



# Central Valley Regional Water Quality Control Board

26 December 2023

Michael Knight
City of Porterville – Public Works Dept.
291 N. Main Street
Porterville, CA 93257

CERTIFIED MAIL 7018 0360 0000 1932 6754

#### NOTICE OF APPLICABILITY

STATE WATER RESOURCES CONTROL BOARD WQ 2016-0068-DDW-R5026 WATER RECLAMATION REQUIREMENTS FOR RECYCLED WATER USE CITY OF PORTERVILLE; PORTERVILLE RECYCLED WATER PROJECT TULARE COUNTY

Central Valley Regional Water Quality Control Board (Central Valley Water Board) staff reviewed the Notice of Intent (NOI) submitted by the City of Porterville (City) for regulatory coverage under Water Quality Order WQ 2016-0068-DDW, *Water Reclamation Requirements for Recycled Water Use* (Recycling General Order or General Order). The NOI included the City of Porterville's Recycled Water Use Guidelines and a Title 22 Engineering Report for the Porterville Tertiary Treatment System and Recycled Water Infrastructure Project, dated February 2021. Supplemental information including a Report of Waste Discharge (RWD) and Addendum submitted in support of the construction of the Tertiary Treatment System were submitted on 16 August and 23 September 2022, respectively. On 28 September 2023 the City submitted a revised Final Title 22 Engineering Report and conditional approval letter from the State Water Resources Control Board's Division of Drinking Water (DDW).

The City owns and operates the City of Porterville Wastewater Treatment Facility (WWTF), which serves the City of Porterville and the nearby community of Porter Vista in southeastern Tulare County. The Facility is currently regulated by Waste Discharge Requirements (WDRs) Order R5-2008-0034 for the discharge of undisinfected secondary-treated effluent to the City-owned Reclamation Area where it is used to irrigate feed and fodder crops or discharged directly to about 60 acres of percolation ponds when irrigation demand is low. According to the NOI the City will construct the satellite Tertiary Treatment System to provide disinfected tertiary treated effluent for

MARK BRADFORD, CHAIR | PATRICK PULUPA, ESQ., EXECUTIVE OFFICER

unrestricted reuse, including on property not owned by the City, as part of the proposed Porterville Recycled Water Project.

On 7 June 2016, the State Water Resources Control Board adopted the Recycling General Order to regulate the use of recycled water for all Title 22 uses except groundwater recharge. The Recycling General Order delegates responsibility for administering water recycling programs to a designated Administrator. Based on the information provided in the NOI and accompanying RWD and final Title 22 Engineering Report, the Porterville Recycled Water Project satisfies the general and specific conditions of the Recycling General Order. Therefore, this serves as formal notice that the Recycling General Order WQ 2016-0068-DDW is applicable to the discharge described below. The City will act as the Administrator for the Porterville Recycled Water Project. You are hereby assigned enrollee number **WQ-2016-0068-DDW-R5026**. Please include this number on all future correspondence related to this discharge.

# Prior to conveying disinfected tertiary-treated recycled water from the Facility to the Eagle Mountain Casino the City shall:

- 1) Complete an initial cross-connection (shutdown) test on both the potable and recycled water systems for the Eagle Mountain Casino Dual Plumbed System prior to operation. Cross-connection control inspection and testing must include:
  - a. An initial visual inspection prior to system operation for both potable and recycled water sides.
  - b. An initial cross-connection test prior to system operation on both the potable and recycled water sides.

You should familiarize yourself with the entire Recycling General Order and its attachments enclosed with this letter, which describe mandatory discharge and monitoring requirements. Sampling, monitoring, and reporting requirements applicable to your recycled water program must be completed in accordance with the attached Monitoring and Reporting Program (MRP) No. **2016-0068-DDW-R5026**. This MRP was developed after review of your NOI and accompanying Title 22 Engineering Report as described in the attached Technical Memorandum.

#### PROJECT DESCRIPTION

The City's WWTF has a design treatment capacity of 8.0 million gallons per day (mgd) and discharges secondary undisinfected effluent to percolation ponds and for irrigation of feed and fodder crops. According to the NOI, a portion of the secondary undisinfected effluent (up to 0.308 mgd) will be diverted to the Tertiary Treatment System, which will provide tertiary disinfected wastewater for unrestricted reuse. The Tertiary Treatment

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System consists of secondary effluent diversion pump, skid mounted ultra filtration modules, chlorine disinfection system, a one-million-gallon aboveground storage tank, and recycled water distribution system. Backwash water and off-spec recycled water will be discharged back to the sanitary sewer system and returned to the WWTF.

Attachment A includes a process Flow Diagram for the Tertiary Treatment System.

According to the NOI, the City will provide disinfected tertiary recycled water for landscape irrigation at the City-owned Porterville Sports Complex and the new Eagle Mountain Casino. Additional uses of the disinfected tertiary recycled water will include indoor non-potable uses (i.e., flushing toilets and urinals) within the Eagle Mountain Casino Complex. In addition, the City may expand future recycled water uses to include irrigation of food corps on nearby farmland and landscape irrigation on public properties. Proposed and potential Use Areas for tertiary disinfected recycled water are shown in **Attachment B**.

Since the Tertiary Treatment System is designed to offset potable water demand for the Eagle Mountain Casino, peak irrigation demand at the Sports Complex will require supplemental irrigation water. This water source will also provide backup utility in the event of a shut down at the Tertiary Treatment System. Supplemental water will be connected to the system by the recycled water storage tank through a legal air-gap connection at the top of the tank.

Cross-connection testing of the recycled water system including the dual-plumbed system at Eagle Mountain Casino will be done prior to start up with annual inspections and retesting done at least once every four years by an American Water Works Association (AWWA) certified cross-connection specialist. At the Porterville Sports Complex the existing irrigation system will be retrofitted to convert it for use of recycled water and all existing connections to the potable water supply will be permanently cut. Drinking water fountains, restrooms, fire hydrants, and concession facilities within the Sports Complex will remain connected to the existing potable water lines and protected from cross connections.

#### RECYCLED WATER APPLICATION

The City proposes to administer the recycled water program for use of disinfected tertiary recycled water for irrigation of landscaping of large common areas such as the City owned Porterville Sports Complex at 2701 W. Scranton Avenue as well as for landscape irrigation and non-potable uses (i.e., toilets, urinals, etc.) for the new Eagle Mountain Casino Complex (on Federal Trust Land operated by the Tule River Indian Tribe) at 2760 Yowlumne Avenue. Future recycled use areas may include irrigation of food crops on an existing orchard, and public landscaped areas at the Porterville Fairgrounds, Porterville Municipal Airport, and OHV Park.

As the sole "Administrator", The City will be responsible for administration of the Porterville Recycled Water Project authorized herein, including the requirements of

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## **DIVISION OF DRINKING WATER (DDW) CONSIDERATIONS AND REQUIREMENTS**

The City submitted a Title 22 Engineering Report for the Porterville Recycled Water Project, dated February 2021 to DDW for review. On 28 September 2023 the City submitted a revised Final Title 22 Engineering Report dated February 2023 along with a Dual-Plumbed Recycled Water System Engineering Report for the Eagle Mountain Casino. The submittal included a letter dated 26 September 2023 from DDW conditionally approving the Title 22 Engineering Report. On 26 October 2023 DDW submitted a second letter conditionally approving the Dual-Plumbed Recycled Water Engineering Report for Eagle Mountain Casino.

#### DDW's approval is contingent on:

- 1. Performance of a cross-connection (shutdown) test prior to the use of the recycled water system. Cross connection testing must include:
  - a. An initial cross-connection test prior to system operations.
  - b. Annual visual inspections of both the potable and recycled water sides.
  - c. Retesting of both the potable and recycled water sides at least once every four years.
  - d. Retesting on both the potable and recycled water sides when there is a material reason to believe that the potable or recycled water system has been compromised.
  - e. Retesting on both the potable and recycled water sides following remediation of a discovered cross-connection.
- 2. Separation of potable water and recycled water pipelines shall be maintained in accordance with Title 22 section 64572. Any modifications, replacements, and/or improvements proposed to the potable or recycled water pipelines must be provided to DDW for review and approval.
- 3. The 100 percent as-built plans for the project's potable and recycled water systems must be available for reference prior to the cross-connection inspection and testing. The plans shall be maintained, as needed, to reflect the current layout of the potable and recycled water pipelines and appurtenances.

- 4. All records of cross-connection testing, visual inspections, and operating records shall be maintained in an easily accessible central repository.
- 5. No irrigation with, or impoundment of, disinfected tertiary recycled water shall take place within 100 feet of any domestic water supply well.
- 6. Any portions of the recycled water piping system that are in areas that may be accessed by the public shall not be equipped with hose bibs.
- 7. Spray, mist, or runoff shall not enter dwellings, designated outdoor eating areas, or food handling facilities.
- 8. Drinking water fountains shall be protected against contact with recycled water spray, mist, or runoff.
- 9. Irrigation runoff shall be confined to the recycled water use areas unless the runoff does not pose a public health hazard and is authorized by the Central Valley Water Board.

The conditional approval also requires the City to submit a revised Title 22 Engineering Report for approval prior to adding any new recycled use areas, making any changes or modifications to the information in the existing report, and/or expanding the wastewater treatment system.

### WATER RECYCLING USE REQUIREMENTS

- 1. The production, distribution, and use of recycled water shall be managed in accordance with the Title 22 Engineering Report approved by DDW, the Recycling General Order, and this NOA.
- 3. The use of recycled water shall not cause pollution or nuisance, as defined by Water Code section 13050.
- 4. The recycled water shall be disinfected tertiary recycled water as defined by Title 22, section 60301.230.
- 5. In accordance with Title 22 section 60321, disinfected tertiary recycled water shall be sampled at least once daily for total coliform bacteria and analyzed by an accredited ELAP certified laboratory.
- 6. Following filtration, the disinfection system shall maintain a CT value of not less than 450 milligrams-minute per liter with a modal contact time of at least 90 minutes.
- 7. The median concentration of total coliform bacteria shall not exceed 2.2 MPN per 100 milliliters (mL) over any 7-day period, 23 MPN/100 mL more than once in any 30-day period, or a maximum of 240 MPN/100 mL.

8. The Administrator shall promptly notify the Central Valley Water Board, DDW, and the local health officer of any discharge of untreated and/or partially treated wastewater. Notice shall also be provided to all recycled water users.

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- 9. Process equipment failures triggering an alarm but not resulting in violations of Title 22 regulations shall be recorded and retained in a separate file noting the date, time, and cause of the failure as well as corrective actions taken.
- 10. All recycled use areas, where recycled water is used, that are accessible to the public (including within Eagle Mountain Casino) shall be posted with signs that are visible to the public, in a size no less than 4 inches by 8 inches wide, that include the following wording, "RECYCLED WATER DO NOT DRINK."

#### **GENERAL INFORMATION AND REQUIREMENTS**

The City shall comply with the Prohibitions, Specifications, Water Recycling Administration Requirements, and General Provisions of the Recycling General Order.

Please review this NOA carefully to ensure that it completely and accurately reflects the proposed Porterville Recycled Water Project. If the discharge violates the terms or conditions of the Recycling General Order, the Central Valley Water Board may take enforcement action, including the assessment of an administrative civil liability. Failure to abide by the conditions of the Recycling General Order, including MRP 2016-0068-DDW-R5026, and this letter authorizing applicability could result in enforcement actions, as authorized by provision of the California Water Code.

The required annual fee specified in the annual billing from the State Water Resources Control Board shall be paid until this NOA is officially terminated. The Administrator must submit in writing a Notice of Termination once the Recycled Water Project has ended.

#### SALT AND NITRATE CONTROL PROGRAMS

As part of the Central Valley Salinity Alternatives for Long-Term Sustainability (CV-SALTS) initiative, the Central Valley Water Board adopted Basin Plan amendments incorporating new programs for addressing ongoing salt and nitrate accumulation in the Central Valley at its 31 May 2018 Board Meeting (Resolution R5-2018-0034). The Basin Plan amendments were revised by the Central Valley Water Board in 2020 with Resolution R5-2020-0057 and became effective on 17 January 2020.

(https://www.waterboards.ca.gov/centralvalley/board\_decisions/adopted\_orders/resolutions/r5-2020-0057\_res.pdf).

For salinity, dischargers that are unable to comply with stringent salinity requirements will instead need to meet performance-based requirements and participate in a basin-wide planning effort (Priority & Optimization Study or P&O Study) to develop a long-term salinity strategy for the Central Valley. The City (CV-SALTS ID 3605)

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submitted its Notice of Intent and paid the applicable fees to join the P&O Study for the Salt Control Program on 20 April 2022.

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For nitrate, dischargers that are unable to comply with stringent nitrate requirements will be required to take on alternative compliance approaches that involve providing replacement drinking water and other actions to persons affected by nitrates. Dischargers can comply with the Nitrate Control Program either individually (Path A) or collectively with other dischargers (Path B) as part of a local Management Zone Group. The City has selected Path A. As a Category 5 discharger with the potential to affect nearby domestic wells the City has submitted an Early Action Plan and Alternative Compliance Project which are currently being reviewed by the Central Valley Water Board. As part of its submittal for operation of the Tertiary Treatment System and Porterville Recycled Water Project the City confirmed that the area of influence for the proposed Project is within the scope of their initial assessment and Early Action Plan.

#### **DOCUMENT SUBMITTALS**

All regulatory documents, submissions, materials, data, monitoring reports, and correspondence should be converted to a searchable Portable Document Format (PDF) and submitted electronically. Documents that are less than 50MB should be emailed to: <a href="mailto:centralvalleyfresno@waterboards.ca.gov">centralvalleyfresno@waterboards.ca.gov</a>. Documents that are 50MB or larger should be transferred to a disk and mailed to the Central Valley Water Board office at 1685 E Street, Fresno, CA 93706. To ensure that your submittals are routed to the appropriate staff, the following information block should be included in any email used to transmit documents to this office:

Program: Non-15, Place ID: 879800,

Facility Name: Porterville Recycled Water Project,

Order: WQ-2016-0068-DDW-R5026

In order to conserve paper and reduce mailing costs, a paper copy of General Order WQO 2016-0068-DDW has been sent only to the Administrator. Others are advised that the <u>General Order</u> is available on the State Water Board's website (http://www.waterboards.ca.gov/board\_decisions/adopted\_orders/water\_quality/2016/w qo2016\_0068\_ddw.pdf).

All documents, including responses to inspections and written notifications, submitted to comply with this NOA shall be directed, via the paperless office system, to the Compliance and Enforcement Unit, attention to Omar Mostafa. Mr. Mostafa can be reached at (559) 445-5197 or <a href="mailto:omar.Mostafa@waterboards.ca.gov">omar.Mostafa@waterboards.ca.gov</a>. Questions regarding the permitting aspects of the NOA, and notification for termination of coverage under the General Order, shall be directed, via the paperless office system, to the WDR Permitting Unit, attention Katie Carpenter. Ms. Carpenter can be reached at (559) 445-5551 or by email at Katie.Carpenter@waterboards.ca.gov.

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and following. The State Water Resources Control Board must receive the petition by 5:00 p.m., 30 days after the date of this NOA, 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 Resources Control 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 <a href="Copies of the laws and regulations applicable to filing petitions">Copies of the laws and regulations applicable to filing petitions</a> (https://www.waterboards.ca.gov/public\_notices/petitions/water\_quality) or will be provided upon request.

If you have any questions regarding this matter, please contact Katie Carpenter by phone at (559) 445-5551 or by email at <a href="mailto:Katie.Carpenter@waterboards.ca.gov">Katie.Carpenter@waterboards.ca.gov</a>.

Original Signed by Alexander S. Mushegan for: Patrick Pulupa Executive Officer

(see next page for Attachments, Enclosures, and cc's)

Attachments:

Attachment A – Process Flow Diagram

Attachment B – Recycled Use Areas

Enclosures: o Monitoring and Reporting Program 2016-0068-DDW-R5026

Staff Review Memorandum for Porterville Recycled Water Project

 26 September and 26 October 2023 DDW Conditional Approval Letters

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 State Water Resources Control Board Order WQ WQ-2016-0068-DDW (Discharger only)

cc's: • Christopher Moskal, State Water Resources Control Board, OCC, (via email)

Laurel Warddrip, State Water Resources Control Board, DWQ, (via email)

• Omar Mostafa, Central Valley Water Board, (via email)

Adam Forbes, State Water Resources Control Board, DDW, (via email)

 Aide Ortiz, State Water Resources Control Board, Recycled Water Unit, (via email)

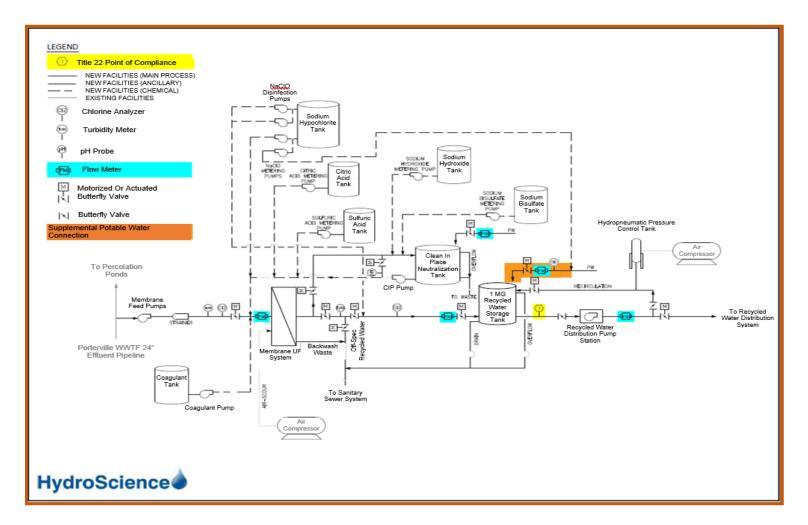
• Tulare County Environmental Health Department, Visalia

Tulare County Public Works and Planning, Visalia

• Robert Alvarez, City of Porterville (via email)

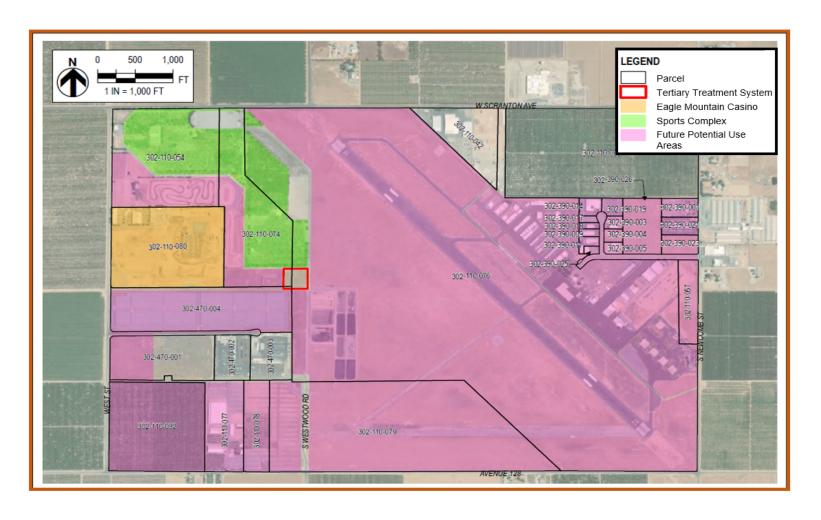
Curtis Lam, HydroScience Engineers, Inc., (via email)

Debbie Webster, Central Valley Clean Water Association (via email)



# ATTACHMENT A - PROCESS FLOW DIAGRAM

NOTICE OF APPLICABILITY 2016-0068-DDW-R5026 FOR CITY OF PORTERVILLE PORTERVILLE RECYCLED WATER PROJECT TULARE COUNTY



# ATTACHMENT B - RECYCLED USE AREAS

NOTICE OF APPLICABILITY 2016-0068-DDW-R5026 FOR CITY OF PORTERVILLE PORTERVILLE RECYCLED WATER PROJECT TULARE COUNTY

# CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL VALLEY REGION

# MONITORING AND REPORTING PROGRAM 2016-0068-DDW-R5026 FOR CITY OF PORTERVILLE PORTERVILLE RECYCLED WATER PROJECT TULARE COUNTY

This Monitoring and Reporting Program (MRP) describes requirements for monitoring the recycled water project for the City of Porterville (City of Discharger). This MRP is issued pursuant to Water Code section 13267. The City (or Administrator) shall not implement any changes to this MRP unless and until a revised MRP is issued by the California Regional Water Quality Control Board, Central Valley Region (Central Valley Water Board) or Executive Officer.

The Administrator has received coverage for the Porterville Recycled Water Project subject to the Notice of Applicability (NOA) of WQ 2016-0068-DDW-R5026 enrolling the recycled water program under State Water Resources Control Board (State Water Board) Water Quality Order 2016-0068-DDW, *Water Reclamation Requirements for Recycled Water Use* (Recycling General Order or General Order). The reports are necessary to ensure that the Administrator complies with the NOA and Recycling General Order. Pursuant to California Water Code section 13267, the Administrator 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.

A glossary of terms used in this MRP is included on the last page.

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 (ELAP) certified laboratory, or:

- 1. The user is trained in proper use and maintenance of the instruments;
- 2. The instruments are field calibrated prior to monitoring events at the frequency recommended by the manufacturer;
- 3. Instruments are serviced and/or calibrated by the manufacturer at the recommended frequency; and
- 4. Field calibration reports are maintained and available for at least three years.

Monitoring requirements listed below may duplicate existing requirements under other orders including WDRs or waivers of WDRs that regulate agricultural discharges from irrigated lands. Duplication of sampling and monitoring activities are not required if the monitoring activity satisfies the requirements of the Recycling General Order. Collecting composite samples is acceptable in most cases. The facility may continue using existing sample collection equipment that is consistent with the applicable facility order. However, due to short sample holding times, bacteriological samples collected to verify disinfection effectiveness must be grab samples. In addition to submitting the results under another order, the results shall be submitted in the reports required by this MRP.

#### **DISINFECTION SYSTEM MONITORING**

Samples of the disinfected tertiary recycled water from the satellite Tertiary Treatment System shall be collected and analyzed by an approved laboratory per Title 22, section 60321(a). Disinfection monitoring shall include the following:

Parameter	Units	Sample Type	Sampling Frequency	Reporting Frequency
Total Coliform Bacteria	MPN/100 mL	Grab	1/Day	Annually
CT value (see 1 below)	mg-min/L	Calculated	Continuous	Annually
Turbidity (see 2 below)	NTU	Grab/Metered	Continuous	Annually

Table 2 – Disinfection System Monitoring

- CT is the product of chlorine residual and modal contact time measured at the same point. Periods of non-compliance shall be reported in the Annual Monitoring Report.
- 2. Turbidity meter shall be stationed immediately following the filters. The Turbidity shall not exceed 0.2 NTU more than 5% of the time within a 24-hour period or 0.5 NTU at any time.

#### **USE AREA MONITORING**

The Administrator shall monitor the use area(s) at a frequency appropriate to determine compliance with the Recycling General Order and the Administrator's recycled water use program requirements. An Administrator may assign monitoring responsibilities to a User as part the Water Recycling Use Permit program. The Administrator retains responsibility to ensure the data is collected, as well as prepare and submitted in the Annual Report.

The following shall be recorded for each User with additional reporting for use areas as appropriate. The frequency of use area inspections shall be based on the complexity and risk of each use area. Use areas may be aggregated to combine acreage for calculations or observation purposes. Use area monitoring shall include the following:

Table 3 – Use Area Monitoring

Parameter	Units	Sample Type	Sampling Frequency	Reporting Frequency
Recycled Water User				Annually
Recycled Water Flow	gpd	Meter (see 1 below)	Monthly	Annually
Acreage Applied (see 2 and 3 below)	acres	Calculated		Annually
Application Rate (see 3 below)	inches/acre/year	Calculated		Annually
Soil Saturation/Ponding		Observation	Quarterly	Annually
Nuisance Odor/Vector		Observation	Quarterly	Annually
Discharge Off-Site		Observation	Quarterly	Annually
Notification Signs (see 4 below)		Observation	Quarterly	Annually

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- 1. Meter requires meter reading, a pump run-time meter, or other approved method. The User must measure and distinguish between the recycled water used for irrigation and recycled water used for other non-potable reuse.
- 2. Acreage applied denotes the acreage to which recycled water is applied to for irrigation.
- 3. For landscaped and agricultural irrigation areas only.
- 4. Notification signs shall be consistent with the requirements of California Code of Regulations, title 22 section 60310 (g).

#### **DUAL PLUMBED RECYCLED WATER SYSTEMS**

Frequency of testing for cross connection and backflow prevention devises shall be established after consultation with the State Water Resources Control Board, Division of Drinking Water. At a minimum, cross-connection and backflow prevention testing shall include the following:

Table 4 – Dual Plumbed Recycled Water System Monitoring

Parameter	Testing Frequency	Reporting Frequency
Cross-Connection Testing	Four Years (see 1 below)	30 days/Annually (see 2 below)
Backflow Incident		24 hours after discovery
Backflow Prevention Testing and Maintenance (see 3 below)	1/Year	Annually

1. Cross-connection testing shall be conducted prior to initiating use of recycled water. After connection to the recycled water system additional cross-connection Porterville Recycled Water Project MRP 2016-0068-DDW-R5026

testing shall be conducted at least once every four years or following discovery and remediation of a cross-connection event.

- Cross-connection testing results shall be reported to the State Water Board Division of Drinking Water (DDW) within 30-days pursuant to CCR Title 22 section 60314 and shall be included in the annual report submitted to the Central Valley Water Board.
- 3. Backflow prevention device maintenance and visual inspections shall be tested by a qualified person as defined in CCR Title 17, section 7605.

#### **REPORTING**

In reporting monitoring data, the Administrator shall arrange the data in tabular form so that the date, sample type (e.g., effluent, solids, etc.), and reported analytical or visual inspection results are readily discernable. The data shall be summarized to clearly illustrate compliance with the General Order and NOA as applicable. The results of any monitoring done more frequently than required at the locations specified in the MRP shall be reported in the next regularly scheduled monitoring report and shall be included in calculations as appropriate.

All regulatory documents, submissions, materials, data, monitoring reports, and correspondence should be converted to a searchable Portable Document Format (PDF) and submitted electronically. Documents that are less than 50MB should be emailed to: <a href="mailto:centralvalleyfresno@waterboards.ca.gov">centralvalleyfresno@waterboards.ca.gov</a>. Documents that are 50MB or larger should be transferred to a disk and mailed to the appropriate Regional Water Board office, in this case 1685 E Street, Fresno, CA 93706. To ensure that your submittals are routed to the appropriate staff, the following information block should be included in any email used to transmit documents to this office:

Program: Non-15, Place ID: 879800

Facility Name: Porterville Recycled Water Project

Order: 2016-0068-DDW-R5026

#### A. Annual Report

Annual Reports shall be submitted to the Regional Water Board **by April 1**<sup>st</sup> **following the monitoring year.** The Annual Report shall include the following:

1. A summary table of all recycled water Users and Use Areas. Maps may be included to identify Use Areas. Newly permitted recycled water Users and Use Areas shall be identified. Recycled Water Use Permits issued over the past year shall be included with the annual report. When applicable, supplements to the Title 22 Engineering Report and the State Water Board approval letter supporting those additions shall be included.

- 2. A summary table of all inspections and enforcement activities initiated by the Administrator. Include a discussion of compliance and the corrective action taken, as well as any planned or proposed actions needed to bring the discharge into compliance with the NOA and/or General Order. Copies of documentation of any enforcement actions taken by the Administrator shall be provided.
- An evaluation of the performance of the Tertiary Treatment System including discussion of capacity issues, system problems, and a forecast of the flows anticipated in the next year.
- 4. Tabular and graphical summaries of all monitoring data collected during the year, including priority pollutant monitoring, if required.
- 5. The name and contact information for the recycled water operator responsible for operation, maintenance, and system monitoring.

# **B. State Water Board Volumetric Annual Reporting**

Per <u>State Water Resources Control Board's Water Quality Control Policy</u> (https://www.waterboards.ca.gov/water\_issues/programs/water\_recycling\_policy/), amended in December 2018, dischargers of treated wastewater and recycled water are 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 this annual report containing monthly data in electronic format via the <u>State Water Board's Internet GeoTracker system</u> (https://geotracker.waterboards.ca.gov/). Required data shall be submitted to the GeoTracker database under a site-specific global identification number. Any data will be made publicly accessible as machine readable 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.
- 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 annual monitoring reports shall accompany each report. The letter shall report number and severity of 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 Administrator or the Administrator's authorized agent:

"I certify under penalty of law that I have personally examined and am familiar with 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 Administrator shall begin implementing the above monitoring program upon initiation of the Recycled Water Program.

Ordered by:

Original Signed by Alexander S. Mushegan for: PATRICK PALUPA, Executive Officer

26 December 2023 (Date)

Porterville Recycled Water Project MRP 2016-0068-DDW-R5026

#### **GLOSSARY**

CT The product of total chlorine residual and modal contact time

measured at the same point.

Continuous The specified parameter shall be measured by a meter

continuously.

24-hr Composite Samples shall be a flow-proportioned composite consisting

of at least eight aliquots over a 24-hour period.

1/Day Every day except weekends or holidays.
2/Week Twice per week on non-consecutive days.

1/Week Once per week.

2/Month Twice per month during non-consecutive weeks.

1/Month Once per calendar month.1/Quarter Once per calendar quarter.

Semiannually Once every six calendar months (i.e., two times per year)

during non-consecutive quarters.

Annually Once per year.

mg/L Milligrams per liter

mg/kg Milligrams per kilogram
mgy Million gallons per year
mL/L Milliliters [of solids] per liter

μg/L Micrograms per liter

µmhos/cm Micromhos per centimeter

gpd Gallons per day

mgd Million gallons per day

MPN/100 mL Most probable number [of organisms] per 100 milliliter

NTU Nephelometric Turbidity Units

SU Standard pH units





# Central Valley Regional Water Quality Control Board

**TO**: Alexander S. Mushegan

Supervising Water Resource Control Engineer

Central Valley Water Board

**FROM**: Kathleen Carpenter

Engineering Geologist Central Valley Water Board

**DATE**: 26 December 2023

APPLICABILITY OF COVERAGE UNDER STATE WATER RESOURCES CONTROL BOARD ORDER WQ 2016-0068-DDW; WATER RECLAMATION REQUIREMENTS FOR RECYCLED WATER USE; CITY OF PORTERVILLE; PORTERVILLE RECYCLED WATER PROJECT; TULARE COUNTY

Central Valley Regional Water Quality Control Board (Central Valley Water Board) staff reviewed the Notice of Intent (NOI) submitted by the City of Porterville (City) for regulatory coverage under Water Quality Order WQ 2016-0068-DDW, *Water Reclamation Requirements for Recycled Water Use* (Recycling General Order). The NOI included the City of Porterville Recycled Water Use Guidelines and a Title 22 Engineering Report for the Porterville Tertiary Treatment System and Recycled Water Infrastructure Project, dated February 2021 (Title 22 Engineering Report). The Title 22 Engineering Report was prepared and stamped by Curtis Lam (RCE 59049) with HydroScience Engineers, Inc.

Supplemental information including a Report of Waste Discharge (RWD) and Addendum in support of the construction of the satellite Tertiary Treatment System were submitted on 16 August and 23 September 2022. On 28 September 2023 the City submitted a revised Final Title 22 Engineering Report with the Eagle Mountain Casino Dual Plumbed Engineering Report and conditional approval letter from the State Water Resources Control Board, Division of Drinking Water (DDW). On 26 October 2023 DDW provided a second letter conditionally approving the Eagle Mountain Casino Dual Plumbed Engineering Report.

MARK BRADFORD, CHAIR | PATRICK PULUPA, ESQ., EXECUTIVE OFFICER

This memorandum provides a summary of Central Valley Water Board's staff review of the NOI and Title 22 Engineering Report and evaluates if the proposed discharge of disinfected tertiary recycled water for unrestricted reuse is eligible for enrollment under the Recycling General Order.

#### **BACKGROUND INFORMATION**

The City owns and operates the Porterville Wastewater Treatment Facility (WWTF), which serves the City of Porterville and nearby community of Porter Vista in southeastern Tulare County. The WWTF is currently regulated by Waste Discharge Requirements (WDRs) Order R5-2008-0034 for the discharge of undisinfected secondary treated effluent to the City-owned Reclamation Area where it is used to irrigate feed and fodder crops or discharged directly to about 60 acres of percolation ponds when irrigation demand is low.

#### **TERTIARY TREATMENT PLANT**

The Tertiary Treatment System will take secondary undisinfected effluent from the Porterville WWTF and provide tertiary treatment and disinfection to produce disinfected tertiary-treated effluent for unrestricted reuse. The satellite Tertiary Treatment System consists of a diversion pump, ultrafiltration membrane modules, sodium hypochlorite disinfection system, one million gallon aboveground effluent storage tank, control station, and recycled water distribution system. Water from backwashing the filters and off-spec recycled water that does not meet Title 22 requirements will be discharged back to the sanitary sewer system.

According to the NOI, the Tertiary Treatment System will have a designed treatment capacity of 0.308 mgd. Since the Tertiary Treatment System is designed to offset potable water demand for the Eagle Mountain Casino, peak irrigation demand at the Sports Complex (5 million gallons per week) will be supplemented with potable water. Potable water will be introduced at the effluent storage tank via legal air gap at the top of the tank.

#### RECYCLED WATER PROGRAM

According to the NOI, the City will assume the roles and responsibility of the "Administrator" under the Recycling General Order. As the sole "Administrator", the City will manage and operate the recycled water program including oversight, training, maintenance, and inspections. The City will also act as the sole producer and distributer of recycled water as well as a user of recycled water. According to the Title 22 Engineering Report, recycled water users on land not owned or controlled or owned by the City will be issued a "Recycled Water Use Permit".

Disinfected tertiary recycled water will be used for irrigation of landscaping of large common areas such as the City-owned Porterville Sports Complex as well as for landscape irrigation and non-potable uses (i.e., toilets, urinals, etc.) at the Eagle Mountain Casino (owned and operated by the Tule River Indian Tribe). In the future, the

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City may expand use of disinfected tertiary recycled water to include irrigation of food crops (i.e., existing orchard) and public landscaped areas at the Porterville Fairgrounds, Porterville Municipal Airport, and OHV Park pending completion of an updated Title 22 Engineering Report.

A site supervisor will be designated for each recycled use area who will serve as the primary contact for the City regarding the recycled water system and will submit quarterly self-monitoring reports to the City. In addition, the City will require cross-connection shutdown tests be performed by a certified Cross-Connection Control Specialist before a recycled water meter is installed at a use site with both potable water and recycled water connections.

The NOI provides a description of the City's Recycled Water Program, including:

- 1. Description of Responsibilities;
- 2. City's Recycled Water Use Guidelines;
- 3. User Rules and Regulations;
- 4. Cross-Connection Control Program;
- 5. Recycled Water Use Monitoring and Inspection Program;
- 6. Site Supervisor Training; and
- 7. Emergency Procedures and Notification Requirements.

## **DIVISION OF DRINKING WATER (DDW) CONSIDERATIONS**

The City submitted a Title 22 Engineering Report for the Porterville Recycled Water Project dated February 2021, which was reviewed by DDW. DDW commented on the Title 22 Engineering Report and the City submitted a revised Final Title 22 Engineering Report along with a Recycled Water System Dual-Plumbed Engineering Report for the Eagle Mountain Casino dated February 2023. DDW reviewed the revision and found that it adequately addressed the previous comments. On 26 September 2023 DDW issued a letter conditionally accepting the February 2023 Title 22 Engineering Report for operation and reclamation activities, and on 26 October 2023 issued a second letter conditionally accepting the Eagle Mountain Casino Engineering Report. The conditions include, in part, the following:

- 1. Separation of potable water and recycled water pipelines within the project must be maintained in accordance with CCR Title 22 section 64572. Any modifications, replacements, and/or improvements proposed to the potable or recycled water pipelines must be provided to DDW for review and approval.
- 2. Following filtration, the disinfection system shall provide a CT value of not less than 450 milligrams-minute per liter at all times with a modal contact time of at least 90 minutes based on peak dry weather flow design.

3. Prior to connection a cross-connection (shutdown) test shall be preformed for the recycled water system. Cross connection tests shall be repeated at minimum every four years and visual inspection of all air gaps (backflow prevention devices) shall be preformed annually.

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The City is also required to submit an updated Title 22 Engineering Report to reflect any changes in operations including expansion of the Tertiary Treatment System and/or new types or locations for recycled water uses to DDW for review and acceptance.

Copies of the conditional approval letters from DDW are included at the end of this memorandum.

# MONITORING REQUIREMENTS

The monitoring requirements from Attachment B of the General Order that are appropriate for this discharge are:

- · Disinfection System Monitoring,
- Use Area Monitoring, and
- Dual-Plumbed Monitoring.

#### **COMMENTS**

Based on the information provided in the NOI, the November 2023 Title 22 Engineering Report and Eagle Mountain Casino Recycled Water Dual-Plumbed Engineering Report, and the 26 September and 26 October 2023 DDW conditional approval letters, the application for the Porterville Recycled Water Project for tertiary disinfected recycled water use is consistent with the requirements of the General Order. Therefore, it may be enrolled under the General Order.