

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

ORDER NO. _____

NPDES NO. CA0079189

WASTE DISCHARGE REQUIREMENTS
FOR
CITY OF VISALIA
WASTEWATER TREATMENT FACILITY
TULARE COUNTY

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

1. The City of Visalia (hereafter City or Discharger) submitted a Report of Waste Discharge (RWD), dated 9 October 2001, and applied for a permit renewal to discharge waste under the National Pollutant Discharge Elimination System (NPDES) from the City of Visalia Water Conservation Plant, a wastewater treatment facility (WWTF). The City provided supplemental information to complete the application dated 21 November 2001, 28 November 2001, 20 December 2001, 4 January 2002, and 17 January 2002. The WWTF provides municipal sewerage service to the City of Visalia and the unincorporated community of Goshen (combined population 110,000). The WWTF's collection system encompasses approximately 30 square miles. Treated municipal wastewater is discharged to Mill Creek (a water of the United States), recycled on 250 acres of fodder and fiber crops and a 650-acre walnut orchard (Use Area) immediately south of the WWTF, and discharged to onsite disposal ponds. The WWTF and Use Area are on property owned by the Discharger in Sections 5 and 6, T19S, R24E, MDB&M, as shown on Attachment A, a part of this Order.
2. Waste Discharge Requirements Order No. 97-061 (NPDES Permit No. CA0079189), adopted on 28 March 1997, regulates the WWTF and its discharge of up to 16 million gallons per day (mgd) to Mill Creek at the point defined as latitude 36° 18' 45" north and longitude 119° 24' 24" east (Discharge 001), the Use Area (Discharge 002), and the onsite disposal ponds (Discharge 003). Order No. 97-061 was administratively extended on 19 February 2002.
3. Attachment B, a part of this Order, depicts the WWTF's process flow diagram. The WWTF features activated sludge treatment. Domestic and industrial wastewater streams mix in the trunk sewer line and two wet wells before entering the headworks for combined treatment. At present, the WWTF includes two septage receiving stations, two wet wells, two parshall flumes, two bar screens, five primary and five secondary clarifiers, four plastic media trickling filters, four aeration basins, two rapid mix chlorination mixers, five chlorine contact basins, two sludge gravity belt thickeners, seven anaerobic sludge digesters, two unlined sludge pits, and thirty unlined sludge drying beds. The WWTF process return flows consist of gravity belt thickener filtrate, scum from the secondary clarifiers, supernatant from the digested sludge pits, decant from the sludge drying beds, and septage hauler rinse water. These flows amount to about 2% of the plant inflows and enter the WWTF through wet wells prior to the headworks. The City collects its influent samples through these wet

wells. The City recently expanded the headworks to contain five pumps for a total inflow capacity to the WWTF of 46.9 mgd. There is space to add another pump to bring the ultimate long-term capacity to 55 mgd. Construction of a new laboratory building was completed in the summer of 2002. Construction of a primary clarifier, a secondary clarifier, a chlorine contact basin and a digester was completed in November 2003. The Discharger indicates that the current expansion increased the WWTF capacity to 22 mgd from the previous design flow of the WWTF of 16.6 mgd.

4. The anaerobic digesters process primary and secondary clarifier sludge and waste activated sludge, and discharge digested sludge to unlined sludge pits. The capacities of the unlined sludge pits are approximately 5.2 million gallons each and have a detention time of about 93 days. The bottoms are sloped to collect the solids, which are discharged to unlined sludge drying beds. Pumps extract supernatant from near the surface of the unlined sludge pits and return it to the headworks for treatment. The Discharger's RWD indicates the sludge is dried for approximately 60 to 90 days, then transferred to the stockpile area for 1½ to 2 years.
5. Prior to April 2003, the dry stockpiled sludge was applied as a soil amendment at the City's Municipal Airport Farmland twice a year pursuant to Order No. 2004-012-DWQ, *General Waste Discharge Requirements for the Discharge of Biosolids to Land for use as a Soil Amendment in Agricultural, Silvicultural, Horticultural, and Land Reclamation Activities*. The RWD indicates the WWTF produces an average of approximately 8,275 tons of dried sludge annually.
6. The Discharger disposes of grit and screenings at the Tulare County Resource Management Agency's Visalia Landfill, which is regulated by Waste Discharge Requirements Order No. 99-047.
7. The RWD and Discharger Self Monitoring Reports (SMRs) from 2001 through 2005 characterize the WWTF influent as follows:

Daily Average Flow: 11.94 mgd
 Daily Maximum Flow: 15.00 mgd, occurring on 10 July 2005
 Design Flow: 22 mgd

<u>Constituent</u>	<u>Minimum</u> <u>mg/L</u>	<u>Maximum</u> <u>mg/L</u>	<u>Annual Average</u>	
			<u>mg/L</u>	<u>lb/day</u>
BOD ₅ ¹	46	1170	402	40,048
TSS ²	70	3760	372	37,029
Chloride	56	141	73	7,250

¹ 5-day, 20°C biochemical oxygen demand

² Total suspended solids

8. The RWD describes the discharge as follows:

<u>Constituent</u>	<u>Units</u>	<u>Quantity</u>	<u>Percent Removal</u>
Average Summer Temperature	°C	24.7	---
Average Winter Temperature	°C	19.5	---

<u>Constituent</u>	<u>Units</u>	<u>Quantity</u>	<u>Percent Removal</u>
BOD ₅ (average concentration)	mg/L	5	98.9
BOD ₅ (mass)	lbs/day	510	98.9
TSS (concentration)	mg/L	8	98.6
TSS (mass)	lbs/day	810	98.6
TKN ¹	mg/L	10.8	---
Ammonia (as N)	mg/L	7.3 ²	---
Nitrate (NO ₃ -N)	mg/L	1.3	---
Chlorine Residual	mg/L	5.1	---
pH	pH units	7.2	---
EC ³	µmhos/cm	643	---

¹ Total Kjeldahl Nitrogen

² Concentration based on average of three consecutive daily samples; maximum concentration is 8 mg/L.

³ Conductivity at 25°C

9. Self Monitoring reports from 2001 through 2005 describe the discharge as follows:

<u>Constituent</u>	<u>Units</u>	<u>Average</u>	<u>Min</u>	<u>Max</u>
2001 Flow	mgd	12.18	10.07	14.78
2002 Flow	mgd	11.61	10.12	14.87
2003 Flow	mgd	11.86	10.34	14.23
2004 Flow	mgd	12.04	10.26	13.73
2005 Flow	mgd	12.01	10.13	15.00
Summer Temperature	°C	25.0	---	---
Winter Temperature	°C	20.0	---	---
BOD ₅	mg/L	5.7	1	19
TSS	mg/L	6.8	1	50
TKN	mg/L	12.7	3.2	23
Nitrate (NO ₃)	mg/L	3.8	0.2	22
Chloride	mg/L	73	56	141
Chlorine Residual	mg/L	5.0	0.8	15.5
pH	pH units	---	5.14	7.76
EC	µmhos/cm	661	309	939

10. The U.S. Environmental Protection Agency (USEPA) and this Regional Water Board have classified this discharge as a major discharge.
11. The City obtains drinking water from a network of wells. In the City's 2000 Water Supply Report, 1998-2000 concentrations in the City's source water of total dissolved solids, conductivity at 25°C, and hardness averaged 144 mg/L, 229 µmhos/cm, and 82 mg/L, respectively.
12. The discharge EC is, on average, about 410 µmhos/cm greater than source water EC (Finding Nos. 8 and 11).

13. Discharger SMRs from 2001 through 2005 indicate that winter influent flows are not higher than summer flows, demonstrating insignificant inflow and infiltration to the collection system during winter months.
14. Discharger SMRs from 2001 through 2005 indicate the WWTF treatment process is not fully nitrifying, as its effluent consistently contains concentrations of TKN that are significantly greater than the nitrate concentrations. The discharge contains ammonia (Finding No. 8), which is toxic to aquatic life (Finding No. 77).
15. The Discharger provided toxicity testing data that indicated WWTF effluent, after laboratory dechlorination, failed the chronic toxicity test for algae (*Selenastrum capricornutum*) growth. Reasons for the toxicity have not been determined.
16. The Discharger contends the 15.65 acres of unlined sludge drying beds to be “self-sealed” through use and that this natural process is adequately protective of area groundwater. The “self-sealing” process has proven ineffective for protecting groundwater quality at other wastewater treatment facilities within the region and there is insufficient data to determine its effectiveness here. The Discharger has indicated that each time it removes dried sludge from the beds it inadvertently removes some surface soil from the bottom of the beds. This practice likely diminishes the effectiveness of any “self-sealing” process to protect groundwater quality.
17. The City’s has discharged to the WWTF’s disposal ponds approximately 30% of the time since making Mill Creek and the Use Area the primary means of disposal in 1996. For several years, it has allowed haulers of grease trap waste to discharge to one of its unused disposal ponds. The grease waste has high BOD₅ (exceeding 20,000 mg/L) and total nitrogen up to 1,000 mg/L. While the waste is not likely hazardous, it is a designated waste, as defined in Section 13173(b) of the California Water Code (CWC); the disposal impoundment does not qualify as a Class II impoundment and the Discharger had not filed a RWD for this unauthorized discharge. The Discharger was cited, in a Notice of Violation issued on 7 March 2002, for unauthorized discharge of grease trap wastes in violation of Order No. 97-061. The City changed its method of handling the grease trap waste in November 2002 and is now accepting the waste at the WWTF headworks and treating it in the anaerobic digesters.

INDUSTRIAL PRETREATMENT PROGRAM

18. The City’s Industrial Pretreatment Program (IPP) and Sewer Ordinance were approved by Notice of Decision dated 5 May 1983.
19. Cease and Desist Order (CDO) No. 97-062, adopted on 28 March 1997 and rescinded 18 October 2002, required, in general, the Discharger to enforce fully its IPP and establish industrial discharger EC effluent limits; and to define, contain, and cleanup degraded groundwater.

An olive processor left and other high EC dischargers made modifications, and the Discharger has since complied with the effluent limitation for EC.

20. On 25 March 1999, the City entered into a Memorandum of Understanding (MOU) with the Goshen Community Services District (District), agreeing that the City would (a) be responsible for day-to-day management, operation and maintenance of the WWTF and its collection system; and (b) regulate Goshen industrial discharges to the WWTF through the City's IPP. Copies of the MOU and Ordinance are under legal review by the State Water Resources Control Board (State Water Board). Preliminary findings of State Water Board's review of the City's ordinance (Visalia Municipal Code Chapter 13.08); the District's ordinance SO96-1, revised 16 October 1995; the 5 June 1995 Wastewater Service Agreement (Agreement); and the 25 March 1999 MOU include the following:
 - a. The City's and District's ordinances require revisions to be considered legally adequate.
 - b. The Agreement and the MOU do not provide the City with the authority necessary to enable it to fully implement and enforce its IPP against industrial users in the District's jurisdiction.

21. There are 17 Significant Industrial Users (SIUs), seven of which are listed as Federal Categorical dischargers pursuant to Title 40 Code of Federal Regulations (CFR). One SIU is Southern California Edison (SCE), which discharges groundwater treated to remove phenol and pentachlorophenol into the collection system. The Discharger indicates that the groundwater treatment process employed by SCE has consistently reduced the concentrations of these two constituents to nondetectable levels. State Water Board's legal review in 2002 indicates the City is in substantial compliance with the implementation of its IPP. The City's and the District's ordinances and the multijurisdictional agreement between the City and the District need to be revised to make them legally acceptable in accordance with State Water Board's legal review. On 12 April 2006, the City submitted a revised ordinance which is currently under legal review by State Water Board. Completion and adoption of the District's revised ordinance and MOU are currently scheduled for 24 June 2006. Provision H.16 of this Order contains a compliance schedule for completion of the remaining necessary revisions.

WATER RECYCLING

22. The 1988 Memorandum of Agreement (MOA) between California Department of Health Services (DHS) and the State Water Board on the use of recycled water establishes basic principles relative to the agencies and the regional water boards. In addition, the MOA allocates primary areas of responsibility and authority between these agencies, and provides for methods and mechanisms necessary to assure ongoing, continuous future coordination of activities relative to the use of recycled water in California.

23. Domestic wastewater contains pathogens harmful to humans that are typically measured by means

of total or fecal coliform, as indicator organisms. DHS, which has primary statewide responsibility for protecting public health, has established statewide criteria in Title 22, California Code of Regulations (CCR), Section 60301 et seq., (hereafter Title 22) for the use of recycled water and has developed guidelines for specific uses.

24. Blain Farms (Grower) farms the walnut orchard of the City's Use Area under a yearly management agreement with the City that extends to 1 December 2006.
25. In 1994, DHS approved the City's recycling of WWTF effluent on the Use Area, using flood-irrigation of the Use Area provided:
 - a. The most probable number of total coliform bacteria in recycled water never exceeds a 7-day median of 23 per 100 mL or a 2-consecutive-day maximum of 240 per 100 mL;
 - b. Samples of recycled water for bacteria analysis were collected at Discharge 002;
 - c. Reclaimed water is not applied within 30 days of walnut crop harvest;
 - d. The Grower always informs the recipient of walnuts that the walnuts contain sewage-borne organisms on the hulls;
 - e. Walnuts are handled in a good hygienic manner that prevents contamination of shells when the hulls are removed; and
 - f. If used for human consumption, the walnut meats are cleaned by a procedure that meets the California Food Sanitation Act (Health and Safety Code, Division 22, Chapter 7).
26. By letter dated 19 August 2002, DHS commented on the Discharger's Title 22 engineering report dated 7 June 2002 and the tentative waste discharge requirements for the City's discharge circulated 31 July 2002. The DHS letter recommended that the walnut orchard (Use Area) be irrigated with recycled water that at least meets the requirements of the disinfected secondary-2.2 recycled water as defined in Title 22 Section 60301.220. The letter further indicated that this will necessitate an increase in treatment requirements (i.e., chlorination), and noted that the WWTF's chlorine contact basins are designed to produce an effluent meeting the disinfected secondary-2.2 coliform concentrations at a 16.6 mgd flow.

The DHS letter also recommended that the monitoring and reporting program include minimum effluent monitoring requirements for total coliform and notification within 24 hours of failure of chlorination equipment, loss of detectable chlorine residual, and effluent total coliform greater than 240 MPN/100 mL. The letter further recommended that the City install a continuous chlorine residual analyzer that will trigger an alarm based on low or nondetectable chlorine residual.

In a letter to the regional water boards dated 8 January 2003, the DHS Food and Drug Branch (which has oversight of all food and drug products) indicated its position concerning the application of recycled water on orchard and vineyard crops. It believes orchard and vineyard crops will likely come in contact with recycled water or soil irrigated with recycled water through

typical harvesting practices. As a result, the Food and Drug Branch recommends that orchard and vineyard crops be irrigated with recycled water that at least meets the requirements of the disinfected secondary-2.2 recycled water as defined in Title 22 Section 60301.220. This letter supports DHS Office of Drinking Water recommendations in the 19 August 2002 letter regarding the level of treatment necessary for the recycled water applied to the City's walnut orchard (Use Area).

27. The Discharger, by letter dated 9 September 2002, indicated that, to consistently comply with the 2.2 MPN/100 mL total coliform limit, the City would need to modify the chlorine contact basins and increase the detention time. It questioned whether these modifications would be cost effective. The Discharger also indicated that it would likely suspend irrigating the walnut orchard until significant modifications to the chlorine contact basins could be completed. Discharge to the walnut orchard was suspended in May 2002

SURFACE HYDROLOGY, SOILS, LAND USE, AND GROUNDWATER

28. The WWTF lies within the Tulare Lake Basin, specifically within the Kaweah Delta Hydrologic Unit (No. 558.10), as depicted on interagency hydrologic maps prepared by the California Department of Water Resources (DWR) in 1986.
29. The WWTF is in a semi-arid region with an average annual precipitation of 10.1 inches. The reference evapotranspiration for the City is 54.3 inches, according to Title 23, CCR, Section 495.
30. The WWTF lies within the 100-year flood hazard, according to maps published by the Federal Emergency Management Agency. However, the City indicates it constructed the WWTF above the 100-year flood plain elevation.
31. Areal topography indicates a slope of about 1.2 feet per 1,000 feet towards the southwest. The Discharger retains storm water runoff on the WWTF property and either pumps the runoff to the headworks or directs the flows to dedicated unlined storm water retention ponds.
32. Mill Creek flows southwesterly from Lake Kaweah in the foothills east of the City and is ephemeral, conveying short-duration storm water runoff, flood releases from Lake Kaweah, and occasionally delivering irrigation supply water from Lake Kaweah or the Friant-Kern Canal. As Mill Creek passes through the City, it receives additional storm water along with two minor NPDES discharges consisting of non-contact cooling water from the Visalia Medical Clinic (WDRs Order No. 97-119, NPDES No. CA0080900) and from Kraft, Inc. (WDRs Order No. 97-122, NPDES No. CA0081256). Except for periods of significant storm water runoff, flood releases from Lake Kaweah, or irrigation deliveries, Mill Creek upstream of the City's discharge is usually dry. Irrigation deliveries through Mill Creek typically occur from the end of May through mid-July and terminate at the diversion at Persian Weir, several miles upstream from the City's discharge. Accordingly, Mill Creek downstream of Discharge 001 is an effluent dominated water body. Due to Mill Creek's gradual slope, effluent backs about 5,000 feet upstream of Discharge 001 and creates a condition of "backwater" that does not qualify as upstream receiving water.

33. The City discharges to Mill Creek year-round except for about five weeks in the summer when Kaweah Delta Water Conservation District (District) conducts routine maintenance of the channel and for relatively short-duration flood flows, storm water runoff, or irrigation deliveries. The City owns 160 acres of percolation ponds roughly four miles west of the WWTF. About one mile downstream from Discharge 001, a diversion structure within Mill Creek allows the District to divert Mill Creek flows to these basins as depicted in Attachment A. The basins are used to increase groundwater recharge. The City currently owns the property occupied by the percolation basins. Flow not directed to the basins flows south in Mill Creek and may occasionally reach Cross Creek several miles downstream. Cross Creek is ephemeral and flows primarily during heavy storm water runoff and flood releases from Lake Kaweah. The District indicated that Cross Creek occasionally flows to the Tulare Lake Bed, but believes effluent reaching Cross Creek would likely flow only a short distance due to the size and dryness of the creek bed. Agricultural lands bound the portion of Mill Creek between Discharge 001 and Cross Creek.
34. Before the City initiated regular discharge to Mill Creek in 1996, the creek would go dry during summer months. For the five years from 2001 to 2005, the City discharge 71 percent of the days to Mill Creek. The California Department of Fish and Game (DFG) determined that Mill Creek was not a fishery, but has not provided a determination regarding other forms of aquatic life. One definition of “fishery” is a place where fish can be caught. The California Fish and Game Code does not specifically define “fishery” but defines “fish” in Section 45 as meaning “wild fish, mollusks, crustaceans, invertebrates, or amphibians, including any part, spawn, or ova thereof.” Now that Mill Creek conveys WWTF effluent on a regular basis, it has the potential to support warm freshwater aquatic habitat. Although fish enter Mill Creek with irrigation deliveries from Terminus Reservoir or the Friant-Kern Canal, hydrologic modifications (e.g., diversion weirs and gates) prior to its terminus diversion at Persian Weir preclude a fish habitat downstream of Persian Weir. Intermittent and ephemeral flow conditions prior to 1996 prevented attainment of a warm freshwater habitat. Flow conditions changed by the City’s regular discharge are at sufficient rates to attain this use if effluent is of sufficient quality. Discharges from the WWTF have sufficiently changed the flow regime of Mill Creek downstream of Discharge 001 that this reach of Mill Creek has the potential to support a warm freshwater habitat if the toxicity caused by chlorination is removed from the effluent through dechlorination.
35. Discharger SMRs for 2005 do not indicate the Discharger exceeded the receiving surface water limitations of Order No. 97-061 other than the limit for maximum incremental pH change. The receiving water limitation for maximum incremental pH change was exceeded on several occasions due to the effluent dominated nature of the receiving water. Order No. 97-061 did not specify limits associated solely with protection of warm freshwater habitat and did not require the Discharger to conduct effluent and receiving water toxicity monitoring. In completing Form 200 for NPDES renewal, the Discharger was required to provide toxicity testing data, which indicated its effluent, after laboratory dechlorination, failed the chronic Selenastrum Algae growth toxicity test. The Discharger has not conducted a Toxicity Identification Evaluation to determine the cause of toxicity, although chlorine and ammonia are likely toxicants.
36. Area soils are moderately permeable alluvial deposits originating in the Sierra Nevada Mountains

to the east. The surface soil is classified as Tagus fine sandy loam. The geology of the Visalia area generally consists of deep underlying metamorphic and granitic rock overlain by hundreds of feet of alluvium. More specifically, the first 100 feet below ground surface (bgs) contains interbedded sand zones that are periodically saturated depending on the lateral proximity to surface water (e.g., disposal and percolation ponds and canals). The interbedded sand zone is underlain by relatively thin saturated beds of sand mixed with clay, clayey silt, and silt that extend to depths of 240 to 275 feet bgs. The RWD designates groundwater within the interbedded sand zone as the upper aquifer, and indicates the majority of the water supply wells in the area are completed within this zone. The highly impermeable and regionally extensive E-clay layer lies beneath these soils and is approximately 20 feet thick. Stratigraphic and water quality data indicate the E-clay to be the first effective aquitard in the upper portion of the regional aquifer, however its effectiveness as an aquitard has been reduced by numerous wells that penetrate the E-clay layer. The RWD identifies the lower aquifer as the groundwater lying beneath the E-clay.

37. Land use in the WWTF vicinity is primarily agricultural and includes numerous dairies not regulated by WDRs. Farmers along Mill Creek with riparian water rights use creek water to irrigate their crops. Area dairies also irrigate associated fodder crop acreage with dairy wastewater. Regional land use data compiled by DWR indicates fodder crops of furrow-irrigated corn and border strip-irrigated alfalfa are the primary crops and irrigation methods. A small percentage of land in the WWTF and discharge area contains walnut and pistachio orchards. Effluent discharged to Mill Creek meets the quality criteria of Disinfected Secondary-23 recycled water, as defined in Title 22, CCR, Section 60301.225. Accordingly, use of effluent to irrigate fodder crops by riparian diverters is consistent with Title 22 recycling criteria. While Mill Creek downstream of the City's discharge is accessible by the public, there is no nearby habitation except for farm residences, and limited public use of the discharge area.
38. Pursuant to Order No. 97-061, the Discharger collected soil samples on an annual basis from seven locations at the Use Area. Soil samples were collected from depths of 2, 4, and 6 feet bgs and analyzed for nitrate-nitrogen and total kjeldahl nitrogen. The sampling results are ambiguous with nitrogen concentrations attenuating with depth at some locations and increasing with depth at others.
39. Regional first-encountered groundwater flows west-southwesterly and occurs about 80 to 90 feet bgs, according to information in *Lines of Equal Depth to Water in Wells, Unconfined Aquifer*, published by DWR in Spring 2000.
40. In 1986, the Discharger installed five groundwater monitoring wells (MW-A, MW-B, MW-C, MW-D, and MW-E) to depths from 30 to 60 feet bgs. At that time, the Discharger used the disposal ponds to dispose of about half the effluent flow, causing groundwater to mound beneath the ponds. With the lowering of the regional groundwater table that occurred throughout the San Joaquin Valley from the 1987 - 1992 drought, all but MW-B have been dry from 1992 and MW-B has been dry since about 1993. In 1992, the Discharger installed MW-F, MW-G, and MW-H, upgradient, on-site, and down gradient of the WWTF. These were installed to about 100 to 110 feet bgs. MW-F, about one mile northeast of the WWTF, is adjacent to an irrigation ditch and water quality data indicates the well may reflect high quality percolated irrigation water, which is

not representative of regional groundwater. A monitoring well at a more appropriate location is necessary to establish representative regional background groundwater quality.

41. In CDO No. 97-062, this Regional Water Board found that groundwater underlying and downgradient of the WWTF was degraded with salinity constituents (e.g., sodium, chloride, sulfate, and calcium). Groundwater elevation and chemical data indicated a mound of salt-degraded groundwater radiating outward from beneath the WWTF disposal ponds. The Discharger measured the highest EC value in MW-G at 1,300 $\mu\text{mhos/cm}$ in October 1993.
42. Because of CDO No. 97-062, the City defined to some degree the horizontal and vertical extent of the degraded groundwater. The City installed ten additional groundwater monitoring wells in 1997 such that nested wells at locations H, J, and K monitor the upper groundwater, groundwater just above the E-clay, and groundwater just beneath the E-clay.
43. The 30 January 1998 *Groundwater Investigation Report* (Report), by Boyajian & Ross, Inc., identified the plume of degraded groundwater emanating from beneath the WWTF's disposal ponds. The Report also identified groundwater collected from periphery wells that show significant adverse impacts from dairies (e.g., degradation for salinity constituents and nitrate). The Report proposed to pump agricultural wells at the WWTF margin to hydraulically control the highest concentrations of effluent-derived salts in the upper aquifer and either discharge to Mill Creek or irrigate the Use Area. Agricultural wells generally withdraw groundwater through vertically extensive perforations and are not generally efficient in achieving plume containment. The Report proposed for the upper aquifer numerical limits for specific waste constituents (i.e., total coliform, EC, iron, nickel, chloride, fluoride, sulfate, TDS, nitrate, and sodium). The proposed limits reflected either (1) concentrations necessary to preserve beneficial uses or (2) maximum concentrations detected in groundwater for the past five years, whichever proved lower. The Report recommended the limits be reviewed every five years and, where appropriate, reduced as groundwater quality conditions improved with the City's compliance with the effluent limitation for EC and reliance on a Mill Creek discharge. The Report's approach is not fully consistent with water quality plans and policies and does not establish receiving water limitations sufficiently stringent to protect existing and anticipated beneficial uses. Further documentation is necessary to develop appropriate groundwater limitations, and it is fair and equitable that the Discharger be allowed a reasonable time to compile this documentation.
44. The City discharges approximately 29% of its effluent to the onsite disposal ponds each year. Recent groundwater data indicate that the groundwater mound beneath the WWTF has subsided and the west-southwest regional groundwater flow direction has been reestablished.
45. The Discharger failed to conduct required semiannual groundwater monitoring in 2005. The most recent groundwater monitoring data is summarized in the Discharger's *Spring 2006 Groundwater Monitoring Report* (Spring 2006 Report) and indicates a reduction in the high salinity groundwater identified in the Discharger's 30 January 1998 Report. MW-G, at the southeast end of the WWTF, initially showed the greatest impact with EC of 1,300 $\mu\text{mhos/cm}$ and chloride above 120 mg/L. Groundwater at MW-G now has EC and chloride of about 1,200 $\mu\text{mhos/cm}$ and 75 mg/L, respectively. Similar reductions in salt constituent concentrations occurred in MW-J1, MW-K1,

and MW-M. Regional groundwater pumping of agricultural wells may have achieved what the Discharger proposed to implement pursuant to the CDO.

46. The City's Spring 2002 Report included a water sample from MW-B for the first time since 1993. Further samples were collected in fall 2004 and spring 2006. Results of the spring 2006 sample show EC of 720 $\mu\text{mhos/cm}$, 68 mg/L chloride, and 47 mg/L nitrate (as N). The drinking water standard for nitrate is 10 mg/L as N. Possible sources of the salinity degradation and nitrate pollution may be the City's previously unpermitted disposal of grease trap wastes to WWTF disposal ponds, use of unlined sludge handling facilities, and nearby agricultural practices.
47. The City's nested groundwater monitoring wells at location H, identified as MW-H1, -H2, -H3, are within one mile of six dairies. Samples collected from MW-H1 in 2001, 2002, 2003, 2004, and 2006 indicate an average EC of 1,187 $\mu\text{mhos/cm}$ and average concentrations of chloride and nitrate (as N) of 92 and 148 mg/L, respectively. Groundwater samples collected during the same period from MW-L, within $\frac{1}{4}$ mile of three dairies, showed an average EC of 1,012 $\mu\text{mhos/cm}$, and average concentrations of chloride and nitrate (as N) of 48 mg/L and 108 mg/L, respectively.

BASIN PLAN AND REGULATORY CONSIDERATIONS

48. *Water Quality Control Plan for the Tulare Lake Basin, Second Edition*), (hereafter Basin Plan) designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve water quality objectives for all waters of the Basin. The Basin Plan incorporates plans and policies of the State Water Board by reference, including State Water Board Resolution No. 68-16 (hereafter Resolution 68-16 or the "Antidegradation" Policy) and State Water Board Resolution 92-49, "Policies and Procedures for Investigation and Cleanup and Abatement of Discharges Under Water Code Section 13304."
49. State Water Board Resolution 92-49 addresses procedural requirements for investigation as well as cleanup and abatement of unauthorized discharges. A discharger shall be required to conduct step-by-step investigations for this purpose, to submit written workplans and reports for all elements and phases, to conform to the provisions of Resolution 68-16, and to cleanup and abate the effects of the discharge in a manner that promotes attainment of background water quality or the highest water quality that is reasonable and which does not exceed water quality objectives. Chapter IV of the Basin Plan contains Regional Water Board policies on *Antidegradation* and *Ground Water Cleanups* that further explain and enhance these State Water Board policies.
50. Water in the Tulare Lake Basin is in short supply, requiring importation of surface waters from other parts of the State. The Basin Plan encourages reclamation on irrigated crops wherever feasible and indicates that discharges to surface water and evaporation of reclaimable wastewater will not be acceptable permanent disposal methods where the opportunity exists to replace an existing use or proposed use of fresh water with recycled water. Where appropriate, the Basin Plan allows a timetable for implementing reclamation. The City's discharge constitutes a significant source of agricultural supply water and groundwater recharge.

51. The Basin Plan identifies the greatest long-term problem facing the entire Tulare Lake Basin as the increase in salinity in groundwater, which has accelerated due to the intensive use of soil and water resources by irrigated agriculture. The Basin Plan describes numerous salt management recommendations and requirements. The latter includes the requirement that discharge to land from wastewater treatment facilities not contain an EC greater than source water plus a maximum 500 $\mu\text{mhos/cm}$, or less if necessary to achieve water quality objectives. Accordingly, the Basin Plan allows for salinity degradation and focuses on controlling the rate of increase. The Basin Plan limits discharges to areas that recharge to good quality groundwater to a maximum EC of 1,000 $\mu\text{mhos/cm}$, and a maximum concentration of chloride and boron of 175 and 1.0 mg/L, respectively. These effluent limits are considered best practicable treatment and control (BPTC).
52. Mill Creek, not specifically identified in the Basin Plan, is a Valley Floor Water where designated beneficial uses are addressed within a group identified as Valley Floor Waters. Beneficial uses designated by the Basin Plan for Valley Floor Waters, and thus Mill Creek downstream of the discharge, are listed below along with a description of what is known specific to this reach of Mill Creek:
 - a. *Agricultural Supply (AGR)*. The State Water Board has granted water rights to existing water users downstream of the discharge for irrigation uses. The discharge comprises most of the flow in Mill Creek during much of the year from discharge point to percolation ponds. Mill Creek water downstream of the discharge point is currently used to irrigate fiber and fodder crops (e.g., pasture, Sudan grass, silage corn, wheat, oats, barley, and alfalfa). It has yet to be documented what other crops have the potential to be grown with water from Mill Creek.
 - b. *Industrial Service Supply (IND) and Industrial Process Supply (PRO)*. The case file contains no evidence that Mill Creek water is utilized or likely to be utilized for these purposes.
 - c. *Water Contact and Noncontact Water Recreation (REC-1 and REC-2)*. Mill Creek downstream of the discharge point flows through areas where there is public access, but little human habitation. While the case file contains no evidence of REC-1 or REC-2 occurring, the presence of water in a natural setting accessible to the public makes it probable both do and will occur.
 - d. *Warm Freshwater Habitat (including preservation or enhancement of aquatic habitats, vegetation, fish, or wildlife, including invertebrates) (WARM) and Wildlife Habitat (WILD)*. Most of the flow in Mill Creek downstream of the discharge is diverted to four percolation ponds approximately four miles downstream from the WWTF. Thus, Mill Creek is normally dry downstream of the point where flow is diverted to the percolation ponds. This effectively precludes upstream migration of warm-water fish species from any warm-water fisheries downstream of Mill Creek. Mill Creek has the potential to support and may have historically supported aquatic life such as crayfish and frogs. Regional Water Board inspectors observed and documented a muskrat swimming in Mill Creek about 1.5 miles downstream of the discharge point during an inspection on 2 April 2003. Regional Water Board inspectors have also observed various aquatic flora downstream of the discharge and

bullfrog tadpoles in a downstream tributary to Mill Creek. Aquatic life may migrate to the downstream reach during periods of continuity with the reach above Persian Weir, as during flood releases. The lethal effects of chlorine, and possibly even ammonia, in the current effluent likely adversely affects habitat. At the time Order No. 97-061 was adopted, this Regional Water Board exercised judgment authorized by the Basin Plan to determine on a case-by-case basis whether a designated beneficial use was really applicable to the reach or portion of a water body. It determined then that WARM was not applicable and thus Order No. 97-061 does not establish an effluent limitation for residual chlorine nor require toxicity monitoring. The exclusion of WARM was due to the DFG determination cited in Finding No. 34 that was made based on the intermittent and ephemeral flow conditions in Mill Creek prior to 1996, the year the City initiated its regular discharges. Now that Mill Creek from the point of discharge sustains a regular flow for most of the year, it is reasonable to expect the current flow conditions are capable of attaining and maintaining some degree of WARM and WILD. WARM must be protected from toxic concentrations of chlorine and other pollutants. Further, a State Water Board precedential decision (Finding No. 54) and a USEPA objection to the judgment provision of the Basin Plan has since changed the Regional Water Board's application of rule.

- e. *Rare, Threatened, or Endangered Species* (RARE). The case file indicates DFG determined that Mill Creek does not support rare and endangered species.
 - f. *Groundwater Recharge* (GWR). Water conveyed in Mill Creek infiltrates along its reach and is diverted to percolation basins that serve to recharge groundwater, which provides a source of domestic and agricultural water supply.
53. The Basin Plan recognizes that some uses may not currently exist and probably may not be supported in the future, at least for certain portions of the receiving waters. Thus, consideration for removing some of the beneficial uses may be appropriate. The Regional Water Board, however, is not authorized to remove such uses unless it follows the public processes required by state law and the federal regulations (i.e., by amending the Basin Plan). Although Mill Creek may not support all the designated beneficial uses, unless the Basin Plan is amended specifically for this, all designated beneficial uses must be protected from impacts of the discharge.
54. The State Water Board adopted Order No. WQ2002-0015 on 3 October 2002 concerning regulation of Vacaville's Easterly Wastewater Treatment Plant. This precedential decision provides guidance on implementing the protection of designated beneficial uses in an effluent dominated water body where the Regional Water Board believes actual and probable uses may warrant re-evaluation. Some of the guidance may be relevant to the Visalia WWTF discharge.
55. The beneficial uses for Mill Creek affecting the most stringent effluent limitations of this Order are REC-1 and WARM. Whether other designated beneficial uses exist or not is unlikely to change the effluent limitations of this Order. This Regional Water Board determined that WARM and REC-1 are existing and probable beneficial uses in Finding No. 52.

Although REC-1 and WARM exist or are probable, a process exists for reconsideration of both

these. The facts concerning WARM appear nonrefutable. If the Discharger provides facts to establish that REC-1 does not exist and is unlikely to occur in the future in Mill Creek, then this beneficial use can be fully evaluated through a Use Attainability Analysis (UAA) and changed if appropriate. As State Water Board Order No. WQ2002-0015 makes clear, a discharger bears the responsibility for providing the information to support this evaluation. To the extent that REC-1 designation/designation is relevant in this case, the Discharger should consider evaluating alternatives for the discharge to determine the most cost effective course of action (e.g., increased treatment, alternative methods of disposal, studies to support redesignating beneficial uses, etc.). During a 27 July 2006 meeting with Regional Water Board staff, the City indicated its intent to complete studies including a facilities plan that evaluates whether there is a need for continued NPDES discharge, and if so, the feasibility of providing information necessary to support redesignation of WARM and REC-1 in Mill Creek.

56. Based on available information and the Discharger's application, Mill Creek, absent the discharge from the WWTF, would be a low-flow/intermittent stream. The ephemeral nature of Mill Creek means that no credit for receiving water dilution is available for determining concentrations in effluent that will be protective of designated beneficial uses. As the receiving water maintains WARM, pollutants may not be discharged in concentrations that cause harm to aquatic life.
57. The Basin Plan designates the beneficial uses of area groundwater as municipal and domestic supply (MUN), industrial service supply (IND), industrial process supply (PRO), agricultural supply (AGR), and water contact recreation (REC-1), and noncontact water recreation (REC-2).
58. The Basin Plan establishes numeric and narrative water quality objectives for surface waters and groundwater within the basin. Numeric water quality objectives are limits obviously quantified. Narrative water quality objectives are unquantified limits expressing the level of protection for beneficial uses from specific pollutants and categories of pollutants. Objectives for chemical constituents in, and toxicity and tastes and odors of, groundwater take both forms. The toxicity objective requires that groundwater be maintained free of toxic substances in concentrations that produce detrimental physiological responses in humans, plants, or animals. The chemical constituent objective states that groundwater shall not contain chemical constituents in concentrations that adversely affect any beneficial use or exceed drinking water Maximum Contaminant Levels adopted by DHS. The tastes and odors objective prohibits taste or odor producing substances in concentrations that cause nuisance or adversely affect beneficial uses.
59. Pursuant to CWC Sections 13263(a) and 13377, waste discharge requirements must implement the Basin Plan and consider the beneficial uses and water quality objectives reasonably required to protect the uses, the need to prevent nuisance, as well as other waste discharges and conditions in the area and groundwater. The Basin Plan requires that waste discharge requirements apply all water quality objectives for each constituent to ensure that discharges do not cause groundwater to contain chemical constituents, toxic substances, radionuclides, pesticides, or taste- or odor-producing substances in a concentration that adversely affects any beneficial use. To satisfy all objectives, the most stringent objective for each constituent must be met.
60. The Basin Plan procedure for applying water quality objectives as terms of discharge in waste

discharge requirements requires maintenance of the existing quality of groundwater except where an adverse change is consistent with Resolution 68-16. Resolution 68-16 requires that waste discharges occur in a manner that maintains high quality waters of the State. Any change in quality can only occur after full application of BPTC of the waste and must be consistent with maximum benefit to the people of the State, not unreasonably affect any beneficial use, and not result in water that exceeds any water quality objective.

61. To protect the designated use of municipal and domestic supply, water quality objectives require, at a minimum, that waters not exceed maximum contaminant levels (MCLs) specified in the following provisions of Title 22, California Code of Regulations: sections 64431 (Inorganic Chemicals, including Fluoride); 64443 (Radioactivity); 64444 (Organic Chemicals); and 64449 (Secondary MCLs – Consumer Acceptance Limits).
62. The Basin Plan's incorporation of MCLs by reference is prospective to incorporate changes to MCLs as changes in Title 22 take effect. Should a change occur to an MCL and that MCL becomes the most stringent objective, implementation of the objective would be affected through reopening of this Order and consideration of a time schedule.
63. The Basin Plan sets forth a procedure for translating narrative water quality objectives into numeric receiving water quality limits, directing that relevant numeric criteria and guidelines developed and published by other agencies and organizations and any other relevant criteria be considered. Wescot and Ayers in a 1985 publication *Water Quality for Agriculture, Food and Agriculture Organization of the United Nations – Irrigation and Drainage Paper No. 29*, (hereafter Guidelines) provides relevant information regarding the quality of irrigation water to sustain various crops.
64. Quantifying a narrative water quality objective requires a site-specific evaluation of each waste constituent for consistency with the narrative objective using the procedures set forth in the Basin Plan. These translation procedures require this Board consider, among other things, site-specific hydrogeologic and land use factors and relevant numerical criteria and guidelines developed or published by other agencies and organizations.
65. The major constituents of concern in assessing the quality of water for agriculture are salinity (expressed as EC or TDS), boron, chloride, and sodium. In general, animal uses are less sensitive than crops for these constituents. Salinity reduces crop growth by reducing the ability of plant roots to absorb water. The salt tolerance of crops also depends on the frequency and type of irrigation (e.g., drip, furrow, or sprinkler irrigation). Sprinkler irrigation has the greatest impact due to foliar absorption of salt. Absorption and foliar injury are further influenced by high temperature, low humidity, and drying winds, type of sprinkler, and timing of irrigation. Boron is an essential element but can become toxic to some plants when concentrations in water even slightly exceed the amount required for optimal growth. Like salt tolerance, boron tolerance varies with the climate, the soil, and the crop. While boron sensitivity appears to affect a wide variety of crops, sodium and chloride toxicities are mostly limited to tree crops and woody perennials (e.g., citrus, stone-fruit, and vineyard). A predominance of sodium relative to other ions in irrigation water may disperse soil aggregates, which in turn, affects virtually all crops by decreasing the permeability of the soil by water and air.

66. In determining the concentrations of salinity, boron, chloride, and sodium in groundwater associated with no adverse affects on agricultural beneficial use in a given area, it is likely that multiple criteria apply. While the most stringent concentration becomes the constraining criterion, it is not necessarily the concentration that is required to protect all crops that have the potential to be grown in the area.
67. The Guidelines present the maximum EC of irrigation water for various crops with respect to percent crop reductions (i.e., 0, 10, 25, and 50). The table below extracts irrigation water EC data (in $\mu\text{mhos/cm}$) for crops known to be cultivated in the WWTF vicinity (as described in Finding No. 37). As indicated below, crop yield reductions are not evident when irrigating all crops currently cultivated in the WWTF vicinity with water having an EC of less than 1,100 $\mu\text{mhos/cm}$.

<u>Crop</u>	<u>0% Reduction</u>	<u>10% Reduction</u>
Walnut	1,100 ¹	1,600 ¹
Corn (Forage)	1,200	2,100
Alfalfa	1,300	2,200

¹ Value from 1976 version of Ayers and Westcot's *Water Quality for Agriculture*

68. With respect to specific-ion toxicity, the Guidelines and other similar references indicate that significant reductions in crop yields can be expected if boron content exceeds 0.7 mg/L for boron-sensitive crops (e.g., walnut). Similarly, reductions in yields of sodium- and chloride-sensitive crops are evident when sprinkler irrigated with water containing sodium and chloride concentrations of up to 3 milliequivalents per liter (me/L) (i.e., 69 mg/L sodium and 106 mg/L chloride). If such crops are not sprinkler irrigated, the maximum concentrations of sodium and chloride associated with no apparent yield reduction may increase; however, the extent of the increase is typically crop specific.
69. The use of municipal wastewater for irrigation at agronomic rates will have a comparable impact on groundwater as fresh water of comparable quality. Beneficial reuse of wastewater conserves freshwater resources and is encouraged within water short areas by the Basin Plan as well as legislature (CWC 13500 et. Seq.).

EFFLUENT LIMITATIONS AND REASONABLE POTENTIAL

70. Effluent limitations, and toxic and pretreatment effluent standards established pursuant to Sections 301 (Effluent Limitations), 302 (Water Quality Related Effluent Limitations), 304 (Information and Guidelines), 306 (National Standards of Performance), and 307 (Toxic and Pretreatment Effluent Standards) of the Clean Water Act (CWA) [Title 33, United States Code (U.S.C.) 1251, 1312, 1311, and 1317, respectively], and amendments thereto are applicable to the discharge.
71. The USEPA promulgated the *National Toxics Rule* (NTR) on 5 February 1993 and the *California Toxics Rule* (CTR) on 18 May 2000. These Rules contain water quality criteria (WQC) applicable to this discharge. The State Water Board adopted the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (known as the *State Implementation Plan* or SIP) on 18 May 2000, which contains implementation procedures for criteria of the NTR and the CTR. The SIP was amended by State Water Board on 24 February 2005.
72. Federal regulations (40 CFR Section 122.44(d)) require effluent limitations for all pollutants that are or may be discharged at a level that will cause or have the reasonable potential to cause, or contribute to an in-stream excursion above a narrative or numerical water quality standard. This Order contains provisions that:
- a. require the Discharger to provide information as to whether the levels of *CTR*, *NTR*, and USEPA priority toxic pollutants in the discharge cause or contribute to an in-stream excursion above a water quality objective;
 - b. require the Discharger to submit information to calculate effluent limitations for those constituents in the discharge found to have a reasonable potential to cause or contribute to an in-stream excursion above a water quality objective; and
 - c. allow the Board to reopen this Order and include effluent limitations for those constituents.
73. Section 13263.6(a), CWC, states:
- The regional board shall prescribe effluent limitations as part of the waste discharge requirements of a POTW [Publicly Owned Treatment Works] for all substances that the most recent toxic chemical release data reported to the state emergency response commission pursuant to Section 313 of the Emergency Planning and Community Right to Know Act of 1986 (42 U.S.C. Sec. 11023) indicate as discharged into the POTW, for which the state board or the regional board has established numeric water quality objectives, and has determined that the discharge is or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to, an excursion above any numeric water quality objective.
- The Discharger has not discharged toxic chemicals through 2003, according to the Right To Know Network Toxic Release Inventory Database (www.rtknet.org/new/tri).
74. Uniform guidelines for Wastewater Disinfection (Uniform Guidelines) prepared by DHS recommend levels of treatment for various wastewater discharge situations for health protection. Uniform Guidelines consider both available dilution and the type of receiving water use. For

ephemeral streams with little or no natural flow during all or part of the year, there is no nearby habitation and limited use of the discharge area and the beneficial use of the discharge area does not include recreation and contact with the discharge is not encouraged, the Uniform Guidelines recommend a median coliform MPN not exceeding 23/100 mL. In the same circumstances except that recreation is identified as a beneficial use, the Uniform Guidelines recommend a median coliform MPN not exceeding 2.2/100 mL. A 4 August 2006 DHS letter clarifies appropriate disinfection levels for discharges to Mill Creek based on identified downstream use patterns. The letter recommends disinfected secondary-23 recycled water as protective of known REC-1 intensity and AGR uses of Mill Creek, provided areas of public access are posted to discourage REC-1 uses and AGR uses are limited to fiber and fodder crops. In the event future information reveals significant REC-1 use of Mill Creek or that Mill Creek water is used to irrigate food crops, it would be appropriate to reopen this permit to require more stringent disinfection requirements based on DHS recommendations.

75. The Basin Plan includes a narrative water quality objective that requires that all surface waters be maintained free of toxic substances in toxic concentrations.
76. The Discharger uses chlorine for effluent disinfection and does not dechlorinate. The use of chlorine presents a reasonable potential that it could be discharged in toxic concentrations. Based on 40 CFR Section 122.44(d)(1)(vi), it is appropriate to use USEPA's Ambient Water Quality Criteria to determine the effluent limit necessary to implement the narrative toxicity water quality objective. In its *Ambient Water Quality Criteria for the Protection of Fresh Water Aquatic Life*, USEPA recommends that chlorine concentrations not exceed 0.019 mg/L as a 1-hour average and 0.011 mg/L as a 4-day average. As the Discharger currently does not have dechlorination equipment, a reasonable period to install the necessary dechlorination equipment is appropriate.
77. The RWD indicates that the average effluent concentration for ammonia is 7.3 mg/l and the maximum effluent concentration is 8 mg/l. Given there is no dilution in Mill Creek, effluent containing these concentrations of ammonia when it comprises flow to Mill Creek will have the reasonable potential to cause an exceedance of the Basin Plan water quality objective for ammonia which states, "In no case shall the discharge of wastes cause concentrations of un-ionized ammonia (NH₃) to exceed 0.025 mg/l (as N) in receiving waters." It is appropriate to include an effluent limit for ammonia to implement the Basin Plan objective. As the discharge has not been previously regulated for ammonia, it is also appropriate to include in this permit an interim limit for ammonia and a schedule for the Discharger to comply. It is also appropriate to require the Discharger to investigate whether the Basin Plan objective is protective of aquatic species that inhabit or could inhabit Mill Creek.
78. Pursuant to CWC Section 13267, the Discharger was directed to implement the monitoring requirements of CTR by letter dated 27 February 2001. The letter directed the Discharger to analyze its discharge and the receiving water upstream of its discharge (1) quarterly for priority pollutants with the final sample to be collected in January 2002 and (2) semiannually for organo-phosphate pesticides in April and October 2001. The letter also directed the Discharger to conduct 2,3,7,8-TCDD and congeners monitoring twice annually (wet and dry season) for the next three years.

79. The Discharger has completed its quarterly priority pollutant monitoring pursuant to the Regional Water Board's letter dated 27 February 2001. Those pollutants detected in the Discharger's effluent (and the number of samples with detectable concentrations) include: chromium III (4), chromium VI (1), mercury (4), selenium (1), chloroform (4), toluene (2), bis(2-ethylhexyl)phthalate (1), and di-n-octyl phthalate (1). Table 5 of the attached Information Sheet presents the concentrations of these pollutants.
80. A Reasonable Potential Analysis (RPA) of the priority pollutant sampling results (as described in Finding No. 79) pursuant to the SIP, indicates that the discharge has a reasonable potential to cause or contribute to an excursion above a water quality standard for bis(2-ethylhexyl)phthalate. The RPA for bis(2-ethylhexyl)phthalate is included in the attached Information Sheet as Attachment A. However, Regional Water Board staff considers the RPA to be inadequate as explained below. Also, the RPA for lead is considered inadequate as also explained below.

Bis (2-ethylhexyl) phthalate. The Discharger has requested that this priority pollutant monitoring results submitted pursuant to Order No. 97-061 be considered in the RPA. The applicable Bis(2-ethylhexyl)phthalate WQC for Mill Creek is 5.9 µg/L based on human health protection (consumption of organisms only) as the beneficial uses of Mill Creek do not include municipal and domestic supply. Although an RPA is included in the Information Sheet, Attachment A, Worksheet 4, which determined that the discharge may cause or contribute to an exceedance of the WQC for this priority pollutant, it is deficient in two respects: 1) a sample concentration of 53 µg/L, a concentration almost six times more than the next highest concentration, with no explanation for this unusually high concentration (it could be a laboratory error); and 2) the reported detection limit for two of the 15 samples were higher than the WQC. The Regional Water Board staff considers the data to be insufficient to conduct an adequate RPA. The SIP provides that when data is unavailable or insufficient to conduct the RPA, the Regional Water Board shall require additional monitoring in place of water quality-based effluent limitation. Accordingly, this Order includes monitoring for Bis(2-ethylhexyl)phthalate with reported detection limit at the SIP required minimum level for six months, to provide additional data for the Regional Water Board staff to conduct an adequate RPA and include water quality-based effluent limitations, if necessary, pursuant to Provision H.22.

Lead. Order No. 97-061 includes effluent limitations of a monthly average of 0.05 mg/L and a daily maximum of 0.1 mg/L. The Order does not explain the basis for the effluent limitations but, based on Regional Water Board staff's review of current water quality criteria for lead, it appears to be for human health protection (water and organisms consumption). The effluent limitations are consistent with the beneficial uses as determined by the Regional Water Board and described in Order No. 97-061, Finding No. 45, at the time of its adoption. This Order includes the designated beneficial use of WARM for Mill Creek. Water quality criteria to protect aquatic life are more stringent than the current limitations. Lead WQC vary with the hardness of the receiving water. Based on the current average hardness of the discharge of 100 mg/L (as CaCO₃), the WQC for lead are 3.2 µg/L for a criteria continuous concentration (CCC)(a four-day average) and 82 µg/L for a criteria maximum concentration (CMC)(a one-hour average) as total recoverable lead. Because the current permit includes lead effluent limitation and monitoring requirement, Regional Water

Board staff considered including the lead monitoring data submitted pursuant to the current permit in conducting the RPA. This additional data should provide a more accurate RPA result. The Regional Water Board staff reviewed the lead test results for the last two years (2004 and 2005). All lead sample results submitted pursuant to Order No. 97-061 have been reported as “less than 0.005 mg/L,” and reporting detection limit of 0.005 mg/L. The reported detection limit does not meet the SIP required minimum level of 0.5 µg/L. Staff considers the latter data to be inadequate. Although the RPA of the lead sample results submitted pursuant to the Regional Water Board’s Section 13267 letter dated 27 February 2001 did not cause a reasonable potential (Information Sheet, Attachment A, Worksheet 1), when including all lead sample results the RPA is an inadequate RPA. Staff considers the latter case to be more appropriate of the two RPAs. As indicated above, the SIP requires additional monitoring be conducted to obtain sufficient data to conduct an adequate RPA. Accordingly, this Order requires the Discharger to monitor the discharge for lead with SIP minimum level detection limit, at the same frequency as Order No. 97-061 for six months, to provide additional data for the Regional Water Board staff to conduct an adequate RPA and include lead effluent limitations, if necessary, pursuant to Provision H.22. However, the effluent limitation from the previous Order is continued in this Order to comply with the anti-backsliding provisions of 40 CFR 122.44(1)

81. The Discharger’s priority pollutant monitoring detected selenium in one of the four samples at a concentration of 3.0 µg/L. The remaining sample results did not indicate selenium concentrations above the analytical detection limit of 2 µg/L. The U.S. Fish and Wildlife Service (USFWS) established a wildlife impact selenium threshold level of 2 µg/L. The Basin Plan indicates that evaporation basins containing selenium concentrations greater than 2.7 µg/L have potential for reduced hatchability and teratogenic impacts on waterfowl. Since the District diverts the flows in Mill Creek to its percolation basins, selenium in the effluent is a potential concern. The Order’s Monitoring and Reporting Program requires the Discharger to monitor effluent selenium concentrations. Provision H.22 provides for reopening for consideration of addition of an effluent limitation for selenium, or a requirement for the Discharger to conduct a hazing program in consultation with USFWS.

DEGRADATION AND SURFACE WATER AND GROUNDWATER LIMITATIONS

82. State Water Board Resolution No. 68-16 requires that discharge of waste maintain high quality waters of the State until it is demonstrated that any change in quality will be consistent with maximum benefit to the people of the State, will not unreasonably affect beneficial uses, and will not result in water quality less than that described in the water quality policies (i.e., quality that exceeds water quality objectives). The discharge must be subject to requirements that will result in best practicable treatment or control.
83. Domestic wastewater contains constituents such as oxygen demanding substances (i.e., BOD₅), salinity constituents, pathogens, nutrients (e.g., nitrate), organics, and metals. Even though nearly all WWTF effluent is discharged to Mill Creek, the effluent in Mill Creek can be diverted to four percolation ponds owned by the City and operated by the Kaweah Delta Water Conservation District. Impacts on area groundwater from percolating effluent discharged to Mill Creek could result in a statistically significant increase in waste constituents over natural regional background.

Any increase in the concentration of these constituents in groundwater must be consistent with the antidegradation provisions of Resolution 68-16.

84. Monitoring data from wells MW-H1 and MW-L at nearby dairies indicate that groundwater passing under dairies and dairy wastewater application areas is degraded for salinity and nitrate.
85. The total nitrogen concentration of the discharge exceeds 10 mg/L. Without adequate attenuation in the soil profile, the percolation of effluent discharged to Mill Creek could cause or contribute to groundwater containing nitrate (as N) in concentrations exceeding 10 mg/L, thereby impairing its use as a domestic supply and as a potential municipal supply.
86. Excessive residual organic carbon in leachate percolating to groundwater from the WWTF's unlined sludge handling facilities may result in prolonged periods of oxygen deficiency in groundwater. If leachate percolating to and mixing with groundwater contains more organic carbon than can be oxidized by microorganisms respiring on the residual oxygen in the leachate and available in the soil column, the soil and groundwater beneath the sludge handling facilities will likely become anoxic. Further microbial decomposition of organic carbon in groundwater causes nitrate and oxidized forms of manganese and iron to substitute for oxygen as a terminal electron acceptor, reducing nitrate to nitrogen and transforming manganese and iron to more water-soluble reduced forms. Where groundwater underlying the sludge drying beds contains dissolved manganese and iron in elevated concentrations, it likely indicates organic overloading.
87. The WWTF described in Finding Nos. 3 and 4 provides treatment and control of the discharge that incorporates:
 - technology for secondary treatment of municipal wastewater
 - mechanical dewatering of debris at the headworks
 - biosolids handling and treatment for reuse
 - effluent disinfection
 - concrete treatment structures
 - pretreatment permits for significant industrial users
 - a capital recovery fund
 - an up to-date operation and maintenance (O&M) manual
 - staffing to assure proper operation and maintenance
88. Certain aspects of the Discharger's waste treatment and control practices have not been and are unlikely to be justified as BPTC. Deficiencies in treatment and control that cause or contribute to exceedances of Basin Plan water quality objectives subject the Discharger to enforcement. The discharge is causing chlorine toxicity in the receiving water due to the Discharger's lack of dechlorination facilities. The discharge may be causing ammonia toxicity due to the Discharger's lack of nitrification treatment. Possible sources of significant nitrate degradation include the WWTF's unlined sludge handling facilities and the Discharger's past practice of discharging grease-trap waste to dry disposal ponds.

89. During a 27 July 2006 meeting with Regional Water Board staff, the Discharger expressed its intent to complete a facilities plan to examine, among others, the following issues:
 - a. Cessation of discharge to Mill Creek
 - b. Revisions to its sludge treatment and handling facilities
 - c. The need for effluent nitrification/denitrification.
90. Temporary dechlorination facilities can be installed relatively quickly at relatively low cost.
91. Resolution of remaining BPTC issues described in Finding 88 will likely require substantial planning, investigation, capital, and operation and maintenance costs. It is therefore appropriate to provide the Discharger reasonable time to complete a facilities plan and to achieve compliance. Provision H.11 provides the Discharger with a schedule to address the issues in Finding 88.
92. Finding 37 does not represent a definitive inventory of crops that are or could be grown in the area potentially affected by the discharge. Based on climate, soil type, and natural background water quality, other crops sensitive to salt and boron might be capable of being grown in the area, and changing market conditions could drive a change in cropping patterns. Changing patterns that include salt-sensitive crops (e.g., beans, carrots, onions, almonds, strawberries, clover, plums and grapes) would require a greater protection than crops already identified. The City has not provided a detailed assessment of uses of surface and groundwater within the area potentially affected by the discharge. It is appropriate to require the City to provide such an assessment.
93. It is reasonable and appropriate to require the Discharger to assemble the technical information necessary for this Regional Water Board to determine the area potentially affected by the discharge, the controlling beneficial uses of water impacted by discharges, and to derive appropriate numerical groundwater quality objectives for the WWTF that are consistent with the Basin Plan. Provision No. H.13 requires the Discharger to conduct studies to:
 - a. Determine the spatial extent of groundwater affected by the discharge and the spatial extent of groundwater that could be affected by the discharge.
 - b. Determine the types of crops that are, and could potentially be, grown, and any other potential beneficial uses of surface and groundwater that could be affected by the discharge.
 - c. Evaluate with supporting documentation and in conformance with the Basin Plan, appropriate numeric limitations for groundwater that could be affected by the WWTF discharge.
94. Following the completion of the studies required by Provision H.13, this Order will be reopened to consider final numerical groundwater limitations.
95. Until the work required by Provision H.13 is completed by the Discharger and reviewed by the Regional Water Board, it is reasonable to employ, where numeric water quality objectives do not exist, narrative groundwater quality limitations that proscribe the discharge from causing or contributing to adverse affects on any beneficial use of groundwater within the area potentially impacted by the discharge. These interim groundwater limitations are thus protective of present

and anticipated beneficial uses.

OTHER REGULATORY CONSIDERATIONS

96. The action to adopt an NPDES permit is exempt from the provisions of Chapter 3 of the California Environmental Quality Act (CEQA) (Public Resources Code Section 21000 et seq.), in accordance with CWC Section 13389.

In October of 1992, the Discharger certified a final Environmental Impact Report in accordance with the California Environmental Quality Act (Public Resources Code Section 21000, et seq.) for 20 mgd. Compliance with this Order will mitigate any impacts on water quality resulting from the increase in discharge to 20 mgd.

97. CWC Section 13241 requires the Regional Water Board to consider various factors, including economic considerations, when adopting water quality objectives into its Basin Plan. CWC Section 13263 requires regional water boards to address the factors in Section 13241 in adopting waste discharge requirements. The State Water Board, however, has held that a regional water board need not specifically address the Section 13241 factors when implementing existing water quality objectives in waste discharge requirements because the factors were already considered in adopting water quality objectives. As these waste discharge requirements implement nothing more stringent than adopted water quality objectives, no additional analysis of the Section 13241 factors is required.
98. The State Water Board adopted the General Industrial Activities Storm Water Permit (General Permit) on 19 November 1991, and amended it on 17 September 1992 and 17 April 1997. The General Permit prescribes waste discharge requirements for discharges of storm water associated with industrial activities, excluding construction activities, and requires submittal of a Notice of Intent by industries to be covered under the permit. The Discharger is not required to obtain coverage under the General Permit because all storm water runoff within the WWTF property is diverted back to the headworks of the WWTF, and does not discharge separately to a water of the United States.
99. The State Water Board adopted the Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (Order No. 2006-0003-DWQ) on 2 May 2006. The General Order prescribes waste discharge requirements for discharges from sanitary sewer systems greater than one mile in length that convey untreated or partially treated wastewater to a publicly owned treatment facility in the State of California. The Discharger is required to obtain coverage under General Order No. 2006-0003-DWQ.
100. The discharge authorized herein and the treatment and storage facilities associated with the discharge of treated municipal wastewater, except for discharges of residual sludge and solid waste, are exempt from the requirements of Title 27, CCR, Section 20005 et seq. (hereafter Title 27). The exemption, pursuant to Section 20090(a) of Title 27, is based on the following:
- a. The waste consists primarily of domestic sewage and treated effluent;

- b. The waste discharge requirements are consistent with water quality objectives; and
 - c. The treatment and storage facilities described herein are associated with a municipal wastewater treatment plant.
 - d. The treatment and storage facilities are not being used for disposal.
101. The discharges authorized herein are consistent with Resolution 68-16:
- a. The City of Visalia certified an Environmental Impact Report for the expansion of the WWTF and the increase in discharge flows to 20 mgd. The EIR finds that expansion of the WWTF is necessary to accommodate increased housing and economic growth in the Visalia area. Economic growth benefits the people of the State.
 - b. This Order contains effluent limitations, discharge specifications and receiving water limitations that implement Basin Plan water quality objectives.
 - c. While this Order allows an increase in the Discharge mass of pollutants to Mill Creek, requirements are not dependent upon assimilative capacity in the receiving water. The effluent concentration limits are as stringent as, or in some cases more stringent than, those in WDRs Order No. 97-061 and will not result in quality in Mill Creek that would be less than previously found to be consistent with water quality policies.

GENERAL FINDINGS

102. Pursuant CWC Section 13263(g) discharge is a privilege, not a right, and adoption of this Order does not create a vested right to continue the discharge.
103. Section 13267 of the CWC states, in part, that:
- In conducting an investigation specified in [Section 13267] subdivision (a), the regional board may require that any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste within its region, or any citizen or domiciliary, or political agency or entity of this state who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge, waste outside of its region that could affect the quality of waters within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports.
104. The technical reports required by this Order and the attached Monitoring and Reporting Program No. _____ are necessary to determine compliance with these waste discharge requirements. The Discharger operates the facility that discharges the waste subject to this Order.
105. Information in the attached Information Sheet was considered in developing findings, terms, and conditions of this Order and is part of this Order.
106. The Discharger and interested agencies and persons were notified of the intent to prescribe waste

discharge requirements for this discharge and provided them an opportunity for a public hearing and an opportunity to submit their written views and recommendations.

- 107. All comments pertaining to the discharge were heard and considered in a public meeting.
- 108. This Order shall serve as an NPDES permit pursuant to Section 402 of the CWA, and amendments thereto, and shall take effect upon the date of hearing, provided USEPA has no objections. If USEPA objects to the NPDES aspects of this permit, the objection will not affect other aspects of this Order.

IT IS HEREBY ORDERED that Waste Discharge Requirements Order No. 97-061 is rescinded and that, pursuant to CWC Sections 13263, 13267, 13377, and 13383, the City of Visalia, its agents, successors and assigns, in order to meet the provisions contained in Division 7 of the CWC and regulations adopted thereunder, and the provisions of the CWA and regulations and guidelines adopted thereunder, shall comply with the following at its wastewater treatment facility:

A. Discharge Prohibitions

- 1. Discharge of pollutants at a location or in a manner different from that described in Finding No. 2 is prohibited.
- 2. The by-pass or overflow of wastes to surface waters is prohibited, except as allowed by Standard Provision A.13.
- 3. Discharge of waste classified as ‘hazardous’ as defined in Section 2521(a) of Title 23, CCR, Section 2510 et seq., is prohibited.
- 4. Discharge of waste classified as ‘designated’ as defined in CWC Section 13173, including untreated grease trap waste, except as allowed by separate Regional Water Board-adopted waste discharge requirements, is prohibited.
- 5. Direct reuse of effluent to areas lacking either water recycling requirements or waiver of said requirements is prohibited.

B. Effluent Limitations

- 1. The monthly average daily discharge flow shall not exceed 20 mgd.
- 2. Discharge 001 (Mill Creek) shall not exceed the following limits:

<u>Constituents</u>	<u>Units</u>	<u>Monthly Average</u>	<u>Weekly Average</u>	<u>7-sample Median</u>	<u>Daily Maximum</u>
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WASTE DISCHARGE REQUIREMENTS ORDER NO. ____
 CITY OF VISALIA WWTF
 TULARE COUNTY

<u>Constituents</u>	<u>Units</u>	<u>Monthly Average</u>	<u>Weekly Average</u>	<u>7-sample Median</u>	<u>Daily Maximum</u>
BOD ₅	mg/L	30	45	--	90
	lbs/day	5,004 ¹	7,506 ¹	--	15,012 ¹
Total Suspended Solids	mg/L	30	45	--	90
	lbs/day	5,004 ¹	7,506 ¹	--	15,012 ¹
Oil and Grease	mg/L	10	--	--	15
	lbs/day	1,668 ¹	--	--	2,502 ¹
Settleable Solids	mL/L	0.2	--	--	0.5
Chlorides	mg/L	--	--	--	175
Lead	mg/L	0.05	--	--	0.1
Chlorine Residual	mg/L	0.01 ²	--	--	0.02 ²
Total Coliform Organisms	MPN ³ /	--	--	23	240 ⁴
	100 mL	--	--	--	500 ⁵
<u>Ammonia (as N)</u>	mg/L	--	--	--	0.025 ⁶

¹ Value based upon a design capacity of 20.0 mgd ($x \text{ mg/L} * 8.34 * 20 \text{ mgd} = z \text{ lbs/day}$), where x is the maximum concentration allowable.

² Effective **6 months following adoption of this Order.**

³ Most probable number.

⁴ This concentration shall not be exceeded in more than one sample in any 30-day period.

⁵ No sample shall exceed this concentration.

⁶ Effective upon compliance with Provision No. H.11.g and no later than 4.5 years following adoption of this Order. In the interim, the Daily Maximum effluent concentration shall not exceed 25 mg/L.

3. Discharges 002 (Use Area) and 003 (onsite disposal ponds) shall not exceed the following limits:

<u>Constituents</u>	<u>Units</u>	<u>Monthly Average</u>	<u>Weekly Average</u>	<u>7-sample Median</u>	<u>Daily Maximum</u>
BOD ₅	mg/L	30	45	--	90
Total Suspended Solids	mg/L	30	45	--	90
Settleable Solids	mL/L	0.2	--	--	0.5
Chlorides	mg/L	--	--	--	175
Total Coliform Organisms ¹	MPN/100 mL	--	--	2.2	23 ²
		--	--	--	240 ³

- ¹ Applies to Discharge 002 (to Use Area) when recycled water is applied to the walnut orchard. If recycled water is applied to fiber and fodder crops within the Use Area, no disinfection is required.
 - ² This concentration shall not be exceeded in more than one sample in any 30-day period.
 - ³ No sample shall exceed this concentration.
4. The arithmetic mean of BOD₅ and of total suspended solids in effluent samples collected over a monthly period shall not exceed 15 percent of the arithmetic mean of the values for influent samples collected at approximately the same times during the same period (85 percent removal), or a maximum of 30 mg/L, whichever is less.
5. Discharge 002 and Discharge 003 shall not have a pH less than 6.0 or greater than 9.0. Discharge 001 shall not have a pH less than 6.5 or greater than 8.3.
6. **Effective 4.5 years following adoption of this Order**, survival of aquatic organisms in 96-hour bioassays of undiluted effluent shall be no less than:
 - a. Minimum for any one bioassay-----70%
 - b. Median for any three or more consecutive bioassays -----90%
7. The EC of the discharge shall not exceed the flow-weighted average EC of the source water plus 500 µmhos/cm, or a total of 1,000 µmhos/cm, whichever is more stringent. The flow-weighted average for the source water shall be a moving average for the most recent twelve months.
8. No waste constituent shall be released or discharged, or placed where it will be released or discharged, in a concentration or in a mass that causes violation of groundwater limitations.

C. Sludge Specifications

Sludge in this document means the solid, semisolid, and liquid residues removed during primary, secondary, or advanced wastewater treatment processes. Solid waste refers to grit and screening material generated during preliminary treatment. Residual sludge means sludge that will not be subject to further treatment at the WWTF. Biosolids refers to sludge that has been treated and tested and shown to be capable of being beneficially and legally used pursuant to federal and state regulations as a soil amendment for agriculture, silviculture, horticulture, and land reclamation activities.

1. Sludge and solid waste shall be removed from screens, sumps, ponds, clarifiers, etc. as needed to ensure optimal plant operation.
2. Treatment and storage of sludge generated by the WWTF shall be confined to the WWTF property and conducted in a manner that precludes infiltration of waste constituents into soils in a mass or concentration that will violate Groundwater Limitations.

3. Any storage of residual sludge, solid waste, and biosolids on property of the WWTF shall be temporary (no more than two years) and controlled and contained in a manner that minimizes leachate formation and precludes infiltration of waste constituents into soils in a mass or concentration that will violate Groundwater Limitations.
4. Residual sludge, biosolids, and solid waste shall be disposed of in a manner approved by the Executive Officer and consistent with Title 27. Removal for further treatment, disposal, or reuse at sites (i.e., landfill, WWTF, composting sites, soil amendment sites) operated in accordance with valid waste discharge requirements issued by a regional water quality control board will satisfy this specification.
5. Use of biosolids as a soil amendment shall comply with valid waste discharge requirements issued by a regional water quality control board. In most cases, this will mean General Biosolids Order (State Water Board Order No. 2004-0012-DWQ, *General Waste Discharge Requirements for the Discharge of Biosolids to Land for Use as a Soil Amendment in Agricultural, Silvicultural, Horticultural, and Land Reclamation Activities*). For a biosolids use project to be covered by the General Biosolids Order, the Discharger must file a complete Notice of Intent and receive a Notice of Applicability for each project.
6. Use and disposal of biosolids should comply with the self-implementing federal regulations of Title 40 CFR Part 503, which are subject to enforcement by the USEPA, not the Regional Water Board. If during the life of this Order the State accepts primacy for implementation of 40 CFR 503, the Regional Water Board may also initiate enforcement where appropriate.

D. Receiving Water Limitations

Receiving Water Limitations are based upon water quality objectives contained in the Basin Plan. As such, they are a required part of this permit. The discharge shall not cause the following in the receiving surface water (i.e., Mill Creek):

1. Concentrations of dissolved oxygen to fall below 5.0 mg/L.
2. Oils, greases, waxes, or other materials in concentrations that cause nuisance, result in a visible film or coating on the water surface or on objects in the water, or otherwise adversely affect beneficial uses.
3. Oils, greases, waxes, floating materials (liquids, solids, foams, and scums) or suspended material that create a nuisance or otherwise adversely affect beneficial uses.
4. **Effective 6 months following adoption of this Order** chlorine to be detected in concentrations above the limit of detection in test procedures specified in 40 CFR Part 136, Table IB. The SWRCB is currently considering adoption of a Chlorine Policy (Policy). If the Policy is adopted, receiving water limitations for chlorine residual must comply with the Policy.
5. Pesticides or combinations of pesticides to be detected in concentrations that adversely affect

beneficial uses.

6. Discoloration that creates nuisance or adversely affects beneficial uses.
7. Biostimulatory substances in concentrations that promote aquatic growths to the extent that they create nuisance or adversely affect beneficial uses.
8. Deposition of material that causes nuisance or adversely affects beneficial uses.
9. The normal ambient pH to fall below 6.5, exceed 8.3, or change by more than 0.3 units.
10. Suspended material in concentrations that cause nuisance or adversely affect beneficial uses.
11. Turbidity at levels that cause nuisance or adversely affect beneficial uses. The increase in turbidity to be:
 - a. More than 1 Nephelometric Turbidity Unit (NTU) where natural turbidity is between 0 and 5 NTUs.
 - b. More than 20 percent where natural turbidity is between 5 and 50 NTUs.
 - c. More than 10 NTUs where natural turbidity is between 50 and 100 NTUs.
 - d. More than 10 percent where natural turbidity is greater than 100 NTUs.
12. The ambient temperature to increase more than 5 °F or to be altered to a degree that adversely affects beneficial uses.
13. Radionuclides to be present in concentrations that exceed maximum contaminant levels specified in Title 22, CCR; that are deleterious to human, plant, animal or aquatic life; or that result in the accumulation of radionuclides in the food web to an extent that presents a hazard to human, plant, animal, or aquatic life.
14. Toxic pollutants to be present in the water column in concentrations that adversely affect beneficial uses or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
15. Taste- or odor-producing substances in concentrations that cause nuisance, adversely affect beneficial uses, or impart undesirable tastes or odors to edible products of aquatic origin or to domestic or municipal water supplies.
16. Violation of any applicable water quality standard for receiving waters adopted by the Regional Water Board, the State Water Board or USEPA (e.g., CTR and National Toxics Rule) pursuant to the CWA and regulations adopted thereunder.

B. Groundwater Limitations

Release of waste constituents from any storage, treatment, recycling, or disposal component associated with the WWTF shall not, in combination with other sources of the waste constituents, cause groundwater within influence of the WWTF and discharge area(s) to contain waste constituents in concentrations equal to or greater than that listed below:

1. Total coliform organisms of 2.2 MPN/100 mL.
2. Chemical constituents in concentrations that adversely affect beneficial uses.
3. Toxic constituents in concentrations that produce detrimental physiological responses in human, plant or animal life.
4. Radionuclides in concentrations deleterious to human, plant, animal, or aquatic life or in concentrations that result in accumulation of radionuclides in the food web to an extent that presents a hazard to human, plant, animal, or aquatic life.

C. Pretreatment Requirements

1. The Discharger shall implement and enforce its approved Pretreatment Program which is hereby made an enforceable condition of these requirements. The Discharger shall comply with all pretreatment requirements contained in 40 CFR 403 and shall be subject to enforcement actions, penalties, fines, and other remedies by USEPA or other appropriate parties, as provided in the CWA, as amended. USEPA or Regional Water Board may initiate enforcement action against an industrial user for noncompliance with applicable standards and requirements as provided in the CWA.
2. The Discharger shall perform the pretreatment functions required in 40 CFR Part 403. Noncompliance shall subject the Discharger to enforcement actions, penalties, fines, and other remedies by the USEPA, Regional Water Board, or other appropriate parties, as provided in the CWA, as amended. These pretreatment functions include, but are not limited to:
 - a. Implementing the necessary legal authorities as provided in 40 CFR 403.8(f)(1);
 - b. Enforcing the pretreatment requirements under 40 CFR 403.5 and 403.6;
 - c. Implementing the programmatic functions provided in 40 CFR 403.8(f)(2);
 - d. Providing the requisite funding and personnel to implement the pretreatment program as provided in 40 CFR 403.8(f)(3); and
 - e. Publishing a list of industrial users which were in significant noncompliance and applicable pretreatment requirements as required by 40 CFR 403.8(f)(2)(vii).
 - f. Conducting inspections in accordance with provisions of 40 CFR 403.8(f)(1)(v) and 403.8(f)(2)(v) and ensure compliance with pretreatment standards and requirements by (1) assessing and collecting, when appropriate, civil penalties and civil administrative

penalties in accordance with Government Code Sections 54740, 54740.5, and 54740.6, or (2) other equally effective means.

3. The Discharger shall enforce the requirements promulgated under CWA Section 307(b), (c), and (d) and Section 402(b). The Discharger shall cause industrial users subject to federal categorical standards to achieve compliance no later than that date specified in those requirements, or in the case of a new industrial user, upon commencement of the discharge.

D. Recycled Water Specifications

The following specifications apply to recycled water and its application in the 900-acre Use Area (Discharge 002) described in Finding No. 1.

1. Use of recycled water shall comply with all the terms and conditions of the most current Title 22 provisions.
2. All areas with recycled water shall have appropriate backflow protection for potable water supplies as specified in Title 17, CCR, Section 7604, or as specified by DHS.
3. Recycled water shall remain within the permitted Use Area.
4. Use of recycled water on walnuts shall comply with the following conditions:
 - a. The most probable number (MPN) of total coliform bacteria in recycled water shall not exceed a median of 2.2 per 100 mL utilizing the bacteriological results of the last seven days for which analyses have been completed, the MPN of total coliform bacteria shall not exceed 23 per 100 mL in more than one sample in any 30-day period, and the MPN of total coliform bacteria shall not exceed 240 per 100 mL in any sample;
 - b. The recycled wastewater shall be disinfected by a chlorine disinfection process following filtration that provides a CT (the product of total chlorine residual and modal contact time measured at the same point) value of not less than 450 milligram-minutes per liter at all times with a modal contact time of at least 90 minutes, based on peak dry weather design flow.
 - c. Samples of recycled water for bacteria analysis shall be collected at the WWTF discharge point (Discharge 002);
 - d. Recycled water shall not be applied to the Use Area within 30 days of crop harvest;
 - e. Recipients or buyers of walnuts shall be informed that the walnuts may possibly contain sewage-borne organisms on the hulls, that they must be handled in a good hygienic manner that will prevent contamination of shells when the hulls are removed, and must be cleaned by a procedure that will meet the California Food Sanitation Act (Health and Safety Code, Division 22, Chapter 7) if offered for human consumption.
5. In the event the crop grown in the Use Area changes, the Discharger shall notify the Regional Water Board and limit the crops to those consistent with Title 22 regulations for

use of recycled water. Provision H.19 allows this Order to be reopened and revised if the crop grown in the Use Area changes from walnuts.

- 6. Application of wastewater, biosolids, and commercial fertilizer to the Use Area shall be at reasonable agronomic rates considering the crop, soil, climate, and irrigation management system. The annual nutrient loading of the Use Area, including the nutritive value of organic and chemical fertilizers and of the recycled water shall not exceed the crop demand.
- 7. The following setback distances from areas irrigated with recycled water shall be maintained:

<u>Setback Distance (feet)</u>	<u>To</u>
25	Property Line
30	Public Roads
50	Drainage Courses
100	Domestic and Irrigation Wells

- 8. The perimeter of the Use Area shall be graded to prevent ponding along public roads or other public areas.
- 9. Areas irrigated with recycled water shall be managed to prevent breeding of mosquitoes. More specifically:
 - a. All 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.
- 10. Recycled water shall be managed to minimize runoff onto adjacent properties not owned or controlled by the Discharger.
- 11. Recycled water used for irrigation shall be managed to minimize erosion.
- 12. Recycled water shall be managed to minimize contact with workers.
- 13. If recycled water is used for construction purposes, it shall comply with the Regional Water Board's most current edition of *Guidelines for Use of Recycled 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 Title 22.
- 14. Public contact with recycled water shall be precluded through such means as fences and signs, or acceptable alternatives. Signs with proper wording (shown below) of a size no less than four inches high by eight inches wide shall be placed at all areas of public access and around the perimeter of all areas used for effluent disposal or conveyance to alert the public of the use of recycled water. All signs shall present the international symbol similar to that

shown in Attachment C and present the following wording:

RECYCLED WATER - DO NOT DRINK

AGUA DE DESPERDICIO RECLAMADA - POR FAVOR NO TOME

H. Provisions

1. The Discharger shall comply with all the items of the *Standard Provisions and Reporting Requirements for Waste Discharge Requirements (NPDES)*, dated February 2004, which are part of this Order. This attachment and its individual paragraphs are referred to as *Standard Provision(s)*.
2. The Discharger shall comply with Monitoring and Reporting Program (MRP) No. _____, which is a part of this Order, and any revisions thereto as ordered by the Regional Water Board. When requested by USEPA, the Discharger shall complete and submit Discharge Monitoring Reports (DMR). If the Discharger wishes to submit a single report to satisfy the request for the DMR and comply with the MRP, the submittal date shall be no later than the submittal date specified in the MRP for the report.
3. The Discharger shall keep a copy of this Order, including its MRP, attachments and Standard Provisions, at the WWTF for reference by operating personnel. Key operating personnel shall be familiar with its contents.
4. All technical reports required herein that involve planning, investigation, evaluation, or design, or other work requiring interpretation and proper application of engineering or geologic sciences, shall be prepared by or under the direction of persons registered to practice in California pursuant to California Business and Professions Code, Sections 6735, 7835, and 7835.1. To demonstrate compliance with Title 16, CCR, Sections 415 and 3065, all technical reports must contain a statement of the qualifications of the responsible registered professional(s). As required by these laws, completed technical reports must bear the signature(s) and seal(s) of the registered professional(s) in a manner such that all work can be clearly attributed to the professional responsible for the work.
5. The Discharger shall conduct the chronic toxicity testing as specified in MRP No. _____. If the testing indicates that the discharge causes, contributes to, or has the reasonable potential to cause or contribute to an in-stream excursion above a water quality objective for toxicity, the Discharger shall initiate a Toxicity Identification Evaluation (TIE) to identify the causes of toxicity. Upon completion of the TIE, the Discharger shall submit a work plan to conduct a Toxicity Reduction Evaluation (TRE) and upon Executive Officer approval conduct the TRE. If necessary, this Order will be reopened and a chronic toxicity limitation included and/or a limitation for the specific toxicant identified in the TRE included. Additionally, if a chronic toxicity water quality objective is adopted by the State Water Resources Control Board, this Order may be opened to include an effluent limitation based

on that objective.

6. **By 90 days following adoption of this Order**, the Discharger shall submit a map depicting the locations of all signs posted in accordance with Recycled Water Specification G.14.
7. **By 90 days following adoption of this Order**, the Discharger shall submit a technical report in the form of a work plan and proposed implementation schedule describing methodologies that it intends to employ to discourage REC-1 uses of the water in Mill Creek down stream of the discharge. The work plan and schedule are subject to Executive Officer approval.
8. **By 180 days following adoption of this Order**, the Discharger shall submit a technical report that contains a characterization of the discharge for appropriate constituents identified in Title 22 (as described in Finding No. 61). The report shall describe the sampling program utilized to characterize the discharge and the technical justification for selecting tested Title 22 constituents as being appropriate for the discharge. The report shall be subject to the requirements of Provision H.4 and is subject to Executive Officer written approval.
9. **By 180 days following adoption of this Order**, the Discharger shall submit a technical report describing a Use Area management plan that ensures wastewater and commercial fertilizer will be applied to the Use Area as defined herein in accordance with this Order's recycling specifications and at reasonable agronomic rates considering the crop, soil, climate, and irrigation management system. The technical report shall (a) describe what measures the Discharger has implemented or proposes to implement to ensure consistent compliance with Recycled Water Specification G.4.a; (b) describe the types of crops to be grown and harvested annually, crop water use, nitrogen uptake, and supporting data and calculations for monthly water and yearly nutrient balances; (c) describe the wastewater constituent concentration effect resulting from irrigation; (d) include a map showing locations of all domestic and irrigation wells that are within and near the Use Area, areas of public access, location and wording of public warning signs and setback distances from irrigation/domestic wells, property boundaries, and roads; (e) shall be subject to the requirements of Provision H.4; and (f) subject to Executive Officer written approval.
10. **Interim Dechlorination Implementation. By (6 months following adoption of this Order)** the Discharger shall install the necessary interim facilities to dechlorinate WWTF effluent to comply with the residual chlorine limits in Effluent Limitation B.2 and Receiving Water Limitation D.4. **By (7 months following adoption of this Order)** shall submit to the Regional Water Board a technical report that describes the installation and includes performance testing results.
11. The Discharger shall prepare and submit a Facilities Management Plan that:
 - a. Presents the results of a technical evaluation of the WWTF's nitrogen control systems and grease and sludge handling practices, treatment units, storage units, and disposal units, to determine changes necessary to achieve BPTC, as required by Resolution 68-16. Following completion of the evaluation, the Discharger shall submit a technical report

describing recommendations for necessary modifications to achieve BPTC and identify the source of funding and proposed schedule for modifications. The schedule shall be as short as practicable. The technical report shall include specific methods the Discharger proposes as a means to measure processes and assure continuous optimal performance of BPTC measures.

- b. Presents the City’s decision to continue or to cease discharge to Mill Creek. If the City decides to cease discharge to Mill Creek, it shall submit a work plan and proposed implementation schedule for terminating discharge to the Creek. If the City decides to continue discharge to Mill Creek it shall provide work plans and proposed time schedules for:
 - i. **Dechlorination Implementation.** The Discharger shall submit a technical report describing a work plan and implementation schedule to install the necessary facilities to sufficiently dechlorinate WWTF and monitor the effluent for compliance residual chlorine limits in Effluent Limitation B.2 and Receiving Water Limitation D.4. Once the system is operational, the Discharger shall submit to the Regional Water Board a technical report that describes the installation and includes performance testing results.
 - ii. **Ammonia Effluent Limitation Evaluation.** The Discharger shall submit a technical report consisting of a work plan and implementation schedule that proposes methods that will be employed to comply with Effluent Limitation B.2 for ammonia. The work plan shall also provide for a study and schedule for determining appropriate ammonia effluent limitations protective of the beneficial use of Mill Creek as warm freshwater habitat considering the ammonia toxicity to the various aquatic habitat species currently supported by or potentially supported by Mill Creek flows. A professional biologist familiar with aquatic habitat and ammonia toxicity shall conduct the evaluation. Results of the evaluation should propose technically justified monthly average and daily maximum ammonia effluent limitations that are protective of Mill Creek aquatic habitat and is no greater than the Basin Plan objective of 0.25 mg/l. Following completion of this evaluation, this permit may be reopened to include modified effluent limits for ammonia.

The Discharger shall comply with the following compliance schedule in performing the above described tasks:

<u>Task</u>	<u>Compliance Date</u>
a. Submit proposed scope of work for completing facilities plan.	60 days following adoption of this Order
b. Submit status report.	180 days adoption of this Order

<u>Task</u>	<u>Compliance Date</u>
c. Submit the results of facilities plan that includes work plans and proposed BPTC implementation schedules and either (1) a work plan and schedule to cease discharge to Mill Creek or (2) work plans and proposed schedules to implement permanent dechlorination , to meet Effluent Limitations B.2 for ammonia, determine appropriate ammonia limits for Mill Creek , and if necessary, to implement WWTF modifications to meet ammonia limits specific to Mill Creek. The work plan for achieving BPTC shall include provisions for producing a sludge management plan that satisfies the information requirements of Attachment F <i>Information Needs for Sludge Management Plan</i> and describes facilities that will be constructed to ensure to comply with Effluent Limitation B.8, Sludge Specifications C.2 and C.3, and Provision H.20.	1 year following adoption of this Order.
d. Implement work plans.	30 days following Executive Officer approval of implementation schedules in Task d.
e. Submit status report.	2 years following adoption of this Order.
f. Complete WWTF modifications necessary to meet BPTC.	4.5 years adoption of this Order.
g. Cease discharge to Mill Creek or complete permanent dechlorination and effluent monitoring to demonstrate compliance with Effluent Limitations B.2 for chlorine and WWTF modifications necessary to meet Effluent Limitations B.2 for ammonia and any more stringent ammonia limits as determined by the Ammonia Limitation Evaluation.	4.5 years adoption of this Order.
h. Submit written certification certifying that WWTF modifications have been completed as designed and are capable of fully complying with the terms and conditions of this Order.	4.5 years and 30 days following adoption of this Order.

<u>Task</u>	<u>Compliance Date</u>
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Technical reports submitted pursuant to this Provision shall be subject to the requirements of Provision H.4 and are subject to Executive Officer written approval.

12. **Modifications to Groundwater Monitoring Network.** The Discharger shall submit a technical report evaluating the existing groundwater monitoring well network and describing proposed modifications to the groundwater monitoring well network based upon the evaluation. The technical report shall consist of a monitoring well installation work plan that satisfies Attachment G, *Standard Monitoring Well Provisions for Waste Discharge Requirements*. The network shall include one or more background monitoring wells and sufficient number of designated monitoring wells to evaluate the extent to which, if any, WWTF facilities (including unlined sludge pits and beds) and the percolation of effluent discharged to Mill Creek have degraded or threaten to degrade groundwater. These include, at a minimum, monitoring wells immediately downgradient of the unlined sludge handling facilities and one well in the vicinity of the percolation ponds. Monitoring wells should also be placed near other WWTF facilities having potential for impacting groundwater (i.e., dried sludge storage area), with the exception of the wastewater Use Area to which the Discharger applies effluent at reasonable agronomic rates.

The design, construction and destruction of wells shall comply with appropriate standards as described in *California Well Standards Bulletin 74-90* (June 1991) and *Water Well Standards: State of California Bulletin 94-81* (December 1981), and any more stringent standards adopted by the Discharger or county pursuant to CWC Section 13801. The Discharger shall install approved monitoring wells and commence groundwater monitoring in accord with the MRP. After the first sampling event, the Discharger shall report on its sampling protocol as specified in the MRP. After one year of monitoring, the Discharger shall characterize natural background quality of monitored constituents in a technical report. The Discharger shall comply with the following compliance schedule in implementing the work required by this Provision:

<u>Task</u>	<u>Compliance Date</u>
a. Submit technical report: evaluation of existing groundwater monitoring well network and additional monitoring well installation work plan	120 days following adoption of this Order
b. Implement monitoring well installation and destruction work plan and commence groundwater monitoring pursuant to MRP	180 days following EO written approval of task a

<u>Task</u>	<u>Compliance Date</u>
c. Submit technical report: monitoring well installation, development, and sampling protocol and results, and well destruction details	90 days following completion of task b
d. Report on monthly and quarterly sampling pursuant to the MRP	1 st day of the second month following prescribed sample collection
e. Submit technical report: natural background quality	120 days following completion of 4 th quarterly sampling

Technical reports submitted pursuant to this Provision shall be subject to the requirements of Provision H.4 and are subject to Executive Officer approval.

13. **Land Use and Groundwater Limitations Study.** The Discharger shall submit a technical report in the form of a work plan and proposed schedule to complete studies to compile sufficient technical data to better characterize the uses of effluent discharged to Mill Creek and underlying groundwater and to determine applicable numerical groundwater quality objectives and to derive appropriate groundwater limitations for the area affected, and potentially affected, by the WWTF discharges. Studies must be designed to:

- a. Determine the spatial extent of groundwater affected by, and that could be affected by, the discharge.
- b. Determine the types of crops that are, and could potentially be, grown, and any other potential beneficial uses of surface and groundwater, that could be affected by the discharge.
- c. Evaluate and propose, with supporting documentation, appropriate numeric groundwater quality objectives for groundwater that could be affected by the WWTF discharge.

Study results must be compiled into a final technical report. The final technical report shall propose specific numeric groundwater limitations for each waste constituent that comply with the most stringent applicable water quality objectives for that waste constituent. The most stringent applicable water quality objective shall be interpreted based on the Regional Water Board policy entitled “Application of Water Quality Objectives” on pages IV-21 through IV-23 of the Basin Plan. If the Discharger wishes the Regional Water Board to consider a proposed water quality limitation that is less stringent than the most stringent water quality objective necessary to protect the most sensitive beneficial use, it must provide documentation necessary to support the proposed limitation. For example, where the stringency of a proposed water quality objective can vary according to land use and other factors, the Discharger must provide documentation that a less stringent but attainable water quality objective is protective of all existing and probable beneficial uses. This documentation must be from public agencies and

organizations with appropriate expertise and authority relative to the uses potentially affected by the less stringent objective, or the water quality necessary to sustain the uses. The Discharger should submit results of a validated groundwater model or other hydrogeologic information to support its proposal. The Discharger shall comply with the following compliance schedule in implementing the work required by this Provision:

<u>Task</u>	<u>Compliance Date</u>
a. Submit technical report: work plan and schedule	Within 3 months of adoption of this Order
b. Commence studies	30 days following Executive Officer approval of Task a
c. Complete studies	As established by Task a or 2 years following Task b, whichever is sooner
d. Submit technical report summarizing results of studies and proposing appropriate numeric groundwater limitations.	60 days following completion of Task c, or 3 years following Order adoption , whichever is sooner
e. Include in its annual report (described in the MRP) a description of the overall status of the studies.	Annually on 1 February following completion of Task d

Where appropriate, the technical report may incorporate relevant information resulting from the information required by Provisions H.8, H.9, H.10, H.11, H.12 above.

Technical reports submitted pursuant to this Provision shall be prepared in accordance with Provision I. 4 and are subject to Executive Officer approval as to adequacy.

14. Upon completion of tasks set forth in Provisions H.11, H.12, and H.13 above, the Regional Water Board shall reopen and revise this Order to contain conditions designed to assure full implementation of BPTC and compliance with the maximum permissible groundwater limitations consistent with Resolution 68-16.
15. The Discharger shall comply with the following time schedule to assure compliance with the monitoring requirements of Monitoring and Reporting Program No. _____:

<u>Task</u>	<u>Compliance Date</u>
a. Submit a work plan and time schedule for installation of continuous flow and chlorine residual meters and composite samplers required by this Order.	1 year following adoption of this Order
b. Begin installation of continuous flow and chlorine residual meters and composite samplers.	60 days following EO written approval of task a
c. Full compliance with the terms of monitoring and reporting specified by this Order.	3 years following adoption of this Order

Technical reports submitted pursuant to this Provision shall be subject to the requirements of Provision H.4 and are subject to Executive Officer written approval. The Discharger shall submit to the Regional Water Board on or before the compliance due date a written report detailing compliance or non-compliance with the specified date and task. If non-compliance is being reported, the reasons for such non-compliance shall be stated, along with an estimate of the date when the Discharger will be in compliance. The Discharger shall notify the Regional Water Board by letter when it returns to compliance with the time schedule.

16. **Pretreatment Program:** The Discharger shall implement and enforce its Pretreatment Program. To satisfy this Provision, the Discharger shall comply with the following time schedule:

<u>Task</u>	<u>Compliance Date</u>
a. Submit revised District Sewer Ordinance	120 days following adoption of this Order
b. Submit revised or new multijurisdictional agreement between the City and the District	120 days following adoption of this Order

17. Upon completion of tasks set forth in Provision H.16, this Order shall be reopened for reconsideration of the modifications to the Industrial Pretreatment Program.

18. The Discharger shall implement water recycling whenever and wherever a reasonable opportunity arises to supply recycled water in place of or as a supplement to use of fresh water or better quality water, as for irrigation of commercial crops. This condition of discharge shall be self-implementing and subject to enforcement only if the Discharger

cannot demonstrate to the satisfaction of the Regional Water Board that the exception was a recycling project not of maximum benefit to the people of the State. Whenever the Discharger requests an increase in discharge flow beyond the maximum permitted value of 22 mgd, it shall also submit a written technical report for accountability of compliance with this Provision.

19. If the crop grown in the Use Area is changed from walnuts, this Order may be reopened to reconsider the Recycled Water Specifications and assure compliance with Title 22 recycled water regulations.
20. The Discharger shall implement best practicable treatment and control of the discharge, including optimal operation and maintenance, to comply with this Order.
21. 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.
22. If the Regional Water Board determines that waste constituents in the discharge have reasonable potential to cause or contribute to an exceedance of a water quality objective, this Order may be enforced or, alternately, reopened for consideration of addition or revision of appropriate numerical effluent limitations for the problem constituents. The Regional Water Board may consider inclusion of a compliance time schedule within the bounds of the applicable regulations if the Discharger is not able to meet a new discharge requirement immediately.
23. If use patterns in and of Mill Creek cause DHS to recommend more stringent disinfection requirements as necessary to protect the beneficial uses of Mill Creek, this Order may be reopened to consider adding such requirements.
24. The Discharger shall submit to the Regional Water Board on or before each report due date the specified document or, if an action is specified, a written report detailing evidence of compliance with the date and task. If noncompliance is being reported, the reasons for such noncompliance shall be stated, plus an estimate of the date when the Discharger will be in compliance. The Discharger shall notify the Regional Water Board by letter when it returns to compliance with the time schedule.
25. 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 Water Board or court orders requiring corrective action or imposing civil monetary liability, or in revision or rescission of this Order. CWC Section 13385(i) requires the Regional Water Board to issue mandatory minimum penalties for certain effluent limitation violations.

26. Prior to making any change in the discharge point, place of use, or purpose of use of the wastewater, the Discharger shall obtain approval of or clearance from the State Water Board (Division of Water Rights).
27. In the event of any change in control or ownership of land or waste treatment and storage facilities presently owned or controlled by the Discharger, the Discharger shall notify the succeeding owner or operator of the existence of this Order by letter, a copy of which shall be immediately forwarded to this office.

To assume operation under this Order, the succeeding owner or operator must apply in writing to the Executive Officer requesting transfer of the Order. The request must contain the requesting entity's full legal name, the state of incorporation if a corporation, the address and telephone number of the persons responsible for contact with the Regional Water Board and a statement. The statement shall comply with the signatory paragraph of Standard Provision D.6 and state that the new owner or operator assumes full responsibility for compliance with this Order. Failure to submit the request shall be considered a discharge without requirements, a violation of the California Water Code. Transfer shall be approved or disapproved in writing by the Executive Officer.

28. The conditions of this Order that pertain to surface water discharge, and serve as an NPDES permit expire on **5 years following adoption of this Order**, at which time surface water discharge is prohibited without administrative continuance by the Regional Water Board, pursuant to authorization in 40 CFR Part 122.6 and Title 23, CCR, Section 2235.4. The Discharger must file a complete Report of Waste Discharge in accordance with Title 23, CCR, Section 13376, not later than _____, **180 days** before its permit expires, if it wishes to continue the discharge.

I, PAMELA C. CREEDON, 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 _____.

PAMELA C. CREEDON, Executive Officer

GEA: 9/8/06

WASTE DISCHARGE REQUIREMENTS ORDER NO. ____
CITY OF VISALIA WWTF
TULARE COUNTY

-43-

Order Attachments:

Monitoring and Reporting Program No.

A: Vicinity Map and Monitoring Well Locations

B: Site Plan and Wastewater Flow Schematic

C: Recycled Water Symbol

D: CTR Analysis

E: CTR Analysis for Bis (2-Ethylhexyl) Phthalate

F: Information Needs for Sludge Management Plan

G: Standard Monitoring Well Provisions

Information Sheet

Standard Provisions for Waste Discharge Requirements (NPDES) (February 2004) (Separate attachment to Discharger only)