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

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 WDR Order 94-077 will be rescinded and replaced with this Order.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

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

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

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 µmhos/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 µmhos/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.

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 gravely loam, gravely 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

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.

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

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-XXXX 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.

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.

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

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.

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

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-XXXX, 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

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

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

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 __

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PAMELA C. CREEDON, Executive Officer