an effluent limitation that is a "new interpretation" of a narrative water quality objective. This conclusion is also consistent with USEPA policies and administrative decisions. See, e.g., Whole Effluent Toxicity (WET) Control Policy. The Regional Water Board, however, is not required to include a schedule of compliance, but may issue a Time Schedule Order pursuant to CWC section 13300 or a Cease and Desist Order pursuant to CWC-section 13301-where it-finds that the discharger is violating or threatening to violate the permit. The Regional Water Board will consider the merits of each case in determining whether it is appropriate to include a compliance schedule in a permit, and, consistent with the Basin Plan, should consider feasibility of achieving compliance, and must impose a schedule that is as short as practicable to achieve compliance with the objectives, criteria, or effluent limit based on the objective or criteria.

Section 2.1 of the SIP provides that, based on a Discharger's request and demonstration that it is infeasible for an existing Discharger to achieve immediate compliance with an effluent limitation derived from a CTR criterion, compliance schedules may be allowed in an NPDES permit. Unless an exception has been granted under section 5.3 of the SIP, a compliance schedule may not exceed 5 years from the date that the permit is issued or reissued, nor may it extend beyond 10 years from the effective date of the SIP (or 18 May 2010) to establish and comply with CTR criterion-based effluent limitations. Where a compliance schedule for a final effluent limitation exceeds 1 year, the Order must include interim numeric limitations for that constituent or parameter. Where allowed by the Basin Plan, compliance schedules and interim effluent limitations or discharge specifications may also be granted to allow time to implement a new or revised water quality objective. This Order does not include compliance schedules or interim effluent limitations.

- L. Alaska Rule. On 30 March 2000, USEPA revised its regulation that specifies when new and revised state and tribal water quality standards become effective for CWA purposes. (40 CFR 131.21 and 65 FR 24641 (27 April 2000).) Under the revised regulation (also known as the Alaska rule), new and revised standards submitted to USEPA after 30 May 2000, must be approved by USEPA before being used for CWA purposes. The final rule also provides that standards already in effect and submitted to USEPA by 30 May 2000 may be used for CWA purposes, whether or not approved by USEPA.
- M. Stringency of Requirements for Individual Pollutants. This Order contains both technology-based effluent limitations and WQBELs for individual pollutants. The technology-based effluent limitations consist of restrictions on 5-day biochemical oxygen demand (BOD<sub>5</sub>) and total suspended solids (TSS). The WQBELs consist of restrictions on aluminum, ammonia, cadmium, chlorine residual, delta-BHC, electrical conductivity, endrin aldehyde, iron, lead, manganese, mercury, pH, total coliform organisms, and zinc. This Order's technology-based pollutant restrictions implement the minimum, applicable federal technology-based requirements.

WQBELs have been scientifically derived to implement water quality objectives that protect beneficial uses. Both the beneficial uses and the water quality objectives have been approved pursuant to federal law and are the applicable federal water quality standards. To the extent that WQBELs for toxic pollutants were derived from the CTR,

the CTR is the applicable standard pursuant to 40 CFR 131.38. The scientific procedures for calculating the individual WQBELs for priority pollutants are based on the CTR-SIP, which was approved by USEPA on 18 May 2000. All beneficial uses and water quality objectives contained in the Basin Plan were approved under state law and submitted to and approved by USEPA prior to 30 May 2000. Any water quality objectives and beneficial uses submitted to USEPA prior to 30-May 2000, but not approved by USEPA before that date, are nonetheless "applicable water quality standards for purposes of the [Clean Water] Act" pursuant to 40 CFR 131.21(c)(1). Collectively, this Order's restrictions on individual pollutants are no more stringent than required to implement the technology-based requirements of the CWA and the applicable water quality standards for purposes of the CWA.

This Order contains pollutant restrictions that are more stringent than applicable federal requirements and standards. Specifically, this Order includes effluent limitations for BOD<sub>5</sub>, TSS, and total coliform organisms that are more stringent than applicable federal standards, but that are nonetheless necessary to meet numeric objectives or protect beneficial uses. The rationale for including these limitations is explained in the Fact Sheet (Attachment F). In addition, the Regional Water Board has previously considered the factors in CWC section 13241.

N. Antidegradation Policy. 40 CFR 131.12 requires that the state water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16. Resolution No. 68-16 incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that existing quality of waters be maintained unless degradation is justified based on specific findings. The Regional Water Board's Basin Plan implements, and incorporates by reference, both the state and federal antidegradation policies. As discussed in detail in the Fact Sheet, the permitted discharge is consistent with the antidegradation provision of 40 CFR 131.12 and Resolution No. 68-16.

As part of the January 2008 Report of Waste Discharge and in additional information provided by the Discharger on 26 October 2009, the Discharger provided a complete Antidegradation Analysis following the guidance provided by State Water Board APU 90-004. As demonstrated in the analysis, the water quality resulting from the proposed increase in discharge to Orchard Creek (from 0.35 MGD to 0.875 MGD of tertiary treated wastewater) is consistent with the maximum social and economical benefit to the people of the State, will not unreasonably affect beneficial uses, will not cause water quality to be less than water quality objectives, and that the discharge provides protection for existing in-stream uses and water quality necessary to protect those uses.

It is currently infeasible for the Discharger to connect to the City of Lincoln Wastewater Treatment and Reclamation Facility. The Discharger has committed to regionalization of its wastewater when that connection becomes feasible. The Order requires that the Discharger connect to the City of Lincoln Wastewater Treatment and Reclamation Facility within 1 year of the construction of a gravity sewer connection to the City of Lincoln Wastewater Treatment and Reclamation Facility or to demonstrate through an updated alternatives analysis that an alternative other than connection to the City of

Lincoln Wastewater Treatment and Reclamation Facility within 1 year satisfies antidegradation requirements.

- O. Anti-Backsliding Requirements. Sections 303(d)(4) and 402(o)(2) of the CWA and federal regulations at 40 CFR 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require effluent limitations in a reissued permit to be as stringent as those in the previous permit, with some exceptions. Some effluent limitations in this Order are less stringent that those in Order No. R5-2005-0032. As discussed in detail in the Fact Sheet, this relaxation of effluent limitations is consistent with the anti-backsliding requirements of the CWA and federal regulations.
- P. Endangered Species Act. This Order does not authorize any act that results in the taking of a threatened or endangered species or any act that is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish and Game Code sections 2050 to 2097) or the Federal Endangered Species Act (16 U.S.C.A. sections 1531 to 1544). This Order requires compliance with effluent limits, receiving water limits, and other requirements to protect the beneficial uses of waters of the state. The discharger is responsible for meeting all requirements of the applicable Endangered Species Act.
- Q. Monitoring and Reporting. 40 CFR 122.48 requires that all NPDES permits specify requirements for recording and reporting monitoring results. CWC sections 13267 and 13383 authorize the Regional Water Board to require technical and monitoring reports. The Monitoring and Reporting Program establishes monitoring and reporting requirements to implement federal and State requirements. The Monitoring and Reporting Program is provided in Attachment E.
- **R. Standard and Special Provisions.** Standard Provisions, which apply to all NPDES permits in accordance with 40 CFR 122.41, and additional conditions applicable to specified categories of permits in accordance with 40 CFR 122.42, are provided in Attachment D. The discharger must comply with all standard provisions and with those additional conditions that are applicable under 40 CFR 122.42. The Regional Water Board has also included in this Order special provisions applicable to the Discharger. A rationale for the special provisions contained in this Order is provided in the Fact Sheet.
- S. Provisions and Requirements Implementing State Law. The provisions/requirements in sections III.B, IV.C, V.B, VI.A.2.o, and VI.C.4.c of this Order are included to implement state law only. These provisions/requirements are not required or authorized under the federal CWA; consequently, violations of these provisions/requirements are not subject to the enforcement remedies that are available for NPDES violations.
- T. Tribal Council Resolution No. 1-26-10-01 Approving A Limited Waiver of Sovereign Immunity. The Tribal Council for the United Auburn Indian Community adopted Resolution No. 1-26-10-01 on 26 January 2010, recognizing this Order as a legal and binding obligation of the Discharger and acknowledging and consenting to a Limited Waiver of Sovereign Immunity. Under the Limited Waiver of Sovereign Immunity, the Discharger expressly waives its sovereign immunity from unconsented administrative enforcement and judicial suit for the purposes of permitting the

commencement and maintenance of administrative action or litigation by the Regional Water Board relative to its rights under this Order. Tribal Council Resolution No. 1-26-10-01 is attached hereto as Attachment N.

- U. Notification of Interested Parties. The Regional Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe WDRs for the discharge and has provided them with an opportunity to submit their written comments and recommendations. Details of notification are provided in the Fact Sheet of this Order.
- V. Consideration of Public Comment. The Regional Water Board, in a public meeting, heard and considered all comments pertaining to the discharge. Details of the Public Hearing are provided in the Fact Sheet.

THEREFORE, IT IS HEREBY ORDERED, that Order No. R5-2005-0032 is rescinded upon the effective date of this Order except for enforcement purposes, and, in order to meet the provisions contained in division 7 of the CWC (commencing with section 13000) and regulations adopted thereunder, and the provisions of the federal CWA and regulations and guidelines adopted thereunder, the Discharger shall comply with the requirements in this Order.

### III. DISCHARGE PROHIBITIONS

# A. Surface Water Discharge Prohibitions

- Discharge of wastewater at a location or in a manner different from that described in the Findings is prohibited.
- **2.** The by-pass or overflow of wastes to surface waters is prohibited, except as allowed by federal Standard Provisions I.G. and I.H. (Attachment D).
- **3.** Neither the discharge nor its treatment shall create a nuisance as defined in section 13050 of the CWC.
- 4. The Discharger shall not allow pollutant-free wastewater to be discharged into the collection, treatment, and disposal system in amounts that significantly diminish the system's capability to comply with this Order. Pollutant-free wastewater means rainfall, groundwater, cooling waters, and condensates that are essentially free of pollutants.

### B. Reclaimed Water Prohibitions

- 1. The use of recycled water in a manner different than described in the Operation and Maintenance (O&M) Plan, as required in section VI.C.4.c of this Order, is prohibited.
- **2.** The use of recycled water, pursuant to this Order, for individually owned residences is prohibited.
- **3.** In conformance with Title 22 Requirements, recycled water shall not be used for direct human consumption or for the processing of food or drink intended for human consumption.
- 4. The use of recycled water for uses other than landscape irrigation uses is prohibited.
- **5.** The use of recycled water on water-saturated or frozen ground or during periods of precipitation such that runoff is induced, is prohibited.
- **6.** The direct or indirect discharge from use areas of recycled water to surface waters is prohibited except in minor amounts such as that associated with Best Management Practices (BMPs) for good irrigation practices.
- 7. The application of recycled water within 50 feet of a domestic well, and impoundment of recycled water within 100 feet of a domestic well, unless approved by the California Department of Public Health (DPH; formerly the Department of Health Services) or USEPA, is prohibited.
- **8.** Use or installation of hose bibs in areas accessible by the public on any irrigation system presently operating or designed to operate with recycled water, regardless of construction or identification, is prohibited.

- **9.** Use of any equipment or facilities that have been used to convey recycled water (e.g., tanks, temporary piping or valves, and portable pumps) also used for potable water supply conveyance, is prohibited.
- **10.** The discharge or use of recycled water in a manner that causes or contributes to an exceedance of an applicable water quality objective is prohibited.
- **11.** The use of recycled water for landscape irrigation shall not cause or threaten to cause pollution or nuisance as defined in Water Code section 13050.

### IV. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

# A. Effluent Limitations – Discharge Point No. 001

### 1. Final Effluent Limitations

a. The Discharger shall maintain compliance with the following effluent limitations at Discharge Point No. 001, with compliance measured at Monitoring Location EFF-001 as described in the Monitoring and Reporting Program:

**Table 6. Final Effluent Limitations** 

Parameter	Units	Effluent Limitations					
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	
Conventional Polit	utants						
Biochemical Oxygen Demand (5-day @ 20°C)	mg/L	10	15	20			
	lbs/day <sup>1</sup>	29	44	58			
	lbs/day <sup>2</sup>	58	88	117			
	lbs/day <sup>3</sup>	73	109	146			
Total Suspended Solids	mg/L	10	15	20			
	lbs/day <sup>1</sup>	29	44	58	<u>-</u>		
	lbs/day <sup>2</sup>	58	88	117			
	lbs/day <sup>3</sup>	73	109	146			
рН	standard units				6.5	8.5	
Priority Pollutants							
Cadmium, Total Recoverable	μg/L	0.05		0.10			
Delta-BHC	μg/L					ND⁴	
Endrin Aldehyde	μg/L					ND⁴	
Lead, Total Recoverable	μg/L	0.05		0.10	<del></del>		
Zinc, Total Recoverable	μg/L	10		20			
Non-Conventional	Pollutants						
Aluminum, Total Recoverable	µg/L	76		128			

Parameter	Units	Effluent Limitations					
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	
Ammonia Nitrogen, Total (as	mg/L	1.1		2.1			
	lbs/day <sup>1</sup>	3.2		6.1		-	
	lbs/day <sup>2</sup>	6.4	.100.00	12			
	lbs/day <sup>3</sup>	8.0		15			
Electrical Conductivity @ 25°C	µmhos/cm	700			<del></del>		
Total Coliform Organisms	MPN/100 mL					240	

- Mass limitations are based on the maximum average daily flow of 0.35 MGD.
- Mass limitations are based on the maximum average daily flow of 0.7 MGD, effective upon compliance with Special Provision VI.C.6.a.
- Mass limitations based on the maximum average daily flow of 0.875 MGD, effective upon compliance with Special Provision VI.C.6.b.
- ND indicates non-detect. See section VII for the protocol for evaluating compliance with the ND effluent limitation.
  - **b. Percent Removal.** The average monthly percent removal of 5-day biochemical oxygen demand (BOD<sub>5</sub>) and total suspended solids (TSS) shall not be less than 85 percent.
  - **c.** Acute Whole Effluent Toxicity. Survival of aquatic organisms in 96-hour bioassays of undiluted waste shall be no less than:
    - i. 70%, minimum for any one bioassay; and
    - ii. 90%, median for any three consecutive bioassays.
  - d. Total Residual Chlorine. Effluent total residual chlorine shall not exceed:
    - i. 0.011 mg/L, as a 4-day average; and
    - ii. 0.019 mg/L, as a 1-hour average.
  - **e.** Chronic Whole Effluent Toxicity. There shall be no chronic toxicity in the effluent discharge.
  - f. Maximum Daily Effluent Flow. The maximum daily effluent flow shall not exceed 0.35 MGD. Effective upon compliance with Special Provision VI.C.6.a, the maximum daily effluent flow shall not exceed 0.7 MGD. Effective upon compliance with Special Provision VI.C.6.b, the maximum daily effluent flow shall not exceed 0.875 MGD.
  - g. Total Coliform Organisms. Effluent total coliform organisms shall not exceed:
    - i. 2.2 most probable number (MPN) per 100 mL, as a 7-day median; and
    - ii. 23 MPN/100 mL, more than once in any 30-day period.

- h. Iron, Total Recoverable. For a calendar year, the annual average effluent concentration shall not exceed 300 μg/L.
- i. Manganese, Total Recoverable. For a calendar year, the annual average effluent concentration shall not exceed 50 μg/L.
- j. Mercury, Total Recoverable. The total monthly mass discharge of total mercury shall not exceed 0.00020 lbs. This performance-based limitation shall be in effect until the Regional Water Board establishes final effluent limitations after adoption of a total maximum daily load (TMDL) for mercury in the Sacramento-San Joaquin Delta.
- 2. Interim Effluent Limitations Not Applicable
- B. Land Discharge Specifications Not Applicable
- C. Reclamation Specifications
  - 1. Recycled water shall be managed in conformance with the applicable regulations contained in the Title 22 Requirements.
  - 2. All recycled water provided pursuant to this Order shall be treated and managed in conformance with all applicable provisions of the Recycled Water Policy<sup>1</sup>.
  - **3.** The Discharger shall provide disinfected tertiary treated recycled water that meets the standards for *disinfected tertiary recycled water* as described in CCR Title 22, sections 60301.230 and 60301.320.
  - 4. Application of recycled water to the use areas (landscape irrigation surrounding the Thunder Valley Casino and Facility as described in the Discharger's annual report) shall be at reasonable agronomic rates and shall consider soil, climate, and nutrient demand. Application rates shall ensure that a nuisance is not created. Degradation of groundwater, considering soil, climate, and nutrient demand, shall be minimized consistent with the applicable provisions of the Recycled Water Policy.
  - **5.** The seasonal nutritive loading of the use area including the nutritive value of organic and chemical fertilizers and of the recycled water, shall not exceed the nutritive demand of the landscape.
  - **6.** Use areas that are spray irrigated and allow public access shall be irrigated during periods of minimal use. Consideration shall be given to allow maximum drying time prior to subsequent public use.
  - 7. All newly installed or any accessible reclamation equipment, pumps, piping, valves, and outlets shall be appropriately marked to differentiate them from potable facilities. All newly installed or any accessible reclamation distribution system piping shall be

<sup>&</sup>lt;sup>1</sup> The Recycled Water Policy was adopted on 3 February 2009 under State Water Board Resolution No. 2009-0011.

- purple or adequately identified with purple tape, tags, or stickers per Section 116815(a) of the California Health and Safety Code.
- 8. Except as allowed under Section 7604 of Title 17, California Code of Regulations, no physical connection shall be made or allowed to exist between any recycled water system and any separate system conveying potable water. Supplementing recycled water with potable water shall not be allowed except as approved by DPH or USEPA.
- **9.** A 4-foot horizontal and 1-foot vertical separation<sup>2</sup> shall be maintained between all new pipelines transporting recycled water and those transporting domestic water, unless approved by DPH or USEPA. Domestic water pipelines shall be configured above recycled water pipelines, unless approved by DPH or USEPA.
- **10.** All recycled water valves, outlets, and quick couplers should be of a type or secured in a manner that only permits operation by authorized personnel.
- **11.** The main shutoff valve of the recycled water meter shall be tagged with a recycled water warning sign. The valve shall be equipped with an appropriate locking device to prevent unauthorized operation of the valve.
- 12. Except where DPH or USEPA has approved alternative signage and wording or an educational program pursuant to Title 22 Requirements, (1) all use areas (landscape irrigation surrounding the Thunder Valley Casino and Facility as described in the Discharger's annual report) where recycled water is used that are accessible to the public shall be posted with signs that are visible to the public in a size no less than 4 inches high by 8 inches wide that include the following wording "RECYCLED WATER- DO NOT DRINK", and (2) each sign shall display an international symbol similar to that shown in Attachment K.
- **13.** Spray, mist, or runoff of recycled water shall not enter dwellings, designated outdoor eating areas, or food handling facilities. Drinking water fountains shall be protected against contact with recycled water spray, mist, or runoff.
- 14. Recycled water shall be managed to minimize contact with workers.
- **15.** Best Management Practices (BMPs) shall be developed and implemented to achieve a safe and efficient irrigation system. At a minimum, the Discharger shall implement the required BMPs identified in Attachment L (Section I.A through I.D) and consider implementing other BMPs as appropriate.
- 16. Recycled water shall not be allowed to escape from the use area (landscape irrigation surrounding the Thunder Valley Casino and Facility as described in the Discharger's annual report) by overspray, mist or by surface flow except in minor amounts such as that associated with BMPs for good irrigation practices.

<sup>&</sup>lt;sup>2</sup> As measured from the nearest outside edge of the respective pipelines.

- 17. Areas irrigated with recycled water shall be managed to prevent ponding and conditions conducive to the proliferation of mosquitoes and other vectors, and to avoid creation of a public nuisance or health hazard. The following practices shall be implemented, at a minimum:
  - a. Irrigation water must infiltrate completely within a 48-hour period.
  - **b.** Ditches receiving irrigation runoff, not serving as wildlife habitat, shall be maintained free of emergent, marginal, and floating vegetation.
  - **c.** Low-pressure and unpressurized pipelines and ditches that may be accessible to mosquitoes shall not be used to store recycled water.
- **18.** The Discharger shall discontinue delivery of recycled water during any period in which there is reason to believe that the requirements for use as specified herein or the requirements of DPH or USEPA are not being met. The delivery of recycled water shall not resume until all conditions have been corrected.

### V. RECEIVING WATER LIMITATIONS

#### A. Surface Water Limitations

Receiving water limitations are based on water quality objectives contained in the Basin Plan and are a required part of this Order. The discharge shall not cause the following in Orchard Creek:

- 1. Bacteria. The fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, to exceed a geometric mean of 200 MPN/100 mL, nor more than 10 percent of the total number of fecal coliform samples taken during any 30-day period to exceed 400 MPN/100 mL.
- 2. Biostimulatory Substances. Water to contain biostimulatory substances which promote aquatic growths in concentrations that cause nuisance or adversely affect beneficial uses.
- **3. Chemical Constituents.** Chemical constituents to be present in concentrations that adversely affect beneficial uses.
- 4. Color. Discoloration that causes nuisance or adversely affects beneficial uses.

### 5. Dissolved Oxygen:

- a. The monthly median of the mean daily dissolved oxygen concentration to fall below 85 percent of saturation in the main water mass;
- **b.** The 95 percentile dissolved oxygen concentration to fall below 75 percent of saturation; nor
- **c.** The dissolved oxygen concentration to be reduced below 7.0 mg/L at any time.

- **6. Floating Material.** Floating material to be present in amounts that cause nuisance or adversely affect beneficial uses.
- 7. Oil and Grease. Oils, greases, waxes, or other materials to be present in concentrations that cause nuisance, result in a visible film or coating on the surface of the water or on objects in the water, or otherwise adversely affect beneficial uses.
- **8. pH.** The pH to be depressed below 6.5, raised above 8.5, nor changed by more than 0.5 units. A 1-month averaging period may be applied when calculating the pH change of 0.5.

### 9. Pesticides:

- **a.** Pesticides to be present, individually or in combination, in concentrations that adversely affect beneficial uses;
- **b.** Pesticides to be present in bottom sediments or aquatic life in concentrations that adversely affect beneficial uses;
- **c.** Total identifiable persistent chlorinated hydrocarbon pesticides to be present in the water column at concentrations detectable within the accuracy of analytical methods approved by USEPA or the Executive Officer;
- **d.** Pesticide concentrations to exceed those allowable by applicable antidegradation policies (see State Water Board Resolution No. 68-16 and 40 CFR 131.12.);
- **e.** Pesticide concentrations to exceed the lowest levels technically and economically achievable;
- **f.** Pesticides to be present in concentration in excess of the maximum contaminant levels set forth in CCR, Title 22, division 4, chapter 15; nor
- g. Thiobencarb to be present in excess of 1.0 μg/L.

### 10. Radioactivity:

- **a.** Radionuclides to be present in concentrations that are harmful to human, plant, animal, or aquatic life nor that result in the accumulation of radionuclides in the food web to an extent that presents a hazard to human, plant, animal, or aquatic life.
- **b.** Radionuclides to be present in excess of the maximum contaminant levels specified in Table 4 (MCL Radioactivity) of Section 64443 of Title 22 of the California Code of Regulations.
- **11. Suspended Sediments.** The suspended sediment load and suspended sediment discharge rate of surface waters to be altered in such a manner as to cause nuisance or adversely affect beneficial uses.

- **12.Settleable Substances.** Substances to be present in concentrations that result in the deposition of material that causes nuisance or adversely affects beneficial uses.
- **13. Suspended Material.** Suspended material to be present in concentrations that cause nuisance or adversely affect beneficial uses.
- **14.Taste and Odors.** Taste- or odor-producing substances to be present in concentrations that impart undesirable tastes or odors to fish flesh or other edible products of aquatic origin, or that cause nuisance, or otherwise adversely affect beneficial uses
- **15. Temperature.** The natural temperature to be increased by more than 5°F.
- **16.Toxicity.** Toxic substances to be present, individually or in combination, in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life.
- 17. Turbidity. The turbidity to increase as follows:
  - 1. More than 1 Nephelometric Turbidity Unit (NTU) where natural turbidity is between 0 and 5 NTUs;
  - 2. More than 20 percent where natural turbidity is between 5 and 50 NTUs;
  - 3. More than 10 NTU where natural turbidity is between 50 and 100 NTUs; nor
  - 4. More than 10 percent where natural turbidity is greater than 100 NTUs.

### **B.** Groundwater Limitations

1. The discharge from the Facility shall not cause the underlying groundwater to be degraded.

### VI. PROVISIONS

## A. Standard Provisions

- 1. The Discharger shall comply with all Standard Provisions (federal NPDES standard conditions from 40 CFR Part 122) included in Attachment D of this Order.
- 2. The Discharger shall comply with the following provisions:
  - **a.** If the Discharger's wastewater treatment plant is publicly owned or subject to regulation by California Public Utilities Commission, it shall be supervised and operated by persons possessing certificates of appropriate grade according to Title 23, CCR, division 3, chapter 26.
  - **b.** After notice and opportunity for a hearing, this Order may be terminated or modified for cause, including, but not limited to:

- i. violation of any term or condition contained in this Order;
- **ii.** obtaining this Order by misrepresentation or by failing to disclose fully all relevant facts:
- iii. a change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge; and
- iv. a material change in the character, location, or volume of discharge.

The causes for modification include:

- New regulations. New regulations have been promulgated under section 405(d) of the CWA, or the standards or regulations on which the permit was based have been changed by promulgation of amended standards or regulations or by judicial decision after the permit was issued.
- Land application plans. When required by a permit condition to incorporate a land application plan for beneficial reuse of sewage sludge, to revise an existing land application plan, or to add a land application plan.
- Change in sludge use or disposal practice. Under 40 CFR 122.62(a)(1), a
  change in the Discharger's sludge use or disposal practice is a cause for
  modification of the permit. It is cause for revocation and reissuance if the
  Discharger requests or agrees.

The Regional Water Board may review and revise this Order at any time upon application of any affected person or the Regional Water Board's own motion.

c. If a toxic effluent standard or prohibition (including any scheduled compliance specified in such effluent standard or prohibition) is established under section 307(a) of the CWA, or amendments thereto, for a toxic pollutant that is present in the discharge authorized herein, and such standard or prohibition is more stringent than any limitation upon such pollutant in this Order, the Regional Water Board will revise or modify this Order in accordance with such toxic effluent standard or prohibition.

The Discharger shall comply with effluent standards and prohibitions within the time provided in the regulations that establish those standards or prohibitions, even if this Order has not yet been modified.

- d. This Order shall be modified, or alternately revoked and reissued, to comply with any applicable effluent standard or limitation issued or approved under sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a)(2) of the CWA, if the effluent standard or limitation so issued or approved:
  - i. contains different conditions or is otherwise more stringent than any effluent limitation in the Order; or

ii. controls any pollutant limited in the Order.

The Order, as modified or reissued under this paragraph, shall also contain any other requirements of the CWA then applicable.

- **e.** The provisions of this Order are severable. If any provision of this Order is found invalid, the remainder of this Order shall not be affected.
- f. The Discharger shall take all reasonable steps to minimize any adverse effects to waters of the State or users of those waters resulting from any discharge or sludge use or disposal in violation of this Order. Reasonable steps shall include such accelerated or additional monitoring as necessary to determine the nature and impact of the non-complying discharge or sludge use or disposal.
- **g.** The Discharger shall ensure compliance with any existing or future pretreatment standard promulgated by USEPA under section 307 of the CWA, or amendment thereto, for any discharge to the municipal system.
- **h.** A copy of this Order shall be maintained at the discharge facility and be available at all times to operating personnel. Key operating personnel shall be familiar with its content.
- i. Safeguard to electric power failure:
  - i. The Discharger shall provide safeguards to assure that, should there be reduction, loss, or failure of electric power, the discharge shall comply with the terms and conditions of this Order.
  - ii. Upon written request by the Regional Water Board the Discharger shall submit a written description of safeguards. Such safeguards may include alternate power sources, standby generators, retention capacity, operating procedures, or other means. A description of the safeguards provided shall include an analysis of the frequency, duration, and impact of power failures experienced over the past 5 years on effluent quality and on the capability of the Discharger to comply with the terms and conditions of the Order. The adequacy of the safeguards is subject to the approval of the Regional Water Board.
  - iii. Should the treatment works not include safeguards against reduction, loss, or failure of electric power, or should the Regional Water Board not approve the existing safeguards, the Discharger shall, within 90 days of having been advised in writing by the Regional Water Board that the existing safeguards are inadequate, provide to the Regional Water Board and USEPA a schedule of compliance for providing safeguards such that in the event of reduction, loss, or failure of electric power, the Discharger shall comply with the terms and conditions of this Order. The schedule of compliance shall, upon approval of the Regional Water Board, become a condition of this Order.

j. The Discharger, upon written request of the Regional Water Board, shall file with the Board a technical report on its preventive (failsafe) and contingency (cleanup) plans for controlling accidental discharges, and for minimizing the effect of such events. This report may be combined with that required under Regional Water Board Standard Provision contained in section VI.A.2.i. of this Order.

The technical report shall:

- i. Identify the possible sources of spills, leaks, untreated waste by-pass, and contaminated drainage. Loading and storage areas, power outage, waste treatment unit outage, and failure of process equipment, tanks and pipes should be considered.
- **ii.** Evaluate the effectiveness of present facilities and procedures and state when they became operational.
- **iii.** Predict the effectiveness of the proposed facilities and procedures and provide an implementation schedule containing interim and final dates when they will be constructed, implemented, or operational.

The Regional Water Board, after review of the technical report, may establish conditions which it deems necessary to control accidental discharges and to minimize the effects of such events. Such conditions shall be incorporated as part of this Order, upon notice to the Discharger.

- k. A publicly owned treatment works whose waste flow has been increasing, or is projected to increase, shall estimate when flows will reach hydraulic and treatment capacities of its treatment and disposal facilities. The projections shall be made in January, based on the last 3 years' average dry weather flows, peak wet weather flows and total annual flows, as appropriate. When any projection shows that capacity of any part of the facilities may be exceeded in 4 years, the Discharger shall notify the Regional Water Board by 31 January. A copy of the notification shall be sent to appropriate local elected officials, local permitting agencies and the press. Within 120 days of the notification, the Discharger shall submit a technical report showing how it will prevent flow volumes from exceeding capacity or how it will increase capacity to handle the larger flows. The Regional Water Board may extend the time for submitting the report.
- I. The Discharger shall submit technical reports as directed by the Executive Officer. All technical reports required herein that involve planning, investigation, evaluation, or design, or other work requiring interpretation and proper application of engineering or geologic sciences, shall be prepared by or under the direction of persons registered to practice in California pursuant to California Business and Professions Code, sections 6735, 7835, and 7835.1. To demonstrate compliance with Title 16, CCR, sections 415 and 3065, all technical reports must contain a statement of the qualifications of the responsible registered professional(s). As required by these laws, completed technical reports must bear the signature(s) and seal(s) of the registered professional(s) in

a manner such that all work can be clearly attributed to the professional responsible for the work.

- m. The Regional Water Board is authorized to enforce the terms of this permit under several provisions of the CWC, including, but not limited to, sections 13385,
   13386, and 13387.
- n. For publicly owned treatment works, prior to making any change in the point of discharge, place of use, or purpose of use of treated wastewater that results in a decrease of flow in any portion of a watercourse, the Discharger must file a petition with the State Water Board, Division of Water Rights, and receive approval for such a change. (CWC section 1211).
- o. In the event the Discharger does not comply or will be unable to comply for any reason, with any prohibition, maximum daily effluent limitation, 1-hour average effluent limitation, or receiving water limitation contained in this Order, the Discharger shall notify the Regional Water Board by telephone (916) 464-3291 within 24 hours of having knowledge of such noncompliance, and shall confirm this notification in writing within 5 days, unless the Regional Water Board waives confirmation. The written notification shall include the information required by the Standard Provision contained in Attachment D section V.E.1. [40 CFR 122.41(I)(6)(i)].
- p. Failure to comply with provisions or requirements of this Order, or violation of other applicable laws or regulations governing discharges from this facility, may subject the Discharger to administrative or civil liabilities, criminal penalties, and/or other enforcement remedies to ensure compliance. Additionally, certain violations may subject the Discharger to civil or criminal enforcement from appropriate local, state, or federal law enforcement entities.
- q. In the event of any change in control or ownership of land or waste discharge facilities presently owned or controlled by the Discharger, the Discharger shall notify the succeeding owner or operator of the existence of this Order by letter, a copy of which shall be immediately forwarded to the Regional Water Board.

To assume operation 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, address and telephone number of the persons responsible for contact with the Regional Water Board and a statement. The statement shall comply with the signatory and certification requirements in the federal Standard Provisions (Attachment D, section V.B) 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 CWC. Transfer shall be approved or disapproved in writing by the Executive Officer.

# **B. Monitoring and Reporting Program Requirements**

The Discharger shall comply with the Monitoring and Reporting Program, and future revisions thereto, in Attachment E of this Order.

# C. Special Provisions

## 1. Reopener Provisions

- **a.** Conditions that necessitate a major modification of a permit are described in 40 CFR 122.62, including:
  - i. If new or amended applicable water quality standards are promulgated or approved pursuant to section 303 of the CWA, or amendments thereto, this permit may be reopened and modified in accordance with the new or amended standards.
  - **ii.** When new information, that was not available at the time of permit issuance, would have justified different permit conditions at the time of issuance.
- b. This Order may be reopened for modification, or revocation and reissuance, as a result of the detection of a reportable priority pollutant generated by special conditions included in this Order. These special conditions may be, but are not limited to, fish tissue sampling, whole effluent toxicity, monitoring requirements on internal waste stream(s), and monitoring for surrogate parameters. Additional requirements may be included in this Order as a result of the special condition monitoring data.
- c. Mercury. If mercury is found to be causing toxicity based on acute or chronic toxicity test results, or if a TMDL program is adopted, this Order shall be reopened and the performance-based mass effluent limitation modified (higher or lower) or an effluent concentration limitation imposed. If the Regional Water Board determines that a mercury offset program is feasible for dischargers subject to a NPDES permit, then this Order may be reopened to reevaluate the interim mercury mass loading limitation(s) and the need for a mercury offset program for the Discharger.
- d. Whole Effluent Toxicity. As a result of a Toxicity Reduction Evaluation (TRE), this Order may be reopened to include a new chronic toxicity limitation, a new acute toxicity limitation, and/or a limitation for a specific toxicant identified in the TRE. Additionally, if the State Water Board revises the SIP's toxicity control provisions that would require the establishment of numeric chronic toxicity effluent limitations, this Order may be reopened to include a numeric chronic toxicity effluent limitation based on the new provisions.
- e. Water Effects Ratios (WER) and Metal Translators. Except for copper, a default WER of 1.0 has been used in this Order for calculating CTR criteria for applicable priority pollutant inorganic constituents. In addition, default dissolved-to-total metal translators have been used to convert water quality objectives from

dissolved to total recoverable when developing effluent limitations for cadmium, lead and zinc. If the Discharger performs studies to determine site-specific WERs and/or site-specific dissolved-to-total metal translators, this Order may be reopened to modify the effluent limitations for the applicable inorganic constituents.

# 2. Special Studies, Technical Reports and Additional Monitoring Requirements

- a. Chronic Whole Effluent Toxicity. For compliance with the Basin Plan's narrative toxicity objective, this Order requires the Discharger to conduct chronic whole effluent toxicity (WET) testing, as specified in the Monitoring and Reporting Program (Attachment E, section V). Furthermore, this Provision requires the Discharger to investigate the causes of, and identify corrective actions to reduce or eliminate effluent toxicity. If the discharge exhibits a pattern of toxicity exceeding the numeric toxicity monitoring trigger during accelerated monitoring established in this Provision, the Discharger is required to initiate a Toxicty Reduction Evaluation (TRE) in accordance with an approved TRE Workplan, and take actions to mitigate the impact of the discharge and prevent recurrence of toxicity. A TRE is a site-specific study conducted in a stepwise process to identify the source(s) of toxicity and the effective control measures for effluent toxicity. TREs are designed to identify the causative agents and sources of effluent toxicity, evaluate the effectiveness of the toxicity control options, and confirm the reduction in effluent toxicity. This Provision includes requirements for the Discharger to develop and submit a TRE Workplan and includes procedures for accelerated chronic toxicity monitoring and TRE initiation.
  - i. Toxicity Reduction Evaluation (TRE) Workplan. Within 90 days of the effective date of this Order, the Discharger shall submit to the Regional Water Board a TRE Workplan for approval by the Executive Officer. The TRE Workplan shall outline the procedures for identifying the source(s) of, and reducing or eliminating effluent toxicity. The TRE Workplan must be developed in accordance with USEPA guidance<sup>3</sup> and be of adequate detail to allow the Discharger to immediately initiate a TRE as required in this Provision.
    - (a) A description of the investigation and evaluation techniques that will be used to identify potential causes and sources of effluent toxicity, effluent variability, and treatment system efficiency;
    - **(b)** A description of the facility's methods of maximizing in-house treatment efficiency and good housekeeping practices, and a list of all chemicals used in operation of the facility; and
    - (c) A discussion of who will conduct the Toxicity Identification Evaluation (TIE), if necessary (e.g., an in-house expert or outside contractor).

<sup>&</sup>lt;sup>3</sup> See the Fact Sheet (Attachment F, section VII.B.2.a. for a list of USEPA guidance documents that must be considered in the development of the TRE Workplan.)

- ii. Accelerated Monitoring and TRE Initiation. When the numeric toxicity monitoring trigger is exceeded during regular chronic toxicity monitoring, and the testing meets all test acceptability criteria, the Discharger shall initiate accelerated monitoring as required in the Accelerated Monitoring Specifications. The Discharger shall initiate a TRE to address effluent toxicity if any WET testing results exceed the numeric toxicity monitoring trigger during accelerated monitoring.
- iii. Numeric Toxicity Monitoring Trigger. The numeric toxicity monitoring trigger to initiate a TRE is >1  $TU_C$  (where  $TU_C = 100/NOEC$ ). The monitoring trigger is not an effluent limitation; it is the toxicity threshold at which the Discharger is required to begin accelerated monitoring and initiate a TRE when the effluent exhibits a pattern of toxicity.
- iv. Accelerated Monitoring Specifications. If the numeric toxicity monitoring trigger is exceeded during regular chronic toxicity testing, the Discharger shall initiate accelerated monitoring within 14 days of notification by the laboratory of the exceedance. Accelerated monitoring shall consist of four (4) chronic toxicity tests conducted once every 2 weeks using the species that exhibited toxicity. The following protocol shall be used for accelerated monitoring and TRE initiation:
  - (a) If the results of four (4) consecutive accelerated monitoring tests do not exceed the monitoring trigger, the Discharger may cease accelerated monitoring and resume regular chronic toxicity monitoring. However, notwithstanding the accelerated monitoring results, if there is adequate evidence of a pattern of effluent toxicity, the Executive Officer may require that the Discharger initiate a TRE.
  - (b) If the source(s) of the toxicity is easily identified (e.g., temporary plant upset), the Discharger shall make necessary corrections to the facility and shall continue accelerated monitoring until four (4) consecutive accelerated tests do not exceed the monitoring trigger. Upon confirmation that the effluent toxicity has been removed, the Discharger may cease accelerated monitoring and resume regular chronic toxicity monitoring.
  - (c) If the result of any accelerated toxicity test exceeds the monitoring trigger, the Discharger shall cease accelerated monitoring and begin a TRE to investigate the cause(s) of, and identify corrective actions to reduce or eliminate effluent toxicity. Within thirty (30) days of notification by the laboratory of any test result exceeding the monitoring trigger during accelerated monitoring, the Discharger shall submit a TRE Action Plan to the Regional Water Board including, at minimum:
    - (1) Specific actions the Discharger will take to investigate and identify the cause(s) of toxicity, including a TRE WET monitoring schedule;
    - (2) Specific actions the Discharger will take to mitigate the impact of the discharge and prevent the recurrence of toxicity; and

(3) A schedule for these actions.

## 3. Best Management Practices and Pollution Prevention

a. Salinity Evaluation and Minimization Plan. The Discharger shall prepare a salinity evaluation and minimization plan to address sources of salinity from the Facility. The plan shall be completed and submitted to the Regional Water Board within 9 months of the adoption date of this Order for the approval by the Executive Officer.

# 4. Construction, Operation and Maintenance Specifications

- **a.** The treatment facilities shall be designed, constructed, operated, and maintained to prevent inundation or washout due to floods with a 100-year return frequency.
- b. Ultraviolet Disinfection (UV) System Operating Specifications. The Discharger shall operate the UV disinfection system to provide a minimum UV dose per bank of 80 millijoules per square centimeter (mJ/cm2) at peak daily flow, unless otherwise approved by DPH, and shall maintain an adequate dose for disinfection while discharging to Orchard Creek, unless otherwise approved by DPH.
  - i. The Discharger shall provide continuous, reliable monitoring of flow, UV transmittance, UV power, and turbidity.
  - ii. The Discharger shall operate the treatment system to insure that turbidity prior to disinfection shall not exceed 0.2 NTU as a daily average, and 0.5 NTU more than 5 percent of the time within a 24-hour period, and 1 NTU, at any time.
  - iii. The UV transmittance (at 254 nanometers) in the wastewater exiting the UV disinfection system shall not fall below 65 percent of maximum at any time.
  - iv. The quartz sleeves and cleaning system components must be visually inspected per the manufacturer's operations manual for physical wear (scoring, solarization, seal leaks, cleaning fluid levels, etc.) and to check the efficacy of the cleaning system.
  - v. The lamp sleeves must be cleaned periodically as necessary to meet the requirements.
  - vi. Lamps must be replaced per the manufacturer's operations manual, or sooner, if there are indications the lamps are failing to provide adequate disinfection. Lamp age and lamp replacement records must be maintained.
  - vii. The Facility must be operated in accordance with an operations and maintenance program that assures adequate disinfection.

#### c. Reclaimed Water

- i. The Discharger's responsibilities are as follows:
  - (a) The Discharger shall be responsible for ensuring that recycled water meets the quality standards of this Order.
  - (b) The Discharger shall be responsible for the operation and maintenance of transport facilities and associated appurtenances necessary to convey and distribute the recycled water from the point of production to the point of use with all applicable Title 22 requirements.
  - (c) The Discharger shall be responsible for the application and use of recycled water in the use area (landscape irrigation surrounding the Thunder Valley Casino and Facility as described in the Discharger's annual report) and for associated operation and maintenance in accordance with all applicable Title 22 requirements and this Order. The Discharger is also responsible for ensuring that the minimum land application acreage and impoundment capacity to comply with the terms and conditions of this Order are maintained.
- **ii.** The Discharger shall comply with the monitoring and reporting requirements in the Monitoring and Reporting Program (Attachment E) for recycled water.
- iii. The Discharger shall designate a Recycled Water Use Supervisor for the use area. The Recycled Water Use Supervisor shall be responsible for the recycled water system within the use area (landscape irrigation surrounding the Thunder Valley Casino and Facility as described in the Discharger's annual report). Specific responsibilities of the Recycled Water Use Supervisor, at a minimum, shall include the following:
  - (a) Proper installation, operation and maintenance of irrigation systems;
  - **(b)** Control of on-site piping to prevent any cross-connections with potable water supplies;
  - (c) Development of and implementation of a set of procedures to verify on an ongoing basis that cross-connections have not occurred between potable water supplies and recycled water supplies;
  - (d) Routine inspection and maintenance of backflow prevention devices installed to protect potable water supplies, consistent with section 7605 of Title 17, California Code of Regulations; and
  - (e) General responsibilities to ensure compliance with this Order and continuous implementation of any BMPs identified as necessary to prevent potential hazards to public health and to protect the environment.

- iv. Within 30 days of the adoption date of this Order, the Discharger shall submit an O&M Plan to the Regional Water Board. An O&M Plan shall contain the following elements:
  - (a) An Operations Plan. A detailed operations plan for the use area (landscape-irrigation-surrounding-the-Thunder-Valley-Casino-and-Facility)including methods and procedures for implementation of regulations regarding recycled water use and maintenance of equipment and emergency backup systems to maintain compliance with the conditions of this Order and DPH or USEPA requirements (i.e., identification of BMPs implemented to achieve and maintain compliance).
  - (b) An Irrigation Management Plan. The Irrigation Management Plan shall include measures to ensure the use of recycled water occurs at an agronomic rate while employing practices to ensure irrigation efficiency necessary to minimize application of salinity constituents (by mass) to the recycled water use area. The Irrigation Management Plan shall account for the following:
    - Soil characteristics;
    - (2) Recycled water characteristics (nutrients, including nitrogen and phosphorous content; specific ion toxicity, including chloride, boron, sodium, bicarbonate; and other parameters);
    - (3) General requirements of the major plant species being irrigated (e.g., seasonal demand, climate, nutrient requirements);
    - (4) Climatic conditions (e.g., precipitation, evapotranspiration rate, wind);
    - (5) Other supplemental nutrient additions (e.g., chemical fertilizers) generally used within the Use Area; and
    - (6) Management of impoundments used to store or collect recycled water.

Where conditions VI.C.4.c.v.(b)(1) thru (5) vary substantially across a service area, the Irrigation Management Plan shall also include sub-basin irrigation management plans that ensure the use of recycled water occurs at an agronomic rate while employing practices to ensure irrigation efficiency necessary to minimize application of salinity constituents (by mass).

- **(c)** A summary of the applicable approved Title 22 Engineering Report submitted to DPH or USEPA. The summary of the Title 22 Engineering Report shall address the following:
  - (1) Method(s) of wastewater treatment and manner for achieving disinfected tertiary recycled water;

- (2) Method(s) to be used to assure that the installation and operation of the recycled system will not result in cross-connections between the recycled water and potable water piping systems;
- (3) Any recommendations or "conditions of approval" provided by DPH or USEPA; and
- (4) A copy of any approval letter(s) prepared by DPH or USEPA.

The Discharger may provide a copy of the complete approved Title 22 Engineering Report in lieu of a summary. The Title 22 Engineering Report shall be available upon request for review and inspection.

- (d) A copy of the Discharger's established rules and/or regulations as approved by DPH or USEPA governing the design and construction of recycled water use facilities and the use of recycled water in accordance with the criteria established in the Title 22 Requirements and this Order.
- **(e)** A copy of the written (and signed) agreement between the respective parties responsible for producing, distributing, and using recycled water.
- (f) Recycled Water Use Supervisor responsibilities and training.
  - (1) Documentation of or examples from a training program including periodic education for Recycled Water Use Supervisors. At a minimum, such training programs shall include the following elements:
    - The safe and efficient operation and maintenance of recycled water use facilities.
    - Prevention and runoff from Recycled Water Use Areas.
    - Matching irrigation rates to the water requirements of the landscape, and not applying when the soil is saturated<sup>4</sup>.
    - Means for ensuring recycled water and other supplemental nutrients (including fertilizers) are used pursuant to the Irrigation Management Plan (i.e., at agronomic rates<sup>5</sup>).
    - Prevention of cross-connections with potable water systems.
- v. The Discharger shall maintain and comply with the O&M Plan, and all portions thereof including the Irrigation Management Plan submitted pursuant to this Order and the applicable Title 22 Engineering Report. To demonstrate compliance with this provision, the Discharger may develop a pamphlet, brochure, or other educational materials, that convey the key operational elements (e.g., prevention of cross-connections, how to adjust fertilization

<sup>5</sup> Including accounting for fertilizers.

<sup>&</sup>lt;sup>4</sup> Accounting for soil saturation conditions.

rates, impoundment practices, etc.) of the O&M Plan to the Recycled Water Use Supervisor. The Discharger shall also ensure compliance with any applicable Salt and Nutrient Management Plans.

- vi. Amendments to the approved Title 22 Engineering Report as well as a description of new use sites shall be submitted to the appropriate public health authority for approval in advance of connection. The Discharger shall include in the annual report submitted to the Regional Water Board copies of approval letter(s) prepared by DPH or USEPA regarding (1) such amendments to the Title 22 Engineering Report and (2) a description of new sites.
- vii. The Discharger shall ensure that periodic inspections are conducted of the use area (landscape irrigation surrounding the Thunder Valley Casino and Facility) they supply at a frequency approved by DPH or USEPA (but no less than annually), including an adaptive approach to address the use area with a record of compliance concerns. The Discharger shall also establish procedures to monitor and assure compliance with conditions of this Order. The Discharger shall also ensure that regular inspections occur to assure cross-connections with potable water systems are not made and air-gap devices are installed and operable.
- viii. The Discharger shall keep a copy of the O&M Plan and this Order, including its Monitoring and Reporting Program, and attachments in a location where they can be easily referenced by operating personnel. Key operating personnel, including the Recycled Water Use Supervisor, shall be familiar with its contents.
- ix. The Discharger shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that are installed to achieve compliance with the conditions of this Order.
- x. All technical reports required herein that involve planning, investigation, evaluation, or design, or other work requiring interpretation and proper application of engineering or geologic sciences, shall be prepared by or under the direction of persons registered to practice in California pursuant to California Business and Professions Code<sup>6</sup>. To demonstrate compliance with sections 415 and 3065 of Title 16, CCR, all technical reports must contain a statement of the qualifications of the responsible registered professional(s). As required by these laws, completed technical reports must bear the signature(s) and seal(s) of the registered professional(s) in a manner such that all work can be clearly attributed to the professional responsible for the work.
- **xi.** All storm water discharges, including conditionally authorized or exempted non-storm water discharges, from recycled water use areas must comply with the lawful requirements of municipalities, counties, drainage districts, and/or

<sup>&</sup>lt;sup>6</sup> Sections 6735, 7835, and 7835.1.

other local agencies, regarding discharges of storm water to Municipal Separate Storm Sewer Systems (MS4s) under their jurisdiction.

- xii. It is the responsibility of the Discharger to make inquiry and to obtain any local, State, or federal governmental agency permits or authorizations prior to the distribution and use of recycled water for landscape irrigation.
- **d. Title 22 Requirements.** Wastewater shall be oxidized, coagulated, filtered, and adequately disinfected pursuant to the DPH reclamation criteria, CCR, Title 22, division 4, chapter 3, (Title 22), or equivalent.

# 5. Special Provisions for Municipal Facilities (POTWs Only)

## a. Sludge/Biosolids Discharge Specifications

- i. Collected screenings, residual sludge, biosolids, and other solids removed from liquid wastes shall be disposed of in a manner approved by the Executive Officer, and consistent with Consolidated Regulations for Treatment, Storage, Processing, or Disposal of Solid Waste, as set forth in Title 27, CCR, division 2, subdivision 1, section 20005, et seq. Removal for further treatment, disposal, or reuse at sites (e.g., landfill, composting sites, soil amendment sites) that are operated in accordance with valid waste discharge requirements issued by a Regional Water Board will satisfy these specifications.
- **ii.** Sludge and solid waste shall be removed from screens, sumps, ponds, clarifiers, etc. as needed to ensure optimal plant performance.
- iii. The treatment of sludge generated at the Facility shall be confined to the Facility property and conducted in a manner that precludes infiltration of waste constituents into soils in a mass or concentration that will violate groundwater limitations in section V.B. of this Order. In addition, the storage of residual sludge, solid waste, and biosolids on Facility property shall be temporary and controlled, and contained in a manner that minimizes leachate formation and precludes infiltration of waste constituents into soils in a mass or concentration that will violate groundwater limitations included in section V.B. of this Order.
- iv. The use and disposal of biosolids shall comply with existing federal and state laws and regulations, including permitting requirements and technical standards included in 40 CFR Part 503. If the State Water Board and the Regional Water Board are given the authority to implement regulations contained in 40 CFR Part 503, this Order may be reopened to incorporate appropriate time schedules and technical standards. The Discharger must comply with the standards and time schedules contained in 40 CFR Part 503 whether or not they have been incorporated into this Order.

### b. Biosolids Disposal Requirements

- i. The Discharger shall comply with the Monitoring and Reporting Program for biosolids disposal contained in Attachment E.
- ii. Any proposed change in biosolids use or disposal practice from a previously approved practice shall be reported to the Executive Officer and USEPA Regional Administrator at least 90 days in advance of the change.
- **iii.** The Discharger is encouraged to comply with the "Manual of Good Practice for Agricultural Land Application of Biosolids" developed by the California Water Environment Association.

# c. Biosolids Storage Requirements

- i. Facilities for the storage of Class B biosolids shall be located, designed and maintained to restrict public access to biosolids.
- **ii.** Biosolids storage facilities shall be designed and maintained to prevent washout or inundation from a storm or flood with a return frequency of 100 years.
- iii. Biosolids storage facilities, which contain biosolids, shall be designed and maintained to contain all storm water falling on the biosolids storage area during a rainfall year with a return frequency of 100 years.
- **iv.** Biosolids storage facilities shall be designed, maintained and operated to minimize the generation of leachate.
- d. Sanitary Sewer System Operation, Maintenance, and Overflow Protection. The Discharger shall maintain all portions of the wastewater collection system to assure compliance with this Order. Collections system overflows and/or discharges are prohibited by this Order.
  - All violations of this Order must be reported as specified in the Standard Provisions (Attachment D) and the public shall be notified, in coordination with DPH or USEPA, in areas that have been contaminated with sewage. All parties with a reasonable potential for exposure to a sewage overflow shall be notified.
- e. Continuous Monitoring Systems. This permit, and the Monitoring and Reporting Program which is a part of this permit, requires that certain parameters be monitored on a continuous basis. The wastewater treatment plant is not staffed on a full time basis. Permit violations or system upsets can go undetected during this period. The Discharger is required to establish an electronic system for operator notification for continuous recording device alarms. The Discharger has a system in place to automatically contact facility operators in the event of alarms generated at the wastewater treatment plant. The Discharger shall upgrade this system with future facility expansions/upgrades, as necessary, to ensure timely notification. For continuous monitoring systems installed following permit adoption, the notification system shall be installed simultaneously.

## 6. Other Special Provisions

- a. Phase 1 Facility Expansion. The Discharger has requested an expansion of allowable flows to be discharged to Orchard Creek to accommodate flows associated with Phase 1 of the Thunder Valley Casino Upgrade Project. The permitted maximum daily effluent flow may increase to 0.7 MGD upon compliance with the following conditions:
  - i. Effluent and Receiving Water Limitation Compliance. The discharge shall demonstrate compliance with Effluent Limitations IV.A and Receiving Water Surface Limitations V.A.
  - **ii. Facility Expansions.** The Discharger shall have completed construction of the first phase of the Thunder Valley Casino Upgrade Project, as described in the Discharger's Report of Waste Discharge.
  - iii. Request for Increase. The Discharger shall submit to the Regional Water Board a request for an increase in the permitted discharge flow rate, which demonstrates compliance with items i. through ii. of this provision. The increase in the permitted discharge flow rate shall not be effective until the Executive Officer verifies compliance with Special Provisions VI.C.6.a and approves the Discharger's request.

# b. Phase 2 Facility Expansion

- i. Alternatives Analysis. The Discharger has requested an expansion of allowable flows to be discharged to Orchard Creek to accommodate flows associated with Phase 2 of the Thunder Valley Casino Upgrade Project. Prior to the commencement of construction of the second phase of the Thunder Valley Casino Upgrade Project, the Discharger shall submit an updated alternatives analysis to the Regional Water Board for approval by the Executive Officer. The alternatives analysis shall evaluate implementation of feasible alternative control measures which might reduce or eliminate the need for the increased discharge. The analysis must consider, at a minimum, whether regionalization has become feasible.
- ii. Increased Flow. Upon approval of the alternatives analysis in section VI.C.6.b.i by the Executive Officer, the permitted maximum daily effluent flow may increase to 0.875 MGD upon compliance with the following conditions:
  - (a) Effluent and Receiving Water Limitation Compliance. The discharge shall demonstrate compliance with Effluent Limitations IV.A and Receiving Water Surface Limitations V.A.
  - **(b) Facility Expansions.** The Discharger shall have completed construction of the second phase of the Thunder Valley Casino Upgrade Project, as described in the Discharger's Report of Waste Discharge.

- (c) Request for Increase. The Discharger shall submit to the Regional Water Board a request for an increase in the permitted discharge flow rate, which demonstrates compliance with items (a) through (b) of this provision. The increase in the permitted discharge flow rate shall not be effective until the Executive Officer verifies compliance with Special Provisions VI.C.6.b.ii-and approves the Discharger's request.
- c. Regionalization. No later than 6 months prior to the anticipated completion of a permanent gravity sewer line, the Discharger shall submit to the Regional Water Board a time schedule for ceasing the discharge from the Facility to Orchard Creek and connecting to the permanent sewer line. The time schedule shall provide for connection to the permanent sewer line no later than 1 year after the completion of a permanent gravity sewer line. Any request for extension of the 1 year time schedule, or for continued discharge to Orchard Creek, shall be supported by an updated alternatives analysis demonstrating that connection within 1 year is not feasible and the proposed alternative meets the anti-degradation provisions of 40 CFR 131.12 and Resolution No. 68-16.
- 7. Compliance Schedules Not Applicable

### VII. COMPLIANCE DETERMINATION

- A. BOD<sub>5</sub> and TSS Effluent Limitations (Section IV.A.1.a and IV.A.1.b). Compliance with the final effluent limitations for BOD<sub>5</sub> and TSS required in Limitations and Discharge Requirements sections IV.A.1.a shall be ascertained by 24-hour composite samples. Compliance with effluent limitations required in Limitations and Discharge Requirements sections IV.A.1.b for percent removal shall be calculated using the arithmetic mean of BOD<sub>5</sub> and TSS in effluent samples collected over a monthly period as a percentage of the arithmetic mean of the values for influent samples collected at approximately the same times during the same period.
- B. Aluminium Effluent Limitations (Section IV.A.1.a). Compliance with the final effluent limitations for aluminum can be demonstrated using either total or acid-soluble (inductively coupled plasma/atomic emission spectrometry or inductively coupled plasma/mass spectrometry) analysis methods, as supported by USEPA's Ambient Water Quality Criteria for Aluminum document (EPA 440/5-86-008), or other standard methods that exclude aluminum silicate particles as approved by the Executive Officer.
- C. Total Mercury Mass Loading Effluent Limitations (Section IV.A.1.j). The procedures for calculating mass loadings are as follows:
  - 1. The total pollutant mass load for each individual calendar month shall be determined using an average of all concentration data collected that month and the corresponding total monthly flow. All effluent monitoring data collected under the monitoring and reporting program, pretreatment program and any special studies shall be used for these calculations.
  - 2. In calculating compliance, the Discharger shall count all non-detect measures at one-half of the detection level. If compliance with the effluent limitation is not

attained due to the non-detect contribution, the Discharger shall improve and implement available analytical capabilities and compliance shall be evaluated with consideration of the detection limits.

D. Mass Effluent Limitations (Section IV.A.1.j). The mass effluent limitations contained in Limitations and Discharge Requirements section IV.A.1.a are based on the permitted maximum daily effluent flow and calculated as follows:

Mass (lbs/day) = Flow (MGD) x Concentration (mg/L) x 8.34 (conversion factor)

- E. Total Coliform Organisms Effluent Limitations (Section IV.A.1.g.i). For each day that an effluent sample is collected and analyzed for total coliform organisms, the 7-day median shall be determined by calculating the median concentration of total coliform bacteria in the effluent utilizing the bacteriological results of the last 7 days for which analyses have been completed. If the 7-day median of total coliform organisms exceeds a most probable number (MPN) of 2.2 per 100 milliliters, the Discharger will be considered out of compliance for that parameter for that 1 day only within the reporting period.
- F. Instantaneous Maximum Effluent Limitation for Delta-BHC and Endrin Aldehyde (Section IV.A.1.a). The Discharger shall use USEPA standard analytical techniques for analyzing delta-BHC and endrin aldehyde with a maximum reporting level not to exceed the minimum levels listed in Appendix 4 of the SIP (Table 2d). If the analytical result of a single effluent sample is detected for delta-BHC or endrin aldehyde and the result is greater than or equal to the minimum levels listed in Appendix 4 of the SIP, a violation will be flagged and the Discharger will be considered out of compliance for that single sample.
- G. Total Residual Chlorine Effluent Limitations (Section IV.A.1.d). Continuous monitoring analyzers for chlorine residual or for dechlorination agent residual in the effluent are appropriate methods for compliance determination. A positive residual dechlorination agent in the effluent indicates that chlorine is not present in the discharge, which demonstrates compliance with the effluent limitations. This type of monitoring can also be used to prove that some chlorine residual exceedances are false positives. Continuous monitoring data showing either a positive dechlorination agent residual or a chlorine residual at or below the prescribed limit are sufficient to show compliance with the total residual chlorine effluent limitations, as long as the instruments are maintained and calibrated in accordance with the manufacturer's recommendations.

Any excursion above the 1-hour average or 4-day average total residual chlorine effluent limitations is a violation. If the Discharger conducts continuous monitoring and the Discharger can demonstrate, through data collected from a back-up monitoring system, that a chlorine spike recorded by the continuous monitor was not actually due to chlorine, then any excursion resulting from the recorded spike will not be considered an exceedance, but rather reported as a false positive. Records supporting validation of

false positives shall be maintained in accordance with Section IV Standard Provisions (Attachment D).

H. Chronic Whole Effluent Toxicity Effluent Limitation (Section IV.A.1.e). Compliance with the accelerated monitoring and TRE/TIE provisions of Provision VI.C.2.a shall constitute compliance with effluent-limitations IV.A.1.e-for-chronic whole effluent toxicity.

### ATTACHMENT A - DEFINITIONS

## Arithmetic Mean (µ)

Also called the average, is the sum of measured values divided by the number of samples. For ambient water concentrations, the arithmetic mean is calculated as follows:

Arithmetic mean =  $\mu = \Sigma x / n$ 

where:  $\Sigma x$  is the sum of the measured ambient water concentrations, and n is the number of samples.

# **Average Monthly Effluent Limitation (AMEL)**

The highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

# Average Weekly Effluent Limitation (AWEL)

The highest allowable average of daily discharges over a calendar week (Sunday through Saturday), calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week.

### **Bioaccumulative**

Those substances taken up by an organism from its surrounding medium through gill membranes, epithelial tissue, or from food and subsequently concentrated and retained in the body of the organism.

## Carcinogenic

Pollutants are substances that are known to cause cancer in living organisms.

#### Coefficient of Variation (CV)

CV is a measure of the data variability and is calculated as the estimated standard deviation divided by the arithmetic mean of the observed values.

### **Daily Discharge**

Daily Discharge is defined as either: (1) the total mass of the constituent discharged over the calendar day (12:00 am through 11:59 pm) or any 24-hour period that reasonably represents a calendar day for purposes of sampling (as specified in the permit), for a constituent with limitations expressed in units of mass or; (2) the unweighted arithmetic mean measurement of the constituent over the day for a constituent with limitations expressed in other units of measurement (e.g., concentration).

The daily discharge may be determined by the analytical results of a composite sample taken over the course of 1 day (a calendar day or other 24-hour period defined as a day) or by the arithmetic mean of analytical results from one or more grab samples taken over the course of the day.

For composite sampling, if 1 day is defined as a 24-hour period other than a calendar day, the analytical result for the 24-hour period will be considered as the result for the calendar day in which the 24-hour period ends.

# **Detected, but Not Quantified (DNQ)**

DNQ are those sample results less than the RL, but greater than or equal to the laboratory's MDL.

### **Dilution Credit**

Dilution-Gredit-is-the amount-of-dilution-granted to-a-discharge in the calculation-of-a-water-quality-based effluent limitation, based on the allowance of a specified mixing zone. It is calculated from the dilution ratio or determined through conducting a mixing zone study or modeling of the discharge and receiving water.

## **Effluent Concentration Allowance (ECA)**

ECA is a value derived from the water quality criterion/objective, dilution credit, and ambient background concentration that is used, in conjunction with the coefficient of variation for the effluent monitoring data, to calculate a long-term average (LTA) discharge concentration. The ECA has the same meaning as waste load allocation (WLA) as used in USEPA guidance (Technical Support Document For Water Quality-based Toxics Control, March 1991, second printing, EPA/505/2-90-001).

### **Enclosed Bays**

Enclosed Bays means indentations along the coast that enclose an area of oceanic water within distinct headlands or harbor works. Enclosed bays include all bays where the narrowest distance between the headlands or outermost harbor works is less than 75 percent of the greatest dimension of the enclosed portion of the bay. Enclosed bays include, but are not limited to, Humboldt Bay, Bodega Harbor, Tomales Bay, Drake's Estero, San Francisco Bay, Morro Bay, Los Angeles-Long Beach Harbor, Upper and Lower Newport Bay, Mission Bay, and San Diego Bay. Enclosed bays do not include inland surface waters or ocean waters.

#### **Estimated Chemical Concentration**

The estimated chemical concentration that results from the confirmed detection of the substance by the analytical method below the ML value.

#### **Estuaries**

Estuaries means waters, including coastal lagoons, located at the mouths of streams that serve as areas of mixing for fresh and ocean waters. Coastal lagoons and mouths of streams that are temporarily separated from the ocean by sandbars shall be considered estuaries. Estuarine waters shall be considered to extend from a bay or the open ocean to a point upstream where there is no significant mixing of fresh water and seawater. Estuarine waters included, but are not limited to, the Sacramento-San Joaquin Delta, as defined in CWC section 12220, Suisun Bay, Carquinez Strait downstream to the Carquinez Bridge, and appropriate areas of the Smith, Mad, Eel, Noyo, Russian, Klamath, San Diego, and Otay rivers. Estuaries do not include inland surface waters or ocean waters.

#### **Inland Surface Waters**

All surface waters of the State that do not include the ocean, enclosed bays, or estuaries.

### **Instantaneous Maximum Effluent Limitation**

The highest allowable value for any single grab sample or aliquot (i.e., each grab sample or aliquot is independently compared to the instantaneous maximum limitation).

### **Instantaneous Minimum Effluent Limitation**

The lowest allowable value for any single grab sample or aliquot (i.e., each grab sample or aliquot is independently compared to the instantaneous minimum limitation).

## Maximum Daily Effluent Limitation (MDEL)

The highest allowable daily discharge of a pollutant, over a calendar day (or 24-hour period). For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the arithmetic mean measurement of the pollutant over the day.

#### Median

The middle measurement in a set of data. The median of a set of data is found by first arranging the measurements in order of magnitude (either increasing or decreasing order). If the number of measurements (n) is odd, then the median =  $X_{(n+1)/2}$ . If n is even, then the median =  $(X_{n/2} + X_{(n/2)+1})/2$  (i.e., the midpoint between the n/2 and n/2+1).

## **Method Detection Limit (MDL)**

MDL is the minimum concentration of a substance that can be measured and reported with 99 percent confidence that the analyte concentration is greater than zero, as defined in 40 CFR Part 136, Attachment B, revised as of 3 July 1999.

## Minimum Level (ML)

ML is the concentration at which the entire analytical system must give a recognizable signal and acceptable calibration point. The ML is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed by a specific analytical procedure, assuming that all the method specified sample weights, volumes, and processing steps have been followed.

### Mixing Zone

Mixing Zone is a limited volume of receiving water that is allocated for mixing with a wastewater discharge where water quality criteria can be exceeded without causing adverse effects to the overall water body.

### Not Detected (ND)

Sample results which are less than the laboratory's MDL.

### **Ocean Waters**

The territorial marine waters of the State as defined by California law to the extent these waters are outside of enclosed bays, estuaries, and coastal lagoons. Discharges to ocean waters are regulated in accordance with the State Water Board's California Ocean Plan.

### **Persistent Pollutants**

Persistent pollutants are substances for which degradation or decomposition in the environment is nonexistent or very slow.

### Pollutant Minimization Program (PMP)

PMP means waste minimization and pollution prevention actions that include, but are not limited to, product substitution, waste stream recycling, alternative waste management

methods, and education of the public and businesses. The goal of the PMP shall be to reduce all potential sources of a priority pollutant(s) through pollutant minimization (control) strategies, including pollution prevention measures as appropriate, to maintain the effluent concentration at or below the water quality-based effluent limitation. Pollution prevention measures may be particularly appropriate for persistent bioaccumulative priority pollutants where there is evidence that beneficial uses are being impacted. The Regional Water Board may consider cost effectiveness when establishing the requirements of a PMP. The completion and implementation of a Pollution Prevention Plan, if required pursuant to CWC section 13263.3(d), shall be considered to fulfill the PMP requirements.

#### **Pollution Prevention**

Pollution Prevention means any action that causes a net reduction in the use or generation of a hazardous substance or other pollutant that is discharged into water and includes, but is not limited to, input change, operational improvement, production process change, and product reformulation (as defined in Water Code section 13263.3). Pollution prevention does not include actions that merely shift a pollutant in wastewater from one environmental medium to another environmental medium, unless clear environmental benefits of such an approach are identified to the satisfaction of the State or Regional Water Board.

## Reporting Level (RL)

RL is the ML (and its associated analytical method) chosen by the Discharger for reporting and compliance determination from the MLs included in this Order. The MLs included in this Order correspond to approved analytical methods for reporting a sample result that are selected by the Regional Water Board either from Appendix 4 of the SIP in accordance with section 2.4.2 of the SIP or established in accordance with section 2.4.3 of the SIP. The ML is based on the proper application of method-based analytical procedures for sample preparation and the absence of any matrix interferences. Other factors may be applied to the ML depending on the specific sample preparation steps employed. For example, the treatment typically applied in cases where there are matrix-effects is to dilute the sample or sample aliquot by a factor of ten. In such cases, this additional factor must be applied to the ML in the computation of the RL.

### **Satellite Collection System**

The portion, if any, of a sanitary sewer system owned or operated by a different public agency than the agency that owns and operates the wastewater treatment facility that a sanitary sewer system is tributary to.

### **Source of Drinking Water**

Any water designated as municipal or domestic supply (MUN) in a Regional Water Board Basin Plan.

# Standard Deviation (σ)

Standard Deviation is a measure of variability that is calculated as follows:

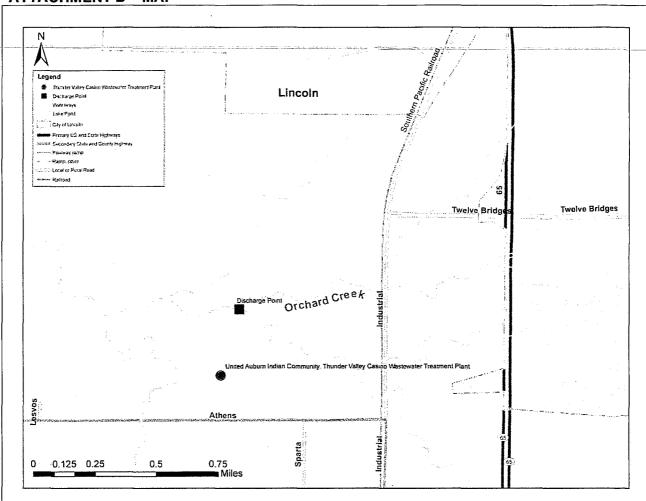
$$\sigma = (\sum [(x - \mu)^2]/(n - 1))^{0.5}$$
  
where:

- x is the observed value;
- $\mu$  is the arithmetic mean of the observed values; and
- n is the number of samples.

# **Toxicity Reduction Evaluation (TRE)**

TRE is a study conducted in a step-wise process designed to identify the causative agents of effluent or ambient toxicity, isolate the sources of toxicity, evaluate the effectiveness of toxicity control options, and then confirm the reduction in toxicity. The first steps of the TRE consist of the collection of data relevant to the toxicity, including additional toxicity testing, and an evaluation of facility operations and maintenance practices, and best management practices. A Toxicity Identification Evaluation (TIE) may be required as part of the TRE, if appropriate. (A TIE is a set of procedures to identify the specific chemical(s) responsible for toxicity. These procedures are performed in three phases (characterization, identification, and confirmation) using aquatic organism toxicity tests.)

# ATTACHMENT B - MAP



# SITE LOCATION MAP

United Auburn Indian Community Thunder Valley Casino Wastewater Treatment Plant Placer County

# ATTACHMENT C - FLOW SCHEMATIC

Figure C-1. Flow Schematic – First Phase of Expansion (0.7 MGD)

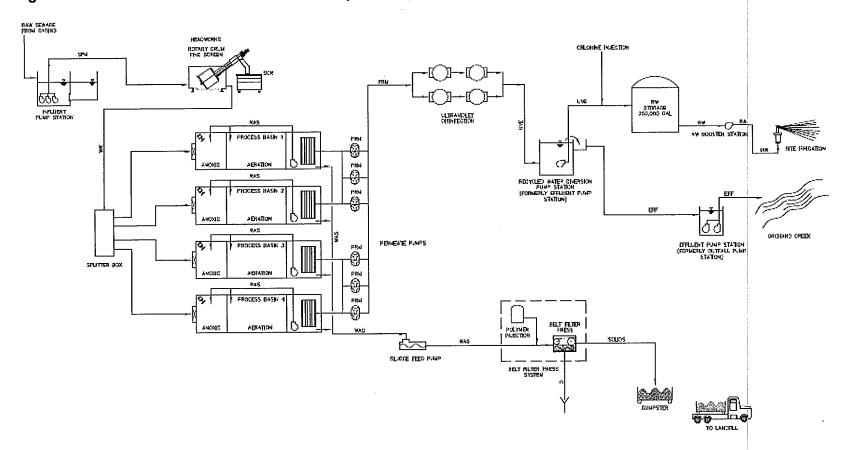
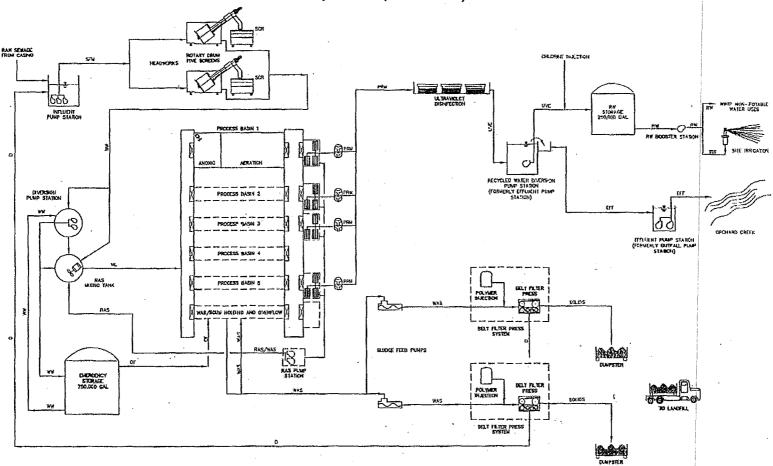


Figure C-1. Flow Schematic – Second Phase of Expansion (0.875 MGD)



#### ATTACHMENT D - STANDARD PROVISIONS

#### VIII. STANDARD PROVISIONS - PERMIT COMPLIANCE

#### A. Duty to Comply

- 1. The Discharger must comply with all of the conditions of this Order. Any noncompliance constitutes a violation of the Clean Water Act (CWA) and the California Water Code (CWC) and is grounds for enforcement action, for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. (40 CFR 122.41(a).)
- 2. The Discharger shall comply with effluent standards or prohibitions established under section 307(a) of the CWA for toxic pollutants and with standards for sewage sludge use or disposal established under section 405(d) of the CWA within the time provided in the regulations that establish these standards or prohibitions, even if this Order has not yet been modified to incorporate the requirement. (40 CFR 122.41(a)(1).)

# B. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a Discharger in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Order. (40 CFR 122.41(c).)

# C. Duty to Mitigate

The Discharger shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this Order that has a reasonable likelihood of adversely affecting human health or the environment. (40 CFR 122.41(d).)

### D. Proper Operation and Maintenance

The Discharger shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Discharger to achieve compliance with the conditions of this Order. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems that are installed by a Discharger only when necessary to achieve compliance with the conditions of this Order. (40 CFR 122.41(e).)

# E. Property Rights

1. This Order does not convey any property rights of any sort or any exclusive privileges. (40 CFR 122.41(g).)

2. The issuance of this Order does not authorize any injury to persons or property or invasion of other private rights, or any infringement of state or local law or regulations. (40 CFR 122.5(c).)

### F. Inspection and Entry

The Discharger shall allow the Regional Water Board, State Water Board, United States Environmental Protection Agency (USEPA), and/or their authorized representatives (including an authorized contractor acting as their representative), upon the presentation of credentials and other documents, as may be required by law, to (40 CFR 122.41(i); CWC section 13383):

- Enter upon the Discharger's premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this Order (40 CFR 122.41(i)(1));
- 2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order (40 CFR 122.41(i)(2));
- 3. Inspect and photograph, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order (40 CFR 122.41(i)(3)); and
- **4.** Sample or monitor, at reasonable times, for the purposes of assuring Order compliance or as otherwise authorized by the CWA or the CWC, any substances or parameters at any location. (40 CFR 122.41(i)(4).)

# G. Bypass

- 1. Definitions
  - **a.** "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility. (40 CFR 122.41(m)(1)(i).)
  - b. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities, which causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production. (40 CFR 122.41(m)(1)(ii).)
- 2. Bypass not exceeding limitations. The Discharger may allow any bypass to occur which does not cause exceedances of effluent limitations, but only if it is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions listed in Standard Provisions Permit Compliance I.G.3, I.G.4, and I.G.5 below. (40 CFR 122.41(m)(2).)

- **3.** Prohibition of bypass. Bypass is prohibited, and the Regional Water Board may take enforcement action against a Discharger for bypass, unless (40 CFR 122.41(m)(4)(i)):
  - **a.** Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage (40 CFR 122.41(m)(4)(i)(A));
  - **b.** There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance (40 CFR 122.41(m)(4)(i)(B)); and
  - **c.** The Discharger submitted notice to the Regional Water Board as required under Standard Provisions Permit Compliance I.G.5 below. (40 CFR 122.41(m)(4)(i)(C).)
- 4. The Regional Water Board may approve an anticipated bypass, after considering its adverse effects, if the Regional Water Board determines that it will meet the three conditions listed in Standard Provisions Permit Compliance I.G.3 above. (40 CFR 122.41(m)(4)(ii).)

#### 5. Notice

- a. Anticipated bypass. If the Discharger knows in advance of the need for a bypass, it shall submit a notice, if possible at least 10 days before the date of the bypass. (40 CFR 122.41(m)(3)(i).)
- **b.** Unanticipated bypass. The Discharger shall submit notice of an unanticipated bypass as required in Standard Provisions Reporting V.E below (24-hour notice). (40 CFR 122.41(m)(3)(ii).)

# H. Upset

Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the Discharger. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation. (40 CFR 122.41(n)(1).)

1. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of Standard Provisions – Permit Compliance I.H.2 below are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review. (40 CFR 122.41(n)(2).)

- 2. Conditions necessary for a demonstration of upset. A Discharger who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that (40 CFR 122.41(n)(3)):
  - a. An upset occurred and that the Discharger can identify the cause(s) of the upset (40 CFR 122.41(n)(3)(i));
  - **b.** The permitted facility was, at the time, being properly operated (40 CFR 122.41(n)(3)(ii));
  - **c.** The Discharger submitted notice of the upset as required in Standard Provisions Reporting V.E.2.b below (24-hour notice) (40 CFR 122.41(n)(3)(iii)); and
  - **d.** The Discharger complied with any remedial measures required under Standard Provisions Permit Compliance I.C above. (40 CFR 122.41(n)(3)(iv).)
- Burden of proof. In any enforcement proceeding, the Discharger seeking to establish the occurrence of an upset has the burden of proof. (40 CFR 122.41(n)(4).)

#### IX. STANDARD PROVISIONS - PERMIT ACTION

#### A. General

This Order may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Discharger for modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any Order condition. (40 CFR 122.41(f).)

#### B. Duty to Reapply

If the Discharger wishes to continue an activity regulated by this Order after the expiration date of this Order, the Discharger must apply for and obtain a new permit. (40 CFR 122.41(b).)

#### C. Transfers

This Order is not transferable to any person except after notice to the Regional Water Board. The Regional Water Board may require modification or revocation and reissuance of the Order to change the name of the Discharger and incorporate such other requirements as may be necessary under the CWA and the CWC. (40 CFR 122.41(I)(3) and 122.61.)

#### X. STANDARD PROVISIONS - MONITORING

**A.** Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. (40 CFR 122.41(j)(1).)

**B.** Monitoring results must be conducted according to test procedures under 40 CFR Part 136 or, in the case of sludge use or disposal, approved under 40 CFR Part 136 unless otherwise specified in 40 CFR Part 503 unless other test procedures have been specified in this Order. (40 CFR 122.41(j)(4) and 122.44(i)(1)(iv).)

#### XI. STANDARD PROVISIONS - RECORDS

A. Except for records of monitoring information required by this Order related to the Discharger's sewage sludge use and disposal activities, which shall be retained for a period of at least 5 years (or longer as required by 40 CFR Part 503), the Discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Order, and records of all data used to complete the application for this Order, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the Regional Water Board Executive Officer at any time. (40 CFR 122.41(j)(2).)

### B. Records of monitoring information shall include:

- 1. The date, exact place, and time of sampling or measurements (40 CFR 122.41(j)(3)(i));
- 2. The individual(s) who performed the sampling or measurements (40 CFR 122.41(j)(3)(ii));
- 3. The date(s) analyses were performed (40 CFR 122.41(j)(3)(iii));
- **4.** The individual(s) who performed the analyses (40 CFR 122.41(j)(3)(iv));
- 5. The analytical techniques or methods used (40 CFR 122.41(j)(3)(v)); and
- **6.** The results of such analyses. (40 CFR 122.41(j)(3)(vi).)

# C. Claims of confidentiality for the following information will be denied (40 CFR 122.7(b)):

- 1. The name and address of any permit applicant or Discharger (40 CFR 122.7(b)(1)); and
- 2. Permit applications and attachments, permits and effluent data. (40 CFR 122.7(b)(2).)

#### XII. STANDARD PROVISIONS – REPORTING

#### A. Duty to Provide Information

The Discharger shall furnish to the Regional Water Board, State Water Board, or USEPA within a reasonable time, any information which the Regional Water Board,

State Water Board, or USEPA may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order or to determine compliance with this Order. Upon request, the Discharger shall also furnish to the Regional Water Board, State Water Board, or USEPA copies of records required to be kept by this Order. (40 CFR 122.41(h); Wat. Code, § 13267.)

#### **B. Signatory and Certification Requirements**

- 1. All applications, reports, or information submitted to the Regional Water Board, State Water Board, and/or USEPA shall be signed and certified in accordance with Standard Provisions Reporting V.B.2, V.B.3, V.B.4, and V.B.5 below. (40 CFR 122.41(k).)
- 2. All permit applications shall be signed by either a principal executive officer or ranking elected official. For purposes of this provision, a principal executive officer of a federal agency includes: (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of USEPA). (40 CFR 122.22(a)(3).).
- 3. All reports required by this Order and other information requested by the Regional Water Board, State Water Board, or USEPA shall be signed by a person described in Standard Provisions Reporting V.B.2 above, or by a duly authorized representative of that person. A person is a duly authorized representative only if:
  - **a.** The authorization is made in writing by a person described in Standard Provisions Reporting V.B.2 above (40 CFR 122.22(b)(1));
  - b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.) (40 CFR 122.22(b)(2)); and
  - **c.** The written authorization is submitted to the Regional Water Board and State Water Board. (40 CFR 122.22(b)(3).)
- 4. If an authorization under Standard Provisions Reporting V.B.3 above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Standard Provisions Reporting V.B.3 above must be submitted to the Regional Water Board and State Water Board prior to or together with any reports, information, or applications, to be signed by an authorized representative. (40 CFR 122.22(c).)
- **5.** Any person signing a document under Standard Provisions Reporting V.B.2 or V.B.3 above shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations." (40 CFR 122.22(d).)

#### C. Monitoring Reports

- 1. Monitoring results shall be reported at the intervals specified in the Monitoring and Reporting Program (Attachment E) in this Order. (40 CFR 122.22(I)(4).)
- Monitoring results must be reported on a Discharge Monitoring Report (DMR) form or forms provided or specified by the Regional Water Board or State Water Board for reporting results of monitoring of sludge use or disposal practices. (40 CFR 122.41(I)(4)(i).)
- 3. If the Discharger monitors any pollutant more frequently than required by this Order using test procedures approved under 40 CFR Part 136 or, in the case of sludge use or disposal, approved under 40 CFR Part 136 unless otherwise specified in 40 CFR Part 503, or as specified in this Order, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Regional Water Board. (40 CFR 122.41(l)(4)(ii).)
- Calculations for all limitations, which require averaging of measurements, shall utilize an arithmetic mean unless otherwise specified in this Order.
   (40 CFR 122.41(l)(4)(iii).)

### D. Compliance Schedules

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this Order, shall be submitted no later than 14 days following each schedule date. (40 CFR 122.41(I)(5).)

# E. Two-Hour and Twenty-Four Hour Reporting

1. The Discharger shall notify the Office of Emergency Services any noncompliance that may endanger health or the environment within 2-hours from the time the Discharger becomes aware of the circumstances. Any information shall be provided by telephone or fax within 24 hours from the time the Discharger becomes aware of the circumstances. A written submission shall also be provided within five (5) days of the time the Discharger becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. (40 CFR 122.41(I)(6)(i).)

- 2. The following shall be included as information that must be reported within 24 hours under this paragraph (40 CFR 122.41(I)(6)(ii)):
  - **a.** Any unanticipated bypass that exceeds any effluent limitation in this Order. (40 CFR 122.41(I)(6)(ii)(A).)
  - **b.** Any upset that exceeds any effluent limitation in this Order. (40 CFR 122.41(l)(6)(ii)(B).)
- 3. The Regional Water Board may waive the above-required written report under this provision on a case-by-case basis if an oral report has been received within 24 hours. (40 CFR 122.41(l)(6)(iii).)

# F. Planned Changes

The Discharger shall give notice to the Regional Water Board as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required under this provision only when (40 CFR 122.41(I)(1)):

- The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR 122.29(b) (40 CFR 122.41(l)(1)(i)); or
- 2. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are not subject to effluent limitations in this Order. (40 CFR 122.41(l)(1)(ii).)
- 3. The alteration or addition results in a significant change in the Discharger's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan. (40 CFR 122.41(I)(1)(iii).)

# G. Anticipated Noncompliance

The Discharger shall give advance notice to the Regional Water Board or State Water Board of any planned changes in the permitted facility or activity that may result in noncompliance with General Order requirements. (40 CFR 122.41(I)(2).)

# H. Other Noncompliance

The Discharger shall report all instances of noncompliance not reported under Standard Provisions – Reporting V.C, V.D, and V.E above at the time monitoring reports are submitted. The reports shall contain the information listed in Standard Provision – Reporting V.E above. (40 CFR 122.41(I)(7).)

#### I. Other Information

When the Discharger becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Regional Water Board, State Water Board, or USEPA, the Discharger shall promptly submit such facts or information. (40 CFR 122.41(I)(8).)

# XIII. STANDARD PROVISIONS - ENFORCEMENT

**A.** The Regional Water Board is authorized to enforce the terms of this permit under several provisions of the CWC, including, but not limited to, sections 13385, 13386, and 13387

# XIV. ADDITIONAL PROVISIONS - NOTIFICATION LEVELS

#### A. Publicly-Owned Treatment Works (POTWs)

All POTWs shall provide adequate notice to the Regional Water Board of the following (40 CFR 122.42(b)):

- 1. Any new introduction of pollutants into the POTW from an indirect discharger that would be subject to sections 301 or 306 of the CWA if it were directly discharging those pollutants (40 CFR 122.42(b)(1)); and
- 2. Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of adoption of the Order. (40 CFR 122.42(b)(2).)
- 3. Adequate notice shall include information on the quality and quantity of effluent introduced into the POTW as well as any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW. (40 CFR 122.42(b)(3).)

# ATTACHMENT E - MONITORING AND REPORTING PROGRAM

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#### ATTACHMENT E - MONITORING AND REPORTING PROGRAM

Title 40 of the Code of Federal Regulations (CFR), section 122.48 (40 CFR 122.48) requires that all NPDES permits specify monitoring and reporting requirements. California Water Code (CWC) sections 13267 and 13383 also authorize the Regional Water Quality Control Board (Regional Water Board) to require technical and monitoring reports. This Monitoring and Reporting Program establishes monitoring and reporting requirements, which implement the federal and California regulations.

#### I. GENERAL MONITORING PROVISIONS

- A. Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge. All samples shall be taken at the monitoring locations specified below and, unless otherwise specified, before the monitored flow joins or is diluted by any other waste stream, body of water, or substance. Monitoring locations shall not be changed without notification to and the approval of this Regional Water Board.
- **B.** Effluent samples shall be taken downstream of the last addition of wastes to the treatment or discharge works where a representative sample may be obtained prior to mixing with the receiving waters. Samples shall be collected at such a point and in such a manner to ensure a representative sample of the discharge.
- C. Chemical, bacteriological, and bioassay analyses shall be conducted at a laboratory certified for such analyses by the Department of Public Health (DPH; formerly the Department of Health Services). In the event a certified laboratory is not available to the Discharger, analyses performed by a noncertified laboratory will be accepted provided a Quality Assurance-Quality Control Program is instituted by the laboratory. A manual containing the steps followed in this program must be kept in the laboratory and shall be available for inspection by Regional Water Board staff. The Quality Assurance-Quality Control Program must conform to USEPA guidelines or to procedures approved by the Regional Water Board.
- **D.** All analyses shall be performed in a laboratory certified to perform such analyses by DPH. Laboratories that perform sample analyses must be identified in all monitoring reports submitted to the Regional Water Board.
- E. Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. All monitoring instruments and devices used by the Discharger to fulfill the prescribed monitoring program shall be properly maintained and calibrated as necessary, at least yearly, to ensure their continued accuracy. All flow measurement devices shall be calibrated at least once per year to ensure continued accuracy of the devices.
- **F.** Monitoring results, including noncompliance, shall be reported at intervals and in a manner specified in this Monitoring and Reporting Program.

- **G.** Laboratories analyzing monitoring samples shall be certified by DPH, in accordance with the provision of CWC section 13176, and must include quality assurance/quality control data with their reports.
- **H.** The Discharger shall conduct analysis on any sample provided by USEPA as part of the Discharge-Monitoring-Quality-Assurance (DMQA) program. The results of any such analysis shall be submitted to USEPA's DMQA manager.
- I. The Discharger shall file with the Regional Water Board technical reports on self-monitoring performed according to the detailed specifications contained in this Monitoring and Reporting Program.
- J. The results of all monitoring required by this Order shall be reported to the Regional Water Board, and shall be submitted in such a format as to allow direct comparison with the limitations and requirements of this Order. Unless otherwise specified, discharge flows shall be reported in terms of the monthly average and the daily maximum discharge flows.

# **II. MONITORING LOCATIONS**

The Discharger shall establish the following monitoring locations to demonstrate compliance with the effluent limitations, discharge specifications, and other requirements in this Order:

Table E-1. Monitoring Station Locations

Table E-1. Monitoring Station Locations				
Discharge Point Name	Monitoring Location Name	Monitoring Location Description		
	INF-001	A location where a representative sample of the influent into the Facility can be collected.		
001	EFF-001	Downstream from the last connection through which wastes can be admitted into the outfall.		
	RSW-001	50 feet upstream from the point of discharge Orchard Creek.		
	RSW-002	200 feet downstream from the point of discharge in Orchard Creek.		
	REC-001	A location where a representative sample of the reclaimed water used for landscape irrigation purposes can be collected.		
	BIO-001	A location where a representative sample of biosolids can be obtained.		
	SPL-001	A location where a representative sample of the municipal water supply can be obtained.		
	UVS-001	Ultraviolet disinfection system.		

### **III. INFLUENT MONITORING REQUIREMENTS**

# A. Monitoring Location INF-001

1. The Discharger shall monitor the influent to the Facility at INF-001 as follows:

Table E-2. Influent Monitoring

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Flow	MGD	Meter	Continuous	
Conventional Pollutants				
Biochemical Oxygen Demand (5-day @ 20°C)	mg/L	24-Hour Composite <sup>1</sup>	1/Day	2
Total Suspended Solids	mg/L	24-Hour Composite <sup>1</sup>	1/Day	2

<sup>24-</sup>hour flow proportioned composite.

#### IV. EFFLUENT MONITORING REQUIREMENTS

# A. Monitoring Location EFF-001

1. The Discharger shall monitor the tertiary treated effluent at EFF-001 as follows. If more than one analytical test method is listed for a given parameter, the Discharger must select from the listed methods and corresponding Minimum Level:

<sup>&</sup>lt;sup>2</sup> Pollutants shall be analyzed using the analytical methods described in 40 CFR Part 136.

**Table E-3. Effluent Monitoring** 

Parameter	Units Sample Typ		Minimum Sampling Frequency <sup>2</sup>	Required Analytical Test Method	
Flow	MGD	Meter	Continuous		
Conventional Pollutants					
Biochemical Oxygen Demand (5-day @ 20°C)	mg/L	24-Hour Composite <sup>3</sup>	1/Day	4	
Demaild (5-day @ 20 C)	lbs/day	Calculate	1/Day	4	
рН	standard units	Meter	1/Day	4	
Total Suspended Solids	mg/L	24-Hour Composite <sup>3</sup>	1/Day	4	
	lbs/day	Calculate	1/Day	4	
Priority Pollutants					
Cadmium, Total Recoverable	μg/L	Grab	1/Month	4,5	
Delta-BHC	μg/L	Grab	1/Month	4,5	
Endrin Aldehyde	μg/L	Grab	1/Month	4,5	
Lead, Total Recoverable	μg/L	Grab	1/Month	4,5	
Mercury, Total Recoverable	μg/L	Grab	1/Month	4,5,6	
Zinc, Total Recoverable	μg/L	Grab	1/Month	4,5	
Priority Pollutants and Other Constituents of Concern <sup>7</sup>	μg/L	24-Hour Composite <sup>8</sup>	9	4,5,10	
Non-Conventional Pollutant	s				
Aluminum, Total Recoverable	μg/L	24-Hour Composite	1/Month	4,11	
Ammonia Nitrogen, Total (as	mg/L	Grab	1/Day <sup>12,13</sup>	4	
N)	lbs/day	Calculate	1/Day	4	
Chlorine, Total Residual	mg/L	Meter	Continuous <sup>14</sup>	4	
Electrical Conductivity @ 25°C	µmhos/cm	Grab	3/Week	4	
Hardness (as CaCO <sub>3</sub> )	mg/L	Grab	1/Month	4	
Iron, Total Recoverable	μg/L	Grab	1/Month	4	
Manganese, Total Recoverable	μg/L	Grab	1/Month	4	
Temperature	°C	Grab	1/Day	4	
Total Coliform Organisms	MPN/100 mL	Grab	1/Day	4	
Total Dissolved Solids	mg/L	24-Hour Composite <sup>3</sup>	1/Month	4	

Parameter	Units	Sample Type <sup>1</sup>	Minimum Sampling Frequency <sup>2</sup>	Required Analytical Test Method
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- Samples collected from the outlet structure of the ponds will be considered adequately composited.

  If the discharge is intermittent rather than continuous, then on the first day of each such intermittent discharge, the Discharger shall monitor and record for all of the constituents listed above, after which the frequencies of analysis given above shall apply for the duration of each such intermittent discharge. In no event shall the Discharger be required to monitor and record data more often than twice the frequencies listed above.
- 3 24-hour flow proportioned composite.

Pollutants shall be analyzed using the analytical methods described in 40 CFR Part 136.

- For priority pollutant constituents with effluent limitations, detection limits shall be below the effluent limitations. If the lowest minimum level (ML) published in Appendix 4 of the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (State Implementation Plan or SIP) is not below the effluent limitation, the detection limit shall be the lowest ML. For priority pollutant constituents without effluent limitations, the detection limits shall be equal to or less than the lowest ML published in Appendix 4 of the SIP.
- Unfiltered methylmercury and total mercury samples shall be taken using clean hands/dirty hands procedures, as described in USEPA Method 1669: Sampling Ambient Water for Trace Metals at EPA Water Quality Levels, for collection of equipment blanks (section 9.4.4.2), and shall be analyzed by USEPA Method 1630/1631 (Revision E) with a method detection limit of 0.02 ng/L for methylmercury and 0.2 ng/L for total mercury.
- See List of Priority Pollutants and Other Pollutants of Concern in Attachment I.

Volatile constituents shall be sampled in accordance with 40 CFR Part 136.

- Priority pollutants and other constituents of concern shall be sampled quarterly during the third year following the date of permit adoption and shall be conducted concurrently with upstream receiving water monitoring for priority pollutants, hardness (as CaCO<sub>3</sub>), and pH. The Discharger is not required to conduct effluent monitoring for priority pollutants that have already been sampled in a given quarter, as required in Table E-3. See Attachment I for more detailed requirements related to performing the priority pollutant monitoring.
- In order to verify if bis (2-ethylhexyl) phthalate is truly present in the effluent discharge, the Discharger shall take steps to assure that sample containers, sampling apparatus, and analytical equipment are not sources of the detected pollutant.
- 11 Compliance with the final effluent limitations for aluminum can be demonstrated using either total or acidsoluble (inductively coupled plasma/atomic emission spectrometry or inductively coupled plasma/mass spectrometry) analysis methods, as supported by USEPA's Ambient Water Quality Criteria for Aluminum document (EPA 440/5-86-008), or other standard methods that exclude aluminum silicate particles as approved by the Executive Officer.
- Concurrent with whole effluent toxicity monitoring.

pH and temperature shall be recorded at the time of ammonia sample collection.

Total chlorine residual must be monitored with a method sensitive to and accurate at the permitted level of 0.01 mg/L. Monitoring for chlorine residual is required only during periods when sodium hypochlorite is being used in the treatment system.

#### V. WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS

- **A.** Acute Toxicity Testing. The Discharger shall conduct acute toxicity testing to determine whether the effluent is contributing acute toxicity to the receiving water. The Discharger shall meet the following acute toxicity testing requirements:
  - 1. <u>Monitoring Frequency</u> The Discharger shall perform quarterly acute toxicity testing, concurrent with effluent ammonia sampling.
  - 2. <u>Sample Types</u> For static non-renewal and static renewal testing, the samples shall be grab samples and shall be representative of the volume and quality of the

discharge. The effluent samples shall be taken at the effluent monitoring location EFF-001.

- 3. <u>Test Species</u> Test species shall be fathead minnows (*Pimephales promelas*).
- **4.** <u>Methods</u> The acute toxicity testing samples shall be analyzed using EPA-821-R-02-012, Fifth Edition. Temperature, total residual chlorine, and pH shall be recorded at the time of sample collection. No pH adjustment may be made unless approved by the Executive Officer.
- **5.** <u>Test Failure</u> If an acute toxicity test does not meet all test acceptability criteria, as specified in the test method, the Discharger must re-sample and re-test as soon as possible, not to exceed 7 days following notification of test failure.
- **B. Chronic Toxicity Testing.** The Discharger shall conduct three species chronic toxicity testing to determine whether the effluent is contributing chronic toxicity to the receiving water. The Discharger shall meet the following chronic toxicity testing requirements:
  - **1.** <u>Monitoring Frequency</u> The Discharger shall perform quarterly three species chronic toxicity testing.
  - 2. <u>Sample Types</u> Effluent samples shall be flow proportional 24-hour composite samples and shall be representative of the volume and quality of the discharge. The effluent samples shall be taken at the effluent monitoring location EFF-001. The receiving water control shall be a grab sample obtained from the RSW-001 sampling location, as identified in this Monitoring and Reporting Program.
  - **3.** <u>Sample Volumes</u> Adequate sample volumes shall be collected to provide renewal water to complete the test in the event that the discharge is intermittent.
  - **4.** <u>Test Species</u> Chronic toxicity testing measures sublethal (e.g., reduced growth, reproduction) and/or lethal effects to test organisms exposed to an effluent compared to that of the control organisms. The Discharger shall conduct chronic toxicity tests with:
    - The cladoceran, water flea, Ceriodaphnia dubia (survival and reproduction test);
    - The fathead minnow, Pimephales promelas (larval survival and growth test); and
    - The green alga, Selenastrum capricornutum (growth test).
  - **5.** <u>Methods</u> The presence of chronic toxicity shall be estimated as specified in *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, Fourth Edition*, EPA/821-R-02-013, October 2002.
  - **6.** <u>Reference Toxicant</u> As required by the SIP, all chronic toxicity tests shall be conducted with concurrent testing with a reference toxicant and shall be reported with the chronic toxicity test results.

7. <u>Dilutions</u> – For regular chronic toxicity monitoring, the testing shall be performed using 100% effluent and two controls. If toxicity is found in any regular effluent test, the Discharger must immediately retest using the dilution series identified in Table E-4, below. The receiving water control shall be used as the diluent (unless the receiving water is toxic). For accelerated and/or TRE monitoring, the chronic toxicity testing shall be performed using the full dilution-series identified in the table, below.

Table E-4. Chronic Toxicity Testing Dilution Series

	Dilutions (%)					Controls	
Sample	100	75	50	25	12.5	Receiving Water	Laboratory Water
% Effluent	100	75	50	25	12.5	0	0
% Receiving Water	0	25	50	75	87.5	100	0
% Laboratory Water	0	0	0	0	0	0	100

- 8. <u>Test Failure</u> The Discharger must re-sample and re-test as soon as possible, but no later than fourteen (14) days after receiving notification of a test failure. A test failure is defined as follows:
  - a. The reference toxicant test or the effluent test does not meet all test acceptability criteria as specified in the Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, Fourth Edition, EPA/821-R-02-013, October 2002 (Method Manual), and its subsequent amendments or revisions; or
  - b. The percent minimum significant difference (PMSD) measured for the test exceeds the upper PMSD bound variability criterion in Table 6 on page 52 of the Method Manual. (A retest is only required in this case if the test results do not exceed the monitoring trigger specified in the Special Provision at section VI.C.2.a.iii. of the Order.)
- **C. WET Testing Notification Requirements.** The Discharger shall notify the Regional Water Board within 24-hours after the receipt of test results exceeding the monitoring trigger during regular or accelerated monitoring, or an exceedance of the acute toxicity effluent limitation.
- D. WET Testing Reporting Requirements. All toxicity test reports shall include the contracting laboratory's complete report provided to the Discharger and shall be in accordance with the appropriate "Report Preparation and Test Review" sections of the method manuals. At a minimum, whole effluent toxicity monitoring shall be reported as follows:
  - 1. Chronic WET Reporting. Regular chronic toxicity monitoring results shall be reported to the Regional Water Board within 30 days following completion of the test, and shall contain, at minimum:
    - **a.** The results expressed in TUc, measured as 100/NOEC, and also measured as 100/LC50, 100/EC25, 100/IC25, and 100/IC50, as appropriate.