

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION**

ORDER R5-2017-00XX

**WASTE DISCHARGE REQUIREMENTS GENERAL ORDER
FOR
OIL FIELD DISCHARGES TO LAND**

GENERAL ORDER NUMBER THREE

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

SCOPE OF GENERAL ORDER COVERAGE

1. This General Order applies to owners and/or operators (hereinafter referred to as “Dischargers”) of oil and gas production facilities (herein after referred to as Facilities or Facility) that:
 - a. primarily discharge produced wastewater from oil and gas extraction operations to land, including but not limited to produced wastewater disposal ponds, but that may also discharge produced wastewater to land for dust control and for construction activities and may discharge road mix within Facility boundaries to enhance containment berms and roads;
 - b. exceed the maximum oil field discharge salinity limits for electrical conductivity, chloride, and boron contained in the *Water Quality Control Plan for the Tulare Lake Basin, Second Edition, Revised January 2015* (Basin Plan);
 - c. discharge where the first encountered groundwater is of poor quality or there is no first encountered groundwater;
 - d. discharge where the first encountered groundwater does not support beneficial uses as identified in the Basin Plan as Municipal and Domestic Supply (MUN), or Agricultural Supply (AGR), or Industrial Service Supply (IND) or Industrial Process Supply (PRO); and
 - e. began discharge of wastewater to pond(s) prior to **26 November 2014**.

This General Order classifies such Facilities as “existing.”

2. The Board will notify Dischargers of coverage under the terms and conditions of this General Order by Executive Officer issuance of a Notice of Applicability as described in the application process below.

3. This General Order will provide coverage for discharge of oil field produced wastewater to ponds and to land for dust control and construction activities. This General Order does not provide coverage for oil field produced wastewater discharges for crop irrigation. This General Order also does not provide coverage for road mix applications to land where that is the only discharge to land. These separate discharges will be addressed under separate Central Valley Water Board order or waiver of waste discharge requirements (WDRs).
4. It is the intent of the Central Valley Water Board that Facilities regulated by outdated WDRs can also apply for coverage under this General Order.
5. For the purposes of this General Order, “produced wastewater” is formation water pumped from an oil or gas well and discharged to land. Produced wastewater may also include water, precipitation, or rainfall runoff that contacts produced wastewater or residual oil field wastes in the Facility. See Attachment A for specific definitions of many of the terms used in this General Order.
6. There are approximately 326 Facilities with about 1,100 ponds within the Central Valley. Approximately 700 ponds are actively used. Not all of these facilities can meet the requirements of this General Order.

APPLICATION PROCESS

7. Dischargers seeking coverage under this General Order shall file a Notice of Intent (NOI) with the Central Valley Water Board within 30 days of the adoption date of this General Order. A NOI shall consist of the following:
 - a. A completed Form 200, which is available at: http://www.waterboards.ca.gov/publications_forms/forms/docs/form200.pdf.
 - b. Dischargers that are not operating under existing WDRs shall submit an application fee that shall also serve as the first annual fee. The fee shall be based on a threat to water quality (TTWQ) and Complexity (CPLX) rating of 3C and applicable surcharges as described in Title 23, California Code of Regulations, section 2200.
 - c. A technical report that describes the wastewater generation, treatment, storage, reuse and disposal activities. Submittal of the technical report containing complete information described in the attached *Information Needs Sheet* (Attachment B), which is hereby incorporated by reference as part of this General Order, will allow for an expedited review by Central Valley Water Board

staff. Applicants are advised to inquire with Central Valley Water Board staff before performing investigations and/or preparing the technical report to ensure that the report will be complete.

Upon review of the NOI, Central Valley Water Board staff will determine the appropriate TTWQ and CPLX rating and additional fees may be required.

8. The NOI for the Facility seeking coverage under this General Order shall document the existing operations, which is defined as the actual maximum monthly average produced wastewater discharge flow to ponds that occurred in the ten years immediately prior to 26 November 2014. Any increase in flow beyond this number constitutes an expansion requiring a CEQA evaluation. The use of the actual maximum monthly average produced wastewater discharge flow in the last ten years to define the existing operations accounts for fluctuations in oil and gas production and associated wastewater flows due to changes in economic conditions.
9. If the information in the NOI demonstrates that coverage under this General Order is appropriate, the Central Valley Water Board's Executive Officer (Executive Officer) will authorize coverage by issuing a Notice of Applicability (NOA). Coverage under this General Order will commence upon issuance of the NOA. The NOA will describe the appropriate monitoring and reporting requirements.
10. The Executive Officer may determine that the discharge would be better regulated by individual WDRs, a different general order, an enforcement order, or a National Pollutant Discharge Elimination System (NPDES) Permit in case of discharges to waters of the United States. In these cases, the Executive Officer will notify the Discharger in writing of such a determination.

BACKGROUND INFORMATION

11. This General Order prescribes requirements for discharges of non-hazardous oil field produced wastewater to ponds and other low threat discharges to land at the existing Facilities located in the Central Valley Region.
12. Existing Facility components can include production wells, networks of pipelines, gas separators and dehydrators, oil and water separation units of various configurations and types (e.g. tank batteries, WEMCOs), storage units, produced wastewater treatment systems, and disposal systems that can include evaporation and percolation ponds. In some operations, produced wastewater is disposed

through underground injection wells permitted and regulated by California Department of Conservation's Division of Oil, Gas, and Geothermal Resources (DOGGR). In most operations, produced wastewater is further treated and reused in steam and power generation or injected as steam or water into the hydrocarbon reservoir to enhance oil recovery (also regulated by DOGGR). High quality produced wastewater may also be reused to supplement agricultural water supplies. Other uses of produced wastewater (of appropriate quality) may include, but are not limited to, oil field dust control and as a compaction aid for construction activities on oil fields, and others as approved by the Executive Officer.

13. The Central Valley Water Board in 2014 began a reevaluation of its oil field program, particularly with respect to discharges to land. The evaluation included research and inspection of all known discharges to ponds. In 2015, the Central Valley Water Board issued orders under Water Code section 13267 requiring oil field operators to submit information on their discharges to land. In 2015, the Central Valley Water Board also issued orders under Water Code section 13304 to those discharging to ponds without valid waste discharge requirements. The orders required dischargers to submit information on the location, volume and quality of the discharge and to conduct hydrogeological site characterization to determine vertical and lateral extent of the impact of wastewater percolating to groundwater and to ascertain whether discharges threaten groundwater quality or threaten to cause pollution. This information was necessary to determine whether the discharge can be permitted by the Central Valley Water Board. This information may be suitable to support a NOI to comply with this General Order, another general order, or to support individual waste discharge requirements.
14. Discharges that would qualify for this General Order are those that discharge where there is no underlying groundwater or where the poor quality of underlying groundwater precludes beneficial use and would support removal of designated beneficial uses through Basin Plan amendments.

BASIN PLAN AND BENEFICIAL USES

15. The *Water Quality Control Plan for the Tulare Lake Basin, Second Edition, Revised January 2015* (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 Resources Control Board (State Water Board).
16. Pursuant to Chapter II of the Basin Plan, the beneficial uses of surface water may include:

- a. municipal and domestic supply (MUN);
- b. agricultural supply (AGR);
- c. industrial process supply (PRO);
- d. industrial service supply (IND);
- e. hydro-power generation (POW);
- f. water contact recreation (REC-1);
- g. non-contact water recreation (REC-2);
- h. warm freshwater habitat (WARM);
- i. cold freshwater habitat (COLD);
- j. migration of aquatic organisms (MIGR);
- k. spawning reproduction and/or early development (SPWN);
- l. wildlife habitat (WILD);
- m. navigation (NAV);
- n. rare, threatened, or endangered species (RARE);
- o. groundwater recharge (GWR);
- p. freshwater replenishment (FRSH);
- q. aquaculture (AQUA); and
- r. preservation of biological habitats of special significance (BIOL).

Where surface water bodies are not specifically listed, the Basin Plan designates beneficial uses based on the waters to which they are tributary.

17. The beneficial uses of groundwater described in the Basin Plan include MUN, AGR, IND, PRO, REC-1, and WILD. Table II-2 of the Basin Plan lists the specific designated beneficial uses of groundwater within each Detailed Analysis Unit (DAU) of the Basin. Due to their sizes, the listed uses may not exist throughout the DAUs. In addition, some discharges do not fall within the DAUs. Further, the Basin Plan incorporates State Water Board Resolution No. 88-63, known as the State "Sources of Drinking Water Policy." Pursuant to this policy, all groundwater is designated as MUN (the use may be existing or potential) unless specifically exempted by the Central Valley Water Board and approved for exemption by the State Water Board. In addition, unless otherwise designated by the Central Valley Water Board, all groundwater in the Region is considered suitable or potentially suitable, at a minimum, for agricultural supply (AGR), industrial supply (IND), and industrial process supply (PRO).
18. Pursuant to Water Code section 13263(a), this General Order must implement the Basin Plan including consideration of the beneficial uses of water, the water quality objectives reasonably required for protection of those beneficial uses, other waste discharges, and the need to prevent nuisance conditions. Water quality objectives are the limits or levels of water quality constituents or characteristics that are established for the reasonable protection of beneficial uses of water or the

prevention of nuisance within a specific area (Water Code, section 13050(h)). Water quality objectives apply to all waters within a surface water or groundwater resource for which beneficial uses have been designated.

19. Water quality objectives are listed separately for surface water and groundwater in Chapter III of the Basin Plan and are either numeric or narrative. The water quality objectives are implemented in this General Order consistent with the Basin Plan's Policy for Application of Water Quality Objectives, which specifies that the Central Valley Water Board "will, on a case-by-case basis, adopt numerical limitations in orders which will implement the narrative objectives." To derive numeric limits from narrative water quality objectives, the Board considers relevant numerical criteria and guidelines developed and/or published by other agencies and organizations.
20. Water quality objectives that apply to groundwater include, but are not limited to, (1) numeric objectives and the chemical constituents objective (includes state drinking water primary and secondary maximum contaminant levels (MCLs) promulgated in California Code of Regulations (CCR), title 22, sections 64431, 64444, and 64449 applicable to municipal and domestic supply), and (2) narrative objectives including the chemical constituents, taste and odor, and toxicity objectives.
21. Chapter III of the Basin Plan under Water Quality Objectives for groundwater for salinity, states:

All ground waters shall be maintained as close to natural concentrations of dissolved matter as is reasonable considering careful use and management of water resources. No proven means exist at present that will allow ongoing human activity in the Basin and maintain ground water salinity at current levels throughout the Basin. Accordingly, the water quality objectives for ground water salinity control the rate of increase.

The maximum average annual increase in salinity measured as electrical conductivity shall not exceed the values specified in [Basin Plan] Table III-4 for each hydrographic unit shown on [Basin Plan] Figure III-1.
22. In considering any exceptions to the beneficial use designation of MUN in the Basin Plan, the Central Valley Water Board must consider the criteria from Resolution No. 88-63, the state's Sources of Drinking Water Policy.
23. The Sources of Drinking Water Policy states that all groundwaters of the state are considered to be suitable, or potentially suitable, for municipal or domestic water supply and should be so designated by the Regional Board with the exception of where the groundwater meets one or more of the following criteria:

- a. The total dissolved solids (TDS) exceed 3,000 milligrams per liter (mg/L) (5,000 micromhos per centimeter ($\mu\text{mhos/cm}$) electrical conductivity) and it is not reasonably be expected by the Regional Boards to supply a public water system; or
- b. There is contamination, either by natural processes or by human activity (unrelated to a specific pollution incident), that cannot reasonably be treated for domestic use using either Best Management Practices or best economically achievable treatment practices; or
- c. The water source does not provide sufficient water to supply a single well capable of producing an average, sustained yield of 200 gallons per day; or
- d. The aquifer is regulated as a geothermal energy producing source or has been exempted administratively pursuant to 40 CFR, section 146.4 for the purpose of underground injection of fluids associated with the production of hydrocarbon or geothermal energy, provided that these fluids do not constitute a hazardous waste under 40 CFR, section 261.3.

Exceptions to the Sources of Drinking Water Policy are not self-implementing, but must be established in an amendment to the Basin Plan.

24. To be consistent with the Sources of Drinking Water Policy in making exceptions to beneficial use designations other than MUN, the Central Valley Water Board will consider criteria for exceptions, parallel to Resolution No. 88-63 exception criteria, which would indicate limitations on those other beneficial uses as follows:

In making any exceptions to the beneficial use designation of agricultural supply (AGR), the Central Valley Water Board will consider the following criteria:

- a. There is pollution, either by natural processes or by human activity (unrelated to a specific pollution incident), that cannot reasonably be treated for agricultural use using either Best Management Practices or best economically achievable treatment practices, or
- b. The water source does not provide sufficient water to supply a single well capable of producing an average, sustained yield of 200 gallons per day, or
- c. The aquifer is regulated as a geothermal energy producing source or has been exempted administratively pursuant to 40 CFR, section 146.4 for the purpose of underground injection of fluids associated with the production of hydrocarbon, or geothermal energy, provided that these fluids do not constitute a hazardous waste under 40 CFR, section 261.3.

In making any exceptions to the beneficial use designation of industrial supply (IND or PRO), the Central Valley Water Board will consider the following criteria:

- d. There is pollution, either by natural processes or by human activity (unrelated to a specific pollution incident), that cannot reasonably be treated for industrial use using either Best Management Practices or best economically achievable treatment practices, or
- e. The water source does not provide sufficient water to supply a single well capable of producing an average, sustained yield of 200 gallons per day.

25. The Basin Plan at page i states:

Basin plans are adopted and amended by regional water boards under a structured process involving full public participation and state environmental review. Basin plans and amendments do not become effective until approved by the State Water Board. Regulatory provisions must be approved by the Office of Administrative Law.

26. The Basin Plan's implementation policy sets forth the following maximum salinity limits (effluent limits) for specific waste constituents for discharges of oil field wastewater to unlined ponds overlying groundwater with existing and future probable beneficial use:

Constituent	Limitation
Electrical Conductivity (EC) ($\mu\text{mhos/cm}$)	1000
Chloride (mg/L)	200
Boron (mg/L)	1

The Basin Plan maximum salinity limits do not apply to this General Order because the groundwater is poor quality and exceeds the maximum salinity limits and exceeds the Basin Plan water quality objectives.

ANTIDegradation Policy / Basin Plan Amendments

27. State Water Board Resolution 68-16, the Statement of Policy with Respect to Maintaining High Quality of Waters in California (hereafter, the State Antidegradation Policy), requires that disposal of waste into high quality waters of the state be regulated to achieve the highest water quality consistent with the maximum benefit to the people of the State. Resolution 68-16 does not apply to waters that are not high quality.

28. Where the water body is not high quality (i.e., “poor quality”), the “best efforts” approach is considered. The “best efforts” approach involves implementation of reasonable control measures to treat produced wastewater prior to discharge to land. The factors that should be analyzed under the “best efforts” approach include the water quality achieved by other similarly situated Dischargers, the good faith efforts of the Discharger to limit the discharge of constituents of concern (COCs), and the measures necessary to achieve compliance.
29. The primary COCs due to discharges of waste from oil field facilities with respect to surface waters and groundwater are elevated concentrations of general minerals (especially total dissolved solids and chloride), metals (e.g., arsenic), trace elements (e.g., boron, strontium, thallium, lithium, etc.), petroleum hydrocarbons, polynuclear aromatic hydrocarbons (PAHs), volatile organic compounds (VOCs, e.g., benzene, toluene, ethylbenzene, and xylenes [BTEX]), and radionuclides.
30. As described in Finding 1, this General Order applies to areas where first encountered groundwater does not exist (e.g., it is petroleum or hydrocarbon producing only) or if it does exist, it is such poor quality that it does not, and could not be reasonably expected to support designated beneficial uses.
31. As described in Finding 17, the Basin Plan applies MUN to all groundwater where it is not specifically de-designated. The Basin Plan also states that unless otherwise designated by the Regional Water Board, all groundwaters in the Region are considered suitable or potentially suitable for AGR, IND, and PRO. Hydrogeological conditions, particularly in the oil fields on the west side of the Central Valley, have resulted in areas where first encountered groundwater is petroleum or hydrocarbon producing and/or is of such poor quality that it cannot reasonably be expected to be used, now or in the future, for the Basin Plan assigned beneficial uses, even with the implementation of best management practices or best economically achievable treatment practices. Under these circumstances, Dischargers are expected to apply “best efforts” to minimize water quality degradation and prevent conditions of nuisance. Also, under these circumstances, Dischargers may also be able to obtain amendments to the Basin Plan that de-designate the beneficial uses that cannot reasonably be achieved.
32. Where groundwater exists, but its quality does not and could not support beneficial uses, this General Order puts the Discharger on a five year compliance schedule (Provision E.4) to obtain an amendment or amendments to the Basin plan to de-designate the beneficial uses of MUN, AGR, IND, or PRO, as appropriate. The schedule requires the Discharger to demonstrate, in the case of MUN, that its discharges will meet the Sources of Drinking Water Policy exception criteria, or in the case of AGR, IND, and PRO, parallel criteria. The compliance schedule also

requires the Discharger to demonstrate, where it can meet the above criteria that its discharges will not migrate from the areas where the beneficial uses will be de-designated to areas of higher quality groundwater, it must demonstrate containment. The compliance schedule may be extended by up to two years by the Executive Officer if, through no fault of the Discharger, the process is delayed.

33. If the Discharger is unable to obtain the amendments to the Basin Plan necessary to continue discharge by the end of the compliance schedule, the discharge must cease.
34. Where Dischargers can demonstrate through an appropriate hydrogeological investigation that groundwater does not exist and discharges of produced wastewater and other wastes to land will not migrate into areas where groundwater does exist, Basin Plan amendments are not required. This General Order will regulate these discharges to confirm the results of the hydrogeological investigation, protect surface waters and surface water drainages, and to prevent the creation of nuisance conditions.
35. The Dischargers in close proximity with similar hydrogeological conditions are encouraged to participate in a regional groundwater monitoring program as a group. The purpose of monitoring or investigation is to confirm that the discharges are effectively controlled by management practices and to evaluate compliance with this General Order.
36. This General Order provides smaller operators (i.e., those that discharge 250 or fewer barrels per day of produced wastewater to land) a time schedule to comply with the groundwater monitoring requirements in the Monitoring and Reporting Program R5-2017-XXXX (MRP). Given this General Order applies to discharges where the first encountered groundwater is of poor quality or there is no first encountered groundwater, it is unlikely that the discharge will degrade groundwater during the time extension.

STATUTORY AND REGULATORY CONSIDERATIONS

37. Water Code section 13260(a) requires that any person discharging waste, or proposing to discharge waste, within the Central Valley Region, that could affect the quality of the waters of the State to file a report of that discharge with the Central Valley Water Board. An NOI meets this requirement.

38. The Central Valley Water Board generally regulates waste discharges by prescribing waste discharge requirements, which must implement the relevant water quality control plan. The Central Valley Water Board may prescribe general waste discharge requirements (i.e., this General Order) for a category of discharges if all the following criteria apply:
- a. The discharges are produced by the same or similar operations.
 - b. The discharges involve the same or similar types of waste.
 - c. The discharges require the same or similar treatment standards.
 - d. The discharges are more appropriately regulated under general requirements than individual requirements.
39. Pursuant to Water Code sections 13241 and 13263, the Central Valley Water Board, in establishing the requirements contained herein, considered factors including, but not limited to, the following:
- a. Past, present, and probable future beneficial uses of water;
 - b. Environmental characteristics of the hydrographic unit under consideration, including the quality of water available thereto;
 - c. Water quality conditions that could reasonably be achieved through the coordinated control of all factors which affect water quality in the area;
 - d. Economic considerations;
 - e. The need for developing housing within the region(s); and
 - f. The need to develop and use recycled water.
40. California Code of Regulations, Title 27 (hereafter Title 27) contains regulatory requirements for the treatment, storage, processing, and disposal of solid waste, which includes designated waste, as defined by Water Code section 13173. However, Title 27 exempts certain activities from its provisions. Discharges regulated by this General Order are exempt from Title 27 pursuant to provisions that exempt wastewater under specific conditions. This exemption, found at Title 27, section 20090 is described below:

(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.

* * *

41. The discharges authorized herein is exempt from the requirements of Title 27 in accordance with Title 27, section 20090(b) because:
 - a. The Central Valley Water Board is issuing general WDRs,
 - b. The discharge is in compliance with the Basin Plan, and
 - c. The treated waste discharged to the ponds does not need to be managed as hazardous waste.
42. New regulations in CCR, title 14, concerning well stimulation treatment went into effect on 1 July 2015.
43. CCR title 14, section 1761(a) defines well stimulation treatment as treatment of a well designed to enhance oil and gas production or recovery by increasing the permeability of the formation. Examples of well stimulation treatments include hydraulic fracturing, acid fracturing, and acid matrix stimulation. Well stimulation treatment does not include routine well cleanout work; routine well maintenance; routine treatment for the purpose of removal of formation damage due to drilling; bottom hole pressure surveys; routine activities that do not affect the integrity of the well or the formation; the removal of scale or precipitate from the perforations, casing, or tubing; a gravel pack treatment that does not exceed the formation fracture gradient; or a treatment that involves emplacing acid in a well and that uses a volume of fluid that is less than the Acid Volume Threshold for the operation and is below the formation fracture gradient.
44. CCR, title 14, section 1786(a)(4) states that operators shall not store well stimulation treatment fluids, including produced waters from a well that has undergone well stimulation treatment, in sumps or pits.
45. Pursuant to Senate Bill 4 (Pavley 2013), the California Natural Resources Agency commissioned the California Council on Science and Technology (CCST) to

conduct an independent scientific assessment of well stimulation treatments, including hydraulic fracturing, in California. CCST's assessment concluded that produced water from stimulated wells may contain well stimulation chemicals or their reaction by-products and that reuse of produced water for irrigation of crops could be a mechanism for release of well stimulation chemicals to the environment.

46. This General Order contains a prohibition for the discharge of produced wastewater that contains well stimulation treatment fluids or related waste. A three-year time schedule is provided for the Discharger to either a) develop an alternate disposal method or b) demonstrate that the produced wastewater does not contain well stimulation treatment fluids or related wastes. Given the large number of wells that have received a well stimulation treatment over time and the large number of stimulated wells that discharge produced wastewater to land, a time schedule is necessary to allow the Discharger to comply with the prohibition without imposing an unnecessary economic burden.
47. This General Order does not authorize violation of any federal, state, or local law or regulation.
48. As stated in Water Code section 13263(g), the discharge of waste into waters of the state is a privilege, not a right, and this General Order does not create a vested right to continue the discharge of waste. Failure to prevent conditions that create or threaten to create pollution or nuisance or cause degradation will be sufficient reason to modify, revoke, or enforce this General Order, as well as prohibit further discharge.
49. 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 General Order promotes that policy by requiring discharges, where appropriate, to ensure that groundwater meets maximum contaminant levels designed to protect human health and ensure that water is safe for domestic use.
50. This General Order is not a National Pollutant Discharge Elimination System Permit issued pursuant to the Federal Clean Water Act. Coverage under this General Order does not exempt a facility from the Clean Water Act. Any facility required to obtain such a permit must notify the Central Valley Water Board.
51. On 1 April 2014, 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. Order 2014-0057-DWQ became effective 1 July 2015 and requires all applicable industrial

dischargers, including oil and gas Facilities, to apply for coverage by the effective date. However, storm water at Facilities may be captured and contained on-site or comingled with produced wastewater before being discharged to ponds or production containment areas (i.e., secondary containment) in accordance with this General Order. This General Order prohibits the discharge of wastes from leaving the pond area, secondary containment area, or entering waters of the United States.

52. This General Order clarifies that discharges of wastewater to secondary containment units are to be due to emergency events that are beyond the control of the Facility operator and that the discharges to the secondary containment are short term, limited duration, and cleaned up. Intermittent discharges that are of longer duration or more frequent would allow wastes to percolate and migrate below the bottoms of the containment units and threaten groundwater. Secondary containment structures used in this fashion would require regulation by the Board. Discharges of storm water containing pollutants to waters of state and waters of the United States would require regulation under waste discharge requirements or a National Pollutant Discharge Elimination Permit.

53. Water Code section 13267(b) states:

In conducting an investigation specified in subdivision (a), the regional board may require that any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste within its region or any citizen or domiciliary, or political agency or entity of this state who has discharged, discharges or is suspected of having discharged or discharging, or proposes to discharge waste outside of its region that could affect the quality of water within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs of these reports, shall bear a reasonable relationship to the need for the report 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 General Order and the attached MRP are necessary to ensure compliance with these waste discharge requirements. The Discharger owns and/or operates the Facility that discharges the waste subject to this General Order.

54. The MRP requires extensive monitoring of the Facility, the wastewater, and the groundwater. The MRP can be modified if the Discharger provides sufficient data to support the proposed changes. Any modification of the MRP must be reviewed and approved by the Executive Officer.

55. 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 General Order.
56. The Findings of this General Order, attachments and details in the Information Sheet, and the administrative record of the Central Valley Water Board relevant to oil field facilities were considered in establishing the conditions of discharge.
57. In 2006, the Central Valley Water Board, the State Water Board, and regional stakeholders began a joint effort to address salinity and nitrate problems in the region and adopt long-term solutions that will lead to enhanced water quality and economic sustainability. Central Valley Salinity Alternatives for Long-Term Sustainability (CV-SALTS) is a collaborative basin planning effort aimed at developing and implementing a comprehensive salinity and nitrate management program. The CV-SALTS effort might effect changes to the Basin Plan that would necessitate the re-opening of this General Order.
58. Where the Discharger's efforts to improve the quality of the land discharge cannot meet Basin Plan maximum salinity limits, the Discharger may submit an application for an exception from water quality objectives related to salinity pursuant to Chapter IV, Exception to Discharge Requirements Related to the Implementation of Water Quality Objectives for Salinity, paragraph 8 of the Basin Plan. The application must provide justification as to why the exception would be necessary, a description of salinity reduction measures that the Discharger has undertaken or is proposing, and an evaluation of whether water conservation has had an impact on the salinity of the discharge. The Discharger must participate in the CV-SALTS Program to qualify for an exception.

CALIFORNIA ENVIRONMENTAL QUALITY ACT AND PUBLIC NOTICE

59. The Central Valley Water Board is the lead agency with respect to the issuance of this General Order under applicable provisions of the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000 et seq.).

60. The benchmark for evaluating whether this General Order will have impacts on the environment is the “environmental baseline.” The environmental baseline normally consists of “a description of the physical environmental conditions in the vicinity of the project at the time...environmental analysis is commenced.” The CEQA Guidelines also contemplate that physical conditions at other points in time may constitute the appropriate baseline. (CCR, title 14, section 15125(a), *Cherry Valley Pass Acres and Neighbors v. City of Beaumont* (2010) 190 Cal. App. 4th 316, 336.)
61. The receipt of a permit application (report of waste discharge) is one event that can be used to mark the beginning of the environmental review process because it commences the development of an individual permit. Therefore, the date an application is received is appropriate for the environmental baseline. (*Fat v. County of Sacramento* (2002) 97 Cal.App.4th 1270, 1278.) In the case of general permits, the permit development process begins when a permitting authority identifies the need for a general permit and collects data that demonstrate that a group or category of facilities has similarities that warrant a general permit.
62. In November 2014, the Board recognized the need to develop a general order to regulate produced wastewater discharges to ponds. Beginning in January 2015, the Board issued Notices of Violation (NOVs) to operators discharging to ponds without WDRs.
63. A rigid date for establishing the environmental baseline is not suitable for this General Order because oil and gas production and associated wastewater discharge flows have fluctuated over the last decade due to varying economic conditions. Accordingly, the environmental baseline shall be based on the existing operations, which is the actual maximum monthly average produced wastewater discharge flow to ponds during the 10 years prior to 26 November 2014.
64. This General Order is designed to enhance the protection of surface and groundwater resources, and its application to existing Facilities is exempt from the provisions of CEQA in accordance with the following categorical exemptions:
 - a. 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. Eligibility under the General Order is limited, to existing Facilities and their existing operations as described in their NOIs. Any increase in flow beyond the existing operations constitutes an expansion requiring a CEQA evaluation.

- b. California Code of Regulations, title 14, section 15302, exempts the “replacement or reconstruction of existing structures and facilities where the new structure will be located on the same site as the structure replaced and will have substantially the same purpose and capacity as the structure replaced.”
 - c. California Code of Regulations, title 14, section 15304 exempts “... minor public or private alterations in the condition of land, water, and/or vegetation which do not involve removal of healthy, mature, scenic trees except for forestry and agricultural purposes.”
65. The Central Valley Water Board has notified interested agencies and persons of its intent to issue this General Order for discharges of wastes from existing Facilities, and has provided them with an opportunity for a public hearing and an opportunity to submit comments.
66. The Central Valley Water Board, in a public meeting, heard and considered all comments pertaining to the proposal to regulate discharges of wastes from existing oil field facilities under this General Order.

IT IS HEREBY ORDERED that, pursuant to Water Code sections 13263 and 13267 and in order to meet the provisions contained in Division 7 of the California Water Code and regulations and policies adopted thereunder; all Dischargers specified by the Central Valley Water Board, their agents, successors, and assigns shall comply with the following:

A. PROHIBITIONS

1. Discharge of wastes to surface waters or surface water drainage courses is prohibited.
2. Discharge of wastes other than those described in the NOI submitted for coverage under this General Order and as described in the resulting NOA issued by the Executive Officer is prohibited.
3. Discharge of waste to land, other than produced wastewater from production wells to ponds, is prohibited unless authorized by the Executive Officer in accordance with the requirements of Provisions E. 5, 6, and 7.

4. The discharge of fluids used in “well stimulation treatment,” as defined by CCR, title 14, section 1761 (including hydraulic fracturing, acid fracturing, and acid matrix stimulation), to land is prohibited.
5. The discharge of produced wastewater from wells containing well stimulation treatment fluids and/or related waste is prohibited in accordance with the requirements of Provision E.8.
6. Acceptance, treatment, or discharge of “hazardous waste,” as defined in the CCR, title 22, section 66261.1 et seq., is prohibited.
7. Treatment system bypass of untreated or partially treated waste is prohibited, except as allowed by section E.2 of Standard Provisions and Reporting Requirements for Waste Discharge Requirements, dated 1 March 1991 and part of this General Order.
8. Produced wastewater overflow from ponds is prohibited.
9. Discharges of produced wastewater to ponds that could adversely impact any municipal or domestic supply well are prohibited.
10. The collection, treatment, storage, discharge or disposal of wastes at the Facility that results in the creation of a condition of pollution or nuisance is prohibited.

B. DISCHARGE SPECIFICATIONS

1. The Discharger shall achieve compliance with this General Order in accordance with the time schedule in Provision E.4.
2. The discharge flow shall not exceed actual maximum monthly average produced wastewater flow to pond between 26 November 2004 and 26 November 2014. The discharge flow also shall not exceed the maximum design flow of the Facility’s limiting unit as described by the technical data in the NOI.
3. The discharge shall remain within the permitted waste treatment/containment/disposal structures at all times, or in case of emergency, within secondary containment structures.
4. All ponds shall be operated and maintained to prevent wastes from concentrating to hazardous levels.

5. Public contact with wastes shall be precluded through such means as fences or other acceptable alternatives in accordance with CCR, title 14, section 1770 (b)(1) through (b)(4).
6. Ponds shall be free of oil or effectively netted to preclude the entry of wildlife in accordance with CCR, title 14, section 1778 (d).
7. The Discharger shall operate all systems and equipment to optimize the water quality of the discharge to ponds.
8. All conveyance, treatment, storage, and disposal systems including ponds, tank batteries, and other components of Facilities shall be designed, constructed, operated, and maintained to prevent inundation or washout due to floods with a 100-year return frequency.
9. Objectionable odors shall not be perceivable beyond the limits of the property where the waste is generated, treated, and/or discharged at an intensity that creates or threatens to create nuisance conditions.
10. Pond berms shall be designed and maintained to prevent leakage caused by erosion, slope failure, or animal burrowing.
11. The Discharger shall operate and maintain all ponds sufficiently to protect the integrity of containment and berms and prevent overtopping and/or structural failure. Unless a California-registered civil engineer certifies (based on design, construction, and conditions of operation and maintenance) that less freeboard is adequate, the operating freeboard in any pond shall never be less than two feet (measured vertically from the lowest possible point of overflow). As a means of management and to discern compliance with this requirement, the Discharger shall install and maintain in each pond a permanent staff gauge or equivalent with calibration marks that clearly show the water level at design capacity and enable determination of available operational freeboard.
12. Produced wastewater treatment, storage, and disposal units shall have sufficient capacity to accommodate allowable wastewater flow, design seasonal precipitation, and ancillary inflow and infiltration during the winter while ensuring continuous compliance with all requirements of this General 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.

13. On or about 1 October of each year, available capacity shall at least equal the volume necessary to comply with Discharge Specifications B.8 and B.12.
14. All ponds and containment structures shall be managed to prevent breeding of mosquitoes or other vectors. Specifically:
 - a. An erosion control program shall be implemented to ensure that small coves and irregularities are not created around the perimeter of the water surface;
 - b. Weeds shall be minimized through control of water depth, harvesting, or herbicides. All pesticide application are to be done in compliance with labeling instructions and all applicable laws and regulations;
 - c. Dead algae, vegetation, and debris shall not accumulate on the water surface; and
 - d. The Discharger shall consult and coordinate with the local Mosquito Abatement District to minimize the potential for mosquito breeding as needed to supplement the above measures.
15. Newly reconstructed or rehabilitated berms or levees (excluding internal berms that separate ponds or control the flow of water within a pond) shall be designed and constructed under the supervision of a California registered civil engineer. A post-construction report by the California registered civil engineer that oversaw construction shall be submitted within **60 days** of completion of construction and shall certify that the berms and/or levees were constructed in accordance with design specifications and are suitable for the retention of wastewater.
16. The Discharger shall monitor solids accumulation in the wastewater treatment units and ponds at least every five years beginning in the year the NOA is issued, and shall periodically remove solids as necessary to maintain adequate treatment storage and capacity. Specifically, if the estimated volume of solids in any units exceeds five percent of the permitted capacity, the Discharger shall complete solids cleanout within 12 months after the date of the estimate or demonstrate that a lesser pond capacity is adequate.
17. Dischargers who are subject to this General Order shall implement water quality management practices based on "best efforts," as necessary, to protect water quality and to maintain compliance with applicable water quality objectives.

18. All precipitation and surface drainage (i.e., "run on") from outside the Facility where it could come into contact with waste shall be diverted away from the Facility or pond unless such drainage is fully contained.
19. Produced wastewater application rates, on the Facility property where the produced wastewater is generated for dust control or construction activities, shall be applied at the minimum hydraulic loading rates necessary to perform the intended purpose and shall be consistent with an approved management plan in accordance with Provision E.6.
20. Application of produced wastewater at the Facility property for dust control or construction activities shall be at reasonable rates to preclude creation of a nuisance and unreasonable degradation of groundwater or surface water. Applied wastewater shall not be allowed to pool onsite or runoff from the area intended for dust suppression.

C. GROUNDWATER LIMITATIONS

1. The discharge of produced wastewater shall not cause groundwater to contain constituents in concentrations that adversely affect the beneficial uses.

D. SOLIDS DISPOSAL SPECIFICATIONS

Solids as used in this document means the solid, semisolid, and liquid residues removed during treatment processes or accumulated in tanks, ponds, or other Facility components.

1. Solids shall be removed from screens, tanks, ponds, and other treatment units as needed to ensure optimal operation and adequate storage capacity.
2. Any handling and storage of solids shall be controlled and contained in a manner that minimizes leachate formation and precludes infiltration of waste constituents into soil in a mass or concentration that could violate the groundwater limitations of this General Order.
3. Solids from the Facility shall be managed in accordance with a solids management plan approved by the Executive Officer in accordance with Provision E.7. Solids used as road mix within the oil lease area shall be non-

hazardous (prior to mixing). Handling and application practices shall be designed to ensure that oil field wastes do not migrate once placed.

4. Any proposed change in solids use, storage, or disposal practices shall be reported in writing to the Executive Officer at least 90 days in advance of the change and shall be pre-approved by the Executive Officer.
5. Road mix containing tank bottoms and oily materials (also referred to as solids) shall be non-hazardous (prior to mixing) and shall not be applied on roads where seasonal storm water flows across the road and potentially washes or erodes the road mix into any seasonal surface drainage course.

E. PROVISIONS

1. The Discharger shall comply with the applicable sections of “*Standard Provisions and Reporting Requirements for Waste Discharge Requirements*,” dated 1 March 1991. This attachment and its individual paragraphs are referred to as “Standard Provisions,” and are hereby incorporated by reference as part of this General Order. NOAs issued will delineate applicable sections of the Standard Provisions.
2. The Discharger shall comply with the MRP, hereby incorporated by reference as part of this General 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.
3. **Within 90 days of receipt of the NOA** for the Facility, the Discharger shall submit written certification that it has installed acceptable flow metering at a location or locations to ensure the accurate measurement of all discharge flows. The certification shall be accompanied by: (1) a description of the flow metering devices installed, (2) a diagram showing their locations at the Facility, and (3) evidence demonstrating that the devices were properly calibrated. An engineering alternative may be used if approved in writing by the Executive Officer.
4. The Discharger shall either:
 - a. Provide by **(60 days of issuance of the NOA)**, as directed in the NOA issued for coverage under this General Order, the results of a hydrogeological investigation demonstrating that there is no groundwater beneath the Facility discharge areas and that produced wastewater and

constituents associated with other approved wastes discharged at the Facility will not migrate into areas that there is groundwater with designated beneficial uses. Upon the written concurrence of the investigation results by the Executive Officer, this provision shall be considered satisfied,

or

- b. If there is first encountered groundwater underlying the Facility or the Executive Officer does not concur with the results of the investigation in Provision E.4.a., above, the Discharger shall demonstrate that the natural background groundwater quality for the Facility meets the Sources of Drinking Water Policy exception criteria and/or parallel exception criteria outlined in this General Order (Findings 22 through 24) and thus the current Basin Plan groundwater beneficial uses are eligible for de-designation in accordance with the following compliance schedule (Tasks 1 through 10):

<u>Task</u>	<u>Task Description</u>	<u>Due date</u> ¹
1.	Participate in the CV-SALTS Group to facilitate the Basin Plan Amendment (BPA) process under the Salt and Nutrient Management Plan.	On-going
2.	Develop an outline of a BPA Work Plan for CV-SALTS Technical Advisory Committee review and comment prior to submittal to the Central Valley Water Board staff for evaluation of the de-designation of Basin Plan beneficial uses of the groundwater. The Work Plan shall include: <ul style="list-style-type: none"> a. Consideration of Sources of Drinking Water Policy and applicable exemption criteria for MUN and applicable parallel criteria for exemption of AGR, IND, and PRO; b. Consideration of available data or how the data will be collected to evaluate and support the exemption criteria; and c. An outline of a draft proposal to de-designate the Basin Plan beneficial uses that are not applicable under the area of consideration. 	4 Months from Date of NOA
3.	Central Valley Water Board staff shall review and consider for approval the outline of BPA Work Plan.	6 Months from Date of NOA

<u>Task</u>	<u>Task Description</u>	<u>Due date</u> ¹
4.	<p>Work with Central Valley Water Board staff to develop a Work Plan describing BPA tasks that will be completed and deliverables that will be produced to support the de-designation of the Basin Plan beneficial uses of the groundwater under consideration. The BPA tasks and resulting deliverables shall include but are not limited to:</p> <ul style="list-style-type: none"> a. Delineation of the horizontal and vertical extent of the sub-basin or subject area under consideration, b. A summary of available data and analyses for each beneficial use proposed for de-designation, c. Maps, geologic cross sections, well and water quality data and any other information that are supportive of de-designation, d. A description of additional data or studies required to fill in any data gaps and support de-designation, e. A final proposed BPA Work Plan to accomplish above tasks a-d, and f. The development of a final technical report that compiles all the information developed in tasks a-e. 	10 Months from Date of NOA
5.	Central Valley Water Board staff shall review and consider for approval ² the final BPA Work Plan and proposed deliverables.	12 Months from Date of NOA
6.	Implement final Work Plan and submit the final technical report to the Central Valley Water Board. The Discharger shall provide quarterly progress reports.	36 Months from Date of NOA
7.	<p>Central Valley Water Board staff will evaluate the final technical report and provide written directions to the Discharger for:</p> <ul style="list-style-type: none"> a. Completing the CEQA scoping process for the BPA, b. Developing a draft staff report for the Central Valley Water Board, and c. Preparing a final staff report for the Central Valley Water Board. 	45 Months from Date of NOA
8.	<p>The Central Valley Water Board and Discharger shall implement BPA Process including:</p> <ul style="list-style-type: none"> a. Stakeholder Participation-Public review of final draft of staff report, 	54 Months from Date of NOA

<u>Task</u>	<u>Task Description</u>	<u>Due date</u> ¹
	b. Peer Review Process-Request peer reviewers to provide comments for final staff report, c. Administrative Records-Preparing record keeping tasks and staff review and comments on deliverables, d. Progress Reports-Providing periodic presentation/reports to the Board and the public on the progress of BPA and deliverables. e. Final Central Valley Water Board approval-Provide a presentation of final report to the Board for consideration, and f. Finalize Administrative Records and submit to State Water Board for consideration.	
9.	State Water Board to consider Central Valley Water Board adopted Basin Plan Amendment(s).	57 Months from Date of NOA
10.	Office of Administrative Law review and approval of adopted Basin Plan Amendment(s).	60 Months from Date of NOA (No later than 5 years ³ from the date of NOA issuance ⁴)
11.	If Basin Plan Amendments are not secured by the compliance date in Task 10 above, the discharges at the Facility shall cease and the Discharger shall submit a Report of Waste Discharge for closure/post closure waste discharge requirements.	60 Months from Date of NOA (No later than 5 years ³ from the date of NOA issuance ⁴)

1. All the compliance due dates are based on the issuance date of the NOA by the Executive Officer. The Executive Officer can extend the due dates of Tasks 1 through 10 if the Discharger is making acceptable progress and misses a due date through no fault of its own.
2. When proposing Basin Plan amendment, it is not a guarantee that it will be approved. The science must support the amendment.
3. Central Valley Water Board in special circumstances (when significant progress has been made) can extend the 5 year compliance period up to an additional 2 years with the written concurrence of the Executive Officer.
4. For example if the NOA was issued on 1 December 2017, the final task due date is on 1 December 2022, unless extended.

5. Discharges of wastes from oil field activities other than produced wastewater from production wells to pond(s) may be authorized by the Executive Officer if the Discharger can demonstrate with appropriate data and analyses that the discharge does not pose a threat to beneficial uses of the groundwater.
6. Dischargers wishing to use produced wastewater at the Facility for dust control or in construction activities shall provide a proposed management plan for such activities. The management plan shall include:
 - a. Data characterizing the quality of the produced wastewater that will be applied;
 - b. Proposed application/use methods, application rates, and proposed frequencies of application;
 - c. Proposed application areas shown on a scaled aerial photograph within the covered oil lease(s). The photograph shall show pertinent site features including roads, ponds, production and treatment Facilities, surface waters, and surface water drainages;
 - d. Proposed constituent loading rates;
 - e. A list of all management practices that will be implemented to ensure applied produced wastewater will remain where applied and not runoff; and
 - f. A demonstration that the discharges will be protective of water quality and will not adversely affect the beneficial uses of surface water or underlying groundwater.

The management plan must be submitted to the Executive Officer at least **90 days** prior to the anticipated discharges. Discharges shall not occur without Executive Officer written approval of the management plan.

7. Dischargers reusing solids for road mix, as described in Solids Disposal Specifications, shall submit a solids management plan for approval by the Executive Officer within **60 days** of receipt of the NOA for the Facility. Dischargers proposing to reuse solids for road mix shall submit a solids management plan for approval by the Executive Officer at least **180 days** prior to any solids reuse. The solids management plan shall include:
 - a. A complete characterization of the quality and quantity of the solids.
 - b. A demonstration that the solids are not hazardous as defined by CCR, title 22, section 66261.1 et seq.,
 - c. Proposed application areas shown on a scaled aerial photograph within the covered oil lease(s). The photograph shall show pertinent site

- features including roads, ponds, production and treatment facilities, surface waters, and surface water drainages;
- d. Proposed constituent loading rates;
- e. A list of all management practices that will be implemented to ensure wastes will remain where processed and applied and not migrate from the location of application; and
- f. A demonstration that the discharges will be protective of water quality and will not adversely affect the beneficial uses of surface water or underlying groundwater.

New reuse shall not commence prior to obtaining the written approval of the solids management plan from the Executive Officer.

Solid wastes disposed off-site shall be transported to an appropriately permitted Facility. Solid waste volumes, disposal methods, disposal facilities, and analytical results from waste characterization shall be reported in accordance with the MRP.

- 8. If the Discharger accepts produced wastewater from wells that have been stimulated, it shall comply with Prohibition A.5 in accordance with the following compliance schedule:

<u>Task</u>	<u>Task Description</u>	<u>Due date</u>
1.	<p>a. Submit a Work Plan to conduct studies necessary to demonstrate that the discharges of produced wastewater from wells that have been stimulated do not contain well stimulation treatment fluids or related wastes in concentrations that could adversely affect beneficial uses of waters. The Work Plan shall include, but is not limited to, a proposed monitoring program for wells that have been stimulated or are planned for stimulation, specific milestones to accomplish the proposed scope of work, and a schedule for compliance with Prohibition A.5. The Work Plan shall be reviewed and approved by the Executive Officer.</p> <p style="text-align: center;">Or</p> <p>b. Submit a Work Plan for an alternate disposal method for wastewater discharges from wells with a history of, or are planned to receive a "well stimulation treatment." The Work Plan shall include, but is not limited to, permitting and</p>	3 Months from Date of NOA

<u>Task</u>	<u>Task Description</u>	<u>Due date</u>
	construction schedules for disposal wells, specific milestones to accomplish the proposed scope of work, and a schedule for compliance with Prohibition A.5. The Work Plan shall be reviewed and approved by the Executive Officer.	
2.	<p>The Discharger shall implement the Work Plan after the Work Plan has been approved by the Executive Officer and shall also provide progress reports toward compliance with this task every six months.</p> <p>By the end of the 36th month from the date the NOA is issued, the Discharger shall submit a technical report for review and approval by the Executive Officer. The technical report shall demonstrate compliance with Prohibition A.5. Upon written approval letter by the Executive Officer, this provision shall be satisfied.</p> <p>The Executive Officer may at its discretion modify this time schedule based on evidence that meeting the compliance date is infeasible through no fault of the Discharger, or when evidence shows that compliance by an earlier date is feasible.</p>	36 Months from Date of NOA¹
3.	If the Discharger does not achieve compliance with Prohibition A.5 by the compliance date in Task 2, the Discharger must cease discharge(s) and submit a written certification that the discharges from the Facility have ceased.	36 Months from Date of NOA

1. All the compliance due dates start from the issuance date of the NOA by the Executive Officer. For example if NOA was issued on 1 July 2017, the final task (Task 2 technical report) due date is on 1 July 2020.

9. 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.

10. Pursuant to section 13264 of the Water Code, the Discharger shall submit a complete revised NOI or a complete Report of Waste Discharge (RWD) for an individual permit in accordance with the Water Code section 13260 at least 140 days prior to any material change or proposed change in the character, location, or volume of the discharge, including any expansion of the facility or development of any treatment technology.
11. The Discharger shall comply with all conditions of this General 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 termination of coverage under this General Order.
12. 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 General 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 General Order.
13. The Discharger shall use the best efforts including proper operation and maintenance, to comply with this General Order.
14. At least 90 days prior to termination or expiration of any lease, contract, or agreement involving disposal or off-site use of effluent, used to justify the capacity authorized herein and assure compliance with this General 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 General Order.
15. In the event of any change in control or ownership of the Facility, the Discharger must notify the succeeding owner or operator of the existence of

- this General Order and the applicable NOA by letter, a copy of which shall be immediately forwarded to the Central Valley Water Board.
16. To assume coverage as a new Discharger under this General Order, the succeeding owner or operator must apply in writing to the Executive Officer requesting transfer of coverage under the General Order. The request shall be made prior to the effective date of the new ownership or operator. The request must contain the requesting entity's full legal name, the state of incorporation if a corporation, and the name, address, and telephone number of the person(s) responsible for contact with the Central Valley Water Board. The request must also include a statement that the new owner or operator assumes full responsibility for compliance with this General Order and comply with the signatory paragraph of Standard Provisions section B.3. Failure to submit a complete request shall be considered an unauthorized discharge in violation of the Water Code. Upon approval of the transfer request, the Executive Officer will issue an NOA authorizing coverage under this General Order.
 17. Dischargers with NOI coverage may/shall request termination of coverage under this General Order when either (a) operation of the Facility has been transferred to another entity, (b) the Facility has ceased operations, or (c) the Facility's operations have changed and are no longer subject to the General Order. Dischargers shall certify and submit a Notice of Termination (NOT) Letter to the Executive Officer approval. Until a valid NOT Letter is received and issuance of written Executive Officer approval letter, the Discharger remains responsible for compliance with this General Order and payment of accrued annual fees.
 18. A copy of this General Order including the MRP, Information Sheet, Standard Provisions, and Attachments A and B shall be kept at the Facility for reference by operating personnel. Key operating personnel shall be familiar with its contents.
 19. The Central Valley Water Board will review this General Order periodically and will revise requirements when necessary.
 20. Coverage under this General Order is effective upon notification by the Executive Officer (i.e., issuance of NOA) that this General Order applies to the Discharger.

21. If more stringent applicable water quality standards are adopted in the Basin Plan, the Central Valley Water Board may revise and modify this General Order in accordance with such standards.
22. This General Order may be reopened to address any changes in state plans, policies, or regulations that would affect the water quality requirements for the discharges and as authorized by state law. This includes regulatory changes that may be brought about by the CV-SALTS planning efforts.
23. Dischargers may apply for an exception from water quality objectives related to salinity pursuant to Chapter IV, Exception to Discharge Requirements Related to the Implementation of Water Quality Objectives for Salinity, paragraph 8 of the Basin Plan. The application must be made in accordance with Finding 58 of this General Order and the Discharger must participate in the CV-SALTS Program to qualify for an exception.
24. The Central Valley Water Board or the Executive Officer may revoke coverage under this General Order at any time and require the Discharger to submit a RWD and obtain individual waste discharge requirements.

If, in the opinion of the Executive Officer, the Discharger fails to comply with the provisions of this General 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 General Order may result in the assessment of Administrative Civil Liability by the Central Valley Water Board up to \$10,000 per violation, per day, depending on the violation, pursuant to the Water Code, including sections 13268, 13350 and 13385. In addition, where there is discharge, Central Valley Water Board can assess up to an additional \$10 per gallon multiplied by the number of gallons by which the volume discharged but not cleaned up exceeds 1,000 gallons. The Central Valley Water Board reserves its right to take any enforcement actions authorized by law. Civil liability may be imposed by the superior court for up to \$25,000 for each day of violation and in addition where there is discharge, up to an additional \$25 per gallon multiplied by the number of gallons by which the volume discharged but not cleaned up exceeds 1,000 gallons.

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 CCR, 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 General Order, except that if the thirtieth day following the date of this General 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 a General Order adopted by the California Regional Water Quality Control Board on ___

PAMELA C. CREEDON, Executive Officer

Attachments:

- A: Definitions
- B: Information Needs Sheet

Tentative Draft