CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL VALLEY REGION

Fresno Office 1685 "E" Street Fresno, CA 93706-2007

Sacramento Office (Main) 11020 Sun Center Drive #200 Rancho Cordova, CA 95670-6114

Redding Office 364 Knollcrest Drive #205 Redding, CA 96002

Regional Board Website (https://www.waterboards.ca.gov/centralvalley)

TENTATIVE WASTE DISCHARGE REQUIREMENTS ORDER R5-2023-XXXX



ORDER INFORMATION

Order Type(s): **Waste Discharge Requirements**

Status: **Tentative**

Program: Non-15 Discharges to Land Sacramento (Rancho Cordova) Region 5 Office:

Discharger(s): **Teichert Land Company**

Marysville Plant Facility:

4249 Hammonton-Smartsville Road Address:

County:

Parcel Nos.: 018-150-010, 018-170-008

R5-2003-0098 Prior Order(s):

CERTIFICATION

I, PATRICK PULUPA, Executive Officer, hereby certify that the following is a full, true, and correct copy of the order adopted by the California Regional Water Quality Control Board, Central Valley Region, on XX October 2023.

PATRICK PULUPA, Executive Officer

REGIONAL BOARD INFORMATION

Sacramento Office (Main)

Rancho Cordova, CA 95670-6114 11020 Sun Center Drive #200 Telephone: (916) 464-3291

Fresno Office

1685 "E" Street Fresno, CA 93706-2007 Telephone: (559) 445-5116

Redding Office

364 Knollcrest Drive #205 Redding, CA 96002 Telephone: (530) 224-4845

Regional Board Website (https://www.waterboards.ca.gov/centralvalley)

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GLOSSARY

| bgs | below ground surface |
|-----------|--|
| BPTC | Best Practicable Treatment or Control |
| CEQA | California Environmental Quality Act, Public Resources Code section 21000 et seq. |
| CV-SALTS | Central Valley Salinity Alternatives for Long-Term Sustainability |
| EC | Electrical Conductivity |
| MCL | Maximum Contaminant Level |
| mgd | Million Gallons [per Day] |
| mg/L | Milligrams per Liter |
| MRP | Monitoring and Reporting Program |
| msl | Mean Sea Level |
| MUN | Municipal and Domestic Beneficial Use |
| N | Nitrogen |
| NA | Not Applicable or Not Available |
| ND | not detected or non-detect |
| ng/L | Nanograms per liter |
| NTU | Nephelometric Turbidity Units |
| NPDES | National Pollutant Discharge Elimination System |
| OAL | Office of Administrative Law |
| P&O Study | Prioritization and Optimization Study of the Salt Control Program |
| RL | Reporting Limit |
| RWD | Report of Waste Discharge |
| SERC | State of Emergency Response Commission |

WASTE DISCHARGE REQUIREMENTS ORDER R5-2023-XXXX MARYSVILLE PLANT YUBA COUNTY

μmhos/cm.....Micromhos per Centimeter

SPRRs Standard Provisions and Reporting Requirements

TDS total dissolved solids

Title 22 California Code of Regulations, Title 22

Title 27 California Code of Regulations, Title 27

US EPA United States Environmental Protection Agency

Wat. Code Water Code

WDRs Waste Discharge Requirements

WQOs Water Quality Objectives

µg/L Micrograms per Liter

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FINDINGS

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

Introduction

- 1. A Report of Waste Discharge (RWD), dated 3 August 2021, was submitted to the Central Valley Water Board that describes mining-related operations and process wastewater discharged to land for the Marysville Plant (Facility). Additional information was submitted on 12 April and 20 April 2023.
- Based on the RWD, Teichert Land Company (Discharger) owns the aggregate mining and processing Facility. Therefore, Teichert Land Company is responsible for compliance with these Waste Discharge Requirements (WDRs). Teichert Materials operates the Facility.
- 3. The Facility is located at 4249 Hammonton-Smartsville Road, approximately six miles northeast of Marysville, California, within an unincorporated area of Yuba County, as shown on Attachment A. The Facility is located within Section 12, T15N, R4E and Section 7, T15N, R5E, Mount Diablo Base and Meridian.
- 4. This Order replaces WDRs Order R5-2003-0098, which was adopted by the Central Valley Water Board on 6 June 2003, and under which previous Facility operations were regulated. The Facility has been temporarily closed since December 2020. To begin operating again, the Discharger requires updated WDRs to align with anticipated operational changes in mining-related activities at the Facility. Therefore, revised WDRs are necessary.
- 5. The following material are attached and incorporated as part of this Order:
 - a. Attachment A Site Location Map
 - b. Attachment B Site Features Map
 - c. Attachment C Wastewater Flow Schematic
 - d. Information Sheet
 - e. Standard Provisions and Reporting Requirements dated 1 March 1991 (SPRRs)
- 6. **Monitoring and Reporting Program (MRP) R5-2023-XXXX** is attached, which requires monitoring and reporting for discharges regulated under these WDRs.

Facility Operations and Discharge

- 7. Aggregate mining at the Facility began in 2004 and consists of excavation, sorting, storage, and transport of extracted aggregate and sediment. The exact locations of the gravel extraction are dynamic, and change based on new locations within the site boundary to be mined. The Facility covers approximately 590 acres and includes a scale house, office, equipment shop and wash area, settling ponds, mining areas, and rice fields.
- 8. Operations vary based on market factors, but the Facility can process up to 3.0 million tons of aggregate per year under the existing Conditional Use permit from Yuba County (Surface Mining Permit #2004-0001).
- 9. Aggregate mining began in the northern portion of the current Settling/Recycling Pond, which is part of Phase 1 of the Facility's mining plan. Mining in this area did not require dewatering due to using a drag line. As mining progressed to the west into the Blue Water Pond, conventional mining equipment, such as excavators, loaders, and bulldozers, was used. Dewatering occurred once the excavation encountered groundwater. Mining is currently occurring south of the Blue Water Pond over an approximate 15 acres, which is typical of this type of operation. Proposed mining areas for Phases 2 and 3 are shown on Attachment B.
- 10. Various mining methods could be used if subsurface conditions change in different areas of the Facility or based on product demand. Changes that could alter this general approach include, but are not limited to, the presence or absence of the intermediate clay layer, changes in the aquifer properties of the gravel layers, and changes in the quality of the aggregate being mined.
- 11. Excavated material from mining areas is transported to the processing plant using conveyor belts, where aggregate products are cleaned and classified. No chemical additives are used to mine and process the aggregate.
- 12. Wash water containing silts and clays that are washed from the aggregate material at the processing plant is discharged to the current 40-acre Settling/Recycling Pond. The exact locations of the Settling/Recycling Ponds are dynamic, and change based on operational needs and capacity requirements. The fines settle out in the Settling/Recycling Pond and the water in the pond is then reused in the wash plant and used for on-site dust control. The wastewater is recycled as much as possible. When additional water is needed, water is supplied by six on-site source water wells. Source well locations are shown on Attachment B.
- 13. Fines from the washed aggregate have filled approximately one-half of the capacity of the current Settling/Recycling Pond. Excess water from the Settling/Recycling Pond decants to the Blue Water Pond. Excavation of fine-grained material may occur to prolong the life of the wastewater ponds; otherwise, new ponds may be

constructed on the property. Filled ponds will be reclaimed in accordance with the Discharger's Surface Mining and Reclamation Act (SMARA) Plan.

- 14. Wash water flows through the processing plant average 8,000 gallons per minute (gpm). The total water cycled through the wash plant can be as high as 8.6 million gallons per day (mgd) during a full 16-hour operation day at peak production.
- 15. Monitoring data collected from the current excavation area and the current Settling/Recycling Pond are summarized below for monitoring years 2018 to 2020 (samples were collected on a semi-annual basis). The Facility was temporarily shut down in December of 2020. The following acronyms are used in the table:

EC = electrical conductivity mg/L = milligrams per liter

NM = not monitored

TDS = total dissolved solids µg/L = micrograms per liter

µmhos/cm = micromhos/centimeter

Table 1. Excavation Area Monitoring Results

| Year | Concentration Range | Total Mercury (μg/L) | EC (µmhos/cm) | TDS (mg/L) | Freeboard (feet) |
|------|---------------------|-------------------------|------------------|---------------|---------------------|
| 2018 | minimum | 0.005 | 78 | 51 | E |
| | maximum | 0.006 | 260 | 175 | 5 |
| 2019 | minimum | 0.001 | 117 | 108 | E |
| | maximum | 0.002 | 248 | 250 | 5 |
| 2020 | minimum | 0.001 | 183 | 92 | \ E |
| | maximum | 0.001 | 270 | 192 | >5 |

Table 2. Settling/Recycling Pond Monitoring Results

| Year | Concentration Range | Total Mercury (μg/L) | EC (µmhos/cm) | TDS (mg/L) | Freeboard (feet) |
|------|---------------------|-------------------------|------------------|---------------|---------------------|
| 2018 | minimum | 0.001 | 152 | 99 | 5 |
| | maximum | 0.587 | 350 | 235 | 5 |
| 2019 | minimum | 0.001 | 101 | 68 | E |
| | maximum | 0.001 | 286 | 186 | 5 |
| 2020 | minimum | 0.0005 | 267 | 133 | >5 |
| | maximum | 0.001 | 499 | 248 | /5 |

16. Rice farming has occurred throughout the Facility for at least the last 30 years and continues at this time on the southern part of the property, as shown on Attachment

- B. The rice fields are irrigated using Brophy Ditch, which is operated by the local irrigation district (Brophy Water District).
- 17. Minor maintenance and equipment washing occurs on-site at the equipment shop and wash area. Major equipment repairs occur at the Discharger's off-site mobile equipment yard in Sacramento. On-site maintenance occurs under covered areas.
- 18. Domestic wastewater is discharged to an on-site septic system permitted by the Yuba County Environmental Health Department. The system includes a 1,000-gallon septic tank, a 1,000-gallon dosing tank, and 200 linear feet of leach field. The system has provisions for a 100-percent replacement leach field area if needed. Bottled water is supplied for drinking water.

Site-Specific Conditions

- 19. The Facility is located south of and adjacent to the Yuba Goldfields, where extensive deposition of historical hydraulic mining debris and subsequent gold dredging activities have occurred for over a century. A review of historical aerial images available on Google Earth® and information in the RWD do not indicate that gold dredging activities associated with the Yuba Gold Fields ever extended onto the Facility property.
- 20. Land uses in the vicinity of the Facility are industrial and agricultural. Beale Air Force Base is located just southeast of the Facility and Western Aggregates (also owned by Teichert) shares a site boundary to the north, as shown on Attachment B.
- 21. The Facility is located approximately 1.5 miles southeast of the Yuba River, within the Lower Yuba River Hydrologic Basin (No. 515.30), as depicted on interagency hydrologic maps prepared by the Department of Water Resources in August 1986. The Facility is not located within the floodway or the 100-year floodplain of the Yuba River.
- 22. Meteorological data are available from the Western Region Climate Center for the City of Marysville from 1905 to 2007 and from the Marysville Airport from 2001 to the present. These are the two closest climate stations to the Facility. The average water year rainfall in the Marysville area is about 21 inches per year. However, water year rainfall totals have varied substantially, with the wettest year being 1995 with 36.21 inches of rainfall and the driest year being 1977 with 7.68 inches of rainfall. The second driest year on record is 2020, with 10.02 inches of rainfall reported. Total rainfall for the 2021 water year through March is 7.1 inches.
- 23. The San Joaquin loam soil series covers most of the site. Perkins loam covers the northern portion of the site, and a small portion of the eastern part of the property has Redding-Corning complex soils. Alluvial deposits of fine-grained, sand, gravel, and cobbles exist to a depth of at least 200 feet.

24. Land surface elevations range from 85 feet above mean sea level (msl) to 103 feet msl.

Groundwater Conditions

25. The groundwater monitoring network at the Facility consists of seven monitoring wells, which have been monitored since 2003. Monitoring well locations are shown on Attachment B. Construction details and depths to groundwater are summarized below. The depth to groundwater represents the shallowest depth reported between 2019 and 2021.

Table 3. Groundwater Monitoring Well Details

| Well ID | Screen Interval (feet bgs) | Depth to Groundwater (feet bgs) | Location | |
|---------|----------------------------------|---------------------------------------|--------------|--|
| MW A | 23.5 - 38.5 | 12.3 | Upgradient | |
| MW B | 19 - 34 | 12.8 | Downgradient | |
| MW C | 29 - 44 | 12.0 | Downgradient | |
| MW F | 17 - 37 | 15.9 | Downgradient | |
| MW G | 18 - 38 | 24.0 | Upgradient | |
| MW H | 16 - 36 | 5.9 | Downgradient | |
| MW J | 15 - 30 | 5.1 | Downgradient | |

- 26. The regional horizontal groundwater flow direction is towards the west and across the property, it is generally to the southwest.
- 27. Groundwater samples were analyzed for EC and TDS. Maximum concentrations in groundwater for samples collected quarterly between 2018 through January 2021 are shown below. Potential Water Quality Objectives (WQOs) or other numerical limits are shown for comparison purposes only and are based on the following:
 - Agricultural Water Quality Goal for EC
 - Secondary Maximum Contaminant Upper Level for TDS.

Table 4. Groundwater Quality

| Well ID | EC µmhos/cm | TDS mg/L |
|---------|----------------|-------------|
| MW A | 197 | 128 |
| MW B | 435 | 283 |
| MW C | 184 | 119 |
| MW F | 457 | 297 |

| Well ID | EC µmhos/cm | TDS mg/L |
|---------------|----------------|-------------|
| MW G | 467 | 304 |
| MW H | 175 | 114 |
| MW J | 568 | 368 |
| Potential WQO | 700 | 1000 |

- 28. Groundwater concentration trends using all available analytical data show decreasing or stable trends, with the exception of TDS and EC in MWs F and J.
- 29. When using data collected between 2010 to 2021 from MWs F and J, concentrations of EC and TDS in both wells show decreasing and stable trends. TDS and EC in effluent in the discharge ponds show stable concentration trends. All concentrations of EC and TDS are less than potential WQOs (or other numerical limit).

Legal Authorities

30. This Order is adopted pursuant to Water Code section 13263, subdivision (a), which provides in pertinent part as follows:

The regional board, after any necessary hearing, shall prescribe requirements as to the nature of any proposed discharge, existing discharge, or material change in an existing discharge..., with relation to the conditions existing in the disposal area or receiving waters upon, or into which, the discharge is made or proposed. The requirements shall implement any relevant water quality control plans that have been adopted, and shall take into consideration the beneficial uses to be protected, the water quality objectives reasonable required for that purpose, other waste discharges, the need to prevent nuisance, and the provisions of Section 13241.

- 31. The ability to discharge waste is a privilege, not a right, and adoption of this Order shall not be construed as creating a vested right to continue discharging waste. (Wat. Code, § 13263, subd. (g).)
- 32. This Order and its associated MRP are also adopted pursuant to Water Code section 13267, subdivision (b)(1), which provides as follows:

[T]he 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 ... 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.

33. The reports required under this Order, as well as under the separately issued MRP, are necessary to verify and ensure compliance with these WDRs. The burden associated with such reports is reasonable relative to the need for their submission.

Basin Plan Implementation

- 34. This Order implements the Central Valley Water Board's Water Quality Control Plan for the Sacramento River and San Joaquin River Basins (Basin Plan), which designates beneficial uses for surface water and groundwater within its scope and establishes WQOs necessary to preserve such beneficial uses. (See Wat. Code, § 13241 et seq.)
- 35. The beneficial uses of the Yuba River are irrigation; stock watering; power; recreation; aesthetic enjoyment; navigation; ground water recharge; contact recreation, canoeing and rafting, other non-contact recreation, warm and cold freshwater habitat, warm and cold-water migration, warm and cold-water spawning, and wildlife habitat.
- 36. Per the Basin Plan, beneficial uses of the underlying groundwater include municipal and domestic supply (MUN), industrial service supply (IND), industrial process supply (PRO) and agricultural supply (ARG).
- 37. The Basin Plan establishes narrative water quality objectives for chemical constituents, tastes and odors, and toxicity in groundwater. It also sets forth a numeric objective for total coliform organisms.
- 38. The Basin Plan's numeric WQO for bacteria requires that the most probable number (MPN) of coliform organisms over any seven-day period shall be less than 2.2 per 100 mL in MUN groundwater.
- 39. The Basin Plan's narrative WQOs for chemical constituents, at a minimum, require MUN-designated waters to meet the MCLs specified in Title 22 of the California Code of Regulations (Title 22). The Basin Plan recognizes that the Central Valley Water Board may apply limits more stringent than MCLs to ensure that waters do not contain chemical constituents in concentrations that adversely affect beneficial uses.
- 40. The narrative toxicity WQO requires that groundwater be maintained free of toxic substances in concentrations that produce detrimental physiological responses in human, animal, plant, or aquatic life associated with designated beneficial uses.

41. Quantifying a narrative WQO requires a site-specific evaluation of those constituents that have the potential to impact water quality and beneficial uses. The Basin Plan states that when compliance with a narrative WQO is required to protect specific beneficial uses, the Central Valley Water Board will, on a case-by-case basis, adopt numerical limitations in order to implement the narrative WQO.

Salt and Nitrate Control Programs Reopener

- 42. On 31 May 2018, the Central Valley Water Board adopted Basin Plan amendments incorporating the Salt Control Program and Nitrate Control Programs. (Resolution R5-2018-0034.) The Basin Plan amendments became effective on 17 January 2020. On 10 December 2020, the Central Valley Water Board adopted revisions to the Basin Plan amendments with Resolution R5-2020-0057 (https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/reso lutions/r5-2020-0057_res.pdf). Those revisions became effective on 10 November 2021. Those revisions became effective on 10 November 2021.
- 43. For the Nitrate Control Program, the Facility falls within the Yolo Sub-basin of the Sacramento Valley Groundwater Basin 5-021.67, a Priority 2 Basin. Notices to Comply for Dischargers in Priority 2 Basins will be sent sometime between 2023 and 2024. However, aggregate processing facilities are exempt from the Nitrate Control Program because they do not discharge nitrate as nitrogen. The Discharger was notified of this exemption in a letter from the Central Valley Water Board dated 5 January 2021
- 44. For the Salt Control Program, the Discharger submitted a Notice to Intent and elected to participate in the Prioritization and Optimization Study (P&O Study), the Alternative Salinity Permitting Approach. The Discharger has been assigned **CV SALTS ID number 2254**. In the interim, to maintain existing salt discharges and minimize salinity impacts this Order requires the Discharger to continue efforts to control salinity in its discharges to the extent reasonable, feasible, and practicable.
- 45. As these strategies are implemented, the Central Valley Water Board may find it necessary to modify the requirements of these WDRs to ensure the goals of the Salt and Nitrate Control Programs are met.

Compliance with Antidegradation Policy

- 46. State Water Resources Control Board (State Water Board) Resolution 68-16, *Policy with Respect to Maintaining High Quality Waters of the State* (Resolution 68-16) prohibits degradation of high-quality groundwater unless it has been shown that such degradation:
 - a. Will be consistent with the maximum benefit to the people of the state;
 - b. Will not unreasonably affect present and anticipated future beneficial uses; and

c. Will not not result in water quality less than that prescribed in state and regional policies, including violation of one or more water quality objectives.

Resolution 68-16 further requires that any discharge to existing high quality waters be required to meet waste discharge requirements that will result in the best practicable treatment or control (BPTC) of the discharge necessary to assure that pollution and/or nuisance will not occur and that the highest quality consistent with the maximum benefit to the people of the state will be maintained.

- 47. Constituents associated with the Facility's discharge that have the potential to degrade water quality include salts, represented by EC and TDS, and total mercury.
 - a. Salts (EC and TDS). EC and TDS concentrations in the excavation area and Settling/Recycling Pond are generally equivalent to EC and TDS concentrations in groundwater. All EC and TDS concentrations in effluent (water in the excavation area and Settling/Recycling Pond) and groundwater are less than potential WQOs (or other numerical value). Concentrations trends in effluent and groundwater for EC and TDS show decreasing or stable trends, with the exception of EC and TDS in groundwater in MWs F and J. However, as noted above, concentrations in effluent are not increasing. Aggregate mining and processing at the Facility has had a negligible impact on water quality in regard to salts.
 - b. Mercury. Historic mining activities within the Yuba River watershed used mercury to amalgamate gold. Significant amounts of mercury were lost during this process, resulting in residual mercury within the Yuba River sediments and surrounding areas. However, no anthropogenic sources of mercury at the Facility have been identified. Mercury detected in the area is the result of historical gold mining where mercury was used to amalgamate gold. A soil investigation was conducted by Tetra Tech EM in 2003 to evaluate the possibility that mercury contaminated sediments related to the Yuba Goldfields may have been placed on the property. Soil samples were collected at three depths, ranging from the ground surface to six feet bgs, at 20 different locations across the Facility. The analytical results indicated that mercury levels within the soils at the Facility are within the normal background range for soils in California. Tetra Tech EM (2003) concluded that sediment containing mercury from the Yuba Goldfields does not appear to have been deposited on the Facility property. The presence of mercury in the water is not the result of the Discharger's activities or discharge.
- 48. Degradation of groundwater by some of the typical waste constituents associated with aggregate mining and processing facilities, after effective source control, treatment, and control measures are implemented, is consistent with the maximum benefit to the people of the state. The Discharger's operation provides approximately 15 jobs. The economic prosperity of valley communities and associated industry is of maximum benefit to the people of the State and provides sufficient justification for allowing the limited groundwater degradation that may occur pursuant to this Order.

49. Based on the foregoing, the adoption of this Order is consistent with State Water Board Resolution 68-16.

California Environmental Quality Act

50. The issuance of this Order, which prescribes requirements and monitoring of waste discharges at an existing facility, with negligible or no expansion of its existing use, is exempt from the procedural requirements of the California Environmental Quality Act (CEQA), Public Resources Code section 21000 et seq., pursuant to California Code of Regulations, title 14, section 15301.

Other Regulatory Considerations

- 51. These WDRs regulate a facility that may impact a disadvantaged community and/or tribal community and include an alternative compliance path that allows the Discharger time to come into compliance with a water quality objective (i.e., salinity). The Discharger has selected the Alternative Salinity Permitting Approach for the Salt Control Program, which provides an alternative approach for compliance with salinity limits through implementation of specific requirements (i.e., support facilitation and completion of the Salinity P&O Study). The Central Valley Water Board has satisfied the outreach requirements set forth in Water Code section 189.7 by conducting outreach in affected disadvantaged and tribal communities. Pursuant to Water Code section 13149.2, the Central Valley Water Board reviewed readily available information. The Board also considered environmental justice concerns within the Board's authority.
- 52. Based on the threat and complexity of the discharge (see Cal. Code of Regs., tit. 23, § 2200), the facility is determined to be classified as 3C, as defined below:
 - a. Category 3 Those discharges of waste that could degrade water quality without violating water quality objectives, or could cause a minor impairment of designated beneficial uses as compared with Category 1 and Category 2.
 - b. Category "C" Any discharger for which waste discharge requirements have been prescribed pursuant to Section 13263 of the Water Code not included in Category A or Category B as described above. Included are dischargers having no waste treatment systems or that must comply with best management practices, dischargers having passive treatment and disposal systems, or dischargers having waste storage systems with land disposal.
- 53. This Order, which prescribes WDRs for discharges of industrial process water, is exempt from the prescriptive requirements of California Code of Regulations, title 27 (Title 27), section 20005 et seq. (See Title 27, § 20090, subds. (a)-(b).)
- 54. State Water Board Order 2014-0057-DWQ (NPDES General Permit CAS000001) specifies waste discharge requirements for discharges of storm water associated

- with industrial activities and requires submittal of a Notice of Intent by all industrial dischargers within its scope. Storm water at the Facility remains on-site and is not allowed to discharge off-site. Therefore, coverage under General Order 2014-0057-DWQ (NPDES No. CAS000001) is not needed at this time.
- 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 94-81 (December 1981). These standards, and any more stringent standards adopted by the state or county pursuant to Water Code section 13801, apply to all monitoring wells used to monitor the impacts of wastewater storage or disposal governed by this Order.
- 56. Statistical data analysis methods outlined in the US EPA's Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, Unified Guidance (Unified Guidance) are appropriate for determining compliance with the Groundwater Limitations of this Order. Depending on the circumstances, other methods may also be appropriate.

Scope of Order

- 57. This Order is strictly limited in scope to those waste discharges, activities, and processes described and expressly authorized herein.
- 58. Pursuant to Water Code section 13264, subdivision (a), the Discharger is prohibited from initiating the discharge of new wastes (i.e., other than those described herein), or making material changes to the character, volume and timing of waste discharges authorized herein, without filing a new RWD per Water Code section 13260.
- 59. Failure to file a new RWD before initiating material changes to the character, volume and/or timing of discharges authorized herein shall constitute an independent violation of these WDRs.
- 60. This Order is also strictly limited in applicability to those individuals and/or entities specifically designated herein as "Discharger".

Procedural Matters

- 61. All the above, and the supplemental information and details in the attached Information Sheet (incorporated herein), were considered in establishing the following conditions of discharge.
- 62. The Discharger, interested agencies, and interested persons were notified of the Central Valley Water Board's intent to prescribe the WDRs in this Order, and provided an opportunity to submit their written views and recommendations at a public hearing. (Wat. Code, § 13167.5.)

- 63. At a public meeting, the Central Valley Water Board heard and considered all comments pertaining to the discharges regulated under this Order.
- 64. The Central Valley Water Board will review and revise the WDRs in this Order as necessary.

REQUIREMENTS

IT IS HEREBY ORDERED pursuant to Water Code sections 13263 and 13267, that the Discharger and their agents, employees, tenants, and successors shall comply with the following:

A. Discharge Prohibitions

- 1. Discharge of wastes to surface waters or surface water drainage courses is prohibited, with the possible exception of Brophy Canal. Discharges to Brophy Canal may only occur once the discharge has been properly permitted under a separate program (i.e., NPDES program).
- 2. Discharge of waste classified as "hazardous", as defined in the California Code of Regulations, title 22, section 66261.1 et seq., is prohibited.
- 3. Discharge of waste classified as "designated", as defined in Water Code section 13173, in a manner that causes violation of Groundwater Limitations, is prohibited.
- 4. No waste constituent shall be released, discharged, or placed where it will cause a violation of the Groundwater Limitations of this Order.
- Wastewater treatment, storage, and/or disposal shall not cause conditions of pollution, and/or nuisance, as those terms are defined by Water Code section 13050.
- 6. Treatment system bypass of untreated or partially treated waste is prohibited, except as allowed by Section E.2 of the SPRRs.
- 7. Discharge of waste at a location or in a manner different from that described in the Findings is prohibited.
- 8. Discharge of toxic substances into any wastewater treatment system or land application area such that biological treatment mechanisms are disrupted is prohibited.
- 9. Discharge of domestic wastewater to the excavation areas or ponds is prohibited.
- 10. Discharge of process wastewater to the domestic wastewater treatment system (septic system) is prohibited.

- 11. The use of any chemical additives in the sand/gravel wash process is prohibited.
- 12. Concrete processing of any kind is prohibited.

B. Flow Limitations

1. Effluent flows to any ponds shall not result in freeboard less than two feet, as measured from the water surface to the lowest point of overflow. If freeboard is expected to be exceeded, discharges must cease or be directed to an alternative pond until sufficient capacity is available to resume discharging.

C. Discharge Specifications

- 1. More than one excavation area and Settling/Recycling Pond may be operated at a time.
- 2. The Discharger shall operate all systems and equipment to optimize the quality of the discharge.
- 3. All conveyance, treatment, storage, and disposal systems shall be designed, constructed, operated, and maintained to prevent inundation or washout due to floods with a 100-year return frequency.
- 4. Objectionable odors shall not be identifiable outside the property boundary at an intensity that creates or threatens to create nuisance conditions that affect an entire community or neighborhood, or any considerable number of persons.
- 5. The Discharger shall design, construct, operate, and maintain all ponds sufficiently to protect the integrity of containment dams and berms and prevent overtopping and/or structural failure. 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 with calibration marks that clearly show the water level at design capacity and enable determination of available operational freeboard.
- 6. Wastewater treatment, storage, and disposal ponds or structures 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 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.
- 7. On **1 October** of each year, available capacity shall at least equal the volume necessary to comply with Discharge Specifications C.5 and C.6.

- 8. All ponds and open containment structures shall be managed to prevent breeding of mosquitoes. 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.
 - c. Dead algae, vegetation, and debris shall not accumulate on the water surface.
 - 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.

D. Groundwater Limitations

Discharge of waste at or from any portion of the Facility shall not cause or contribute to groundwater containing constituent concentrations in excess of the concentrations specified below or in excess of natural background quality, whichever is greater:

- Constituents in concentrations that exceed either the Primary or Secondary MCLs, as applicable, established in Title 22, excluding salinity since the Discharger has chosen the Alternative Option for the Salt Control Program and is in good standing with the P&O Study.
- 2. Contain taste- or odor-producing constituents, toxic substances, or any other constituent in concentrations that cause nuisance or adversely affect beneficial uses.

E. Land Application Area Specifications

1. Land application of wastewater (dust control activities, etc.) shall be managed to minimize erosion and runoff.

F. Solids Disposal Specifications

- 1. If removed from the site for disposal, sediments shall be disposed of in a manner consistent with Title 27, division 2. Removal for land disposal at facilities (i.e., landfills, composting facilities, and/or soil amendment sites operated in accordance with valid waste discharge requirements issued by a Regional Water Board) will satisfy this specification.
- 2. Any proposed change in solids use or disposal practice shall be reported in writing to the Executive Officer at least 90 days in advance of the change.

G. Provisions

- 1. In accordance with 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.
- 2. The Discharger shall submit the technical reports and work plans required by this Order for consideration and shall incorporate comments from the Central Valley Water Board in a timely manner, as appropriate. Unless expressly stated otherwise in this Order, the Discharger shall proceed with all work required by the foregoing provisions by the due dates specified.
- 3. The Discharger shall comply with Monitoring and Reporting Program **R5-2023-XXXX** 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.
- The Discharger shall comply with the SPRRs.
- 5. The Discharger shall comply with all conditions of this Order, including timely submittal of technical and monitoring reports. On or before each report due date, the Discharger shall submit the specified document to the Central Valley Water Board or, if appropriate, a written report detailing compliance or noncompliance with the specific schedule date and task. If noncompliance is being reported, then the Discharger shall state the reasons for such noncompliance and provide an estimate of the date when the Discharger will be in compliance. The Discharger shall notify the Central Valley Water Board in writing when it returns to compliance with the time schedule. Violations may result in enforcement action, including Central Valley Water Board or court orders requiring corrective action or imposing civil monetary liability, or in revision or rescission of this Order.
- 6. The Discharger shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that are installed or used by the Discharger to achieve compliance with the conditions of this Order. Proper operation and maintenance include adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems that are installed by the Discharger when the operation is necessary to achieve compliance with the conditions of this Order.

- 7. The Discharger shall use the best practicable control technique(s), including proper operation and maintenance, to comply with this Order.
- 8. As described in the SPRRs, the Discharger shall report promptly to the Central Valley Water Board any material change or proposed change in the character, location, or volume of the discharge.
- 9. In the event that the Discharger reports toxic chemical release data to the State Emergency Response Commission (SERC) pursuant to section 313 of the Emergency Planning and Community Right to Know Act (42 U.S.C. § 11023), the Discharger shall also report the same information to the Central Valley Water Board within 15 days of the report to the SERC.
- 10. At least 90 days prior to termination or expiration of any lease, contract, or agreement involving disposal or recycling areas or off-site reuse of effluent, used to justify the capacity authorized herein and assure compliance with this Order, the Discharger shall notify the Central Valley Water Board in writing of the situation and of what measures have been taken or are being taken to assure full compliance with this Order.
- 11. 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 Order by letter, a copy of which shall be immediately forwarded to the Central Valley Water Board.
- 12. To assume operation as Discharger under this Order, the succeeding owner or operator must apply in writing to the Executive Officer requesting transfer of the Order. The request must contain the requesting entity's full legal name, the state of incorporation if a corporation, the name and address and telephone number of the persons responsible for contact with the Central Valley Water Board, and a statement. The statement shall comply with the signatory paragraph of SPRRs Standard Provision B.3 and state that the new owner or operator assumes full responsibility for compliance with this Order. Failure to submit the request shall be considered a discharge without requirements, a violation of the Water Code. If approved by the Executive Officer, the transfer request will be submitted to the Central Valley Water Board for its consideration of transferring the ownership of this Order at one of its regularly scheduled meetings.
- 13. In order to rescind WDRs that are no longer necessary because the discharge to land permitted under this Order has ceased, the Discharger must contact the Central Valley Water Board to discuss appropriate wastewater treatment system closure requirements.
- 14. A copy of this Order including the MRP, Information Sheet, Attachments, and SPRRs, shall be kept at the Facility for reference by operating personnel. Key operating personnel shall be familiar with its contents.

ENFORCEMENT

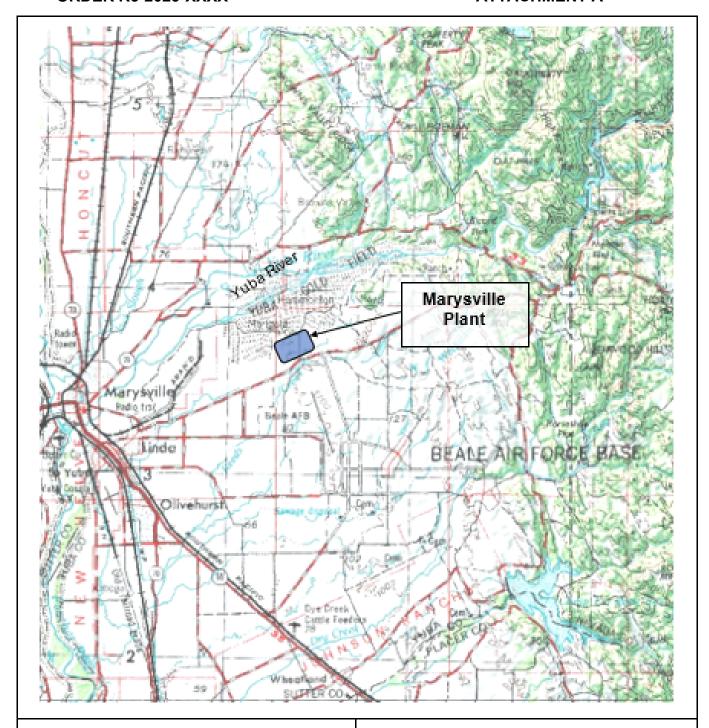
If, in the opinion of the Executive Officer, the Discharger fails to comply with the provisions of this Order, the Executive Officer may refer this matter to the Attorney General for judicial enforcement, may issue a complaint for administrative civil liability, or may take other enforcement actions.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

ADMINISTRATIVE REVIEW

Any person aggrieved by this action of the Central Valley Water Board may petition the State Water Board for administrative review in accordance with Water Code section 13320, and California Code of Regulations, title 23, section 2050 et seq. To be timely, the State Water Board must receive the petition by 5 pm on the 30th day after the date of this Order, except that if the 30th day falls on a Saturday, Sunday or State Holiday, the petition must be received by the State Water Board by 5 pm on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the Internet on the Water Boards Public Notice web page (http://www.waterboards.ca.gov/public notices/petitions/water quality).

ORDER R5-2023-XXXX

ATTACHMENT A





SITE LOCATION MAP

MARYSVILLE PLANT YUBA COUNTY

ORDER R5-2023-XXXX

ATTACHMENT B



Legend

- Groundwater Monitoring Wells
- Source Water Wells

Note: Wells are approximately located



3,000 feet

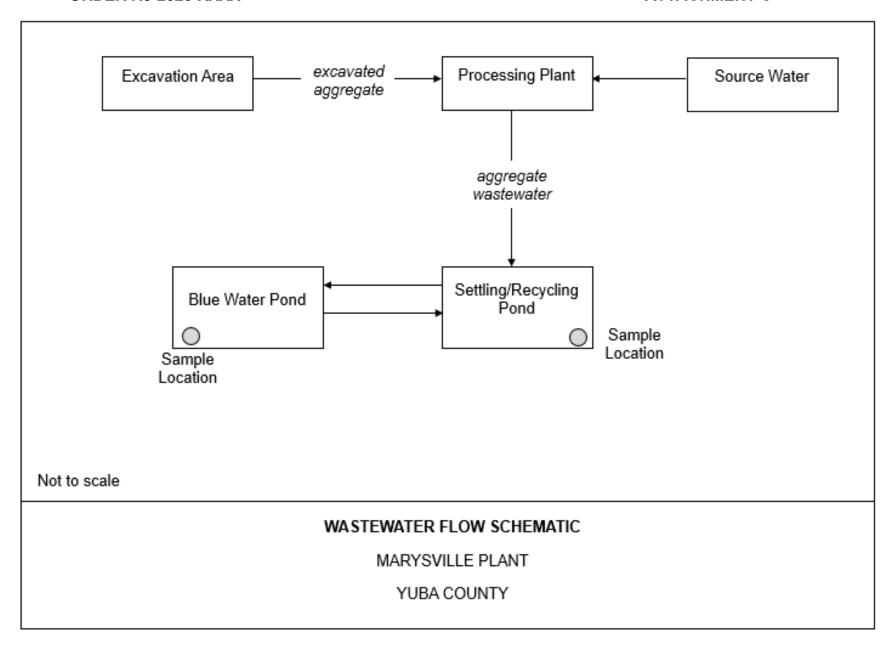
SITE FEATURES MAP

MARYSVILLE PLANT TEICHERT LAND COMPANY

YUBA COUNTY

ORDER R5-2023-XXXX

ATTACHMENT C



CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL VALLEY REGION

WASTE DISCHARGE REQUIREMENTS ORDER R5-2022-XXXX
FOR
TEICHERT LAND COMPANY
MARYSVILLE PLANT
YUBA COUNTY

INFORMATION SHEET

Background

Teichert Land Company owns and operates the aggregate mining and processing facility located at 4249 Hammonton-Smartsville Road in Yuba County. Aggregate mining at the Facility began in 2004 and consists of excavation, sorting, storage, and off-site transport of extracted aggregate and sediment. The exact locations of the gravel extraction are dynamic, and change based on new locations within the site boundary to be mined.

Wastewater Generation and Disposal

Aggregate material is excavated from an excavation area and transported to the processing plant where it is washed, screened, and sorted. Wastewater generated from washing and sorting the aggregate material is discharged to the Settling/Recycling Pond and Blue Water Pond. No chemical additives are used to process and wash the aggregate.

Effluent quality in the Settling/Recycling Pond when compared to potential WQOs (used for comparison purposes only), is considered good quality. Concentrations of monitored constituents in effluent are less than potential WQOs. Concentrations of monitored constituents in effluent have been stable over time.

Groundwater Considerations

There are seven shallow groundwater monitoring wells on-site, which have been monitoring since 2003. Depths to groundwater range from 6 to 24 feet bgs, with a horizontal groundwater flow direction to the southwest.

In general, concentrations of monitored constituents in effluent are less than or equivalent to groundwater concentrations, indicating that aggregate operations are degrading groundwater beyond current conditions. Concentration trends in groundwater are stable or decreasing, with the exception of TDS and EC in downgradient monitoring wells MWs F and J. However, all concentrations in these wells are less than potential WQOs and TDS and EC in effluent show stable and decreasing trends.

Antidegradation

Constituents and parameters of concern associated with the Facility include salts and mercury. The Discharger has monitored effluent and groundwater quality for approximately 20 years. Maximum concentrations of constituents reported in the ponds for monitoring years 2018 to 2021 are summarized below. Average concentrations of EC and TDS in groundwater are shown. NA indicates samples were not analyzed for that constituent.

Table 5. Data Comparison

| Sample Location | EC (µmhos/cm) | TDS (mg/L) | Mercury (ng/L) |
|----------------------------|------------------|---------------|-------------------|
| Blue Water Pond | 223 | 160 | 6.28 |
| Settling/Recycling Pond | 245 | 194 | 587 |
| Upgradient GW | 255 | 167 | NA |
| Downgradient GW | 281 | 182 | NA |
| Potential WQOs | 700 | 1000 | 500 |

The excavation and discharge activities at the Facility have had a negligible impact on groundwater water quality.

Discharge Prohibitions, Effluent Limitations, Discharge Specifications, and Provisions

Effluent flows to any ponds shall not result in freeboard less than two feet, as measured from the water surface to the lowest point of overflow. If freeboard is expected to be exceeded, discharges must cease or be directed to an alternative pond until sufficient capacity is available to resume discharging.

Discharges of waste or wastewater to surface water or surface water drainage courses is prohibited, with the exception of Brophy Ditch. Discharges of wastewater to Brophy Ditch may only occur once the discharge is appropriately permitted under the NPDES program.

Monitoring Requirements

Section 13267 of the California Water Code authorizes the Central Valley Water Board to require monitoring and technical reports as necessary to investigate the impact of waste discharges on waters of the State. Water Code Section 13268 authorizes assessment of civil administrative liability where appropriate. The Order includes effluent monitoring requirements. This monitoring is necessary to characterize the discharge and evaluate compliance with the requirements and specifications in the Order.

Salt and Nitrate Control Programs Regulatory Considerations

As part of the Central Valley Salinity Alternatives for Long-Term Sustainability (CV-SALTS) initiative, the Central Valley Water Board adopted Basin Plan amendments (Resolution R5-2018-0034) incorporating new programs for addressing ongoing salt and nitrate accumulation in the waters and soils of the Central Valley at its 31 May 2018 Board Meeting. On 16 October 2019, the State Water Resources Control Board adopted Resolution No. 2019-0057 conditionally approving the Central Valley Water Board Basin Plan amendments and directing the Central Valley Water Board to make targeted revisions to the Basin Plan amendments within one year from the approval of the Basin Plan amendments by the Office of Administrative Law. The Office of Administrative Law (OAL) approved the Basin Plan amendments on 15 January 2020. (OAL Matter No. 2019-1203-03).

For the Salt Control Program, the Discharger submitted a Notice to Intent and elected to participate in the Prioritization and Optimization Study (P&O Study) under the Alternative Salinity Permitting Approach. The Discharger has been assigned **CV SALTS ID number 2254**. In the interim, to maintain existing salt discharges and minimize salinity impacts, this Order requires the Discharger to continue efforts to control salinity in its discharges to the extent reasonable, feasible, and practicable.

Aggregate facilities are exempt from the Nitrate Control Program because the Facility does not discharge nitrate as nitrogen. The Discharger was notified of this exemption in a letter from the Central Valley Water Board dated 5 January 2021.

Reopener

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

Legal Effect of Rescission of Prior WDRs or Orders on Existing Violations

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