California Regional Water Quality Control Board
Santa Ana Region

ORDER NO. R8-2005-0003
NPDES NO. CA8000027

Waste Discharge and Producer/User Water Recycling Requirements

for

Elsinore Valley Municipal Water District
Regional Water Reclamation Facility
Riverside County

California Regional Water Quality Control Board
Santa Ana Region

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1. On August 26, 2004, Elsinore Valley Municipal Water District (hereinafter, discharger or EVMWD) submitted a complete Report of Waste Discharge and a National Pollutant Discharge Elimination System permit application for the renewal of waste discharge requirements for EVMWD's Regional Water Reclamation Facility (RWRF) discharges of tertiary treated wastewater into Temescal Creek and/or to Lake Elsinore. Discharges from the facility are currently regulated under Order No. 00-1, NPDES No. CA8000027. Order No. 00-1 expired on February 1, 2005 and was not administratively extended.

2. Order No. 00-1 was amended by Orders No. 01-70, R8-2002-0008-A02, R8-2003-0067 and R8-2004-0099. A summary description of these amendments is provided in the following table:

Order No.	Date of Amendment	Description of Amendment
01-70	July 20, 2001	Added Turbidity and Coliform limits to the Order
R8-2002-0008-A02	January 23, 2002	Authorized the discharge of tertiary treated wastewater into Lake Elsinore for a two-year pilot project to address lake stabilization problems and to determine effects of the discharges on the quality and beneficial uses of the lake.
R8-2003-0067	July 1, 2003	Extended the discharge of tertiary treated wastewater into Lake Elsinore to December 1, 2004.
R8-2004-0099	December 20, 2004	Extended authorization to discharge recycled water into Lake Elsinore until such time that renewed waste discharge requirements are adopted by the Regional Board.

3. The treatment facility is located at 14980 Strickland Avenue in a portion of Section 31, T5S, R4W, SSB&M, in the City of Lake Elsinore, Riverside County.

4. The facility is designed to tertiary treat 8 million gallons per day (mgd) of wastewater. The treatment process is divided into two parallel treatment trains. The original treatment facilities are called Train A and the newer facilities are called Train B.

5. The facility treats domestic and commercial wastes generated within EVMWD's service area, including the cities of Lake Elsinore and Canyon Lake and the communities of Wildomar and Lakeland Village. Current wastewater flow is about 4.66 mgd.

6. The wastewater treatment consists of the following:

   a. Preliminary treatment consists of bar screening and grit chambers.
   b. Secondary treatment utilizes oxidation ditch technology and anaerobic reactors for carbonaceous and nitrogenous pollutant reduction.
   c. Tertiary treatment consists of monomedia filtration. Ultraviolet light is used for disinfection.
   d. Primary sludge treatment consists of belt press mechanical dewatering and drying. Sludge bed dewatering and drying is also employed, especially in summer.

7. The discharge outfall to Temescal Creek (Outfall 001) is located at latitude 37°27'00" and longitude 117°21'00". The discharge outfall to Lake Elsinore (Outfall 002) is located at latitude 33°40'45" and longitude 117°19'44".

8. The RWRF currently produces 4.66 mgd of tertiary treated wastewater. Currently, up to 3.35 mgd of wastewater is discharged to Reach 5, Temescal Creek, of which 0.5 mgd flows in a channel alongside Temescal Creek that goes into Gunerson Pond, a constructed wetland. Up to 1.1 mgd flow is discharged to Lake Elsinore for lake water replenishment. EVWMD plans to discharge up to 7.5 mgd recycled water to the Lake to stabilize the lake water elevation and thereby improve water quality and beneficial uses.

9. EVMWD owns and operates a number of municipal treatment facilities, including the Railroad Canyon wastewater treatment plant (RRC) and the Canyon Lake water treatment plant. Treated water from RRC is used for golf course irrigation at the Canyon Lake Golf Course. Currently, excess raw sewage and/or treated effluent from RRC are diverted and blended with the regional plant's influent upstream of the regional treatment facility. The diverted water is up to 1.5 mgd. Sludge from RRC and the discharger's Canyon Lake water treatment plant is also processed at RWRF. Dewatered sludge is then transported to a local composting facility for final processing and disposal.

10. The water supply sources for the sewered areas include the Elsinore Groundwater Management Zone, Canyon Lake, and Lake Skinner.

11. A revised Water Quality Control Plan (Basin Plan) became effective on January 24, 1995. The Basin Plan contains beneficial uses and water quality objectives for waters in the Santa Ana Region. More recently, the Basin Plan was amended significantly to incorporate revised boundaries for groundwater subbasins, now termed "management zones", new nitrate-nitrogen and TDS objectives for the new management zones, and new nitrogen and TDS management strategies applicable to both surface and ground waters. This Basin Plan Amendment, shown in the Attachment to Resolution No. R8-2004-0001, was adopted by the Regional Board on January 22, 2004. The State Water Resources Control Board and Office of Administrative Law (OAL) approved the Amendment on September 30, 2004 and December 23, 2004, respectively.

The surface water components of the Amendment are awaiting EPA approval, but do not bear significantly on these proposed waste discharge requirements. The surface water components of the Amendment relevant to this Order are revised total dissolved solids (TDS) and total inorganic nitrogen (TIN) wasteload allocations for discharges by Publicly Owned Treatment Works (POTWs) to the Santa Ana River and its tributaries, including discharges by EVMWD to Temescal Creek. However, the TDS and TIN wasteload allocations for EVMWD in the Amendment are the same as those specified previously in the Basin Plan. Thus, there is no need to await EPA approval of the surface water components of the Amendment in order to proceed with consideration of this Order. The groundwater-related components of the Amendment became effective upon approval by OAL. Accordingly, these waste discharge requirements implement relevant, groundwater-related components of the Amendment.

12. The 1995 Basin Plan includes wasteload allocations for discharges of total dissolved solids (TDS) to the Santa Ana River system. In conformance with the wasteload allocation for EVMWD, this Order specifies a TDS limit of 700 milligram per liter (mg/l) for discharges into Temescal Creek. This TDS limit will also ensure protection of Lake Elsinore, which has a TDS objective of 2000 mg/l.

    An alternative limit based on the TDS quality of the water supply in the service area plus a 250 mg/l TDS increment is also specified. The more restrictive of the two TDS limits applies. The Basin Plan recognizes that strict compliance with the TDS wasteload allocation may be difficult to achieve. The Basin Plan describes the regulatory approach the Regional Board uses to address such situations. Consistent with the Basin Plan, the Board incorporates offset provisions in waste discharge requirements whereby dischargers can participate in approved programs to offset TDS discharges in excess of specified TDS limits, provided that the discharger makes all reasonable efforts to improve the TDS quality of the water supply (and, thereby, the wastewater). The discharger will likely not be able to comply with the 700 mg/l TDS limit or the 250 mg/l TDS increment over water supply in the near future. This Order requires the discharger to submit a proposal to offset TDS discharges in excess of the limits by June 1, 2005. The TDS limits in this Order are effective unless the discharger implements an offset program approved by the Regional Board's Executive Officer.

13. The 1995 Basin Plan includes wasteload allocations for discharges of total inorganic nitrogen (TIN) within the Region. In conformance with the TIN wasteload allocation, this Order specifies a TIN limit of 13 mg/l for discharges into Temescal Creek.

14. On December 20, 2004, the Board adopted Resolution No. R8-2004-0037, amending the Water Quality Control Plan to incorporate nutrient total maximum daily loads (TMDLs) for Lake Elsinore and Canyon Lake. These TMDLs have not yet been approved by the State Board, OAL or the USEPA. While the TMDLs are thus not yet effective, it is appropriate to specify requirements in this Order that implement relevant TMDL requirements.

The Lake Elsinore TMDL includes wasteload allocations for discharges of recycled water (supplemental water) based on the recognition that recycled water inputs to the lake are necessary to attain and maintain a stable lake level and thereby improve water quality and beneficial uses. Implementing TMDL requirements in this Order will assure that recycled water inputs to Lake Elsinore are authorized in accordance with requirements developed by the Regional Board and stakeholders using sound scientific methods and practices and adopted after an extensive public participation process, including scientific peer review. The wasteload allocations specified in the Elsinore TMDL are the basis for the nutrient limits, compliance schedules and offset requirements for discharges of recycled water to Lake Elsinore that are specified in this Order. The TMDL establishes schedules for compliance with the wasteload allocations and allows for the implementation of suitable offset programs when compliance with strict numeric limitations based on those allocations is not reasonably feasible.

15. Based on the supplemental water wasteload allocations in the Lake Elsinore Nutrient TMDL (see Finding 14, above), this Order includes mass limits for nutrients (Total Nitrogen (TN) and Total Phosphorous (TP) of 16,372 lbs/year (7442 kg/yr) and 8,186 lbs/year (3721 kg/yr), respectively. The TMDL specifies these wasteload allocations as 5-year running averages, to be met as soon as possible. This Order also includes TN and TP concentration limits of 1 mg/l and 0.5 mg/l, respectively. These concentration limits are based on Best Available Technology (BAT) and the Lake Elsinore nutrient TMDL.

16. Prior amendment of the RWRF waste discharge requirements (via Orders No. R8-2002-0008-A02, R8-2003-0067, and R8-2004-0099) authorized the discharger to implement a pilot study project that included the discharge of tertiary treated recycled water from EVMWD's RWRF to Lake Elsinore, coupled with the discharge of groundwater to the Lake from island wells located at the east end of the Lake. Order No. R8-2004-0099, adopted on December 20, 2004, authorized the discharger to continue the recycled water discharges until such time as revised waste discharge requirements for the RWRF are in place. The presumption was that the revised RWRF waste discharge requirements would include appropriate specifications for long-term recycled water discharges to Lake Elsinore, based on the Lake Elsinore Nutrient TMDL (also approved on December 20, 2004). Order No. R8-2004-0099 also required the discharger to offset total nitrogen and total phosphorus mass discharges into Lake Elsinore in accordance with an offset program(s) and schedule approved by the Executive Officer. The offset program(s) must assure the offset of all total nitrogen and total phosphorus mass loads discharged beginning December 20, 2004 that exceed those allowed pursuant to the supplemental water (recycled water) discharge wasteload allocations in the Lake Elsinore Nutrient TMDL. Order No. R8-2004-0099 required that the discharger submit the proposed offset program/schedule by December 6, 2004. The discharger has indicated their commitment to implement requisite nutrient offsets and submitted a proposed compliance plan and schedule on December 6, 2004. The discharger submitted a revised plan, together with reaffirmation of their offset commitment, on December 16, 2004.

17. This Order includes essentially the same offset requirement included in Order No. R8-2004-0099. This Order specifies that the offset shall address total phosphorus and total nitrogen mass loads discharged to the Lake by the discharger on and after December 20, 2004 that exceed those allowed pursuant to the effluent mass limitations in this Order. These effluent limitations implement the Lake Elsinore Nutrient TMDL wasteload allocations.

18. The discharger's December 16, 2004 Revised Compliance Plan and Schedule includes implementation of a chemical phosphorus removal process to be added to the RWRF, and in-lake aeration and mixing facilities to reduce the release of nutrients from the lake sediments to the water column. The addition of the phosphorus removal facilities is expected to ensure recycled water quality that complies with the TMDL. The in-lake facilities are expected to result in substantial reductions in nitrogen inputs to the water column from the lake sediments. These reductions are projected to significantly exceed nitrogen inputs resulting from recycled water discharges, thereby providing the requisite offset.

    The Lake Elsinore TMDL assumes that implementation of these in-lake projects will result in a 35% reduction in phosphorus release from the sediments. Phosphorus reduction greater than 35% may be achieved. Any such additional reduction may be available for phosphorus offset purposes. Whether or not it would be appropriate to apply such an offset to EVWMD recycled water discharges, if necessary, would need to be considered in the future.

19. Both the chemical phosphorus removal and in-lake aeration/mixing projects are scheduled to be operational in summer 2006. Monitoring will be conducted to assess the efficacy of the projects. Based on data collected in other lakes, EVMWD expects that implementation of these projects will provide future phosphorus compliance and nitrogen offsets for discharges to Lake Elsinore of all recycled water currently available for this purpose. Depending on the amount and phosphorus quality of recycled water discharged prior to the implementation of the phosphorus removal facilities, an additional phosphorus offset may be required to meet the effluent mass limitations based on the wasteload allocation. This Order requires the discharger to identify an appropriate additional phosphorus offset program, if necessary, and to implement that program upon approval by the Executive Officer. It may be appropriate to apply phosphorus reductions greater than the 35% expected from the in-lake nutrient removal facilities to provide this offset (see also Finding 18).

20. EVMWD's proposed compliance plan and schedule includes contingency planning in the form of a feasibility study that will be conducted during construction and start-up of the nutrient removal projects. The feasibility study will look at alternative treatment methods and technologies that could be applied should the nutrient removal projects not meet expectations. The feasibility study will be complete in the latter part of 2005, prior to the completion of the nutrient removal projects. Monitoring to determine the efficacy of the in-lake aeration/mixing project is expected to require a period of approximately two years, to allow the Lake system to equilibrate.

A determination of whether additional offset measures, as identified by the feasibility study, are expected to be made in mid-2008. This Order requires the discharger to implement one or more alternative offset mechanisms that may be identified through the Feasibility Study or other means and approved by the Executive Officer, if it is demonstrated that requisite phosphorus and/or nitrogen offsets are not achieved by the proposed nutrient removal projects. Implementation of these alternatives will be required as soon as possible, as determined by the Executive Officer. In no case shall requisite phosphorus and nitrogen offsets be provided later than March 1, 2010.

21. This Order requires the discharger to implement the December 16, 2004 Revised Compliance Plan and Schedule in accordance with the schedule specified therein. This schedule is consistent with the schedule requirements of the Lake Elsinore Nutrient TMDL.

22. The TN concentration limits specified in this Order apply if the discharger does not implement an acceptable program to offset TN discharges in excess of the TN effluent mass limitation based on the wasteload allocation. The discharger has demonstrated that immediate compliance with effluent limitation for TP is infeasible. The discharger's proposed compliance plan and schedule indicates that chemical phosphorus removal facilities will be in operation by summer 2006. Consequently, this Order requires that until August 1, 2006, when the chemical phosphorus removal facilities are in place, the TP concentration limits specified in the Order apply only if the discharger does not implement an acceptable program to offset TP discharges in excess of the TP effluent mass limitations. Compliance with the TP concentration limit is required as of August 1, 2006. This schedule will be reconsidered and revised as appropriate if it is demonstrated that additional time is required to complete proposed plant changes and implement appropriate control measures. This Order will be reopened to consider appropriate changes to the compliance schedule if and as necessary based on submission of additional justification.

23. The discharge via outfall 001 is to Reach 5 of Temescal Creek, which is tributary to Reach 3 of the Santa Ana River. The beneficial uses of these water bodies include:

    a. Agricultural supply,
    b. Groundwater recharge,
    c. Water contact recreation,
    d. Non-water contact recreation,
    e. Warm freshwater habitat,
    f. Wildlife habitat, and
    g. Rare, threatened or endangered species.

24. Recycled water is discharged via outfall 002 to Lake Elsinore. The beneficial uses of Lake Elsinore include:

    a. Water contact recreation,
    b. Non-water contact recreation,

c. Warm freshwater habitat, and
d. Wildlife habitat.

25. The recycled water use area overlies the Elsinore Management Zone, the beneficial uses of which include:

a. Municipal and domestic supply,
b. Agricultural supply, and
c. Industrial Process supply.

26. The requirements contained in this Order are necessary to implement the Basin Plan.

27. In dry weather, the flows in Temescal Creek and the Santa Ana River are comprised predominantly of effluent discharges from municipal wastewater treatment facilities, including the discharge from the Elsinore Valley facility, and very little natural flow exists.

28. Article 5, Section 60315 of Title 22, Chapter 3, "Reclamation Criteria" of the California Code of Regulations specifies that recycled water used as a source supply for nonrestricted recreational impoundments shall be at all times an adequately disinfected, oxidized, coagulated, clarified, filtered wastewater (tertiary treated). The degree of treatment specified represents an approximately 5-log reduction in the virus content of the water. The California State Department of Health Services (CDHS) has determined that this degree of virus removal is necessary to protect the health of people using these impoundments for water contact recreation.

29. The CDHS has developed wastewater disinfection guidelines ("Wastewater Disinfection for Health Protection", Department of Health Services, Sanitary Engineering Branch, February 1987) for discharges of wastewater to surface waters where water contact recreation (REC-1) is a beneficial use. The disinfection guidelines recommend the same treatment requirements for wastewater discharges to REC-1 waters as those stipulated in Title 22 for supply of reclaimed water to nonrestricted recreational impoundments, since the public health risk under both scenarios is analogous. The disinfection guidelines are based on sound science and are widely used as guidance to assure public health and beneficial use protection.

30. Neither Temescal Creek nor the Santa Ana River is a "nonrestricted recreational impoundments", nor is "reclaimed water" (as defined in the Reclamation Criteria) being used as a supply source for these waterbodies. However, except during major storms, most of the flow in the Creek and the River is composed of treated municipal wastewater discharges. These waterbodies are used for water contact recreation and, accordingly, are designated REC-1 (water contact beneficial use). People recreating in them face a similar exposure as do those coming in contact with recycled water in an impoundment. Therefore, to protect the water contact recreation beneficial use and to prevent nuisance and health risk, it is necessary and appropriate to require the same degree of treatment for wastewater discharges to these waterbodies as would be required for the use of recycled water in a nonrestricted recreational impoundment.

Similarly, Lake Elsinore is not a "non-restricted recreational impoundment" as defined in the Water Recycling Criteria. However, Lake Elsinore is used for water contact recreation and recycled water is proposed to be used as a supply source. As for Temescal Creek and the Santa Ana River, it is appropriate to require the same degree of wastewater treatment for recycled water discharges to the lake as would be required for the use of recycled water in a non-restricted recreational impoundment.

31. Section 13523 of the California Water Code provides that a Regional Board, after consulting with and receiving the recommendations from the CDHS and any party who has requested in writing to be consulted, and after any necessary hearing, shall prescribe water recycling requirements for water which is used or proposed to be used as recycled water, if, in the judgment of the Board, such requirements are necessary to protect the public health, safety, or welfare. Section 13523 further provides that such requirements shall include, or be in conformance with, the statewide uniform water recycling criteria established by the CDHS pursuant to California Water Code Section 13521.

32. On January 6, 1977, the State Water Resources Control Board (State Board) adopted Resolution No. 77-1, "*Policy with Respect to Water Reclamation in California.*" This Order incorporates requirements for the production and use of reclaimed water in conformance with this policy and the "*Reclamation Criteria" (Title 22, Division 4, California Code of Regulations)* adopted by the California Department of Health Services. The Regional Board has consulted with the California Department of Health Services regarding these requirements and has incorporated its recommendations.

33. This Order includes limitations on inorganic and toxic substances for the protection of the quality and beneficial uses of the affected receiving waters, including Lake Elsinore, Temescal Creek and the Santa Ana River.

34. On April 17, 1997, the State Board adopted the General Industrial Storm Water Permit, Order No. 97-03-DWQ, NPDES No. CAS000001. This General Permit implements the Final Regulations (40 CFR 122, 123, and 124) for storm water runoff published on November 16, 1990 by EPA in compliance with Section 402(p) of the Clean Water Act (CWA). Stormwater from the site of train A of RWRF is channeled into the onsite emergency storage basin with a capacity of 8 million gallons. No direct stormwater runoff from the train A site into surface waters. However, stormwater runoff from the train B site would discharge to surface water. Consequently, this Order includes pertinent provisions of the General Industrial Storm Water Permit appropriate for this discharge.

35. As required by the Clean Water Act and regulations adopted thereunder, the chemical specific limitations contained in this Order are designed to prevent a violation of any applicable water quality standard for receiving waters adopted by the Regional Board, the State Board or US EPA. If more stringent applicable water quality standards are approved pursuant to Section 303 of the Clean Water Act, or amendments thereto, the Regional Board will revise and modify this Order in accordance with such more stringent standards.

36. Effluent limitations, national standards of performance, and toxic pretreatment effluent standards established pursuant to Section 208(b), 301, 302, 303(d), 304, 306, and 307 of the Clean Water Act, and amendments thereto, are applicable to the discharge.

37. This Order includes requirements for the implementation of an effective pretreatment program pursuant to Section 307 of the Federal Clean Water Act Parts 35 and 403 of Title 40, Code of Federal Regulations (40 CFR 35 and 40 CFR 403) and Section 2233, Title 23, California Code of Regulations. RWRF is designed to treat 8 mgd of wastewater. An effective pretreatment program is required for those publicly owned treatment works that have a design capacity at or greater than 5 million gallons per day, or are receiving flows and pollutants from industrial users that may pass through or interfere with the operation of the POTW or are otherwise subject to pretreatment standards.

38. On May 18, 2000, the U.S. Environmental Protection Agency issued a final rule establishing Numeric Criteria for Priority Toxic Pollutants necessary to fulfill the requirements of Section 303(c)(2)(B) of the Clean Water Act for the State of California. This rule is commonly referred to as the California Toxics Rule (CTR).

39. Federal Regulations require permits to include limitations for all pollutants that are or may be discharged at a level that will cause, have the reasonable potential to cause, or contribute to an excursion of a water quality standard.

40. On March 2, 2000, the State Water Resources Control Board adopted the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (SIP). The SIP includes implementation provisions for the CTR. The SIP specifies a methodology to determine if pollutants in the discharge are at a level that will cause, have the reasonable potential to cause, or contribute to an excursion of a water quality standard, and delineates procedures to be used to calculate appropriate limits.

41. This Order implements relevant provisions of the CTR and the SIP. Using RWRF data, the reasonable potential analysis showed that copper and cyanide has the reasonable potential to exceed water quality criteria in the CTR.

42. In its January 8, 2001, guidance document, the US EPA finds that a fish tissue residue water quality criterion for methylmercury (Water Quality Criterion for the Protection of Human Health: Methylmercury - EPA-823-R-01-001, January 2001) is more appropriate than a water column based water quality criterion. The EPA further states that a fish tissue residue water quality criterion is more closely tied to the Clean Water Act goal of protecting the public health because it is based directly on the human exposure route for methylmercury. Consequently, this Order specifies a receiving water limitation in fish tissue of 0.3 mg methylmercury/kg fish in lieu of limitations for total mercury in the effluent.

43. On February 19, 1993, the USEPA issued a final rule for the use and disposal of sewage sludge, 40 CFR, Part 503. This rule requires that producers of sewage sludge meet certain reporting, handling, and disposal requirements. The State of California has not been delegated the authority to implement this program, therefore, the U.S. Environmental Protection Agency is the implementing agency. However, this Order includes Regional Board biosolids requirements.

44. In accordance with Water Code Section 13389, the issuance of waste discharge requirements for this discharge is exempt from those provisions of the California Environmental Quality Act contained in Chapter 3 (commencing with Section 21100), Division 13 of the Public Resources Code.

45. The Regional Board has considered antidegradation pursuant to 40 CFR 131.12 and State Board Resolution No. 68-16. The water quality of the receiving waters is not expected to degrade as a result of discharges regulated by this Order if compliance with this Order is consistently achieved. In part, this Order renews waste discharge requirements for discharges to Temescal Creek. These requirements are not less stringent that the prior waste discharge requirements for the RWRF discharges to the Creek. Therefore, discharges to Temescal Creek by the discharger will not result in a lowering of water quality in the Creek or affected downstream waters. This Order also authorizes the discharge of recycled water to Lake Elsinore, resulting in the addition of nutrients, a source of impairment of the Lake. However, such discharges are authorized only in conformance with wasteload allocations specified in the Lake Elsinore Nutrient TMDL, which was established to improve water quality in the Lake and address the nutrient impairment. Compliance with these allocations may be achieved through the implementation of RWRF facility improvements and/or the implementation of offset programs designed to assure that there is no net loading of nutrients to the Lake. As such, compliance with the requirements of this Order that pertain to recycled water discharges to Lake Elsinore will prevent the lowering of water quality. The use of recycled water to attain and maintain a stable level in the Lake is considered essential to improve and protect the water quality and beneficial uses of the Lake. Therefore, these waste discharge requirements are consistent with federal and state antidegradation policies.

46. The Regional Board has notified the discharger and other interested agencies and persons of its intent to prescribe waste discharge requirements for the discharge and has provided them with an opportunity to submit their written views and recommendations.

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

IT IS HEREBY ORDERED that the discharger, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder and the provisions of the Clean Water Act and regulations and guidelines adopted thereunder, shall comply with the following:

A. DISCHARGE SPECIFICATIONS

1. The limitations apply to waste discharges via outfall 001 and 002. The discharge of wastes to surface waters shall not contain constituent concentrations in excess of the following limits:

   a. Biological/Solids limits:

Constituent	Average Weekly	Average Monthly	Average Weekly Emission Rate[1]	Average Monthly Emission Rate
	(mg/l)	(mg/l)	(lbs/day)	(lbs/day
Biochemical Oxygen Demand$_5$	30	20	2,002	1,334
Suspended Solids	30	20	2,002	1,334

   b. TDS Limitation: For Discharge Specification No. A.1.b.(1) and A.1.b.(2), the lower of the two dissolved solids limits shall be the controlling limit.

      (1) The 12-month average total dissolved solids concentration and mass emission rate shall not exceed 700 mg/l and 47,704 lbs/day, respectively, unless:

         (a) The discharger demonstrates to the satisfaction of the Regional Board's Executive Officer that:

            i. Discharges in excess of the TDS limits are due to the quality of water supply sources utilized in the discharger's service area, and that all reasonable steps, as agreed upon by the Executive Officer, have been taken to ensure that the best quality supplies are obtained and utilized in the discharger's service area; or

[1] *Except where noted, mass emission rates for this and all other tables in this permit are based on 8 mgd.*

ii. Discharges in excess of the TDS limits are due solely to chemical additions in the treatment process needed to meet waste discharge requirements, and the discharger has taken all steps to optimize chemical additions so as to minimize the increases.

(b) And if paragraph (1)(a)i or (1)(a)ii applies, the discharger implements a plan to offset discharges in excess of the TDS limits.

(2) Water Supply Based TDS Limitation: The discharge of wastes containing a 12-month average total dissolved solids concentration which exceeds the 12-month average total dissolved solids concentration in the water supply by more than 250 mg/l is prohibited[2], unless:

(a) The discharger demonstrates to the satisfaction of the Regional Board's Executive Officer that TDS discharges in excess of the 250 mg/l mineral increment are due solely to chemical additions in the treatment process needed to meet waste discharge requirements, and the discharger has taken all steps to optimize chemical additions so as to minimize the TDS increases; and

(b) The discharger implements a plan, with the approval of the Executive Officer, to offset discharges in excess of the 250 mg/l mineral increment.

c. Trace Constituent Effluent Limitations:

Constituent	**Maximum Daily Concentration Limit (µg/l)**	**Average Monthly Concentration Limit (µg/l)**	**Maximum Daily Mass Emission Rate (lbs/day)**	**Average Monthly Mass Emission Rate (lbs/day)**
Total Recoverable Copper[3]	70	35	4.67	2.34
Free Cyanide	8.5	4.2	0.57	0.28

2. The following limitations apply to discharges via outfall 001. The discharge of wastes to surface waters shall not contain constituent concentrations in excess of the following limits:

a. Total Ammonia Nitrogen Limitations[4]: The average monthly total ammonia-nitrogen concentration and mass emission rate shall not exceed 4.5 mg/l and 300 lbs/day, respectively;

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2 *See Section H.6, "Compliance Determination".*

3 *The median total hardness (210 mg/l) of effluent flow is used to calculate total recoverable limit for copper.*

b. TIN Limitations: The 12-month average total inorganic nitrogen concentration and mass emission rate shall not exceed 13 mg/l and 867 lbs/day, respectively

3. The following limitations apply to discharges via outfall 002. The discharge of wastes to Lake Elsinore shall not contain constituent concentrations in excess of the following limits:

a. Nutrient Limitations:

Constituent	12-Month Average Concentration Limit (mg/l)	5-Year Running Average Mass Limit (lbs/year)
Total Nitrogen[5] (see A.3.b., below)	1	16,372
Total Phosphorus[6] (effective August 1, 2006) (see A.3.c., below)	0.5	8,186

b. Total nitrogen concentration limit specified in A.3.a., applies unless the discharger implements the offset program identified in the discharger's December 16, 2004 Revised Compliance Plan and Schedule and additional offset(s) acceptable to the Regional Board's Executive Officer that are necessary to assure compliance with the TN mass limitation no later than March 1, 2010.

c. The discharger shall comply with the TP mass limitation specified in A.3.a., above no later than March 1, 2010. Implementation of any phosphorus offset program necessary to comply with this requirement shall be in accordance with a plan and schedule approved by the Regional Board's Executive Officer.

4. The discharge of wastewater or use of recycled water shall at all times be a filtered and subsequently disinfected wastewater that meets the following criteria:

a. Filtered wastewater means an oxidized wastewater that meets either (1) or (2), below:

(1) Has been coagulated and passed through natural undisturbed soils or a bed of filter media pursuant to the following:

The turbidity of the filtered wastewater does not exceed any of the following:

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4 *Total ammonia nitrogen is the sum of un-ionized ammonia nitrogen (NH3-N) and ammonium nitrogen (NH4+-N).*

5 *See Provision K.6 and K.7.*

6 *See Provision K.5.*

i. An average of 2 Nephelometric Turbidity Unit (NTU) within a 24-hour period;

ii. 5 NTU more than 5 percent of the time within a 24-hour period; and

iii. 10 NTU at any time[7].

(2) Has been passed through a microfiltration, ultrafiltration, nanofiltration, or reverse osmosis membrane so that the turbidity of the filtered wastewater does not exceed any of the following:

i. 0.2 NTU more than 5 percent of the time within a 24-hour period; and

ii. 0.5 NTU at any time.

b. Disinfected tertiary wastewater shall mean a filtered wastewater that has been disinfected and meets the following criteria:

(1) The filtered wastewater has been disinfected by:

A disinfection process that, when combined with the filtration process, demonstrates[8] inactivation and/or removal of 99.999 percent of the plaque-forming units of F-specific bacteriophage MS-2[9], or polio virus in the wastewater. A virus that is at least as resistant to disinfection as polio virus may be used for purposes of the demonstration.

(2) The average weekly concentration of total coliform bacteria measured in the disinfected effluent shall not exceed an MPN of 2.2 per 100 milliliters. The average weekly concentration shall be evaluated using the median of the bacteriological results of the last seven days[10].

(3) The number of total coliform bacteria shall not exceed an MPN of 23 per 100 milliliters in more than one sample in any calendar month.

(4) The number of total coliform bacteria shall not exceed an MPN of 240 per 100 milliliters in any sample.

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7 *See Section H. 6 "Compliance Determination."*

8 *Meeting the discharge limits in A.4.b.(2),(3),and (4) shall constitute the demonstration required by this sub-paragraph.*

9 *F-Specific bacteriophage MS-2 means a strain of a specific type of virus that infects coliform bacteria that is traceable to the American Type Culture Collection (ATCC) 15597B1) and is grown on lawns of E. coli (ATCC 15597).*

10 *See Section H.7, "Compliance Determination."*

c. A coagulated wastewater shall be an oxidized wastewater in which colloidal and finely divided suspended matter have been destabilized and agglomerated upstream from a filter by the addition of suitable floc-forming chemicals.

d. An oxidized wastewater shall be wastewater in which the organic matter has been stabilized, is non-putrescible, and contains dissolved oxygen.

5. The monthly average biochemical oxygen demand and suspended solids concentrations of the discharge shall not be greater than fifteen percent (15%) of the monthly average influent concentrations.

6. The discharge of any substances in concentrations toxic to animal or plant life is prohibited.

7. There shall be no visible oil and grease in the discharge.

8. The pH of the discharge shall at all times be within the range of 6.5 and 8.5 pH units.

B. TOXICITY REQUIREMENTS:

1. This Order contains no numeric limitation for toxicity. However, the discharger shall conduct chronic toxicity monitoring as specified in Monitoring and Reporting Program (M&RP) No. R8-2005-0003.

2. The discharger shall implement the accelerated monitoring as specified in Section F.4. of the M&RP No. R8-2005-0003 when the result of any single chronic toxicity test of the effluent exceeds 1.0 TUc.

3. The discharger shall develop an Initial Investigation Toxicity Reduction Evaluation (IITRE) work plan that describes the steps the discharger intends to follow if required by Toxicity Requirement No. 4, below. The work plan shall include at a minimum:

   a. A description of the investigation and evaluation techniques that will be used to identify potential causes/sources of the exceedance, effluent variability, and/or efficiency of the treatment system in removing toxic substances. This shall include a description of an accelerated chronic toxicity-testing program.

   b. A description of the methods to be used for investigating and maximizing in-house treatment efficiency and good housekeeping practices.

   c. A description of the evaluation process to be used to determine if implementation of a more detailed TRE\TIE is necessary.

4. The discharger shall implement the IITRE work plan whenever the results of chronic toxicity tests of the effluent exceed:

a. A two month median value of 1.0 TUc for survival or reproduction endpoint or,

b. Any single test value of 1.7 TUc for survival endpoint.

5. The discharger shall develop a detailed Toxicity Reduction Evaluation and Toxicity Identification Evaluation (TRE/TIE) work plan that shall describe the steps the discharger intends to follow if the implemented IITRE fails to identify the cause of, or rectify, the toxicity.

6. The discharger shall use as guidance, at a minimum, EPA manuals EPA/600/2-88/070 (industrial), EPA/600/4-89-001A (municipal), EPA/600/6-91/005F (Phase I), EPA/600/R-92/080 (Phase II), and EPA-600/R-92/081 (Phase III) to identify the cause(s) of toxicity. If during the life of this Order the aforementioned EPA manuals are revised or updated, the revised/updated manuals may also be used as guidance. The detailed TRE/TIE work plan shall include:

   a. Further actions to investigate and identify the cause of toxicity;

   b. Actions the discharger will take to mitigate the impact of the discharge and to prevent the recurrence of toxicity; and

   c. A schedule for these actions.

7. The discharger shall implement the TRE/TIE work plan if the IITRE fails to identify the cause of, or rectify, the toxicity, or if in the opinion of the Executive Officer the IITRE does not adequately address an identified toxicity problem.

8. The discharger shall assure that adequate resources are available to implement the required TRE/TIE.

C. RECEIVING WATER LIMITATIONS[11]:

1. The discharge of wastes shall not cause a violation of any applicable water quality standards for receiving waters adopted by the Board or State Board, as required by the Clean Water Act and regulations adopted thereunder.

2. The discharge shall not cause any of the following:

   a. Coloration of the receiving waters, which causes a nuisance or adversely affects beneficial uses.

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11 *Receiving water limitations are specific interpretations of water quality objectives from applicable water quality control plans. As such, they are a required part of this Order. A receiving water condition not in conformance with any of these receiving water limitations is not necessarily a violation of this Order. The Regional Board may require an investigation to determine the cause and culpability prior to asserting a violation has occurred, or requiring that corrective action be taken.*

b. Deposition of oil, grease, wax or other materials in the receiving waters in concentrations which result in a visible film or in coating objects in the water, or which cause a nuisance or affect beneficial uses.

c. An increase in the amounts of suspended or settleable solids in the receiving waters, which will cause a nuisance or adversely affect beneficial uses as a result of controllable water quality factors.

d. Taste or odor producing substances in the receiving waters at concentrations, which cause a nuisance or adversely affect beneficial uses.

e. The presence of radioactive materials in the receiving waters in concentrations, which are deleterious to human, plant or animal life.

f. The depletion of the dissolved oxygen concentration below 5.0 mg/l.

g. The temperature of the receiving waters to be raised above 90°F (32°C) during the period of June through October, or above 78°F (26°C) during the rest of the year.

h. The concentration of pollutants in the water column, sediments, or biota to adversely affect the beneficial uses of the receiving water. The discharge shall not result in the degradation of inland surface water communities and populations, including vertebrate, invertebrate, and plant species.

3. Pollutants not specifically mentioned and limited in this Order shall not be discharged at levels that will bioaccumulate in aquatic resources to levels, which are harmful to human health.

4. The discharge shall not contain constituent concentrations of mercury that will result in the bioaccumulation of methylmercury in fish flesh tissue greater than 0.3 milligram methylmercury/kilogram fish.

D. BIOSOLIDS REQUIREMENTS:

1. Collected screenings, biosolids, and other solids removed from liquid wastes shall be disposed of in a manner that is consistent with Chapter 15, Division 3, Title 23, of the California Code of Regulations and approved by the Executive Officer.

2. 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 503[12].

3. Any proposed change in biosolids use or disposal practice from a previously approved practice shall be reported to the Executive Officer and EPA Regional Administrator at least 90 days in advance of the change.

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12 *See Section K.6. – Permit Re-opening, Revision, Revocation, and Re-issuance*

4. The discharger shall take all reasonable steps to minimize or prevent any discharge or biosolids use or disposal that has the potential of adversely affecting human health or the environment.

E. STORM WATER REQUIREMENTS:

1. Storm water[13] discharges shall not:

   a. cause or contribute to a violation of any applicable water quality standards contained in the Basin Plan, or in the State or Federal regulations.

   b. cause or threaten to cause pollution, contamination, or nuisance,

   c. contain a hazardous substance equal to or in excess of a reportable quantity listed in 40 CFR Part 117 and/or 40 CFR Part 302,

   d. adversely impact human health or the environment, and

   e. result in noncompliance with the lawful requirements of municipalities, counties, drainage districts, and other local agencies on storm water discharges into storm drain systems or other courses under their jurisdiction.

2. The discharger must update and implement the Storm Water Pollution Prevention Plan for the treatment facility in accordance with Attachment "A" of this Order.

F. WATER RECYCLING REQUIREMENTS:

1. The use of recycled water shall only commence after final approval for such use is granted by the California Department of Health Services (CDHS). The Producer/User shall provide the Regional Board with a copy of the CDHS approval letter within 30 days of the approval notice.

2. The discharger shall be responsible for assuring that recycled water is delivered and utilized in conformance with this Order, the recycling criteria contained in Title 22, Division 4, Chapter 3, Sections 60301 through 60355, California Code of Regulations, and the "Guidelines for Use of Reclaimed Water" by the California Department of Health Services. The discharger shall conduct periodic inspections of the facilities of the recycled water users to monitor compliance by the users with this Order.

3. The discharger shall establish and enforce Rules and Regulations for Recycled Water users, governing the design and construction of recycled water use facilities and the use of recycled water in accordance with the uniform statewide recycling criteria established pursuant to the California Water Code Section 13521.

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13 *Stormwater means storm water runoff, surface runoff, and drainage.*

a. Use of recycled water by the discharger shall be consistent with its Rules and Regulations for Recycled Water Use.

b. Any revisions made to the Rules and Regulations shall be subject to the review of the Regional Board, the California Department of Health Services, and the County of Riverside Department of Environmental Health. The revised Rules and Regulations or a letter certifying that the discharger's Rules and Regulations contain the updated provisions in this Order, shall be submitted to the Regional Board within 60 days of adoption of this Order by the Regional Board.

4. The discharger shall, within 60 days of the adoption of this Order, review and update as necessary its program to conduct compliance inspections of recycled water reuse sites. Inspections shall determine the status of compliance with the discharger's Rules and Regulations for Recycled Water Use.

5. The storage, delivery, or use of recycled water shall not individually or collectively, directly or indirectly, result in a pollution or nuisance, or adversely affect water quality, as defined in the California Water Code.

6. Prior to delivering recycled water to any new user, the discharger shall submit to the Regional Board, the California Department of Health Services and the Riverside County Health Department a report containing the following information for review and approval:

a. The average number of persons estimated to be served at each use site area on a daily basis.

b. The specific boundaries of the proposed use site area including a map showing the location of each facility, drinking water fountain, and impoundment to be used.

c. The person or persons responsible for operation of the recycled water system at each use area.

d. The specific use to be made of the recycled water at each use area.

e. The methods 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. This shall include a description of the pressure, dye or other test methods to be used to test the system.

f. Plans and specifications which include following:

1) Proposed piping system to be used.
2) Pipe locations of both the recycled and potable systems.
3) Type and location of the outlets and plumbing fixtures that will be accessible to the public.
4) The methods and devices to be used to prevent backflow of recycled water into the potable water system.
5) Plan notes relating to specific installation and use requirements.

7. An on-site supervisor responsible for the operation of the recycled water distribution system shall be designated by the user. The supervisor shall be responsible for enforcing this Order, prevention of potential hazards, the installation, operation and maintenance of the distribution system, maintenance of the distribution and irrigation system plans in "as-built" form, and for the distribution of the recycled wastewater in accordance with this Order.

G. PRETREATMENT REQUIREMENTS:

1. The discharger shall develop and implement an acceptable pretreatment program.

2. The discharger shall establish and update as necessary and appropriate contractual agreements with all governmental agencies[14]. The contractual agreements shall give the discharger the authority to implement and enforce the EPA approved pretreatment program within the sewer service areas of the treatment facility. The discharger shall assure that any other steps necessary to provide this implementation and enforcement authority (e.g. adoption of ordinances, etc.) are taken by all governmental agencies. If a governmental agency has an EPA approved pretreatment program for any portion of the service area of the treatment facility, the discharger's pretreatment program shall contain provisions ensuring that that governmental agency's program is implemented. In the event that any agency discharging to discharger's facility fails to effectively implement its individual EPA approved pretreatment program, the discharger shall implement and enforce its approved program within that agency's service area.

3. The discharger shall ensure that the POTW[15] pretreatment program for all contributory agencies discharging to the discharger's treatment facility are implemented and enforced. The discharger shall be responsible and liable for the performance of all Control Authority pretreatment requirements contained in 40 CFR 403, including any subsequent regulatory revisions to Part 403. Where Part 403 or subsequent revisions place mandatory actions upon the discharger as Control Authority but does not specify a timetable for completion of the actions, the discharger shall submit for approval of the Regional Board's Executive Officer, a schedule for implementation of the required actions and shall implement the approved schedule. The schedule for implementation shall be submitted within six months from the date that such mandatory actions are established. For violations of pretreatment requirements, the discharger shall be subject to enforcement actions, penalties, fines and other remedies by the EPA, or other appropriate parties, as provided in the CWA, as amended (33 USC 1351 et seq.). The EPA or the Regional Board may also initiate enforcement action against an industrial user (IU) for non-compliance with applicable standards and requirements as provided in the CWA.

4. The discharger shall perform the pretreatment functions as required in 40 CFR Part 403 including, but not limited to:

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14 *Member agencies and sewering agencies discharging wastewater into the facility.*

15 *Publicly owned treatment works.*

a. Enforce the pretreatment requirements under 40 CFR 403.5 and 403.6;

b. Implement the necessary legal authorities as provided in 40 CFR 403.8(f)(1);

c. Implement the programmatic functions as provided in 40 CFR 403.8(f)(2);

d. Publish a list of significant non-compliance as required by 40 CFR 403.8(f)(2)(vii); and

e. Provide the requisite funding and personnel to implement the pretreatment program as provided in 40 CFR 403.8(f)(3).

5. The following wastes shall not be introduced into the treatment works:

a. Wastes which create a fire or explosion hazard in the treatment works;

b. Wastes which will cause corrosive structural damage to treatment works, but, in no case, wastes with a pH lower than 5.0 unless the works are designed to accommodate such wastes;

c. Wastes at a flow rate and/or pollutant discharge rate which is excessive over relatively short time periods so that there is a treatment process upset and subsequent loss of treatment efficiency;

d. Solid or viscous wastes in amounts that would cause obstruction to the flow in sewers or otherwise interfere with the proper operation of the treatment works.

6. The discharger shall ensure compliance with any existing or future pretreatment standard promulgated by EPA under Section 307 of the CWA or amendments thereto for any discharge to the municipal system.

7. The discharger shall comply with effluent standards or prohibitions established under Section 307(a) of the CWA for toxic pollutants 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.

8. The discharger shall require each user not in compliance with any pretreatment standard to submit periodic notice (over intervals not to exceed nine months) of progress toward compliance with applicable toxic and pretreatment standards developed pursuant to the CWA or amendments thereto. The discharger shall forward a copy of such notice to the Regional Board and to the EPA Regional Administrator.

H. COMPLIANCE DETERMINATION:

1. The "maximum daily" concentration is defined as the measurement made on any single grab sample or composite sample.

2. Compliance with average weekly and monthly discharge limitations specified under Discharge Specifications A.1.a., A.1.b. and A.1.e. shall be determined from the average of the analytical results of all samples collected during a calendar week or month, respectively.

3. Compliance with the 12-month average limit under Discharge Specification A.1.b., A.2.b.,and A.3.a., shall be determined by the arithmetic mean of the last twelve monthly averages.

4. Compliance with the 5-Year Running Average Mass Limit specified in Discharge Specification A.3.a., shall be determined by the arithmetic mean of the last five yearly averages.

5. Compliance with Discharge Specifications A.1.b.(2) shall be determined based on TDS water supply quality and shall be determined from TDS analysis of secondary treated wastewater. The discharger shall provide the necessary calculations showing the overall TDS water supply quality.

6. Exceedance of the "10 NTU at any time" turbidity requirement referenced in Discharge Specifications A.4.a.(1).iii. shall not be considered a violation of these waste discharge requirements if such exceedance does not exceed a duration of one minute. The discharger shall not be considered to be in violation of this requirement if the apparent exceedance was caused by interference with, or malfunction of, the monitoring instrument. If the discharger is using a properly operating backup turbidimeter, the reading of the backup turbidimeter shall be considered in determining whether there has been an actual noncompliance.

7. Compliance with the weekly average total coliform limit expressed in Discharge Specification A.4.b.(2) shall be based on a running median of the test results from the previous 7 days. To comply with the weekly average limit, the 7-day median MPN must not exceed 2.2 per 100 milliliters on any day during the week. However, only one violation is recorded for each calendar week, even if the 7-day median MPN value is greater than 2.2 for more than one day in the week.

8. Pursuant to 40 CFR 401.17, the discharger shall be in compliance with the pH limitation specified in Discharge Specification A.8., above, provided that both of the following conditions are satisfied:

   a. The total time during which the pH values are outside the required range of 6.5-8.5 pH values shall not exceed 7 hours and 26 minutes in any calendar month; and

   b. No individual excursion from the range of pH values shall exceed 60 minutes.

9. Compliance determinations shall be based on available analyses for the time interval associated with the effluent limitation. Where only one sample analysis is available in a specified time interval (e.g., monthly or weekly average), that sample shall serve to characterize the discharge for the entire interval. If quarterly sample results show noncompliance with the average monthly limit and that sample result is used for compliance determinations for each month of the quarter, then three separate violations of the average monthly limit shall be deemed to have occurred.

10. Compliance with a single effluent limitation which applies to a group of chemicals (e.g., PCBs), based on a single sample shall be determined by considering the concentrations of individual members of the group to be zero if the analytical response for the individual chemical falls below the method detection limit (MDL or PQL) for that chemical.

11. For priority pollutants, the discharger shall be deemed out of compliance with an effluent limitation if the concentration of the priority pollutant in the monitoring sample is greater than the effluent limitation.

    a. Compliance determination shall be based on the minimum level (ML)[16] specified in Attachment "A" of the Monitoring and Reporting Program No. R8-2005-0003, unless an alternative minimum level is approved by the Regional Board's Executive Officer. When there is more than one ML value for a given substance, the discharger shall select the ML value that is below the calculated effluent limitation, and use its associated analytical method, listed in Attachment "A" of the M&RP. If no ML value is below the effluent limitation, then the Regional Board will select the lowest ML value and its associated analytical method.

    b. When determining compliance with an average monthly limit and more than one sample result is available in a month, the discharger shall compute the arithmetic mean unless the data set contains one or more reported determinations of detected but not quantified (DNQ) or not detected (ND). In those cases, the discharger shall compute the median in place of the arithmetic mean in accordance with the following procedure:

        1) The data set shall be ranked from low to high, reported ND determinations lowest, DNQ determinations next, followed by quantified values (if any). The order of the individual ND or DNQ determinations is unimportant.

        2) The median value of the data set shall be determined. If the data set has an odd number of data points, then the median is the middle value. If the data set has an even number of data points, then the median is the average of the two values around the middle unless one or both of the points are ND or DNQ, in which case the median value shall be the lower of the two data points where DNQ is lower than a value and ND is lower than DNQ. If a sample result, or the arithmetic mean or median of multiple sample results, is below the reported ML, and there is evidence that the priority pollutant is present in the effluent above an effluent limitation and the discharger conducts a pollutant minimization program (PMP)[17] (as described in Section K. 11.), the discharger shall not be deemed out of compliance.

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16 *Minimum level is the concentration at which the entire analytical system must give a recognizable signal and acceptable 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.*

17 *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.*

12. For non-priority pollutants, the discharge shall be considered to be in compliance with an effluent limitation, which is less than or equal to the PQL specified in Attachment "C" of M&RP No. R8-2005-0003 if the arithmetic mean of all test results for the monitoring period is less than the constituent effluent limitation. Analytical results that are less than the specified PQL shall be assigned a value of zero.

13. "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with 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 action. A discharger that wishes to establish the affirmative defense of an upset in an action brought for noncompliance shall demonstrate, by relevant direct or circumstantial evidence that:

    a. An upset occurred and that the discharger can identify the likely cause(s) of the upset;

    b. The permitted facility was being properly operated at the time of the upset;

    c. The discharger submitted notice of the upset as required in Section I.13., below; and

    d. The discharger complied with any remedial measures required under Section K.14., below.

    Regional Board's Executive Officer's preliminary determinations shall not be subject to judicial review until after final administrative action has been taken by the Regional Board. In any enforcement proceeding, the discharger seeking to establish the occurrence of an upset has the burden of proof.

I. REQUIRED NOTICES AND REPORTS:

1. Reporting Provisions:

    a. All applications, reports, or information submitted to the Regional Board shall be signed and certified in accordance with 40 CFR 122.22 except as otherwise specified by the Regional Board's Executive Officer.

    b. The discharger shall furnish, within a reasonable time, any information the Regional Board or EPA may request to determine compliance with this Order or whether cause exists for modifying, revoking and reissuing, or terminating this Order. The discharger shall also furnish to the Regional Board, upon request, copies of records required to be kept by this Order.

c. Except for data determined to be confidential under Section 308 of the CWA, all reports prepared in accordance with the terms of this Order shall be available for public inspection at the offices of the Regional Board and the Regional Administrator of EPA. As required by the CWA, effluent data shall not be considered confidential. Knowingly making any false statements on any such report may result in the imposition of criminal penalties as provided for in Section 309 of the CWA and Section 13387 of the California Water Code.

2. By July 1, 2005, the discharger shall submit a proposed monitoring/evaluation plan to evaluate the efficacy of the in-lake nutrient removal projects (aeration and mixing) for approval by the Executive Officer. The proposed plan shall specify that a determination of the percentage reductions of phosphorus and nitrogen achieved by the in-lake nutrient removal projects will be provided by July 1, 2008. The discharger shall implement the plan upon approval. The approved monitoring/evaluation plan, including the schedule for determination of nutrient reductions achieved, may be modified at the discretion of the Executive Officer.

3. By July 1, 2005, the discharger shall notify the Executive Officer of its continuous involvement with the comprehensive mercury investigation program currently being conducted by a group of Santa Ana River system dischargers. If the discharger discontinues its involvement with this comprehensive program, the discharger shall, within 60 days of that date, submit for the approval of the Executive Officer its plan for the annual testing of mercury levels in fish flesh samples collected from the Santa Ana River, upstream of, at, and downstream of the point of the River's confluence with Temescal Creek. Upon approval, the discharger shall implement the plan.

4. By July 1, 2005, the discharger shall submit an updated written description of electrical power failure safeguards. Such safeguards may include alternate power sources, standby generators, retention capacity, operating procedures, or other means. The description of the safeguards provided shall include an analysis of the frequency, duration, and impact of power failures experienced over the past year(s) of treatment plant operation on effluent quality and on the capability of the discharger to comply with the requirements of this Order. Deficiencies in present safeguards must be identified together with a plan for any necessary corrective actions. The adequacy of the safeguards and the corrective action plan (if necessary) is subject to the approval of the Executive Officer.

5. By October 1, 2005, the discharger shall submit an updated technical report on the discharger's preventive (failsafe) and contingency (response and cleanup) plans for controlling accidental discharges and for minimizing the effect of such events. This technical report may be combined with that required under Section I.4., above. The technical report shall:

   a. Identify the possible sources of accidental loss, untreated waste bypass, and contaminated drainage. Loading and storage areas, power outage, waste treatment outage, and failure of process equipment, tanks, and pipes should be considered.

b. Evaluate the effectiveness of present facilities and procedures and state when they become operational.

c. Describe any new facilities and procedures needed. 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.

d. Describe proposed and completed training programs and schedules to train and familiarize plant operating personnel with the discharger's preventive (failsafe) and contingency (response and cleanup) plans for controlling accidental discharges and for minimizing the effect of such events.

6. By July 1, 2005, the discharger shall submit a copy of the Initial Investigation Toxicity Reduction Evaluation work plan specified in Toxicity Requirement B.3 of this Order.

7. By July 1, 2005, the discharger shall submit a copy of the TRE/TIE work plan specified in Toxicity Requirement B.5 of this Order.

8. The discharger shall give advance notice to the Regional Board of any planned physical alterations or additions to the permitted facility or changes in operation or activity that may result in noncompliance with these waste discharge requirements.

9. The discharger shall provide adequate notice to the Regional Board of:

a. 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[18].

b. Any change in the volume or character of pollutants being introduced by an existing or new source into the treatment facility that will cause or threaten to cause a violation of this Order.

c. Any planned changes in the discharger's biosolids use or disposal practice, or provision of additional disposal sites not reported during the permit application process.

d. Any proposed change in the character, location, or method of disposal of the discharge, or any proposed change in ownership of the facility.

e. All instances of noncompliance. Reports of noncompliance shall be submitted with the discharger's next scheduled self-monitoring report or earlier, as specified in this Order, or if requested by the Executive Officer, or if required by an applicable standard for biosolids use and disposal.

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18 *Adequate notice shall include information on the quality and quantity of effluent introduced, and any anticipated impact of the change on the quantity or quality of the discharger's effluent and/or sludge.*

10. The discharger shall submit a Title 22 Engineering Report for review and approval by the California Department of Health Services prior to the use of recycled water at proposed recycling sites. The Engineering Report shall comply with the California Code of Regulations, Title 22, Chapter 3.

11. The discharger shall file a written report with the Regional Board within ninety (90) days after the average dry-weather waste flow for any month equals or exceeds 75 percent of the design capacity of the waste treatment and/or disposal facilities. The discharger's senior administrative officer shall sign a letter which transmits that report and certifies that the policy making body is adequately informed about it. The report shall include:

    a. Average daily flow for the month, the date on which the instantaneous peak flow occurred, the rate of that peak flow, and the total flow for the day.
    b. The discharger's best estimate of when the average daily dry-weather flow rate will equal or exceed the design capacity of the treatment facilities.
    c. The discharger's intended schedule for studies, design, and other steps needed to provide additional capacity for the waste treatment and/or disposal facilities before the waste flow rate equals the capacity of present units.

12. The discharger shall file with the Regional Board a Report of Waste Discharge at least 180 days before making any material change in the character, location, or volume of the discharge. A material change includes, but is not limited to, the following:

    a. Adding a major industrial waste discharge to a discharge of essentially domestic sewage, or adding a new process or product by an industrial facility resulting in a change in the character of the waste.
    b. Significantly changing the disposal method or location, such as changing the disposal to another drainage area or water body.
    c. Significantly changing the method of treatment.
    d. Increasing the treatment plant design capacity beyond that specified in this Order.

13. The discharger shall immediately report any condition related to the discharger's collection, treatment or disposal facilities that endangers human health or the environment. This includes any unauthorized discharge of treated, partially treated, or untreated wastewater from the discharger's collection, treatment, or disposal system that endangers human health or the environment. All available information concerning the condition and/or unauthorized discharge shall be provided to the Executive Officer or the Executive Officer's designee (951-782-4130) and the Office of Emergency Services (1-800-852-7550), as soon as the discharger becomes aware of the circumstances. A written report shall be submitted within 5 working days and shall contain a description of the condition and its cause; the duration of the condition, including exact dates and times, and, if the condition has not been corrected, the anticipated time it is expected to continue; and the steps taken or planned to reduce, eliminate, and prevent recurrence of the condition, with a schedule for their implementation.

The following shall be included as information that must be reported within 24 hours from time discharger becomes aware of the circumstances:

a. Any unanticipated bypass that exceeds any limitation of this Order.

b. Any upset that exceeds any limitation of this Order.

c. Any violation of a maximum daily discharge limitation for any of the pollutants listed in this Order.

d. Any unauthorized discharge of treated, partially treated, or untreated wastewater resulting from the intentional or unintentional diversion of wastewater from a collection, treatment or disposal system that endangers human health or the environment.

The Executive Officer or the Executive Officer's designee may waive the above required written report on a case-by-case basis.

Unauthorized discharges of more than 100 gallons that do not endanger human health or the environment shall be reported to the Executive Officer's designee no later than the last day of the month following the month the discharges occurred.

14. By August 1, 2005, the discharger shall submit a proposed TDS offset program for approval by the Regional Board's Executive Officer.

15. By June 1, 2005, the discharger shall submit an UV treatment system operational plan approved by CDHS. Revision of this schedule may be made at the discretion of the Executive Officer, if the discharger demonstrates the need for such change. The plan shall identify UV operational parameters, including but not limited to minimum UV dose, minimum UV intensity, UV transmittance ranges, etc. and treatment system reliability features and alarms. The approved treatment system operational plan shall be reviewed annually and updated as necessary by June 1st of each year. Any changes to the operational plan shall be approved by CDHS. Whenever changes in the operational plan are approved by CDHS, a copy of the revised/approved operational plan shall be submitted to the Regional Board within 30-days of approval.

J. PENALTIES:

1. Violation of any of the provisions of the NPDES program or of any of the provisions of this Order may subject the violator to any of the penalties described under Section 309(c) of the CWA, or any subsequent amendments to Section 309(c). The violator may be subjected to any combination of the penalties described herein at the discretion of the prosecuting authority; however, only one kind of penalty may be applied for each kind of violation.

2. The CWA provides that any person who violates any portion of this Order implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the CWA, or any order requirement or limitation implementing any such sections in this Order, is subject to a civil penalty not to exceed $25,000 per day for each violation. The CWA provides that any person who willfully or negligently violates this Order with regard to these sections of the CWA is subject to criminal penalties of $2,500 to $25,000 per day of violation, or imprisonment of not more than 1 year, or both. Any person who knowingly violates a provision implementing these sections is subject to criminal penalties of $5,000 to $50,000 per day of violation, or imprisonment of not more than 3 years, or both.

3. The CWA provides that any person who knowingly falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this Order shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than 2 years per violation, or by both.

4. The CWA provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this Order, including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than 2 years per violation, or by both.

5. The California Water Code provides that any person who violates an order of the Regional Board is subject to civil penalties of up to $25,000 per day of violation, and when the violation involves the discharge of pollutants, additional civil penalties of up to $25 per gallon.

K. PROVISIONS:

1. This Order shall become effective upon its adoption. This Order shall serve as a National Pollutant Discharge Elimination System permit pursuant to Section 402 of the CWA, or amendments thereto. The NPDES permit shall become effective 10 days after the date of adoption provided the Regional Administrator of the EPA has no objection. If the Regional Administrator objects to its issuance, this Order shall not serve as an NPDES permit until such objection is withdrawn.

2. Neither the treatment nor the discharge of waste shall create, or threaten to create, a nuisance or pollution as defined by Section 13050 of the California Water Code.

3. Order No. 00-1, as amended by Orders No. 01-70, R8-2002-000-A02, R8-2003-0067 and R8-2004-0099, is hereby rescinded.

4. This Order expires March 1, 2010 and the discharger must file a Report of Waste Discharge in accordance with Title 23, Division 3, Chapter 9 of the California Code of Regulations not later than 180 days in advance of this expiration date. The Report of Waste Discharge shall serve as the application for issuance of new waste discharge requirements.

5. By July 1, 2008, the discharger shall evaluate current and projected compliance with the TP mass limitation specified in Discharge Specification A.3.a. If the Executive Officer determines that this evaluation demonstrates that a phosphorus offset will be required to achieve compliance with the TP mass limitation, then the discharger shall, by September 1, 2008, propose a phosphorus offset program. The offset program shall be implemented upon the Executive Officer's approval. Implementation of this offset program, if necessary, shall assure compliance with the TP mass limitation in Discharge Specification 3.a. no later than March 1, 2010.

6. The discharger shall implement the December 16, 2004 Revised Compliance Plan and Schedule. This includes the following: to offset discharges in excess of the TN and TP limits specified in Discharge Specifications A.3.a.

   a. Construct facilities necessary for a chemical phosphorus removal at the regional plant to be completed by July 31, 2006.

   b. Construct and install appurtenant structures and facilities for the proposed lake aeration and mixing in cooperation with Lake Elsinore-San Joaquin Watershed Authority (LESJWA) to be completed by July 31, 2006.

   c. Conduct feasibility study that involves the following tasks to be completed by December 31, 2005:

      (1) Identify, describe, and estimate the cost of specific projects within the wastewater treatment process to further reduce effluent nutrient concentrations.

      (2) Identify, describe, and estimate the cost of specific projects outside of the wastewater treatment process to offset nutrient loadings in the Lake.

      (3) Evaluate, compare and rank the nutrient reduction alternatives identified above in terms of efficacy, cost effectiveness and feasibility.

7. If the results of monitoring required to determine the efficacy of the in-lake nutrient removal projects (See x) demonstrate that TN load reductions are less than 50%[19], then the discharger shall, by September 1, 2008, propose one or more additional offset programs. The discharger shall implement those programs upon approval by the Regional Board's Executive Officer. Implementation of these offset programs shall assure compliance with the TN mass limitation in Discharge Specification 3.a. no later than March 1, 2010.

8. The discharger shall implement the Lake Elsinore monitoring and reporting program approved by the Regional Board Executive Officer on June 24, 2002 for assessing effects of discharges of recycled water into the lake. The approved Lake Elsinore monitoring and reporting program shall be part of Monitoring and Reporting Program No. R8-2005-0003.

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[19] *The discharger's December 16, 2004 Revised Compliance Plan and Schedule assumes that the in-lake facilities will result in internal nitrogen load reductions of 50%.*

9. The discharger shall comply with M&RP No. R8-2005-0003 as issued by the Executive Officer. This monitoring and reporting program may be modified by the Executive Officer at any time during the term of this Order, and may include an increase in the number of parameters to be monitored, the frequency of the monitoring or the number and size of samples to be collected. Any increase in the number of parameters to be monitored, the frequency of the monitoring or the number and size of samples to be collected may be reduced back to the levels specified in the original monitoring and reporting program at the discretion of the Executive Officer.

10. The discharger shall optimize chemical additions needed in the treatment process to meet waste discharge requirements so as to minimize total dissolved solid increases in the recycled water.

11. The discharger shall conduct a Pollutant Minimization Program (PMP) when there is evidence that the priority pollutant is present in the effluent above an effluent limitation (e.g., sample results reported as detected but not quantified (DNQ) when the effluent limitation is less than the MDL, sample results from analytical methods more sensitive than those methods included in the permit, presence of whole effluent toxicity, health advisories for fish consumption, results of benthic or aquatic organism tissue sampling) and either: (i) A sample result is reported as DNQ and the effluent limitation is less than the reported ML; or (ii) A sample result is reported as ND and the effluent limitation is less than the MDL. The PMP shall include, but not be limited to, the following actions and submittals acceptable to the Regional Board:

    a. An annual review and semi-annual monitoring of potential sources of the reportable priority pollutant(s), which may include fish tissue monitoring and other bio-uptake sampling;

    b. Quarterly monitoring for the reportable priority pollutant(s) in the influent to the wastewater treatment system;

    c. Submittal of a control strategy designed to proceed toward the goal of maintaining concentrations of the reportable priority pollutant(s) in the effluent at or below the effluent limitation;

    d. Implementation of appropriate cost-effective control measures for the reportable priority pollutant(s), consistent with the control strategy; and

    e. An annual status report that shall be sent to the Regional Board including:

        1) All PMP monitoring results for the previous year;
        2) A list of potential sources of the reportable priority pollutant(s);
        3) A summary of all actions undertaken pursuant to the control strategy; and
        4) A description of actions to be taken in the following year.

12. The discharger shall maintain a copy of this Order at the site so that it is available to site operating personnel at all times. Key operating personnel shall be familiar with its content.

13. The discharger must comply with all of the requirements of this Order. Any violation of this Order constitutes a violation of the California Water Code and may constitute a violation of the CWA and its regulations, and is grounds for enforcement action, termination of this Order, revocation and re-issuance of this Order, denial of an application for re-issuance of this Order; or a combination thereof.

14. The discharger shall take all reasonable steps to:

    a. Minimize or prevent any discharge that has a reasonable likelihood of adversely affecting human health or the environment; and

    b. Minimize any adverse impact to receiving waters resulting from noncompliance with any requirements specified in this Order, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge.

15. The discharger shall provide safeguards to assure that should there be reduction, loss, or failure of electric power, the discharger will comply with the requirements of this Order.

16. The discharger shall, at all times, properly operate and maintain all facilities and systems of treatment and control including sludge use, disposal facilities, and related appurtenances which are installed or used by the discharger to achieve compliance with this Order. Proper operation and maintenance includes adequate laboratory controls, appropriate quality assurance procedures, effective performance, adequate funding, adequate staffing and training, and adequate process controls. This provision requires the operation of back up or auxiliary facilities or similar systems, which are installed by a discharger only when the operation is necessary to achieve compliance with the requirements of this Order.

17. The discharger shall update as necessary, the "Operation and Maintenance Manual (O&M Manual)" which it has developed for the RWRF to conform to latest plant changes and requirements. The O&M Manual shall be readily available to operating personnel onsite. The O&M Manual shall include the following:

    a. Description of the treatment plant table of organization showing the number of employees, duties and qualifications and plant attendance schedules (daily, weekends and holidays, part-time, etc). The description should include documentation that the personnel are knowledgeable and qualified to operate the treatment facility so as to achieve the required level of treatment at all times.

    b. Detailed description of safe and effective operation and maintenance of treatment processes, process control instrumentation and equipment.

    c. Description of laboratory and quality assurance procedures.

    d. Process and equipment inspection and maintenance schedules.

    e. Description of safeguards to assure that, should there be reduction, loss, or failure of electric power, the discharger will be able to comply with requirements of this Order.

f. Description of preventive (fail-safe) and contingency (response and cleanup) plans for controlling accidental discharges, and for minimizing the effect of such events. These plans shall identify the possible sources (such as loading and storage areas, power outage, waste treatment unit failure, process equipment failure, tank and piping failure) of accidental discharges, untreated or partially treated waste bypass, and polluted drainage.

18. The discharger's wastewater treatment plant shall be supervised and operated by persons possessing certificates of appropriate grade pursuant to Title 23, Division 3, Chapter 14, California Code of Regulations.

19. The discharge of any radiological, chemical, or biological warfare agent or high level radiological waste is prohibited.

20. The provisions of this Order are severable, and if any provision of this Order, or the application of any provisions of this Order to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this Order shall not be affected thereby.

21. The filing of a request by the discharger for modification, revocation and re-issuance, or termination of this Order or a notification of planned changes or anticipated noncompliance does not stay any requirements of this Order.

22. The requirements prescribed herein do not authorize the commission of any act causing injury to the property of another, nor protect the discharger from liabilities under federal, state, or local laws, nor guarantee the discharger a capacity right in the receiving waters.

23. This Order does not convey any property rights of any sort, or any exclusive privilege.

24. This Order is not transferable to any person except after notice to, and approval by the Executive Officer. The Regional Board may require modification or revocation and re-issuance of this Order to change the name of the discharger and incorporate such other requirements as may be necessary under the CWA.

25. Collected screenings, sludge, and other solids removed from liquid wastes shall be disposed of in a manner approved by the Regional Board's Executive Officer.

26. If the discharger demonstrates a correlation between the biological oxygen demand (BOD) and total organic carbon (TOC) concentrations in the effluent to the satisfaction of the Executive Officer, compliance with the BOD limits contained in this Order may be determined based on analyses of the TOC of the effluent.

27. In the event of any change in control or ownership of land or waste discharge facility 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 forwarded to the Regional Board.

28. 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 requirements of this Order.

29. Bypass (the intentional diversion of waste streams from any portion of a treatment facility or collection system) is prohibited unless it is permitted under the terms of this Order. The Regional Board may take enforcement action against the discharger for unpermitted bypass unless:

    a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage. (Severe property damage means substantial physical damage to property, damage to the treatment facilities that 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.);

    b. There was no feasible alternative to bypass, such as the use of auxiliary treatment facilities, retention of untreated waste, or maintenance during normal periods of equipment down time. 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 could occur during normal periods of equipment down time or preventive maintenance; and

    c. The discharger submitted a notice to the Regional Board at least ten days in advance of the need for a bypass. The discharger may allow a bypass to occur that does not cause effluent limitations to be exceeded, but only if the by-pass is required for essential maintenance to assure efficient operation, and neither effluent nor receiving water limitations are exceeded. In such a case, the above bypass conditions are not applicable. The discharger shall promptly notify the Regional Board and the EPA within 24 hours of each such bypass.

30. The Regional Board, EPA, and other authorized representatives shall be allowed:

    a. Entry upon premises where a regulated facility or activity is located or conducted, or where records are kept under the requirements of this Order;

    b. Access to copy any records that are kept under the requirements of this Order;

    c. To inspect any facility, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order; and

    d. To photograph, sample and monitor for the purpose of assuring compliance with this Order, or as otherwise authorized by the CWA.

L. PERMIT RE-OPENING, REVISION, REVOCATION AND RE-ISSUANCE:

1. This Order may be modified, revoked and reissued, or terminated for cause.

2. This Order may be reopened to address any changes in State or federal plans, policies or regulations that would affect the quality requirements for the discharges.

3. This Order may be reopened to include effluent limitations for pollutants determined to be present in the discharge in concentrations that pose a reasonable potential to cause or contribute to violations of water quality objectives.

4. This Order may be reopened if the Regional Board or the discharger develops different site-specific total-to-dissolved ratios for copper or any other constituent, which are acceptable to the Regional Board's Executive Officer.

5. This Order may be reopened and modified in accordance with the requirements set forth at 40 CFR 122 and 124, to include the appropriate conditions or limits to address demonstrated effluent toxicity based on newly available information, or to implement any EPA-approved new State water quality standards applicable to effluent toxicity.

6. This Order may be reopened to incorporate appropriate biosolids requirements if the State Water Resources Control Board and the Regional Water Quality Control Board are given the authority to implement regulations contained in 40 CFR 503.

7. This Order may be reopened to include an appropriate bioaccumulation based effluent limit for mercury if test results (as required in M&RP No. R8-2005-0003) show that the concentration levels of methylmercury in the fish tissue are at or above 0.3 milligrams per kilogram.

8. This Order may be reopened and modified in accordance with the requirements set forth at 40 CFR 122 and 124, to include the appropriate conditions or limits to address demonstrated effluent toxicity based on newly available information, or to implement any EPA-approved new State water quality standards applicable to effluent toxicity.

9. This Order may be reopened to consider appropriate modifications to the schedule specified in this Order for compliance with the final effluent limitations for free cyanide, based on consideration of RWRF performance capability and/or justification provided by the discharger.

10. This Order will be reopened to consider appropriate changes to the compliance schedule (see Provision K.5) if and as necessary based on submission of additional justification.

I, Gerard J. Thibeault, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Santa Ana Region, on March 4, 2005.

Gerard J. Thibeault
Executive Officer

STORM WATER POLLUTION PREVENTION PLAN REQUIREMENTS

1. *Implementation Schedule*

The storm water pollution prevention plan (SWPPP) shall be updated and implemented in a timely manner, but in no case later than June 30, 2005.

2. *Objectives*

The SWPPP has two major objectives: (a) to identify and evaluate sources of pollutants associated with industrial activities that may affect the quality of storm water discharges and authorized non-storm water discharges from the facility; and (b) to identify and implement site-specific best management practices (BMPs) to reduce or prevent pollutants associated with industrial activities in storm water discharges and authorized non-storm water discharges. BMPs may include a variety of pollution prevention measures or other low-cost pollution control measures. They are generally categorized as non-structural BMPs (activity schedules, prohibitions of practices, maintenance procedures, and other low-cost measures) and as structural BMPs (treatment measures, run-off controls, over-head coverage). To achieve these objectives, dischargers should consider the five phase process for SWPPP development and implementation as shown in Table A (see page 10 of 11, below).

The SWPPP requirements are designed to be sufficiently flexible to meet the various needs of the facility. SWPPP requirements that are not applicable to the facility should not be included in the SWPPP.

A facility's SWPPP is a written document that shall contain a compliance activity schedule, a description of industrial activities and pollutant sources, descriptions of BMPs, drawings, maps, and relevant copies or references of parts of other plans. The SWPPP shall be revised whenever appropriate and shall be readily available for review by facility employees or Regional Board inspectors.

3. *Planning and Organization*

a. Pollution Prevention Team

The SWPPP shall identify a specific individual or individuals and their positions within the facility organization as members of a storm water pollution prevention team responsible for developing the SWPPP, assisting the facility manager in SWPPP implementation and revision, and conducting all monitoring program activities required in the Stormwater monitoring program of Order No. R8-2005-0003. The SWPPP shall clearly identify the storm water pollution prevention related responsibilities, duties, and activities of each team member.

b. Review Other Requirements and Existing Facility Plans

The SWPPP may incorporate or reference the appropriate elements of other regulatory requirements. The discharger shall review all local, state, and federal requirements that impact, complement, or are consistent with the requirements of Order No. R8-2005-0003. The discharger shall identify any existing facility plans that contain storm water pollutant control measures or relate to the requirements of Order No. R8-2005-0003. As examples, dischargers whose facilities are subject to Federal Spill Prevention Control and Countermeasures' requirements should already have instituted a plan to control spills of certain hazardous materials. Similarly, the discharger whose facilities are subject to air quality related permits and regulations may already have evaluated industrial activities that generate dust or particulates.

4. *Site Map*

The SWPPP shall include a site map. The site map shall be provided on an 8-1/2 x 11 inch or larger sheet and include notes, legends, and other data as appropriate to ensure that the site map is clear and understandable. If necessary, the discharger may provide the required information on multiple site maps. The following information shall be included on the site map:

a. The facility boundaries; the outline of all storm water drainage areas within the facility boundaries; portions of the drainage area impacted by run-on from surrounding areas; and direction of flow of each drainage area, on-site surface water bodies, and areas of soil erosion. The map shall also identify nearby water bodies (such as rivers, lakes, ponds) and municipal storm drain inlets where the facility's storm water discharges and authorized non-storm water discharges may be received.

b. The location of the storm water collection and conveyance system, associated points of discharge, and direction of flow. Include any structural control measures that affect storm water discharges, authorized non-storm water discharges, and run-on. Examples of structural control measures are catch basins, berms, detention ponds, secondary containment, oil/water separators, diversion barriers, etc.

c. An outline of all impervious areas of the facility, including paved areas, buildings, covered storage areas, or other roofed structures.

d. Locations where materials are directly exposed to precipitation and the locations where significant spills or leaks identified in Section 6.a.(4)., below, have occurred.

e. Areas of industrial activity. This shall include the locations of all storage areas and storage tanks, shipping and receiving areas, fueling areas, vehicle and equipment storage/maintenance areas, material handling and processing areas, waste treatment and disposal areas, dust or particulate generating areas, cleaning and rinsing areas, and other areas of industrial activity which are potential pollutant sources.

5. *List of Significant Materials*

The SWPPP shall include a list of significant materials handled and stored at the site. For each material on the list, describe the locations where the material is being stored, received, shipped, and handled, as well as the typical quantities and frequency. Materials shall include raw materials, intermediate products, final or finished products, recycled materials, and waste or disposed materials.

6. *Description of Potential Pollutant Sources*

a. The SWPPP shall include a narrative description of the facility's industrial activities, as identified in Section 4.e., above, associated potential pollutant sources, and potential pollutants that could be discharged in storm water discharges or authorized non-storm water discharges. At a minimum, the following items related to a facility's industrial activities shall be considered:

(1) Industrial Processes

Describe each industrial process, the type, characteristics, and quantity of significant materials used in or resulting from the process, and a description of the processes (manufacturing or treatment), cleaning, rinsing, recycling, disposal, or other activities related to the process. Where applicable, areas protected by containment structures and the corresponding containment capacity shall be described.

(2) Material Handling and Storage Areas

Describe each handling and storage area, type, characteristics, and quantity of significant materials handled or stored, description of the shipping, receiving, and loading procedures, and the spill or leak prevention and response procedures. Where applicable, areas protected by containment structures and the corresponding containment capacity shall be described.

(3) Dust and Particulate Generating Activities

Describe all industrial activities that generate dust or particulates that may be deposited within the facility's boundaries and identify their discharge locations; the characteristics of dust and particulate pollutants; the approximate quantity of dust and particulate pollutants that may be deposited within the facility boundaries; and a description of the primary areas of the facility where dust and particulate pollutants would settle.

(4) Significant Spills and Leaks

Describe materials that have spilled or leaked in significant quantities in storm water discharges or non-storm water discharges. Include toxic chemicals (listed in 40 Code of Federal Regulations [CFR] Part 302) that have been discharged to storm water as reported on U.S. Environmental Protection Agency (U.S. EPA) Form R, and oil and hazardous substances in excess of reportable quantities (see 40 CFR, Parts 110, 117, and 302).

The description shall include the type, characteristics, and approximate quantity of the material spilled or leaked, the cleanup or remedial actions that have occurred or are planned, the approximate remaining quantity of materials that may be exposed to storm water or non-storm water discharges, and the preventative measures taken to ensure spills or leaks do not reoccur. Such list shall be updated as appropriate during the term of Order No. R8-2005-0003.

(5) Non-Storm Water Discharges

The discharger shall investigate the facility to identify all non-storm water discharges and their sources. As part of this investigation, all drains (inlets and outlets) shall be evaluated to identify whether they connect to the storm drain system.

All non-storm water discharges shall be described. This shall include the source, quantity, frequency, and characteristics of the non-storm water discharges and associated drainage area.

Non-storm water discharges that contain significant quantities of pollutants or that do not meet the conditions of Order No. R8-2005-0003 are prohibited. (Examples of prohibited non-storm water discharges are contact and non-contact cooling water, boiler blowdown, rinse water, wash water, etc.). The SWPPP must include BMPs to prevent or reduce contact of non-storm water discharges with significant materials or equipment.

(6) Soil Erosion

Describe the facility locations where soil erosion may occur as a result of industrial activity, storm water discharges associated with industrial activity, or authorized non-storm water discharges.

b. The SWPPP shall include a summary of all areas of industrial activities, potential pollutant sources, and potential pollutants. This information should be summarized similar to Table B (see page 11 of 11, below). The last column of Table B, "Control Practices", should be completed in accordance with Section 8., below.

7. *Assessment of Potential Pollutant Sources*

a. The SWPPP shall include a narrative assessment of all industrial activities and potential pollutant sources as described in Section 6., above, to determine:

(1) Which areas of the facility are likely sources of pollutants in storm water discharges and authorized non-storm water discharges, and

(2) Which pollutants are likely to be present in storm water discharges and authorized non-storm water discharges. The discharger shall consider and evaluate various factors when performing this assessment such as current storm water BMPs; quantities of significant materials handled, produced, stored, or disposed of; likelihood of exposure to storm water or authorized non-storm water discharges; history of spill or leaks; and run-on from outside sources.

b. The discharger shall summarize the areas of the facility that are likely sources of pollutants and the corresponding pollutants that are likely to be present in storm water discharges and authorized non-storm water discharges.

The discharger is required to develop and implement additional BMPs as appropriate and necessary to prevent or reduce pollutants associated with each pollutant source. The BMPs will be narratively described in Section 8., below.

8. *Storm Water Best Management Practices*

The SWPPP shall include a narrative description of the storm water BMPs to be implemented at the facility for each potential pollutant and its source identified in the site assessment phase (Sections 6. and 7., above). The BMPs shall be developed and implemented to reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges. Each pollutant and its source may require one or more BMPs. Some BMPs may be implemented for multiple pollutants and their sources, while other BMPs will be implemented for a very specific pollutant and its source.

The description of the BMPs shall identify the BMPs as (1) existing BMPs, (2) existing BMPs to be revised and implemented, or (3) new BMPs to be implemented. The description shall also include a discussion on the effectiveness of each BMP to reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges. The SWPPP shall provide a summary of all BMPs implemented for each pollutant source. This information should be summarized similar to Table B.

The discharger shall consider the following BMPs for implementation at the facility:

a. Non-Structural BMPs: Non-structural BMPs generally consist of processes, prohibitions, procedures, schedule of activities, etc., that prevent pollutants associated with industrial activity from contacting with storm water discharges and authorized non-storm water discharges. They are considered low technology, cost-effective measures. The discharger should consider all possible non-structural BMPs options before considering additional structural BMPs (see Section 8.b., below). Below is a list of non-structural BMPs that should be considered:

(1) Good Housekeeping: Good housekeeping generally consist of practical procedures to maintain a clean and orderly facility.

(2) Preventive Maintenance: Preventive maintenance includes the regular inspection and maintenance of structural storm water controls (catch basins, oil/water separators, etc.) as well as other facility equipment and systems.

(3) Spill Response: This includes spill clean-up procedures and necessary clean-up equipment based upon the quantities and locations of significant materials that may spill or leak.

(4) Material Handling and Storage: This includes all procedures to minimize the potential for spills and leaks and to minimize exposure of significant materials to storm water and authorized non-storm water discharges.

(5) Employee Training: This includes training of personnel who are responsible for (a) implementing activities identified in the SWPPP, (b) conducting inspections, sampling, and visual observations, and (c) managing storm water. Training should address topics such as spill response, good housekeeping, and material handling procedures, and actions necessary to implement all BMPs identified in the SWPPP. The SWPPP shall identify periodic dates for such training. Records shall be maintained of all training sessions held.

(6) Waste Handling/Recycling: This includes the procedures or processes to handle, store, or dispose of waste materials or recyclable materials.

(7) Record Keeping and Internal Reporting: This includes the procedures to ensure that all records of inspections, spills, maintenance activities, corrective actions, visual observations, etc., are developed, retained, and provided, as necessary, to the appropriate facility personnel.

(8) Erosion Control and Site Stabilization: This includes a description of all sediment and erosion control activities. This may include the planting and maintenance of vegetation, diversion of run-on and runoff, placement of sandbags, silt screens, or other sediment control devices, etc.

(9) Inspections: This includes, in addition to the preventative maintenance inspections identified above, an inspection schedule of all potential pollutant sources. Tracking and follow-up procedures shall be described to ensure adequate corrective actions are taken and SWPPPs are made.

(10) Quality Assurance: This includes the procedures to ensure that all elements of the SWPPP and Monitoring Program are adequately conducted.

b. Structural BMPs: Where non-structural BMPs as identified in Section 8.a., above, are not effective, structural BMPs shall be considered. Structural BMPs generally consist of structural devices that reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges. Below is a list of structural BMPs that should be considered:

(1) Overhead Coverage: This includes structures that provide horizontal coverage of materials, chemicals, and pollutant sources from contact with storm water and authorized non-storm water discharges.

(2) Retention Ponds: This includes basins, ponds, surface impoundments, bermed areas, etc., that do not allow storm water to discharge from the facility.

(3) Control Devices: This includes berms or other devices that channel or route run-on and runoff away from pollutant sources.

(4) Secondary Containment Structures: This generally includes containment structures around storage tanks and other areas for the purpose of collecting any leaks or spills.

(5) Treatment: This includes inlet controls, infiltration devices, oil/water separators, detention ponds, vegetative swales, etc., that reduce the pollutants in storm water discharges and authorized non-storm water discharges.

9. *Annual Comprehensive Site Compliance Evaluation*

The discharger shall conduct one comprehensive site compliance evaluation in each reporting period (July 1-June 30). Evaluations shall be conducted within 8-16 months of each other. The SWPPP shall be revised, as appropriate, and the revisions implemented within 90 days of the evaluation. Evaluations shall include the following:

a. A review of all visual observation records, inspection records, and sampling and analysis

results.

b. A visual inspection of all potential pollutant sources for evidence of, or the potential for, pollutants entering the drainage system.

c. A review and evaluation of all BMPs (both structural and non-structural) to determine whether the BMPs are adequate, properly implemented and maintained, or whether additional BMPs are needed. A visual inspection of equipment needed to implement the SWPPP, such as spill response equipment, shall be included.

d. An evaluation report that includes, (1) identification of personnel performing the evaluation, (2) the date(s) of the evaluation, (3) necessary SWPPP revisions, (4) schedule, as required in Section 10.e, below, for implementing SWPPP revisions, (5) any incidents of non-compliance and the corrective actions taken, and (6) a certification that the discharger is in compliance with Order No. R8-2005-0003. If the above certification cannot be provided, explain in the evaluation report why the discharger is not in compliance with this order. The evaluation report shall be submitted as part of the annual report, retained for at least five years, and signed and certified in accordance with Section H.1. "Required Notices and Reports" of Order No. R8-2005-0003.

10. *SWPPP General Requirements*

a. The SWPPP shall be retained on site and made available upon request by a representative of the Regional Board and/or local storm water management agency (local agency) which receives the storm water discharges.

b. The Regional Board and/or local agency may notify the discharger when the SWPPP does not meet one or more of the minimum requirements of this section. As requested by the Regional Board and/or local agency, the discharger shall submit a SWPPP revision and implementation schedule that meets the minimum requirements of this section to the Regional Board and/or local agency that requested the SWPPP revisions. Within 14 days after implementing the required SWPPP revisions, the discharger shall provide written certification to the Regional Board and/or local agency that the revisions have been implemented.

c. The SWPPP shall be revised, as appropriate, and implemented prior to changes in industrial activities which (1) may significantly increase the quantities of pollutants in storm water discharge, (2) cause a new area of industrial activity at the facility to be exposed to storm water, or (3) begin an industrial activity which would introduce a new pollutant source at the facility.

d. The SWPPP shall be revised and implemented in a timely manner, but in no case more than 90 days after a discharger determines that the SWPPP is in violation of any requirement(s) of Order No. R8-2005-0003.

e. When any part of the SWPPP is infeasible to implement by the deadlines specified in Order No. R8-2005-0003, due to proposed significant structural changes, the discharger shall submit a report to the Regional Board prior to the applicable deadline that (1) describes the portion of the SWPPP that is infeasible to implement by the deadline, (2) provides justification for a time extension, (3) provides a schedule for completing and implementing that portion of the SWPPP, and (4) describes the BMPs that will be implemented in the interim period to reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges. Such reports are subject to Regional Board approval and/or modifications. The discharger shall provide written notification to the Regional Board within 14 days after the SWPPP revisions are implemented.

f. The SWPPP shall be provided, upon request, to the Regional Board. The SWPPP is considered a report that shall be available to the public by the Regional Board under Section 308(b) of the Clean Water Act.

TABLE A

FIVE PHASES FOR DEVELOPING AND IMPLEMENTING INDUSTRIAL STORM WATER POLLUTION PREVENTION PLANS

{PRIVATE } **PLANNING AND ORGANIZATION**

*Form pollution prevention team
*Review other plans

ASSESSMENT PHASE

*Develop a site map
*Identify potential pollutant sources
*Inventory of materials and chemicals
*List significant spills and leaks
*Identify non-storm water discharges
*Assess pollutant risks

BEST MANAGEMENT PRACTICES IDENTIFICATION PHASE

*Non-structural BMPs
*Structural BMPs
*Select activity and site-specific BMPs

IMPLEMENTATION PHASE

*Train employees
*Implement BMPs
*Conduct record keeping and reporting

EVALUATION / MONITORING

*Conduct annual site evaluation
*Review monitoring information
*Evaluate BMPs
*Review and revise SWPPP

TABLE B

EXAMPLE

ASSESSMENT OF POTENTIAL POLLUTION SOURCES AND CORRESPONDING BEST MANAGEMENT PRACTICES SUMMARY

AREA	ACTIVITY	POLLUTANT SOURCE	POLLUTANT	BEST MANAGEMENT PRACTICES
Vehicle & equipment fueling	Fueling	Spills and leaks during delivery	Fuel oil	- Use spill and overflow protection - Minimize run-on of storm water into the fueling area - Cover fueling area - Use dry cleanup methods rather than hosing down area - Implement proper spill prevention control program - Implement adequate preventative maintenance program to prevent tank and line leaks - Inspect fueling areas regularly to detect problems before they occur - Train employees on proper fueling, cleanup, and spill response techniques.
		Spills caused by topping off fuel oil	Fuel oil	
		Hosing or washing down fuel area	Fuel oil	
		Leaking storage tanks	Fuel oil	
		Rainfall running off fueling areas, and rainfall running onto and off fueling area	Fuel oil	

California Regional Water Quality Control Board
Santa Ana Region

Monitoring and Reporting Program (M&RP) No. R8-2005-0003
NPDES NO. CA8000027

for
Elsinore Valley Municipal Water District
Regional Water Reclamation Plant
Lake Elsinore, Riverside County

A. MONITORING AND REPORTING REQUIREMENTS:

1. All sampling and sample preservation shall be in accordance with the current edition of "Standard Methods for the Examination of Water and Wastewater" (American Public Health Association).

2. All laboratory analyses shall be performed in accordance with test procedures under 40 CFR 136 "Guidelines Establishing Test Procedures for the Analysis of Pollutants," promulgated by the United States Environmental Protection Agency (EPA) unless otherwise specified in this monitoring and reporting program (M&RP). In addition, the Regional Board and/or EPA, at their discretion, may specify test methods which are more sensitive than those specified in 40 CFR 136.

3. Chemical, bacteriological, and bioassay analyses shall be conducted at a laboratory certified for such analyses by the California Department of Health Services or EPA or at laboratories approved by the Regional Board's Executive Officer.

4. In conformance with federal regulations 40 CFR 122.45(c), analyses to determine compliance with the effluent limitations for metals shall be conducted using the total recoverable method. For Chromium (VI), the dissolved method in conformance with 40 CFR 136 may be used to measure compliance with the Chromium (VI) limitation.

5. For effluent and ambient receiving water monitoring:

   a. The discharger shall require its testing laboratory to calibrate the analytical system down to the minimum level (ML)[1] specified in Attachment "A" for priority pollutants with effluent limitations in this Order, unless an alternative minimum level is approved by the Regional Board's Executive Officer. When there is more than one ML value for a given substance, the discharger shall use the ML values, and their associated analytical methods, listed in Attachment "A" that are below the calculated effluent limitation. The discharger may select any one of those cited analytical methods for compliance determination. If no ML value is below the effluent limitation, then the lowest ML value, and its associated analytical method, listed in Attachment "A" shall be used.

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1 *Minimum level is the concentration at which the entire analytical system must give a recognizable signal and acceptable 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.*

Any internal quality control data associated with the sample must be reported when requested by the Executive Officer. The Regional Board will reject the quantified laboratory data if quality control data is unavailable or unacceptable.

b. The discharger shall report the results of analytical determinations for the presence of chemical constituents in a sample using the following reporting protocols:

1) Sample results greater than or equal to the reported ML shall be reported as measured by the laboratory (i.e., the measured chemical concentration in the sample).
2) Sample results less than the reported ML, but greater than or equal to the laboratory's current Method Detection Limit (MDL)[2], shall be reported as "Detected, but Not Quantified," or "DNQ." The estimated chemical concentration of the sample shall also be reported.
3) Sample results not detected above the laboratory's MDL shall be reported as "not detected" or "ND."

c. The discharger shall submit to the Regional Board reports necessary to determine compliance with effluent limitations for priority pollutants in this Order and shall follow the chemical nomenclature and sequential order of constituents shown in Attachment "B" – Priority Pollutant Lists. The discharger shall report with each sample result:

1) The ML or PQL[3] listed in Attachment "C" achieved by the testing laboratory; and
2) The laboratory's current MDL, as determined by the procedure found in 40 CFR 136 (revised as of May 14, 1999).

d. For receiving water monitoring and for those priority pollutants without effluent limitations, the discharger shall require its testing laboratory to quantify constituent concentrations to the lowest achievable MDL as determined by the procedure found in 40 CFR 136 (revised as of May 14, 1999). In situations where the most stringent applicable receiving water objective (freshwater or human health (consumption of organisms only), as specified for that pollutant in 40 CFR 131.38[4]) is below the minimum level value specified in Attachment "A" and the discharger cannot achieve an MDL value for that pollutant below the ML value, the discharger shall submit justification why a lower MDL value cannot be achieved. Justification shall be submitted together with monthly monitoring reports.

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2 *MDL is the minimum concentration of a substance that can be measured and reported with 99 percent confidence that the analytical concentration is greater than zero, as defined in 40 CFR 136, Appendix B, revised as of May 14, 1999.*

3 *PQL is the lowest concentration of a substance that can be determined within ± 20 percent of the true concentration by 75 percent of the analytical laboratories tested in a performance evaluation study. Alternatively, if performance data are not available, the PQL is the method detection limit (MDL) x 5 for carcinogens and MDL x 10 for noncarcinogens.*

4 *See Federal Register/ Vol. 65, No. 97 / Thursday, May 18, 2000 / Rules and Regulations.*

6. For non-priority pollutants monitoring, all analytical data shall be reported with identification of practical quantitation levels and with method detection limits, as determined by the procedure found in 40 CFR 136 (revised as of May 14, 1999).

7. The discharger shall have, and implement an acceptable written quality assurance (QA) plan for laboratory analyses. Duplicate chemical analyses must be conducted on a minimum of ten percent (10%) of the samples, or at least one sample per month, whichever is greater. A similar frequency shall be maintained for analyzing spiked samples. When requested by the Regional Board or EPA, the discharger will participate in the NPDES discharge monitoring report QA performance study.

8. Discharge monitoring data shall be submitted in a format acceptable by the Regional Board and EPA. Specific reporting format may include preprinted forms and/or electronic media. The results of all monitoring required by this order shall be reported to the Regional Board, and shall be submitted in such a format as to allow direct comparison with the limitations and requirements of this order.

9. The discharger shall tabulate the monitoring data to clearly illustrate compliance and/or noncompliance with the requirements of the order.

10. For every item of monitoring data where the requirements are not met, the monitoring report shall include a statement discussing the reasons for noncompliance, and of the actions undertaken or proposed which will bring the discharge into full compliance with requirements at the earliest time, and an estimate of the date when the discharger will be in compliance. The discharger shall notify the Regional Board by letter when compliance with the time schedule has been achieved.

11. The reports for June and December shall include a roster of plant personnel, including job titles, duties, and level of State certification for each individual.

12. By December 31 of each year, the discharger shall submit an annual report to the Regional Board. The report shall contain both tabular and graphical summaries of the monitoring data obtained during the previous year. In addition, the discharger shall discuss the compliance record and the corrective actions taken or planned, which may be needed to bring the discharge into full compliance with the waste discharge requirements. The annual report shall include a summary of the quality assurance (QA) activities for the previous year.

13. The discharger shall assure that records of all monitoring information are maintained and accessible for a period of at least five years from the date of the sample, report, or application. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge or by the request of the Regional Board at any time. Records of monitoring information shall include:

    a. The date, exact place, and time of sampling or measurements;

    b. The date(s) analyses were performed;

    c. The laboratory which performed the analyses,

d. The analytical techniques or methods used;

e. The individual(s) who performed the analyses;

f. The analytical techniques or methods used, including any modification to those methods;

g. All sampling and analytical results, including

1) units of measurement used;
2) minimum reporting limit for the analysis (minimum level, practical quantitation level (PQL));
3) results less than the reporting limit but above the method detection limit (MDL);
4) data qualifiers and a description of the qualifiers;
5) quality control test results (and a written copy of the laboratory quality assurance plan);
6) dilution factors, if used; and
7) sample matrix type; and

h. All monitoring equipment calibration and maintenance records;

i. All original strip charts from continuous monitoring devices;

j. All data used to complete the application for this Order; and,

k. Copies of all reports required by this Order.

l. Electronic data and information generated by the Supervisory Control And Data Acquisition (SCADA) System.

14. The flow measurement system shall be calibrated at least once per year or more frequently, to ensure continued accuracy.

15. All monitoring instruments and devices used by the discharger to fulfill the prescribed monitoring program shall be properly maintained and calibrated as necessary to ensure their continued accuracy. In the event that continuous monitoring equipment is out of service for greater than a 24-hour period, the discharger shall obtain a representative grab sample each day the equipment is out of service. The discharger shall correct the cause(s) of failure of the continuous monitoring equipment as soon as practicable. In its monitoring report, the discharger shall specify the period(s) during which the equipment was out of service and if the problem has not been corrected, shall identify the steps which the discharger is taking or proposes to take to bring the equipment back into service and the schedule for these actions.

16. Monitoring and reporting shall be in accordance with the following:

a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

b. The monitoring and reporting of influent, effluent, and sludge shall be done more frequently as necessary to maintain compliance with this Order and or as specified in this order.

c. Whenever the discharger monitors any pollutant more frequently than is required by this Order, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the discharge monitoring report specified by the Executive Officer.

d. A "grab" sample is defined as any individual sample collected in less than 15 minutes.

e. A composite sample is defined as a combination of no fewer than eight individual grab samples obtained over the specified sampling period. The volume of each individual grab sample shall be proportional to the discharge flow rate at the time of sampling. The compositing period shall equal the specific sampling period, or 24 hours, if no period is specified.

f. 24-hour composite samples shall be collected continuously during a 24-hour operation of the facility.

g. Daily samples shall be collected on each day of the week.

h. Monthly samples shall be collected on any representative day of each month.

i. Quarterly samples shall be collected by any representative day of March, June, September, and December.

j. Annual samples shall be collected in accordance with the following schedule:

Year	Annual Samples
2005	April
2006	July
2007	October
2008	January
2009	April
2010	July

17. All reports shall be signed by either a principal executive officer or ranking elected or appointed official or a duly authorized representative of a principal executive officer or ranking elected or appointed official. A duly authorized representative of a principal executive officer or ranking elected or appointed official may sign the reports only if;

a. The authorization is made in writing by a principal executive officer or ranking elected or appointed official,

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, superintendent, or position of equivalent responsibility. (A duly authorized representative may thus be either a named individual or any individual occupying a named position), and

c. The written authorization is submitted to the Regional Board.

Each person signing a report required by this Order or other information requested by the Regional Board 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[5], and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

18. The discharger, unless otherwise specified elsewhere in this M&RP, shall deliver a copy of each monitoring report in the appropriate format to:

a. California Regional Water Quality Control Board
Santa Ana Region
3737 Main Street, Suite 500
Riverside, CA 92501-3348, and

b. U.S.EPA
CWA Compliance Office, WTR-7
Water Division
75 Hawthorne Street
San Francisco, CA 94105

B. INFLUENT MONITORING:

1. Sampling stations shall be established and located upstream of any in-plant return flows and where a representative sample of the influent to the treatment facility can be obtained. The date and time of sampling (as appropriate) shall be reported with the analytical values determined.

2. The following shall constitute the influent monitoring program:

Constituent	Units	Type of Sample	Minimum Frequency of Sampling & Analysis
Flow	mgd	Recorder/Totalizer	Continuous
Specific Conductance	µmhos/cm	Recorder	"

[5] *For the purposes of this certification the term "accurate" refers to the veracity of the information submittal and not to the performance characteristics of the measurement system.*

Constituent	Units	Type of Sample	Minimum Frequency of Sampling & Analysis
pH	pH units	Recorder	"
Biochemical Oxygen Demand	mg/l	Composite	Weekly
Chemical Oxygen Demand	mg/l	"	"
Suspended Solids	"	"	"
Total Dissolved Solids	"	Composite	Monthly
Ammonia-Nitrogen	"	Grab	"
Total Inorganic Nitrogen	mg/l	Composite	"
Boron	mg/l	"	Semi-Annually
Chloride	"	"	"
Fluoride	"	"	"
Sulfate	"	"	"
Total Hardness	mg/l	"	"
Arsenic	µg/l	"	"
Cadmium	"	"	"
Total Chromium	µg/l	"	"
Copper	"	"	"
Lead	"	"	"
Mercury	"	"	"
Nickel	µg/l	"	"
Silver	µg/l	"	"
Zinc	"	"	"
Cyanide	"	Grab	"
Volatile organic portion of remaining EPA Priority Pollutants[6] (See Attachment "C")	µg/l	Grab	Annually

[6] *Remaining EPA priority pollutants are those pollutants listed in Attachment "C" which are not specifically listed in the monitoring program table.*

Constituent	Units	Type of Sample	Minimum Frequency of Sampling & Analysis
Remaining EPA Priority Pollutants[7] (See Attachment "C")	µg/l	Composite	Annually

C. EFFLUENT MONITORING:

1. Sampling station(s) shall be established at the point(s) of discharge and shall be located where representative samples of the effluent can be obtained.

2. The following shall constitute the effluent monitoring program:

Constituent	Units	Type of Sample	Minimum Frequency of Analysis
Flow	mgd	Recorder/Totalizer	Continuous
Turbidity	NTU	Recorder	"
Total Residual Chlorine	mg/l	Recorder	"
pH	pH units	Recorder	"
Coliform Organisms	MPN per 100 ml	Grab	Daily
Suspended Solids	mg/l	Composite	"
Biochemical Oxygen Demand$_5$	"	"	"
Chemical Oxygen Demand	"	"	"
Ammonia-Nitrogen	mg/l	Grab	Monthly
Toxicity Monitoring	TUc	(See Section D, Below)	"
Bicarbonate	mg/l	Composite	"
Boron	mg/l	Composite	Monthly
Calcium	"	"	"
Carbonate	"	"	"
Chloride	"	"	"
Total Dissolved Solids	"	"	"

Constituent	Units	Type of Sample	Minimum Frequency of Analysis
Fluoride	"	"	"
Sodium	"	"	"
Sulfate	"	"	"
Phosphate	"	"	"
Total Inorganic Nitrogen	"	"	"
Total Nitrogen	"	"	"
Total Hardness	"	"	"
Total Phosphorus	"	"	"
Total Recoverable Copper	µg/l	"	monthly
Free Cyanide	"	Grab	"
Chromium (VI) or Total Chromium	µg/l	Composite	Quarterly (see C.3., below)
Total Recoverable Lead	"	"	"
Arsenic	µg/l	Composite	"
Barium	"	"	"
Total Recoverable Cadmium	"	"	"
Cobalt	"	"	"
Iron	"	"	"
Manganese	"	"	"
Mercury	"	"	"
Total Recoverable Nickel	"	"	"
Total Recoverable Selenium	"	"	"
Total Recoverable Silver	µg/l	Composite	Quarterly (see C.3., below)
Total Recoverable Zinc	"	"	"
Phenolic Compounds	"	"	"
Aldrin	µg/l	Grab	"

Constituent	Units	Type of Sample	Minimum Frequency of Analysis
Chlordane	"	"	"
Dieldrin	"	"	"
4, 4' – DDT	"	"	"
Endosulfan Sulfate	"	"	"
Heptachlor	"	"	"
Heptachlor Epoxide	"	"	"
Alpha BHC	"	"	"
Beta BHC	"	"	"
Gamma BHC (Lindane)	"	"	"
Toxaphene	"	"	"
PCB 1016	"	"	"
PCB 1221	"	"	"
PCB 1232	"	"	"
PCB 1242	"	"	"
PCB 1248	"	"	"
PCB 1254	"	"	"
PCB 1260	"	"	"
1,2-Dichlorobenzene	"	"	"
1,3-Dichlorobenzene	"	"	"
1,4-Dichlorobenzene	"	"	"
Bromoform	"	"	"
Chlorodibromomethane	"	"	"
Chloroform	µg/l	Grab	Quarterly (see C.3., below)
Dichlorobromomethane	"	"	"
Methyl Bromide	"	"	"
Toluene	"	"	"

Constituent	Units	Type of Sample	Minimum Frequency of Analysis
Dichlorodifluoromethane	"	"	"
Trichlorofluoromethane	"	"	"
Methyl Chloride	"	"	"
Volatile organic portion of remaining EPA Priority Pollutants (See Attachment "C")	"	"	Annually (see C.4., below)
Remaining EPA Priority Pollutants (See Attachment "C")	µg/l	Composite	Annually (see C.4., below)

3. The monitoring frequency for those priority pollutants that are detected during the required quarterly monitoring at a concentration greater than eighty percent of the most stringent applicable receiving water objective (freshwater or human health (consumption of organisms only) specified for that pollutant[7] in 40 CFR 131.38[8]) shall be accelerated to monthly. To return to the monitoring frequency specified, the discharger shall request and receive approval from the Regional Board's Executive Officer or designee.

4. The monitoring frequency for those priority pollutants that are detected during the required annual monitoring at a concentration greater than eighty percent of the most stringent applicable receiving water objective (freshwater or human health (consumption of organisms only) as specified for that pollutant[7] in 40 CFR 131.38[8]) shall be accelerated to quarterly for one year following detection. To return to the monitoring frequency specified, the discharger shall request and receive approval from the Regional Board's Executive Officer or designee.

D. LAKE MONITORING

1. Whenever recycled water is discharged into Lake Elsinore, the volume of recycled water, and the date at which recycled water is supplied shall be recorded on a permanent log. A copy of the log of recycled wastewater discharged into Lake Elsinore shall be submitted every month. If no discharge occurs, a letter to that effect shall be submitted.

2. The discharger shall implement the Lake Elsinore monitoring and reporting program approved by the Regional Board's Executive Officer on June 24, 2002.

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7 *For those priority pollutants without specified criteria values, accelerated monitoring is not required.*

8 *See Federal Register/ Vol. 65, No. 97 / Thursday, May 18, 2000 / Rules and Regulations.*

3. Upon approval by the Regional Board's Executive Officer, the discharger shall implement the monitoring program required by Section I.2. of the Order to assess the efficacy of in-lake nutrient reduction facilities (aeration, mixing).

E. NUTRIENT OFFSET PROGRAM MONITORING AND REPORTING:

The discharger shall submit a semi-annual report that demonstrates that requisite total nitrogen and total phosphorus offsets, as applicable, are achieved.

F. TOXICITY MONITORING REQUIREMENTS:

1. The discharger shall conduct critical life stage chronic toxicity testing in accordance with Method 1002.0 - Survival and Reproduction test for water flea, Ceriodaphnia dubia as specified in "Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms", third edition, Environmental Monitoring Systems Laboratory, U.S. Environmental Protection Agency 1994, Cincinnati, Ohio (July 1994, EPA/600/4-91/002).

2. The discharger shall establish procedures to ensure that the toxicity-testing laboratory notifies the discharger of the results of toxicity testing within twenty-four hours of completing such tests.

3. A minimum of one monthly chronic toxicity test shall be conducted on 24-hour composite samples.

4. The discharger shall increase the frequency of chronic toxicity testing to every two weeks whenever any test result exceeds 1.0 TUc. The first test under the accelerated schedule shall be conducted within two weeks of receiving notice of the test which exceeds 1.0 TUc, and every two weeks thereafter. The discharger may resume the regular test schedule when two consecutive chronic toxicity tests result in 1.0 TUc, or when the results of the Initial Investigation Reduction Evaluation conducted by the discharger have adequately addressed the identified toxicity problem .

5. 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. Third Edition. EPA/600/4-91/002.

   Results for both survival and reproduction endpoints shall be reported in TUc, where TUc = 100/NOEC or $100/IC_p$ or EC_p (p is the percent effluent). The no observed effect concentration (NOEC) is the highest concentration of toxicant to which organisms are exposed in a chronic test, that causes no observable adverse effect on the tests organisms (e.g., the highest concentration of toxicant to which the values for the observed responses are not statistically significant different from the controls). The inhibition concentration (IC) is a point estimate of the toxicant concentration that causes a given percent reduction in a non-quantal biological measurement (e.g., reproduction or growth) calculated from a continuous model (the EPA Interpolation Method). The effective concentration (EC) is a point estimate of the toxicant concentration that would cause a given percent reduction in quantal biological measurement (e.g., larval development, survival) calculated from a continuous model (e.g., probit).

6. Additional Testing Requirements.

   a. A series of at least five dilutions and a control will be tested. The series shall be within 60% to 100% effluent concentration.

   b. If organisms are not cultured in-house, concurrent testing with reference toxicants shall be conducted. Where organisms are cultured in-house, monthly reference toxicant testing is sufficient. Reference toxicants shall also be conducted using the same test conditions as the effluent toxicity test (e.g., same test duration, etc).

   c. If either of the reference toxicant test or the effluent tests do not meet all test acceptability criteria as specified in the manual[9], then the discharger must re-sample and re-test within 14 days or as soon as the discharger receives notification of failed tests.

   d. Control and dilution water should be receiving water or lab water, as appropriate, as described in the manual. If the dilution water used is different from the culture water, a second control, using culture water shall also be used.

7. Quality Assurance/Control:

   a. A quality assurance/quality control (QA/QC) program shall be instituted to verify the results of the effluent toxicity monitoring program. The QA/QC program shall include but shall not be limited to the following: (1) Selection of an independent testing laboratory; (2) Approval by the Regional Board's Executive Officer or Executive Officer's designee of the independent testing laboratory; (3) Once during the year, the discharger shall split samples with the independent laboratory for conducting acute and chronic toxicity testing; (4) Results from the independent laboratory shall be submitted to the Regional Board and the discharger for evaluation; (5) The discharger shall review the test acceptability criteria in accordance with the EPA test protocols, EPA/600/4-91/002.

   b. Results from the independent laboratory of the annual QA/QC split samples are to be used for Quality Assurance/Quality Control (QA/QC) purposes only and not for purposes of determining compliance with other requirements of this Order.

8. The use of alternative methods for measuring chronic toxicity may be considered by the Executive Officer on a case–by-case basis. The use of a different test species, in lieu of conducting the required test species may be considered/approved by the Executive Officer on a case-by case basis upon submittal of the documentation supporting discharger's determination that a different species is more sensitive and appropriate.

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9 *Refers to USEPA Manual "Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms. Third Edition. EPA/600/4-91/002."*

9. Reporting: Results of all toxicity testing conducted within the month following the reporting period shall be submitted monthly in accordance with "Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms", third edition, Environmental Monitoring Systems Laboratory, U.S. Environmental Protection Agency 1994, Cincinnati, Ohio (July 1994, EPA/600/4-91/002). The report shall include a determination of the median value of all chronic toxicity testing results conducted during the two previous months.

10. Whenever an Initial Investigation Reduction Evaluation is conducted, the results of the evaluation shall be submitted upon completion. In addition, monthly status reports shall be submitted as part of the discharger's monitoring report for the previous month.

G. BIOSOLIDS MONITORING:

1. The discharger shall maintain a permanent log of solids hauled away from the treatment facilities for use/disposal elsewhere, including the date hauled, the volume or weight (in dry tons), type (screening, grit), and destination. This information shall be reported quarterly.

H. WATER SUPPLY MONITORING:

1. In August of each year, a sample of each source of the water supplied to the sewered area shall be obtained and analyzed for the following constituents:

Boron	pH	Specific Conductance
Chloride	Sodium	Total Dissolved Solids
Nitrate	Sulfate	Total Hardness

2. All of the above constituents shall be expressed in "mg/l" except specific conductance and pH, which shall be expressed in "micromhos/cm" and "pH units," respectively.

3. Monthly reports shall be submitted stating the amount (in percentage or acre-feet) supplied to the sewered area from each source of water and the resulting flow-weighted water supply quality for constituents specified in Section G.1. above.

H. PRETREATMENT MONITORING AND REPORTING:

1. The discharger shall submit to the Regional Board and the EPA Region 9, a quarterly compliance status report. The quarterly compliance status reports shall cover the periods January 1 - March 31, April 1 - June 30, July 1 - September 30, and October 1 -December 31. Each report shall be submitted by the end of the month following the quarter, except that the report for October 1 - December 31 may be included in the annual report. This quarterly reporting requirement shall commence for the first full quarter following issuance of this Order. The reports shall identify:

a. All significant industrial users (SIUs) which violated any standards or reporting requirements during that quarter;
b. The violations committed (distinguish between categorical and local limits);
c. The enforcement actions undertaken; and
d. The status of active enforcement actions from previous periods, including closeouts (facilities under previous enforcement actions which attained compliance during the quarter).

2. Annually, the discharger shall submit a report to the Regional Board, the State Water Resources Control Board and the EPA Region 9 describing the pretreatment activities within the service area during the previous year. In the event that any control authority within the service area is not in compliance with any conditions or requirements of this Order or their approved pretreatment program (such as due to industrial user discharges, interjurisdictional agency agreement implementation issues, or other causes,) then the discharger shall also include the reasons for non-compliance and state how and when the discharger and the control authority shall comply with such conditions and requirements. This annual report shall cover operations from July 1 through June 30 of each fiscal year and is due on September 1 of each year. The report shall contain, but not be limited to, the following information:

a. A summary of analytical results from representative, flow-proportioned, 24-hour composite sampling of the POTW's influent and effluent wastewaters for those pollutants which are known or suspected to be discharged by industrial users (IUs) as identified by EPA under Section 307(a) of the CWA. The summary will include the result of annual full priority pollutant scan, with quarterly samples analyzed only for those pollutants[10] detected in the full scan. The discharger shall also provide any influent or effluent monitoring data for non-priority pollutants which the discharger believes may be causing or contributing to Interference, Pass Through or adversely impacting sludge quality. Sampling and analysis shall be performed in accordance with the techniques prescribed in 40 CFR 136 and amendments thereto.

b. A discussion of any upset, interference, or pass-through incidents at the treatment plant (if any), which the discharger knows or suspects were caused by IUs of the POTW system. The discussion shall include the following:

1) The reasons why the incidents occurred, the corrective actions taken, and, if known, the name and address of the IU(s) responsible.

2) A review of the applicable pollutant limitations to determine whether any additional limitations, or changes to existing requirements, may be necessary to prevent pass through, interference or noncompliance with sludge disposal requirements.

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10 *The discharger is not required to analyze for asbestos.*

c. A complete and updated list of the discharger's significant industrial users (SIUs), including names, Standard Industrial Classification (SIC) code(s) and addresses, and a list of any SIU deletions and/or additions. The discharger shall provide a brief explanation for each deletion. The SIU list shall identify the SIUs subject to Federal Categorical Standards by specifying which set(s) of standards are applicable to each SIU. The list shall also indicate which SIUs are subject to local limitations more stringent than Federal Categorical Standards and those which are not subject to local limits.

d. A list or table characterizing the industrial compliance status of each SIU, including:

1) SIU name;
2) Industrial category;
3) The type (processes) of wastewater treatment in place;
4) Number of samples taken by the POTW during the year;
5) Number of samples taken by the SIU during the year;
6) Whether all needed certifications (if allowed) were provided by SIUs which have limits for total toxic organics;
7) Federal and Regional Standards violated during the year, reported separately;
8) Whether the SIU at any time in the year was in Significant Noncompliance (SNC)[11], as defined by 40 CFR 403.12 (f)(2)(vii); and
9) A summary of enforcement actions against the SIU taken during the year, including the type of action, final compliance date, and amount of fines assessed/collected (if any). Proposed actions, if known, should be included.
10) Number of inspections conducted at each SIU during the year.

e. A compliance summary table which includes:

1) SIU's which were in SNC at any time during the year;
2) The total number of SIUs which are in SNC with pretreatment compliance schedules during the year;
3) The total number of notices of violation and administrative orders issued against SIUs during the year;
4) The total number of civil and criminal judicial actions filed against SIUs during the year;
5) The number of SIUs which were published as being in SNC during the year; and
6) The number of IUs from which penalties were collected during the year.

f. A short description of any significant changes in operating the pretreatment program which differ from the previous year including, but not limited to changes concerning:

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[11] *SNC is determined at the beginning of each quarter based on data of the previous six months.*

1) the program's administrative structure;
2) local industrial discharge limitations;
3) monitoring program or monitoring frequencies;
4) legal authority or enforcement policy;
5) funding mechanisms; and
6) resource requirements and/or staffing levels.

g. A summary of the annual pretreatment budget, including the cost of pretreatment program functions and equipment purchases.

h. A summary of public participation activities to involve and inform the public.

i. A description of any changes in sludge disposal methods and a discussion of any concerns not described elsewhere in the report.

3. The cumulative number of industrial users that the discharger has notified regarding Baseline Monitoring Reports and the cumulative number of industrial user responses.

4. The discharger shall submit the quarterly compliance status reports and the annual pretreatment report to EPA Region 9, the State Board and the Regional Board.

I. STORM WATER MONITORING AND REPORTING:

For storm water discharges, the discharger shall comply with the monitoring and reporting requirements as outlined in Attachment "D".

J. WATER RECYCLING MONITORING AND REPORTING:

1. Whenever recycled water is supplied to a user, the user of recycled water, the volume of recycled water delivered, the locations of recycled water use sites (including the groundwater management zone underlying the recycled water use sites), type of use (e.g. irrigation, industrial, etc) and the dates at which water is supplied shall be recorded. A summary report of water use by groundwater management zones shall be submitted annually. This report shall be included in the annual report required in Section A.12., above.

2. Semi-annually in May and October, the discharger shall submit a report that:

a. Documents the operation of UV system relative to the approved operational plan; and;

b. Evaluates the efficacy of the operational plan in achieving compliance with relevant requirements of this Order. This report shall be submitted together with the required monthly report.

K. REPORTING:

1. Monitoring reports shall be submitted by the dates in the following schedule:

Report	Reporting period	Report Due Date
Influent and effluent constituents	Monthly	By the 30th day of the month following the monitoring period
Lake Monitoring	Quarterly	"
Remediation and offset program for TN and TP	Quarterly	"
Toxicity Testing	See Section D., above	"
Quarterly Pretreatment Reporting	See Section H.1., above	"
Stormwater Monitoring & Reporting	See Section I., above	"
Water Supply Quality	Monthly	By the 60th day following the monitoring period
Annual Pretreatment Reporting	See Section H.2., above	September 1, each year
Annual Report per Section A.12, above	See Section A.12., above	April 1, each year
Annual Water Supply Parameters from each source	Annually	September 30 of each year

2. The following reports shall also be submitted by the dates indicated:

REQUIRED REPORTS OF ORDER NO. R8-2005-0003	
Report	Report Due Date
Report per Section I.2.	July 1, 2005
Report per Section I.3.	July 1, 2005
Report per Section I.4.	July 1, 2005
Report per Section I.5.	October 1, 2005
Report per Section I.6.	See Section I.6. of the Order
Report per Section I.7.	See Section I.7. of the Order
Report per Section I.8.	See Section I.8. of the Order
Report per Section I.9.	See Section I.9. of the Order

REQUIRED REPORTS OF ORDER NO. R8-2005-0003	
Report	Report Due Date
Report per Section I.10.	See Section I.10. of the Order
Report per Section I.11.	90-days after effective date of the Order (see Section I.11. of the Order)
Report of Waste Discharge per Section I.12.	180-days before any plant changes (see Section I.12. of the Order)
Non-compliance Reporting per Section I.13.	within 24-hours followed by a written report within 5-days (see Section I.13. of the Order)
This table attempts to summarize all of the special reports that are required to be submitted in accordance with Order No. R8-2005-0003; however, the omission of a report from this table does not absolve the discharger from the requirement to submit that report.	

Gerard J. Thibeault
Executive Officer

March 4, 2005

MINIMUM LEVELS IN PPB (µg/l)

Table 1- VOLATILE SUBSTANCES[1]	GC	GCMS
Acrolein	2.0	5
Acrylonitrile	2.0	2
Benzene	0.5	2
Bromoform	0.5	2
Carbon Tetrachloride	0.5	2
Chlorobenzene	0.5	2
Chlorodibromomethane	0.5	2
Chloroethane	0.5	2
Chloroform	0.5	2
Dichlorobromomethane	0.5	2
1,1 Dichloroethane	0.5	1
1,2 Dichloroethane	0.5	2
1,1 Dichloroethylene	0.5	2
1,2 Dichloropropane	0.5	1
1,3 Dichloropropylene (volatile)	0.5	2
Ethylbenzene	0.5	2
Methyl Bromide (*Bromomethane*)	1.0	2
Methyl Chloride (*Chloromethane*)	0.5	2
Methylene Chloride (*Dichloromethane*)	0.5	2
1,1,2,2 Tetrachloroethane	0.5	1
Tetrachloroethylene	0.5	2
Toluene	0.5	2
trans-1,2 Dichloroethylene	0.5	1
1,1,1 Trichloroethane	0.5	2
1,1,2 Trichloroethane	0.5	2
Trichloroethylene	0.5	2
Vinyl Chloride	0.5	2
1,2 Dichlorobenzene (volatile)	0.5	2
1,3 Dichlorobenzene (volatile)	0.5	2
1,4 Dichlorobenzene (volatile)	0.5	2

Selection and Use of Appropriate ML Value:

ML Selection: When there is more than one ML value for a given substance, the discharger may select any one of those ML values, and their associated analytical methods, listed in Attachment "A" that are below the calculated effluent limitation for compliance determination. If no ML value is below the effluent limitation, then the discharger shall select the lowest ML value, and its associated analytical method, listed in this Attachment "A".

ML Usage: The ML value in Attachment "A" represents the lowest quantifiable concentration in a sample based on the proper application of all method-based analytical procedures and the absence of any matrix interferences. Assuming that all method-specific analytical steps are followed, the ML value will also represent, after the appropriate application of method-specific factors, the lowest standard in the calibration curve for that specific analytical technique. Common analytical practices sometimes require different treatment of the sample relative to calibration standards.

Note: chemical names in parenthesis and italicized is another name for the constituent.

[1] *The normal method-specific factor for these substances is 1, therefore, the lowest standard concentration in the calibration curve is equal to the above ML value for each substance.*

MINIMUM LEVELS IN PPB (µg/l)

Table 2 – Semi-Volatile Substances[2]	GC	GCMS	LC
2-Chloroethyl vinyl ether	1	1	
2 Chlorophenol	2	5	
2,4 Dichlorophenol	1	5	
2,4 Dimethylphenol	1	2	
4,6 Dinitro-2-methylphenol	10	5	
2,4 Dinitrophenol	5	5	
2- Nitrophenol		10	
4- Nitrophenol	5	10	
4 Chloro-3-methylphenol	5	1	
2,4,6 Trichlorophenol	10	10	
Acenaphthene	1	1	0.5
Acenaphthylene		10	0.2
Anthracene		10	2
Benzidine		5	
Benzo (a) Anthracene (*1,2 Benzanthracene*)	10	5	
Benzo(a) pyrene (*3,4 Benzopyrene*)		10	2
Benzo (b) Flouranthene (*3,4 Benzofluoranthene*)		10	10
Benzo(g,h,i)perylene		5	0.1
Benzo(k)fluoranthene		10	2
bis 2-(1-Chloroethoxyl) methane		5	
bis(2-chloroethyl) ether	10	1	
bis(2-Chloroisopropyl) ether	10	2	
bis(2-Ethylhexyl) phthalate	10	5	
4-Bromophenyl phenyl ether	10	5	
Butyl benzyl phthalate	10	10	
2-Chloronaphthalene		10	
4-Chlorophenyl phenyl ether		5	
Chrysene		10	5
Dibenzo(a,h)-anthracene		10	0.1
1,2 Dichlorobenzene (semivolatile)	2	2	
1,3 Dichlorobenzene (semivolatile)	2	1	
1,4 Dichlorobenzene (semivolatile)	2	1	
3,3' Dichlorobenzidine		5	
Diethyl phthalate	10	2	
Dimethyl phthalate	10	2	
di-n-Butyl phthalate		10	
2,4 Dinitrotoluene	10	5	
2,6 Dinitrotoluene		5	
di-n-Octyl phthalate		10	
1,2 Diphenylhydrazine		1	
Fluoranthene	10	1	0.05
Fluorene		10	0.1
Hexachloro-cyclopentadiene	5	5	
1,2,4 Trichlorobenzene	1	5	

MINIMUM LEVELS IN PPB (µg/l)

Table 2 - SEMI-VOLATILE SUBSTANCES[2]	GC	GCMS	LC	COLOR
Pentachlorophenol	1	5		
Phenol [3]	1	1		50
Hexachlorobenzene	5	1		
Hexachlorobutadiene	5	1		
Hexachloroethane	5	1		
Indeno(1,2,3,cd)-pyrene		10	0.05	
Isophorone	10	1		
Naphthalene	10	1	0.2	
Nitrobenzene	10	1		
N-Nitroso-dimethyl amine	10	5		
N-Nitroso -di n-propyl amine	10	5		
N-Nitroso diphenyl amine	10	1		
Phenanthrene		5	0.05	
Pyrene		10	0.05	

Table 3– INORGANICS[4]	FAA	GFAA	ICP	ICPMS	SPGFAA	HYDRIDE	CVAA	COLOR	DCP
Antimony	10	5	50	0.5	5	0.5			1000
Arsenic		2	10	2	2	1		20	1000
Beryllium	20	0.5	2	0.5	1				1000
Cadmium	10	0.5	10	0.25	0.5				1000
Chromium (total)	50	2	10	0.5	1				1000
Chromium VI	5							10	
Copper	25	5	10	0.5	2				1000
Lead	20	5	5	0.5	2				10000
Mercury				0.5			0.2		
Nickel	50	5	20	1	5				1000
Selenium		5	10	2	5	1			1000
Silver	10	1	10	0.25	2				1000
Thallium	10	2	10	1	5				1000
Zinc	20		20	1	10				1000
Cyanide								5	

2 *With the exception of phenol by colorimetric technique, the normal method-specific factor for these substances is 1000, therefore, the lowest standards concentration in the calibration curve is equal to the above ML value for each substance multiplied by 1000.*

3 *Phenol by colorimetric technique has a factor of 1.*

4 *The normal method-specific factor for these substances is 1, therefore, the lowest standard concentration in the calibration curve is equal to the above ML value for each substance.*

MINIMUM LEVELS IN PPB (µg/l)

Table 4- PESTICIDES – PCBs[5]	GC
Aldrin	0.005
alpha–BHC (*a-Hexachloro-cyclohexane*)	0.01
beta–BHC (*b-Hexachloro-cyclohexane*)	0.005
Gamma–BHC (*Lindane; g-Hexachloro-cyclohexane*)	0.02
Delta-BHC (*d-Hexachloro-cyclohexane*)	0.005
Chlordane	0.1
4,4'-DDT	0.01
4,4'-DDE	0.05
4,4'-DDD	0.05
Dieldrin	0.01
Alpha-Endosulfan	0.02
Beta-Endosulfan	0.01
Endosulfan Sulfate	0.05
Endrin	0.01
Endrin Aldehyde	0.01
Heptachlor	0.01
Heptachlor Epoxide	0.01
PCB 1016	0.5
PCB 1221	0.5
PCB 1232	0.5
PCB 1242	0.5
PCB 1248	0.5
PCB 1254	0.5
PCB 1260	0.5
Toxaphene	0.5

Techniques:
GC - Gas Chromatography
GCMS - Gas Chromatography/Mass Spectrometry
HRGCMS - High Resolution Gas Chromatography/Mass Spectrometry (i.e., EPA 1613, 1624, or 1625)
LC - High Pressure Liquid Chromatography
FAA - Flame Atomic Absorption
GFAA - Graphite Furnace Atomic Absorption
HYDRIDE - Gaseous Hydride Atomic Absorption
CVAA - Cold Vapor Atomic Absorption
ICP - Inductively Coupled Plasma
ICPMS - Inductively Coupled Plasma/Mass Spectrometry
SPGFAA - Stabilized Platform Graphite Furnace Atomic Absorption (i.e., EPA 200.9)
DCP - Direct Current Plasma
COLOR - Colorimetric

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5 *The normal method-specific factor for these substances is 100, therefore, the lowest standard concentration in the calibration curve is equal to the above ML value for each substance multiplied by 100.*

EPA PRIORITY POLLUTANT LIST

Metals		Acid Extractibles		Base/Neutral Extractibles (continuation)	
1.	Antimony	45.	2-Chlorophenol	91.	Hexachloroethane
2.	Arsenic	46.	2,4-Dichlorophenol	92.	Indeno (1,2,3-cd) Pyrene
3.	Beryllium	47.	2,4-Dimethylphenol	93.	Isophorone
4.	Cadmium	48.	2-Methyl-4,6-Dinitrophenol	94.	Naphthalene
5a.	Chromium (III)	49.	2,4-Dinitrophenol	95.	Nitrobenzene
5b.	Chromium (VI)	50.	2-Nitrophenol	96.	N-Nitrosodimethylamine
6.	Copper	51.	4-Nitrophenol	97.	N-Nitrosodi-N-Propylamine
7.	Lead	52.	3-Methyl-4-Chlorophenol	98.	N-Nitrosodiphenylamine
8.	Mercury	53.	Pentachlorophenol	99.	Phenanthrene
9.	Nickel	54.	Phenol	100.	Pyrene
10.	Selenium	55.	2, 4, 6 – Trichlorophenol	101.	1,2,4-Trichlorobenzene
11.	Silver	**Base/Neutral Extractibles**		**Pesticides**	
12.	Thallium	56.	Acenaphthene	102.	Aldrin
13.	Zinc	57.	Acenaphthylene	103.	Alpha BHC
Miscellaneous		58.	Anthracene	104.	Beta BHC
14.	Cyanide	59.	Benzidine	105.	Delta BHC
15.	Asbestos (not required unless requested)	60.	Benzo (a) Anthracene	106.	Gamma BHC
16.	2,3,7,8-Tetrachlorodibenzo-P-Dioxin (TCDD)	61.	Benzo (a) Pyrene	107.	Chlordane
Volatile Organics		62.	Benzo (b) Fluoranthene	108.	4, 4' - DDT
17.	Acrolein	63.	Benzo (g,h,i) Perylene	109.	4, 4' - DDE
18.	Acrylonitrile	64.	Benzo (k) Fluoranthene	110.	4, 4' - DDD
19.	Benzene	65.	Bis (2-Chloroethoxy) Methane	111.	Dieldrin
20.	Bromoform	66.	Bis (2-Chloroethyl) Ether	112.	Alpha Endosulfan
21.	Carbon Tetrachloride	67.	Bis (2-Chloroisopropyl) Ether	113.	Beta Endosulfan
22.	Chlorobenzene	68.	Bis (2-Ethylhexyl) Phthalate	114.	Endosulfan Sulfate
23.	Chlorodibromomethane	69.	4-Bromophenyl Phenyl Ether	115.	Endrin
24.	Chloroethane	70.	Butylbenzyl Phthalate	116.	Endrin Aldehyde
25.	2-Chloroethyl Vinyl Ether	71.	2-Chloronaphthalene	117.	Heptachlor
26.	Chloroform	72.	4-Chlorophenyl Phenyl Ether	118.	Heptachlor Epoxide
27.	Dichlorobromomethane	73.	Chrysene	119.	PCB 1016
28.	1,1-Dichloroethane	74.	Dibenzo (a,h) Anthracene	120.	PCB 1221
29.	1,2-Dichloroethane	75.	1,2-Dichlorobenzene	121.	PCB 1232
30.	1,1-Dichloroethylene	76.	1,3-Dichlorobenzene	122.	PCB 1242
31.	1,2-Dichloropropane	77.	1,4-Dichlorobenzene	123.	PCB 1248
32.	1,3-Dichloropropylene	78.	3,3'-Dichlorobenzidine	124.	PCB 1254
33.	Ethylbenzene	79.	Diethyl Phthalate	125.	PCB 1260
34.	Methyl Bromide	80.	Dimethyl Phthalate	126.	Toxaphene
35.	Methyl Chloride	81.	Di-n-Butyl Phthalate		
36.	Methylene Chloride	82.	2,4-Dinitrotoluene		
37.	1,1,2,2-Tetrachloroethane	83.	2-6-Dinitrotoluene		
38.	Tetrachloroethylene	84.	Di-n-Octyl Phthalate		
39.	Toluene	85.	1,2-Dipenylhydrazine		
40.	1,2-Trans-Dichloroethylene	86.	Fluoranthene		
41.	1,1,1-Trichloroethane	87.	Fluorene		
42.	1,1,2-Trichloroethane	88.	Hexachlorobenzene		
43.	Trichloroethylene	89.	Hexachlorobutadiene		
44.	Vinyl Chloride	90.	Hexachlorocyclopentadiene		

PRACTICAL QUANTITATION LEVELS FOR COMPLIANCE DETERMINATION

	Constituent	RL µg/l	Analysis Method
1	Arsenic	7.5	GF/AA
2	Barium	20	ICP/GFAA
3	Cadmium	15	ICP
4	Chromium (VI)	15.0	ICP
5	Cobalt	10.0	GF/AA
6	Copper	19.0	GF/ICP
7	Cyanide	50.0	335.2/335.3
8	Iron	100.0	ICP
9	Lead	26.0	GF/AA
10	Manganese	20.0	ICP
11	Mercury	0.5	CV/AA
12	Nickel	50.0	ICP
13	Selenium	14.0	GF/HYDRIDE GENERATION
14	Silver	16.0	ICP
15	Zinc	20	ICP
16	1,2 - Dichlorobenzene	5.0	601/602/624
17	1,3 - Dichlorobenzene	5.0	601
18	1,4 - Dichlorobenzene	5.0	601
18	2,4 - Dichlorophenol	10.0	625/604
20	4 - Chloro -3-methylphenol	10.0	625/604
21	Aldrin	0.04	608
22	Benzene	1.0	602/624
23	Chlordane	0.30	608
24	Chloroform	5.0	601/624
25	DDT	0.10	608
26	Dichloromethane	5.0	601/624
27	Dieldrin	0.10	608
28	Fluorantene	10.0	625/610
29	Endosulfan	0.50	608
30	Endrin	0.10	608
31	Halomethanes	5.0	601/624
32	Heptachlor	0.03	608
33	Hepthachlor Epoxide	0.05	608
34	Hexachlorobenzene	10.0	625
35	Hexachlorocyclohexane		
	Alpha	0.03	608
	Beta	0.03	608
	Gamma	0.03	608
36	PAH's	10.0	625/610
37	PCB	1.0	608
38	Pentachlorophenol	10.0	625/604
39	Phenol	10.0	625/604
40	TCDD Equivalent	0.05	8280
41	Toluene	1.0	602/625
42	Toxaphene	2.0	608
43	Tributyltin	0.02	GC
44	2,4,6-Trichlorophenol	10.0	625/604

STORMWATER MONITORING PROGRAM AND REPORTING REQUIREMENTS

1. *Implementation Schedule*

The discharger shall continue to implement their existing Stormwater monitoring program and implement any necessary revisions to their Stormwater monitoring program in a timely manner, but in no case later than June 30, 2000. The discharger may use the monitoring results conducted in accordance with their existing Stormwater monitoring program to satisfy the pollutant/parameter reduction requirements in Section 5.c., below, and Sampling and Analysis Exemptions and Reduction Certifications in Section 10, below.

2. *Objectives*

The objectives of the monitoring program are to:

a. Ensure that storm water discharges are in compliance with waste discharge requirements specified in Order No. R8-2005-0003.

b. Ensure practices at the facility to reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges are evaluated and revised to meet changing conditions.

c. Aid in the implementation and revision of the SWPPP required by Attachment "A" Stormwater Pollution Prevention Plan of Order No. R8-2005-0003.

d. Measure the effectiveness of best management practices (BMPs) to prevent or reduce pollutants in storm water discharges and authorized non-storm water discharges. Much of the information necessary to develop the monitoring program, such as discharge locations, drainage areas, pollutant sources, etc., should be found in the Storm Water Pollution Prevention Plan (SWPPP). The facility's monitoring program shall be a written, site-specific document that shall be revised whenever appropriate and be readily available for review by employees or Regional Board inspectors.

3. *Non-Storm Water Discharge Visual Observations*

a. The discharger shall visually observe all drainage areas within their facility for the presence of unauthorized non-storm water discharges;

b. The discharger shall visually observe the facility's authorized non-storm water discharges and their sources;

c. The visual observations required above shall occur quarterly, during daylight hours, on days with no storm water discharges, and during scheduled facility operating hours[1]. Quarterly visual observations shall be conducted in each of the following periods: January-March, April-June, July-September, and October-December. The discharger shall conduct quarterly visual observations within 6-18 weeks of each other.

d. Visual observations shall document the presence of any discolorations, stains, odors, floating materials, etc., as well as the source of any discharge. Records shall be maintained of the visual observation dates, locations observed, observations, and response taken to eliminate unauthorized non-storm water discharges and to reduce or prevent pollutants from contacting non-storm water discharges. The SWPPP shall be revised, as necessary, and implemented in accordance with Attachment "A" Stormwater Pollution Prevention Plan of Order No. R8-2005-0003.

4. *Storm Water Discharge Visual Observations*

a. With the exception of those facilities described in Section 4.d., below, the discharger shall visually observe storm water discharges from one storm event per month during the wet season (October 1-May 30). These visual observations shall occur during the first hour of discharge and at all discharge locations. Visual observations of stored or contained storm water shall occur at the time of release.

b. Visual observations are only required of storm water discharges that occur during daylight hours that are preceded by at least three (3) working days[2] without storm water discharges and that occur during scheduled facility operating hours.

c. Visual observations shall document the presence of any floating and suspended material, oil and grease, discolorations, turbidity, odor, and source of any pollutants. Records shall be maintained of observation dates, locations observed, observations, and response taken to reduce or prevent pollutants in storm water discharges. The SWPPP shall be revised, as necessary, and implemented in accordance with Attachment "A" Stormwater Pollution Prevention Plan of Order No. R8-2005-0003.

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[1] *"Scheduled facility operating hours" are the time periods when the facility is staffed to conduct any function related to industrial activity, but excluding time periods where only routine maintenance, emergency response, security, and/or janitorial services are performed.*

[2] *Three (3) working days may be separated by non-working days such as weekends and holidays provided that no storm water discharges occur during the three (3) working days and the non-working days.*

d. The discharger with storm water containment facilities shall conduct monthly inspections of their containment areas to detect leaks and ensure maintenance of adequate freeboard. Records shall be maintained of the inspection dates, observations, and any response taken to eliminate leaks and to maintain adequate freeboard.

5. *Sampling and Analysis*

a. The discharger shall collect storm water samples during the first hour of discharge from (1) the first storm event of the wet season, and (2) at least one other storm event in the wet season. All storm water discharge locations shall be sampled. Sampling of stored or contained storm water shall occur at the time the stored or contained storm water is released. The discharger that does not collect samples from the first storm event of the wet season are still required to collect samples from two other storm events of the wet season and shall explain in the "Annual Stormwater Report" (see Section 12, below) why the first storm event was not sampled.

b. Sample collection is only required of storm water discharges that occur during scheduled facility operating hours and that are preceded by at least (3) three working days without storm water discharge.

c. The samples shall be analyzed for:

(1) Total suspended solids (TSS) pH, specific conductance, and total organic carbon (TOC). Oil and grease (O&G) may be substituted for TOC;

(2) Toxic chemicals and other pollutants that are likely to be present in storm water discharges in significant quantities. If these pollutants are not detected in significant quantities after two consecutive sampling events, the discharger may eliminate the pollutant from future sample analysis until the pollutant is likely to be present again;

(3) The discharger is not required to analyze a parameter when either of the two following conditions are met: (a) the parameter has not been detected in significant quantities from the last two consecutive sampling events, or (b) the parameter is not likely to be present in storm water discharges and authorized non-storm water discharges in significant quantities based upon the discharger's evaluation of the facilities industrial activities, potential pollutant sources, and SWPPP; and

(4) Other parameters as required by the Regional Board.

6. *Sample Storm Water Discharge Locations*

a. The discharger shall visually observe and collect samples of storm water discharges from all drainage areas that represent the quality and quantity of the facility's storm water discharges from the storm event.

b. If the facility's storm water discharges are commingled with run-on from surrounding areas, the discharger should identify other visual observation and sample collection locations that have not been commingled by run-on and that represent the quality and quantity of the facility's storm water discharges from the storm event.

c. If visual observation and sample collection locations are difficult to observe or sample (e.g., sheet flow, submerged outfalls), the discharger shall identify and collect samples from other locations that represent the quality and quantity of the facility's storm water discharges from the storm event.

d. The discharger that determines that the industrial activities and BMPs within two or more drainage areas are substantially identical may either (1) collect samples from a reduced number of substantially identical drainage areas, or (2) collect samples from each substantially identical drainage area and analyze a combined sample from each substantially identical drainage area. The discharger must document such a determination in the annual Stormwater report.

7. Visual Observation and Sample Collection Exceptions

The discharger is required to be prepared to collect samples and conduct visual observations at the beginning of the wet season (October 1) and throughout the wet season until the minimum requirements of Sections 4. and 5., above, are completed with the following exceptions:

a. The discharger is not required to collect a sample and conduct visual observations in accordance with Section 4 and Section 5, above, due to dangerous weather conditions, such as flooding, electrical storm, etc., when storm water discharges begin after scheduled facility operating hours or when storm water discharges are not preceded by three working days without discharge. Visual observations are only required during daylight hours. The discharger that does not collect the required samples or visual observations during a wet season due to these exceptions shall include an explanation in the "Annual Stormwater Report" why the sampling or visual observations could not be conducted.

b. The discharger may conduct visual observations and sample collection more than one hour after discharge begins if the discharger determines that the objectives of this section will be better satisfied. The discharger shall include an explanation in the "Annual Stormwater Report" why the visual observations and sample collection should be conducted after the first hour of discharge.

8. *Alternative Monitoring Procedures*

The discharger may propose an alternative monitoring program that meets Section 2, above, monitoring program objectives for approval by the Regional Board's Executive Officer. The discharger shall continue to comply with the monitoring requirements of this section and may not implement an alternative monitoring plan until the alternative monitoring plan is approved by the Regional Board's Executive Officer. Alternative monitoring plans are subject to modification by the Regional Board's Executive Officer.

9. *Monitoring Methods*

a. The discharger shall explain how the facility's monitoring program will satisfy the monitoring program objectives of Section 2., above. This shall include:

(1) Rationale and description of the visual observation methods, location, and frequency;

(2) Rationale and description of the sampling methods, location, and frequency; and

(3) Identification of the analytical methods and corresponding method detection limits used to detect pollutants in storm water discharges. This shall include justification that the method detection limits are adequate to satisfy the objectives of the monitoring program.

b. All sampling and sample preservation shall be in accordance with the current edition of "Standard Methods for the Examination of Water and Wastewater" (American Public Health Association). All monitoring instruments and equipment (including the discharger's own field instruments for measuring pH and Electro-conductivity) shall be calibrated and maintained in accordance with manufacturers' specifications to ensure accurate measurements. All laboratory analyses must be conducted according to test procedures under 40 CFR Part 136, unless other test procedures have been specified in Order No. R8-2005-0003 or by the Regional Board's Executive Officer. All metals shall be reported as total recoverable metals or unless otherwise specified in Order No. R8-2005-0003. With the exception of analysis conducted by the discharger, all laboratory analyses shall be conducted at a laboratory certified for such analyses by the State Department of Health Services. The discharger may conduct their own sample analyses if the discharger has sufficient capability (qualified employees, laboratory equipment, etc.) to adequately perform the test procedures.

10. *Sampling and Analysis Exemptions and Reductions*

A discharger who qualifies for sampling and analysis exemptions, as described below in Section 10.a.(1) or who qualifies for reduced sampling and analysis, as described below in Section 10.b., must submit the appropriate certifications and required documentation to the Regional Board prior to the wet season (October 1) and certify as part of the annual Stormwater report submittal. A discharger that qualifies for either the Regional Board or local agency certification programs, as described below in Section 10.a.(2) and (3), shall submit certification and documentation in accordance with the requirements of those programs. The discharger who provides certification(s) in accordance with this section are still required to comply with all other monitoring program and reporting requirements. The discharger shall prepare and submit their certification(s) using forms and instructions provided by the State Water Board, Regional Board, or local agency or shall submit their information on a form that contains equivalent information. The discharger whose facility no longer meets the certification conditions must notify the Regional Board's Executive Officer (and local agency) within 30 days and immediately comply with Section 5., Sampling and Analysis requirements. Should a Regional Board (or local agency) determine that a certification does not meet the conditions set forth below, the discharger must immediately comply with the Section 5., Sampling and Analysis requirements.

a. Sampling and Analysis Exemptions

A discharger is not required to collect and analyze samples in accordance with Section 5., above, if the discharger meets all of the conditions of one of the following certification programs:

(1) No Exposure Certification (NEC)

This exemption is designed primarily for those facilities where all industrial activities are conducted inside buildings and where all materials stored and handled are not exposed to storm water. To qualify for this exemption, the discharger must certify that their facilities meet all of the following conditions:

(a) All prohibited non-storm water discharges have been eliminated or otherwise permitted.

(b) All authorized non-storm water discharges have been identified and addressed in the SWPPP.

(c) All areas of past exposure have been inspected and cleaned, as appropriate.

(d) All significant materials related to industrial activity (including waste materials) are not exposed to storm water or authorized non-

storm water discharges.

(e) All industrial activities and industrial equipment are not exposed to storm water or authorized non-storm water discharges.

(f) There is no exposure of storm water to significant materials associated with industrial activity through other direct or indirect pathways such as from industrial activities that generate dust and particulates.

(g) There is periodic re-evaluation of the facility to ensure conditions (a), (b), (d), (e), and (f) above are continuously met. At a minimum, re-evaluation shall be conducted once a year.

(2) Regional Board Certification Programs

The Regional Board may grant an exemption to the Section 5. Sampling and Analysis requirements if it determines a discharger has met the conditions set forth in a Regional Board certification program. Regional Board certification programs may include conditions to (a) exempt the discharger whose facilities infrequently discharge storm water to waters of the United States, and (b) exempt the discharger that demonstrate compliance with the terms and conditions of Order No. R8-2005-0003.

(3) Local Agency Certifications

A local agency may develop a local agency certification program. Such programs must be approved by the Regional Board. An approved local agency program may either grant an exemption from Section 5. Sampling and Analysis requirements or reduce the frequency of sampling if it determines that a discharger has demonstrated compliance with the terms and conditions of the Industrial Activities Storm Water General Permit Order No. 97-03-DWQ which was adopted by the State Water Resources Control Board on April 17, 1997.

b. Sampling and Analysis Reduction

(1) A discharger may reduce the number of sampling events required to be sampled for the remaining term of Order No. R8-2005-0003 if the discharger provides certification that the following conditions have been met:

(a) The discharger has collected and analyzed samples from a minimum of six storm events from all required drainage areas;

(b) All prohibited non-storm water discharges have been eliminated or otherwise permitted;

(c) The discharger demonstrates compliance with the terms and conditions of the Order No. R8-2005-0003 for the previous two years (i.e., completed Annual Stormwater Reports, performed visual observations, implemented appropriate BMPs, etc.);

(d) The discharger demonstrates that the facility's storm water discharges and authorized non-storm water discharges do not contain significant quantities of pollutants; and

(e) Conditions (b), (c), and (d) above are expected to remain in effect for a minimum of one year after filing the certification.

(2) Unless otherwise instructed by the Regional Board, the discharger shall collect and analyze samples from two additional storm events during the remaining term of Order No. R8-2005-0003 in accordance with Table A, below. The discharger shall collect samples of the first storm event of the wet season. The discharger that does not collect samples from the first storm event of the wet season shall collect samples from another storm event during the same wet season. The discharger that does not collect a sample in a required wet season shall collect the sample from another storm event in the next wet season. The discharger shall explain in the "Annual Stormwater Report" why the first storm event of a wet season was not sampled or a sample was not taken from any storm event in accordance with the Table A schedule, below.

Table A
REDUCED MONITORING SAMPLING SCHEDULE

Discharger Filing Sampling Reduction Certification By	Samples Shall be Collected and Analyzed in these wet seasons	
	Sample 1	Sample 2
Sept. 1, 2004	Oct. 1, 2004-May 31, 2005	Oct. 1, 2006-May 31, 2007
Sept. 1, 2005	Oct. 1, 2005-May 31, 2006	Oct. 1, 2007-May 31, 2008
Sept. 1, 2006	Oct. 1, 2006-May 31, 2007	Oct. 1, 2008-May 31, 2009
Sept. 1, 2007	Oct. 1, 2007-May 31, 2008	Oct. 1, 2009-May 31, 2010

11. Records

Records of all storm water monitoring information and copies of all reports (including the Annual Stormwater Reports) required by Order No. R8-2005-0003 shall be retained for a period of at least five years. These records shall include:

a. The date, place, and time of site inspections, sampling, visual observations, and/or measurements;

b. The individual(s) who performed the site inspections, sampling, visual observations, and or measurements;

c. Flow measurements or estimates;

d. The date and approximate time of analyses;

e. The individual(s) who performed the analyses;

f. Analytical results, method detection limits, and the analytical techniques or methods used;

g. Quality assurance/quality control records and results;

h. Non-storm water discharge inspections and visual observations and storm water discharge visual observation records (see Sections 3. and 4., above);

i. Visual observation and sample collection exception records (see Section 5.a, 6.d, 7, and 10.b.(2), above;

j. All calibration and maintenance records of on-site instruments used;

k. All Sampling and Analysis Exemption and Reduction certifications and supporting documentation (see Section 10);

l. The records of any corrective actions and follow-up activities that resulted from the visual observations.

12. Annual Report

The discharger shall submit an Annual Stormwater Report by July 1 of each year to the Executive Officer of the Regional Board and to the local agency (if requested). The report shall include a summary of visual observations and sampling results, an evaluation of the visual observation and sampling and analysis results, laboratory reports, the Annual Comprehensive Site Compliance Evaluation Report required in Section 9. of Attachment "A" of Order No. R8-2005-0003, an explanation of why a facility did not implement any activities required by Order No. R8-2005-0003 (if not already included in the Evaluation Report), and records specified in Section 11., above. The method detection limit of each analytical parameter shall be included. Analytical results that are less than the method detection limit shall be reported as "less than the method detection limit". The Annual Stormwater Report shall be signed and certified in accordance with Section H.1. "Required Notices and Reports" of Order No. R8-2005-0003. The discharger shall prepare and submit their Annual Stormwater Reports using the annual report forms provided by the State Water Board or Regional Board or shall submit their information on a form that contains equivalent information.

13. Watershed Monitoring Option

Regional Boards may approve proposals to substitute watershed monitoring for some or all of the requirements of this section if the Regional Board finds that the watershed monitoring will provide substantially similar monitoring information in evaluating discharger compliance with the requirements of Order No. R8-2005-0003.

California Regional Water Quality Control Board
Santa Ana Region
3737 Main Street, Suite 500
Riverside, CA 92501-3348

March 4, 2005

ITEM:

SUBJECT: Waste Discharge and Producer/User Water Recycling Requirements for Elsinore Valley Municipal Water District, Regional Water Reclamation Facility, Riverside County - Order No. R8-2005-0003 (NPDES CA8000027)

DISCUSSION:

See attached Fact Sheet

RECOMMENDATION:

Adopt Order No. R8-2005-0003, NPDES No. CA8000027, as presented.

COMMENTS SOLICITED:

Comments were solicited from the following agencies:

U.S. Environmental Protection Agency, Permits Issuance Section (WTR-5) – Doug Eberhardt
U.S. Army District, Los Angeles, Corps of Engineers - Regulatory Branch
U.S. Fish and Wildlife Service, Carlsbad
State Water Resources Control Board, Office of the Chief Counsel - Jorge Leon
State Water Resources Control Board, Division of Water Quality - James Maughan
State Water Resources Control Board, Division of Financial Assistance – Diana Robles
California Department of Health Services, Carpinteria - Jeff Stone
California Department of Health Services, San Diego – Steve Williams
State Department of Water Resources, Glendale
State Department of Fish and Game, Long Beach
Riverside County Environmental Health Department - Sandy Bunchek
Riverside County Flood Control and Water Conservation District – Jason Uhley
City of Lake Elsinore – City Manager
City of Canyon Lake – City Manager
Santa Ana River Dischargers Association
Santa Ana Watershed Project Authority – Joseph Grindstaff
Montgomery Watson – Jeff Mohr
Best Best & Krieger LLP - Arthur L. Littleworth
County of Riverside – Supervisor Bob Buster
Orange County Water District – Nira Yamachika
Orange County Coastkeeper – Garry Brown
Lawyers for Clean Water C/c San Francisco Baykeeper

California Regional Water Quality Control Board
Santa Ana Region
3737 Main Street, Suite 500
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March 4, 2005

FACT SHEET

The attached pages contain information concerning an application for the renewal of waste discharge and producer/user water recycling requirements and a National Pollutant Discharge Elimination System (NPDES) permit.

I. FACILITY DESCRIPTION:

Elsinore Valley Municipal Water District (EVMWD) owns and operates a regional water reclamation facility (RWRF), located at 14980 Strickland Avenue (formerly 18200 Treleven Avenue), Lake Elsinore, Riverside County. The facility currently, discharges an annual average flow of approximately 4.66 million gallons per day (mgd) of tertiary treated wastewater. This discharge is regulated under Order No. 00-1, NPDES No. CA8000027. That Order expired on February 1, 2005 and was not administratively extended. On August 26, 2004, Elsinore Valley Municipal Water District (EVMWD) submitted a Report of Waste Discharge and a National Pollutant Discharge Elimination System Permit application for the renewal of waste discharge requirements for EVMWD's Regional Water Reclamation Facility (RWRF).

Order No. 00-1 was amended by Orders No. 01-70, R8-2002-000-A02, R8-2003-0067 and R8-2004-0099. A summary description of these amendments is provided in the following table:

Order No.	Date of Amendment	Description of Amendment
01-70	July 20, 2001	Added Turbidity and Coliform limits to the Order
R8-2002-0008-A02	January 23, 2002	Authorized the discharge of tertiary treated wastewater into Lake Elsinore for a two year pilot project to address lake stabilization problems and to determine effects of the discharges on the quality and beneficial uses of the lake.
R8-2003-0067	July 1, 2003	Extended the discharge of tertiary treated wastewater into Lake Elsinore to December 1, 2004.
R8-2004-0099	December 20, 2004	Extended authorization to discharge recycled water into Lake Elsinore until such time that renewed waste discharge requirements are adopted by the Regional Board.

Additional discussion concerning authorization of recycled water discharges to Lake Elsinore is provided in Section II. Regulatory Basis for Waste Discharge Requirements, below.

The RWRF treats domestic and commercial wastes generated within EVMWD's service area, which includes the Cities of Lake Elsinore and Canyon Lake and the communities of Wildomar and Lakeland Village. In 2004, the estimated total population in the service area was nearly 45,800.

EVMWD owns and operates a number of other municipal wastewater treatment facilities, including the Railroad Canyon wastewater treatment plant (RRC). Wastewater discharges from RRC are regulated under Board Order No. 96-34. Tertiary treated wastewater from RRC is used for golf course irrigation at the Canyon Lake Golf Course. Currently, up to 1.5 mgd excess raw sewage and/or treated effluent from RRC are diverted and blended with the influent to the regional treatment facility. .

The RWRF is designed to tertiary treat 8 million gallons per day (mgd) of wastewater. The treatment process is divided into two parallel treatment trains. The original treatment facilities are called Train A and the newer facilities are called Train B. In addition, there are a number of facilities common to the two process trains. Sludge from RRC and the District's Canyon Lake water treatment plant is also processed at this facility. Dewatered sludge is then transported to a local composting facility for final processing and disposal.

The wastewater treatment at the regional plant consists of the following:

1. Preliminary treatment consists of bar screens and grit Chambers.
2. Secondary treatment utilizes oxidation ditch technology and anaerobic reactors for carbonaceous and nitrogenous pollutant reduction.
3. Tertiary treatment consists of monomedia filtration. Ultraviolet light is used for disinfection.
4. Primary sludge treatment system consists of belt press mechanical dewatering and drying. Sludge bed dewatering and drying is also employed, especially in summer.

As noted above, the RWRF currently discharges an annual average of 4.66 mgd of tertiary treated wastewater. Up to 3.35 mgd of the treated effluent is discharged to Reach 5 of Temescal Creek. Approximately 0.5 mgd of the 3.35 mgd flows into the channel alongside Temescal Creek that goes into Gunerson Pond, a wetland constructed by the US Army Corps of Engineers. Up to 1.1 mgd flow is discharged to Lake Elsinore for lake water replenishment. EVWMD plans to discharge up to 7.5 mgd of tertiary treated wastewater to the Lake to stabilize the lake water elevation.

The treatment facility is located in a portion of Section 31, T5S, R4W, and Section 6, T6S, R4W, SSB&M, in the City of Lake Elsinore. The treated effluent is discharged to Reach 5 of Temescal Creek, a tributary to Reach 3 of Santa Ana River, and/or discharged to Lake Elsinore. The discharge point to Temescal Creek is located at latitude 33°41'3" and longitude 117°20'31". The discharge point to Lake Elsinore is located at latitude 33°40'45" and longitude 117°19'44".

The facility location map is shown in Attachment "A".
The flow diagram for the wastewater treatment process is shown in Attachment "B".

II. REGULATORY BASIS FOR WASTE DISCHARGE REQUIREMENTS:

This Order includes requirements that implement the Water Quality Control Plan for the Santa Ana River Basin (Basin Plan). The Basin Plan specifies water quality objectives and beneficial uses for the groundwater and surface waters of the Santa Ana Region. The Basin Plan also includes an implementation plan, including management strategies for nitrogen and Total Dissolved Solids (TDS) and Total Maximum Daily Loads (TMDLs) that address pollutants causing impairment of certain surface waters.

A revised Basin Plan was adopted by the Regional Board on March 11, 1994 and became effective on January 24, 1995. More recently, the Basin Plan was amended significantly to incorporate revised boundaries for groundwater subbasins, now termed "management zones", new nitrate-nitrogen and TDS objectives for the new management zones, and new nitrogen and TDS management strategies applicable to both surface and ground waters. This Basin Plan Amendment, shown in the Attachment to Resolution No. R8-2004-0001, was adopted by the Regional Board on January 22, 2004. The State Water Resources Control Board and Office of Administrative Law (OAL) approved the Amendment on September 30, 2004 and December 23, 2004, respectively. The surface water components of the Amendment are awaiting USEPA approval. The surface water components of the Amendment relevant to this Order are revised total dissolved solids (TDS) and total inorganic nitrogen (TIN) wasteload allocations for discharges by Publicly Owned Treatment Works (POTWs) to the Santa Ana River and its tributaries, including discharges by EVMWD to Temescal Creek. The TDS and TIN wasteload allocations for EVMWD in the Amendment are the same as those specified previously in the Basin Plan. Thus, there is no need to await EPA approval of the surface water components of the Amendment in order to proceed with consideration of this Order.

On December 20, 2004, the Board adopted Resolution No. R8-2004-0037, amending the Basin Plan to incorporate nutrient TMDLs for Lake Elsinore and Canyon Lake. The TMDLs include total phosphorus and total nitrogen wasteload allocations for inputs of supplemental water to the lakes, including recycled water inputs to Lake Elsinore. These wasteload allocations were included in the Elsinore TMDL based on the recognition that additions of supplemental water, including recycled water, were likely to be necessary to address the substantial water level variation in the lake, including periods when the lake is completely dry[1]. This lake level variation results in significant adverse effects on the water quality and beneficial uses of the Lake, including recreational opportunities and fish and wildlife habitat. The Lake Elsinore TMDL specifies that the wasteload allocations for supplemental water are to be met as soon as possible as a 5-year running average. The TMDL allows for the implementation of suitable offset

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1 *The Lake Elsinore Nutrient TMDL assumes that supplemental water requirements would average 8,800 acre-feet/year (ac-ft/yr) to maintain the elevation of Lake Elsinore between 1240 and 1247 feet, the desired operating range. In the driest year, up to 13,800 ac-ft/yr of supplemental water may be needed. Potential sources of supplemental water identified in the TMDL are recycled water and well water. Since nutrient concentrations in the well water are below detection limits, the supplemental water wasteload allocations address only recycled water. At current flows, approximately 4500 ac-ft/yr of recycled water would be available for discharge to Lake Elsinore. At the design capacity of the RWRF (8 mgd), EVMWD would have approximately 8,400 acre-feet/year available for discharge to Lake Elsinore.*

programs when compliance with numeric effluent limitations based on the wasteload allocations is not reasonably feasible.

These TMDLs have not yet been approved by the State Board, OAL or, most importantly, USEPA. However, USEPA has indicated support for the TMDLs and approval by all requisite agencies is anticipated. While the TMDLs are not yet effective, this Order implements relevant TMDL requirements. The intent is to assure that recycled water inputs to Lake Elsinore necessary to attain and maintain a stable lake level, and thereby improve water quality and beneficial uses, are authorized in accordance with requirements developed by the Regional Board using sound scientific methods and practices and approved by the Board after an extensive public participation process. The wasteload allocations specified in the TMDL are the basis for the nutrient limits, compliance schedules and offset requirements for discharges of recycled water to Lake Elsinore that are specified in this Order. (See Section III. Proposed Effluent Limitations)

As stated previously, amendment of EVMWD's waste discharge requirements (via Order Nos. R8-2002-08-A02, R8-2003-067, and R8-2004-0099) authorized EVMWD to implement a pilot study project that included the discharge of tertiary treated recycled water from EVMWD's RWRF to Lake Elsinore, coupled with the discharge of groundwater to the Lake from island wells located at the east end of the Lake. Order No. R8-2004-0099, adopted on December 20, 2004, authorized EVMWD to continue the recycled water discharges until such time as revised waste discharge requirements for the RWRF are in place. The presumption was that the revised RWRF waste discharge requirements would include appropriate specifications for long-term recycled water discharges to Lake Elsinore, based on the Lake Elsinore Nutrient TMDL (also approved on December 20, 2004). Order No. R8-2004-0099 also required EVMWD to offset total nitrogen and total phosphorus mass discharges into Lake Elsinore in accordance with an offset program(s) and schedule approved by the Executive Officer. The offset program(s) must assure the offset of all total nitrogen and total phosphorus mass loads discharged beginning December 20, 2004 that exceed those allowed pursuant to the supplemental water (recycled water) discharge wasteload allocations in the Lake Elsinore Nutrient TMDL. Order No. R8-2004-0099 required that EVMWD submit the proposed offset program/schedule by December 6, 2004. Order No. R8-2005-0003 also includes this offset requirement. This Order specifies that the offset shall address total phosphorus and total nitrogen mass loads discharged to the Lake by EVMWD on and after December 20, 2004 that exceed those allowed pursuant to the effluent mass limitations in this Order (see Section III. Proposed Effluent Limitations). Again, these effluent mass limitations implement the Lake Elsinore Nutrient TMDL wasteload allocations.

By letter dated November 3, 2004, EVMWD indicated its commitment to provide requisite nitrogen and phosphorus offsets. EVMWD submitted a proposed compliance program/schedule on December 6, 2004, and a modified proposal, based on discussion with Regional Board staff, on December 16, 2004[2]. The letter transmitting the revised proposal reconfirmed EVMWD's offset commitment. EVMWD's proposed compliance program includes implementation of a chemical phosphorus removal process to be added to the RWRF, and in-lake aeration and mixing

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2 *"Elsinore Valley MWD, Regional Water Reclamation Facilities NPDES Discharge Permit to Lake Elsinore, Revised Compliance Plan and Schedule", December 16, 2004.*

facilities to reduce the release of nutrients from the lake sediments to the water column. The addition of the phosphorus removal facilities is expected to ensure recycled water quality that complies with the TMDL. The in-lake facilities are expected to result in substantial reductions in nitrogen inputs to the water column from the lake sediments. These reductions are projected to significantly exceed nitrogen inputs resulting from recycled water discharges, thereby providing the requisite offset. Both the chemical phosphorus removal and in-lake aeration/mixing projects are scheduled to be operational in summer 2006. Monitoring will be conducted to assess the efficacy of the projects. This will include monitoring the quality and amount of recycled water discharges, in–lake monitoring to assess the effects of the recycled water discharges and the nutrient removal projects, including sediment release studies, designed in consultation with Regional Board staff, to judge the efficacy of the in-lake aeration/mixing project. Based on data collected in other lakes, EVMWD expects that implementation of these projects will provide future requisite phosphorus compliance and nitrogen offsets for discharges to Lake Elsinore of all recycled water currently available for this purpose. Depending on the amount and phosphorus quality of recycled water discharged prior to the implementation of the phosphorus removal facilities, an additional phosphorus offset may be required to meet the effluent mass limitations based on the wasteload allocation.[3] This Order requires the discharger to identify an appropriate additional phosphorus offset program, if necessary, and to implement that program upon approval by the Executive Officer. EVMWD's proposed compliance plan and schedule includes contingency planning in the form of a feasibility study that will be conducted during construction and start-up of the nutrient removal projects. The feasibility study will look at alternative treatment methods and technologies that could be applied should the nutrient removal projects not meet expectations. The feasibility study will be complete in the latter part of 2005, prior to the completion of the nutrient removal projects. Monitoring to determine the efficacy of the in-lake aeration/mixing project is expected to require a period of approximately two years, to allow the Lake system to equilibrate. A determination of whether additional offset measures, as identified in by the feasibility study, is expected to be made in mid-2008.

The Order also requires the discharger to implement the proposed compliance plan. The Order also requires one or more alternative offset mechanisms that may be identified through the Feasibility Study or other means and approved by the Executive Officer, if it is demonstrated that requisite phosphorus and/or nitrogen offsets are not achieved by the proposed nutrient removal projects. Implementation of these alternatives will be required as soon as possible, as determined by the Executive Officer. In no case shall requisite phosphorus and nitrogen offsets be provided later than March 1, 2010.

The RWRF discharges tertiary treated wastewater to Reach 5 of Temescal Creek. Temescal Creek joins Reach 3 of the Santa Ana River in the Prado Dam area. The beneficial uses of Temescal Creek, Reach 5 and downstream reaches include groundwater recharge, water contact recreation, non-water contact recreation, warm freshwater habitat, agricultural supply, wildlife

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3 *As stated above, the design capacity of the RWRF is 8 mgd. However, an 8 mgd plant flow is not anticipated within the term of this Order. If and when the higher flow rate is attained, EVMWD estimates that there would be a phosphorus offset need of about 1500 kg/year that would need to be addressed through the implementation of effluent phosphorus reductions and/or an offset mechanism. See EVMWD's Revised Compliance Plan and Schedule, December 16, 2004, page 2-4.*

habitat, and rare, threatened or endangered species. The beneficial uses of the Santa Ana River, Reach 3 include: agricultural supply, groundwater recharge, water contact recreation, non-water contact recreation, warm freshwater habitat, wildlife habitat, and rare, threatened or endangered species. The beneficial uses of Lake Elsinore include water contact recreation, non-water contact recreation, warm freshwater habitat, and wildlife habitat

Except during storms, the flow in Temescal Creek and the Santa Ana River is comprised of effluent discharges from municipal wastewater treatment facilities, including the discharge from the RWRF, and very little natural flow exists. Therefore, both surface waters are effluent dominated waters (EDW).

Article 3, Section 60305 of Title 22, Division 4, Chapter 3, "Water Recycling Criteria" of the California Code of Regulations specifies that recycled water used as a source supply for non-restricted recreational impoundments shall be disinfected tertiary recycled water that has been subjected to conventional treatment. Section 60305 also provides that disinfected tertiary recycled water that has not received conventional treatment may be used for non-restricted recreational impoundments provided that the recycled water is monitored for the presence of pathogenic organisms in accordance with certain conditions. The degree of treatment specified represents an approximately 5-log reduction in the virus content of the water. The California Department of Health Services (CDHS) has determined that this degree of virus removal is necessary to protect the health of people using these impoundments for water contact recreation. The CDHS has developed wastewater disinfection guidelines ("Wastewater Disinfection for Health Protection", CDHS, Sanitary Engineering Branch, February 1987) for discharges of wastewater to surface waters where water contact recreation (REC-1) is a beneficial use. The disinfection guidelines recommend the same treatment requirements for wastewater discharges to REC-1 waters as those stipulated in Title 22 for supply of recycled water to non-restricted recreational impoundments, since the public health risks under both scenarios are analogous. The disinfection guidelines are based on sound science and are widely used as guidance to assure public health and beneficial use protection.

Neither Temescal Creek nor the Santa Ana River is a "non-restricted recreational impoundment," nor is "disinfected tertiary recycled water" (as defined in the Water Recycling Criteria) being used as a supply source to these waters. However, except during major storms, most of the flow in the Creek and the River is composed of treated municipal wastewater discharges. The Creek and River are used for water contact recreation and, accordingly, are designated REC-1 (water contact beneficial use). People recreating in the Creek or the River face an exposure similar to those coming in contact with recycled water in an impoundment. Therefore, to protect the water contact recreation beneficial use and to prevent nuisance and health risk, it is necessary and appropriate to require the same degree of treatment for wastewater discharges to the Creek and the River as would be required for the use of recycled water in a non-restricted recreational impoundment. Similarly, Lake Elsinore is not a "non-restricted recreational impoundment" as defined in the Water Recycling Criteria. However, Lake Elsinore is used for water contact recreation and recycled water is proposed to be used as a supply source. As for Temescal Creek and the Santa Ana River, it is appropriate to require the same degree of wastewater treatment for recycled water discharges to the lake as would be required for the use of recycled water in a non-

restricted recreational impoundment. Therefore, this Order specifies requirements based on tertiary or equivalent treatment.

The proposed Order specifies numeric and narrative limits for the control of toxic substances. These limits are based on the following:

1. 1995 Basin Plan as amended by Resolution Nos. R8-2004-0001 and R8-2004-0037;
2. Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California adopted on March 2, 2000 by the State Water Resources Control Board (SIP);
3. Code of Federal Regulations (40 CFR Parts 122-124, 129, 131, 136, 141-142 and 503);
4. Technical Support Document for Water Quality-based Toxics Control (EPA/505/2-90-001, March 1991);
5. Water Quality Standards; Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California, promulgated in May 18, 2000 by the U.S. EPA, (hereinafter, "CTR");
6. Santa Ana River Use-Attainability Analysis, Volume 10, Calculation of Total-to-Dissolved Metal Ratios to Translate Site-Specific Water Quality Objectives into NPDES Effluent Limits", Risk Sciences (May, 1994);

The State Water Resources Control Board adopted the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (SIP) on March 2, 2000. The SIP establishes implementation provisions for priority pollutant criteria promulgated by the U.S. Environmental Protection Agency (U.S. EPA) through the National Toxics Rule (NTR), which was promulgated on December 22, 1992 and amended on May 4, 1995, and through the California Toxics Rule (CTR), which was promulgated on May 18, 2000.

This Order implements federal regulations specified in 40 CFR 122, 123, 124, 125, and 129, which pertain to all publicly-owned treatment works (POTW) with average design flows exceeding 1 mgd.

This Order includes requirements for the implementation of an effective pretreatment program pursuant to Section 307 of the Federal Clean Water Act Parts 35 and 403 of Title 40, Code of Federal Regulations (40 CFR 35 and 40 CFR 403) and Section 2233, Title 23, California Code of Regulations. EVMWD's RWRF was designed to treat 8 mgd of wastewater. An effective pretreatment program is required for those publicly owned treatment works that have a design capacity at or greater than 5 million gallons per day, or are receiving flows and pollutants from industrial users that pass through or interfere with the operation of the POTW or are otherwise subject to pretreatment standards.

In accordance with Section 402 (p) of the Federal Clean Water Act, EPA published the final regulations for storm water runoff on November 16, 1990 (40 CFR Parts 122, 123 and 124). Industrial facilities, including POTW sites, are required to obtain NPDES Permits for storm water discharges. On April 17, 1997, the State Board adopted a General Industrial Storm Water Permit, Order No. 97-03-DWQ, NPDES No. CAS000001. Stormwater discharges from the southern portion of the facility (designated Drain "A") drain directly to the Lake Outlet Channel

(Temescal Creek, Reach 5). Stormwater discharges from the northern portion of the facility (designated Drain "B") drain to a holding pond at the far north end of the facility. Under normal conditions, the storm runoff from the pond is discharged to Temescal Creek. In the event of any spill, the outlet from the north pond is closed and runoff held within the pond. If necessary, the stored wastewater can be pumped back to the plant. Because there are direct discharges of stormwater from the plant to surface waters, this Order incorporates requirements for the discharge of storm water from the RWRF facility site.

III. PROPOSED EFFLUENT LIMITATIONS:

The limitations in this Order are intended to control pollutants in the waste discharge, maintain water quality, and protect the beneficial uses of the affected receiving waters. Revisions to water quality objectives or to beneficial uses designated in the Basin Plan may occur in the course of periodic review and update of the Plan. These waste discharge requirements will be re-evaluated and may be revised to accommodate any of these changes.

In determining compliance with the effluent limitations in this Order, no mixing zone allowance is provided. No mixing zone allowance is proposed since there are essentially no natural receiving waters at the point of discharge to the Temescal Creek.

Biochemical Oxygen Demand (BOD) and Suspended Solids

The proposed Biochemical Oxygen Demand$_5$ (BOD_5) and suspended solids limits are based on values that are achievable with tertiary treatment. These limits are intended to ensure that only adequately oxidized wastewater is discharged.

Total Dissolved Solids (TDS)

The 1995 Basin Plan includes wasteload allocations for discharges of total dissolved solids (TDS) to the Santa Ana River system, including Temescal Creek. As indicated previously, revised wasteload allocations for TDS have been approved by the Regional Board, the State Board and the Office of Administrative Law. The revised wasteload allocations, and other surface water components of the N/TDS Basin Plan amendment not relevant to this Order, are awaiting USEPA approval, which is anticipated. The revised TDS wasteload allocation for EVMWD discharges to Temescal Creek is the same as that previously specified in the Basin Plan. In conformance with the wasteload allocation, this Order specifies a TDS limit of 700 milligram per liter (mg/l) for discharges into Temescal Creek. This limit assures protection of TDS quality in Lake Elsinore, which has a TDS objective of 2000 mg/l, as well as in Temescal Creek and downstream receiving waters.

Total Inorganic Nitrogen (Nitrate, Nitrite, Ammonia), Total Nitrogen, and Phosphorous

The 1995 Basin Plan includes wasteload allocations for discharges of total inorganic nitrogen (TIN) within the Region. As indicated previously, these wasteload allocations were revised as part of the N/TDS Basin Plan amendment, which has been approved by the Regional Board,

State Board and Office of Administrative Law. The revised TIN wasteload allocations, and other surface water components of the Amendment not relevant to this Order, are awaiting approval by the USEPA. This approval is expected. The revised TIN wasteload allocation for EVMWD discharges to Temescal Creek is the same as that previously specified in the Basin Plan. In conformance with the TIN wasteload allocation, this Order specifies a limit of 13 mg/l TIN for discharges into Temescal Creek.

For recycled water use in Lake Elsinore, the proposed limitations for nitrogen and phosphorus are based on best available technology (BAT) and the wasteload allocations and related provisions for recycled water discharges that are specified in the Lake Elsinore Nutrient TMDL (see also discussion in Section II. Regulatory Basis for Waste Discharge Requirements). These wasteload allocations were calculated based on the assumption of TN and TP effluent quality using BAT[4]. For Total Nitrogen (TN), a concentration limit of 1 mg/l based on BAT is specified. A mass limit of 16,372 lbs/yr (7,442 kg/yr) TN (as a 5-year running average) is specified based on the supplemental water wasteload allocation in the Nutrient TMDL. This Order recognizes that compliance with these limitations may be infeasible, at least at the present time, and requires that the discharger offset TN discharges to the Lake in excess of these limits. As described in Section II. Regulatory Basis for Waste Discharge Requirements, the discharger has proposed to implement in-lake aeration and mixing facilities to offset excess nitrogen discharges. Should these facilities prove to be insufficient to provide the requisite offset, the discharger is required to implement additional offset measures in accordance with a plan and schedule approved by the Executive Officer. For Total Phosphorus (TP), a limit of 0.5 mg/l is specified. This limit is based on BAT and is consistent with the Lake Elsinore TMDL. Compliance with this limit is required in accordance with the schedule proposed by the discharger in the December 16, 2004 "Revised Compliance Plan and Schedule" (see footnote 2), that is, no later than July 1, 2006. Until the phosphorus removal facilities proposed by the discharger are implemented, discharges of phosphorus that exceed this limit are required to be offset.

Regional Board staff determined that expressing limits in terms of both concentration and mass, as provided in this Order, is appropriate. Expressing limitations in terms of concentration as well as mass encourages the proper operation of a treatment facility at all times. In the absence of concentration limits, a permittee would be able to increase its effluent concentration (i.e., reduce its level of treatment) during low flow periods and still meet its mass-based effluent limits. Concentration limits discourage the reduction in treatment efficiency during low flow periods, and require proper operation of treatment units at all times.

Un-ionized ammonia exists in equilibrium with ammonium $(NH_4)^+$ and hydroxide $(OH)^-$ ions in water. The concentrations of ammonium and hydroxide ions change with temperature, pH and salinity of the water. Total ammonia nitrogen wasteload allocations are specified in the Basin Plan in order to meet the Santa Ana River site-specific un-ionized ammonia objective. In accordance with the Basin Plan, this Order specifies an average monthly effluent limitation of 4.5 mg/l for total ammonia-nitrogen for discharge to Santa Ana River.

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4 *"California Regional Water Quality Control Board, Total Maximum Daily Load for Nutrients in Lake Elsinore and Canyon Lake, May 2004", page 73.*

Trace Constituent Limitations

The U.S. EPA has identified 126 priority pollutants, including metals and organic chemicals, and has promulgated water quality objectives for many of these substances in the California Toxics Rule and National Toxics Rule. The State Board's Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays and Estuaries of California (SIP) specifies the procedures that are to be used in implementing these objectives in waste discharge requirements. Numeric effluent limitations must be specified for those priority pollutants that are determined to have the reasonable potential to cause or contribute to a violation of the applicable objectives.

To determine reasonable potential for pollutants to exceed water quality objectives, Board staff used the procedures outlined in the SIP. Influent and effluent monitoring data for RWRF were used in this analysis. The maximum concentrations for individual constituents that were detected in the effluent or upstream receiving water, whichever values were higher, were compared to the criteria values specified in the California Toxics Rule (CTR). When monitoring data show that individual constituents were not detected, the lowest detection level (DL) is used to make such comparisons. When the detected concentrations or the lowest DL were less than the criteria, it was concluded that the effluent posed no reasonable potential to exceed water quality objectives for that constituent. For all priority pollutants for which there was no demonstrated reasonable potential to cause a water quality objective to be exceeded, no numeric limitations are specified in this Order. In situations where the criteria value and all available effluent data were below detection levels and receiving water data are unavailable, staff was unable to determine if there was a reasonable potential to cause a water quality objective to be exceeded. Therefore, effluent limits for those constituents were also not included in this Order. However, the discharger is required to monitor for these pollutants on a quarterly basis at detection levels that are specified in the Order. If warranted by the results of this monitoring, this Order will be reopened to incorporate appropriate effluent limits.

Using RWRF data, the reasonable potential analysis showed that copper and free cyanide have the reasonable potential to exceed water quality criteria in the CTR. Following the CTR and the SIP procedures, effluent discharge limitations were developed for these pollutants. Federal regulations require that the effluent limits for metals be expressed as the total recoverable form. To comply with this requirement, the dissolved criteria are translated into total recoverable effluent limits using ratios of the total recoverable metals to dissolved metals (t/d) concentrations. The SIP stipulates that in the absence of site-specific information, the conversion factors cited in the CTR should be used as the t/d translators. No dilution credit is used in the calculation.

Toxicity Limitations

This Order requires the discharger to conduct chronic[5] toxicity testing of the effluent on a monthly basis. The Order also requires the discharger to conduct an Initial Investigation

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5 *The chronic test method for the water flea "Ceriodaphnia dubia" also measures acute toxicity.*

Toxicity Reduction Evaluation (IITRE[6]) program when either the two-month median of toxicity test results exceeds 1 TUc or any single test exceeds 1.7 TUc for survival endpoint. Based on the results of this investigation program and at the discretion of the Executive Officer, a more rigorous Toxicity Reduction Evaluation/Toxicity Identification Evaluation (TRE/TIE) may be required. A re-opener provision is included in the Order to incorporate a chronic toxicity effluent limitation if warranted by the toxicity test results.

Compliance

Many of the objectives specified in the CTR, and the effluent limits that implement them, are at extremely low concentrations. In several cases, these concentrations are below current laboratory detection values. As such, it is necessary to require laboratory analyses to be performed to the lowest possible concentrations. The Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (SIP) includes a list of priority pollutants with their respective Minimum Levels (ML)[7] on which "reported Minimum Levels" (i.e., quantitation values for the sample) shall be based. The SIP recognizes that the "reported ML" may be orders of magnitude different than the listed MLs depending on the amount of dilution/concentration required for sample preparation, and the amount of dilution necessary to address matrix interference. Unfortunately, the SIP lacks guidance for the development of appropriate "reported MLs".

The Regional Board has required discharges to meet Minimum Levels for all priority pollutants and practical quantitation levels (PQLs)[8] for non-priority pollutants. The PQLs for wastewater were developed based on the following:

1. A survey of laboratories in the Southern California area and a review of method detection levels (MDLs) in accordance with 40 CFR 136 for a wastewater matrix reported by local laboratories;

2. The consensus PQLs determined during the meeting of major Southern California laboratories with the Regional Board staff on January 28, 1992. The consensus PQLs are believed to represent the lowest quantitation levels that can be achieved by most laboratories in Southern California based on proven laboratory performance and the reasonable application of best available analytical technology for most toxic substances;

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6 *An IITRE is the initial stage of investigation conducted prior to implementing a complete toxicity reduction evaluation (TRE) study. A TRE is a stepwise process for identifying the agent(s) and/or source(s) of toxicity in a given effluent.*

7 *Minimum Level 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.*

8 *PQL is the lowest concentration of a substance that can be determined within ± 20 percent of the true concentration by 75 percent of the analytical laboratories tested in a performance evaluation study. Alternatively, if performance data are not available, the PQL is the method detection limit (MDL) x 5 for carcinogens and MDL x 10 for noncarcinogens.*

3. The report "A Study To Determine The Practical Quantitation Levels (PQL) For Selected Water Chemistry Parameters Analyzed by Commercial Laboratories Operating In The Santa Ana River Watershed" (Risk Sciences, 1993).

The discharger is required to meet the minimum levels in Attachment A of the Monitoring and Reporting Program (M&RP) No. R8-2005-0003 for those priority pollutants with effluent limitations in this Order. The discharger shall select and use the appropriate ML value. When there is more than one ML value for a given substance, the discharger shall select the ML value which is below the calculated effluent limitation, and use its associated analytical method, listed in Attachment A of the M&RP. If no ML value is below the effluent limitation, then the Regional Board will select the lowest ML value and its associated analytical method. In cases where the discharger believes that the sample matrix justifies a different "reported ML", the discharger is required to demonstrate to the satisfaction of the Regional Board's Executive Officer the appropriateness of the alternative "reported ML" for that sample matrix.

All analytical data are required to be submitted with the corresponding MDLs and MLs. Sample results shall be reported as "DNQ" (Detected, but Not Quantified) if the results are less than the reported ML, but greater than the MDL. Sample results shall be reported as "ND" (Not Detected) if the results are less than the MDL.

The discharger shall be deemed out of compliance with an effluent concentration limit if the concentration of the effluent sample is greater than the effluent limit and greater than or equal to the "reported ML." The discharger shall not be deemed out of compliance for any sample result reported as DNQ or ND. However, the discharger is required to conduct a Pollutant Minimization Program, as described in the SIP, if there is an indication that a constituent is present in the effluent above an effluent limitation and either: a sample result is reported as DNQ and the effluent limitation is less than the "reported ML", or a sample result is reported as ND and the effluent limitation is less than the MDL.

IV. ANTIDEGRADATION ANALYSIS:

The Regional Board has considered antidegradation pursuant to 40 CFR 131.12 and State Board Resolution No. 68-16. The water quality of the receiving waters is not expected to degrade as a result of discharges regulated by this Order if compliance with this Order is consistently achieved. In part, this Order renews waste discharge requirements for discharges to Temescal Creek. These requirements are not less stringent that the prior waste discharge requirements for the RWRF discharges to the Creek. Therefore, discharges to Temescal Creek by the discharger will not result in a lowering of water quality in the Creek or affected downstream waters. This Order also authorizes the discharge of recycled water to Lake Elsinore, resulting in the addition of nutrients, a source of impairment of the Lake. However, such discharges are authorized only in conformance with wasteload allocations specified in the Lake Elsinore Nutrient TMDL, which was established to improve water quality in the Lake and address the nutrient impairment. Compliance with these allocations may be achieved through the implementation of RWRF facility improvements and/or the implementation of offset programs designed to assure that there

is no net loading of nutrients to the Lake. As such, compliance with the requirements of this Order that pertain to recycled water discharges to Lake Elsinore will prevent the lowering of water quality. The use of recycled water to attain and maintain a stable level in the Lake is considered essential to improve and protect the water quality and beneficial uses of the Lake. Therefore, these waste discharge requirements are consistent with federal and state antidegradation policies.

V. WRITTEN COMMENTS:

Interested persons are invited to submit written comments on the proposed discharge limits and the Fact Sheet. Comments should be submitted by February 14, 2005, either in person or by mail to:

Jane Qiu
California Regional Water Quality Control Board
Santa Ana Region
3737 Main Street, Suite 500
Riverside, CA 92501-3348

VI. INFORMATION AND COPYING:

Persons wishing further information may write to the above address or call Jane Qiu of the Regional Board at (951) 320-2008. Copies of the application, proposed waste discharge requirements, Fact Sheet, and other documents (other than those which the Executive Officer maintains as confidential) are available at the Regional Board office for inspection and copying between the hours of 9:00 a.m. and 3:00 p.m., Monday through Friday (excluding holidays).

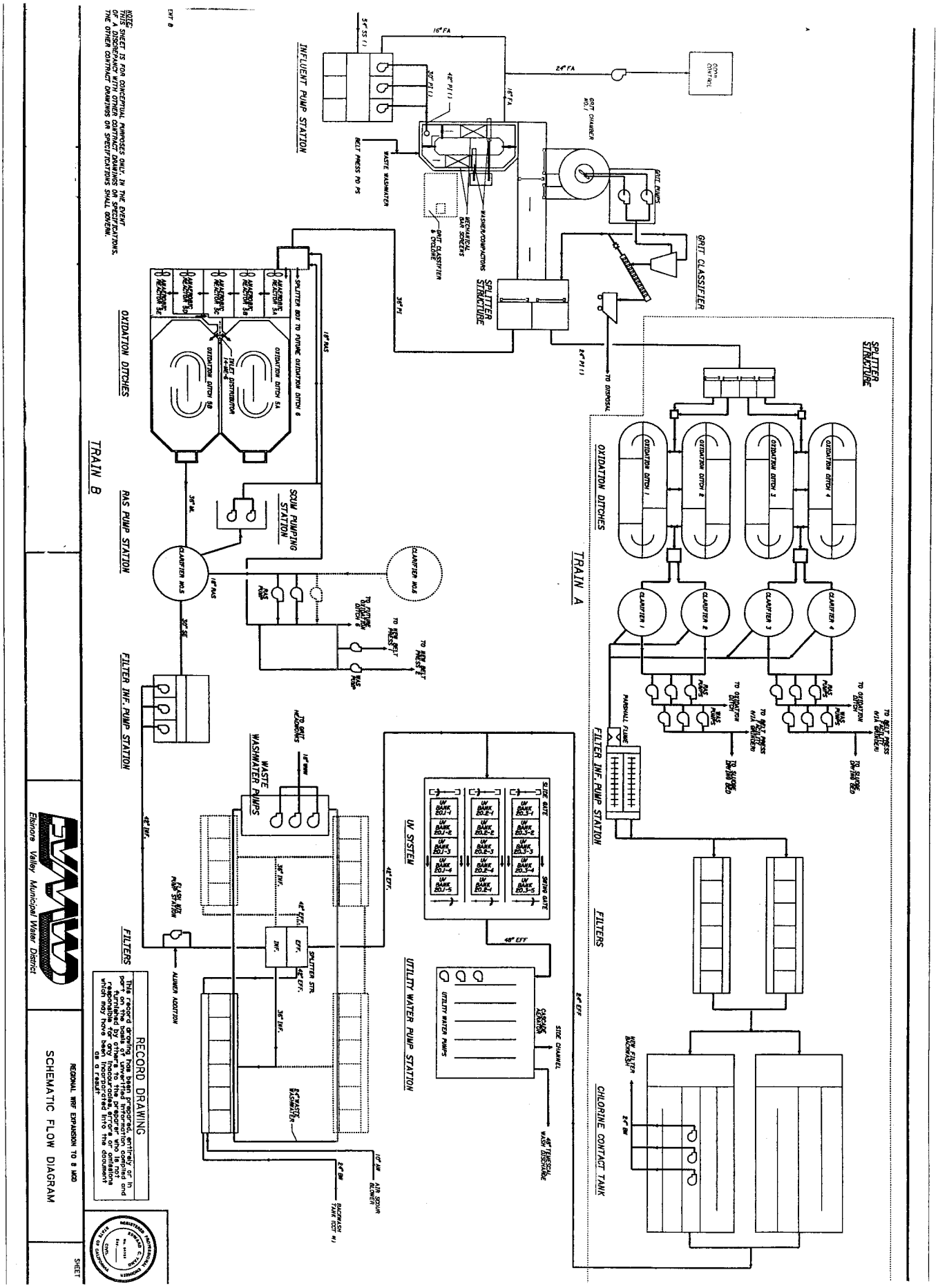
VII. REGISTER OF INTERESTED PERSONS:

Any person interested in a particular application or group of applications may leave his name, address, and phone number as part of the file for an application.

VIII. PUBLIC HEARING:

The Regional Board will hold a public hearing regarding the proposed waste discharge requirements as follows:

DATE:	March 4, 2005
TIME:	9:00 a.m.
PLACE:	City Council Chambers of Loma Linda 25541 Barton Road Loma Linda, California

Regional Waste Reclamation Facility-Location Map

RWRF-Schematic Flow Diagram