

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

ORDER NO. 5-00-019

WASTE DISCHARGE REQUIREMENTS
FOR
HIDDEN VALLEY LAKE COMMUNITY SERVICES DISTRICT
HIDDEN VALLEY LAKE ASSOCIATION
HIDDEN VALLEY LAKE WATER RECLAMATION FACILITY
LAKE COUNTY

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

1. Hidden Valley Lake Community Services District (District) submitted a Report of Waste Discharge, dated 28 May 1999, requesting approval to reuse stabilized sludge (biosolids) from its wastewater treatment plant. Supplemental information, including a Draft Supplemental Environmental Impact Report, was received on 23 August 1999.
2. The Hidden Valley Lake Association uses treated effluent to spray irrigate the community golf course within the Hidden Valley Lake Subdivision. The golf course is approximately 135 acres, and is owned, operated, and maintained by the Hidden Valley Lake Association.
3. Hidden Valley Lake Community Services District and the Hidden Valley Lake Association are hereafter jointly referred to as "Discharger".
4. The Board, on 20 May 1994, adopted Order No. 94-138 which prescribed requirements for the District's activated sludge-extended aeration treatment plant and recycled water spray irrigation practices.
5. Order No. 94-138 does not specifically prescribe requirements for the application of biosolids to a supplemental spray irrigation field owned by the District, and is not consistent with current plans and policies of the Board.
6. The existing wastewater collection system, activated sludge-extended aeration treatment facility, recycled water spray irrigation and biosolid application areas (Assessor's Parcel Nos. 14-270-10 and 14-280-16) are owned by the Discharger in Lake County. As shown in Attachment A, these areas are found within the projected Section 30, T11N, R6W, MDB&M. The golf course disposal area is in projected Sections 17, 18, 19, 20 & 21, T11N, R6W, MDB&M. Local surface waters, the treatment facility, and the recycled water, biosolids application and wastewater disposal areas and are shown in Attachment B. Attachments A and B are attached hereto and part of the Order by reference.

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7. The existing treatment facility became operational on 15 February 1996 and includes an activated sludge-extended aeration plant with an average dry weather flow of 0.350 million gallons per day (mgd), and a peak wet weather flow of 0.894 mgd. The facility processes include primary screening, secondary treatment through an activated sludge and clarification process, chemical addition, direct tertiary filtration, chlorination, six sludge-drying beds, a concrete-lined equalization basin and an effluent storage basin. Treated effluent is stored in the 412-acre-feet, clay-lined, effluent storage basin during periods when irrigation is prohibited. Monitoring wells are in place at the treatment site to measure any potential effect of the impounded wastewater to groundwater.
8. The Discharger uses treated effluent to spray irrigate the community golf course located within the Hidden Valley Lake Subdivision, as well as a supplemental spray irrigation field (supplemental field) located between the treatment plant site and Grange Road. The supplemental field contains approximately 45 acres of suitable area for reuse. The Discharger will also use the 45-acre supplemental field for the application of up to 200 tons of biosolids per year.
9. A ground water study was conducted by the Discharger to model the occurrence of nitrates in the ground water as the result of seepage from the bottom of the storage pond. The study concluded that an effluent storage pond liner of 18" thickness and 1×10^{-6} cm/sec permeability, or equivalent thickness and permeability, would have minimal impact on ground water quality. The ground water study was based upon conservative assumptions regarding various aspects affecting the potential for ground water contamination. These assumptions included: 1) using 100-year storm event data modeled for 30 consecutive years, 2) neglecting biological denitrification processes at the pond bottom, 3) assuming that background nitrate levels in ground water are negligible, and 4) using 1×10^{-6} cm/sec as overall permeability, whereas actual constructed liner permeabilities should be less than 1×10^{-6} cm/sec in some areas.
10. Recycled water is delivered from the effluent storage basin to two irrigation ponds located on the golf course. Irrigation flows are proposed to reach a maximum of 1.3 mgd, weather permitting.
11. According to the 28 May 1999 Report of Waste Discharge, at an ultimate design capacity of 0.350 mgd, up to 200 tons of biosolids will be produced from the treatment plant per year. Waste solids generated from the biological and filtration processes are dewatered in sludge drying beds and will be applied to the designated supplemental field. Due to required setbacks and buffer zones, the available application area will be limited to approximately 45-acres. The setback distances are incorporated in this Order.

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12. As described in the Discharger's 26 January 1993 Report of Waste Discharge, characteristics of the treated wastewater are:

Constituents	Concentrations
BOD ₅	30 mg/l
Total Suspended Solids	30 mg/l
Total Coliform	2.2 MPN/100ml Median
Turbidity	2 NTU

13. Local annual precipitation averages 40 to 45 inches. The mean evaporation rate is approximately 45 inches per year. The treatment facility and the adjacent supplemental field are partially within the 100-year floodplain.
14. The United States Environmental Protection Agency (USEPA) has promulgated biosolids reuse regulations in 40 CFR 503, *Standard for the Use or Disposal of Sewage Sludge*, which establishes management criteria for protection of ground and surface waters, sets application rates for heavy metals, and establishes stabilization and disinfection criteria.
15. The Board is using the Standards in 40 CFR 503 as guidelines in establishing this Order, but the Board is not the implementing agency for 40 CFR 503 regulations. The Discharger may have separate and/or additional compliance, reporting, and permitting responsibilities to USEPA, which are not covered by this Order.
16. The following are the Discharger's metals concentrations in the biosolids as reported in the 28 May 1999 Report of Waste Discharge:

Constituents	Concentrations	Units ¹
Arsenic	<0.5	mg/kg
Cadmium	<10	mg/kg
Chromium	90	mg/kg
Copper	680	mg/kg
Lead	<25	mg/kg
Mercury	<0.1	mg/kg
Molybdenum	<25	mg/kg
Nickel	29	mg/kg
Selenium	<0.1	mg/kg
Zinc	306	mg/kg

¹Results are reported in dry weight

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17. The Discharger reports that acceptable biosolids will have been treated to meet the standards for a process to significantly reduce pathogens as defined by 40 CFR 503.
18. The biosolids application rates will vary but will be established based on crop utilization and limitations imposed by annual and/or cumulative metal loading criteria. Biosolids/soil mixture will not be allowed to exceed maximum soluble metal concentrations to protect groundwater. Metals concentration in the recycled water will also have to be evaluated and taken into account in calculating the total metals loading and soluble metal loading to the soil. Crops will be limited to pasture grasses for livestock grazing and fodder crops.
19. The application of biosolids will occur annually on approximately 45 acres of the designated supplemental field. Biosolids will be applied using spreading equipment and will be incorporated into the soil within 24 hours of initial biosolids application. Any new application site in conjunction with the Discharger's submittal of an updated Biosolids Management Plan will have to be approved by the Executive Officer prior to application.
20. Based on a Soil Conservation Service Soil Survey, the soil in the proposed application area is underlain by the Lupoyoma silt-loam on the north end, and the Maxwell and Yorkville Variant clay-loams on the south side. Permeability rate for the clay and clay loam soils encountered at the site were below 6.0 inches/hour.
21. The treatment plant and supplemental field site are sensitive due to the proximity to both individual and the Discharger's domestic water supply wells, and to within 1000 feet of residential homes. Ground water has been observed as shallow as 4.5 feet below existing grade throughout the Dischargers property. The Discharger's three drinking water wells are located just north of Grange Road, near the wastewater treatment and disposal facility and the supplemental field. These wells draw water from the deeper zones of 80 and 170 feet. A drainage ditch extends in an easterly direction across the supplemental field. Drainage from this area flows south to Crazy Creek, then north and east in Crazy Creek to Putah Creek.
22. Surface water drainage is to Crazy Creek, then to Putah Creek and ultimately to Lake Berryessa.
23. The State Water Resources Control Board adopted Order No. 97-03-DWQ (General Permit No. CAS000001) specifying waste discharge requirements for discharges of storm water associated with industrial activities, excluding construction activities, and requiring

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submittal of a Notice of Intent by industries to be covered under the permit. However, this Order incorporates specific limitations and prohibitions to mitigate potential water quality problems associated with storm water runoff.

24. The Board adopted a Water Quality Control Plan, Fourth Edition, for the Sacramento River and San Joaquin River Basins (hereafter Basin Plan), which contains water quality objectives for all waters of the Basin. These requirements implement the Basin Plan.
25. The beneficial uses of Lake Berryessa and Putah Creek are municipal, industrial, and agricultural supply; recreation; aesthetic enjoyment; ground water recharge; fresh water replenishment; hydroelectric power generation; and preservation and enhancement of fish, wildlife and other aquatic resources.
26. The beneficial uses of the underlying groundwater are municipal, industrial, and agricultural supply.
27. The California Department of Health Services has established statewide reclamation criteria in Title 22, California Code of Regulations, Section 60301, et seq. (hereafter Title 22) for the use of recycled water and has developed guidelines for biosolids reuse in the *Manual of Good Practices for Landspreading of Sewage Sludge*, April 1993. The Discharger's operation and management of its biosolids program will be consistent with these guidelines as well as the USEPA's biosolids reuse regulations in 40 CFR 503, *Standard for the Use or Disposal of Sewage Sludge*.
28. Prior to the issuance of Order No. 94-138, the Discharger adopted a final environmental impact report (EIR) in accordance with the California Environmental Quality Act (CEQA) (Public Resources Code Section 21000, et seq.) and the State CEQA Guidelines. The EIR indicated that the wastewater treatment facility, recycled water irrigation and biosolids application practices may have the following significant impacts on water quality:
 - a. Increase in turbidity of surface water and streams during and after construction.
 - b. Water quality effects from force main rupture or pump station failure.
 - c. Potential for contamination of surface water by sewage during flooding or damage to treatment plant and disposal facilities from flooding.
 - d. Pollution of groundwater by infiltration of storage pond effluent.
 - e. Potential for contamination of ground water with excess nutrients, particularly

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nitrogen, from irrigation with recycled water at the supplemental irrigation field located between the treatment plant site and Grange Road.

29. In 1994, the Board has reviewed the EIR and determined that compliance with the waste discharge requirements will mitigate or avoid the significant impacts on air and water quality listed in Finding No. 28. Specific mitigation measures correspond to the alphabetically listed impacts in Finding No. 28 and are as follows:
- a.
 - i. Control increased turbidity of surface water by using standard erosion control measures.
 - b.
 - i. The pump station and transmission main system should be designed for leak detection and early warning to hasten necessary repairs.
 - ii. The transmission main crossing of Putah Creek should be encased in concrete to minimize the potential for rupture.
 - iii. The terminal pump station and treatment plant shall be provided with emergency power supplies.
 - c.
 - i. Irrigation systems located in the floodplain shall be valved to isolate those areas in the floodplain from irrigation.
 - ii. All pumps and facilities shall be flood-proofed to one foot above the 100-year floodplain.
 - iii. The facility will be equipped with a portable generator as a source of power in the event of an emergency.
 - d.
 - i. The effluent storage pond will be fitted with the proper liner as geotechnical/engineering studies of the site indicate that a liner is necessary to mitigate nitrate leakage into the ground water.
 - e.
 - i. The treatment process will be modified to reduce nitrate concentrations that may adversely affect the water quality in wells located along Grange Road when the supplemental field is in use.
 - ii. When use of the supplemental field commences, ongoing monitoring studies will be conducted to demonstrate that no domestic water supply

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quality is being degraded. Should a potential for degradation of potable water supplies be demonstrated, the treatment/storage/disposal process will be modified to eliminate the potential for degradation.

30. This discharge is exempt from the requirements of Consolidated Regulations for Treatment, Storage, Processing, or Disposal of Solid Waste, as set forth in Title 27, California Code of Regulations (CCR), Division 2, Subdivision 1, Section 20005, et seq. (hereafter Title 27). The exemption, pursuant to Section 20090 (b), is based on the following:
 - a. The Board is issuing waste discharge requirements, and
 - b. The discharge complies with the Basin Plan, and
 - c. The biosolids to be applied are a non-hazardous, decomposable waste applied as a soil amendment pursuant to best management practices, and
 - d. The wastewater does not need to be managed according to CCR, Title 22, Division 4.5, Chapter 11, as a hazardous waste.
31. The Board has notified the Discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for this discharge and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.
32. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED that Order No. 94-138 is rescinded and Hidden Valley Lake Community Services District and Hidden Valley Lake Association, its agents, successors, and assigns, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, shall comply with the following:

A. Discharge Prohibitions:

1. Discharge of wastes to surface waters or surface water drainage courses is prohibited.
2. Bypass or overflow of untreated or partially treated waste is prohibited.

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3. The discharge of waste classified as 'hazardous' under CCR, Title 23, Chapter 15, Section 2521, or 'designated', as defined in Section 13173 of the California Water Code, is prohibited.
4. The application of biosolids at rates in excess of the nitrogen requirements of the vegetation, or at rates that would cause the excess nitrogen or metals to leach to groundwater, is prohibited.
5. The application of biosolids shall be confined to the designated application areas, as stated in Finding Nos. 6, 8 and 11 of this Order and shown on Attachment B.
6. The grazing of milking animals used for producing unpasteurized milk for human consumption is prohibited on the designated recycled water irrigation or biosolids application areas.
7. The off-site discharge of storm water, and/or irrigation runoff, from fields on which biosolids have been applied, is prohibited for 30 days following the application of biosolids.
8. The application of biosolids during rainfall events is prohibited.
9. The application of biosolids with pollutant concentrations greater than those shown below is prohibited.

Constituents	Ceiling Concentration mg/kg dry weight
Arsenic	75
Cadmium	85
Chromium	3000
Copper	4300
Lead	840
Mercury	57
Molybdenum	75
Nickel	420
Selenium	100
Zinc	7500

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B. Discharge Specifications:

Treatment Plant and Wastewater Storage Facilities

1. The average monthly dry weather discharge from the treatment plant shall not exceed 0.350 mgd.
2. The maximum wet weather discharge from the treatment plant shall not exceed 0.894 mgd.
3. Objectionable odors originating at this facility shall not be perceivable beyond the limits of the wastewater treatment, recycled water irrigation, biosolids application or wastewater disposal areas.
4. As a means of discerning compliance with Discharge Specification No. 3, the dissolved oxygen content in the upper zone (1 foot) of wastewater in ponds shall not be less than 1.0 mg/l.
5. The treatment and storage facilities shall be designed, constructed, operated and maintained to prevent inundation or washout due to floods with a 100-year return frequency.
6. The effluent from the treatment facility shall not exceed the following limits:

Constituent	Units	Monthly Average	Daily Maximum
BOD ₅ ¹	mg/l	30	60
Suspended Solids	mg/l	30	60
Settleable Solids	ml/l	-	0.5
Coliform	MPN/100ml	2.2 Median	23
Turbidity	NTU	2	5

¹Five-day, 20°C biochemical oxygen demand (BOD).

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7. Treatment plant effluent shall not have a pH less than 6.5 or greater than 8.5.
8. The storage pond shall have a clay liner a minimum of 18" thick, installed at a relative compaction of at least 90%, with a maximum permeability of 1×10^{-6} cm/sec, or equivalent.
9. Ponds shall be managed to prevent breeding of mosquitoes. In particular,
 - a. An erosion control program should assure that small coves and irregularities are not created around the perimeter of the water surface.
 - b. Weeds shall be minimized through control of water depth, harvesting, or herbicides.
 - c. Dead algae, vegetation, and debris shall not accumulate on the water surface.
10. Public contact with wastewater shall be precluded through such means as fences, signs, and other acceptable alternatives.
11. Ponds shall have sufficient capacity to accommodate allowable wastewater flow, design seasonal precipitation and ancillary inflow and infiltration during the nonirrigation season. Design seasonal precipitation shall be based on total annual precipitation using a return period of 100 years, distributed monthly in accordance with historical rainfall patterns. Freeboard shall never be less than two feet (measured vertically).
12. On or about **1 October each year**, available pond storage capacity shall at least equal the volume necessary to comply with Discharge Specification No. 11.

Recycled Water Irrigation

13. A maximum of 1.3 mgd may be discharged to the golf course and supplemental field, weather permitting.
14. There shall be no standing water in the disposal area 48 hours after wastewater is applied.
15. Areas irrigated with recycled water shall be managed to prevent breeding of mosquitoes. More specifically,

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- a. Tail water must be returned, and applied irrigation water must infiltrate completely within a 48-hour period.
 - b. Ditches not serving as wildlife habitat should be maintained free of emergent, marginal, and floating vegetation.
 - c. Low-pressure and unpressurized pipelines and ditches accessible to mosquitoes shall not be used to store recycled water.
16. Recycled water for irrigation shall be managed to minimize erosion, runoff, and movement of aerosols from the disposal areas.
 17. Direct or windblown spray shall be confined to the designated recycled water spray irrigation areas (appropriate portions of the golf course and the supplemental field) and prevented from contacting drinking water facilities.
 18. The Discharger may not spray irrigate recycled water during periods of precipitation and for at least 24 hours after cessation of precipitation, or when winds exceed 30 mph.
 19. The discharge shall remain within designated disposal areas at all times.
 20. Signs with proper wording of sufficient size shall be placed at areas of access and around the perimeter of all areas used for effluent disposal to alert the public of the use of recycled water.
 21. Golf course scorecards should indicate that recycled water is being used for irrigation purposes.
 22. Storm water runoff from the irrigation areas shall not be discharged to any surface water drainage course within 48 hours of the last application of recycled water.
 23. Recycled water irrigation practices shall be in accordance with Winzler and Kelly Consulting Services' September 1993 *Engineering Report on the Production Distribution and Use of Reclaimed Water*. Application of recycled water to the reclamation areas shall be at reasonable rates considering the crop, soil, climate, and irrigation management system. The nutrient loading of the reclamation areas, including the nutritive value of organic and chemical fertilizers and of the recycled water shall not exceed the crop demand.

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24. There shall be no impoundment of recycled water, recycled water irrigation or biosolids application within 500 feet of any domestic water well, or within 100 feet of any irrigation well unless it is demonstrated to the satisfaction of the Executive Officer that less distance is justified.

Biosolids Application

25. Collected screenings, sludges, and other solids removed from liquid wastes shall be disposed of in a manner that is consistent with CCR, Title 27, and approved by the Executive Officer.
26. Prior to biosolids application, the Discharger shall submit a Biosolids Management Plan for approval by the Executive Officer. The Discharger shall maintain and operate under this approved Biosolids Management Plan.
27. Biosolids shall comply with either Class A or Class B pathogen standards as listed in Appendix B of 40 CFR 503.
28. Biosolids shall comply with one of the vector attraction reduction standards as listed in 40 CFR 505.33.
29. Biosolids shall be landspread and incorporated into the soil within 24 hours of arrival at the disposal fields. If the Vector Attraction Reduction alternative 40 CFR 503.33 (b)(10)(i) is used, the biosolids must be incorporated into the ground within six (6) hours of landspreading.
30. Biosolids application rates shall not exceed crop utilization rates, or rates which cause specific constituents to exceed single, annual, or lifetime application limits based on:
 - a. 40 CFR 503, Standard for the Use or Disposal of Sewage Sludge;
 - b. Soil Cation Exchange Rates;
 - c. Soil pH;
 - d. Nitrogen demand of the crop; and
 - e. Phytotoxicity.

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31. Biosolids shall not be applied to soil with a pH of less than 6.5
32. Biosolids shall not be applied to water-saturated, snow-covered or frozen ground.
33. Biosolids shall not be applied to slopes exceeding 10 degrees, unless a certified agronomist provides sufficient information in the Pre-Application report outlining site conditions that justify application on steeper slopes. Furthermore, application to slopes exceeding 10 degrees shall not be allowed from **30 October through 30 April**. Biosolids applied to slopes 10 degrees or greater shall be incorporated immediately. Contour tilling shall be required on slopes greater than 10 degrees. In no case shall biosolids application be made on slopes exceeding 28 degrees.
34. Objectionable odors originating at this facility, as a result of applying biosolids, shall not be perceivable beyond the limits of the property owned by the Discharger.
35. Biosolids shall not be applied to land in amounts which cause the following cumulative loading rates to be exceeded:

<u>Constituents</u>	<u>Cumulative Loading Rate (kg per hectare)</u>
Arsenic	41
Cadmium	39
Chromium	3000
Copper	1500
Lead	300
Mercury	17
Molybdenum	18
Nickel	420
Selenium	100
Zinc	2800

36. To protect groundwater, the application of biosolids shall not cause the biosolids/soil mixture to exceed the following soluble levels (mg/l) when extracted with distilled water using the Waste Extraction Test (WET) described in the CCR, Title 22, Division 4, Chapter 30:

Concentrations in Biosolids/Soil Mixture Not to be Exceeded

Metal	Limitation (mg/l)
Cadmium	0.1
Copper	20.0
Lead	0.5
Nickel	0.134
Zinc	200.0

37. After the last application of biosolids in the supplemental field, the Discharger shall ensure the following:
- a. For at least 30 days:
 - 1) Public access to the application site is restricted for land with a low potential for public exposure;
 - 2) Food, feed, and fiber crops are not harvested; and
 - 3) Grazing by animals is prevented.
 - b. For at least 14 months:
 - 1) Public access to the site is restricted for land with a high potential for public exposure;
 - 2) Turf is not to be harvested if the harvested turf is to be placed on land with a high degree of public exposure; and
 - 3) Grazing of milking animals used in the production of unpasteurized milk for human consumption is prevented.
 - c. For at least 14 months:

Food crops with harvested parts that touch the biosolids/soil mixture and are completely above the land surface are not harvested.
 - d. For at least 36 months:

Prevent planting of unprocessed food chain crops.
 - e. For at least 38 months:

Food crops with harvested parts below the land surface are not harvested, unless the biosolids remained exposed on the ground surface for at least four months prior to incorporation into the soil.

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38. Staging areas, storage areas, and biosolids application shall be at least:
 - a. 25 feet from property lines;
 - b. 500 feet from water supply wells or occupied dwellings;
 - c. 50 feet from public roads;
 - d. 100 feet from surface waters, including rivers, creeks, ponds, lakes, marshes, and their tributaries;
 - e. 10 feet from agricultural dwellings; and
 - f. 100 feet from residential developments.
39. Any proposed change in sludge use or disposal practice shall be reported to the Executive Officer at least 90 days in advance of the change.

C. Biosolids Storage Specifications:

Biosolids shall be considered "stored" if they are placed on the ground or in non-mobile containers (i.e., not in truck or trailer) at the application site or an intermediate storage location away from the generator/processing site prior to application. "Storage" does not include biosolids placed on the ground for brief periods of time solely to facilitate transfer the biosolids between transportation and application vehicles.

1. Biosolids shall not be stored for more than seven consecutive days prior to application.
2. Biosolids containing free liquids shall not be placed on the ground prior to application on an approved site.
3. Sites for the storage of biosolids shall be located, designed, and maintained to restrict public access to the biosolids.
4. Biosolids shall not be stored directly on the ground at any one location for more than seven days in any 60-day period.

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5. Biosolids storage sites which contain biosolids between 1 October and 30 April shall be designed and maintained to prevent washout or inundation from a storm or flood with a return frequency of 100-year.
6. Biosolids storage facilities which contain biosolids between 1 October and 30 April shall be designed and maintained to contain all storm water falling from a 10-year, 24-hour storm.
7. Biosolids storage facilities shall be designed, maintained, and operated to minimize the generation of leachate.
8. If biosolids are to be stored at the site, a plan describing the storage program and means of complying with this Order shall be submitted for Executive Officer approval no later than 60-days prior to the storage of biosolids. The storage of biosolids shall not commence until after approval of the plan.
9. The Discharger shall operate the biosolids storage facilities in accordance with the approved Biosolids Management Plan required in Discharge Specification B.26.

D. Groundwater Limitations:

The discharge, in combination with other sources, shall not cause underlying groundwater to contain waste constituents in concentrations statistically greater than background water quality, except for coliform. For coliform, increases shall not cause the most probable number of total coliform organisms to exceed 2.2/100 ml over any 7-day period.

E. Provisions:

1. The Discharger shall not allow pollutant-free wastewater to be discharged into the collection, treatment, and disposal system in amounts that significantly diminish the system's capability to comply with this Order. Pollutant-free wastewater means rainfall, groundwater, cooling waters, and condensates that are essentially free of pollutants.

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2. The Discharger shall use the best practical cost-effective control technique currently available to limit mineralization to no more than a reasonable increment.
3. The Discharger shall implement the necessary legal authorities, programs, and controls to ensure that the following incompatible wastes are not introduced to the treatment system, where incompatible wastes are:
 - 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 is specially designed to accommodate such wastes;
 - c. Solid or viscous wastes in amounts which cause obstruction to flow in sewers, or which cause other interference with proper operation or treatment works;
 - d. Any waste, including oxygen demanding pollutants (BOD, etc.) released in such volume or strength as to cause inhibition or disruption in the treatment works, and subsequent treatment process upset and loss of treatment efficiency;
 - e. Heated in amounts that inhibit or disrupt biological activity in the treatment works, or that raise influent temperatures above 40°C (104°F), unless the treatment works is designed to accommodate such heat;
 - f. Petroleum oil, nonbiodegradable cutting oil, or products of mineral oil origin in amounts that will cause interference or pass through;
 - g. Pollutants which result in the presence of toxic gases, vapors, or fumes within the treatment works in a quantity that may cause acute worker health and safety problems; and
 - h. Trucked or hauled pollutants, unless predesignated by the Discharger.
4. For the purposes of this Order, "spray irrigation" means application of recycled water to crops by sprinklers.

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5. Recycled water controllers, valves, quick couplers, sprinkler heads etc., shall be affixed with recycled water warning signs and shall be of a type, or secured in a manner, that permits operation by authorized personnel only.
6. Piping, valves and outlets shall be marked to differentiate recycled water from domestic water supply.
7. Supplementing recycled water by connection with a domestic drinking water source or irrigation or industrial wells requires an air gap device.
8. A contingency plan, including notification of the Board and health agencies, and outlining action to be taken when effluent quality fails to meet required standards, shall be submitted within 60 days of adoption of this Order.
9. If the Discharger intends to use recycled water on crops other than those specified in an accepted land management plan, it shall first submit a written report demonstrating, to the satisfaction of the Executive Officer, that management of recycled water and irrigated properties will assure compliance with the terms of this Order.
10. Neither the distribution or application of biosolids shall cause a nuisance or condition of pollution as defined by the California Water Code, Section 13050.
11. The Discharger shall comply with the Monitoring and Reporting Program No. 5-00-019, which is part of this Order, and any revisions thereto as ordered by the Executive Officer.
12. The Discharger shall submit a report with an updated Biosolids Management Plan prior to the biosolids application to the designated 45-acre supplemental field. The report must demonstrate Discharger's ability to comply with this Order. In addition, this report will include, but not be limited to, a monitoring program for the ditches and stream for the proposed application site. This report may also be included with the Pre-Application Report required in Monitoring and Reporting Program No. 5-00-019.
13. The Discharger shall not apply biosolids until all permitting requirements for Lake County have been satisfied.

WASTE DISCHARGE REQUIREMENTS ORDER NO. 5-00-019
HIDDEN VALLEY LAKE COMMUNITY SERVICES DISTRICT
HIDDEN VALLEY LAKE ASSOCIATION
HIDDEN VALLEY LAKE WATER RECLAMATION FACILITY
LAKE COUNTY

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14. Biosolids reuse authorized by this Order is limited to stabilized wastewater treatment plant biosolids approved of by the Executive Officer. The biosolids must be treated as described in Finding No. 17.
15. The Discharger shall comply with the "Standard Provisions and Reporting Requirements for Waste Discharge Requirements", dated 1 March 1991, which are attached hereto and by reference a part of this Order. This attachment and its individual paragraphs are commonly referenced as "Standard Provision(s)."
16. In the event of any change in control or ownership of land or waste discharge facilities described herein, the Discharger shall notify the succeeding owner or operator of the existence of this Order by letter, a copy of which shall be immediately forwarded to this office.
17. At least **90 days** prior to termination or expiration of any lease, contract, or agreement involving disposal or application areas or off-site reuse of effluent, used to justify the capacity authorized herein and assure compliance with this Order, the Discharger shall notify the Board in writing of the situation and of what measures have been taken or are being taken to assure full compliance with this Order.
18. The Discharger must comply with all conditions of this Order, including timely submittal of technical and monitoring reports as directed by the Executive Officer. Violations may result in enforcement action, including Regional Board or court orders requiring corrective action or imposing civil monetary liability, or in revision or rescission of this Order.
19. A copy of this Order shall be kept at the discharge facility for reference by operating personnel. Key operating personnel shall be familiar with its contents.
20. If recycled water is used for construction purposes, it shall comply with the most current edition of "Guidelines for Use of Reclaimed Water for Construction Purposes". Other uses of recycled water not specifically authorized herein shall be subject to the approval of the Executive Officer and shall comply with CCR, Title 22, Division 4.
21. The Board will review this Order periodically and will revise requirements when necessary.

WASTE DISCHARGE REQUIREMENTS ORDER NO. 5-00-019
HIDDEN VALLEY LAKE COMMUNITY SERVICES DISTRICT
HIDDEN VALLEY LAKE ASSOCIATION
HIDDEN VALLEY LAKE WATER RECLAMATION FACILITY
LAKE COUNTY

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I, GARY M. CARLTON, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Central Valley Region, on 28 January 2000.



GARY M. CARLTON, Executive Officer

AMENDED

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SKC:1/28/00

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM NO. 5-00-019

FOR
HIDDEN VALLEY LAKE COMMUNITY SERVICES DISTRICT
HIDDEN VALLEY LAKE ASSOCIATION
HIDDEN VALLEY LAKE WATER RECLAMATION FACILITY
LAKE COUNTY

Specific sample station locations shall be established under direction of the Board's staff and a description of the stations shall be attached to this Order.

EFFLUENT MONITORING

Effluent samples shall be collected at the point of discharge from the chlorine contact basin. Effluent samples should be representative of the volume and nature of the discharge. Samples collected from the outlet structure of the chlorine contact basin will be considered adequately composited. Time of collection of a grab sample shall be recorded. Effluent monitoring shall include at least the following:

<u>Constituents</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>
Flow	mgd	Cumulative	Daily
Turbidity	NTU	Grab	Daily
20°C BOD ₅	mg/l	Grab	Weekly
Suspended Matter	mg/l	Grab	Weekly
Settleable Matter	ml/l	Grab	Weekly
pH	pH Units	Grab	Weekly
Total Coliform Organisms	MPN/100 ml	Grab	Weekly
Nitrates as N	mg/l	Grab	Monthly
Total Dissolved Solids	mg/l	Grab	Quarterly
Specific Conductivity	µmhos/cm	Grab	Quarterly
Standard Minerals	mg/l	Grab	Quarterly

SLUDGE MONITORING

A representative composite sample of sludge shall be collected annually in accordance with EPA's POTW Sludge Sampling and Analysis Guidance Document, August 1989, and tested for the following metals:

Arsenic	Mercury
Cadmium	Molybdenum
Chromium	Nickel
Copper	Selenium
Lead	Zinc

Sampling records shall be retained for a minimum of five years. A log shall be kept of sludge quantities generated and of handling and disposal activities. The frequency of entries is discretionary; however, the log should be complete enough to serve as a basis for part of the annual report.

PRE-APPLICATION REPORT

A Pre-Application Report shall be submitted for Board staff approval **at least 30 days prior to each application** of biosolids to the supplemental field. Soil samples shall be composites of each application area. If composite sampling indicate constituent concentrations exceeding the loading shown in Discharge Specification B.35., individual soil samples must be completed to determine if there is unsuitable soil within the test area. A Pre-Application Report shall include, but not be limited to, the following:

1. A sampling and analysis plan detailing sampling locations, sampling methods, and analytical procedures to be used to assure compliance with this Order. The sampling and analysis plan shall be subject to review and approval by Board Staff.
2. Proposed loading rates based on agronomic and metal loading criteria, including justification and calculations shall be submitted.
3. Results of a representative composite sample of background soil for each 45-acre area, analyzed for pH, cation exchange capacity (CEC), and tested for soluble metals (cadmium, copper, lead, nickel, and zinc, all in mg/l) using the Waste Extraction Test (WET) described in the California Code of Regulations (CCR) Title 22, Division 4, Chapter 30, using distilled water to extract. The soil samples shall be collected prior to biosolids application.
4. Sludge characteristics including: percent nitrogen, percent solids, pH, soluble metals (cadmium, copper, lead, nickel, and zinc, all in mg/l) using the Waste Extraction Test (WET) described in CCR Title 22, Division 4, Chapter 30 using distilled water to extract, and results of monitoring indicating whether the sludge meets the standards for a process to significantly reduce pathogens

per 40 CFR 503, Appendix B, the standards for vector attraction reduction per 40 CFR 503.33, and the maximum allowable pollutant concentrations found in Discharge Prohibition A.9. A representative sample of the biosolids shall also be analyzed annually for PCBs by EPA Method 8080 and reported as mg/kg on a wet weight basis.

5. Field characterization, including: proposed crops, tillage practices, erosion controls and locations, sludge staging locations, and distance to any nearby surface water, wells, residences, etc. Field characteristics and pertinent distances may be shown on a map of appropriate scale.
6. Verification of classification of biosolids as nonhazardous per CCR, Title 22, Division 4.5, Chapter 11, Criteria for Identification and Listing of Hazardous Waste.
7. Verification that the application of biosolids will not exceed the maximum soluble metal concentrations (mg/l) to protect groundwater (to prevent metals from leaching to groundwater), and will not exceed the maximum cumulative loading rates required for the 45-acre area on which biosolids are applied.
8. Verification that the biosolids have been treated to meet the standards for a process to significantly reduce pathogens as defined by 40 CFR 503, and the Vector Attraction Reduction requirement in 40 CFR 503.33.

POST-APPLICATION REPORT

A Post-Application Report shall be submitted by **30 January** of each year following application of biosolids to the supplemental field. The Post-Application Report shall provide information on the previous year's biosolids application and include, but not be limited to, the following:

1. Volume (cubic yards) and weight (dry tons) of biosolids applied.
2. Location of the field receiving biosolids clearly shown on a map.
3. Tons of wet biosolids per acre and tons of dry biosolids per acre applied.
4. Total loading of heavy metals (kilograms per hectare) and pounds per acre of nitrogen for each site applied. Include a comparison of these loadings to the allowable loading standards (including calculations).
5. Cumulative application of each constituent (kilograms/hectare) listed in Discharge Specifications No. B.35 for all biosolids applied to each site and a comparison to the allowable cumulative loading standards (include calculations).

6. Biosolids/soil mixture monitoring with a comparison to the allowable standards to protect groundwater. A representative composite sample of biosolids/soil mixture from each parcel shall be analyzed for cation exchange capacity and pH, and tested for nitrogen and for soluble metals (cadmium, copper, lead, nickel, and zinc, all in mg/l) using the Waste Extraction Test (WET) described in CCR, Title 22, Division 4.5, Chapter 11, Appendix II, using deionized water as the extractant. Include a verification that the biosolids/soil mixture has not exceeded the maximum soluble metal concentration (mg/l) to protect the groundwater and the cumulative loading criteria found in Discharge Specification No. B.35. This analysis is required only once per area per biosolids application, after a given biosolids application to that area is completed.
7. Any variations from Pre-Application Report.
8. The type of crops being grown on each parcel.
9. A statement of compliance or non-compliance with the land use restrictions identified in Discharge Prohibitions No. A.5 and Discharge Specification Nos. B.37 and B.38.

BIOSOLIDS MONITORING

Representative samples of biosolids to be applied to land shall be collected twice per year. Samples for the Pre-Application Report shall be collected within 30 days of the application season. Samples shall be analyzed for the following:

Constituent	Units ¹
Percent Solids	%
Nitrogen	
Ammonia	mg/kg
Nitrate	mg/kg
Total Kjeldahl	mg/kg
Organic	mg/kg
Phosphorous	mg/kg
Potassium	mg/kg
pH	pH Units
Heavy Metals ²	mg/kg
Boron	mg/kg
Fecal Coliform	MPN/gram dry weight

¹ To be reported as dry weight corrected for percent moisture

² Arsenic, Cadmium, Chromium, Copper, Lead, Mercury, Molybdenum, Nickel, Selenium, and Zinc

WATER SUPPLY MONITORING

A sampling station shall be established where a representative sample of the municipal water supply can be obtained. Water supply monitoring shall include at least the following:

Constituents	Units	Sampling Frequency
Electrical Conductivity @ 25°C	µmhos/cm	Annual
Nitrates as N	mg/l	Annual

GROUNDWATER MONITORING

The Discharger has developed a system of groundwater monitoring wells to define groundwater impacts from the effluent storage pond. The Discharger shall also develop a system of groundwater monitoring wells to define shallow groundwater impacts from the supplemental spray irrigation and biosolids application field. One well shall be established upgradient of the facilities to monitor background levels. The number (minimum of 2) and location of wells downgradient of the facilities shall be sufficient to determine groundwater impacts.

Constituents	Units	Type of Sample	Sampling Frequency
Depth to groundwater	feet/inches	Grab	Quarterly
Specific Conductivity	µmhos/cm	Grab	Quarterly
Nitrate as Nitrogen	mg/l	Grab	Quarterly

ANNUAL LAND MANAGEMENT AND MONITORING REPORT

The Discharger shall submit a summary report on the land management operation after the conclusion of each calendar year. The report shall discuss total water application over the season; the total volume of wastewater applied; the total nutrient loading from wastewater, sludges, and chemical fertilizers; and amount of nutrients removed through harvest of the crop. In short, the report shall present a mass balance relative to pollutants of concern and hydraulic loading.

In reporting the effluent, groundwater and water supply monitoring data, the Discharger shall arrange the data in tabular form so that the data, the constituents, and the concentrations are readily discernible. The

data shall be summarized in a manner that illustrates clearly whether the Discharger is in compliance with waste discharge requirements, including calculation of all averages, etc. 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 report is due by **30 January** of each calendar year.

REPORTING

Monthly effluent and quarterly groundwater monitoring reports shall be submitted to the Regional Board by the **20th day** of the following month.

The Biosolids Pre-Application Report shall be submitted at least **30 days prior to application** for staff approval, and the Post-Application Report shall be submitted by **30 January** for all biosolids applications for the preceding calendar year.

The Discharger shall submit a Annual Land Management and Monitoring Report to the Board by **30 January** of each year.

If the Discharger monitors any constituent more frequently than is required by this Order, the results of such monitoring shall be included in the discharge monitoring report.

All reports submitted in response to this Order shall comply with signatory requirements of Standard Provision B.3, General Reporting Requirements. The Discharger shall implement the above monitoring program as of the date of this Order.

Ordered by :


GARY M. CARLTON, Executive Officer

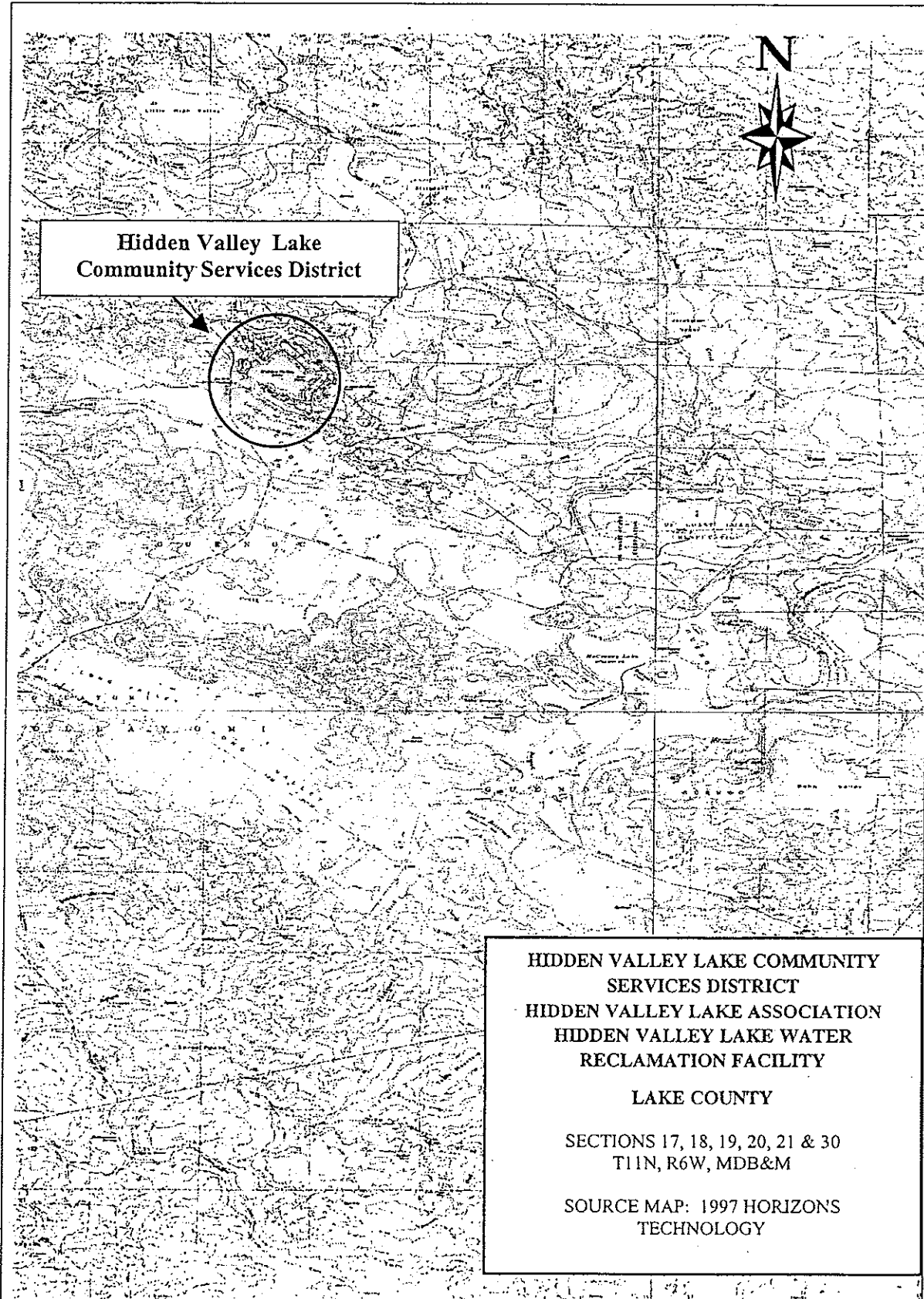
28 January 2000

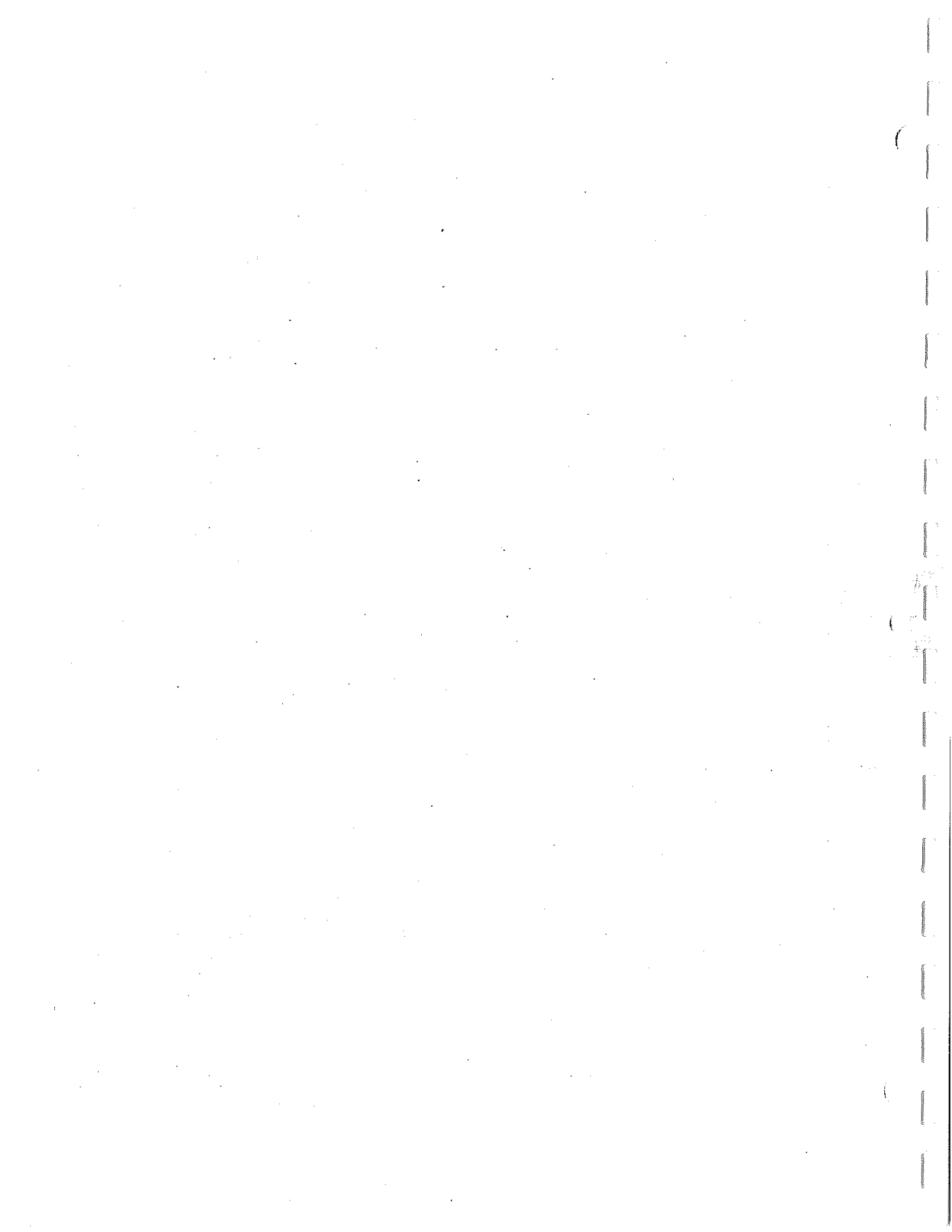
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WASTE DISCHARGE REQUIREMENTS ORDER NO. 5-00-019
HIDDEN VALLEY LAKE COMMUNITY SERVICES DISTRICT
HIDDEN VALLEY LAKE ASSOCIATION
HIDDEN VALLEY LAKE WATER RECLAMATION FACILITY
LAKE COUNTY

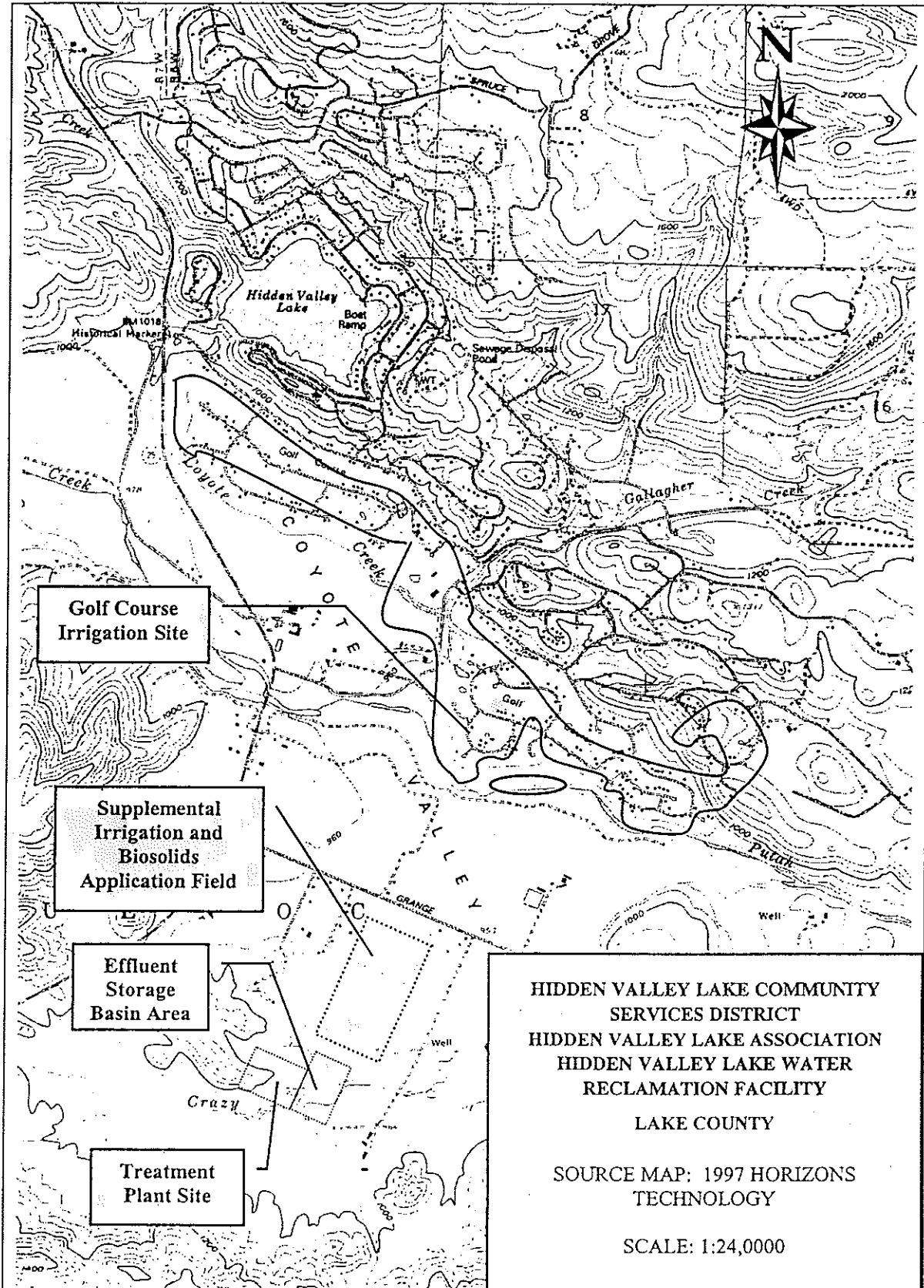
ATTACHMENT A

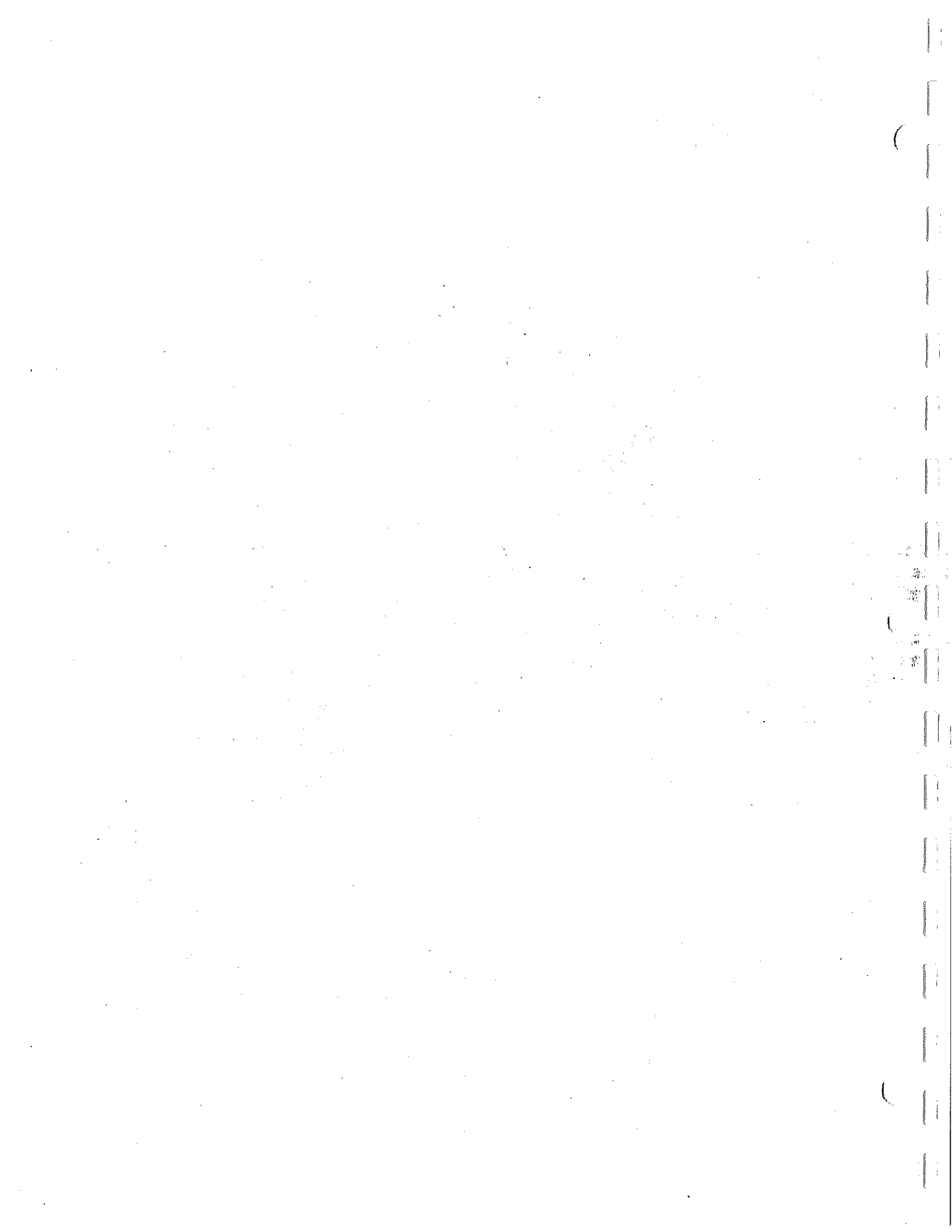




WASTE DISCHARGE REQUIREMENTS ORDER NO. 5-00-019
HIDDEN VALLEY LAKE COMMUNITY SERVICES DISTRICT
HIDDEN VALLEY LAKE ASSOCIATION
HIDDEN VALLEY LAKE WATER RECLAMATION FACILITY
LAKE COUNTY

ATTACHMENT B





INFORMATION SHEET

WASTE DISCHARGE REQUIREMENTS ORDER NO. 5-00-019
HIDDEN VALLEY LAKE COMMUNITY SERVICES DISTRICT
HIDDEN VALLEY LAKE ASSOCIATION
HIDDEN VALLEY LAKE WATER RECLAMATION FACILITY
LAKE COUNTY

The Board, on 25 October 1985, adopted Order No. 85-289 which prescribed requirements for a discharge from a package treatment plant to a leachfield for Treatment Plant No. 1 and discharge from a treatment pond and chlorinator to three spray fields for Treatment Plant No. 2. Stonehouse Mutual Water Company was the named Discharger in Order No. 85-289, but transferred legal ownership of Treatment Plant Nos. 1 and 2 to Hidden Valley Lake Community Services District (hereafter, Discharger).

The Discharger submitted a Report of Waste Discharge, dated 26 January 1993, and supplemental information dated 22 February 1994, proposing to replace Treatment Plant Nos. 1 and 2 with an activated sludge-extended aeration treatment plant. The proposed plant would provide sewerage service to the Hidden Valley Lake Subdivision.

The existing facility began operation on 15 February 1996 to replace the inadequately sized Treatment Plant No. 1 and Treatment Plant No. 2, which had been discharging chlorinated effluent into a tributary of Gallagher Creek, Coyote Creek and Putah Creek during wet weather.

The existing treatment system is an extended aeration process that includes primary screening, secondary treatment by extended aeration activated sludge, secondary clarification, chemical addition (chlorine, alum and polymer), direct tertiary filtration, chlorination, six sludge drying beds, a concrete-lined equalization basin and an effluent storage basin. Denitrification can be operationally accomplished in the aeration basin through the establishment of oxic and anoxic conditions. Fully treated, recycled water is impounded in a 412-acre-feet, clay-lined effluent storage pond adjacent to the reclamation plant. A ground water study was conducted for the storage pond in order to determine a liner permeability and thickness that would protect underlying ground water from possible nitrate contamination. Monitoring wells are in place at the treatment site to measure any potential effect of the impounded wastewater to groundwater.

Recycled water is delivered from the 412-acre-feet impoundment for storage in two irrigation ponds on the golf course. Ultimate disposal of the recycled water is through spray irrigation onto a golf course located within the Hidden Valley Lake Subdivision and an 80-acre supplemental spray irrigation field adjacent to the wastewater treatment facility. The irrigated golf course area has a high degree of public contact. The tertiary treatment meets the effluent standards required by Title 22 for reclamation purposes. Irrigation flows are proposed to reach a maximum of 1.3 mgd, weather permitting.

Stabilized biosolids will also be applied to the supplemental field. Due to required setbacks resulting from the proximity of both individual and the Discharger's domestic water supply wells, only approximately 45 acres of the 80-acre supplemental field can be used for spray

INFORMATION SHEET

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WASTE DISCHARGE REQUIREMENTS ORDER NO. 5-00-019
HIDDEN VALLEY LAKE COMMUNITY SERVICES DISTRICT
HIDDEN VALLEY LAKE ASSOCIATION
HIDDEN VALLEY LAKE WATER RECLAMATION FACILITY
LAKE COUNTY

irrigation and/or biosolids application. On an individual basis, the Regional Board Executive Officer has previously approved of numerous requests by the Discharger to land spread biosolids to its property, provided that the land spreading operation was performed in accordance with WDRs Order No. 94-138, the Dischargers sludge management plan and best management practices. This Order will serve to formalize the sludge disposal process.

The facility will have a maximum wet weather discharge of 0.894 mgd and an average dry weather discharge of 0.35 mgd. Surface waters in the vicinity of the area include Crazy Creek and Putah Creek which eventually drain into Lake Berryessa.

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CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

STANDARD PROVISIONS AND REPORTING REQUIREMENTS
FOR
WASTE DISCHARGE REQUIREMENTS

1 March 1991

A. General Provisions:

1. The requirements prescribed herein do not authorize the commission of any act causing injury to the property of another, or protect the discharger from liabilities under federal, state, or local laws. This Order does not convey any property rights or exclusive privileges.
2. The provisions of this Order are severable. If any provision of this Order is held invalid, the remainder of this Order shall not be affected.
3. After notice and opportunity for a hearing, this Order may be terminated or modified for cause, including, but not limited to:
 - a. Violation of any term or condition contained in this Order;
 - b. Obtaining this Order by misrepresentation, or failure to disclose fully all relevant facts;
 - c. A change in any condition that results in either a temporary or permanent need to reduce or eliminate the authorized discharge;
 - d. A material change in the character, location, or volume of discharge.
4. Before making a material change in the character, location, or volume of discharge, the discharger shall file a new Report of Waste Discharge with the Regional Board. A material change includes, but is not limited to, the following:
 - a. An increase in area or depth to be used for solid waste disposal beyond that specified in waste discharge requirements
 - b. A significant change in disposal method, location or volume, e.g., change from land disposal to land treatment.
 - c. The addition of a major industrial, municipal or domestic waste discharge facility.
 - d. The addition of a major industrial waste discharge to a discharge of essentially domestic sewage, or the addition of a new process or product by an industrial facility resulting in a change in the character of the waste.

A. General Provisions (continued)

5. Except for material determined to be confidential in accordance with California law and regulations, all reports prepared in accordance with terms of this Order shall be available for public inspection at the offices of the Board. Data on waste discharges, water quality, geology, and hydrogeology shall not be considered confidential.
6. The discharger shall take all reasonable steps to minimize any adverse impact to the waters of the state resulting from noncompliance with this Order. Such steps shall include accelerated or additional monitoring as necessary to determine the nature and impact of the noncompliance.
7. The discharger shall maintain in good working order and operate as efficiently as possible any facility, control system, or monitoring device installed to achieve compliance with the waste discharge requirements.
8. The discharger shall permit representatives of the Regional Board (hereafter Board) and the State Water Resources Control Board, upon presentation of credentials, to:
 - a. Enter premises where wastes are treated, stored, or disposed of and facilities in which any records are kept,
 - b. Copy any records required to be kept under terms and conditions of this Order,
 - c. Inspect at reasonable hours, monitoring equipment required by this Order, and
 - d. Sample, photograph and video tape any discharge, waste, waste management unit or monitoring device.
9. For any electrically operated equipment at the site, the failure of which could cause loss of control or containment of waste materials, or violation of this Order, the discharger shall employ safeguards to prevent loss of control over wastes. Such safeguards may include alternate power sources, standby generators, retention capacity, operating procedures, or other means.
10. The fact that it would have been necessary to halt or reduce the permitted activity in Order to maintain compliance with this Order shall not be a defense for the discharger's violations of the Order.
11. Neither the treatment nor the discharge shall create a condition of nuisance or pollution as defined by the California Water Code, Section 13050.

**California Regional Water Quality Control Board****Central Valley Region**

Steven T. Butler, Chair

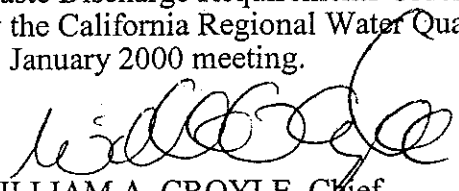
Gray Davis
GovernorDon H. Hickox
Secretary for
Environmental
Protection**Sacramento Main Office**Internet Address: <http://www.swrcb.ca.gov/~rwqcb5>
3443 Routier Road, Suite A, Sacramento, California 95827-3003
Phone (916) 255-3000 • FAX (916) 255-3015

3 February 2000

CERTIFIED MAIL
Z 100 456 394Mr. Mel Aust, General Manager
Hidden Valley Lake CSD
19400 Hartman Road
Middletown, CA 95461-8371CERTIFIED MAIL
Z 100 456 395Mr. William Stewart, General Manager
Hidden Valley Lake Association
18174 Hidden Valley Road
Middletown, CA 95461

NOTICE OF ADOPTION
OF
REVISED WASTE DISCHARGE REQUIREMENTS
FOR
HIDDEN VALLEY LAKE COMMUNITY SERVICES DISTRICT
HIDDEN VALLEY LAKE ASSOCIATION
HIDDEN VALLEY LAKE WATER RECLAMATION FACILITY
LAKE COUNTY

Waste Discharge Requirements Order No. 5-00-019 for the above named discharger was adopted by the California Regional Water Quality Control Board, Central Valley Region, at the 28 January 2000 meeting.

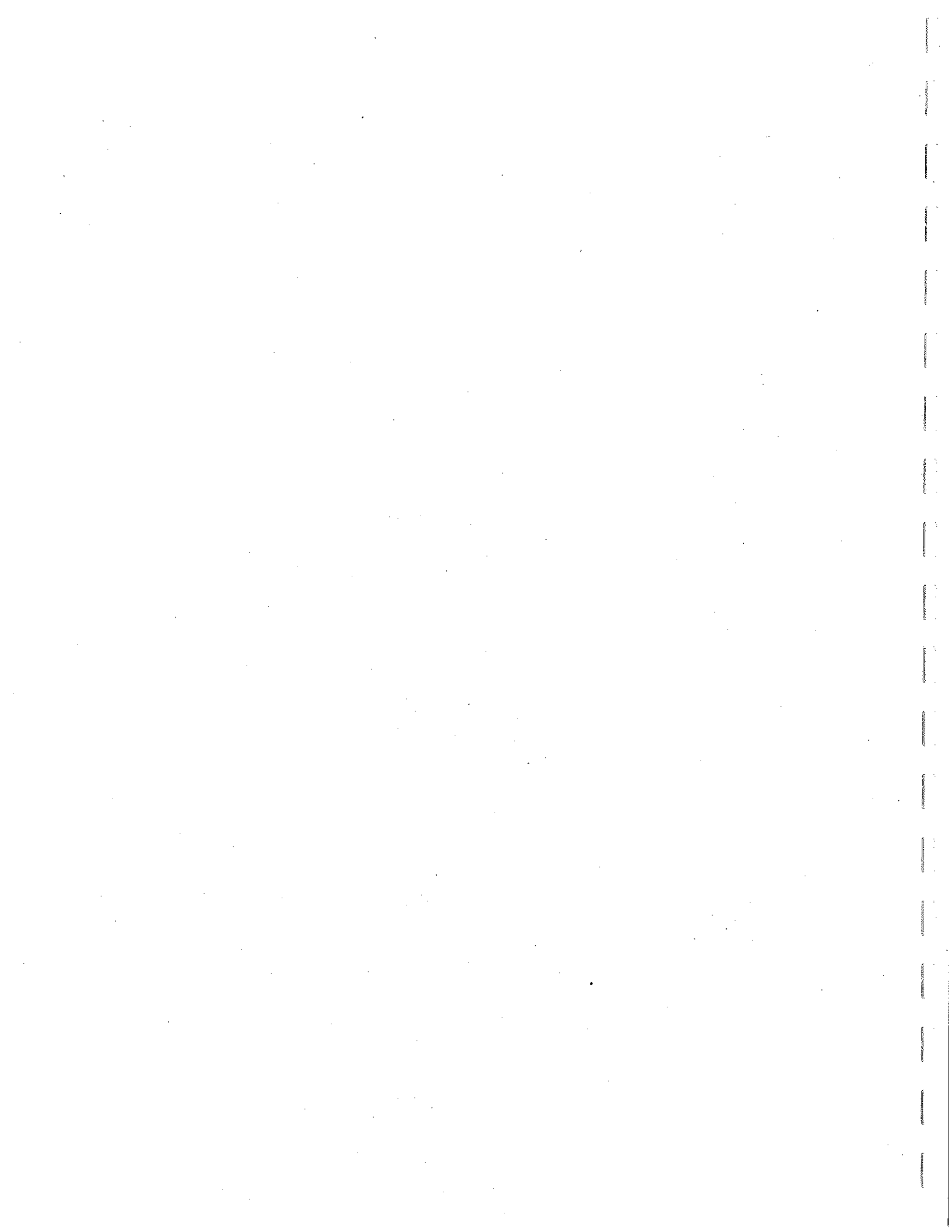

WILLIAM A. CROYLE, Chief
Waste Discharge to Land Unit
Lower Sacramento River Watershed

Enclosures (Adopted Order and Standard Provisions)

cc w/o encl: Ms. Frances McChesney, Office of Chief Counsel, State Water Resources Control Board, Sacramento
Division of Water Quality, State Water Resources Control Board, Sacramento
Department of Health Services, Environmental Management Branch, Sacramento
Department of Health Services, Office of Drinking Water, Santa Rosa
Department of Fish and Game, Region III, Yountville
Lake County Department of Environmental Health, Lakeport
Lake County Planning Department, Lakeport
Lake County Public Works, Lakeport
Lake County Special Districts Administration, Lakeport
Lake County Mosquito Abatement, Lakeport

California Environmental Protection Agency

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STANDARD PROVISIONS AND REPORTING REQUIREMENTS
Waste Discharge to Land

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A. General Provisions (continued)

12. The discharge shall remain within the designated disposal area at all times.

B. General Reporting Requirements

9/6/64-3291

1. In the event the discharger does not comply or will be unable to comply with any prohibition or limitation of this Order for any reason, the discharger shall notify the Board by telephone at (916) 255-3000 as soon as it or its agents have knowledge of such noncompliance or potential for noncompliance, and shall confirm this notification in writing within two weeks. The written notification shall state the nature, time and cause of noncompliance, and shall describe the measures being taken to prevent recurrences and shall include a timetable for corrective actions. *Correlate to CWS Report Certification*
2. The discharger shall have a plan for preventing and controlling accidental discharges, and for minimizing the effect of such events.

This plan shall:

- a. Identify the possible sources of accidental loss or leakage of wastes from each waste management, treatment, or disposal facility.
- b. Evaluate the effectiveness of present waste management/treatment units and operational procedures, and identify needed changes or contingency plans.
- c. Predict the effectiveness of the proposed changes in waste management/treatment facilities and procedures and provide an implementation schedule containing interim and final dates when changes will be implemented.

The Board, after review of the plan, may establish conditions that it deems necessary to control leakages and minimize their effects.

3. All reports shall be signed by persons identified below:
 - a. For a corporation: by a principal executive officer of at least the level of senior vice-president.
 - b. For a partnership or sole proprietorship: by a general partner or the proprietor.
 - c. For a municipality, state, federal or other public agency: by either a principal executive officer or ranking elected or appointed official.

B. General Reporting Requirements (continued)

- d. A duly authorized representative of a person designated in 3a, 3b or 3c of this requirement if;
- (1) the authorization is made in writing by a person described in 3a, 3b; or 3c of this provision;
 - (2) the authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a waste management unit, 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
 - (3) the written authorization is submitted to the Board

Any person signing a document under this Section shall make the following certification:

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

4. Technical and monitoring reports specified in this Order are requested pursuant to Section 13267 of the Water Code. Failing to furnish the reports by the specified deadlines and falsifying information in the reports, are misdemeanors that may result in assessment of civil liabilities against the discharger.
5. The discharger shall mail a copy of each monitoring report and any other reports required by this Order to:

California Regional Water Quality Control Board
Central Valley Region
3443 Routier Road, Suite A
Sacramento, CA 95827-3098

or the current address if the office relocates.

C. Provisions for Monitoring

1. All analyses shall be made in accordance with the latest edition of:
(1) "Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater" (EPA 600 Series) and (2) "Test Methods for Evaluating Solid Waste" (SW 846-latest edition). The test method may be modified subject to application and approval of alternate test procedures under the Code of Federal Regulations (40 CFR 136).
2. Chemical, bacteriological, and bioassay analyses shall be conducted at a laboratory certified for such analyses by the State Department of Health Services. In the event a certified laboratory is not available to the discharger, analyses performed by a noncertified laboratory will be accepted provided a Quality Assurance-Quality Control Program is instituted by the laboratory. A manual containing the steps followed in this program must be kept in the laboratory and shall be available for inspection by Board staff. The Quality Assurance-Quality Control Program must conform to EPA guidelines or to procedures approved by the Board.

Unless otherwise specified, all metals shall be reported as Total Metals.

3. The discharger shall retain records of all monitoring information, including all calibration and maintenance records, all original strip chart recordings of continuous monitoring instrumentation, copies of all reports required by this Order, and records of all data used to complete the application for this Order. Records shall be maintained for a minimum of three years from the date of the sample, measurement, report, or application. This period may be extended during the course of any unresolved litigation regarding this discharge or when requested by the Regional Board Executive Officer.

Record of monitoring information shall include:

- a. the date, exact place, and time of sampling or measurements,
 - b. the individual(s) who performed the sampling or measurements,
 - c. the date(s) analyses were performed,
 - d. the individual(s) who performed the analyses,
 - e. the laboratory which performed the analysis,
 - f. the analytical techniques or methods used, and
 - g. the results of such analyses.
4. All monitoring instruments and devices used by the discharger to fulfill the prescribed monitoring program shall be properly maintained and calibrated at least yearly to ensure their continued accuracy.

C. Provisions For Monitoring (continued)

5. The discharger shall maintain a written sampling program sufficient to assure compliance with the terms of this Order. Anyone performing sampling on behalf of the discharger shall be familiar with the sampling plan.
6. The discharger shall construct all monitoring wells to meet or exceed the standards stated in the State Department of Water Resources Bulletin 74-81 and subsequent revisions, and shall comply with the reporting provisions for wells required by Water Code Sections 13750 through 13755.22

D. Standard Conditions for Facilities Subject to California Code of Regulations, Title 23, Division 3, Chapter 15 (Chapter 15)

1. All classified waste management units shall be designed under the direct supervision of a California registered civil engineer or a California certified engineering geologist. Designs shall include a Construction Quality Assurance Plan, the purpose of which is to:
 - a. demonstrate that the waste management unit has been constructed according to the specifications and plans as approved by the Board.
 - b. provide quality control on the materials and construction practices used to construct the waste management unit and prevent the use of inferior products and/or materials which do not meet the approved design plans or specifications.
2. Prior to the discharge of waste to any classified waste management unit, a California registered civil engineer or a California certified engineering geologist must certify that the waste management unit meets the construction or prescriptive standards and performance goals in Chapter 15, unless an engineered alternative has been approved by the Board. In the case of an engineered alternative, the registered civil engineer or certified engineering geologist must certify that the waste management unit has been constructed in accordance with Board-approved plans and specifications.
3. Materials used to construct liners shall have appropriate physical and chemical properties to ensure containment of discharged wastes over the operating life, closure, and post-closure maintenance period of the waste management units.
4. Closure of each waste management unit shall be performed under the direct supervision of a California registered civil engineer or California certified engineering geologist.

E. Conditions Applicable to Discharge Facilities Exempted From Chapter 15 Under Section 2511

1. If the discharger's wastewater treatment plant is publicly owned or regulated by the Public Utilities Commission, it shall be supervised and operated by persons possessing certificates of appropriate grade according to California Code of Regulations, Title 23, Division 4, Chapter 14.
2. By-pass (the intentional diversion of waste streams from any portion of a treatment facility, except diversions designed to meet variable effluent limits) is prohibited. The Board may take enforcement action against the discharger for by-pass unless:

- a. (1) By-pass 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 by-pass. Severe property damage does not mean economic loss caused by delays in production); and

- (2) There were no feasible alternatives to by-pass, such as the use of auxiliary treatment facilities or retention of untreated waste. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a by-pass that would otherwise occur during normal periods of equipment downtime or preventive maintenance; or

- b. (1) by-pass is required for essential maintenance to assure efficient operation; and

- (2) neither effluent nor receiving water limitations are exceeded; and

- (3) the discharger notifies the Board ten days in advance.

The permittee shall submit notice of an unanticipated by-pass as required in paragraph B.1. above.

3. A discharger that wishes to establish the affirmative defense of an upset (see definition in E.6 below) in an action brought for noncompliance shall demonstrate, through properly signed, contemporaneous operating logs, or other evidence, that:

- a. an upset occurred and the cause(s) can be identified;

E. Dischargers Exempt from Chapter 15 (continued)

- 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 paragraph B.1., above; and
- d. the discharger complied with any remedial measures required by waste discharge requirements.

In any enforcement proceeding, the discharger seeking to establish the occurrence of an upset has the burden of proof.

4. A discharger whose waste flow has been increasing, or is projected to increase, shall estimate when flows will reach hydraulic and treatment capacities of its treatment, collection, and disposal facilities. The projections shall be made in January, based on the last three years' average dry weather flows, peak wet weather flows and total annual flows, as appropriate. When any projection shows that capacity of any part of the facilities may be exceeded in four years, the discharger shall notify the Board by 31 January.
5. Effluent samples shall be taken downstream of the last addition of wastes to the treatment or discharge works where a representative sample may be obtained prior to disposal. Samples shall be collected at such a point and in such a manner to ensure a representative sample of the discharge.
6. Definitions
 - a. Upset means an exceptional incident in which there is unintentional and temporary noncompliance with 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.
 - b. The monthly average discharge is the total discharge by volume during a calendar month divided by the number of days in the month that the facility was discharging. This number is to be reported in gallons per day or million gallons per day.

Where less than daily sampling is required by this Order, the monthly average shall be determined by the summation of all the measured discharges by the number of days during the month when the measurements were made.

E. Dischargers Exempt from Chapter 15 (continued)

- c. The monthly average concentration is the arithmetic mean of measurements made during the month.
- d. The "daily maximum" discharge is the total discharge by volume during any day.
- e. The "daily maximum" concentration is the highest measurement made on any single discrete sample or composite sample.
- f. A "grab" sample is any sample collected in less than 15 minutes.
- g. Unless otherwise specified, a composite sample is a combination of individual samples collected over the specified sampling period;
 - (1) at equal time intervals, with a maximum interval of one hour
 - (2) at varying time intervals (average interval one hour or less) so that each sample represents an equal portion of the cumulative flow.

The duration of the sampling period shall be specified in the Monitoring and Reporting Program. The method of compositing shall be reported with the results.

7. Annual Pretreatment Report Requirements:

Applies to dischargers required to have a Pretreatment Program as stated in waste discharge requirements.)

The annual report shall be submitted by 28 February and include, but not be limited to, the following items:

- a. A summary of analytical results from representative, flow-proportioned, 24-hour composite sampling of the influent and effluent for those pollutants EPA has identified under Section 307(a) of the Clean Water Act which are known or suspected to be discharged by industrial users.

The discharger is not required to sample and analyze for asbestos until EPA promulgates an applicable analytical technique under 40 CFR (Code of Federal Regulations) Part 136. Sludge shall be sampled during the same 24-hour period and analyzed for the same pollutants as the influent and effluent sampling and analysis. The sludge analyzed shall be a composite sample of a minimum of 12 discrete samples taken at equal time intervals over the 24-hour period. Wastewater and sludge sampling and analysis shall be

E. Dischargers Exempt from Chapter 15 (continued)

performed at least annually. The discharger shall also provide any influent, effluent or sludge monitoring data for nonpriority pollutants which 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 Part 136 and amendments thereto.

- b. A discussion of Upset, Interference, or Pass Through incidents, if any, at the treatment plant which the discharger knows or suspects were caused by industrial users of the system. The discussion shall include the reasons why the incidents occurred, the corrective actions taken and, if known, the name and address of the industrial user(s) responsible. The discussion shall also include 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.
- c. The cumulative number of industrial users that the discharger has notified regarding Baseline Monitoring Reports and the cumulative number of industrial user responses.
- d. An updated list of the discharger's industrial users including their names and addresses, or a list of deletions and additions keyed to a previously submitted list. The discharger shall provide a brief explanation for each deletion. The list shall identify the industrial users subject to federal categorical standards by specifying which set(s) of standards are applicable. The list shall indicate which categorical industries, or specific pollutants from each industry, are subject to local limitations that are more stringent than the federal categorical standards. The discharger shall also list the noncategorical industrial users that are subject only to local discharge limitations. The discharger shall characterize the compliance status through the year of record of each industrial user by employing the following descriptions:
 - (1) Complied with baseline monitoring report requirements (where applicable);
 - (2) Consistently achieved compliance;
 - (3) Inconsistently achieved compliance;
 - (4) Significantly violated applicable pretreatment requirements as defined by 40 CFR 403.8(f)(2)(vii);

E. Dischargers Exempt from Chapter 15 (continued)

- (5) Complied with schedule to achieve compliance (include the date final compliance is required);
- (6) Did not achieve compliance and not on a compliance schedule;
- (7) Compliance status unknown.

A report describing the compliance status of any industrial user characterized by the descriptions in items (d)(3) through (d)(7) above shall be submitted quarterly from the annual report date to EPA and the Board. The report shall identify the specific compliance status of each such industrial user. This quarterly reporting requirement shall commence upon issuance of this Order.

- e. A summary of the inspection and sampling activities conducted by the discharger during the past year to gather information and data regarding the industrial users. The summary shall include but not be limited to, a tabulation of categories of dischargers that were inspected and sampled; how many and how often; and incidents of noncompliance detected.
- f. A summary of the compliance and enforcement activities during the past year. The summary shall include the names and addresses of the industrial users affected by the following actions:
 - (1) Warning letters or notices of violation regarding the industrial user's apparent noncompliance with federal categorical standards or local discharge limitations. For each industrial user, identify whether the apparent violation concerned the federal categorical standards or local discharge limitations;
 - (2) Administrative Orders regarding the industrial user's noncompliance with federal categorical standards or local discharge limitations. For each industrial user, identify whether the violation concerned the federal categorical standards or local discharge limitations;
 - (3) Civil actions regarding the industrial user's noncompliance with federal categorical standards or local discharge limitations. For each industrial user, identify whether the violation concerned the federal categorical standards or local discharge limitations;

E. Dischargers Exempt from Chapter 15 (continued)

- (4) Criminal actions regarding the industrial user's noncompliance with federal categorical standards or local discharge limitations. For each industrial user, identify whether the violation concerned the federal categorical standards or local discharge limitations.
 - (5) Assessment of monetary penalties. For each industrial user identify the amount of the penalties;
 - (6) Restriction of flow to the treatment plant; or
 - (7) Disconnection from discharge to the treatment plant.
- g. A description of any significant changes in operating the pretreatment program which differ from the discharger's approved Pretreatment Program, including, but not limited to, changes concerning: the program's administrative structure; local industrial discharge limitations; monitoring program or monitoring frequencies; legal authority or enforcement policy; funding mechanisms; resource requirements; and staffing levels.
 - h. A summary of the annual pretreatment budget, including the cost of pretreatment program functions and equipment purchases.
 - i. A summary of public participation activities to involve and inform the public.
 - j. A description of any changes in sludge disposal methods and a discussion of any concerns not described elsewhere in the report.

Duplicate signed copies of these reports shall be submitted to the Board and:

Regional Administrator
U.S. Environmental Protection Agency W-5
75 Hawthorne Street
San Francisco, CA 94105

and

State Water Resources Control Board
Division of Water Quality
P.O. Box 944213
Sacramento, CA 94244-2130

Revised March 1993 to update phone number of Central Valley Regional Board.