monitoring reports; however, all laboratory reports must be retained for a minimum of three years in accordance with Standard

Provision C.3. For a Discharger conducting any of its own analyses, reports must also be signed and certified by the chief of the laboratory.

In addition to the requirements of Standard Provision C.3, monitoring information shall include the method detection limit (MDL) and the Reporting limit (RL) or practical quantitation limit (PQL). If the regulatory limit for a given constituent is less than the RL (or PQL), then any analytical results for that constituent that are below the RL (or PQL) but above the MDL shall be reported and flagged as estimated.

All monitoring reports that involve planning, investigation, evaluation or design, or other work requiring interpretation and proper application of engineering or geologic sciences, shall be prepared by or under the direction of persons registered to practice in California pursuant to California Business and Professions Code sections 6735, 7835, and 7835.1.

In the future, the State Water Board or Central Valley Regional Water Board may require electronic submittal of monitoring reports using the State Water Board's California Integrated Water Quality System (CIWQS) Program Web site at:

(<http://www.waterboards.ca.gov/ciwqs/index.html>) or similar system. Electronic submittal to CIWQS, when implemented, will meet the requirements of our Paperless Office System.

A. Monthly Monitoring Reports

Monthly monitoring reports shall be submitted to the Board by the **1st day of the second month** following the end of the reporting period (i.e. the January monthly report is due by **March 1st**). At a minimum, each monitoring report shall include the following:

1. Results of Marina Monitoring.
2. Results of Leachfield Monitoring.
3. Results of Surface Water Monitoring
4. Results of Sludge/Biosolids Monitoring, if applicable, and verification of classification of biosolids as nonhazardous per 22 California Code of Regulations (CCR), Article 11, Criteria for Identification of Hazardous and Extremely Hazardous Waste (California Assessment Manual procedures).
5. Copies of laboratory analytical report(s).
6. A comparison of monitoring data to the flow limitations and discharge specifications and an explanation of any violation of those requirements.
7. A copy of inspection log page(s) documenting inspections completed during the month.
8. A calibration log verifying calibration of all monitoring instruments and devices used to fulfill the prescribed monitoring program.

B. Quarterly Monitoring Reports

Quarterly monitoring reports shall be submitted to the Board by the **1st day of the second month after the quarter** (i.e. the January-March quarterly report is due by **May 1st**). Each Quarterly Monitoring Report shall include the following:

1. Results of monthly flow monitoring.
2. Results of Sludge/Biosolids Monitoring, if applicable, and verification of classification of biosolids as nonhazardous per 22 CCR, Article 11, Criteria for Identification of Hazardous and Extremely Hazardous Waste (California Assessment Manual procedures).
3. Copies of laboratory analytical report(s).
4. A comparison of monitoring data to the flow limitations and discharge specifications and an explanation of any violation of those requirements.
5. A copy of inspection log page(s) documenting inspections completed during the quarter.
6. A copy of calibration log page(s) verifying calibration of all hand-held monitoring instruments performed during the quarter.

C. Annual Monitoring Reports

The Fourth Quarterly Monitoring Report will serve as an **Annual Monitoring Report**. The Fourth Quarterly Monitoring Report for each calendar year shall include the following in addition to the items listed above.

1. Effective 2017, and every five years thereafter, an evaluation of sludge depth and sludge removal plans pursuant to Discharge Specification D.9.
2. Sludge/Biosolids monitoring results, if sludge or biosolids were removed for off-site disposal during the year.
3. A summary of all biosolids/sludge analytical data and verification of compliance with the biosolids/sludge monitoring requirements.
4. A summary of information on the disposal of sludge and/or solid waste during the calendar year.
5. An evaluation of the performance of the WWTF, including discussion of capacity issues, infiltration and inflow rates, nuisance conditions, and a forecast of the flows anticipated in the next year, as described in Standard Provision E.4.
6. A discussion of compliance and the corrective actions taken, as well as any planned or proposed actions needed to bring the discharge into full compliance with the waste discharge requirements.
7. Monitoring equipment maintenance and calibration records, as described in Standard Provision C.4.

8. A statement of when the wastewater treatment system Operation and Maintenance Manual was last reviewed for adequacy and a description of any changes made during the year.
9. A discussion of any data gaps and potential deficiencies or redundancies in the monitoring system or reporting program.

The Discharger shall implement the above monitoring program as of the date of this Order.

Original Signed By

Ordered by: _____
PAMELA C. CREEDON, Executive Officer

9 June 2017

Date

GLOSSARY

BOD ₅	Five-day biochemical oxygen demand
CaCO ₃	Calcium carbonate
DO	Dissolved oxygen
EC	Electrical conductivity at 25° C
FDS	Fixed dissolved solids
NTU	Nephelometric turbidity unit
TKN	Total Kjeldahl nitrogen
TDS	Total dissolved solids
TSS	Total suspended solids
Continuous	The specified parameter shall be measured by a meter continuously.
24-hr Composite	Samples shall be a flow-proportioned composite consisting of at least eight aliquots over a 24-hour period.
Daily	Every day
Twice Weekly	Twice per week on non-consecutive days.
Weekly	Once per week.
Twice Monthly	Twice per month during non-consecutive weeks.
Monthly	Once per calendar month.
Bimonthly	Once every two calendar months (i.e., six times per year) during non-consecutive months.
Quarterly	Once per calendar quarter.
Semiannually	Once every six calendar months (i.e., two times per year) during non-consecutive quarters.
Annually	Once per year.
mg/L	Milligrams per liter
mL/L	Milliliters [of solids] per liter
µg/L	Micrograms per liter
µmhos/cm	Micromhos per centimeter
gpd	Gallons per day
mgd	Million gallons per day
MPN/100 mL	Most probable number [of organisms] per 100 milliliters
MTF	Multiple tube fermentation

INFORMATION SHEET

ORDER R5-2017-0074

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.

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

STANDARD PROVISIONS AND REPORTING REQUIREMENTS
FOR
WASTE DISCHARGE REQUIREMENTS

1 March 1991

A. General Provisions:

1. The requirements prescribed herein do not authorize the commission of any act causing injury to the property of another, or protect the Discharger from liabilities under federal, state, or local laws. This Order does not convey any property rights or exclusive privileges.
2. The provisions of this Order are severable. If any provision of this Order is held invalid, the remainder of this Order shall not be affected.
3. After notice and opportunity for a hearing, this Order may be terminated or modified for cause, including, but not limited to:
 - a. Violation of any term or condition contained in this Order;
 - b. Obtaining this Order by misrepresentation, or failure to disclose fully all relevant facts;
 - c. A change in any condition that results in either a temporary or permanent need to reduce or eliminate the authorized discharge;
 - d. A material change in the character, location, or volume of discharge.
4. Before making a material change in the character, location, or volume of discharge, the discharger shall file a new Report of Waste Discharge with the Regional Board. A material change includes, but is not limited to, the following:
 - a. An increase in area or depth to be used for solid waste disposal beyond that specified in waste discharge requirements.
 - b. A significant change in disposal method, location or volume, e.g., change from land disposal to land treatment.
 - c. The addition of a major industrial, municipal or domestic waste discharge facility.
 - d. The addition of a major industrial waste discharge to a discharge of essentially domestic sewage, or the addition of a new process or product by an industrial facility resulting in a change in the character of the waste.

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5. Except for material determined to be confidential in accordance with California law and regulations, all reports prepared in accordance with terms of this Order shall be available for public inspection at the offices of the Board. Data on waste discharges, water quality, geology, and hydrogeology shall not be considered confidential.
6. The discharger shall take all reasonable steps to minimize any adverse impact to the waters of the state resulting from noncompliance with this Order. Such steps shall include accelerated or additional monitoring as necessary to determine the nature and impact of the noncompliance.
7. The discharger shall maintain in good working order and operate as efficiently as possible any facility, control system, or monitoring device installed to achieve compliance with the waste discharge requirements.
8. The discharger shall permit representatives of the Regional Board (hereafter Board) and the State Water Resources Control Board, upon presentations of credentials, to:
 - a. Enter premises where wastes are treated, stored, or disposed of and facilities in which any records are kept,
 - b. Copy any records required to be kept under terms and conditions of this Order,
 - c. Inspect at reasonable hours, monitoring equipment required by this Order, and
 - d. Sample, photograph and video tape any discharge, waste, waste management unit, or monitoring device.
9. For any electrically operated equipment at the site, the failure of which would cause loss of control or containment of waste materials, or violation of this Order, the discharger shall employ safeguards to prevent loss of control over wastes. Such safeguards may include alternate power sources, standby generators, retention capacity, operating procedures, or other means.
10. The fact that it would have been necessary to halt or reduce the permitted activity in Order to maintain compliance with this Order shall not be a defense for the discharger's violations of the Order.
11. Neither the treatment nor the discharge shall create a condition of nuisance or pollution as defined by the California Water Code, Section 13050.
12. The discharge shall remain within the designated disposal area at all times.

B. General Reporting Requirements:

1. In the event the discharger does not comply or will be unable to comply with any prohibition or limitation of this Order for any reason, the discharger shall notify the Board by telephone at **(916) 464-3291** [*Note: Current phone numbers for all three Regional Board offices may be found on the internet at http://www.swrcb.ca.gov/rwqcb5/contact_us.*] as soon as it or its agents

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have knowledge of such noncompliance or potential for noncompliance, and shall confirm this notification in writing within **two weeks**. The written notification shall state the nature, time and cause of noncompliance, and shall include a timetable for corrective actions.

2. The discharger shall have a plan for preventing and controlling accidental discharges, and for minimizing the effect of such events.

This plan shall:

- a. Identify the possible sources of accidental loss or leakage of wastes from each waste management, treatment, or disposal facility.
- b. Evaluate the effectiveness of present waste management/treatment units and operational procedures, and identify needed changes of contingency plans.
- c. Predict the effectiveness of the proposed changes in waste management/treatment facilities and procedures and provide an implementation schedule containing interim and final dates when changes will be implemented.

The Board, after review of the plan, may establish conditions that it deems necessary to control leakages and minimize their effects.

3. All reports shall be signed by persons identified below:
 - a. For a corporation: by a principal executive officer of at least the level of senior vice-president.
 - b. For a partnership or sole proprietorship: by a general partner or the proprietor.
 - c. For a municipality, state, federal or other public agency: by either a principal executive officer or ranking elected or appointed official.
 - d. A duly authorized representative of a person designated in 3a, 3b or 3c of this requirement if;
 - (1) the authorization is made in writing by a person described in 3a, 3b or 3c of this provision;
 - (2) the authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a waste management unit, superintendent, or position of equivalent responsibility. (A duly authorized representative may thus be either a named individual or any individual occupying a named position); and
 - (3) the written authorization is submitted to the Board

Any person signing a document under this Section shall make the following certification:

“I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of the those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.”

4. Technical and monitoring reports specified in this Order are requested pursuant to Section 13267 of the Water Code. Failing to furnish the reports by the specified deadlines and falsifying information in the reports, are misdemeanors that may result in assessment of civil liabilities against the discharger.
5. The discharger shall mail a copy of each monitoring report and any other reports required by this Order to:

California Regional Water Quality Control Board
Central Valley Region
11020 Sun Center Drive, #200
Rancho Cordova, CA 95670-6114

Note: Current addresses for all three Regional Board offices may be found on the internet at http://www.swrcb.ca.gov/rwqcb5/contact_us or the current address if the office relocates.

C. Provisions for Monitoring:

1. All analyses shall be made in accordance with the latest edition of: (1) *Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater* (EPA 600 Series) and (2) *Test Methods for Evaluating Solid Waste* (SW 846-latest edition). The test method may be modified subject to application and approval of alternate test procedures under the Code of Federal Regulations (40 CFR 136).
2. Chemical, bacteriological, and bioassay analysis shall be conducted at a laboratory certified for such analyses by the State Department of Health Services. In the event a certified laboratory is not available to the discharger, analyses performed by a noncertified laboratory will be accepted provided a Quality Assurance-Quality Control Program is instituted by the laboratory. A manual containing the steps followed in this program must be kept in the laboratory and shall be available for inspection by Board staff. The Quality Assurance-Quality Control Program must conform to EPA guidelines or to procedures approved by the Board.

Unless otherwise specified, all metals shall be reported as Total Metals.

3. The discharger shall retain records of all monitoring information, including all calibration and maintenance records, all original strip chart recordings of continuous monitoring instrumentation, copies of all reports required by this Order, and records of all data used to

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complete the application for this Order. Records shall be maintained for a minimum of three years from the date of the sample, measurement, report, or application. This period may be extended during the course of any unresolved litigation regarding this discharge or when requested by the Regional Board Executive Officer.

Record of monitoring information shall include:

- a. the date, exact place, and time of sampling or measurements,
 - b. the individual(s) who performed the sampling of the measurements,
 - c. the date(s) analyses were performed,
 - d. the individual(s) who performed the analyses,
 - e. the laboratory which performed the analysis,
 - f. the analytical techniques or methods used, and
 - g. the results of such analyses.
4. All monitoring instruments and devices used by the discharger to fulfill the prescribed monitoring program shall be properly maintained and calibrated at least yearly to ensure their continued accuracy.
 5. The discharger shall maintain a written sampling program sufficient to assure compliance with the terms of this Order. Anyone performing sampling on behalf of the discharger shall be familiar with the sampling plan.
 6. The discharger shall construct all monitoring wells to meet or exceed the standards stated in the State Department of Water Resources *Bulletin 74-81* and subsequent revisions, and shall comply with the reporting provisions for wells required by Water Code Sections 13750 through 13755.22

D. Standard Conditions for Facilities Subject to California Code of Regulations, Title 23, Division 3, Chapter 15 (Chapter 15)

1. All classified waste management units shall be designed under the direct supervision of a California registered civil engineer or a California certified engineering geologist. Designs shall include a Construction Quality Assurance Plan, the purpose of which is to:
 - a. demonstrate that the waste management unit has been constructed according to the specifications and plans as approved by the Board.
 - b. provide quality control on the materials and construction practices used to construct the waste management unit and prevent the use of inferior products and/or materials which do not meet the approved design plans or specifications.
2. Prior to the discharge of waste to any classified waste management unit, a California registered civil engineer or a California certified engineering geologist must certify that the waste management unit meets the construction or prescriptive standards and performance goals in Chapter 15, unless an engineered alternative has been approved by the Board. In the case of an engineered alternative, the registered civil engineer or a certified engineering geologist must

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certify that the waste management unit has been constructed in accordance with Board-approved plans and specifications.

3. Materials used to construct liners shall have appropriate physical and chemical properties to ensure containment of discharged wastes over the operating life, closure, and post-closure maintenance period of the waste management units.
4. Closure of each waste management unit shall be performed under the direct supervision of a California registered civil engineer or a California certified engineering geologist.

E. Conditions Applicable to Discharge Facilities Exempted from Chapter 15 Under Section 2511

1. If the discharger's wastewater treatment plant is publicly owned or regulated by the Public Utilities Commission, it shall be supervised and operated by persons possessing certificates of appropriate grade according to California Code of Regulations, Title 23, Division 4, Chapter 14.
2. By-pass (the intentional diversion of waste streams from any portion of a treatment facility, except diversions designed to meet variable effluent limits) is prohibited. The Board may take enforcement action against the discharger for by-pass unless:
 - a. (1) By-pass was unavoidable to prevent loss of life, personal injury, or severe property damage. (Severe property damage means substantial physical damage to property, damage to the treatment facilities that causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a by-pass. Severe property damage does not mean economic loss caused by delays in production); and
 - (2) There were no feasible alternatives to by-pass, such as the use of auxiliary treatment facilities or retention of untreated waste. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a by-pass that would otherwise occur during normal periods of equipment downtime or preventive maintenance; or
 - b. (1) by-pass is required for essential maintenance to assure efficient operation; and
 - (2) neither effluent nor receiving water limitations are exceeded; and
 - (3) the discharger notifies the Board ten days in advance.

The permittee shall submit notice of an unanticipated by-pass as required in paragraph B.1. above.

3. A discharger that wishes to establish the affirmative defense of an upset (see definition in E.6 below) in an action brought for noncompliance shall demonstrate, through properly signed, contemporaneous operating logs, or other evidence, that:

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- a. an upset occurred and the cause(s) can be identified;
- b. the permitted facility was being properly operated at the time of the upset;
- c. the discharger submitted notice of the upset as required in paragraph B.1. above; and
- d. the discharger complied with any remedial measures required by waste discharge requirements.

In any enforcement proceeding, the discharger seeking to establish the occurrence of an upset has the burden of proof.

4. A discharger whose waste flow has been increasing, or is projected to increase, shall estimate when flows will reach hydraulic and treatment capacities of its treatment, collection, and disposal facilities. The projections shall be made in January, based on the last three years' average dry weather flows, peak wet weather flows and total annual flows, as appropriate. When any projection shows that capacity of any part of the facilities may be exceeded in four years, the discharger shall notify the Board by **31 January**.
5. Effluent samples shall be taken downstream of the last addition of wastes to the treatment or discharge works where a representative sample may be obtained prior to disposal. Samples shall be collected at such a point and in such a manner to ensure a representative sample of the discharge.
6. Definitions
 - a. Upset means an exceptional incident in which there is unintentional and temporary noncompliance with effluent limitations because of factors beyond the reasonable control of the Discharger. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper action.
 - b. The monthly average discharge is the total discharge by volume during a calendar month divided by the number of days in the month that the facility was discharging. This number is to be reported in gallons per day or million gallons per day.

Where less than daily sampling is required by this Order, the monthly average shall be determined by the summation of all the measured discharges by the number of days during the month when the measurements were made.
 - c. The monthly average concentration is the arithmetic mean of measurements made during the month.
 - d. The "daily maximum" **discharge** is the total discharge by volume during any day.

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- e. The “daily maximum” **concentration** is the highest measurement made on any single discrete sample or composite sample.
- f. A “grab” sample is any sample collected in less than 15 minutes.
- g. Unless otherwise specified, a composite sample is a combination of individual samples collected over the specified sampling period;
 - (1) at equal time intervals, with a maximum interval of one hour
 - (2) at varying time intervals (average interval one hour or less) so that each sample represents an equal portion of the cumulative flow.

The duration of the sampling period shall be specified in the Monitoring and Reporting Program. The method of compositing shall be reported with the results.

7. Annual Pretreatment Report Requirements:

Applies to dischargers required to have a Pretreatment Program as stated in waste discharge requirements.)

The annual report shall be submitted **by 28 February** and include, but not be limited to, the following items:

- a. A summary of analytical results from representative, flow-proportioned, 24-hour composite sampling of the influent and effluent for those pollutants EPA has identified under Section 307(a) of the Clean Water Act which are known or suspected to be discharged by industrial users.

The discharger is not required to sample and analyze for asbestos until EPA promulgates an applicable analytical technique under 40 CFR (Code of Federal Regulations) Part 136. Sludge shall be sampled during the same 24-hour period and analyzed for the same pollutants as the influent and effluent sampling analysis. The sludge analyzed shall be a composite sample of a minimum of 12 discrete samples taken at equal time intervals over the 24-hour period. Wastewater and sludge sampling and analysis shall be performed at least annually. The discharger shall also provide any influent, effluent or sludge monitoring data for nonpriority pollutants which may be causing or contributing to Interference, Pass Through or adversely impacting sludge quality. Sampling and analysis shall be performed in accordance with the techniques prescribed in 40 CFR Part 136 and amendments thereto.

- b. A discussion of Upset, Interference, or Pass Through incidents, if any, at the treatment plant which the discharger knows or suspects were caused by industrial users of the system. The discussion shall include the reasons why the incidents occurred, the corrective actions taken and, if known, the name and address of the industrial user(s) responsible. The discussion shall also include a review of the applicable pollutant limitations to determine whether any

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additional limitations, or changes to existing requirements, may be necessary to prevent Pass Through, Interference, or noncompliance with sludge disposal requirements.

- c. The cumulative number of industrial users that the discharger has notified regarding Baseline Monitoring Reports and the cumulative number of industrial user responses.
- d. An updated list of the discharger's industrial users including their names and addresses, or a list of deletions and additions keyed to a previously submitted list. The discharger shall provide a brief explanation for each deletion. The list shall identify the industrial users subject to federal categorical standards by specifying which set(s) of standards are applicable. The list shall indicate which categorical industries, or specific pollutants from each industry, are subject to local limitations that are more stringent than the federal categorical standards. The discharger shall also list the noncategorical industrial users that are subject only to local discharge limitations. The discharger shall characterize the compliance status through the year of record of each industrial user by employing the following descriptions:
 - (1) Complied with baseline monitoring report requirements (where applicable);
 - (2) Consistently achieved compliance;
 - (3) Inconsistently achieved compliance;
 - (4) Significantly violated applicable pretreatment requirements as defined by 40 CFR 403.8(f)(2)(vii);
 - (5) Complied with schedule to achieve compliance (include the date final compliance is required);
 - (6) Did not achieve compliance and not on a compliance schedule;
 - (7) Compliance status unknown.

A report describing the compliance status of any industrial user characterized by the descriptions in items (d)(3) through (d)(7) above shall be **submitted quarterly from the annual report date** to EPA and the Board. The report shall identify the specific compliance status of each such industrial user. This quarterly reporting requirement shall commence upon issuance of this Order.

- e. A summary of the inspection and sampling activities conducted by the discharger during the past year to gather information and data regarding the industrial users. The summary shall include but not be limited to, a tabulation of categories of dischargers that were inspected and sampled; how many and how often; and incidents of noncompliance detected.

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- f. A summary of the compliance and enforcement activities during the past year. The summary shall include the names and addresses of the industrial users affected by the following actions:
- (1) Warning letters or notices of violation regarding the industrial user's apparent noncompliance with federal categorical standards or local discharge limitations. For each industrial user, identify whether the apparent violation concerned the federal categorical standards or local discharge limitations;
 - (2) Administrative Orders regarding the industrial user's noncompliance with federal categorical standards or local discharge limitations. For each industrial user, identify whether the violation concerned the federal categorical standards or local discharge limitations;
 - (3) Civil actions regarding the industrial user's noncompliance with federal categorical standards or local discharge limitations. For each industrial user, identify whether the violation concerned the federal categorical standards or local discharge limitations;
 - (4) Criminal actions regarding the industrial user's noncompliance with federal categorical standards or local discharge limitations. For each industrial user, identify whether the violation concerned the federal categorical standards or local discharge limitations.
 - (5) Assessment of monetary penalties. For each industrial user identify the amount of the penalties;
 - (6) Restriction of flow to the treatment plant; or
 - (7) Disconnection from discharge to the treatment plant.
- g. A description of any significant changes in operating the pretreatment program which differ from the discharger's approved Pretreatment Program, including, but not limited to, changes concerning: the program's administrative structure; local industrial discharge limitations; monitoring program or monitoring frequencies; legal authority of enforcement policy; funding mechanisms; resource requirements; and staffing levels.
- h. A summary of the annual pretreatment budget, including the cost of pretreatment program functions and equipment purchases.
- i. A summary of public participation activities to involve and inform the public.
- j. A description of any changes in sludge disposal methods and a discussion of any concerns not described elsewhere in the report.

Duplicate signed copies of these reports shall be submitted to the Board and:

Regional Administrator
U.S. Environmental Protection Agency W-5
75 Hawthorne Street
San Francisco, CA 94105

and

State Water Resource Control Board
Division of Water Quality
P.O. Box 100
Sacramento, CA 95812

Revised January 2004 to update addresses and phone numbers