

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LAHONTAN REGION**

**MEETING OF MAY 13, 2021
VIDEO AND TELECONFERENCE ONLY**

ITEM 7

**WASTE DISCHARGE REQUIREMENTS FOR THE CALIFORNIA DEPARTMENT
OF TRANSPORTATION, VALLEY WELLS SAFETY ROADSIDE REST AREA**

BACKGROUND

The Water Board has not previously regulated discharges from the California Department of Transportation (Caltrans) Valley Wells Safety Roadside Rest Area (SRRA), which was constructed in 1980. The Valley Wells SRRA ranks within the top five heavily used California safety roadside rest areas. Caltrans currently operates the Valley Wells SRRA with a conventional septic tank leach-field system for waste disposal to groundwater.

Due to high traveler usage and undersized septic tanks, Caltrans proposed to replace the wastewater treatment and disposal system by 2026. Water Board staff requested Caltrans consider installing an advanced wastewater treatment process with nitrogen removal because the wastewater is high strength with elevated ammonia concentrations and data indicate increasing nitrate concentrations in groundwater.

The original onsite production well installed by Caltrans was poorly sited downgradient of the leach field. Data from this well indicate increasing trends of nitrate concentrations in receiving groundwater. In 2018, Caltrans installed a new onsite production well upgradient of the leach field and destroyed the existing production well in 2019, which also had a collapsed well casing. The rest area was closed until the well was replaced and is now open for visitors.

ISSUES

Should the Water Board adopt waste discharge requirements for the Caltrans Valley Wells SRRA?

DISCUSSION

These waste discharge requirements will regulate discharges from the existing septic system and include a time schedule requiring Caltrans to complete construction of an upgraded wastewater treatment system by 2026. Caltrans intends to upgrade the existing systems at both the northbound and southbound rest areas to include nitrogen removal.

Waste discharge requirements are needed to protect the receiving groundwater quality because the facility flow is greater than 20,000 gallons per day, and the

DISCUSSION

existing onsite wastewater treatment system (OWTS) discharges have high-strength wastewater from large volumes of urine with high percentages of ammonia nitrogen. Groundwater data indicate that facility discharges have contributed to receiving groundwater nitrate degradation.

Soil percolation tests indicate that some locations have high percolation rates. Two of the eight percolation tests conducted at the site had fast percolation rates indicating there is minimal soil treatment prior to effluent reaching groundwater.

Data from the onsite production well, now destroyed, indicate this well contained a nitrate concentration of 6.4 mg/L in 2019. The closest downgradient drinking water well exhibits increasing nitrate concentrations over time to a maximum of 2.8 mg/L. Data from the replacement onsite production well that is installed upgradient of the leach field indicate that naturally occurring nitrate concentrations are near 1.0 mg/L. Continued waste effluent discharged from the existing septic system may lead to groundwater pollution if nitrogen removal is not implemented.

Therefore, this Board Order also establishes time schedules for Caltrans to submit plans for an upgraded treatment plant that will remove nitrogen concentrations to meet an effluent limitation of 10 mg/L, thereby improving water quality in the site vicinity.

SUSTAINABLE GROUNDWATER MANAGEMENT ACT BASINS

For purposes of the Sustainable Groundwater Management Act, the California Department of Water Resources identifies the following groundwater basin in San Bernardino County, along with priority, near the discharge location within the Lahontan Region.

Priority	Groundwater Basin
Very Low	Upper Kingston Valley (Basin No. 6-022)

Source: <https://gis.water.ca.gov/app/bp2018-dashboard/>

PUBLIC OUTREACH/INPUT

The Lahontan Water Board, in a public meeting, heard and considered all comments pertaining to the discharge. Caltrans reviewed the administrative draft waste discharge requirements and provided comments that were incorporated into the Tentative waste discharge requirements. Water Board staff solicited comments from interested parties on the Tentative waste discharge requirements, but no comments were received.

PRESENTERS

John Morales, Water Board, Water Resources Control Engineer (presentation is Enclosure 2).

RECOMMENDATION

Water Board staff recommends the adoption of Board Order No. R6V-2021-PROPOSED, waste discharge requirements, as proposed.

ENCLOSURE	ITEM	BATES NUMBER
1	Water Board Proposed Board Order No. R6V-2021-PROPOSED	7 - 5
2	Water Board staff presentation (John Morales)	7 - 45

ENCLOSURE 1

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LAHONTAN REGION**

**BOARD ORDER NO. R6V-2021-PROPOSED
WDID NO. 6B361809001**

WASTE DISCHARGE REQUIREMENTS

FOR

**CALIFORNIA DEPARTMENT OF TRANSPORTATION
VALLEY WELLS SAFETY ROADSIDE REST AREA**

San Bernardino County

The California Regional Water Quality Control Board, Lahontan Region (Water Board) finds:

1. Discharger

The California Department of Transportation (Caltrans) operates the Valley Wells Safety Roadside Rest Area (SRRA) on Interstate Route 15 (I-15). The land is owned by both Caltrans and U.S. Bureau of Land Management (BLM), as described in Finding 3 (d). For this Board Order, both Caltrans and the BLM are considered Dischargers.

2. Facility

For this Board Order, the combined northbound and southbound sewage collection, treatment, and disposal systems at Valley Wells SRRA is the Facility. Domestic high strength wastewater from the existing Valley Wells SRRA is treated and disposed using an onsite wastewater treatment system (OWTS). The combined average daily flow at the rest area for both the northbound and southbound comfort stations is approximately 21,000 gallons per day (gpd). Both the northbound and southbound sides of the Valley Wells SRRA each have a 24,000-gallon concrete septic tank and leach dispersal fields for subsurface disposal of primary treated wastewater.

3. Facility Location

- a. General Location – The Facility is shown on Attachment A and is located on the following geographic coordinates; latitude 35.4350038 and longitude -115.7017196. The Facility located along I-15 is approximately 25 miles south of the California /Nevada state line in San Bernardino County. The Facility is within the Upper Kingston Valley groundwater basin, about one mile west of Cima Road.
- b. Legal Location Description – The Facility is located within Township 16N, Range 12E, Section 33, of the San Bernardino Baseline and Meridian.
- c. Physical Address – The facility address is Interstate 15, Nipton, CA 92364, San Bernardino County.
- d. Land and Facility Ownership – Land ownership is between Caltrans and the BLM as described in Table 1. Caltrans was granted a right-of-way easement for two of three

parcels owned by the BLM. The third parcel is owned in fee title by Caltrans. Only a portion of each parcel is used for the Valley Wells SRRA.

Table 1 – Land Ownership

Assessor's Parcel Numbers	Parcel Size (acres)	Use	Landowner
0572-011-06-0000	14.8	Northbound Valley Wells SRRA	BLM
0572-011-01-0000	10.4	Southbound Valley Wells SRRA	BLM
0572-011-07-0000	0.23	Part of the Northbound Valley Wells SRRA	Caltrans

4. Reason for Action

The Facility is one of the top-five heavily used roadside rest areas in California. The Water Board is issuing these Waste Discharge Requirements (WDRs) and Monitoring and Reporting Program (MRP) No. R6V-2021-Proposed for the following reasons.

- a. The State Water Resources Control Board's (State Water Board's) *Water Quality Control Policy for Siting, Design, Operation, and Maintenance of Onsite Wastewater Treatment Systems* (OWTS Policy) establishes criteria that all OWTS with a design flow of over 10,000 gpd must submit a report of waste discharge (RWD) pursuant to the California Water Code (CWC), section 13260. The Valley Wells SRRA Facility design flow exceeds 10,000 gpd.
- b. WDRs are needed to protect the receiving groundwater quality because the Facility's flow is greater than 20,000 gpd; the existing OWTS discharges are characterized as high-strength wastewater due to large volumes of urine containing high percentages of ammonia nitrogen, contributing to receiving groundwater degradation, and with potentially high soil percolation rate at the site.
- c. This Board Order includes time schedules pursuant to CWC, section 13263(c), for implementing a project to upgrade wastewater treatment and reduce total effluent nitrogen concentrations to less than 10 milligrams per Liter (mg/L). The time schedules require the Discharger to propose alternatives for discharges that comply with the *Water Quality Control Plan for the Lahontan Region* (Basin Plan) and submit a revised RWD.

5. Board Order History

Facility discharges were never previously regulated by the Water Board.

6. Report of Waste Discharge

The documents constituting the RWD are listed in the Table 2.

Table 2 – Report of Waste Discharge

Date	Item	Author
November 16, 2018	<ul style="list-style-type: none"> • Caltrans responded to Water Board staff's September 17, 2018, letter requesting RWD • Budget allocation and planning schedule to complete environmental studies, design, construction of a new sewage treatment system 	Caltrans
December 31, 2018	<ul style="list-style-type: none"> • Form 200 • Typical effluent data • Groundwater data • Proposed wastewater treatment system 	Caltrans
February 25, 2019	<ul style="list-style-type: none"> • Revised RWD with additional information for proposed wastewater treatment system 	Caltrans

7. Facility Description and History

The Valley Wells SRRA was completed and open to the public in 1980. The original wastewater treatment systems consisted of four 6,000-gallon septic tanks and subsurface leach dispersal fields on each side (northbound and southbound). Two-6,000-gallon septic tanks northbound and two-6,000-gallon tanks southbound. One septic tank serviced the men's restroom flow and the other tank serviced the women's restroom flow on each side of I-15. The effluent flow from the men's and women's septic tanks would combine at a central distribution box and feed into a battery of several distribution boxes connected to five parallel 80-foot leach-lines. There were no monitoring wells installed when the original leach-fields were constructed.

In 1987, Caltrans discovered that there were frequent backups in the women's restrooms and deterioration of the septic tanks. Due to significant increases in Facility usage, Caltrans determined that the 6,000-gallon septic tanks were undersized and did not have sufficient storage capacity for proper treatment. In 1993, Caltrans upgraded the Facility and installed two 24,000-gallon septic tanks and expanded the leach fields on both the northbound and southbound sides of I-15. These septic tanks discharge effluent by gravity flow to the associated leach fields.

Currently, both existing septic tanks are in poor condition, and Caltrans determined that they should be replaced. The septic tank's effluent filters at the southbound comfort station are missing. The septic tank's effluent filters at the northbound comfort station are severely damaged. The coating on the septic tanks at both the southbound and northbound comfort stations are peeling off. In addition, the septic tank sidewall concrete is deteriorating rapidly; continued operation of the septic tanks in this condition may affect the structural integrity of the tanks.

In 2018, Caltrans constructed a new water supply well that provides water for drinking and toilet flushing at both the northbound and the southbound comfort stations. Based on the well driller's log, groundwater was encountered at 112.62 feet below ground surface.

8. Effluent Quality

The Valley Wells SRRA facility receives large volumes of urine, which is a highly concentrated source of ammonia nitrogen derived from people’s use of this Facility. The following table describes the key constituent concentrations from the Facility’s effluent as compared with typical untreated domestic wastewater characteristics. These data show that the Facility produces high-strength wastewater as compared to typical wastewater.

Table 3 – Effluent Quality

Constituent	Typical Untreated Domestic Wastewater - Medium Strength (mg/L)¹	Wastewater from the SRRA Facility (mg/L)
Ammonia	25	245
Biochemical Oxygen Demand	190	470
Chemical Oxygen Demand	430	1,600
Total Alkalinity	60-120	1,150
Total Dissolved Solids	150-380	1,000
Total Nitrogen	40	280
Total Phosphorous	7	29
Total Suspended Solids	210	550

¹ Values obtained from *Wastewater Engineering, Treatment and Reuse: Metcalf & Eddy*, 4th Edition, Table 3-15.

9. Authorized Disposal Sites

The authorized disposal sites are the dispersal leach-lines located on the northbound and southbound sides of the Facility. These are the only authorized sites for disposal of treated wastewater. There are approximately 2,227 lineal feet of northbound leach lines and 3,340 lineal feet of southbound leach lines.

10. Recycled Water

Recycled water uses are not planned for this Facility nor authorized by this Board Order.

11. Future Projects

Because the septic tanks are deteriorating, continued operation risks the structural integrity of the tanks. Prior to constructing a replacement wastewater treatment plant, the content of the existing septic tanks will be pumped out and sewage waste properly disposed off-site. The existing wastewater piping system may be disconnected, capped with concrete, and abandoned in place. The existing leach-field piping, from both the northbound and southbound septic tanks, may be disconnected, capped with concrete, and abandoned in place. Final disposition of treatment and disposal components will be determined when Caltrans submits the Report of Waste Discharge for the upgraded wastewater treatment plant.

The Discharger proposes to construct a facility to reduce water consumption at all Caltrans rest area facilities, including this Facility. The Valley Wells SRRA will incorporate low-flow fixtures for urinals, toilets, and sinks. To reduce maintenance requirements and improve the system cost effectiveness and reliability, the northbound and southbound effluent wastewater flows will be combined for treatment in a single treatment system with new septic tanks installed. Following treatment, the combined wastewater effluent will be dispersed onsite to a shallow leach-field system proposed to be located on the southbound parcel. Conceptually, the Discharger has proposed a new wastewater treatment system that will reduce total nitrogen to below 10 mg/L prior to disposal at the leach-fields.

Caltrans has proposed the following dates (Table 4) that are the basis for time schedules included in this Board Order to complete a future project consisting of the installation of an upgraded treatment plant, septic tanks, and leach-field to improve wastewater treatment and remove excess nitrogen in the effluent before disposal. In the RWD, Caltrans proposed the following reports and schedule. The actual time schedules included in this Board Order are modified slightly based on discussions with Caltrans staff.

Table 4 – Proposed Facility Upgrade Time Schedule

Date	Action
September 2021	Submittal of proposal for final treatment plant facility that will treat total nitrogen-N to less than 10 mg/L
January 2022	California Environmental Quality Act (CEQA) documentation submitted
July 2023	Project status report submitted
July 2024	Notification that project construction has begun
June 2025	RWD submitted
October 2026	Approved As-Built Drawings submitted

12. Salt and Nutrient Management Plan

The Facility is in the Upper Kingston Valley Groundwater Basin, Department of Water Resources (DWR) Basin No. 6-022, and does not have an established Salt and Nutrient Management Plan (SNMP). At this time, a SNMP is not yet required, as this basin is classified as very low priority in accordance with the Sustainable Groundwater Management Act (SGMA). In addition, the area is sparsely populated and undeveloped. This Board Order requires Caltrans to prepare, or participate in preparing, a SNMP if required by the Executive Officer in the future.

13. Industrial Pretreatment Program

The Facility does not have, nor is it necessary to have, an industrial pretreatment program.

14. Land Uses

The Caltrans Valley Wells SRRA, located on I-15 approximately 25 miles south of the California /Nevada state line in San Bernardino County, serves as the last public safety roadside rest area along I-15 before entering the state of Nevada. The surrounding land use is native desert public land. The Facility is in a remote location where there are no nearby surface water bodies, except ephemeral drainages that carry stormwater runoff during storm events. The nearest major surface water is the Colorado River approximately 57 miles east of the Facility. The site is in the Shadow Valley on three parcels. The town of Baker is approximately 25 miles southwest of the Facility.

15. Site Topography and Hydrology

The site is relatively flat with slopes that incline at 1 to 2 percent from the southwest to the northwest across I-15. Surface water run-off from higher elevations to the south and west of the site is intercepted by ephemeral drainage channels and carried across the highway right-of-way by mean of the West Valley Ditch Bridge and Windmill Station Ditch Bridge.

16. Climatology

The Valley Wells SRRA is located in the Mojave Desert and has a dry, arid climate characterized by infrequent rainfall, cold winters, and hot summers with low humidity. The mean annual temperature is 80 degrees Fahrenheit (F) and ranges from a high of 105 degrees F in the summer to a low of 30 degrees F in the winter. Precipitation in the vicinity of the Facility averages 5-inches annually.

17. Site Soils and Geology

Based on percolation test results conducted in 1989 by the Caltrans laboratory, the site soil is comprised of slightly clayey, silty sand with an average percolation rate of 12 minutes per inch. In two of the eight test sample locations, the percolation rates were greater than 1 minute per inch, which is a very fast rate of percolation and an indication of limited soil treatment abilities.

The Basin Plan, Chapter 4.4, states that where percolation rates are faster than 5 minutes per inch, the soil underlying the dispersal field must meet certain characteristics and the minimum distance to groundwater must be at least 40 feet. At this Facility, groundwater is deeper than 40 feet deep, but the original leach dispersal field was not constructed with satisfactory soil properties; this is an additional reason for upgrading the level of wastewater treatment.

The geology in the area is mainly composed of quaternary alluvial deposits. The general bedrock types include Mesozoic granitic rocks, Pleistocene non-marine sediments, and Paleozoic limestone or dolomite. Outcrops of Paleozoic limestone or dolomite are located to the north and south of the facility. Quaternary lacustrine sediments are located approximately one mile to the northeast of the facility. Some units include combinations of these sediment types. The geology beneath the site is characterized by lower density granitoid rocks. There is a decrease in subsurface rock

densities owing to the termination of thrust sheets of relatively dense Paleozoic Carbonate rocks and Proterozoic rocks.

18. Receiving Groundwater Quality

The Facility’s drinking water well, located downgradient of the leach field, was destroyed in 2019 because the well casing had collapsed. Selected water quality data obtained prior to the well’s destruction is shown in the Table 5.

Table 5 – Receiving Groundwater Quality

Constituent	Concentration	Maximum Contaminant Level (MCL)
Arsenic	5.7 micrograms per Liter (ug/L)	10.0 ug/L
Chromium (Total)	13.0 ug/L	50.0 ug/L
Nitrate as Nitrogen	6.4 mg/L	10.0 mg/L
Total Dissolved Solids	490 mg/L	Three-part standard (500 mg/L, 1000 mg/L, 1500 mg/L)

Naturally occurring nitrate concentrations within the site vicinity are generally less than 1 mg/L. Table 5 shows that groundwater beneath the Facility has been degraded with respect to nitrate from wastewater discharges. The MPMO company operates three water domestic supply wells downgradient of the Facility; the closest well is approximately 1,000 feet distance. Data indicate this closest well is affected by Facility discharges (nitrate concentration is 2.8 mg/L). To prevent further groundwater impacts, this Board Order includes a time schedule requiring the Discharger to upgrade wastewater treatment.

A replacement drinking water well was constructed in 2018 upgradient of the leach field disposal area on the southbound side of the facility. Results from the initial October 2018 sampling event yielded the following concentrations shown in Table 6.

Table 6 – Receiving Groundwater Quality of New Onsite Drinking Water Well

Constituent	Concentration	Maximum Contaminant Level (MCL)
Arsenic	6.6 micrograms per Liter (ug/L)	10.0 ug/L
Chromium (Total)	5.2 ug/L	50.0 ug/L
Nitrate as Nitrogen	1.4 mg/L	10.0 mg/L
Total Dissolved Solids	490 mg/L	Three-part standard (500 mg/L, 1000 mg/L, 1500 mg/L)

Comparing the data sets concludes that the upgradient groundwater quality is better than downgradient groundwater quality for total chromium and nitrate as nitrogen.

19. Site Stormwater Management

The Facility is not regulated under State Water Board Order No. 2014-0057-DWQ (General Permit for Storm Water Discharges Associated with Industrial Activities)

because the facility design flow is less than 1 million gallons per day (criteria for coverage under the permit).

20. Lahontan Basin Plan

The Water Board adopted a Basin Plan, which became effective on March 31, 1995. Subsequent amendments to the Basin Plan were adopted. This Order implements the Basin Plan, as amended.

21. Receiving Waters and Beneficial Uses

The receiving waters are the groundwaters of the Upper Kingston Valley Groundwater Basin (CA Department of Water Resources Basin No. 6-22). The beneficial uses for this groundwater basin listed in the Basin Plan are the following:

- a. Municipal and domestic supply (MUN),
- b. Agricultural supply (AGR), and
- c. Freshwater replenishment (FRSH).

22. Groundwater Quality Objectives

The groundwater quality objectives for the Upper Kingston Valley Groundwater Basin include:

- a. The Basin Plan establishes water quality objectives for the following.
 - i. Bacteria, coliform,
 - ii. Chemical constituents,
 - iii. Radioactivity, and
 - iv. Taste and odor.
- b. Site specific numerical water quality objectives – There are no applicable site-specific groundwater quality objectives for the Upper Kingston Valley Groundwater Basin.

23. Waste Discharge Prohibitions

The regionwide Basin Plan prohibitions apply to the Facility.

24. Maintenance of High-Quality Waters in California, State Board Resolution 68-16, Degradation Analysis

State Water Board Resolution No. 68-16 “*Statement of Policy with Respect to Maintaining High Quality Waters in California*,” also called the Anti-degradation Policy, states:

“Whenever the existing quality of water is better than the quality established in policies as of the date on which such policies become effective, such existing high quality will be maintained until it has been demonstrated to the State that a change will be consistent with the maximum benefit to the people of the State, will not unreasonably

affect present and anticipated beneficial use of such water and will not result in water quality less than that prescribed in the policies.

Any activity which produces or may produce a waste...and which discharges or proposes to discharge to existing high quality waters will be required to meet waste discharge requirements which will result in the best practicable treatment or control of the discharge necessary to assure that (a) pollution or nuisance will not occur and (b) the highest water quality consistent with maximum benefit to the people of the State will be maintained.”

Groundwater data from the State Water Board’s GeoTracker database indicate that groundwater degradation has occurred from Facility discharges. Specifically, nitrate concentrations beneath the Facility are elevated above naturally occurring background concentrations but remain below numerical water quality objectives established to protect the MUN beneficial uses.

This WDR contains a time schedule to implement necessary upgrades and to improve water quality. It is in the maximum benefit to the people of the state to have continued roadside services available at this location for residents and visitors alike until the Discharger can upgrade its wastewater treatment facilities. Roadside services are a necessary service for the public health of travelers. The water quality degradation that would occur while the wastewater treatment facilities are upgraded are not anticipated to unreasonably affect present and anticipated beneficial uses of such water. Continued groundwater degradation during this interim period is not likely to cause impairment of beneficial uses to current or likely users of groundwater because the requirements in this Order are designed to protect beneficial uses and the Facility’s drinking water well is constructed upgradient of the leach field disposal area.

To ensure existing high-quality groundwater will be maintained, this Board Order establishes a time schedule for the Discharger to upgrade the wastewater treatment plant to reduce total effluent nitrogen concentrations to below 10 mg/L. This action further satisfies State Water Board Resolution No. 68-16 because the upgraded wastewater treatment plant will produce an effluent quality using best practicable treatment or control assuring pollution or nuisance will not occur and existing high-water quality will be maintained. Any proposed degradation from that future project will be evaluated at that time. This Board Order requires effluent monitoring to assess the impact of the discharge upon receiving waters.

25. Consideration of California Water Code, Section 13241

Pursuant to CWC, section 13241, the requirements of this Order take into consideration the following factors.

- a. Past, present, and probable future beneficial uses of water – The receiving waters are groundwater of the Upper Kingston Valley Groundwater Basin. The beneficial uses for this groundwater basin listed in the Basin Plan are the following: MUN, AGR, and FRSH. This Order includes requirements that protect the most sensitive beneficial use, Municipal and Domestic Supply (MUN), and is therefore protective of the other beneficial uses. Downgradient of the Facility private and corporate supply

wells are used for MUN and industrial uses, in addition to the MUN use from the Facility's own onsite well. This Board Order establishes a Time Schedule for the Discharger to submit plans and implement a project to protect these uses.

- b. Environmental characteristics of the hydrographic unit under consideration, including the quality of the water available thereto – Localized groundwater quality has been affected by Facility discharges (see Finding 18, Table 5), however, most of the groundwater within the Upper Kingston Valley Groundwater Basin is of high quality. This groundwater basin is hydrologically closed and receives limited rainfall, and thus there is minimal groundwater recharge.
- c. Water quality conditions that could reasonably be achieved through the coordinated control of all factors which will affect water quality in the area – The project required in the time schedules of this Board Order will result in the Discharger upgrading its existing wastewater treatment system and producing effluent of a quality meeting Basin Plan objectives. This will result in improved overall water quality within the basin.
- d. Economic considerations – Water Quality Objectives established in the Basin Plan for the Upper Kingston Valley Groundwater Basin do not subject the Discharger to economic disadvantage as compared to other similar discharges in the Region. The upgraded treatment plant required by the time schedules of this Board Order will produce an effluent of better quality that will improve groundwater quality. The costs associated with continued operation of the existing Facility will remain unchanged. The time schedule will allow the Discharger to develop a capital improvement plan to allocate funding for these plant upgrades. It is in the best interest of the people of the state for the Discharger to meet the time schedules contained in this Board Order while still maintaining the public service that the Facility provides.
- e. The need for developing housing within the region – The Discharger is not responsible for developing housing within the region. In addition, the land surrounding the Facility is largely government owned and likely will not be developed.
- f. The need to develop and use recycled water – This Board Order does not regulate recycled water uses or otherwise impact recycled water uses.

26. Right to Safe, Clean, Affordable, and Accessible Water

CWC, section 106.3, establishes a state policy that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes and directs state agencies to consider this policy when adopting regulations pertinent to those uses of water. This Board Order promotes that policy by establishing a time schedule requiring the Discharger to upgrade the treatment, which will improve water quality and protect drinking water use. The groundwater in the area includes a MUN beneficial use.

27. California Code of Regulations, Title 27

California Code of Regulations (CCR), title 27, section 20090(a) and (b) states that discharges are exempt from title 27 requirements for waste disposal provided the activity meets and continues to meet the following conditions:

“(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.”*

The wastewater discharged from the Facility is from domestic sewage regulated by WDRs issued in this Board Order. Discharges from the Facility are in compliance with receiving water quality objectives in the Basin Plan. The wastewater effluent does not need to be managed as hazardous waste. Therefore, the discharge from the Facility is exempt from the requirements of CCR, title 27.

28. California Environmental Quality Act

Issuance of this Board Order regulates discharges from existing facilities with no authorized expansion and is exempt from California Environmental Quality Act (CEQA) CEQA pursuant to CCR title 14 section 15301.

The construction of a future project to satisfy the requirement of the time schedules in this Board Order and meet Basin Plan requirements are not herein approved, but will require environmental review under CEQA by the lead agency at the time that any changes to the Facility will be proposed.

29. California Climate Change Mitigation Strategy

The Water Board adopted Resolution No. R6T-2019-0277 that addresses impacts of climate change. The four protection strategies stated in the resolution are addressed by this Board Order as stated below:

- a. Protection of Wetlands, Floodplains and Headwaters - *Support external efforts and initiate necessary regulatory actions to facilitate improved meadow, wetland, and*

floodplain conditions and stream flows in headwater areas to achieve greater levels of watershed resiliency.

This Board Order has no effect on wetlands, floodplains, and headwaters protection.

- b. Infrastructure Protection - *Support external efforts and initiate necessary regulatory actions to help build and maintain sustainably functioning infrastructure so built systems remain safe and reliable during extreme weather events including heat waves, extreme precipitation, severe droughts, and wildfires.*

Infrastructure associated with this Facility is well protected beneath the ground surface and likely will not be affected during extreme weather events.

- c. Protection of Groundwater Quality and Supply - *Support external efforts and initiate necessary regulatory actions to protect groundwater quality and improve groundwater recharge for purposes of protecting source water and building sustainability and drought resiliency.*

This Board Order establishes time schedules requiring the Discharger to implement a project improving effluent quality that will reduce groundwater degradation and/or pollution.

- d. Protection of Headwater Forests and Promoting Fire Resiliency - *Support external efforts and initiate necessary regulatory actions to facilitate the pace and scale of projects implemented to build long-term resilience of headwater forests including those that (1) reduce vulnerability to catastrophic fires and pest infestations, and (2) support resilience in recovery efforts.*

This Board Order has no effect on protecting headwater forests or promoting fire resiliency.

30. Technical and Monitoring Reports

CWC, section 13267(b) provides that: "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 discharge or discharging, or who proposed to discharge within its region, or any citizen or domiciliary, or political agency or entity of this state who had discharged, discharges, or is suspected of having discharged or discharging, or who proposed to discharge waste outside of its region that could affect the quality of the waters of the state 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."

Technical reports are necessary to assure compliance with this Order and to assess any water quality impacts due to discharges from the Facility. Therefore, the burden, including costs, of these reports bears a reasonable relationship to the need for the report and the benefits to be obtained from the reports.

31. Time Schedules

Pursuant to CWC, section 13263(c), this Board Order includes a time schedule, requiring the Discharger to submit plans to upgrade the wastewater treatment plant producing an effluent that will meet Basin Plan water quality objectives.

32. Classification

Pursuant to CCR, title 23, section 2200(a) the "Threat to Water Quality" from the Facility discharge is "Category (2)" because the discharge could impair beneficial uses of the receiving water. The "Complexity" is "Category (C)" because the Facility has septic treatment and disposal systems discharging to the subsurface.

33. Right to Petition

Any person aggrieved by this action of the Water Board may petition the State Water Board to review the action in accordance with California Water Code, section 13320, and CCR, title 23, sections 2050 et. seq. 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 in hard copy or electronic format upon request.

34. Notification of Interested Parties

The Lahontan Water Board has notified the Discharger and interested persons of its intent to adopt WDRs for the discharge. Comments were solicited from interested parties but no comments were received.

35. Consideration of Public Comments

The Lahontan Water Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED, pursuant to CWC, sections 13260, 13263, and 13267 the Discharger must comply with the following:

I. FLOW LIMITS AND AUTHORIZED DISPOSAL SITES

- A. The daily flow for a 24-hour period must not exceed 24,000 gallons for either the northbound or southbound rest areas.
- B. The authorized disposal sites are the dispersal leach-lines located on the northbound and southbound sides of the Facility.

II. EFFLUENT LIMITATIONS

There are no numerical effluent limitations associated with this discharge.

III. RECEIVING WATER LIMITATIONS

- A. The discharge from the leach fields must not cause a violation of the Basin Plan's water quality objectives established for the groundwater of the Upper Kingston Valley Groundwater Basin.
- B. The discharge must not cause a violation of any applicable water quality standard for receiving water adopted by the Water Board or State Water Resources Control Board.
- C. The Discharger must not cause the groundwater of the Upper Kingston Valley Groundwater Basin Hydrologic Area to contain:
 1. Bacteria: In groundwaters designated as MUN, the median concentration of coliform organisms over any seven-day period must be less than 1.1/ milliliters. The unit is defined as most probable number per 100 milliliters (MPN/100 mL).
 2. Chemical Constituents – Groundwaters designated as MUN must not contain concentrations of chemical constituents in excess of the Primary MCL or Secondary MCL based upon drinking water standards specified in the following provisions of CCR, title 22: Table 64431-A of section 64431 (Inorganic Chemicals), Table 64444-A of section 64444 (Organic Chemicals), Table 64449-A of section 64449 (Secondary MCLs – Consumer Acceptance Contaminant Levels), and Table 64449-B of section 64449 (Secondary MCLs – Consumer Acceptance Contaminant Level Ranges). This incorporation-by-reference is prospective including future changes to the incorporated provisions as the changes take effect.

Groundwaters must not contain concentrations of chemical constituents that adversely affect the water for beneficial uses.

3. Radioactivity – Radionuclides must not be present in concentrations that are deleterious to human, plant, animal, or aquatic life, or that result in the accumulation of radionuclides in the food chain to an extent that it presents a hazard to human, plant, animal, or aquatic life. Groundwater designated MUN must not contain concentrations of radionuclides in excess of limits specified in CCR, title 22, section 64442, Table 64442, and section 64443, Table 64443, including future changes as the changes take effect.
4. Taste and Odors – Groundwaters must not contain taste or odor-producing substances in concentrations that cause a nuisance or that adversely affect beneficial uses. For groundwaters designated as MUN, at a minimum, concentrations must not exceed adopted Secondary MCLs as specified in CCR, title 22, section 64449, Table 64449-A (Secondary MCLs – Consumer Acceptance Contaminant Level) and Table 64449-B (Secondary MCLs –

Consumer Acceptance Contaminant Levels Ranges) including future changes as the changes take effect.

IV. GENERAL REQUIREMENTS AND PROHIBITIONS

- A. The discharge must not cause pollution, as defined in CWC, section 13050, subdivision (l), or a threatened pollution.
- B. Neither the treatment nor the discharge must cause a nuisance, as defined in CWC, section 13050, subdivision (m).
- C. The following Basin Plan regionwide prohibitions apply.
 - 1. The discharge of waste that causes exceedance of any narrative or numeric water quality objective contained in the Basin Plan is prohibited.
 - 2. Where any applicable numeric or narrative water quality objective contained in the Basin Plan is already being violated, the discharge of waste that causes further degradation or pollution is prohibited.
 - 3. The discharge of waste that could affect the quality of waters of the state that is not authorized by the State or Regional Water Board through waste discharge requirements, waiver of waste discharge requirements, National Pollutant Discharge Elimination System permit, cease and desist order, certification of water quality compliance pursuant to federal Clean Water Act section 401, or other appropriate regulatory mechanism is prohibited.
 - 4. The discharge of untreated sewage garbage, or other solid wastes into surface waters is prohibited.
 - 5. The discharge of pesticides to surface or groundwaters is prohibited.
- D. The discharge, bypass, or diversion of untreated or treated wastewater, sludge, grease, or oils from the collection system, transport, or to adjacent land areas is prohibited.
- E. Surface flow, or visible discharge of untreated or treated wastewater, from the Authorized Disposal Sites to adjacent land areas is prohibited.
- F. All facilities used for collection, transport, treatment, or disposal of waste regulated by this Order must be adequately protected against overflow, washout, inundation, structural damage or a significant reduction in efficiency resulting from a storm or flood having a recurrence interval of once in 100 years.
- G. The disposal of waste residue, including sludge, must be in a manner in compliance with all local, state, and federal requirements.
- H. The discharge of wastewater except to the authorized discharge sites is prohibited.

V. PROVISIONS

A. Operator Certificates

The Facility must be supervised by persons possessing a wastewater treatment plant operator certificate of appropriate grade pursuant to CCR, title 23, section 3670 et seq.

B. Standard Provisions

The Discharger must comply with the "Standard Provisions for Waste Discharge Requirements," dated September 1, 1994, in Attachment "B" which is made part of this Order.

C. Monitoring and Reporting

The Discharger must comply with the Monitoring and Reporting Program issued pursuant to Water Code section 13267. The Executive Officer may amend the MRP.

D. Salt and Nutrient Management Plan

If required by the Executive Officer, the Discharger must develop, or provide documentation demonstrating participation in a stakeholder group that is developing, a SNMP for the Upper Kingston Valley Groundwater Basin that satisfies section 6.2 of the *Water Quality Control Policy for Recycled Water*.

E. Material Change

Any proposed material change in the character of waste, manner or method of treatment or disposal, increase in discharge, or location of discharge must be reported to the Water Board at least 140 days in advance of implementing such proposal.

VI. TIME SCHEDULES

Pursuant to CWC, section 13263(c) the Discharger must comply with the following time schedule shown in Table 7:

Table 7 – Time Schedules

Schedule Date	Requirement
January 21, 2023	Submit a technical report, signed by the Design Branch Chief, or equivalent, describing a preferred proposed project that Caltrans will construct to produce an effluent quality with an annual average total nitrogen of less than 10 mg/L. The installation of a new flow meter must be included in the new wastewater treatment plant design. The technical report must also describe the following: <ul style="list-style-type: none"> • Locations of the proposed leach dispersal fields, which should be located outside the footprint of the existing

Schedule Date	Requirement
	dispersal fields to prevent percolating effluent from mobilizing higher concentrations of nitrate to groundwater. <ul style="list-style-type: none"> • Site features on a map and include a conceptual process flow schematic. • The manner in which the existing Facility wastewater components, including the disposal leach fields, will be de-activated or destroyed.
July 14, 2024	Submit a technical report, signed by the Caltrans Design Branch Chief, or equivalent, describing the status of implementing the preferred proposed project.
June 13, 2025	Submit a complete Report of Waste Discharge for the preferred proposed project pursuant to CWC, section 13260.
July 6, 2026	Complete construction of the project designed to produce an effluent that will meet an effluent limit of 10 mg/L total nitrogen and submit a status report signed by the Discharger’s superintendent indicating that construction is complete.
October 6, 2026	Submit a report signed by a California registered civil engineer providing the as-built construction plans of the completed project.

Technical reports must include the signature, stamp, and contact information from a California Registered Civil Engineer acting in responsible charge for the content of the construction plans for the proposed project.

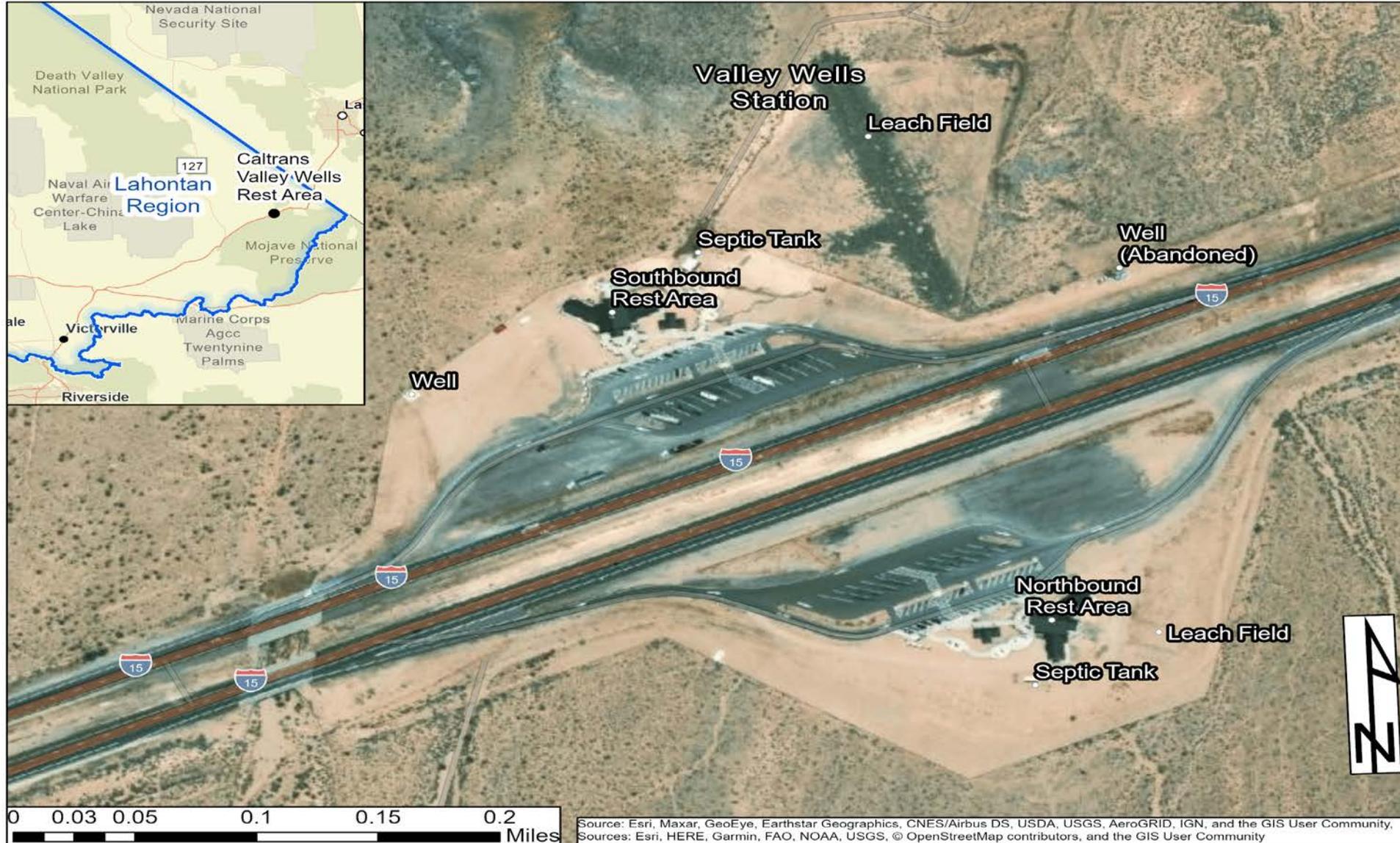
I, Michael R. Plaziak, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Lahontan Region, on May 13, 2021.

MICHAEL R. PLAZIAK, P.G.
 EXECUTIVE OFFICER

- Attachments: A. Caltrans Valley Wells SRRA Map
 B. Standard Provisions for Waste Discharge Requirements

ATTACHMENT A - Caltrans Valley Wells SRRA Map

Credits:



CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LAHONTAN REGION

STANDARD PROVISIONS
FOR WASTE DISCHARGE REQUIREMENTS

1. Inspection and Entry

The Discharger shall permit Regional Board staff:

- a. to enter upon premises in which an effluent source is located or in which any required records are kept;
- b. to copy any records relating to the discharge or relating to compliance with the Waste Discharge Requirements (WDRs);
- c. to inspect monitoring equipment or records; and
- d. to sample any discharge.

2. Reporting Requirements

- a. Pursuant to California Water Code 13267(b), the Discharger shall immediately notify the Regional Board by telephone whenever an adverse condition occurred as a result of this discharge; written confirmation shall follow within two weeks. An adverse condition includes, but is not limited to, spills of petroleum products or toxic chemicals, or damage to control facilities that could affect compliance.
- b. Pursuant to California Water Code Section 13260 (c), any proposed material change in the character of the waste, manner or method of treatment or disposal, increase of discharge, or location of discharge, shall be reported to the Regional Board at least 120 days in advance of implementation of any such proposal. This shall include, but not be limited to, all significant soil disturbances.
- c. The Owners/Discharger of property subject to WDRs shall be considered to have a continuing responsibility for ensuring compliance with applicable WDRs in the operations or use of the owned property. Pursuant to California Water Code Section 13260(c), any change in the ownership and/or operation of property subject to the WDRs shall be reported to the Regional Board. Notification of applicable WDRs shall be furnished in writing to the new owners and/or operators and a copy of such notification shall be sent to the Regional Board.
- d. If a Discharger becomes aware that any information submitted to the Regional Board is incorrect, the Discharger shall immediately notify the Regional Board, in writing, and correct that information.
- e. Reports required by the WDRs, and other information requested by the Regional Board, must be signed by a duly authorized representative of the Discharger. Under Section 13268 of the California Water Code, any person failing or refusing to furnish technical or monitoring reports, or falsifying any information provided therein, is guilty of a misdemeanor and may be liable civilly in an amount of up to one thousand dollars (\$1,000) for each day of violation.

- f. If the Discharger becomes aware that their WDRs (or permit) are no longer needed (because the project will not be built or the discharge will cease) the Discharger shall notify the Regional Board in writing and request that their WDRs (or permit) be rescinded.

3. Right to Revise WDRs

The Regional Board reserves the privilege of changing all or any portion of the WDRs upon legal notice to and after opportunity to be heard is given to all concerned parties.

4. Duty to Comply

Failure to comply with the WDRs may constitute a violation of the California Water Code and is grounds for enforcement action or for permit termination, revocation and re-issuance, or modification.

5. Duty to Mitigate

The Discharger shall take all reasonable steps to minimize or prevent any discharge in violation of the WDRs which has a reasonable likelihood of adversely affecting human health or the environment.

6. Proper Operation and Maintenance

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 WDRs. Proper operation and maintenance includes adequate laboratory control, where appropriate, and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems that are installed by the Discharger, when necessary to achieve compliance with the conditions of the WDRs.

7. Waste Discharge Requirement Actions

The WDRs may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Discharger for waste discharge requirement modification, revocation and re-issuance, termination, or a notification of planned changes or anticipated noncompliance, does not stay any of the WDRs conditions.

8. Property Rights

The WDRs do not convey any property rights of any sort, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations.

9. Enforcement

The California Water Code provides for civil liability and criminal penalties for violations or threatened violations of the WDRs including imposition of civil liability or referral to the Attorney General.

10. Availability

A copy of the WDRs shall be kept and maintained by the Discharger and be available at all times to operating personnel.

11. Severability

Provisions of the WDRs are severable. If any provision of the requirements is found invalid, the remainder of the requirements shall not be affected.

12. Public Access

General public access shall be effectively excluded from treatment and disposal facilities.

13. Transfers

Providing there is no material change in the operation of the facility, this Order may be transferred to a new owner or operation. The owner/operator must request the transfer in writing and receive written approval from the Regional Board's Executive Officer.

14. Definitions

- a. "Surface waters" as used in this Order, include, but are not limited to, live streams, either perennial or ephemeral, which flow in natural or artificial water courses and natural lakes and artificial impoundments of waters. "Surface waters" does not include artificial water courses or impoundments used exclusively for wastewater disposal.
- b. "Ground waters" as used in this Order, include, but are not limited to, all subsurface waters being above atmospheric pressure and the capillary fringe of these waters.

15. Storm Protection

All facilities used for collection, transport, treatment, storage, or disposal of waste shall be adequately protected against overflow, washout, inundation, structural damage or a significant reduction in efficiency resulting from a storm or flood having a recurrence interval of once in 100 years.

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LAHONTAN REGION**

**BOARD ORDER NO. R6V-2021-PROPOSED
WDID NO. 6B361809001**

MONITORING AND REPORTING PROGRAM

FOR

**CALIFORNIA DEPARTMENT OF TRANSPORTATION
VALLEY WELLS SAFETY ROADSIDE REST AREA**

San Bernardino County

I. GENERAL REQUIREMENTS

1. Authorization Basis and Effective Date

This monitoring and reporting program (MRP) is being required pursuant to California Water Code (CWC), section 13267.

2. California Water Code Section 13267

CWC Section 13267 states that the regional board, *“in establishing or reviewing any water quality control plan or waste discharge requirements, or in connection with any action relating to any plan or requirement authorized by this division, may investigate the quality of any waters of the state within its region.”* Information requested in this MRP is necessary to establish compliance with waste discharge requirements (WDRs). The elements in this MRP bear a reasonable relationship to the need for the reports and the benefits to be obtained from the reports.

3. Summary of Reports Required

Caltrans (Discharger) discharges primary undisinfectated effluent from the Valley Wells Roadside Rest Area (Facility) and is required to submit technical or self-monitoring reports pursuant to CWC, section 13267. Table 1 is a summary of reports required under this program.

Table 1 – Summary of Reports Required

Report Name	Period	Report Due Date
Self-Monitoring Reports	January 1 - March 31 April 1 - June 30 July 1 - September 30 October 1 - December 31	May 1 Aug 1 Nov 1 Feb 1 of the following year
Annual Report	January 1 - December 31 of prior year	March 1 each year
Effluent Sampling and Analysis Plan	One time, amended as necessary	June 10, 2021

Each quarterly self-monitoring report must provide information on:

- (a) general operations,
- (b) operational problems,
- (c) compliance assessment, and
- (d) data for constituents as specified below.

4. Report and Correspondence Submittal

All correspondence and reports must be uploaded to the State Water Resources Control Board's (State Water Board's) GeoTracker database under the Global Identification number to be assigned when the Board Order is adopted. The GeoTracker website can be accessed at the following web address, where you may register for an account <https://geotracker.waterboards.ca.gov/esi/login.asp>. Please contact the GeoTracker Help Desk if you have any questions. Contact information for the Help Desk is email: GeoTracker@waterboards.ca.gov, Phone: (866) 480-1028.

5. GeoTracker

The Discharger must comply with the Electronic Submittal of Information (ESI) requirements by submitting all effluent and groundwater *data* required under the MRP in Electronic Data Format (EDF) to the State Board's GeoTracker database for both Surveyed and Non-Surveyed Field Sampling Points. This includes monitoring locational data (latitude and longitude) and searchable Portable Document Format (PDF) monitoring reports.

The following *information* **must be uploaded one-time**.

- a. Site Map: An electronic site plan map must be submitted into the GEO_MAP file and display site features, and adjacent streets. The site map is a stand-alone document that may be submitted in various formats. Updated site maps must be submitted when site conditions change.

The following *information* must be uploaded each reporting period.

- b. Self-Monitoring Reports: The monitoring reports must be uploaded to GeoTracker.

6. General Provisions

The Discharger must comply with the "General Provisions for Monitoring and Reporting" dated September 1, 1994, which is made part of this MRP as Attachment A.

7. Reports

a. Data Tables

The Discharger must tabulate the data collected and present that data in chronological order for the following:

- 1) Treatment plant flow.
- 2) Effluent sample results.
- 3) Groundwater monitoring data.
- 4) Historical data for entries covering, at minimum, the last five years.
- 5) Submit data tables to the Water Board in one or more Microsoft Excel files or one or more comma delimited formatted file with the PDF monitoring report submission.
- 6) Where additional data are collected above minimum reporting requirements, that additional data must also be reported.

b. Laboratory Reports

- 1) Include in the monitoring report all original data sheets from the analytical laboratory.
- 2) For sample results greater than or equal to the laboratory's reporting limit (RL), the Discharger must report the results as measured by the laboratory (i.e., the measured chemical concentration in the sample). When sample results are less than the reported RL, yet greater than or equal to the laboratory's Method Detection Limit (MDL), the Discharger must report the results as "Detected, but Not Quantified (DNQ)". The Discharger must also report the estimated chemical concentration of the sample using an appropriate data qualifier (e.g., "J" flag).

c. Compliance Self-Assessment

- 1) The Discharger must use a cover letter for all reports provided to the Water Board (see this MRP, Attachment B).
- 2) The Discharger must provide a written explanation for all numeric and narrative Facility effluent violations, including dates and cause of violations and measures to prevent violation reoccurrence, in each report. Include a specific assessment as to whether any data indicate a violation of receiving water quality objectives because of the discharge.

- 3) Reports must include graphs or charts covering the monitoring period, where appropriate, to illustrate trends (e.g., effluent and groundwater results).

II. MONITORING

The Discharger must comply with the monitoring requirements outlined below. All monitoring and inspecting activities must be documented, and all sampling must be conducted in accordance with an approved Sampling and Analysis Plan (SAP) that includes quality assurance and quality control standards and procedures, as described in the General Provisions for Monitoring and Reporting (Attachment A of this MRP). Each report must include the information specified below.

1. Flow and Operations Monitoring

Flow Meter Installation – Caltrans estimates effluent flows based on monthly water meter readings obtained at the site. Caltrans assumes that all potable water produced from its onsite production well is used in the Facility and discharged to onsite septic leach fields for disposal. There is no requirement to install sewage flow meters at this time. Potable water production flow rates to each the northbound and southbound rest areas will be used to represent sewage effluent flow rates and must be reported to the Water Board, as Caltrans separates and measures this usage.

The following information must be submitted according to the frequency listed.

- a. Monthly Flow Volume – The total flow for each calendar month must be reported, in million gallons (MG), for wastewater discharged from the northbound and southbound septic tanks existing water well.
- b. Daily Flow Volume – The total flow for each day must be reported, in MG, for wastewater discharged from the northbound and southbound septic tanks.
- c. Report – Report general performance, maintenance, and operational problems at the Facility affecting system performance, including the following:
 - 1) Facility site map showing all septic tank and leach-field locations.
 - 2) Information regarding the general operations, compliance assessment, effluent discharges, calibration, and compliance with WDRs.
 - 3) For any operational problems provide the following: a map showing where the problems occurred, cause of the operational problem, and corrective actions implemented or schedule for completion. If no problems arise, include a statement that no problems were encountered.

2. Septage and Biosolids Monitoring

The Discharger must report annually, the following for the previous year:

- a. Total Volume – Volume of solids pumped from each septic tank onsite.
 - b. Location(s) and Address(s) – Date, nature of service, service company name, and site(s) where biosolids were transported (i.e., landfills, agriculture sites, and/or composting facilities).
 - c. Septic Tank Monitoring – Monitoring of all septic tanks must include the following:
 - 1) Sludge depth and scum thickness in each compartment of each tank,
 - 2) Distance between bottom of scum layer and bottom of outlet service,
 - 3) Distance between top of sludge layer and bottom of outlet service, and
 - 4) Effluent filter condition (if equipped, clean as needed).
3. Effluent Monitoring
- a. Monitor and Report – The following constituents, for both northbound and southbound rest areas, prior to disposal as follows:

Table 2 – Effluent Monitoring for Northbound & Southbound Rest Areas

Constituent	Units	Sample Type	Frequency
Dissolved oxygen	mg/L	Grab	Annually ¹
Electrical conductivity	Micro siemens per centimeter (uS/cm)	Grab	Annually
pH	pH Units	Grab	Annually
Biochemical oxygen demand ²	mg/L	Grab	Annually
Oil and grease	mg/L	Grab	Annually
Total suspended solids	mg/L	Grab	Annually
Ammonia as nitrogen	mg/L	Grab	Annually
Nitrate as nitrogen	mg/L	Grab	Annually
Nitrite as nitrogen	mg/L	Grab	Annually
Total Kjeldahl nitrogen	mg/L	Grab	Annually
Total nitrogen ³	mg/L	Grab	Annually
Methylene blue active substances	mg/L	Grab	Annually
Phenol	mg/L	Grab	Annually
Total dissolved solids ⁴	mg/L	Grab	Annually
General minerals series ⁵	(varies)	Grab	Annually

- ¹ Monitor DO on the 4th quarter and include results with Annual Report.
- ² Five-day BOD at 20°C.
- ³ Sum of nitrate as nitrogen, nitrite as nitrogen, and total Kjeldahl nitrogen.
- ⁴ Annual general minerals analysis includes this constituent.
- ⁵ See General Minerals Analysis Table below.

b. Field tests - may be accomplished by site personnel with a direct read instrument calibrated per manufacturer's specifications prior to sampling. All samples other than field measurements must be conducted by a California-certified laboratory and a United States Environmental Protection Agency (USEPA) analytical method or accepted standard method. An alternate method may be proposed and used if acceptable to the Water Board's Executive Officer.

4. Groundwater Monitoring

No groundwater monitoring wells are required at this time.

5. Biosolids Monitoring

The Discharger must report the following annually for the previous year:

- a. Total Biosolids Volume - Biosolids generated at the wastewater treatment plant, and
- b. Location(s) and Address(s) - Of the site(s) where biosolids were transported (i.e., landfills, agriculture sites, or composting facilities).

III. ROUTINE REPORTS

1. Quarterly Reports

Quarterly self-monitoring reports **are due on the 1st day of the second month following the end of each quarterly monitoring period** in accordance with Table 1, Summary of Reports Required in MRP, Section I.C. Each quarterly report must provide information on:

- a. General operations,
- b. Operational problems,
- c. Compliance assessment,
- d. Data from the monitoring section of this program, and

- e. Any problem with industrial pretreatment discharge to collection system causing collection system deterioration or upset in wastewater treatment system.

2. Annual Report

The Discharger must submit an annual report by **March 1** of each year that covers the period from January 1 through December 31 of the previous calendar year.

- a. Facility site map showing treatment plant, disposal, and monitoring well locations.
- b. Compliance record and corrective actions taken or planned to bring the Discharger into full compliance with WDRs.
- c. Modifications or additions, or major maintenance conducted on flow measuring equipment, treatment, or disposal facilities during the past year. If none, then so state.
- d. Names and grades of all certified operators.

3. Sampling and Analysis Plan

Pursuant to CWC, section 13267, the Discharger must submit an SAP by **June 10, 2021**, revised when conditions change (including, but not limited to, any changes to sampling methods, locations, or analytical methods and procedures). The SAP must include a detailed description of procedures and techniques for:

- a. Sample collection method, sample locations, including purging techniques, sampling equipment, and decontamination of sampling equipment,
- b. Measurement of static groundwater levels and depths of wells,
- c. Sample preservation and shipment,
- d. Analytical methods and procedures,
- e. Chain of custody control,
- f. Quality assurance and quality control (QA/QC) methods,
- g. Frequency of calibration for any onsite field equipment or flow meters, and
- h. Description of how onsite measurements are performed.

The Discharger must also keep the most recent version of the SAP at the plant and accessible to personnel performing sampling and analyses. The SAP is subject to review during the Water Board's plant compliance inspections.

IV. SPILL REPORTING

1. In accordance with the requirements of the California Health and Safety Code (HSC), section 5411.5, the Discharger must provide notification to the local health officer or the director of environmental health with jurisdiction over the affected water body of any unauthorized release of sewage or other waste that causes, or probably will cause, a discharge to any waters of the state.
2. In accordance with the requirements of CWC, section 13271, the Discharger must provide notification to the Office of Emergency Services (OES) of the release of reportable amounts of hazardous substances or sewage that causes, or probably will cause, a discharge to any waters of the state. The California Code of Regulations, title 23, section 2250, defines a reportable amount of sewage as being 1,000 gallons. The phone number for reporting these releases to OES is (800) 852-7550.
3. The Discharger must notify the Water Board of any unauthorized release of sewage from its septic tanks and leach-fields systems that cause, or probably will cause, a discharge to a water of the state as soon as possible, but not later than two (2) hours after becoming aware of the release. This notification does not need to be made if the Discharger has notified OES. The phone number for reporting these releases of sewage to the Water Board is (760) 241-6583. At a minimum, the following information must be provided:
 - a. Location, date, and time of the release,
 - b. Water body that received or will receive the discharge,
 - c. Estimate of the amount, or volume, of sewage or other waste released, and the amount that reached a surface water at the time of notification,
 - d. If ongoing, the estimated flow rate of the release at the time of the notification, and
 - e. Name, organization, phone number, and email address of the reporting representative.
4. As soon as possible, but **not later than 24 hours** after becoming aware of an unauthorized discharge of sewage or other waste from the septic tank and leach-field systems to a water of the state, the Discharger must submit a statement to the Water Board by email at Lahontan@waterboards.ca.gov. If the discharge is 1,000 gallons or more, this statement must certify that OES has been notified of the

discharge in accordance with CWC, section 13271. The statement must also certify that the local health officer or director of environmental health with jurisdiction over the affected water bodies has been notified of the discharge in accordance with HSC, section 5411.5. The statement must also include, at a minimum, the following information.

- a. Agency, Board Order No., and MRP No., if applicable,
- b. Location, date, and time of the discharge,
- c. Water body that received the discharge,
- d. Map showing the release location,
- e. Description of the level of treatment of the sewage or other waste discharged,
- f. Initial estimate of the amount, or volume, of sewage or other waste released and the amount that reached a surface water,
- g. OES control number and the date and time that notification of the incident was provided to OES, and
- h. Name of the local health officer or director of environmental health representative notified (if contacted directly), the date and time of notification, and the method of notification (e.g., telephone, email, fax).

Ordered by: _____ Dated: _____
MICHAEL R. PLAZIAK, P.G.
EXECUTIVE OFFICER

Attachments: A. General Provisions for Monitoring and Reporting
B. SMR Cover Letter

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LAHONTAN REGION

GENERAL PROVISIONS
FOR MONITORING AND REPORTING

1. **SAMPLING AND ANALYSIS**

- a. All analyses shall be performed in accordance with the current edition(s) of the following documents:
 - i. Standard Methods for the Examination of Water and Wastewater
 - ii. Methods for Chemical Analysis of Water and Wastes, EPA
- b. All analyses shall be performed in a laboratory certified to perform such analyses by the California State Department of Health Services or a laboratory approved by the Regional Board Executive Officer. Specific methods of analysis must be identified on each laboratory report.
- c. Any modifications to the above methods to eliminate known interferences shall be reported with the sample results. The methods used shall also be reported. If methods other than EPA-approved methods or Standard Methods are used, the exact methodology must be submitted for review and must be approved by the Regional Board prior to use.
- d. The Discharger shall establish chain-of-custody procedures to insure that specific individuals are responsible for sample integrity from commencement of sample collection through delivery to an approved laboratory. Sample collection, storage, and analysis shall be conducted in accordance with an approved Sampling and Analysis Plan (SAP). The most recent version of the approved SAP shall be kept at the facility.
- e. The Discharger shall calibrate and perform maintenance procedures on all monitoring instruments and equipment to ensure accuracy of measurements, or shall insure that both activities will be conducted. The calibration of any wastewater flow measuring device shall be recorded and maintained in the permanent log book described in 2.b, below.
- f. A grab sample is defined as an individual sample collected in fewer than 15 minutes.
- g. A composite sample is defined as a combination of no fewer than eight individual samples obtained over the specified sampling period at equal intervals. The volume of each individual sample shall be proportional to the discharge flow rate at the time of sampling. The sampling period shall equal the discharge period, or 24 hours, whichever period is shorter.

2. OPERATIONAL REQUIREMENTS

a. Sample Results

Pursuant to California Water Code Section 13267(b), the Discharger shall maintain all sampling and analytical results including: strip charts; date, exact place, and time of sampling; date analyses were performed; sample collector's name; analyst's name; analytical techniques used; and results of all analyses. Such records shall be retained for a minimum of three years. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge, or when requested by the Regional Board.

b. Operational Log

Pursuant to California Water Code Section 13267(b), an operation and maintenance log shall be maintained at the facility. All monitoring and reporting data shall be recorded in a permanent log book.

3. REPORTING

- a. For every item where the requirements are not met, the Discharger shall submit a statement of the actions undertaken or proposed which will bring the discharge into full compliance with requirements at the earliest time, and shall submit a timetable for correction.
- b. Pursuant to California Water Code Section 13267(b), all sampling and analytical results shall be made available to the Regional Board upon request. Results shall be retained for a minimum of three years. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge, or when requested by the Regional Board.
- c. The Discharger shall provide a brief summary of any operational problems and maintenance activities to the Board with each monitoring report. Any modifications or additions to, or any major maintenance conducted on, or any major problems occurring to the wastewater conveyance system, treatment facilities, or disposal facilities shall be included in this summary.
- d. Monitoring reports shall be signed by:
 - i. In the case of a corporation, by a principal executive officer at least of the level of vice-president or his duly authorized representative, if such representative is responsible for the overall operation of the facility from which the discharge originates;
 - ii. In the case of a partnership, by a general partner;
 - iii. In the case of a sole proprietorship, by the proprietor; or

- iv. In the case of a municipal, state or other public facility, by either a principal executive officer, ranking elected official, or other duly authorized employee.
- e. Monitoring reports are to include the following:
 - i. Name and telephone number of individual who can answer questions about the report.
 - ii. The Monitoring and Reporting Program Number.
 - iii. WDID Number.
- f. Modifications

This Monitoring and Reporting Program may be modified at the discretion of the Regional Board Executive Officer.

4. NONCOMPLIANCE

Under Section 13268 of the Water Code, any person failing or refusing to furnish technical or monitoring reports, or falsifying any information provided therein, is guilty of a misdemeanor and may be liable civilly in an amount of up to one thousand dollars (\$1,000) for each day of violation under Section 13268 of the Water Code.

x:PROVISIONS WDRS

file: general pro mrp

Date _____

California Regional Water Quality Control
Board Lahontan Region
15095 Amargosa Road
Building 2, Suite 210
Victorville, CA 92394

Facility Name: _____

Address: _____

Contact Person: _____

Job Title: _____

Phone: _____

Email: _____

WDR/NPDES Order Number: _____

WDID Number: _____

Type of Report (circle one): **Monthly** **Quarterly** **Semi-Annual** **Annual** **Other**

Month(s) (circle applicable month(s)*: **JAN** **FEB** **MAR** **APR** **MAY** **JUN**
JUL **AUG** **SEP** **OCT** **NOV** **DEC**

*annual Reports (circle the first month of the reporting period)

Year: _____

Violation(s)? (Please check one): _____ **NO** _____ **YES***

***If YES is marked complete a-g (Attach Additional information as necessary)**

a) Brief Description of Violation: _____

b) Section(s) of WDRs/NPDES Permit Violated: _____

c) Reported Value(s) or Volume: _____

d) WDRs/NPDES
Limit/Condition: _____

e) Date(s) and Duration of
Violation(s): _____

f) Explanation of Cause(s): _____

g) Corrective Action(s)
(Specify actions taken and a schedule
for actions to be taken)

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision following a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my knowledge of the person(s) who manage the system, or those directly responsible for data gathering, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

If you have any questions or require additional information, please contact _____ at the number provided above.

Sincerely,

Signature: _____

Name: _____

Title: _____

ENCLOSURE 2

Agenda Item 7

Caltrans Valley Wells Safety Roadside Rest Area Waste Discharge Requirements

John Morales, P.E.

Water Resources Control Engineer
Lahontan Water Board, Victorville Office

May 13, 2021

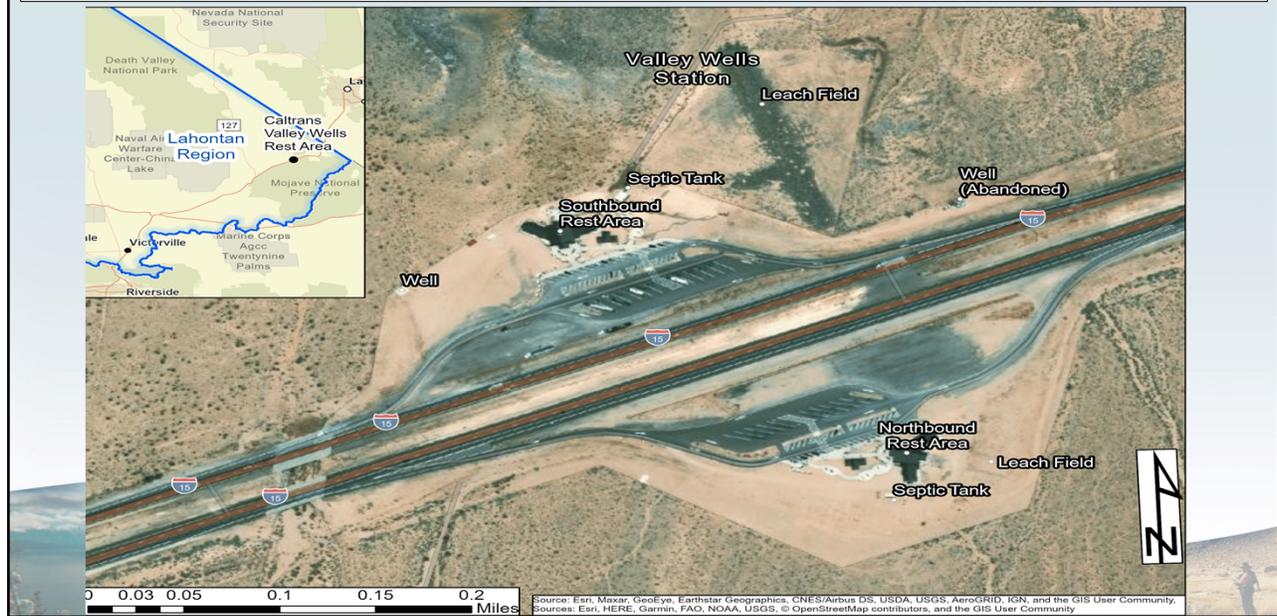
Video and Teleconference Meeting Only
No Physical Meeting Location



OUTLINE

- Existing Caltrans Valley Wells Vicinity Map
- Reasons to Regulate with Individual WDRs
- Groundwater Degradation
- Proposed Time Schedules
- Recommendation

CALTRANS VALLEY WELLS SAFETY ROADSIDE REST AREA SITE LOCATION MAP



EXISTING VALLEY WELLS REST AREA

- Valley Wells rest area - top five heavily used California roadside rest areas
- Caltrans to replace the undersized septic tanks and disposal system by 2026
- Combined current flows about 21,000 gal/day
- Original production well poorly sited downgradient of leach field



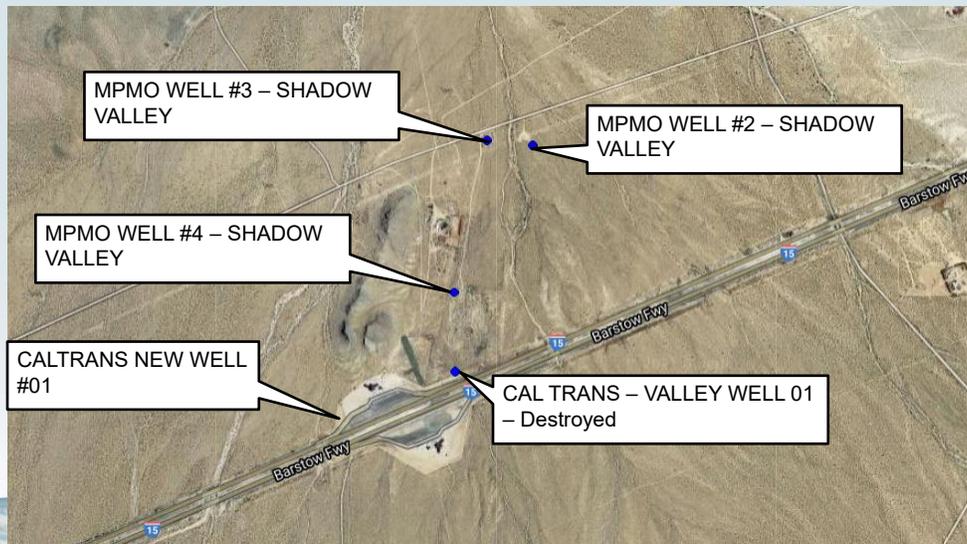
REASONS TO REGULATE WITH INDIVIDUAL WDRs

- OWTS exceeding a design flow of 10,000 gallons per day must be regulated by the Water Board
- High strength wastewater containing Ammonia-Nitrogen from urine at 245 milligrams per liter (mg/L) degrading groundwater, compared to only 25 mg/L for typical untreated domestic wastewater.
- This Order includes Time Schedules for Caltrans to propose alternative and complete construction of upgraded wastewater plant so that discharges comply with the Basin Plan by 2026.

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PRODUCTION WELL LOCATIONS



Map Data Imagery 2021 from GeoTracker

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PROPOSED TIME SCHEDULES

- New single treatment system for combined north and south bound effluent flows
- New treatment system to reduce total nitrogen effluent to below 10 mg/L
- New treatment system must be on-line by 2026

Date	Action
January 2023	Submit plan for treatment plant producing effluent of total nitrogen < than 10 mg/L
July 2024	Submit a technical report describing the status of implementing the preferred project
June 2025	Submit a complete Report of Waste Discharge for the preferred proposed project
July 2024	Notification that project construction has begun
July 2026	Submit a status report that the project is completed
October 2026	Approved As-Built Drawings submitted

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RECOMMENDATION

- Water Board staff recommends adoption of the Order as proposed

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RECEIVING GROUNDWATER QUALITY – Historical Nitrate (as N)

MPMO Well #3

Date	Nitrate (as N) in mg/L
10/15/2019	1
3/21/2018	1.2
12/29/2017	1.7

MPMO Well #2

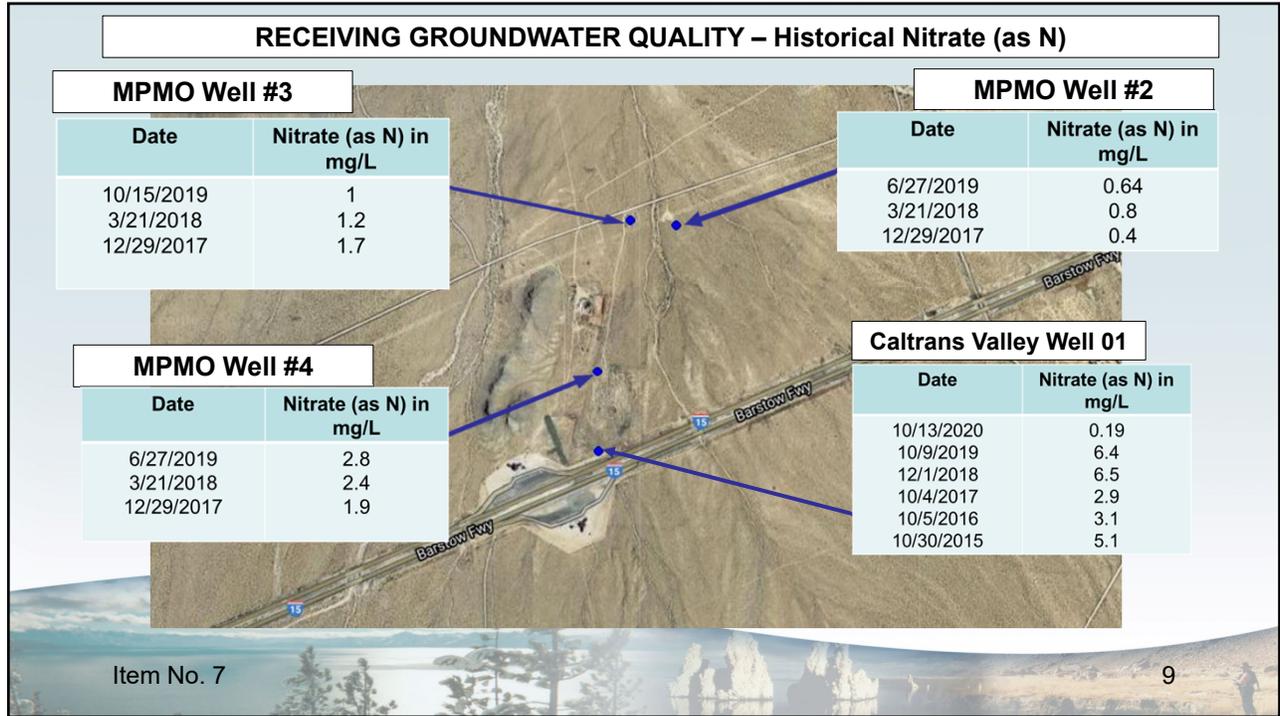
Date	Nitrate (as N) in mg/L
6/27/2019	0.64
3/21/2018	0.8
12/29/2017	0.4

MPMO Well #4

Date	Nitrate (as N) in mg/L
6/27/2019	2.8
3/21/2018	2.4
12/29/2017	1.9

Caltrans Valley Well 01

Date	Nitrate (as N) in mg/L
10/13/2020	0.19
10/9/2019	6.4
12/1/2018	6.5
10/4/2017	2.9
10/5/2016	3.1
10/30/2015	5.1



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