CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION
REVISED MONITORING AND REPORTING PROGRAM R5-2015-0129-001
FOR
CALIFORNIA DEPARTMENT OF CORRECTIONS AND REHABILITATION
CALIFORNIA DEPARTMENT OF FORESTRY FIRE ACADEMY
MULE CREEK STATE PRISON
AMADOR COUNTY

This revised Monitoring and Reporting Program (MRP) is issued pursuant to Water Code section 13267. The Discharger shall not implement any changes to this MRP unless and until the Central Valley Regional Water Quality Control Board (Central Valley Water Board) adopts, or the Executive Officer issues, a revised MRP. Specific sample station locations shall be approved by Regional Board staff prior to implementation of sampling activities.

Water Code section 13267 states, in part:

> "In conducting an investigation specified in subdivision (a), the regional board may require that any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste within its region, or any citizen or domiciliary, or political agency or entity of this state who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge, waste outside of its region that could affect the quality of waters within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports."

Water Code section 13268 states, in part:

> "(a) Any person failing or refusing to furnish technical or monitoring program reports as required by subdivision (b) of section 13267, or failing or refusing to furnish a statement of compliance as required by subdivision (b) of section 13399.2, or falsifying any information provided therein, is guilty of a misdemeanor and may be liable civilly in accordance with subdivision (b).
>
> (b)(1) Civil liability may be administratively imposed by a regional board in accordance with article 2.5 (commencing with section 13323) of chapter 5 for a violation of subdivision (a) in an amount which shall not exceed one thousand dollars ($1,000) for each day in which the violation occurs."

Pursuant to Water Code section 13267, the Discharger shall implement this MRP and shall submit the monitoring reports described herein.

All samples shall be representative of the volume and nature of the discharge or matrix of material sampled. The name of the sampler, sample type (grab or composite), time, date, location, bottle type, and any preservative used for each sample shall be recorded on the sample chain of custody form. The chain of custody form must also contain all custody

information including date, time, and to whom samples were relinquished. If composite samples are collected, the basis for sampling (time or flow weighted) shall be approved by Central Valley Water Board staff.

Field test instruments (such as those used to test pH, dissolved oxygen, and electrical conductivity) may be used provided that they are used by a State Water Resources Control Board, Environmental Laboratory Accreditation Program certified laboratory, or:

1. The operator is trained in proper use and maintenance of the instruments;

2. The instruments are field calibrated at the frequency recommended by the manufacturer;

3. The instruments are serviced and/or calibrated by the manufacturer at the recommended frequency; and

4. Field calibration reports are maintained and submitted as described in the “Reporting” section of the MRP.

Laboratory analytical procedures shall comply with the methods and holding times specified in the following: Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater (EPA); Test Methods for Evaluating Solid Waste (EPA); Methods for Chemical Analysis of Water and Wastes (EPA); Methods for Determination of Inorganic Substances in Environmental Samples (EPA); Standard Methods for the Examination of Water and Wastewater (APHA/AWWA/WEF); and Soil, Plant and Water Reference Methods for the Western Region (WREP 125). Accepted editions shall be those that are approved for use by the United States Environmental Protection Agency or the California Department of Public Health’s Environmental Laboratory Accreditation Program. The Discharger may propose alternative methods for approval by the Executive Officer. Where technically feasible, laboratory reporting limits shall be lower than the applicable water quality objectives for the constituents to be analyzed.

## WASTEWATER TRANSMISSION LINES

The California Department of Forestry Fire Academy shall monitor the collection system and wastewater pipeline on its property on a monthly basis for pipe anomalies, cracks, overflows, or leaks. A copy of all monitoring inspections shall be submitted to California Department of Corrections and Rehabilitation (CDCR) and shall be included in the CDCR’s monthly reports to the Central Valley Water Board.

CDCR shall monitor the collection system and wastewater pipeline, including the Preston Youth Authority Facility and the transmission pipeline on its property, that connects to the Ione Tertiary Plant, on a monthly basis for pipe anomalies, cracks, overflows, or leaks. A copy of all monitoring inspections shall be submitted to shall be included in the CDCR’s monthly reports to the Central Valley Water Board.

## INFLUENT MONITORING

Influent monitoring shall include, at a minimum, the following:

| Constituent/Parameter | Units | Sample Type | Monitoring Frequency | Reporting Frequency |
|---|---|---|---|---|
| Flow, see note No.1 | gpd | Meter Observation | Continuous | Monthly |
| $BOD_5$, see note No.2 | mg/L | Grab | Monthly | Monthly |
| pH | | Grab | Monthly | Monthly |
| Total Suspended Solids | mg/L | Grab | Monthly | Monthly |
| Electrical Conductivity | µmhos/cm | Grab | Monthly | Monthly |
| Volatile Organic Compounds (VOCs), see note No.3 | µg/L | Grab | Weekly | Monthly |
| Semi Volatile Organic Compounds (SVOCs), see note No.4 | µg/L | Grab | Weekly | Monthly |

Notes:

1. Total flow coming into the WWTP must be reported, as well as individual flow values for the Old Prison, MCIC, Preston Youth Authority, and Cal Fire facilities.
2. BOD5 is 5-day biochemical oxygen demand.
3. VOCs shall be analyzed by EPA method 8260B or equivalent. Analysis shall include the full list of VOC analytes.
4. SVOCs shall be analyzed by EPA method 8270E or equivalent. Analysis shall include the full list of SVOC analytes.

## EFFLUENT MONITORING

CDCR shall collect effluent samples immediately downstream of disinfection system and prior to entering into the storage reservoir. At a minimum, effluent monitoring shall include the following:

| Constituent | Units | Sample Type | Sampling Frequency | Reporting Frequency |
|---|---|---|---|---|
| Flows, see note No.1 | gpd | Meter Observation | Continuous | Monthly |
| Total Coliform Organisms, see note No.2 | MPN /100 mL | Grab | Weekly | Monthly |
| $BOD_5$ | mg/L | Grab | Monthly | Monthly |
| Total Dissolved Solids | mg/L | Grab | Monthly | Monthly |
| Electrical Conductivity | µmhos/cm | Grab | Monthly | Monthly |
| Nitrate Nitrogen | mg/L | Grab | Monthly | Monthly |

| Constituent | Units | Sample Type | Sampling Frequency | Reporting Frequency |
|---|---|---|---|---|
| Total Kjeldahl Nitrogen | mg/L | Grab | Monthly | Monthly |
| Sodium | mg/L | Grab | Monthly | Monthly |
| Chloride | mg/L | Grab | Monthly | Monthly |
| pH | Standard | Grab | Monthly | Monthly |
| Volatile Organic Compounds (VOCs), see note No.3 | µg/L | Grab | Weekly | Monthly |
| Semi Volatile Organic Compounds (SVOCs), see note No.4 | µg/L | Grab | Weekly | Monthly |
| Standard Minerals, see note No. 5 | mg/L | Grab | Annually | Annually |

Notes:

1. Flows sent to the Ione Tertiary Treatment Plant, Effluent Storage Reservoir and each LAAs, respectively.
2. Using a minimum of 15 tubes or three dilutions
3. VOCs shall be analyzed by EPA method 8260B or equivalent. Analysis shall include the full list of VOC analytes.
4. SVOCs shall be analyzed by EPA method 8270E or equivalent. Analysis shall include the full list of SVOC analytes.
5. Standard minerals shall include, at a minimum, the following elements and compounds: arsenic, boron, calcium, dissolved iron, magnesium, dissolved manganese, potassium, sulfate, total alkalinity (including alkalinity series), and hardness. Samples for metals analysis shall be filtered prior to preservation and digestion using a 0.45-micron filter.

## EFFLUENT STORAGE RESERVOIR MONITORING

CDCR shall collect samples from an established sampling station located in an area that will provide a sample representative of the wastewater in the effluent storage reservoir. Freeboard shall be measured vertically from the surface of the pond water to the lowest elevation of the surrounding berm and shall be measured to the nearest 0.1 feet. Monitoring of the storage reservoir shall include, at a minimum, the following:

| Constituent | Units | Sample Type | Monitoring Frequency | Reporting Frequency |
|---|---|---|---|---|
| Dissolved Oxygen, see note No.1 | mg/L | Grab | Weekly | Monthly |

| Constituent | Units | Sample Type | Monitoring Frequency | Reporting Frequency |
|---|---|---|---|---|
| Volatile Organic Compounds (VOCs), see note No.2 | µg/L | Grab | Weekly | Monthly |
| Semi Volatile Organic Compounds (SVOCs), see note No.3 | µg/L | Grab | Weekly | Monthly |
| pH | Standard | Grab | Weekly | Monthly |
| Freeboard | 0.1 feet | Measurement | Weekly | Monthly |
| Odors | -- | Observation | Weekly | Monthly |
| Levee Condition, see note No.4 | -- | Observation | Weekly | Monthly |

Notes:

1. Samples shall be collected at a depth of one foot from each pond in use, opposite the inlet.
2. VOCs shall be analyzed by EPA method 8260B or equivalent. Analysis shall include the full list of VOC analytes.
3. SVOCs shall be analyzed by EPA method 8270E or equivalent. Analysis shall include the full list of SVOC analytes.
4. Containment levees shall be observed for signs of seepage or surfacing water along the exterior toe of the levees. If surfacing water is found, then a sample shall be collected and tested for total fecal coliform organisms and electrical conductivity. If any signs of seepage are observed on containment levees the Division of Safety of Dams should be immediately notified.

## LAND APPLICATION AREA MONITORING

CDCR shall monitor the LAAs on an **hourly basis** effluent is being applied. Effluent shall be evenly distributed to the LAAs. Evidence of erosion, field saturation, irrigation runoff, or the presence of nuisance conditions shall be noted in a daily log and be submitted with the monthly monitoring reports. If the LAAs are not used, then the monthly monitoring reports shall state so. Effluent monitoring results shall be used in calculations to ascertain loading rates at the LAAs. Monitoring of the LAAs shall include the following:

| Constituent | Units | Sample Type | Sampling Frequency | Reporting Frequency |
|---|---|---|---|---|
| Flow to Each LAA, see note No.1 | gpd | Meter observation | Daily | Monthly |
| Acreage Applied | acres | Calculated | Daily | Monthly |

| Constituent | Units | Sample Type | Sampling Frequency | Reporting Frequency |
|---|---|---|---|---|
| Water Application Rate, see note No.2 | inches/day | Calculated | Daily | Monthly |
| Total Nitrogen Loading Rate, see note No. 2 | lbs./ac/month | Calculated | Monthly | Monthly |
| Rainfall, see note No. 3 | inches | Observation | Daily | Monthly |
| Tailwater Runoff Observation | -- | Observation | Daily | Monthly |
| Mule Creek Observation, see note No. 4 | -- | Observation | Daily | Monthly |

Notes:

1. Specific LAAs in use shall be identified.
2. Calculated average for each LAA in use.
3. Rainfall data to be collected from the weather station that is nearest to the LAAs. Alternatively, a rain gauge may be installed at the site.
4. On all days that effluent is land applied the condition of Mule Creek must be observed upstream and downstream of the Mule Creek State Prison property, at the property boundary. Observations should include presence/absence of nearby standing water and/or flow. If measurable water is observed at the downstream location in Mule Creek between 15 May and 15 October and it has not rained within the previous 24 hours a sample must be collected. Samples must be analyzed for all constituents listed in the Surface Water Monitoring section below. If a downstream sample is collected and flow is also observed at the upstream location, then an upstream sample must also be collected and analyzed for all constituents listed in the Surface Water Monitoring section below.

## GROUNDWATER MONITORING

CDCR shall conduct the following groundwater monitoring program. This groundwater sampling and analysis program applies to all groundwater monitoring wells installed at the site.

Prior to sampling, depth to groundwater measurements shall be measured in each monitoring well to the nearest 0.01 feet. Groundwater elevations shall then be calculated to determine groundwater gradient and flow direction. Monitoring wells to be sampled shall be purged of at least three well volumes until temperature, pH, and electrical conductivity have stabilized. Low or no-purge sampling methods are acceptable, if described in an approved Sampling and Analysis Plan. Samples shall be collected and analyzed using standard EPA methods. Groundwater monitoring shall include, at a minimum, the following:

| Constituent | Units | Sample Type | Sampling Frequency | Reporting Frequency |
|---|---|---|---|---|
| Groundwater Elevation, see note No.1 | 0.01 feet | Calculated | Quarterly | Quarterly |
| Depth to Groundwater | 0.01 feet | Measurement | Quarterly | Quarterly |
| Gradient | feet/foot | Calculated | Quarterly | Quarterly |
| Gradient Direction | degrees | Calculated | Quarterly | Quarterly |
| pH | Standard | Grab | Quarterly | Quarterly |
| Total Dissolved Solids | mg/L | Grab | Quarterly | Quarterly |
| Electrical Conductivity | µmhos/cm | Grab | Quarterly | Quarterly |
| Nitrate as Nitrogen | mg/L | Grab | Quarterly | Quarterly |
| Total Kjeldahl Nitrogen | mg/L | Grab | Quarterly | Quarterly |
| Total Coliform Organisms, see note No.2 | MPN/100 mL | Grab | Quarterly | Quarterly |
| Volatile Organic Compounds, see note No. 3 | µg/L | Grab | Quarterly | Quarterly |
| Semi Volatile Organic Compounds (SVOCs), see note No.4 | µg/L | Grab | Quarterly | Quarterly |
| Total Trihalomethanes, see note No.5 | µg/L | Grab | Annually | Annually |
| Standard Minerals, see note No. 6 | mg/L | Grab | Annually | Annually |

Notes:

1 Groundwater elevations shall be based on depth-to-water using a surveyed measuring point elevation on the well and a surveyed reference elevation.

2 Using a minimum of 15 tubes or three dilutions.

3 VOCs shall be analyzed by EPA Method 8260B or equivalent. Analysis shall include the full list of VOC analytes.

4 SVOCs shall be analyzed by EPA method 8270E or equivalent. Analysis shall include the full list of SVOC analytes

5 Individual trihalomethane constituent concentrations shall be reported (EPA Method 8260B or equivalent).

6 Standard Minerals shall include, at a minimum, the following elements and compounds: arsenic, boron, calcium, chloride, dissolved iron, magnesium, dissolved manganese, potassium, sodium, sulfate, total alkalinity (including alkalinity series), and hardness. Samples for metals shall be filtered prior to preservation and digestion using a 0.45-micron filter.

## SURFACE WATER MONITORING

CDCR shall establish two surface sampling stations in Mule Creek. These sampling stations shall be within 50 feet of the Mule Creek State Prison property line, one at an upstream

location and one at a downstream location. The surface water monitoring program shall apply only when water is visibly present in the Mule Creek surrounding the prison. If measurable water is not present at any of the sampling station, then the monthly monitoring report shall state so. Samples of the surface water shall be analyzed forthe following:

| Constituent | Units | Sample Type | Sampling Frequency | Reporting Frequency |
|---|---|---|---|---|
| Electrical Conductivity | µmhos/cm | Grab | Twice-monthly, see note No. 1 | Monthly |
| Total Fecal Coliform Organisms, see note No. 2 | MPN/100 mL | Grab | Twice-monthly, see note No. 1 | Monthly |
| VOCs, see note No. 3 | µg/L | Grab | Twice-monthly, see note No. 1 | Monthly |

1 Twice-weekly shall mean two observations per week, 3 days apart

2 Using a minimum of 15 tubes or three dilutions.

3 VOCs shall be analyzed by EPA Method 8260B or equivalent. Analysis shall include the full list of VOC analytes.

## WATER SUPPLY MONITORING

CDCR shall complete the following water supply monitoring. A sampling station shall be established where a representative sample of the municipal water supply can be obtained. Municipal water supply monitoring shall include at least the following for each water source used during the previous year. As an alternative to annual water supply monitoring, CDCR may submit results of the most current municipal water supply monitoring data for Division of Drinking Water Program.

| Constituent | Units | Sampling Frequency | Reporting Frequency |
|---|---|---|---|
| Total Dissolved Solids | mg/L | Annually | Annually |
| pH | pH units | Annually | Annually |
| Standard Minerals | mg/L | Annually | Annually |

Note: Standard Minerals shall include, at a minimum, the following elements and compounds: boron, calcium, chloride, iron, magnesium, manganese, nitrate as nitrogen, potassium, sodium, sulfate, total alkalinity (including alkalinity series), and hardness. Include verification that the analysis is complete (i.e., cation/anion balance).

## DOMESTIC WELL MONITORING

CDCR shall conduct the following groundwater monitoring program of all active domestic wells associated with the addresses listed below.

- 3470 Hwy 104, Ione, CA
- 10805 5 Mile Drive, Ione, CA
- 11300 Winter Road, Ione, CA
- 10555 5 Mile Drive, Ione, CA
- 11300 Collins Road, Ione, CA
- 10105 5 Mile Drive, Ione, CA
- 9305 Dave Brubeck Road, Ione, CA

Prior to sampling, depth to groundwater measurements shall be measured in each monitoring well to the nearest 0.01 feet. For domestic supply wells where a top of casing elevation is known, groundwater elevations shall then be calculated to determine groundwater gradient and flow direction. Domestic water supply wells to be sampled shall be purged of at least three well volumes until temperature, pH, and electrical conductivity have stabilized. Low or no-purge sampling methods are acceptable, if described in an approved Sampling and Analysis Plan. Samples shall be collected and analyzed using standard EPA methods. Groundwater monitoring shall include, at a minimum, the following:

| Constituent | Units | Sample Type | Sampling Frequency | Reporting Frequency |
|---|---|---|---|---|
| Groundwater Elevation, see note No.1 | 0.01 feet | Calculated | Quarterly | Quarterly |
| Depth to Groundwater | 0.01 feet | Measurement | Quarterly | Quarterly |
| Gradient | feet/foot | Calculated | Quarterly | Quarterly |
| Gradient Direction | degrees | Calculated | Quarterly | Quarterly |
| pH | Standard | Grab | Quarterly | Quarterly |
| Total Dissolved Solids | mg/L | Grab | Quarterly | Quarterly |
| Electrical Conductivity | µmhos/cm | Grab | Quarterly | Quarterly |
| Nitrate as Nitrogen | mg/L | Grab | Quarterly | Quarterly |
| Total Kjeldahl Nitrogen | mg/L | Grab | Quarterly | Quarterly |
| Total Coliform Organisms, see note No. 2 | MPN/100 mL | Grab | Quarterly | Quarterly |
| Volatile Organic Compounds, see note No. 3 | µg/L | Grab | Quarterly | Quarterly |
| Total Trihalomethanes, see note No. 4 | µg/L | Grab | Annually | Annually |

| Constituent | Units | Sample Type | Sampling Frequency | Reporting Frequency |
|---|---|---|---|---|
| Semi Volatile Organic Compounds (SVOCs), see note No. 5 | µg/L | Grab | Quarterly | Quarterly |
| Standard Minerals, see note No. 6 | mg/L | Grab | Annually | Annually |

Notes:

1 Groundwater elevations shall be based on depth-to-water using a surveyed measuring point elevation on the well to a surveyed reference elevation.

2 Using a minimum of 15 tubes or three dilutions.

3 VOCs shall be analyzed by EPA Method 8260B or equivalent. Analysis shall include the full list of VOC analytes.

4 Individual trihalomethane constituent concentrations shall be reported (EPA Method 8260B or equivalent).

5 SVOCs shall be analyzed by EPA method 8270E or equivalent. Analysis shall include the full list of SVOC analytes

6 Standard Minerals shall include, at a minimum, the following elements and compounds: arsenic, boron, calcium, chloride, dissolved iron, magnesium, dissolved manganese, potassium, sodium, sulfate, total alkalinity (including alkalinity series), and hardness. Samples for metals shall be filtered prior to preservation and digestion using a 0.45-micron filter.

## SOLIDS/SLUDGE DISPOSAL MONITORING

CDCR shall keep records regarding the quantity of biosolids and residual sludge generated by the treatment processes; any sampling and analytical data; the quantity of biosolids and residual sludge stored on site; and the quantity removed for disposal. The records shall also indicate the steps taken to reduce objectionable odors and other nuisance conditions. Records shall be stored onsite and available for review during inspections.

If biosolids are transported off-site for disposal, then the Discharger shall submit records identifying the hauling company, the amount of biosolids transported, the date removed from the facility, the location of disposal, and copies of all analytical data required by the entity accepting the waste. All records shall be submitted as part of the Annual Monitoring Report.

## REPORTING

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

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

Central Valley Regional Water Quality Control Board
ECM Mailroom
11020 Sun Center Drive, Suite 200
Rancho Cordova, California 95670

Please include a transmittal sheet that includes the following:

Attention: Compliance/Enforcement Section
California Department of Corrections and Rehabilitation
Mule Creek State Prison Wastewater Treatment Plant
Amador County
Place ID: 241842

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

Laboratory analysis reports shall be included in the monitoring reports. For a Discharger conducting any of its own analyses, reports must also be signed and certified by the chief of the laboratory.

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

As required by the California Business and Professions Code Sections 6735, 7835, and 7835.1, all groundwater monitoring reports shall be prepared under the direct supervision of a registered professional engineer or geologist and signed by the registered professional.

If violations occur, the Discharger shall notify the Central Valley Water Board within 10 business days after receiving the analytical laboratory reports.

## A. Monthly Monitoring Reports

CDCR shall submit Monthly Monitoring Reports to the Central Valley Water Board by the **1st day of the second month** following the end of the reporting period (i.e. the January monthly report is due by 1 March). At a minimum, the reports shall include:

1. Results of the collection system, pump stations, wastewater transmission line, influent, effluent, storage reservoir, land application area, and surface water monitoring;

2. Copies of inspection log entries for all facilities, collection systems, and wastewater transmission pipelines described herein;

3. A comparison of the monitoring data to the discharge specifications and an explanation of any violation of those requirements. Data shall be presented in tabular format.

4. Copies of laboratory analytical report(s); and

5. A calibration log verifying calibration of all handheld monitoring instruments and devices used to comply with the prescribed monitoring program.

**B. Quarterly Monitoring Reports**

CDCR shall establish a quarterly sampling schedule for groundwater monitoring such that samples are obtained approximately every three months. Quarterly monitoring reports shall be submitted to the Board by the **1st day of the second month after the quarter** (i.e. the January-March quarter is due by May 1st) each year. The Quarterly Report shall include the following:

1. Results of groundwater monitoring;

2. A narrative description of all preparatory, monitoring, sampling, and sample handling for groundwater monitoring. The narrative shall be sufficiently detailed to verify compliance with the WDRs, this MRP, and the Standard Provisions and Reporting Requirements. The narrative shall be supported by field logs for each well documenting depth to groundwater; parameters measured before, during, and after purging; method of purging; calculation of casing volume; and total volume of water purged; sample preparation (e.g., filtering); and sample preservation.

3. Calculation of groundwater elevations, an assessment of groundwater flow direction and gradient on the date of measurement, comparison of previous flow direction and gradient data, and discussion of seasonal trends if any;

4. A narrative discussion of the analytical results for all groundwater locations monitored including spatial and temporal tends, with reference to summary data tables, graphs, and appended analytical reports (as applicable);

5. A comparison of monitoring data to the groundwater limitations and an explanation of any violation of those requirements;

6. Summary data tables of historical and current water table elevations and analytical results;

7. A scaled map showing relevant structures and features of the facility, the locations of monitoring wells and any other sampling stations, and groundwater elevation contours referenced to mean sea level datum;

8. Copies of laboratory analytical report(s) for groundwater monitoring.

## C. Annual Monitoring Reports

CDCR shall submit an Annual Monitoring Report to the Central Valley Water Board by **1 February** of each year. This report shall be submitted separately from monthly and quarterly monitoring reports. The Annual Report shall include the following:

The annual total influent flow and average dry weather influent flow for the year; and a comparison of these results to the flow limitations of this Order;

1. Summary of the monthly and annual total effluent flow discharged to the LAAs and the Ione Tertiary Treatment Plant.

2. Annual Volatile Organic Compound Monitoring Data and Treatment Analysis, which shall include a data summary for all VOCs monitoring for influent, effluent, reservoir, and groundwater and analysis.

3. An evaluation of the wastewater quality and comparison to the groundwater quality. Determination of whether the results reveal a previously unidentified threat to water quality or indicate a change in waste character such that the discharge poses a threat to water quality. This shall be determined by comparing the annual average concentration of the effluent quality during the calendar year to the corresponding concentration of the groundwater.

4. A digital database (Microsoft Excel) containing historic groundwater, influent and effluent data;

5. Concentration vs. time graphs for each monitored constituent using all historic groundwater monitoring data. Each graph shall show the background groundwater concentration range and the Groundwater Limitation as horizontal lines at the applicable concentration;

6. An evaluation of the groundwater quality beneath the site and determination of Compliance with Groundwater Limitations of the WDRs based on statistical analysis for each constituent monitored for each downgradient well. Include all calculations and data input/analysis tables derived from use of statistical software as applicable;

7. A discussion of compliance and the corrective action taken, as well as any planned or proposed actions needed to bring the discharge into full compliance with the waste discharge requirements.

8. A discussion of the following:

   a. Waste constituent reduction efforts implemented in accordance with any required workplan;

   b. Other treatment or control measures implemented during the calendar year either voluntarily or pursuant to the WDRs, this MRP, or any other Order;

   c. Based on monitoring data, an evaluation of the effectiveness of the treatment or control measures implemented to date.

9. A discussion of any data gaps and potential deficiencies or redundancies in the monitoring system or reporting program.

10. A forecast of influent flows predicted for the next year.

11. Summary of information on the disposal of sludge and/or solid waste, including the quantity, disposal locations and dates, and the hauler names; and

12. Monitoring equipment maintenance and calibration records, as described in Standard Provision C.4.

## D. State Water Board Volumetric Annual Reporting

Per State Water Resources Control Board's Water Quality Control Policy (https://www.waterboards.ca.gov/water_issues/programs/water_recycling_policy/), amended in December 2018, dischargers of treated wastewater and recycled waterare required to report annually monthly volumes of influent, wastewater produced, and effluent, including treatment level and discharge type. The Discharger shall submit an annual report to the State Water Board by **April 30 of each calendar year** furnished with the information detailed below. The Discharger must submit thisannual report containing monthly data in electronic format via the State Water Board's Internet GeoTracker system (http://geotracker.waterboards.ca.gov/). Required data shall be submitted to the GeoTracker database under a site-specificglobal identification number. Any data will be made publicly accessible as machinereadable datasets. The Discharger must report all applicable items listed below:

1. **Influent.** Monthly volume of wastewater collected and treated by the wastewater treatment plant.

2. **Production.** Monthly volume of wastewater treated, specifying level of treatment.

3. **Discharge.** Monthly volume of treated wastewater discharged to land, where beneficial use is not taking place, including evaporation or percolation ponds, overland flow, or spray irrigation disposal, excluding pasture of fields with harvested grounds.

4. **Reuse.** Monthly volume of recycled water distributed.

5. **Reuse Categories.** Annual volume of treated wastewater distributed for

beneficial use in compliance with California Code of Regulations, Title 22 in each of the use categories listed below:

a. Agricultural irrigation: pasture or crop irrigation.

b. Landscape irrigation: irrigation of parks, greenbelts, and playgrounds; school yards; athletic fields; cemeteries; residential landscaping, common areas; commercial landscaping; industrial landscaping; and freeway, highway, and street landscaping.

c. Golf course irrigation: irrigation of golf courses, including water used to maintain aesthetic impoundments within golf courses.

d. Commercial application: commercial facilities, business use (such as laundries and office buildings), car washes, retail nurseries, and appurtenant landscaping that is not separately metered.

e. Industrial application: manufacturing facilities, cooling towers, process water, and appurtenant landscaping that is not separately metered.

f. Geothermal energy production: augmentation of geothermal fields.

g. Other non-potable uses: including but not limited to dust control, flushing sewers, fire protection, fill stations, snow making, and recreational impoundments.

h. Groundwater recharge: the planned use of recycled water for replenishment of a groundwater basin or an aquifer that has been designated as a source of water supply for a public water system. Includes surface or subsurface application, except for seawater intrusion barrier use.

i. Reservoir water augmentation: the planned placement of recycled water into a raw surface water reservoir used as a source of domestic drinking water supply for a public water system, as defined in section 116275 of the Health and Safety Code, or into a constructed system conveying water to such a reservoir (Water Code § 13561).

j. Raw water augmentation: the planned placement of recycled water into a system of pipelines or aqueducts that deliver raw water to a drinking water treatment plant that provides water to a public water system as defined in section 116275 of the Health and Safety Code (Water Code§ 13561).

k. Other potable uses: both indirect and direct potable reuse other than for groundwater recharge, seawater intrusion barrier, reservoir water augmentation, or raw water augmentation.

A letter transmitting the monitoring reports shall accompany each report. The letter shall report violations found during the reporting period, and actions taken or planned to correct the violations and prevent future violations. The transmittal letter shall contain the following penalty of perjury statement and shall be signed by the Discharger or the Discharger's authorized agent:

*“I certify under penalty of law that I have personally examined and am familiarwith the information submitted in this document and all attachments*

> *and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."*

The Discharger shall implement the above monitoring program on the first day of the month following issuance of this revised MRP.

This Order is issued under authority delegated to the Executive Officer by the Central Valley Water Board pursuant to Resolution R5-2018-0057 and is effective upon signature.

Ordered by: Original Digitally Signed by John J. Baum
on Date: 2021.10.21 15:45:42-07'00'

for PATRICK PALUPA, Executive Officer