CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

ORDER NO. R5-2006-0016
NPDES NO. CA0083046
WASTE DISCHARGE REQUIREMENTS
FOR
THE VENDO COMPANY
GROUNDWATER REMEDIATION SYSTEM
FRESNO COUNTY

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

1. The Vendo Company (hereafter Discharger), a Missouri corporation, submitted a Report of Waste Discharge (RWD) on 27 April 2004, and applied to renew its permit to discharge waste under the National Pollutant Discharge Elimination System (NPDES) from the Phase III Ground Water Remediation System (GWRS) in Fresno.

2. The GWRS is within the Pinedale area of Fresno at 7209 North Ingram Avenue (hereafter site), in Section 32, T12S, R20E, MDB&M, as shown in Attachment A, a part of this Order. The site covers approximately 36 acres and has been owned and operated by the Discharger since 1963 when it purchased the site from the Vendorlator Company. The Discharger manufactures vending machines. The Discharger operates a groundwater collection, treatment and disposal system. Treated groundwater is discharged to Bullard Canal, a water of the United States and a tributary to the San Joaquin River at the points latitude 36°50'14"N and longitude 119°48'8"W. Bullard Canal is owned and operated by the Fresno Irrigation District (FID).

3. Waste Discharge Requirements (WDRs) Order No. 99-012 (NPDES permit No. CA0083046) was adopted on 30 April 1999 for discharge of treated groundwater from the GWRS to the FID Bullard Canal.

4. Soils beneath the site are generally described as sandy silts and silty sands, with small clay lenses. Groundwater beneath the site is about 120 feet below ground surface (bgs) and moves southwesterly.

5. The site is part of a 500-acre tract (tract) that has been used over the last 80 years as a lumber mill, warehouse, and military base (Camp Pinedale). Activities conducted at the site include the manufacturing of mattresses, military hardware, airplane parts, mainframe computers, and automatic teller machines. These activities have historically generated hazardous wastes, including metals (e.g., zinc and chromium), acids, caustics, paints, waste oil, and solvents (e.g., trichloroethylene, tetrachloroethylene, 1,1,1-trichloroethane, cis-1,2-dichloroethylene, trans-1,2-dichloroethylene, chloroform, and methylene chloride).

6. Other industries and parties now or formerly occupying properties within the tract that may have contributed to areal soil and groundwater contamination include Calcot, Industrial Waste

Processing Corporation, the Pinedale Solid Waste Disposal Site, the Kepco Dry Dump solid waste disposal site, and the U.S. Army's Camp Pinedale.

7. The Pinedale Groundwater Site (PGS) is defined to encompass the area where constituents of concern, which primarily originated from the Pinedale Industrial Area (PIA), exist in groundwater. The PIA is defined within the PGS as the 375-acre parcel bounded by Ingram, Herndon, and Harrison Avenues and the San Joaquin River Bluffs.

8. The Discharger submitted reports entitled Implementation of A-Zone Groundwater Interim Remedial Measure System (27 May 1992) and Task Work Plan B-Zone Groundwater Interim Remedial Measure (9 July 1992). According to the reports, there are two dissimilar hydrogeologic water-bearing zones in the upper portion of the aquifer, which the reports refer to as the "A-Zone" and "B-Zone." The reports describe the A-Zone as more interbedded and finer grained than the underlying B-Zone. Groundwater in both zones has been polluted by metals and volatile organic compounds (VOCs).

9. On 19 November 1998, the California Environmental Protection Agency (Cal/EPA), Department of Toxic Substances Control (DTSC), approved the Final Remedial Action Plan (hereafter RAP) for PGS, Fresno, California dated 2 November 1998.

10. The RAP partitioned the remediation project into three phases - Phase I, Phase II, and Phase III. The first two phases are complete and Phase III is currently being implemented. Phase III implements an expanded granular activated carbon (GAC) system capable of treating substantially higher flow of groundwater extracted from two extraction wells.

11. The Phase III system has been operational since 13 January 2004. The Phase III GWRS includes: (a) extraction of groundwater from wells E-1B and E-2B only, (b) two 20,000 pound GAC units, and (c) a maximum discharge flow of 2.88 mgd. The GAC units have a reported design flow capacity of 1,100 gpm (1.58 mgd) when operated in series and 2,200 gpm (3.17 mgd) when operated in parallel.

12. Extraction wells E-1B and E-2B are within the PIA and intended to intercept plume migration. Extraction well E-1B is at the intersection of Palm and Locust Avenues with a screened interval from 130 to 160 feet bgs. Well E-2B is at the northeast corner of Palm Bluffs and Beechwood Avenues with a screened interval from 150 to 265 feet bgs.

13. Presently, groundwater in the PIA is monitored semi-annually using a network of 31 monitoring wells. Fifteen monitoring wells are completed in the shallow zone, 125 to 140 feet bgs; fifteen monitoring wells are completed in the intermediate zone, 135 to 170 feet bgs; and one monitoring well is completed in the deep zone below 170 feet. Water levels in the PIA have dropped significantly since the installation of many of the shallow monitoring wells, allowing for samples to be collected intermittently. Metals and organics including the VOCs are continuously monitored in the groundwater through the monitoring and extraction wells.

14. Groundwater from extraction wells E-1B and E-2B is conveyed through two 10-inch pipelines to the two GAC vessels. Treated water from the GAC units is combined in a single iron pipe where it is metered before being discharged to the FID Bullard Canal via Outfall 001. Outfall 001 is near the northwest corner of Ingram and Herndon Avenues and locally is completely underground due to the development of the property. The Bullard Canal is a closed conduit for a good portion of its reach downstream of the discharge. Access to the canal water can only be gained through manholes and vents.

15. The RWD originally proposed to operate the GAC vessels in parallel as extraction rates increase up to 2,000 gpm or 2.88 mgd. A 22 August 2005 letter from the Discharger's consultant, BSK, Inc., stated that the vessels are currently operated in series due to low extraction rates. In the same letter, BSK, Inc. requested to modify the RWD application to reflect the revised flow scheme and reaffirmed its request for a maximum flow limit of 2.88 mgd.

16. Industry standard GAC treatment design provides for two GAC vessels: (a) the first operated in a lead position, and (b) the second operated in a polishing position. The role of the second vessel is to remove any pollutants that may break through the carbon in the first vessel; allowing full use of the first vessel and providing a factor of safety that ensures discharges reliably meet effluent limits.

17. The Discharger has not demonstrated how it will treat flows up to 2.88 mgd. As stated in Finding 11, the GAC vessels have a design flow capacity of 1,100 gpm (1.58 mgd) when operated in series. Operating the GAC vessels in parallel is not consistent with industry standards and is not the best practicable treatment or control (BPTC) as described in Findings 39 and 40. Parallel operation would not provide the safety factor necessary to ensure compliance with effluent limits. It is appropriate to prohibit parallel operation of the two GAC vessels without secondary polishing and to appropriately limit discharge flow until the system can be modified to reflect BPTC.

18. The RWD and monitoring data submitted by the Discharger for the period 1996 through 2005 describes the treated groundwater discharged to Bullard Canal as follows:

Constituent	Units	Daily Maximum
Flow (E-1B)	mgd	0.58
Flow (E-2B)	mgd	1.44
Ammonia	mg/L	Not detected
Benzene	µg/L	<0.5
Boron	mg/L	0.2
Calcium	mg/L	26
Chloride	mg/L	10
Chloroform[1]	µg/L	<0.5
Total Chromium[2]	µg/L	4
Copper[1]	µg/L	<50
Dichlorodifluoromethane[1]	µg/L	<1.0
1,1-Dichloroethane (1,1-DCA)[1]	µg/L	<1.0
1,1-Dichloroethylene (1,1-DCE)	µg/L	<0.5
cis-1,2-Dichloroethylene (cis-1,2-DCE)[1]	µg/L	3.4
1,2-Dichloropropane (1,2-DCP)[1]	µg/L	<0.5

Constituent	Units	Daily Maximum
Hardness	mg/L	110[3]
Magnesium	mg/L	16
Methylene Chloride[1]	µg/L	<0.5
Potassium	mg/L	6
Conductivity at 25ºC	µmho/cm	400
Sodium	mg/L	31
Sulfate	mg/L	14
TDS	mg/L	300
Tetrachloroethene (PCE)[1]	µg/L	<0.5
trans-1,2 Dichloroethene (trans-1,2-DCE)[1]	µg/L	<0.5
1,1,1-Trichloroethane (1,1,1-TCA)[1]	µg/L	<0.5
Trichlorofluoromethane	µg/L	<0.5
Trichloroethylene (TCE)[1]	µg/L	0.74
Toluene	µg/L	0.73
Zinc[1]	µg/L	<50
pH – maximum	standard unit	8.8
pH - minimum	standard unit	7.1

[1] Effluent Limitation established for this parameter in WDRs Order No. 99-012.
[2] WDRs Order No. 99-012 contained effluent limitations for chromium (III) and chromium (VI). The Discharger only reported total chromium.
[3] Minimum hardness value reported.

19. The RWD and monitoring data submitted by the Discharger for the period 1996 through 2005 describe the maximum concentrations of constituents reported in untreated pumped groundwater as follows:

Constituent	Units	Maximum Concentration Reported Detected In Groundwater
Benzene	µg/L	0.66
Calcium	mg/L	36
Chloride	mg/L	12
Chloroform[1]	µg/L	<0.5
Total Chromium[2]	µg/L	660
Copper[1]	µg/L	14
Dichlorodifluoromethane[1]	µg/L	1.2
1,1-DCA[1]	µg/L	32
1,1-DCE	µg/L	25
cis-1,2-DCE[1]	µg/L	360
1,2-DCP[1]	µg/L	<0.5
Hardness	mg/L	120[3]
Magnesium	mg/L	16
Methylene Chloride[1]	µg/L	<400
Potassium	mg/L	6
Conductivity at 25ºC	µmho/cm	430
Sodium	mg/L	32
Sulfate	mg/L	14
TDS	mg/L	300
PCE[1]	µg/L	540
trans-1,2-DCE[1]	µg/L	<0.5
1,1,1-TCA[1]	µg/L	0.85

Constituent	Units	Maximum Concentration Reported Detected In Groundwater
Trichlorofluoromethane	µg/L	3.5
TCE[1]	µg/L	14,000
Toluene	µg/L	0.73
Zinc[1]	µg/L	130

[1] Effluent Limitation established for this parameter in WDRs Order No. 99-012.
[2] WDRs Order No. 99-012 contained effluent limitations for chromium (III) and chromium (VI). The Discharger only reported total chromium.
[3] Minimum hardness value reported.

20. Bullard Canal at the point of discharge is within the Tulare Lake Basin and flows seasonally downstream of the discharge point. The Bullard Canal originates where the Enterprise Canal terminates and becomes the Enterprise-Helm Colony and the Bullard Canal. The Enterprise Canal receives surface water from either the Kings River, via the Gould Canal, and/or the San Joaquin River, via the Friant Kern Canal. The Friant Kern Canal originates at Millerton Lake on the San Joaquin River. The Bullard Canal joins the Herndon Canal some distance downstream of the discharge. The Herndon Canal drains excess stormwater to the San Joaquin River roughly nine miles downstream of the discharge point. The canals carry water for irrigation purposes and are owned and operated by the FID. They also carry urban storm runoff and surface waters from ephemeral streams that include Redbank Creek, Fancher Creek, Dog Creek, and Holland Creek. At times, primarily during the fall and winter non-irrigation season, the discharge is the only source of flow in the canals.

21. An agreement between Calcot and the Discharger allows for placement and operation of the pipeline on Calcot property (now Palm Bluffs Corporate Center) connecting the groundwater extraction wells, GAC system, and the discharge point (Outfall 001) to the Bullard Canal. The agreement also allows for continuous access to the monitoring lines for sampling.

22. An agreement exists between the Discharger and the FID to allow the discharge of up to 4.32 mgd of treated groundwater to the Bullard Canal.

23. The *Water Quality Control Plan, Second Edition, for the Tulare Lake Basin* (hereafter Tulare Lake Basin Plan) and the *Water Quality Control Plan, Fourth Edition, for the Sacramento and San Joaquin River Basins* (hereafter San Joaquin Basin Plan) (both collectively Basin Plans) designate beneficial uses, establish water quality objectives (WQOs), and contain implementation programs and policies to achieve WQOs for all waters of these basins. The Basin Plans include plans and policies of the State Water Resources Control Board (SWRCB) incorporated by reference, including SWRCB Resolution No. 68-16, "Statement of Policy with Respect to Maintaining High Quality of Waters in California" (hereafter Resolution No. 68-16). Pursuant to Section 13263(a) of the California Water Code (CWC), waste discharge requirements must implement the Basin Plans.

24. The San Joaquin Basin Plan on page II-1.00 states: "Protection and enhancement of existing and potential beneficial uses are primary goals of water quality planning…" and with respect to disposal of wastewaters states that "...disposal of wastewaters is [not] a prohibited use of waters of the State; it is merely a use which cannot be satisfied to the detriment of beneficial uses."

25. As described above, Bullard Canal discharges to the Herndon Canal that drains to the San Joaquin River. The San Joaquin Basin Plan identifies the following beneficial uses for the San Joaquin River at the point the Herndon Canal drains to the river: municipal and domestic supply (MUN), agricultural supply (AGR), industrial process supply (PRO), water contact recreation (REC-1), non-contact water recreation (REC-2), warm freshwater habitat (WARM), cold freshwater habitat (COLD), warm and cold water fish migration habitat (MIGR), spawning, reproduction, and/or early development (SPWN), and wildlife habitat (WILD). Waters not specifically identified in the San Joaquin Basin Plan are designated as potential municipal and domestic supply; therefore, this designation applies to the Herndon and Bullard Canals. Further, discharges from the groundwater cleanup system to the Bullard Canal and Herndon Canal must be protective of the beneficial uses of the San Joaquin River. Therefore, for purposes of this Order the beneficial uses of the San Joaquin River are considered applicable to the Bullard Canal.

26. Bullard Canal, absent the discharge, may at times be dry. During these periods, the beneficial uses made possible by the discharge must be protected, and no credit for receiving water dilution is available. At other times, other flows within the canal help support beneficial uses. Both conditions may exist within a short time span, where Bullard Canal would be dry without the discharge and periods when sufficient background flows provide hydraulic continuity with the San Joaquin River. Dry conditions may occur throughout the year, particularly in low rainfall years. The lack of dilution results in more stringent effluent limitations to protect contact recreational uses, drinking water standards, agricultural water quality goals and aquatic life. Significant dilution may occur during and immediately following high rainfall events.

27. The designated beneficial uses of the underlying groundwater are MUN, AGR, PRO and industrial service supply (IND). The discharge of treated groundwater is not expected to degrade underlying groundwater.

28. Chapter 4 of the Basin Plans contain a policy for application of WQOs that specifies a method for evaluating the cumulative cancer risk from multiple chemicals found together in water. As of 4 March 2005, the following pollutants that may be present in untreated groundwater and treated groundwater and are considered to be carcinogens as defined by The Safe Drinking Water and Toxic Enforcement Act of 1986:

- Benzene
- Chloroform
- Chromium (VI)
- 1,1-DCE
- 1,2-DCP
- Methylene Chloride
- PCE
- TCE

According to the Basin Plans, the additive toxicity of the sum of the carcinogenic constituents is determined by dividing the concentration of each carcinogen in the discharge by its toxicological limit. The Basin Plans assume an additive toxicity problem does not exist if the summation of the ratios is less than 1.0. If the summation of the ratios is equal to or greater than 1.0, the combination of constituents is assumed to present an unacceptable

level of toxicologic risk. The Basin Plans describe additive toxicity by the following formula:

$$\sum_{i=1}^{n} \frac{[\text{Concentration of Toxic Substance}]_i}{[\text{Toxicological Limit for Substance in Water}]_i} < 1.0$$

29. United States Environmental Protection Agency (USEPA) adopted the *National Toxics Rule* (NTR) on 22 December 1992, which was amended on 4 May 1995 and 9 November 1999, and the *California Toxics Rule* (CTR) on 18 May 2000, which was amended on 13 February 2001. These Rules contain water quality standards applicable to this discharge. The SWRCB adopted the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (known as the State Implementation Policy or SIP) on 2 March 2000, which contains policies and procedures for implementation of the NTR and the CTR. The SIP was amended by the State Water Board on 24 February 2005.

30. Federal regulations 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 or technology-based standard.

31. The SIP requires the Regional Board to use all available, valid, relevant, representative information to determine whether a discharge may: (a) cause, (b) have a reasonable potential to cause, or (c) contribute to an excursion above any applicable priority pollutant criterion or objective.

32. WQOs applicable to protecting MUN include the narrative WQOs for toxicity, which states, in part, "[a]ll waters shall be maintained free of toxic substances in concentrations that produce detrimental physiological responses in human, plant, animal or aquatic life." The narrative toxicity objective and the MUN beneficial use designation comprise a water quality standard applicable to pollutants in the receiving stream.

33. Chapter IV of the San Joaquin Basin Plan contains the *Policy for Application of Water Quality Objectives*, which provides that "[w]here compliance with narrative objectives is required (i.e., where the objectives are applicable to protect specified beneficial uses), the Regional Board will, on a case-by-case basis, adopt numerical limitations in orders which will implement the narrative objectives." The policy further provides that to evaluate compliance with narrative WQOs the Regional Board considers, among other things, "relevant numerical criteria and guidelines developed and/or published by other agencies and organizations (e.g.,… California Office of Environmental Health Hazard Assessment, …)."

34. Groundwater investigation reports provided as part of Order Nos. 93-018 and 99-012, and information provided by the Discharger for the period of 1996 to early 2005, as shown in Finding 19 of this Order and Table 1 of the Information Sheet, indicate total chromium, copper, dichlorodifluoromethane, 1,1-DCA, 1,1-DCE, cis-1,2-DCE, PCE, trichlorofluoromethane, TCE, and zinc were in concentrations that exceed or threaten to exceed applicable water quality criteria or objectives. The Discharger's groundwater treatment system and similar systems have

experienced failures or operational errors that have resulted in pass through of untreated or partially treated effluent resulting in exceedances of permit limits. A failure of the groundwater treatment system or operational errors could result in a similar discharge of partially treated or untreated effluent exceeding applicable water quality criteria. Thus, each of these constituents has a reasonable potential to cause or contribute to an excursion above each respective applicable priority pollutant criterion or objective. Water quality-based effluent limitations were developed for each of these pollutants in accordance with the SIP and are shown in Table 4 of the Information Sheet.

35. The SIP Section 1.4 states, in part, "…*calculated water quality based effluent limitations shall be compared to the technology based effluent limitations for the pollutant, and the most protective of the two types of limitations shall be included in the permit*."

36. The SIP defines Minimum Level (ML) as the concentration at which the entire analytical system must give recognizable signal and calibration point. The ML is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed by a specific analytical procedure, assuming that all method specified sample weights, volumes, and processing steps have been followed. MLs are synonymous to practical quantitation limits (PQLs).

37. The SIP defines Method Detection Limit (MDL) as the concentration of a substance that can be measured and reported with 99 percent confidence that the analyte concentration is greater than zero, as defined in 40 CFR 136, Appendix B, revised as of 14 May 1999. MDLs are synonymous to detection limits.

38. The SIP requires the Discharger to report with each sample result the corresponding applicable ML and the laboratory's current MDL.

39. Clean Water Act (CWA) section 301(b)(1) requires NPDES permits to include effluent limitations that achieve technology-based standards and any more stringent limitations necessary to meet water quality standards. Water quality standards include beneficial uses and narrative and numeric WQOs specific to the beneficial uses as set forth in the Basin Plans, SWRCB adopted standards, and federal standards including NTR and CTR. These standards include the toxicity objective of the Basin Plans and Resolution 68-16. Under the CWA, the applicable technology-based standard is best available control technology (BAT)/best conventional pollutant control technology (BCT). Because there are no promulgated effluent limitations for VOCs in groundwater extracted for cleanup, technology-based limitations are established based upon consideration of the Regional Board staff's best professional judgment (BPJ). This Regional Board has a long history of regulating cleanup of VOCs in groundwater and has consistently imposed effluent limits at less than the minimum levels (MLs) for VOCs in groundwater. With respect to the specific discharges permitted herein, the following have been considered:

a. Appropriate technology for category or class of discharges
b. Unique factors relating to the applicant

c. Age of equipment
d. Processes employed
e. Engineering aspects of various control techniques
f. Non-water quality environmental impacts, including energy requirements
g. Cost of achieving proposed effluent reduction
h. Influent, effluent, and receiving water data

A GAC system is an appropriate technology for complete VOC removal from extracted groundwater, and this type of system is currently in place elsewhere in the State. Data submitted by the Discharger shows that the GAC system operated in series can meet the proposed effluent limits set at less than MLs, which supports a conclusion that the limits reflect Best Practicable Treatment and Control (BPTC)/BAT. Additionally, the Discharger must properly operate and maintain its treatment system. As the Discharger is already meeting the proposed effluent limitations with the technology currently employed, continued proper operation and maintenance of the existing treatment system will achieve these effluent limits and not impose additional costs on the Discharger.

40. In addition, CWA Section 301 requires implementation of effluent limitations that are as stringent as necessary to meet water quality standards established pursuant to state law. Applicable state water quality standards include Resolution No. 68-16.

41. Resolution No. 68-16 requires implementation of BPTC to ensure that the highest water quality is maintained consistent with the maximum benefit to the people of the State. BPTC is equivalent to BAT and for VOCs provides that the pollutants should be discharged at concentrations no higher than quantifiable levels for each pollutant. For VOCs this Order requires meeting effluent limits set at less than MLs. Several dischargers in the Central Valley Region, including The Vendo Company, have implemented BPTC groundwater treatment systems and have been able to consistently treat VOCs in the wastewater to concentrations below the MLs. The MLs for VOC constituents of concern are listed below:

Constituent	Units	ML
Chloroform	µg/L	0.5[1]
Dichlorodifluoromethane	µg/L	[3]
1,1-DCA	µg/L	0.5[1]
1,1-DCE	µg/L	0.5[1]
cis-1,2-DCE	µg/L	0.5[2]
1,2-DCP	µg/L	0.5[1]
Methylene Chloride	µg/L	0.5[1]
PCE	µg/L	0.5[1]
trans-1,2-DCE	µg/L	0.5[1]
1,1,1-TCA	µg/L	0.5[1]
Trichlorofluoromethane	µg/L	5[2]
TCE	µg/L	0.5[1]

[1] SIP, Appendix 4, "SWRCB Minimum Levels in ppb (µg/L)."
[2] Title 22, CCR, Section 64445.1, California Department of Health Services Detection Limits for Purposes of Reporting (DLRs).
[3] No ML or DLR is published for this constituent.

42. To implement the applicable WQOs, the most stringent numerical criteria available should be used to determine water quality based effluent limits (WQBELs) for each pollutant. The criteria used for each pollutant are summarized in Table 3 of the Information Sheet, a part of this Order.

43. The most stringent effluent limits authorized by this Order are:

Constituent	Units	WQBEL Limit[1]		TBEL Limit[2]	Most Stringent Effluent Limit	
		Daily Maximum	Monthly Average	Daily Maximum	Daily Maximum	Monthly Average
Chloroform	µg/L	2.2	1.1	<0.5	<0.5	n/a[3]
Chromium (III)	µg/L	46	23	-	46	23
Chromium (VI)	µg/L	16	8	-	16	8
Copper	µg/L	1.4	0.7	-	1.4	0.7
Dichlorodifluoromethane	µg/L	0.38	0.19	-	0.38	0.19
1,1-DCA	µg/L	10	5	<0.5	<0.5	n/a[3]
1,1-DCE	µg/L	0.11	0.06	<0.5	0.11	0.06
cis-1,2-DCE	µg/L	12	6	<0.5	<0.5	n/a[3]
1,2-DCP	µg/L	1.1	0.52	<0.5	<0.5	n/a[3]
Methylene Chloride	µg/L	5.0	2.5	<0.5	<0.5	n/a[3]
PCE	µg/L	1.6	0.8	<0.5	<0.5	n/a[3]
trans-1,2-DCE	µg/L	20	10	<0.5	<0.5	n/a[3]
1,1,1-TCA	µg/L	402	200	<0.5	<0.5	n/a[3]
Trichlorofluoromethane	µg/L	0.38	0.19	<0.5	0.38	0.19
TCE	µg/L	5.4	2.7	<0.5	<0.5	n/a[3]
Zinc	µg/L	15	7.6	-	15	7.6

[1] Water Quality Based Effluent Limit.
[2] Technology-based Effluent Limit.
[3] n/a=not applicable.

44. Over the past several years GAC units have consistently removed the pollutants and achieved the proposed effluent limits. The proposed effluent limitations consider the BPJ factors in Finding 39 above, historical performance of the on-site BAT/BPTC systems, receiving water conditions, and USEPA method detection limits, and they are less than or equal to California Primary Maximum Contaminant Levels, CTR and NTR criteria, and limits which implement applicable WQOs.

45. Application of BAT/BCT to achieve the effluent limits will also result in compliance with WQBELs and that is consistent with the requirement of Resolution No. 68-16 that discharges meet BPTC. A possible exception is the WQBEL limits for dichlorodifluoromethane; 1,1-DCE; and trichlorofluoromethane. However, given that the limits for these constituents are below the applicable ML, it is appropriate to assume that a result of less than 0.5 µg/L also represents compliance with the WQBEL and BPTC. The permitted discharge is consistent with the anti-degradation provisions of 40 CFR 131.12 and Resolution No. 68-16. BPTC for cleanup of

groundwater polluted by volatile organic constituents is removal of VOCs to a level at or below corresponding analytical quantitation limits. Some resulting degradation of the receiving water could occur if VOCs were present at concentrations below the quantitation limit, but such degradation would not be quantifiable. The Discharger has not submitted an analysis to the Regional Board demonstrating that degradation resulting from discharges of VOCs at concentrations in excess of quantifiable levels would be consistent with the maximum benefit of the people of the state and Resolution No. 68-16. Due to the relatively low conductivity and TDS values of the receiving water, during periods of limited or no dilution, some degradation of the receiving water may occur from these pollutants, however, the discharge will not cause an exceedance of WQOs or cause a significant impact on the beneficial uses of groundwater and surface water. The continued remediation of polluted groundwater and the use of the treated groundwater for irrigation via the Bullard Canal both benefit the people of the state.

46. According to the SIP, if no ML value is below the effluent limitation, the applicable ML value shall be the lowest ML value listed in Appendix 4 of the SIP. VOC concentrations below the MLs are generally considered unquantifiable. Therefore, application of WQBELs for these constituents requires effluent to meet MLs.

47. Order No. 99-012 established a technology-based effluent limit monthly median limit of less than 0.5 µg/L and a daily maximum limit of 5 µg/L for volatile organics 1,1-DCA, cis-1,2-DCE, PCE, 1,1,1-TCA, and TCE. Based on monitoring data submitted by the Discharger between 1996 and 2005, these constituents have been either reported in detectable concentrations in the groundwater or effluent that exceeded water quality criteria, or were analyzed by methodologies with MDLs that exceed MLs. Because these constituents were either in detectable concentrations or maximum concentrations that could not be adequately evaluated due to high MDLs, technology-based effluent limitations are established in this Order.

48. Order No. 99-012 established a technology-based effluent limit monthly median limit of less than 0.5 µg/L and a daily maximum limit of 5 µg/L for volatile organics chloroform; 1,2-DCP; methylene chloride; and trans-1,2-DCE that were either not reported in detectable concentrations in the groundwater or effluent, or were analyzed by methodologies with MDLs that exceed MLs. Because these constituents could be present in groundwater or in the effluent, this Order includes technology-based effluent limits for these constituents.

49. **Flow—** Order No. 99-012 limited effluent flow to 1.44 mgd but included a provision that allowed a maximum flow of 2.5 mgd when the new GWRS system in Phase III was operational with the approval of the Executive Officer. Phase III was implemented on January 2004; however, the Discharger has not demonstrated how it will implement BPTC to treat flows up to 2.88 mgd. Therefore, this Order establishes a maximum flow of 1.44 mgd until such time as the GWRS GAC units are modified to reflect BPTC. Following satisfaction of Provision F.6, the discharge flow may be increased to 2.88 mgd.

50. **Chromium (III)**— Order No. 99-012 established a variable WQBEL for chromium (III) based on the hardness values of either the effluent or receiving water, whichever is less, but no less than 25 mg/L as $CaCO_3$. During the term of Order No. 99-012, the Discharger failed to monitor and provide effluent and receiving water data for chromium (III). This Order carries forward the

WQBEL for chromium (III) as a fixed limitation. The Discharger reported hardness concentrations for the effluent and receiving water. The most stringent hardness concentration was 8.8 mg/L as $CaCO_3$ in the receiving water; therefore, based on the SIP, a hardness of 8.8 mg/L was used to calculate the effluent limitations for chromium (III) in this Order. The CTR includes acute and chronic water quality criteria for chromium (III) for the protection of freshwater aquatic life. Using a hardness of 8.8 mg/L, the acute and chronic criteria for total chromium (III) are 237 µg/L and 28 µg/L, respectively. Based on information provided by the Discharger, the maximum reported concentration of total dissolved chromium was 660 µg/L. The presence of chromium in the groundwater presents a reasonable potential to cause or contribute to an in-stream excursion above the CTR criteria for chromium (III). WQBELs for chromium (III) for the protection of aquatic life have been established in this Order.

51. **Chromium (VI)**— Order No. 99-012 established effluent limitations for chromium (VI) that were expressed as 1-hour average concentration, and 4-day average concentration. These limits were developed by setting them equal to the proposed CTR water quality criteria. These limits were developed prior to the final promulgation of the CTR criteria and the adoption and implementation of the SIP. According to the SIP, effluent limits for CTR pollutants are to be expressed as a monthly average and as a maximum and may be calculated using the CTR criteria. During the term of Order No. 99-012 the Discharger failed to monitor and provide effluent and receiving water data for chromium (VI). CTR includes acute and chronic water quality criteria for chromium (VI) of 16 µg/L and 11 µg/L, respectively, for the protection of freshwater aquatic life. Based on information provided by the Discharger, the maximum reported concentration of total dissolved chromium was 660 µg/L. The presence of chromium in the groundwater presents a reasonable potential to cause or contribute to an in-stream excursion above the CTR criteria for chromium (VI). This Order carries forward the WQBELs for chromium (VI) expressed in accordance with the methodology and terminology established in the in SIP for developing WQBELs. WQBELs for chromium (VI) for the protection of aquatic life have been established in this Order.

52. **Copper**— Order No. 99-012 established a variable WQBEL for copper based on the hardness values of either the effluent or receiving water, whichever was less, but no less than 25 mg/L as $CaCO_3$. This Order carries forward the WQBEL for copper as a fixed limitation. The Discharger reported hardness concentrations for the effluent and receiving water. The most stringent hardness concentration was 8.8 mg/L as $CaCO_3$ in the receiving water; therefore, based on the SIP, a hardness of 8.8 mg/L was used to calculate the effluent limitations for copper in this Order. CTR includes acute and chronic water quality criteria for copper for the protection of freshwater aquatic life. Using a hardness of 8.8 mg/L, the acute and chronic criteria for copper are 1.4 µg/L and 1.2 µg/L, respectively. Based on information provided by the Discharger, the maximum reported concentration of copper was 14 µg/L in the groundwater, a concentration that presents a reasonable potential to cause or contribute to an in-stream excursion above the CTR criteria for copper. WQBELs for copper for the protection of aquatic life have been established in this Order.

53. **Dichlorodifluoromethane—** Order No. 99-012 established a technology-based effluent limit monthly median limit of less than 0.5 µg/L and a daily maximum limit of 5 µg/L for

dichlorodifluoromethane. USEPA established a national recommended ambient water quality criterion for human health and welfare based on a one-in-a-million cancer risk for sources of drinking water for the ingestion of water and organisms of 0.19 μg/L. Based on information provided by the Discharger the maximum detected concentration of dichlorodifluoromethane was 1.2 μg/L. The discharge has reasonable potential to cause or threaten to cause an exceedance of water quality criteria based on the protection of human health. Using the methodology in the SIP, WQBELs for dichlorodifluoromethane have been established in this Order.

54. **1,1-DCE—** Based on monitoring data submitted by the Discharger, 1,1-DCE was reported in detectable concentrations with a maximum treated groundwater effluent concentration reported as 1.3 μg/L. The maximum reported concentration for 1,1-DCE in untreated groundwater reported by the Discharger is 25 μg/L. The CTR establishes criteria for the protection of human health based on a one-in-a-million cancer risk for 1,1-DCE. MUN is a beneficial use of the receiving stream. The CTR criteria for consumption for water and organisms and organisms only are 0.057 μg/L and 3.2 μg/L, respectively. The discharge has reasonable potential to cause or threaten to cause an exceedance of water quality criteria based on the protection of human health. In accordance with the SIP, WQBELs for 1,1-DCE have been established in this Order.

55. **Trichlorofluoromethane—** Based on monitoring data submitted by the Discharger, trichlorofluoromethane was reported in detectable concentrations with a maximum untreated groundwater concentration reported as 3.5 μg/L. USEPA established a national recommended ambient water quality criterion for human health and welfare based on a one-in-a-million cancer risk for sources of drinking water for the ingestion of water and organisms of 0.19 μg/L. The discharge has reasonable potential to cause or threaten to cause an exceedance of water quality criteria based on the protection of human health. Using the methodology in the SIP, WQBELs for trichlorofluoromethane have been established in this Order.

56. **Zinc**— Order No. 99-012 established a variable WQBEL for zinc based on the hardness values of either the effluent or receiving water, whichever is less, but no less than 25 mg/L as $CaCO_3$. This Order carries forward the WQBEL for zinc as a fixed limitation. The Discharger reported hardness concentrations for the effluent and receiving water. The most stringent hardness concentration was 8.8 mg/L as $CaCO_3$ in the receiving water; therefore, based on the SIP, a hardness of 8.8 mg/L was used to calculate the effluent limitations for zinc in this Order. CTR includes acute and chronic water quality criteria for zinc for the protection of freshwater aquatic life. Using a hardness of 8.8 mg/L, the acute and chronic criteria for zinc are 15.3 μg/L and 15.3 μg/L, respectively. Based on information provided by the Discharger, the maximum reported concentration of zinc was 130 μg/L in the groundwater, a concentration that presents a reasonable potential to cause or contribute to an in-stream excursion above the CTR criteria for copper. WQBELs for zinc for the protection of aquatic life have been established in this Order.

57. **Other VOCs—** Order No. 99-012 established a technology-based maximum daily effluent limitation for other VOCs that have not been specifically identified in this Order. As described in Finding 39, this Regional Board has historically established technology-based limits of VOCs

for GWRS at less than MLs for the VOC. Therefore, this Order carries forward the technology-based limitations for other VOCs.

58. **Total VOCs—** Order No. 99-012 established a technology-based maximum daily effluent limitation for total VOCs of not to exceed 5 µg/L. As described in Finding 39, this Regional Board has historically established technology-based limits of VOCs for GWRS at less than MLs for VOCs. The Basin Plans include a narrative WQO that states that "[a]ll waters shall be maintained free of toxic substances in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life." Allowing a discharge of VOCs up to 5 µg/L may result in the discharge exceeding applicable water quality criteria. To protect the beneficial use of the receiving water from the cumulative effect of multiple VOCs the maximum daily effluent limitation for total VOCs not to exceed 5 µg/L has been revised to less than 0.5 µg/L.

59. Section 303(a-c) of the CWA, required states to adopt numeric criteria where necessary to protect designated uses. This Regional Board adopted numeric criteria in the Basin Plans. The Basin Plans are a regulatory reference for meeting the state and federal requirements for water quality control (40 CFR 131.20). Resolution No. 68-16 does not allow changes in water quality less than that prescribed in Basin Plans. The San Joaquin Basin Plan states: *"The numerical and narrative water quality objectives define the least stringent standards that the Regional Board will apply to regional waters in order to protect the beneficial uses."* This Order contains Receiving Water Limitations for Biostimulatory Substances, Chemical Constituents, Color, Dissolved Oxygen, Floating Material, Oil and Grease, pH, Pesticides, Radioactivity, Salinity, Sediment, Settleable Material, Suspended Material, Tastes and Odors, Temperature, Toxicity and Turbidity based on numerical and narrative WQOs in the Basin Plans.

60. The Discharger was issued a letter on 27 February 2001, pursuant to CWC Section 13267, requiring effluent and receiving water monitoring meeting the requirements of the SIP. These data were required to perform reasonable potential analyses (RPAs). The Discharger did not submit effluent and receiving water monitoring data as required by the 27 February 2001 letter, and a RPA for CTR constituents is not possible.

61. To gather the information necessary to conduct an RPA for CTR constituents, it is appropriate to require the Discharger to:

    a. Provide information regarding the levels of NTR and CTR constituents in the discharge.
    b. Conduct an RPA for detected constituents, and
    c. Calculate effluent limitations for constituents showing reasonable potential to cause or contribute to an in-stream excursion above a water quality standard, including Basin Plan numeric and narrative objectives and NTR and CTR criteria.

    The Regional Board may then need to reopen this Order and include effluent limitations for constituents showing reasonable potential.

62. The Discharger has not provided sufficient data for non-priority pollutants for the Regional Board to determine reasonable potential for these constituents to cause or threaten to cause an exceedance of water quality standards. This Order requires the Discharger to monitor for these constituents.

63. The additional data points for CTR and non-CTR pollutants will be used to perform an RPA. Upon completion of the analysis, if it is found that a pollutant has a reasonable potential to cause or contribute to an excursion of applicable water quality standards, then this Order may be reopened and specific effluent and/or receiving water limitations may be added.

64. Section 13267 of the CWC states, in part, "*(a) A regional board, in establishing…waste discharge requirements… may investigate the quality of any waters of the state within its region"* and *"(b) (1) In conducting an investigation…, the regional board may require that any person who… discharges… waste…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. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports."* The attached Monitoring and Reporting Program is issued pursuant to CWC Sections 13267 and 13383. The attached Monitoring and Reporting Program in this Order is necessary to assure compliance with these waste discharge requirements. The Vendo Company is responsible for the discharges of waste at the facility subject to this Order.

65. If other constituents of concern are identified as being present or potentially being present in groundwater discharged under this Order, then this Order may be reopened and effluent limits and receiving water limitations may be established for those constituents.

66. All of the above and the supplemented data and information and details in the attached Information Sheet and attachments, which are incorporated by reference herein, were considered in establishing conditions of discharge.

67. USEPA and the Regional Board have classified this discharge as a minor discharge.

68. 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 CWA and amendments thereto are applicable to the discharge.

69. The action to renew 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 Section 13389 of the CWC.

70. The Discharger and interested agencies and persons were notified of the intent to prescribe waste discharge requirements for this discharge and provided with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.

71. In a public meeting, all comments pertaining to the discharge were heard and considered.

72. 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.

IT IS HEREBY ORDERED pursuant to CWC Sections 13263, 13267, 13377, and 13383 that Order No. 99-012 is rescinded and The Vendo Company, its agents, successors and assigns, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, and the provisions of the CWA and regulations and guidelines adopted there under, shall comply with the following:

A. Discharge Prohibitions:

1. Discharge of material other than treated groundwater from the investigation and cleanup of groundwater pollution, or discharge of treated groundwater from the investigation of groundwater where other pollutants exist in the groundwater, or in a manner different from that described in the Findings, is prohibited.

2. The bypass or overflow of untreated or partially treated groundwater, including polluted purge water, is prohibited.

3. Discharge of waste classified as ‘hazardous’ as defined in Section 2521(a) of Title 23, CCR, Section 2510, et seq., or ‘designated’, as defined in Section 13173 of the CWC, is prohibited.

4. Discharge of wastewater or pollutants not passing through at least two GAC vessels operated in series is prohibited.

B. Effluent Limitations: Outfall 001

1. The maximum daily discharge to Outfall 001 shall not exceed 1.44 mgd. If Provision F.6 is satisfied, the discharge shall not exceed 2.88 mgd.

2. Effluent discharged from Outfall 001 shall not exceed the following limits:

Constituent	Units	Monthly Average	Daily Maximum
Chloroform	µg/L		<0.5
Chromium (III) (total recoverable)	µg/L	23	46

Constituent	Units	Monthly Average	Daily Maximum
	lbs/day [1]	0.28	0.55
	lbs/day [2]	0.55	1.11
Chromium (VI) (total recoverable)	µg/L	8	16
	lbs/day [1]	0.1	0.19
	lbs/day [2]	0.19	0.38
Copper (total recoverable)	µg/L	0.7	1.4
	lbs/day [1]	0.01	0.02
	lbs/day [2]	0.02	0.03
Dichlorodifluoromethane	µg/L	0.19[3]	0.38[3]
1,1-DCA	µg/L		<0.5
1,1-DCE	µg/L	0.06[3]	0.11[3]
Cis-1,2-DCE	µg/L		<0.5
1,2-DCP	µg/L		<0.5
Methylene Chloride	µg/L		<0.5
PCE	µg/L		<0.5
Trans-1,2-DCE	µg/L		<0.5
1,1,1-TCA	µg/L		<0.5
Trichlorofluoromethane	µg/L	0.19[3]	0.38[3]
TCE	µg/L		<0.5
Zinc (total recoverable)	µg/L	7.6	15
	lbs/day [1]	0.09	0.18
	lbs/day [2]	0.18	0.36
Other VOCs[4]	µg/L		<0.5

[1] Based on a maximum flow of 1.44 mgd.
[2] Based on a maximum flow of 2.88 mgd.
[3] If approved ML is greater than Effluent Limit, then compliance is met if concentration is below the ML.
[4] Other volatile organic compounds.

3. The sum of the concentrations of the VOC constituents listed in Effluent Limitation B.2, above, in any single sample of the discharge shall be less than 0.5 µg/L.

4. The discharge shall not have a pH less than 6.5 nor greater than 8.5.

5. Survival of aquatic organisms in 96-hour bioassays of undiluted waste shall be no less than:

   Minimum for any one bioassay ---------- 70%
   Median for any three or more consecutive bioassays--------90%

C. Waste and Solids Disposal:

1. Spent carbon and other residual solids removed from liquid wastes or used to treat liquid wastes shall either be recycled or disposed of in a manner that is consistent with CCR Title 27, Division 3; Title 23, Division 3, Chapter 15; and Title 22, Division 4.5, and as approved by the Executive Officer.

2. Any proposed change in filter waste use or solids disposal practice from a previously approved practice shall be reported to the Executive Officer and USEPA Regional Administrator at least 90 days in advance of the change.

D. Receiving Water Limitations:

Receiving water limitations for the Bullard Canal are based on maintaining WQOs contained in the Basin Plans for Bullard Canal and the San Joaquin River. As such, they are a required part of this permit.

The discharge, alone or in combination with other sources, shall not cause the following in the Bullard Canal:

1. Bacteria: The fecal coliform concentration based on a minimum of not less than five samples for any 30-day period shall not exceed a geometric mean of 200/100 ml, nor shall more than ten percent of the total number of samples taken during any 30-day period exceed 400/100 ml.

2. Dissolved Oxygen: Discharge shall not cause the concentrations of dissolved oxygen to fall below 7.0 mg/L.

3. Oil and Grease: 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.

4. Color: Discoloration that causes nuisance or adversely affects beneficial uses.

5. pH: The ambient pH to be depressed below 6.5, nor raised above 8.5, nor changes in normal ambient pH levels to be exceeded by more than 0.5 units.

6. Temperature: The natural receiving water temperature to increase more than 5°F.

7. Setteable Matter: Substances in concentrations that result in the deposition of material that causes nuisance or adversely affects beneficial uses.

8. Radioactivity: Radionuclides to be present in concentrations that are harmful to human, plant, animal or aquatic life nor that result in the accumulation of radionuclides in the food web to an extent that presents a hazard to human, plant, animal or aquatic life.

   Concentrations of radionuclides in excess of the maximum contaminant levels (MCLs) specified in Table 4 (MCL Radioactivity) of Section 64443 of Title 22 of the California Code of Regulations.

9. Toxicity: Toxic substances in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life. This applies regardless of whether the toxicity is caused by a single substance or the interactive effect of multiple substances.

10. Biostimulatory Substances: Biostimulatory substances which promote aquatic growths in concentrations that cause nuisance or adversely affect beneficial uses.

11. Floating Material: Floating material in amounts that cause nuisance or adversely affect beneficial uses.

12. Sediment: Suspended sediment load and suspended sediment discharge rate altered in such a manner to cause nuisance or adversely affect beneficial uses.

13. Suspended Material: Suspended material concentrations that cause nuisance or adversely affect beneficial uses.

14. Taste and Odor: Taste or odor-producing substances to impart undesirable tastes or odors to fish flesh or other edible products of aquatic origin or to cause nuisance or adversely affect beneficial uses.

15. Chemical constituents: Chemical constituents in concentrations that adversely affect beneficial uses.

16. Turbidity: Changes in turbidity that cause nuisance or adversely affect beneficial uses. Turbidity attributable to controllable water quality factors to exceed the following:

    a. More than 1 Nephelometric Turbidity Units (NTUs) 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.

17. Pesticides[1]:

    a. Pesticides in individual or combined concentrations that adversely affect beneficial uses.

    b. Pesticide concentrations in bottom sediments or aquatic life that adversely affect beneficial uses.

    c. Total identifiable persistent chlorinated hydrocarbon pesticides in concentrations detectable within the accuracy of analytical methods approved by the USEPA or the Executive Officer.

    d. Concentrations exceeding those allowable by applicable antidegradation policies (see Resolution No. 68-16 and 40 CFR Section 131.12.)

    e. Concentrations exceeding the lowest levels technically and economically achievable.

    f. Concentrations exceeding the MCLs set forth in CCR Title 22, Division 4, Chapter 15.

    g. Concentrations of thiobencarb in excess of 1.0 mg/L.

18. Violation of any applicable water quality standard for receiving waters adopted by the Regional Board or the SWRCB to implement the CWA and regulations adopted there under.

E. Groundwater Limitations:

The discharge shall not adversely alter the physical properties of or the concentration of any constituent in underlying groundwater, as determined by comparison to the quality of groundwater in an area unaffected by any past or present discharge of pollutants, and shall not cause or contribute to the violation of any Basin Plan narrative or numeric water quality objective.

F. Provisions:

1. The Discharger shall comply with all the items of the "Standard Provisions and Reporting Requirements for Waste Discharge Requirements (NPDES)", dated 1 February 2004, which is part of this Order.

[1] The term pesticide shall include: (1) any substance, or mixture of substances which is intended to be used for defoliating plants, regulating plant growth, or for preventing, destroying, repelling, or mitigating any pest, which may infest or be detrimental to vegetation, man, animals, or households, or be present in any agricultural or nonagricultural environment whatsoever, or (2) any spray adjuvant, or (3) any breakdown products of these materials that threaten beneficial uses. Note that discharges of "inert" ingredients included in pesticide formulations must comply with all applicable water quality objectives.

2. The Discharger shall comply with Monitoring and Reporting Program No. R5-2006-0016, which is part of this Order, and any revisions thereto as ordered by the Executive Officer.

   When requested by USEPA, the Discharger shall complete and submit Discharge Monitoring Reports. The submittal date shall be no later than the submittal date specified in the Monitoring and Reporting Program for Discharger Self Monitoring Reports.

3. This Order merely sets conditions for discharge to the Bullard Canal. This Order does not grant privilege to use the subject canal.

4. The Discharger shall conduct the chronic toxicity testing specified in the Monitoring and Reporting Program. 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 the WQO for toxicity, the Discharger shall initiate a Toxicity Identification Evaluation (TIE) to identify the causes of toxicity. Upon implementation of the TIE, the Discharger shall submit a workplan 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. The results shall conform to Provision F.14. Additionally, if the SWRCB adopts a chronic toxicity WQO, this Order may be reopened to include an effluent limitation based on that objective.

5. The Discharger shall provide a technical report describing the methods it will use to: provide the priority pollutant and non-CTR constituent monitoring required by CWC Section 13267 Order dated 27 February 2001 described in Finding No. 60; conduct an RPA consistent with the methodology in the SIP for all detected pollutants; and calculate proposed effluent limits for all constituents showing the reasonable potential to cause or contribute to an exceedance of a WQO in Bullard Canal. The technical report shall include a work plan and implementation schedule. The work plan and implementation schedule are subject to EO approval. Provision F.14 requirements apply to this technical report.

	Task	Compliance Date
a.	Submit the technical report including a work plan and implementation schedule to complete the Priority Pollutant Evaluation described above.	**13 March 2006**
b.	Begin to implement approved work plan	**30 days following EO written approval of task 5.a.**
c.	Submit written status report.	**7 months following completion of task 5.b**

Task	Compliance Date
d. Complete implementation of approved work plan and submit in a written technical report proposed effluent limits for CTR constituents.	**27 March 2007**

The above compliance schedule does not supersede that in the 13267 Order for the purpose of calculating potential administrative civil liability, should assessment become necessary.

6. At least **90 days** prior to the proposed increase in discharge from the GWRS from 1.44 mgd to 2.88 mgd, the Discharger shall submit a technical report describing in detail the additional equipment to be installed to provide redundant treatment units to meet industry standards, to effect BPTC, and to ensure the GWRS will have a reliable treatment capacity at 2.88 mgd. The technical report and time schedule are subject to Executive Officer approval. The technical report shall conform to Provision F.14.

7. The Discharger must utilize USEPA test methods and detection limits to achieve detection levels below applicable water quality criteria. At a minimum the Discharger shall comply with the Monitoring Requirements for these constituents as outlined in Section 2.3 and 2.4 of the SIP, adopted 2 March 2000 by the SWRCB, and report all peaks identified by the USEPA test methods.

8. **By 27 February 2006**, the Discharger shall develop or review and revise the existing operation and maintenance plan (O&M Plan) to ensure full compliance with the conditions and requirements set forth in this Order. The O&M Plan shall instruct operating personnel on how to manage the day-to-day discharge operation to comply with the terms and conditions of this order. The O&M Plan shall also detail how frequently each GAC unit is serviced and also describe how valves and plumbing are clearly labeled to ensure proper operation of the GWRS by operating personnel. The O&M Plan shall also include details for the following aspects of the proposed sampling process for monitoring influent, effluent, mid-treatment, and groundwater:

   a. Method Summary (must be USEPA approved method and capable of quantifying analytes to levels at or below those specified in Effluent Limitations and Receiving Water Limitations, above);
   b. Proposed list of analytes;
   c. Sample preservation, containers, handling, and storage;
   d. Interferences and potential problems;
   e. Sampling and analysis equipment/apparatus;
   f. Reagents;
   g. Preparation and sample collection procedures;
   h. Quality assurance and quality control;
   i. Well purging;
   j. Filtering; and
   k. Health and Safety.

The O&M Plan must be submitted to the Regional Board, **by 13 March 2006**, for Executive Officer approval. A copy of the O&M Plan shall be kept at the GWRS office for reference by operating personnel. Key operating personnel shall be familiar with its contents. The O&M Plan shall conform to Provision F.14.

9. If it is determined that specific pollutants in the discharge have a reasonable potential to cause or contribute to an exceedance of a WQO or promulgated water quality criterion, this Order will be reopened for consideration of additional or revision of appropriate numerical effluent or receiving water limitations for the problem constituents.

10. This Order may be reopened and modified to make it consistent with any Basin Plans amendments that are adopted regarding the Regional Board's policy on Effluent Dominated Water Bodies (EDWs).

11. The Discharger shall employ BPTC of the discharge, including proper operation and maintenance, to comply with this Order.

12. The Board may modify or reopen this Order prior to its expiration date in any of the following circumstances:

    a. If present or future investigations demonstrate that the discharge governed by this Order has a reasonable potential to cause or contribute to adverse impacts on water quality and/or beneficial uses of the receiving waters;

    b. New or revised WQOs come into effect for the receiving water. In such cases, effluent limitations in this Order will be modified as necessary to reflect updated WQOs. Adoption of effluent limitations contained in this Order is not intended to restrict in any way future modifications based on legally adopted WQOs or as otherwise permitted under federal regulations governing NPDES permit modifications;

    c. If translator or other water quality studies provide a basis for determining that a permit condition(s) should be modified. The Discharger may request permit modification on this basis. The Discharger shall include in any such request an antidegradation and antibacksliding analysis.

    d. If new regulations or information becomes available. The Regional Board may consider inclusion of a compliance time schedule within the bounds of the applicable regulation if the Discharger is not able to meet a new more stringent discharge requirement immediately.

13. This Order does not pre-empt or supersede the authority of local agencies to prohibit, restrict, or control the discharge of groundwater cleanup wastewater subject to their control. Discharges allowed by this order to local irrigation or storm water collection and

conveyance facilities must obtain approval from the agency responsible for operation and maintenance of the facilities.

14. 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 sections 415 and 3065 of Title 16, CCR, all technical reports must contain a statement of the qualifications of the responsible registered professional(s). As required by these laws, completed technical reports must bear the signature(s) and seal(s) of the registered professional(s) in a manner such that all work can be clearly attributed to the professional(s) responsible for the work.

15. The Discharger must comply with all conditions of this Order, including timely submittal of technical and monitoring reports as directed by the Executive Officer. Violations may result in enforcement action, including Regional Board or court orders requiring corrective action or imposing civil monetary liability, or in revision or rescission of this Order.

16. A copy of this Order shall be kept at the site for reference by personnel operating the ground water treatment system. Key operating personnel shall be familiar with its contents.

17. Exceedances of monthly average and daily maximum effluent limitations based on results of a single sampling event may be considered violations of the requirements of this Order. The Discharger may sample more frequently than required by the attached Monitoring and Reporting Program to provide a more representative database and possibly lower reported average constituent values to demonstrate compliance with effluent limitations.

18. 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 SWRCB (Division of Water Rights).

19. In the event of any change in control or ownership of land or waste discharge facilities presently owned or controlled by the Discharger, the Discharger shall notify the succeeding owner or operator of the existence of this Order by letter, a copy of which shall be immediately forwarded to 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, address and telephone number of the persons responsible for contact with the Regional 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 CWC. Transfer shall be approved or disapproved in writing by the Executive Officer.

20. This Order expires on **27 January 2011** and the Discharger must file a RWD in accordance with 23 CCR, not later than 180 days in advance of such date in application for renewal of waste discharge requirements if it wishes to continue the discharge.

I, KENNETH D. LANDAU, Acting 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 26 January 2006.

_____

KENNETH D. LANDAU, Acting Executive Officer

MSS: 1/26/06

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM NO. R5-2006-0016

NPDES NO. CA0083046
FOR
THE VENDO COMPANY
GROUNDWATER REMEDIATION SYSTEM
FRESNO COUNTY

Specific sample station locations shall be established with concurrence of the Regional Board's staff, and the Discharger shall attach a description of the stations to its copy of this Monitoring and Reporting Program. All analyses shall be performed using methods approved by USEPA and the Regional Board. In reporting data, the Discharger shall indicate whether any analysis was performed using a method not in conformance with USEPA's Guidelines.

If the discharge is intermittent rather than continuous, then on the first day of each such intermittent discharge the Discharger shall monitor and record influent, mid-treatment, and effluent data for all of the constituents listed below, after which the frequencies of analysis given in the schedule shall apply for the duration of each such intermittent discharge. For this Order, the Regional Board considers an intermittent discharge, any period of no discharge prolonged more than seven days. In no event shall the Discharger be required to monitor and record the data more often than twice the frequencies listed in the schedule.

INFLUENT MONITORING

Samples shall be collected for each extraction well (E-1B and E-2B) prior to groundwater entering the GWRS. Influent samples shall be representative of the volume and quality of extracted groundwater. The time of collection of samples shall be recorded. Influent monitoring shall include at least the following:

Constituent	Units	Type of Sample	Sampling Frequency
Flow	mgd	Metered	Daily
Chloroform	µg/L	Grab	Monthly
Chromium (III) (total recoverable)	µg/L	Grab	Monthly
Chromium (VI) (total recoverable)	µg/L	Grab	Monthly
Copper (total recoverable)	µg/L	Grab	Monthly
Dichlorodifluoromethane	µg/L	Grab	Monthly
1,1-Dichloroethane (1,1-DCA)	µg/L	Grab	Monthly
1,1-Dichloroethylene (1,1-DCE)	µg/L	Grab	Monthly
cis-1,2-Dichloroethylene (cis-1,2-DCE)	µg/L	Grab	Monthly
1,2-Dichloropropane (1,2-DCP)	µg/L	Grab	Monthly
Methylene Chloride	µg/L	Grab	Monthly

Constituent	Units	Type of Sample	Sampling Frequency
Conductivity at 25°C	µmhos/cm	Grab	Monthly
Tetrachloroethene (PCE)	µg/L	Grab	Monthly
trans-1,2 Dichloroethene (trans-1,2-DCE)	µg/L	Grab	Monthly
1,1,1-Trichloroethane (1,1,1-TCA)	µg/L	Grab	Monthly
Trichlorofluoromethane	µg/L	Grab	Monthly
Trichloroethylene (TCE)	µg/L	Grab	Monthly
Zinc (total recoverable)	µg/L	Grab	Monthly
Other VOCs[1]	µg/L	Grab	Monthly

[1] All typical VOCs listed in Appendix 4 of the SIP.

EFFLUENT MONITORING – OUTFALL 001

Effluent samples shall be collected at Outfall 001 downstream from the last connection through which wastes can be admitted into the outfall. Effluent samples shall be representative of the volume and quality of the discharge. Time of collection of samples shall be recorded. Effluent monitoring shall include at least the following:

Constituent	Units	Type of Sample	Sampling Frequency
Flow	mgd	Metered	Daily
Chloroform	µg/L	Grab	Monthly
Chromium (III) (total recoverable)	µg/L	Grab	Monthly
Chromium (VI) (total recoverable)	µg/L	Grab	Monthly
Copper (total recoverable)	µg/L	Grab	Monthly
Dichlorodifluoromethane	µg/L	Grab	Monthly
1,1-DCA	µg/L	Grab	Monthly
1,1-DCE	µg/L	Grab	Monthly
cis-1,2-DCE	µg/L	Grab	Monthly
1,2-DCP	µg/L	Grab	Monthly
Hardness (as $CaCO_3$)[1]	mg/L	Grab	Monthly
Methylene Chloride	µg/L	Grab	Monthly
Conductivity at 25°C	µmho/cm	Grab	Monthly
PCE	µg/L	Grab	Monthly
trans-1,2-DCE	µg/L	Grab	Monthly
1,1,1-TCA	µg/L	Grab	Monthly
Trichlorofluoromethane	µg/L	Grab	Monthly

Constituent	Units	Type of Sample	Sampling Frequency
TCE	µg/L	Grab	Monthly
Zinc (total recoverable)	µg/L	Grab	Monthly
Other VOCs[2]	µg/L	Grab	Monthly
General Minerals[3]	mg/L	Grab	Annually
Acute Toxicity[4]	% Survival	Grab	Quarterly
Temperature	°F	Grab	Monthly
pH	standard units	Grab	Monthly

[1] Hardness of the effluent shall be recorded at the time of sample collection for metals analyses.
[2] All typical VOCs listed in Appendix 4 of the SIP.
[3] General Minerals as referred to in this program shall include total dissolved solids and other cations and anions present in the discharge. The cations and anions include iron, magnesium, manganese, potassium, sulfate, chloride and all other major cations and anions. Analyses shall be accompanied by charge balance (anion and cation balance).
[4] Acute toxicity bioassays shall be performed according to EPA-821-R-02-012 *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, Fifth Edition*, October 2002 (or latest edition) using *Pimephales promelas* with no pH adjustment, with exceptions granted to the Discharger by the Executive Officer and the Environmental Laboratory Accreditation Program (ELAP). Temperature and pH shall be recorded at the time of bioassay sample collection.

If other constituents of concern are identified as being present or potentially being present in groundwater discharged under this Order, then this Order may be revised or a new monitoring and reporting program issued to include monitoring requirements for those constituents.

If effluent monitoring detects a pollutant at concentrations greater than the daily maximum effluent limitation established in Order No. R5-2006-0016, the Discharger shall resample and reanalyze the discharge immediately after knowledge of the exceedance and the frequency of sampling should be increased to daily until compliance is verified.

The Discharger shall report the Minimum Level (ML) and the laboratory's (Method Detection Limit) MDL for each sample result. Results greater than or equal to the ML shall be reported as measured. Sample results less than the ML but greater than or equal to the laboratory's MDL, shall be reported as "Detected but Not Quantified" (DNQ). The estimated chemical concentration of the sample shall also be reported. The laboratory may include numerical estimates of the data quality. Results less than the laboratory's MDL shall be reported as "Not Detected" (ND).

PRIORITY POLLUTANT MONITORING

The Discharger shall monitor the effluent and receiving water (at R-1) **once between 27 January 2010 and 27 July 2010** for priority pollutants. Priority pollutants are defined as USEPA priority toxic pollutants, and consist of the constituents listed in the most recent NTR and CTR. Volatile organic priority pollutants are listed in Tables 2a and 2b in Appendix 4 of the SIP. Results of sampling shall be submitted by the **first day of the second month** following sampling. Reporting shall conform with SIP Reporting Requirements, Section 2.4 et seq. In particular, the reported MLs shall be at least as low as the lowest ML for each priority pollutant specified in Appendix 4 of the SIP. **Effluent and**

receiving water samples must be analyzed for pH and hardness in order to calculate translators, which are needed for pollutants that are hardness and/or pH dependent. All analyses shall be performed at a laboratory certified by the California Department of Health Services.

Constituent[1,2]	Units	Type of Sample
Arsenic	µg/L	Grab
Chromium (VI)	µg/L	Grab
Mercury	µg/L	Grab
Metals	µg/L	Grab
Pesticides	µg/L	Grab
Semi-Volatile Organics	µg/L	Grab
VOCs	µg/L	Grab

[1] Constituents shall be analyzed using a method approved in 40 CFR 136.3. The chosen analytical method must be able to achieve the required quantitation limit for the given constituent, as specified by the MLs listed in Appendix 4 of the SIP.
[2] Report all detected peaks.

CARBON FILTER BREAKTHROUGH CURVES

The previous Order No. 99-012 required the Discharger to provide to the Regional Board a proposed program for determining the break-through point of the carbon filters and a means of providing compliance with Order No. 99-012 during the period when the break-through point is approached. This study was to be conducted upon startup of the Phase III GWRS. The Discharger failed to implement this study.

By 28 March 2006, the Discharger shall provide to the Regional Board a proposed program for determining the breakthrough point of the carbon filters and a means of providing compliance with requirements of this Order during the period when the breakthrough point is approached. The program shall include the following:

a. A proposed monitoring program, including frequency of monitoring, for determining the breakthrough point.

b. The rationale for "a" above that incorporates system design, constituent concentrations, loading rates, and estimated breakthrough period.

Within two weeks from the first regeneration or replacement of the carbon filtration units the Discharger shall submit an engineering report that includes the breakthrough curve showing organic constituents and regulated metals concentrations as a function of throughput volume, any proposed revisions in monitoring frequencies based on the constructed curve, and the rationale for the proposed revisions.

After presentation of appropriate breakthrough curves and/or performance data of the GWRS system by the Discharger, monthly monitoring may be decreased to quarterly upon the written approval of the Executive Officer.

GROUNDWATER TREATMENT PLANT STARTUP MONITORING

If the GWRS has a scheduled or unscheduled shutdown that lasts longer than 72 hours or which could result in noncompliance on startup regardless of the downtime, the Discharger shall conduct the influent and effluent monitoring requirements upon startup of the treatment system using the following monitoring schedule:

- Immediately upon startup
- Daily for the first five days of operation
- Monthly thereafter in accordance with the influent and effluent monitoring schedules.

RECEIVING WATER MONITORING

All receiving water samples shall be grab samples except for flow, which shall be an estimate. Samples shall be collected at approximately the same time as the collection of effluent samples. Receiving water monitoring is not required when the discharge represents the entire flow in the receiving waters. Receiving water monitoring shall include at least the following and be performed at the sample stations associated with the approved discharge point in use:

Station	Description
R-1	100 ft or more upstream from the point of discharge (Outfall 001) to the Bullard Canal[1]
R-2	500 ft or more downstream from the point of discharge (Outfall 001) to the Bullard Canal[1]

[1] If necessary, stations may be located more or less distant from the point of discharge to obtain valid sample results because of backwater conditions, access limitations to the closed conduit portions of the canals, or other conditions. Alternate locations are subject to approval of the Executive Officer.

Constituent	Units	Station	Sampling Frequency
Flow	mgd	R-1, R-2	Monthly
Chloroform	µg/L	R-1, R-2	Quarterly
Chromium (III) (total recoverable)	µg/L	R-1, R-2	Quarterly
Chromium (VI) (total recoverable)	µg/L	R-1, R-2	Quarterly
Copper (total recoverable)	µg/L	R-1, R-2	Quarterly
Dichlorodifluoromethane	µg/L	R-1, R-2	Quarterly
1,1-DCA	µg/L	R-1, R-2	Quarterly
1,1-DCE	µg/L	R-1, R-2	Quarterly
cis-1,2-DCE	µg/L	R-1, R-2	Quarterly
1,2-DCP	µg/L	R-1, R-2	Quarterly

Constituent	Units	Station	Sampling Frequency
Hardness (as $CaCO_3$)[1]	mg/L	R-1, R-2	Monthly
Methylene Chloride	µg/L	R-1, R-2	Quarterly
Conductivity at 25°C	µmho/cm	R-1, R-2	Monthly
PCE	µg/L	R-1, R-2	Quarterly
trans-1,2-DCE	µg/L	R-1, R-2	Quarterly
1,1,1-TCA	µg/L	R-1, R-2	Quarterly
Trichlorofluoromethane	µg/L	R-1, R-2	Quarterly
TCE	µg/L	R-1, R-2	Quarterly
Zinc (total recoverable)	µg/L	R-1, R-2	Quarterly
Other VOCs[2]	µg/L	R-1, R-2	Quarterly
General Minerals[3]	mg/L	R-1, R-2	Annually
Dissolved Oxygen	mg/L	R-1, R-2	Monthly
Temperature	°F	R-1, R-2	Monthly
pH	standard units	R-1, R-2	Monthly

[1] Hardness of the effluent shall be recorded at the time of sample collection for metals analyses.
[2] All typical VOCs listed in Appendix 4 of the SIP.
[3] General Minerals as referred to in this program shall include total dissolved solids and other cations and anions present in the discharge. The cations and anions include iron, magnesium, manganese, potassium, sulfate, chloride and all other major cations and anions. Analyses shall be accompanied by charge balance (anion and cation balance).

In conducting the receiving water sampling, a log shall be kept of the receiving water conditions, in the sampling locations. Attention shall be given to the presence or absence of:

a. Floating or suspended matter
b. Discoloration
c. Bottom deposits
d. Aquatic life
e. Visible films, sheens or coatings
f. Fungi, slimes, or objectionable growths
g. Potential nuisance conditions

Notes on receiving water conditions shall be summarized in the monitoring report.

THREE SPECIES CHRONIC TOXICITY MONITORING

Chronic toxicity monitoring shall be conducted to determine whether the effluent is contributing toxicity in the receiving water. The testing shall be conducted as specified in EPA/821/R-02/013, or later amendment. Chronic toxicity samples shall be collected at the last point

of discharge prior to its entering the receiving water. Time of samples collection shall be recorded. The effluent tests must be conducted with concurrent reference toxicant tests. Monthly laboratory reference toxicant tests may be substituted upon approval. Both the reference toxicant and effluent tests must meet all test acceptability criteria as specified in the chronic manual. If the test acceptability criteria are not achieved, then the Discharger must re-sample and re-test within 14 days. Chronic toxicity monitoring shall include the following:

Species: Pimephales promelas, Ceriodaphnia dubia, and Selenastrum capricornutum

Frequency: Quarterly[1]

Dilution Series:

	Dilution(%)					Controls	
Sample	100	75	50	25	12.5	Canal Water	Lab Water
% GWRS Effluent	100	75	50	25	12.5	0	0
% Dilution Water[2]	0	25	50	75	87.5	100	0
% Lab Water	0	0	0	0	0	0	100

[1] If after four consecutive sampling events the Discharger can demonstrate that the discharge does not cause or have reasonable potential to cause, or contribute to chronic toxicity in the receiving waters the Discharger may discontinue chronic toxicity testing for the remainder of the term of this Order subject to the approval of the Executive Officer.

[2] Dilution water shall be receiving water.

REPORTING

At any time during the term of this permit, the State or Regional Water Board may notify the Discharger to electronically submit self-monitoring reports. Until such notification is given, the Discharger shall submit self-monitoring reports in accordance with the requirements described below.

Monitoring results shall be submitted to the Regional Board by the **1st day of the second month following sample collection**. Quarterly monitoring results shall be submitted by the **1st day of the second month following the end of each calendar quarter (i.e., by 1 February, 1 May, 1 August, and 1 November) following each calendar quarter**. Annual monitoring results shall be submitted by **1 February of each year**. Reports shall be submitted whether or not there was a discharge during the reporting period. Failure to submit a report will result in an assessment of a Minimum Mandatory Penalty pursuant to CWC Section 13385.

In reporting the monitoring data, the Discharger shall arrange the data in tabular form so that the date, the constituents, and the concentrations are readily discernible. The data shall be summarized in such a manner to illustrate clearly the compliance with waste discharge requirements. The highest daily maximum for the month and monthly averages shall be determined and recorded. The report shall also include an evaluation of the groundwater cleanup progress, trends, monitoring well analyses and plume containment. If this evaluation is already submitted to the Regional Board in a separate report, then the Discharger may reference the date and title of the most recent report in lieu of including it with the NPDES monitoring report.

If the Discharger monitors any pollutant at the locations designated herein more frequently than is required by this Order, the results of such monitoring shall be included in the calculation and reporting of the values required in the discharge monitoring report form. Such increased frequency shall be indicated on the discharge monitoring form.

By **1 February** of each year, the Discharger shall submit an annual written report to the Executive Officer containing the following:

a. The names and telephone numbers of persons to contact regarding the Facility for emergency and routine situations.

b. A statement certifying when monitoring instruments and devices were last calibrated (for purposes of assuring compliance with this Order), including identification of who performed the calibration (Standard Provision C.6).

c. A statement certifying whether the current operation and maintenance manual and contingency plan reflect the Facility as currently constructed and operated, and the dates when these documents were last revised and last reviewed for adequacy.

d. Tabular and graphical summaries of the monitoring data obtained during the previous year. Monitoring data shall also be submitted in electronic format acceptable to the Executive Officer (e.g. Microsoft Excel).

e. A discussion of the compliance record. If violations have occurred, the report shall also discuss the corrective actions taken and planned to bring the discharge into full compliance with the waste discharge requirements.

All reports submitted in response to this Order shall comply with the signatory requirements of Standard Provision D.6.

The Discharger shall implement the above monitoring program on the first day of the month following adoption of this Order.

Ordered by: KENNETH D. LANDAU, Acting Executive Officer

January 26, 2006
(Date)

MSS: 1/26/06

INFORMATION SHEET

WDRs ORDER NO. R5-2006-0016
THE VENDO COMPANY
GROUNDWATER REMEDIATION SYSTEM
FRESNO COUNTY

Background Information

The Vendo Company (hereafter Discharger) proposes to continue to discharge treated groundwater from the Phase III Ground Water Remediation System (GWRS) located within the Pinedale area of Fresno at 7209 North Ingram Avenue (hereafter site). The site covers about 36 acres and has been owned and operated by the Discharger since 1963 when it purchased the site from its predecessor, the Vendorlator Company. The Discharger manufactures vending machines at its site. The site is part of a 500-acre tract that has been used for the last 80 years as a lumber mill, warehouse, and Camp Pinedale military base; and for the manufacturing of mattresses, military hardware, airplane parts, mainframe computers, and automatic teller machines. These activities have historically generated hazardous wastes, including metals, acids, caustics, paints, waste oil, and solvents that are detected in groundwaters below and in the vicinity of the site. Industries and parties now or formerly occupying properties within the tract that may have contributed to areal soil and groundwater contamination include Calcot, Industrial Waste Processing Corporation, Pinedale Solid Waste Disposal Site, Kepco Dry Dump solid waste disposal site, and the U.S. Army's Camp Pinedale. The Pinedale Groundwater Site (PGS) is defined to encompass the area where constituents of concern, which primarily originated from the Pinedale Industrial Area (PIA), exist in groundwater. The PIA is defined within the PGS as the 375-acre parcel bounded by Ingram, Herndon, and Harrison Avenues and the San Joaquin River Bluffs.

Soils beneath the site are generally described as sandy silts and silty sands, with small clay lenses. Groundwater beneath the site is about 120 feet below ground surface (bgs) and moves southwesterly. Hydrogeologic evaluations and remedial activities indicate that areal soils and groundwater have been polluted, in part, by metals, hydrocarbons, and volatile organic compounds (VOCs) discharged at the site. In 1992, the Discharger implemented soil vapor extraction (SVE) to remove VOCs from impacted soils as part of an interim remedial measure (IRM). On
19 November 1998, the California Environmental Protection Agency (Cal/EPA), Department of Toxic Substances Control (DTSC), approved the 2 November 1998 Final Remedial Action Plan for PGS, Fresno, California, hereafter "RAP."

The RAP partitioned the remediation project into three phases - Phase I, Phase II, and Phase III. Phase III was implemented in January 2004. The three phases include investigation and treatment of groundwater. The treatment involved pumping and treating the contaminated groundwater using granular activated carbon (GAC) units. During Phase II, groundwater was extracted from six extraction wells (MW-13S, W-01, E-1A, E-2A, E-3A, and E-1B) and treated through two GAC units. Under Phase III, the interim treatment system was replaced with an expanded GAC system capable of treating substantially higher flow of groundwater extracted from two extraction wells only. Construction of Phase III on-site treatment system began in 1999 and was operational by January 2004. The salient features in Phase III GWRS include: (a) addition of extraction well E-2B, (b) extraction of groundwater from wells E-1B and E-2B only, (c) installation of two 20,000

pound GAC units, and (d) increasing the maximum discharge flow from 1.44 million gallons per day (mgd) to 2.88 mgd. As part of the Phase III system implementation, groundwater is extracted from wells E1-B and E2-B to intercept plume migration. The impacted groundwater is conveyed by pipeline to the two GAC units. Treated water from the GAC units is conveyed through the dual effluent lines into a single iron pipe, through a flow meter and to the PVC effluent/outfall piping to the FID Bullard Canal via Outfall 001. Outfall 001 is near the northwest corner of Ingram and Herndon Avenues in the South Valley Floor Hydrologic Unit, Fresno Hydrologic Area (No.551.30). Bullard Canal is completely underground in the vicinity of the PIA due to the development of the property. Access to the canal water can only be gained through manholes and vents.

Bullard Canal at the point of discharge is within the Tulare Lake Basin and flows seasonally downstream of the discharge point. The Bullard Canal originates where the Enterprise Canal terminates and becomes the Enterprise-Helm Colony and the Bullard Canal. The Enterprise Canal receives surface water from either the Kings River, via the Gould Canal, and/or the San Joaquin River, via the Friant Kern Canal. The Friant Kern Canal originates at Millerton Lake on the San Joaquin River. The Bullard Canal joins the Herndon Canal some distance downstream of the discharge. The Herndon Canal drains excess storm water to the San Joaquin River roughly nine miles downstream of the discharge point. The canals carry water for irrigation purposes and are owned and operated by the FID. They also carry urban storm runoff and surface waters from ephemeral streams that include Redbank Creek, Fancher Creek, Dog Creek, and Holland Creek. At times, primarily during the fall and winter non-irrigation season, the discharge is the only source of flow in the canals.

Granular Activated Carbon (GAC) Vessel Design Considerations

The Report of Waste Discharge (RWD) originally proposed to operate the two GAC vessels in parallel as extraction rates increase up to 2,000 gpm or 2.88 mgd. The reported design flow capacity is 1,100 gpm (1.58 mgd) when the GAC vessels are operated in series and 2,200 gpm (3.17 mgd) when operated in parallel. A 22 August 2005 letter from the Discharger's consultant, BSK, Inc., stated that the vessels are currently operated in series, due to low extraction rates; and it reaffirmed its request for a maximum permitted flow of 2,000 gpm (2.88 mgd). Industry standard GAC treatment system design provides for two GAC vessels: (a) the first operated in a lead position, and (b) the second operated in a polishing position. The role of the second vessel is to remove any pollutants that may break through the carbon in the first vessel; thus providing a factor of safety to ensure that discharges reliably meet effluent limits. The Discharger has not demonstrated how it will treat flows up to 2.88 mgd while maintaining industry standard design. Operating the GAC in parallel is not best practicable treatment or control (BPTC). Parallel operation would not provide the safety factor necessary to ensure compliance with effluent limits. This Order prohibits parallel operation of primary GAC vessels without secondary polishing and limits discharge flow to 1,000 gpm (1.44 mgd) until the system can be modified to reflect BPTC.

History of Compliance with Effluent Limitations

Effluent monitoring data submitted by the Discharger for the period December 2003 through February 2005 was evaluated for compliance with effluent limitations required through WDRs Order No. 99-012. The Discharge exceeded the effluent limitations on the following occasions:

- The Discharger reported a analytical results for samples collected on 1 July 2004. The concentration for cis-1,2-Dichloroethylene (cis-1,2-DCE) was reported as 1.6 μg/L. This was the only sample reported for cis-1,2-DCE for the month of July. The monthly median of the sampling events equals 1.6 μg/L exceeding the monthly median effluent limitation of less than 0.5 μg/L.
- The Discharger reported analytical results for samples collected on 9 August 2004 and 23 August 2004 for cis-1,2-DCE of 2.9 μg/L and 3.4 μg/L, respectively. Using these data the monthly median for the reported data was 3.15 μg/L exceeding the monthly median effluent limitation of less than 0.5 μg/L.
- The Discharger reported concentrations of Trichloroethylene (TCE) for samples collected on 23 August 2004 as 0.74 μg/L. This was the only sample reported for TCE for the month of August. The monthly median of the sampling events equals 0.74 μg/L exceeding the monthly median effluent limitation of less than 0.5 μg/L.

In addition, the Discharger did not report analytical results for total and dissolved concentrations of chromium (III) and chromium (VI) in accordance with WDRs Order No. 99-012.

Beneficial Uses of the Receiving Water

Bullard Canal is the receiving water for discharges from the GWRS. Bullard Canal discharges to the Herndon Canal that drains to the San Joaquin River. The San Joaquin Basin Plan identifies the following beneficial uses for the San Joaquin River at the point the Herndon Canal drains to the river:

- municipal and domestic supply (MUN),
- agricultural supply (AGR),
- industrial process supply (PRO),
- water contact recreation (REC-1),
- non-contact water recreation (REC-2),
- warm freshwater habitat (WARM),
- cold freshwater habitat (COLD),
- migration of aquatic organisms (MIGR),
- spawning, reproduction, and/or early development (SPWN), and
- wildlife habitat (WILD).

The beneficial uses of the underlying groundwater are MUN, AGR, industrial service supply (IND), and PRO.

Dilution Considerations

The Bullard Canal, absent the discharge, may at times be dry and therefore, no credit for receiving water dilution is available for this discharge.

Effluent Limitations and Monitoring

Federal regulations, 40 CFR Part 122.44 (d)(1)(i), require that NPDES permit effluent limitations must control all pollutants which are or may be discharged at a level which will cause or have the reasonable potential to cause or contribute to an in-stream excursion above any State water quality standard, including any narrative criteria for water quality. Beneficial uses, together with their corresponding water quality objectives or federally promulgated water quality criteria, are defined per federal regulations as water quality standards.

State Water Resources Control Board Resolution No. 68-16 requires implementation of Best Practicable Treatment and Control (BPTC) to ensure that the highest water quality is maintained consistent with the maximum benefit to the people of the State. Federal Regulations require effluent limits representing best available technology economically feasible (BAT) for all toxic pollutants. For treatment of VOCs associated with groundwater cleanups, BAT is consistent with BPTC. As no federal effluent limit guidelines exist for discharges from groundwater cleanup systems, limits are based on Regional Board staff's best professional judgment. BPTC for groundwater cleanup of VOCs provides that the pollutants should be discharged at concentrations less than quantifiable levels for each pollutant.

The effluent limitations consider BPTC for VOC removal, the historical performance of the on-site treatment system, receiving water conditions, USEPA Method quantitation limits, and are less than California Primary Maximum Contaminant Levels.

The following major revisions to WDRs Order No. 99-012 have been made to this Order:

- Technology-based daily maximum limits for chloroform, 1,1-Dichloroethane (1,1-DCA), cis-1,2 DCE, 1,2-Dichloropropane (1,2-DCP), methylene chloride, Tetrachloroethylene (PCE), trans-1,2 Dichloroethene (trans-1,2-DCE), 1,1,1-Trichloroethane (1,1,1-TCA), and TCE were made more stringent based on Best Practicable Treatment and Control (BPTC). Effluent limits of less than 0.5 µg/L are included as opposed to 5 µg/L. Technology-based monthly median effluent limits for these constituents were removed from this Order based on BPTC.

- The technology-based effluent limitation for total VOCs was made more stringent based on BPTC. The limitation for the sum of the VOC constituent concentrations was revised from 5 µg/L to 0.5 µg/L.

- Water quality based average monthly and daily maximum effluent limits were established for dichlorodifluoromethane, 1,1-DCE, and trichlorofluoromethane.

- Variable effluent limits for chromium (III), copper, and zinc have been revised to maximum limitations based on a receiving water hardness of 8.8 mg/L as $CaCO_3$.

- Monitoring requirements for all priority pollutants at least once during the term of this Order and at least 180 days prior to the expiration of this Order have been added, as set forth in the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (known as the State Implementation Policy or SIP).

- Influent monitoring requirements have been established under this Order.

Reasonable Potential Analysis (RPA) and Water Quality-based Effluent Limitations (WQBELs)

Section 1.3 of the SIP requires that the Regional Board impose water quality-based effluent limitations for a priority pollutant if (1) the maximum effluent concentration (MEC) is greater than the most stringent CTR or NTR criterion or applicable site-specific Basin Plan objective, or (2) the ambient background concentration is greater than the CTR or NTR criterion or applicable site-specific Basin Plan objective and the pollutant is detected in the effluent, or (3) other information is available to determine that a water quality-based effluent limitation is necessary to protect beneficial uses.

The Discharger was issued an Order on 27 February 2001 pursuant to CWC Section 13267, requiring effluent and receiving water monitoring meeting the requirements of the SIP. These data were requested in order to assist the Regional Board in conducting RPAs.

The Discharger submitted some but not all of the required monitoring data for the effluent and no receiving water data, as required by the 27 February 2001 letter, and therefore the Regional Board is unable to conduct an RPA for all required CTR and non-CTR constituents. Provision F.5 of this Order directs the Discharger to conduct a Priority Pollutant evaluation study within a time schedule. This Order also includes a reopener to allow the Regional Board to reopen this Order and establish effluent limitations or other requirements if necessary based on the results of the study.

The dates in the compliance schedule do not extend or supersede those in the 27 February 2001 13267 Order. Should the Discharger fail to comply with the compliance schedule, it would be appropriate to assess administrative civil liabilities based on the due dates in the 13267 Order.

Monitoring data used to conduct the reasonable potential analysis consisted of influent and effluent data (including data provided in the special monitoring study required by the SIP), and data provided in the RWD. The maximum detectable concentrations reported by these data sets are summarized as follows:

Parameter	Units	M&RP Influent Monitoring Data	M&RP Effluent Monitoring Data	RWD Data	Maximum Concentration used in RPA
Benzene	µg/L	0.66	<0.5	n/a	0.66
Chromium	µg/L	660	<50	522	660

Parameter	Units	M&RP Influent Monitoring Data	M&RP Effluent Monitoring Data	RWD Data	Maximum Concentration used in RPA
Copper	µg/L	14	<50	n/a	14
Dichlorodifluoromethane	µg/L	n/a	<0.5	1.2	1.2
1,1-DCA	µg/L	32	<1	1.8	32
1,1-DCE	µg/L	25	<0.5	13	25
cis-1,2-DCE	µg/L	360	3.4	38	360
PCE	µg/L	540	<0.5	4.2	540
1,1,1-TCA	µg/L	0.85	<0.5	n/a	0.85
Trichlorofluoromethane	µg/L	1.6	<2	3.5	3.5
TCE	µg/L	14,000	0.74	2300	14000
Toluene	µg/L	0.73	<0.5	n/a	0.73
Zinc	µg/L	130	<50	n/a	130

Based on information submitted as part of the application, in studies, and as directed by monitoring and reporting programs, the discharge does have a reasonable potential to cause or contribute to an in-stream excursion above a water quality standard for the following constituents: chromium, copper, dichlorodifluoromethane, 1,1-DCA, 1,1-DCE, cis-1,2-DCE, PCE, trichlorofluoromethane, TCE, and zinc.

A summary of all the monitoring data used to conduct the RPA is provided in Tables 1 and 2 attached to this Information Sheet. A summary of the RPA analysis for all constituents reported in detectable concentrations is in Table 3 (attached).

Water quality based effluent limitations (WQBELs) calculated for these constituents, based on the most restrictive water quality objectives and the methodology presented in the SIP, are summarized below:

		Most Stringent WQBEL	
Constituent	Units	Daily Max	Monthly Average
Chloroform	µg/L	2.2	1.1
Chromium (III)	µg/L	46	23
Chromium (VI)	µg/L	16	8
Copper	µg/L	1.4	0.7
Dichlorodifluoromethane	µg/L	0.38	0.19
1,1-DCA	µg/L	10	5
1,1-DCE	µg/L	0.11	0.06
Cis-1,2-DCE	µg/L	12	6
1,2-DCP	µg/L	1.1	0.52
Methylene Chloride	µg/L	5	2.5
PCE	µg/L	1.6	0.8
Trans-1,2-DCE	µg/L	20	10
1,1,1-TCA	µg/L	402	200
TCE	µg/L	5.4	2.7
Trichlorofluoromethane	µg/L	0.38	0.19
Zinc	µg/L	15	7.6

Table 4 (attached) provides a summary of the final effluent limitations for each constituent and provides a summary of how each limit was calculated.

Technology Based Effluent Limits (TBEL)

Section 1.4 of the SIP requires that WQBELs be compared to TBELs and that the more protective limit is applied in the permit. Therefore, TBELs must be developed for each constituent. For establishing BAT based upon BPJ, 40 CFR 125 requires consideration of several specific factors. The following factors were considered:

Appropriate Technology for Category or Class of Discharges, Processes Employment, Engineering Aspects of Various Control Techniques: GAC treatment is commonly used to remove VOCs from extracted groundwater at cleanup sites to non-detectable concentrations. Properly operated and maintained systems perform reliably and ensure essentially complete removal of VOCs. The Discharger employs a GAC system to treat impacted groundwater.

Age of Equipment Portions of the Phase III on-site treatment system were installed in 1999 and the remainder of the system is currently under construction and is substantially complete. The GAC system installation was completed in 2003.

Influent and Effluent Data: The groundwater investigation reports and the information provided by the Discharger show that the groundwater is contaminated with VOCs. Effluent data submitted by the Discharger show that the effluent VOC concentrations are below the detection limit of 0.5 µg/L, and thus will meet the proposed effluent limits. The Regional Board assumes that the exceedances of the detection limits are likely attributable to lack of timely maintenance.

Unique Factors Relating To The Applicant: The Discharger has not identified any unique factors that would justify discharges equaling or exceeding quantifiable concentrations of VOCs.

Non-Water Quality Environmental Impacts, Including Energy Requirements; Cost of Achieving Proposed Effluent Reduction: The system currently in place reliably removes VOCs to nondetectable concentrations of less than 0.5 µg/L, therefore, implementation of the proposed limits would not create additional non-water quality impacts, or financial costs for The Vendo Company.

The technology-based standard for cleanup of VOCs in groundwater with an airstripper, GAC, or combination treatment system is that all effluent should be discharged with unquantifiable levels of VOCs in the effluent. For VOCs of concern, the MLs listed in Appendix 4 of the SIP or the Title 22, CCR, Section 64445.1, California Department of Health Services Detection Limits for Purposes of Reporting (DLRs) represent the minimum quantifiable levels of these constituents and serve as the technology-based effluent limits. A summary of the TBELs is listed below:

Constituent	Units	TBEL
Chloroform	µg/L	<0.5[1]
Dichlorodifluoromethane	µg/L	-
1,1-DCA	µg/L	<0.5[1]
1,1-DCE	µg/L	<0.5[1]
Cis-1,2-DCE	µg/L	<0.5[2]
1,2-DCP	µg/L	<0.5[1]
Methylene Chloride	µg/L	<0.5[1]
PCE	µg/L	<0.5[1]
Trans-1,2-DCE	µg/L	<0.5[1]
1,1,1-TCA	µg/L	<0.5[1]
Trichlorofluoromethane	µg/L	<5[2]
TCE	µg/L	<0.5[1]

[1] ML
[2] DLR

Final Effluent Limits

The more stringent of the TBEL or WQBEL has been implemented as the effluent limit in this Order for each constituent. A comparison of the TBEL and WQBEL for each constituent is provided below:

Constituent	Units	WQBEL Limit[1]		TBEL Limit[2]	Most Stringent Effluent Limit	
		Daily Maximum	Monthly Average	Daily Maximum	Daily Maximum	Monthly Average
Chloroform	µg/L	2.2	1.1	<0.5	<0.5	n/a
Chromium (III)	µg/L	46	23	-	46	23
Chromium (VI)	µg/L	16	8	-	16	8
Copper	µg/L	1.4	0.7	-	1.4	0.7
Dichlorodifluoromethane	µg/L	0.38	0.19	<0.5	0.38	0.19
1,1-DCA	µg/L	10	5	<0.5	<0.5	n/a
1,1-DCE	µg/L	0.11	0.06	<0.5	0.11	0.06
Cis-1,2-DCE	µg/L	12	6	<0.5	<0.5	n/a
1,2-DCP	µg/L	1.1	0.52	<0.5	<0.5	n/a
Methylene Chloride	µg/L	5.0	2.5	<0.5	<0.5	n/a
PCE	µg/L	1.6	0.8	<0.5	<0.5	n/a
Trans-1,2-DCE	µg/L	20	10	<0.5	<0.5	n/a
1,1,1-TCA	µg/L	402	200	<0.5	<0.5	n/a
Trichlorofluoromethane	µg/L	0.38	0.19	<0.5	0.38	0.19
TCE	µg/L	5.4	2.7	<0.5	<0.5	n/a
Zinc	µg/L	15	7.6	-	15	7.6

[1] Water Quality Based Effluent Limit.
[2] Technology-based Effluent Limit.
[3] n/a – not applicable

Filter Waste Disposal Limitations

Spent carbon, and other residual solids removed from liquid wastes or used to treat liquid wastes, except that approved by the Executive Officer, shall be recycled or disposed of in a manner that is consistent with California Code of Regulations (CCR) Title 27, Division 3; Title 23, Division 3 Chapter 15; and Title 22, Division 4.5, and approved by the Executive Officer. Any proposed change in filter waste use or solids disposal practice from a previously approved practice shall be reported to the Executive Officer and USEPA Regional Administrator at least 90 days in advance of the change.

Receiving Water Limitations

Receiving water limitations are based on water quality objectives from the Basin Plan and are a required part of this Order. They are included to protect beneficial uses of receiving waters. A receiving water condition not in conformance with a limitation is not necessarily a violation of the Order. The Regional Board may require an investigation to determine cause and culpability prior to asserting that a violation has occurred.

Groundwater Limitations

The beneficial uses of the underlying groundwater, as identified in the Tulare Lake Basin Plan, are municipal and domestic, industrial service, industrial process, and agricultural supply. Tulare Lake Basin Plan water quality objectives to protect the beneficial uses of groundwater include numeric objectives and narrative objectives, including objectives for chemical constituents, toxicity of groundwater, pesticides, salinity, and taste and odor. The toxicity objective requires that groundwater be maintained free of toxic substances in concentrations that produce detrimental physiological responses in humans, plants, or animals. This Order contains groundwater limitations that prohibit groundwater degradation caused by the treatment and disposal of treated groundwater at the facility.

Anti-degradation and CEQA Considerations

The permitted discharge is consistent with the anti-degradation provisions of 40 CFR 131.12 and State Water Resources Control Board Resolution No. 68-16. BPTC for discharges of treated groundwater polluted by volatile organic compounds is to remove all pollutants to below applicable detection limits. All VOCs are required to be removed to a level below corresponding analytical quantitation limits. Some resulting degradation of the receiving water could occur if constituents were present below the quantitation limit, but such degradation would not be quantifiable. Due to the relatively low EC and TDS values of the receiving water, during periods of unusually limited dilution, some degradation of the receiving water may occur from these pollutants, however, the discharge will not cause an exceedance of water quality objectives or cause a significant impact on the beneficial uses of groundwater and surface water. The continued remediation of polluted groundwater and the use of the treated groundwater for irrigation benefit the people of the state.

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

MSS: 1/26/06

Table 1
Summary of Detected Constituents Monitoring Results
Influent to GWRS

SAMPLE DATE	PARAMETER	RESULT	DETECTION LIMIT	UNITS	SOURCE
3/20/97	**1,1,1-Trichloroethane**	**0.85**	not avail	µg/L	SMR
3/21/97	1,1-Dichloroethane	16	not avail	µg/L	SMR
9/30/97	1,1-Dichloroethane	1.8	not avail	µg/L	SMR
3/10/98	1,1-Dichloroethane	1.7	not avail	µg/L	SMR
3/13/98	1,1-Dichloroethane	1	not avail	µg/L	SMR
3/16/98	**1,1-Dichloroethane**	**32**	not avail	µg/L	SMR
3/26/98	1,1-Dichloroethane	3.7	not avail	µg/L	SMR
9/9/98	1,1-Dichloroethane	2.2	not avail	µg/L	SMR
4/24/02	1,1-Dichloroethane	0.26	not avail	µg/L	RWD
4/25/02	1,1-Dichloroethane	1.4	not avail	µg/L	RWD
4/30/02	1,1-Dichloroethane	0.97	not avail	µg/L	RWD
4/30/02	1,1-Dichloroethane	0.65	not avail	µg/L	RWD
5/6/02	1,1-Dichloroethane	0.79	not avail	µg/L	RWD
5/6/02	1,1-Dichloroethane	0.87	not avail	µg/L	RWD
5/6/02	1,1-Dichloroethane	1.7	not avail	µg/L	RWD
5/6/02	1,1-Dichloroethane	0.31	not avail	µg/L	RWD
5/6/02	1,1-Dichloroethane	0.27	not avail	µg/L	RWD
5/6/02	1,1-Dichloroethane	0.62	not avail	µg/L	RWD
5/6/02	1,1-Dichloroethane	0.41	not avail	µg/L	RWD
9/11/02	1,1-Dichloroethane	1.5	not avail	µg/L	RWD
9/12/02	1,1-Dichloroethane	1.2	not avail	µg/L	RWD
9/20/02	1,1-Dichloroethane	0.58	not avail	µg/L	RWD
9/20/02	1,1-Dichloroethane	0.93	not avail	µg/L	RWD
9/20/02	1,1-Dichloroethane	1.4	not avail	µg/L	RWD
9/24/02	1,1-Dichloroethane	2	not avail	µg/L	RWD
4/3/03	1,1-Dichloroethane	1.39	not avail	µg/L	RWD
4/4/03	1,1-Dichloroethane	0.64	not avail	µg/L	RWD
4/4/03	1,1-Dichloroethane	1.32	not avail	µg/L	RWD
4/18/03	1,1-Dichloroethane	0.81	not avail	µg/L	RWD
5/14/03	1,1-Dichloroethane	1.72	not avail	µg/L	RWD
9/25/03	**1,1-Dichloroethane**	**1.8**	**not avail**	**µg/L**	**RWD**
9/26/03	1,1-Dichloroethane	0.73	not avail	µg/L	RWD
3/18/97	1,1-Dichloroethene	0.65	not avail	µg/L	SMR
3/19/97	1,1-Dichloroethene	13	not avail	µg/L	SMR
3/20/97	1,1-Dichloroethene	0.99	not avail	µg/L	SMR
9/30/97	1,1-Dichloroethene	6.3	not avail	µg/L	SMR
10/2/97	1,1-Dichloroethene	0.55	not avail	µg/L	SMR
10/2/97	1,1-Dichloroethene	0.96	not avail	µg/L	SMR
10/9/97	**1,1-Dichloroethene**	**25**	not avail	µg/L	SMR
3/10/98	1,1-Dichloroethene	22	not avail	µg/L	SMR

Table 1
Summary of Detected Constituents Monitoring Results
Influent to GWRS

SAMPLE DATE	PARAMETER	RESULT	DETECTION LIMIT	UNITS	SOURCE
3/11/98	1,1-Dichloroethene	3.5	not avail	µg/L	SMR
3/13/98	1,1-Dichloroethene	1.2	not avail	µg/L	SMR
3/16/98	1,1-Dichloroethene	4.3	not avail	µg/L	SMR
3/17/98	1,1-Dichloroethene	1.5	not avail	µg/L	SMR
3/26/98	1,1-Dichloroethene	2.3	not avail	µg/L	SMR
9/9/98	1,1-Dichloroethene	2	not avail	µg/L	SMR
9/9/98	1,1-Dichloroethene	2.6	not avail	µg/L	SMR
4/25/02	1,1-Dichloroethene	2.3	not avail	µg/L	RWD
4/30/02	1,1-Dichloroethene	3.6	not avail	µg/L	RWD
5/6/02	1,1-Dichloroethene	1.5	not avail	µg/L	RWD
5/6/02	1,1-Dichloroethene	1.8	not avail	µg/L	RWD
5/6/02	1,1-Dichloroethene	3.1	not avail	µg/L	RWD
5/6/02	1,1-Dichloroethene	0.66	not avail	µg/L	RWD
5/6/02	1,1-Dichloroethene	0.47	not avail	µg/L	RWD
5/6/02	1,1-Dichloroethene	0.38	not avail	µg/L	RWD
5/7/02	1,1-Dichloroethene	0.47	not avail	µg/L	RWD
5/7/02	1,1-Dichloroethene	0.67	not avail	µg/L	RWD
9/11/02	1,1-Dichloroethene	2.7	not avail	µg/L	RWD
9/12/02	1,1-Dichloroethene	3.2	not avail	µg/L	RWD
9/20/02	1,1-Dichloroethene	1.9	not avail	µg/L	RWD
9/20/02	1,1-Dichloroethene	1.9	not avail	µg/L	RWD
9/20/02	1,1-Dichloroethene	0.75	not avail	µg/L	RWD
9/20/02	**1,1-Dichloroethene**	**13**	**not avail**	**µg/L**	**RWD**
9/24/02	1,1-Dichloroethene	4.2	not avail	µg/L	RWD
10/15/02	1,1-Dichloroethene	1.7	not avail	µg/L	RWD
4/3/03	1,1-Dichloroethene	2.76	not avail	µg/L	RWD
4/3/03	1,1-Dichloroethene	0.61	not avail	µg/L	RWD
4/4/03	1,1-Dichloroethene	1.15	not avail	µg/L	RWD
4/4/03	1,1-Dichloroethene	1.83	not avail	µg/L	RWD
5/14/03	1,1-Dichloroethene	3.8	not avail	µg/L	RWD
5/14/03	1,1-Dichloroethene	0.61	not avail	µg/L	RWD
9/25/03	1,1-Dichloroethene	7.6	not avail	µg/L	RWD
9/25/03	1,1-Dichloroethene	0.9	not avail	µg/L	RWD
9/26/03	1,1-Dichloroethene	1.2	not avail	µg/L	RWD
2/23/05	1,1-Dichloroethene	1.3	0.5	µg/L	SMR
2/23/04	Alkalinity (as CaCO3)	200	1	mg/L	SMR
4/7/04	**Benzene**	**0.66**	0.5	µg/L	SMR
12/6/96	Chromium	69	unfiltered	µg/L	SMR
12/6/96	Chromium	65	unfiltered	µg/L	SMR
12/6/96	Chromium	98	unfiltered	µg/L	SMR

Table 1
Summary of Detected Constituents Monitoring Results
Influent to GWRS

SAMPLE DATE	PARAMETER	RESULT	DETECTION LIMIT	UNITS	SOURCE
12/6/96	Chromium	77	unfiltered	µg/L	SMR
12/6/96	Chromium	240	unfiltered	µg/L	SMR
12/17/96	Chromium	140	unfiltered	µg/L	SMR
3/4/97	Chromium	35	unfiltered	µg/L	SMR
3/4/97	Chromium	43	unfiltered	µg/L	SMR
3/4/97	Chromium	73	unfiltered	µg/L	SMR
3/4/97	Chromium	200	unfiltered	µg/L	SMR
3/17/97	Chromium	30	filtered	µg/L	SMR
3/19/97	Chromium	70	unfiltered	µg/L	SMR
3/19/97	Chromium	110	unfiltered	µg/L	SMR
3/19/97	Chromium	13	unfiltered	µg/L	SMR
3/21/97	Chromium	150	filtered	µg/L	SMR
7/16/97	Chromium	120	unfiltered	µg/L	SMR
7/16/97	Chromium	44	unfiltered	µg/L	SMR
7/16/97	Chromium	110	unfiltered	µg/L	SMR
7/16/97	Chromium	120	unfiltered	µg/L	SMR
7/21/97	Chromium	24	unfiltered	µg/L	SMR
9/3/97	Chromium	120	unfiltered	µg/L	SMR
9/3/97	Chromium	49	unfiltered	µg/L	SMR
9/3/97	Chromium	28	unfiltered	µg/L	SMR
9/3/97	Chromium	130	unfiltered	µg/L	SMR
9/3/97	Chromium	300	unfiltered	µg/L	SMR
10/1/97	Chromium	99	unfiltered	µg/L	SMR
10/1/97	Chromium	150	unfiltered	µg/L	SMR
10/1/97	Chromium	12	unfiltered	µg/L	SMR
10/2/97	Chromium	83	filtered	µg/L	SMR
10/9/97	**Chromium**	**660**	unfiltered	µg/L	SMR
10/9/97	Chromium	46	unfiltered	µg/L	SMR
12/8/97	Chromium	110	unfiltered	µg/L	SMR
12/8/97	Chromium	43	unfiltered	µg/L	SMR
12/8/97	Chromium	53	unfiltered	µg/L	SMR
12/8/97	Chromium	130	unfiltered	µg/L	SMR
12/8/97	Chromium	240	unfiltered	µg/L	SMR
12/8/97	Chromium	14	unfiltered	µg/L	SMR
3/11/98	Chromium	420	filtered	µg/L	SMR
3/12/98	Chromium	95	filtered	µg/L	SMR
3/12/98	Chromium	45	filtered	µg/L	SMR
3/12/98	Chromium	45	filtered	µg/L	SMR
3/12/98	Chromium	190	filtered	µg/L	SMR
3/13/98	Chromium	120	filtered	µg/L	SMR

Table 1
Summary of Detected Constituents Monitoring Results
Influent to GWRS

SAMPLE DATE	PARAMETER	RESULT	DETECTION LIMIT	UNITS	SOURCE
3/13/98	Chromium	210	filtered	µg/L	SMR
3/17/98	Chromium	130	filtered	µg/L	SMR
3/17/98	Chromium	460	filtered	µg/L	SMR
3/18/98	Chromium	140	filtered	µg/L	SMR
3/18/98	Chromium	56	filtered	µg/L	SMR
3/18/98	Chromium	38	filtered	µg/L	SMR
3/26/98	Chromium	170	filtered	µg/L	SMR
3/26/98	Chromium	120	filtered	µg/L	SMR
3/26/98	Chromium	81	filtered	µg/L	SMR
3/26/98	Chromium	110	filtered	µg/L	SMR
3/26/98	Chromium	150	filtered	µg/L	SMR
6/24/98	Chromium	58	filtered	µg/L	SMR
6/24/98	Chromium	31	filtered	µg/L	SMR
6/24/98	Chromium	67	filtered	µg/L	SMR
6/24/98	Chromium	130	filtered	µg/L	SMR
6/24/98	Chromium	210	filtered	µg/L	SMR
8/14/98	Chromium	150	filtered	µg/L	SMR
8/18/98	Chromium	82	filtered	µg/L	SMR
8/19/98	Chromium	240	filtered	µg/L	SMR
8/20/98	Chromium	320	filtered	µg/L	SMR
9/8/98	Chromium	290	filtered	µg/L	SMR
9/9/98	Chromium	12	filtered	µg/L	SMR
9/23/98	Chromium	83	filtered	µg/L	SMR
9/23/98	Chromium	33	filtered	µg/L	SMR
9/23/98	Chromium	38	filtered	µg/L	SMR
9/23/98	Chromium	130	filtered	µg/L	SMR
9/23/98	Chromium	270	filtered	µg/L	SMR
12/16/99	Chromium	42	unfiltered	µg/L	SMR
12/16/99	Chromium	20	unfiltered	µg/L	SMR
4/25/02	Chromium	29.5	not avail	µg/L	RWD
4/30/02	**Chromium**	**522**	**not avail**	**µg/L**	**RWD**
9/11/02	Chromium	32.9	not avail	µg/L	RWD
9/24/02	Chromium	5	not avail	µg/L	RWD
4/3/03	Chromium	5	not avail	µg/L	RWD
4/4/03	Chromium	20	not avail	µg/L	RWD
4/4/03	Chromium	4	not avail	µg/L	RWD
5/14/03	Chromium	8	not avail	µg/L	RWD
5/14/03	Chromium	5	not avail	µg/L	RWD
5/14/03	Chromium	6	not avail	µg/L	RWD
5/14/03	Chromium	9	not avail	µg/L	RWD

Table 1
Summary of Detected Constituents Monitoring Results
Influent to GWRS

SAMPLE DATE	PARAMETER	RESULT	DETECTION LIMIT	UNITS	SOURCE
5/14/03	Chromium	4	not avail	µg/L	RWD
5/14/03	Chromium	4	not avail	µg/L	RWD
9/24/03	Chromium	1	not avail	µg/L	RWD
9/25/03	Chromium	2	not avail	µg/L	RWD
9/25/03	Chromium	11	not avail	µg/L	RWD
9/25/03	Chromium	9	not avail	µg/L	RWD
9/25/03	Chromium	19	not avail	µg/L	RWD
9/25/03	Chromium	4	not avail	µg/L	RWD
9/26/03	Chromium	6	not avail	µg/L	RWD
9/26/03	Chromium	110	not avail	µg/L	RWD
9/26/03	Chromium	6	not avail	µg/L	RWD
1/15/04	Chromium	5	1	ug/L	SMR
2/23/04	Chromium	5	1	µg/L	SMR
3/9/04	Chromium	4	1	µg/L	SMR
3/9/04	Chromium	6	1	µg/L	SMR
4/7/04	Chromium	4	1	µg/L	SMR
5/5/04	Chromium	4	1	ug/L	SMR
12/17/96	cis-1,2-Dichloroethene	18	not avail	µg/L	SMR
3/18/97	cis-1,2-Dichloroethene	1.1	not avail	µg/L	SMR
3/18/97	cis-1,2-Dichloroethene	4.5	not avail	µg/L	SMR
3/18/97	cis-1,2-Dichloroethene	4.2	not avail	µg/L	SMR
3/18/97	cis-1,2-Dichloroethene	110	not avail	µg/L	SMR
3/19/97	cis-1,2-Dichloroethene	6.5	not avail	µg/L	SMR
3/20/97	cis-1,2-Dichloroethene	8.1	not avail	µg/L	SMR
3/21/97	cis-1,2-Dichloroethene	300	not avail	µg/L	SMR
9/30/97	cis-1,2-Dichloroethene	17	not avail	µg/L	SMR
10/1/97	cis-1,2-Dichloroethene	2.6	not avail	µg/L	SMR
10/1/97	cis-1,2-Dichloroethene	1.2	not avail	µg/L	SMR
10/2/97	cis-1,2-Dichloroethene	6.8	not avail	µg/L	SMR
10/2/97	cis-1,2-Dichloroethene	5.6	not avail	µg/L	SMR
10/9/97	cis-1,2-Dichloroethene	52	not avail	µg/L	SMR
10/9/97	cis-1,2-Dichloroethene	11	not avail	µg/L	SMR
3/10/98	cis-1,2-Dichloroethene	19	not avail	µg/L	SMR
3/11/98	cis-1,2-Dichloroethene	3.5	not avail	µg/L	SMR
3/11/98	cis-1,2-Dichloroethene	3.8	not avail	µg/L	SMR
3/12/98	cis-1,2-Dichloroethene	14	not avail	µg/L	SMR
3/12/98	cis-1,2-Dichloroethene	3.7	not avail	µg/L	SMR
3/13/98	cis-1,2-Dichloroethene	0.61	not avail	µg/L	SMR
3/16/98	**cis-1,2-Dichloroethene**	**360**	not avail	µg/L	SMR
3/17/98	cis-1,2-Dichloroethene	2.1	not avail	µg/L	SMR

Table 1
Summary of Detected Constituents Monitoring Results
Influent to GWRS

SAMPLE DATE	PARAMETER	RESULT	DETECTION LIMIT	UNITS	SOURCE
3/26/98	cis-1,2-Dichloroethene	61	not avail	µg/L	SMR
9/9/98	cis-1,2-Dichloroethene	2.7	not avail	µg/L	SMR
9/9/98	cis-1,2-Dichloroethene	5.7	not avail	µg/L	SMR
9/9/98	cis-1,2-Dichloroethene	33	not avail	µg/L	SMR
4/24/02	cis-1,2-Dichloroethene	0.99	not avail	µg/L	RWD
4/24/02	cis-1,2-Dichloroethene	0.86	not avail	µg/L	RWD
4/25/02	cis-1,2-Dichloroethene	9.5	not avail	µg/L	RWD
4/30/02	cis-1,2-Dichloroethene	10	not avail	µg/L	RWD
5/6/02	cis-1,2-Dichloroethene	7.4	not avail	µg/L	RWD
5/6/02	cis-1,2-Dichloroethene	8.4	not avail	µg/L	RWD
5/6/02	cis-1,2-Dichloroethene	18	not avail	µg/L	RWD
5/6/02	cis-1,2-Dichloroethene	1.3	not avail	µg/L	RWD
5/6/02	cis-1,2-Dichloroethene	2.4	not avail	µg/L	RWD
5/6/02	cis-1,2-Dichloroethene	7.8	not avail	µg/L	RWD
5/6/02	cis-1,2-Dichloroethene	0.29	not avail	µg/L	RWD
5/7/02	cis-1,2-Dichloroethene	0.34	not avail	µg/L	RWD
5/7/02	cis-1,2-Dichloroethene	1.3	not avail	µg/L	RWD
9/11/02	cis-1,2-Dichloroethene	0.6	not avail	µg/L	RWD
9/11/02	cis-1,2-Dichloroethene	21	not avail	µg/L	RWD
9/12/02	cis-1,2-Dichloroethene	17	not avail	µg/L	RWD
9/20/02	cis-1,2-Dichloroethene	9.9	not avail	µg/L	RWD
9/20/02	cis-1,2-Dichloroethene	5.9	not avail	µg/L	RWD
9/20/02	cis-1,2-Dichloroethene	8.7	not avail	µg/L	RWD
9/20/02	cis-1,2-Dichloroethene	14	not avail	µg/L	RWD
9/20/02	cis-1,2-Dichloroethene	4.2	not avail	µg/L	RWD
9/24/02	cis-1,2-Dichloroethene	21	not avail	µg/L	RWD
10/15/02	cis-1,2-Dichloroethene	12	not avail	µg/L	RWD
4/3/03	cis-1,2-Dichloroethene	1	not avail	µg/L	RWD
4/3/03	cis-1,2-Dichloroethene	9	not avail	µg/L	RWD
4/3/03	cis-1,2-Dichloroethene	2.9	not avail	µg/L	RWD
4/4/03	cis-1,2-Dichloroethene	5.3	not avail	µg/L	RWD
4/4/03	cis-1,2-Dichloroethene	12	not avail	µg/L	RWD
4/18/03	cis-1,2-Dichloroethene	6.6	not avail	µg/L	RWD
5/14/03	cis-1,2-Dichloroethene	1.65	not avail	µg/L	RWD
5/14/03	cis-1,2-Dichloroethene	12	not avail	µg/L	RWD
5/14/03	cis-1,2-Dichloroethene	3.74	not avail	µg/L	RWD
9/25/03	**cis-1,2-Dichloroethene**	**38**	**not avail**	**µg/L**	**RWD**
9/25/03	cis-1,2-Dichloroethene	13	not avail	µg/L	RWD
9/26/03	cis-1,2-Dichloroethene	1	not avail	µg/L	RWD
9/26/03	cis-1,2-Dichloroethene	16	not avail	µg/L	RWD

Table 1
Summary of Detected Constituents Monitoring Results
Influent to GWRS

SAMPLE DATE	PARAMETER	RESULT	DETECTION LIMIT	UNITS	SOURCE
9/26/03	cis-1,2-Dichloroethene	1.8	not avail	µg/L	RWD
1/15/04	cis-1,2-Dichloroethene	1.5	0.5	µg/L	SMR
1/21/04	cis-1,2-Dichloroethene	2.7	0.5	µg/L	SMR
2/23/04	cis-1,2-Dichloroethene	3.2	0.5	µg/L	SMR
3/9/04	cis-1,2-Dichloroethene	3.7	0.5	µg/L	SMR
4/7/04	cis-1,2-Dichloroethene	3.8	0.5	µg/L	SMR
5/5/04	cis-1,2-Dichloroethene	3.2	0.5	µg/L	SMR
6/1/04	cis-1,2-Dichloroethene	3	0.5	µg/L	SMR
7/1/04	cis-1,2-Dichloroethene	3	0.5	µg/L	SMR
8/9/04	cis-1,2-Dichloroethene	2.6	0.5	µg/L	SMR
9/16/04	cis-1,2-Dichloroethene	2.3	0.5	µg/L	SMR
10/6/04	cis-1,2-Dichloroethene	2.2	0.5	µg/L	SMR
11/5/04	cis-1,2-Dichloroethene	2	0.5	µg/L	SMR
12/2/04	cis-1,2-Dichloroethene	1.7	0.5	µg/L	SMR
1/5/05	cis-1,2-Dichloroethene	1.5	0.5	µg/L	SMR
2/4/05	cis-1,2-Dichloroethene	1.5	0.5	µg/L	SMR
2/23/05	cis-1,2-Dichloroethene	4.5	0.5	µg/L	SMR
	cis-1,2-Dichloroethene	3.58	not avail	µg/L	RWD
1/15/04	**Copper**	**14**	5	µg/L	SMR
5/5/04	Copper	7	5	µg/L	SMR
1/5/05	Copper	5	5	µg/L	SMR
4/3/03	Dichlorodifluoromethane	0.65	not avail	ug/L	RWD
5/14/03	Dichlorodifluoromethane	0.61	not avail	ug/L	RWD
9/25/03	**Dichlorodifluoromethane**	**1.2**	not avail	ug/L	RWD
2/23/04	Hardness	160	1	mg/L	SMR
6/1/04	Hardness	140	1	mg/L	SMR
10/6/04	Hardness	140	1	mg/L	SMR
11/5/04	Hardness	130	1	mg/L	SMR
12/2/04	Hardness	120	1	mg/L	SMR
1/5/05	Hardness	120	1	mg/L	SMR
2/4/05	Hardness	120	1	mg/L	SMR
2/23/04	pH	7.8	N/A	Std. Unit	SMR
10/6/04	pH	7.1	N/A	Std. Unit	SMR
11/5/04	pH	7.6	N/A	Std. Unit	SMR
12/2/04	pH	7.7	N/A	Std. Unit	SMR
1/5/05	pH	7.7	N/A	Std. Unit	SMR
2/4/05	pH	7.8	N/A	Std. Unit	SMR
3/20/97	Tetrachloroethene	4.2	not avail	µg/L	SMR
9/30/97	Tetrachloroethene	1.5	not avail	µg/L	SMR
3/10/98	Tetrachloroethene	0.56	not avail	µg/L	SMR

Table 1
Summary of Detected Constituents Monitoring Results
Influent to GWRS

SAMPLE DATE	PARAMETER	RESULT	DETECTION LIMIT	UNITS	SOURCE
3/10/98	Tetrachloroethene	0.89	not avail	µg/L	SMR
3/16/98	Tetrachloroethene	1.4	not avail	µg/L	SMR
3/26/98	**Tetrachloroethene**	**540**	**not avail**	**µg/L**	**SMR**
9/9/98	Tetrachloroethene	0.76	not avail	µg/L	SMR
9/9/98	Tetrachloroethene	0.63	not avail	µg/L	SMR
4/25/02	Tetrachloroethene	1.2	not avail	µg/L	RWD
4/30/02	Tetrachloroethene	0.27	not avail	µg/L	RWD
4/30/02	Tetrachloroethene	0.56	not avail	µg/L	RWD
5/6/02	Tetrachloroethene	2.1	not avail	µg/L	RWD
5/6/02	Tetrachloroethene	2	not avail	µg/L	RWD
5/6/02	Tetrachloroethene	2.6	not avail	µg/L	RWD
5/6/02	Tetrachloroethene	0.53	not avail	µg/L	RWD
5/6/02	Tetrachloroethene	0.29	not avail	µg/L	RWD
9/11/02	Tetrachloroethene	1.4	not avail	µg/L	RWD
9/12/02	Tetrachloroethene	0.53	not avail	µg/L	RWD
9/20/02	Tetrachloroethene	2.9	not avail	µg/L	RWD
9/20/02	Tetrachloroethene	2.1	not avail	µg/L	RWD
9/20/02	Tetrachloroethene	0.36	not avail	µg/L	RWD
9/20/02	Tetrachloroethene	0.52	not avail	µg/L	RWD
10/15/02	**Tetrachloroethene**	**4.2**	**not avail**	**µg/L**	**RWD**
4/4/03	Tetrachloroethene	0.72	not avail	µg/L	RWD
5/14/03	Tetrachloroethene	0.6	not avail	µg/L	RWD
9/25/03	Tetrachloroethene	0.78	not avail	µg/L	RWD
4/7/04	**Toluene**	**0.73**	0.5	µg/L	SMR
12/6/96	Trichloroethene	3600	not avail	µg/L	SMR
12/6/96	Trichloroethene	5400	not avail	µg/L	SMR
12/6/96	Trichloroethene	7800	not avail	µg/L	SMR
12/6/96	Trichloroethene	7000	not avail	µg/L	SMR
12/6/96	Trichloroethene	2000	not avail	µg/L	SMR
12/6/96	Trichloroethene	630	not avail	µg/L	SMR
12/17/96	Trichloroethene	270	not avail	µg/L	SMR
12/17/96	Trichloroethene	2900	not avail	µg/L	SMR
3/4/97	Trichloroethene	2400	not avail	µg/L	SMR
3/4/97	Trichloroethene	4900	not avail	µg/L	SMR
3/4/97	Trichloroethene	9100	not avail	µg/L	SMR
3/4/97	Trichloroethene	2600	not avail	µg/L	SMR
3/4/97	Trichloroethene	460	not avail	µg/L	SMR
3/17/97	Trichloroethene	7.7	not avail	µg/L	SMR
3/17/97	Trichloroethene	5	not avail	µg/L	SMR
3/18/97	Trichloroethene	22	not avail	µg/L	SMR

Table 1
Summary of Detected Constituents Monitoring Results
Influent to GWRS

SAMPLE DATE	PARAMETER	RESULT	DETECTION LIMIT	UNITS	SOURCE
3/18/97	Trichloroethene	380	not avail	µg/L	SMR
3/18/97	Trichloroethene	10	not avail	µg/L	SMR
3/18/97	Trichloroethene	6.4	not avail	µg/L	SMR
3/18/97	Trichloroethene	60	not avail	µg/L	SMR
3/19/97	Trichloroethene	5800	not avail	µg/L	SMR
3/19/97	Trichloroethene	330	not avail	µg/L	SMR
3/19/97	Trichloroethene	1400	not avail	µg/L	SMR
3/19/97	Trichloroethene	230	not avail	µg/L	SMR
3/19/97	Trichloroethene	410	not avail	µg/L	SMR
3/19/97	Trichloroethene	39	not avail	µg/L	SMR
3/20/97	Trichloroethene	920	not avail	µg/L	SMR
3/21/97	Trichloroethene	120	not avail	µg/L	SMR
7/16/97	Trichloroethene	3000	not avail	µg/L	SMR
7/16/97	Trichloroethene	3000	not avail	µg/L	SMR
7/16/97	Trichloroethene	570	not avail	µg/L	SMR
7/16/97	Trichloroethene	3500	not avail	µg/L	SMR
7/16/97	Trichloroethene	6500	not avail	µg/L	SMR
7/16/97	Trichloroethene	13000	not avail	µg/L	SMR
9/3/97	Trichloroethene	6800	not avail	µg/L	SMR
9/3/97	Trichloroethene	3000	not avail	µg/L	SMR
9/3/97	Trichloroethene	3000	not avail	µg/L	SMR
9/3/97	Trichloroethene	13000	not avail	µg/L	SMR
9/3/97	Trichloroethene	1700	not avail	µg/L	SMR
9/3/97	Trichloroethene	470	not avail	µg/L	SMR
9/30/97	Trichloroethene	8.1	not avail	µg/L	SMR
9/30/97	Trichloroethene	290	not avail	µg/L	SMR
9/30/97	Trichloroethene	2	not avail	µg/L	SMR
9/30/97	Trichloroethene	5.9	not avail	µg/L	SMR
9/30/97	Trichloroethene	58	not avail	µg/L	SMR
10/1/97	Trichloroethene	4900	not avail	µg/L	SMR
10/1/97	Trichloroethene	260	not avail	µg/L	SMR
10/1/97	Trichloroethene	3500	not avail	µg/L	SMR
10/1/97	Trichloroethene	69	not avail	µg/L	SMR
10/1/97	Trichloroethene	300	not avail	µg/L	SMR
10/2/97	Trichloroethene	6	not avail	µg/L	SMR
10/2/97	Trichloroethene	14	not avail	µg/L	SMR
10/2/97	Trichloroethene	0.9	not avail	µg/L	SMR
10/9/97	Trichloroethene	510	not avail	µg/L	SMR
10/9/97	Trichloroethene	8600	not avail	µg/L	SMR
10/9/97	Trichloroethene	300	not avail	µg/L	SMR

Table 1
Summary of Detected Constituents Monitoring Results
Influent to GWRS

SAMPLE DATE	PARAMETER	RESULT	DETECTION LIMIT	UNITS	SOURCE
10/9/97	Trichloroethene	1400	not avail	µg/L	SMR
12/8/97	Trichloroethene	8800	not avail	µg/L	SMR
12/8/97	Trichloroethene	3000	not avail	µg/L	SMR
12/8/97	Trichloroethene	3900	not avail	µg/L	SMR
12/8/97	**Trichloroethene**	**14000**	not avail	µg/L	SMR
12/8/97	Trichloroethene	2200	not avail	µg/L	SMR
12/8/97	Trichloroethene	620	not avail	µg/L	SMR
3/10/98	Trichloroethene	5.2	not avail	µg/L	SMR
3/10/98	Trichloroethene	15	not avail	µg/L	SMR
3/10/98	Trichloroethene	5.4	not avail	µg/L	SMR
3/11/98	Trichloroethene	4.1	not avail	µg/L	SMR
3/11/98	Trichloroethene	9.7	not avail	µg/L	SMR
3/12/98	Trichloroethene	6600	not avail	µg/L	SMR
3/12/98	Trichloroethene	2300	not avail	µg/L	SMR
3/12/98	Trichloroethene	3200	not avail	µg/L	SMR
3/12/98	Trichloroethene	1800	not avail	µg/L	SMR
3/12/98	Trichloroethene	4400	not avail	µg/L	SMR
3/12/98	Trichloroethene	16	not avail	µg/L	SMR
3/12/98	Trichloroethene	1.5	not avail	µg/L	SMR
3/12/98	Trichloroethene	4.4	not avail	µg/L	SMR
3/12/98	Trichloroethene	3.6	not avail	µg/L	SMR
3/12/98	Trichloroethene	2.3	not avail	µg/L	SMR
3/13/98	Trichloroethene	9600	not avail	µg/L	SMR
3/13/98	Trichloroethene	8.8	not avail	µg/L	SMR
3/13/98	Trichloroethene	130	not avail	µg/L	SMR
3/13/98	Trichloroethene	8.3	not avail	µg/L	SMR
3/16/98	Trichloroethene	45	not avail	µg/L	SMR
3/17/98	Trichloroethene	230	not avail	µg/L	SMR
3/17/98	Trichloroethene	380	not avail	µg/L	SMR
3/17/98	Trichloroethene	19	not avail	µg/L	SMR
3/17/98	Trichloroethene	32	not avail	µg/L	SMR
3/17/98	Trichloroethene	4.5	not avail	µg/L	SMR
3/17/98	Trichloroethene	140	not avail	µg/L	SMR
3/18/98	Trichloroethene	2500	not avail	µg/L	SMR
3/18/98	Trichloroethene	320	not avail	µg/L	SMR
3/18/98	Trichloroethene	5.9	not avail	µg/L	SMR
3/18/98	Trichloroethene	71	not avail	µg/L	SMR
3/18/98	Trichloroethene	1300	not avail	µg/L	SMR
3/18/98	Trichloroethene	69	not avail	µg/L	SMR
3/20/98	Trichloroethene	5600	not avail	µg/L	SMR

Table 1
Summary of Detected Constituents Monitoring Results
Influent to GWRS

SAMPLE DATE	PARAMETER	RESULT	DETECTION LIMIT	UNITS	SOURCE
3/24/98	Trichloroethene	83	not avail	µg/L	SMR
3/26/98	Trichloroethene	2900	not avail	µg/L	SMR
3/26/98	Trichloroethene	6100	not avail	µg/L	SMR
3/26/98	Trichloroethene	430	not avail	µg/L	SMR
3/26/98	Trichloroethene	1500	not avail	µg/L	SMR
3/26/98	Trichloroethene	2400	not avail	µg/L	SMR
3/26/98	Trichloroethene	29	not avail	µg/L	SMR
6/24/98	Trichloroethene	2400	not avail	µg/L	SMR
6/24/98	Trichloroethene	990	not avail	µg/L	SMR
6/24/98	Trichloroethene	3100	not avail	µg/L	SMR
6/24/98	Trichloroethene	7000	not avail	µg/L	SMR
6/24/98	Trichloroethene	1000	not avail	µg/L	SMR
8/14/98	Trichloroethene	3600	not avail	µg/L	SMR
8/18/98	Trichloroethene	1600	not avail	µg/L	SMR
8/18/98	Trichloroethene	180	not avail	µg/L	SMR
8/18/98	Trichloroethene	1900	not avail	µg/L	SMR
8/19/98	Trichloroethene	250	not avail	µg/L	SMR
8/20/98	Trichloroethene	170	not avail	µg/L	SMR
9/8/98	Trichloroethene	2.6	not avail	µg/L	SMR
9/9/98	Trichloroethene	2.5	not avail	µg/L	SMR
9/9/98	Trichloroethene	14	not avail	µg/L	SMR
9/9/98	Trichloroethene	6.4	not avail	µg/L	SMR
9/9/98	Trichloroethene	31	not avail	µg/L	SMR
9/23/98	Trichloroethene	1200	not avail	µg/L	SMR
9/23/98	Trichloroethene	640	not avail	µg/L	SMR
9/23/98	Trichloroethene	370	not avail	µg/L	SMR
9/23/98	Trichloroethene	3200	not avail	µg/L	SMR
9/23/98	Trichloroethene	900	not avail	µg/L	SMR
12/16/99	Trichloroethene	1800	not avail	µg/L	SMR
12/16/99	Trichloroethene	1900	not avail	µg/L	SMR
12/16/99	Trichloroethene	520	not avail	µg/L	SMR
4/24/02	Trichloroethene	12	not avail	µg/L	RWD
4/24/02	Trichloroethene	0.36	not avail	µg/L	RWD
4/25/02	Trichloroethene	660	not avail	µg/L	RWD
4/30/02	Trichloroethene	110	not avail	µg/L	RWD
4/30/02	Trichloroethene	12	not avail	µg/L	RWD
4/30/02	Trichloroethene	2.2	not avail	µg/L	RWD
5/6/02	Trichloroethene	820	not avail	µg/L	RWD
5/6/02	Trichloroethene	1200	not avail	µg/L	RWD
5/6/02	Trichloroethene	1600	not avail	µg/L	RWD

Table 1
Summary of Detected Constituents Monitoring Results
Influent to GWRS

SAMPLE DATE	PARAMETER	RESULT	DETECTION LIMIT	UNITS	SOURCE
5/6/02	Trichloroethene	0.42	not avail	µg/L	RWD
5/6/02	Trichloroethene	42	not avail	µg/L	RWD
5/6/02	Trichloroethene	4	not avail	µg/L	RWD
5/6/02	Trichloroethene	8.6	not avail	µg/L	RWD
5/6/02	Trichloroethene	460	not avail	µg/L	RWD
5/6/02	Trichloroethene	16	not avail	µg/L	RWD
5/7/02	Trichloroethene	21	not avail	µg/L	RWD
5/7/02	Trichloroethene	26	not avail	µg/L	RWD
9/11/02	Trichloroethene	6.5	not avail	µg/L	RWD
9/11/02	Trichloroethene	290	not avail	µg/L	RWD
9/12/02	Trichloroethene	15	not avail	µg/L	RWD
9/12/02	Trichloroethene	1.3	not avail	µg/L	RWD
9/20/02	**Trichloroethene**	**2300**	**not avail**	**µg/L**	**RWD**
9/20/02	Trichloroethene	1200	not avail	µg/L	RWD
9/20/02	Trichloroethene	200	not avail	µg/L	RWD
9/20/02	Trichloroethene	430	not avail	µg/L	RWD
9/20/02	Trichloroethene	40	not avail	µg/L	RWD
9/24/02	Trichloroethene	21	not avail	µg/L	RWD
10/15/02	Trichloroethene	2300	not avail	µg/L	RWD
4/3/03	Trichloroethene	17	not avail	µg/L	RWD
4/3/03	Trichloroethene	2.62	not avail	µg/L	RWD
4/3/03	Trichloroethene	26	not avail	µg/L	RWD
4/3/03	Trichloroethene	160	not avail	µg/L	RWD
4/3/03	Trichloroethene	1.65	not avail	µg/L	RWD
4/3/03	Trichloroethene	0.98	not avail	µg/L	RWD
4/4/03	Trichloroethene	440	not avail	µg/L	RWD
4/4/03	Trichloroethene	11	not avail	µg/L	RWD
4/18/03	Trichloroethene	35	not avail	µg/L	RWD
4/18/03	Trichloroethene	0.56	not avail	µg/L	RWD
4/18/03	Trichloroethene	13	not avail	µg/L	RWD
4/18/03	Trichloroethene	1.56	not avail	µg/L	RWD
4/18/03	Trichloroethene	38	not avail	µg/L	RWD
5/14/03	Trichloroethene	86	not avail	µg/L	RWD
5/14/03	Trichloroethene	2.9	not avail	µg/L	RWD
5/14/03	Trichloroethene	19	not avail	µg/L	RWD
5/14/03	Trichloroethene	150	not avail	µg/L	RWD
5/14/03	Trichloroethene	19	not avail	µg/L	RWD
5/14/03	Trichloroethene	1.14	not avail	µg/L	RWD
9/25/03	Trichloroethene	8.2	not avail	µg/L	RWD
9/25/03	Trichloroethene	1.3	not avail	µg/L	RWD

Table 1
Summary of Detected Constituents Monitoring Results
Influent to GWRS

SAMPLE DATE	PARAMETER	RESULT	DETECTION LIMIT	UNITS	SOURCE
9/25/03	Trichloroethene	64	not avail	µg/L	RWD
9/25/03	Trichloroethene	100	not avail	µg/L	RWD
9/25/03	Trichloroethene	1.1	not avail	µg/L	RWD
9/26/03	Trichloroethene	51	not avail	µg/L	RWD
9/26/03	Trichloroethene	190	not avail	µg/L	RWD
9/26/03	Trichloroethene	100	not avail	µg/L	RWD
1/15/04	Trichloroethene	7.8	0.5	µg/L	SMR
1/21/04	Trichloroethene	14	0.5	µg/L	SMR
2/23/04	Trichloroethene	66	1	µg/L	SMR
3/9/04	Trichloroethene	48	0.5	µg/L	SMR
4/7/04	Trichloroethene	32	0.5	µg/L	SMR
5/5/04	Trichloroethene	26	0.5	µg/L	SMR
6/1/04	Trichloroethene	26	0.5	µg/L	SMR
7/1/04	Trichloroethene	25	0.5	µg/L	SMR
8/9/04	Trichloroethene	23	0.5	µg/L	SMR
9/16/04	Trichloroethene	22	0.5	µg/L	SMR
10/6/04	Trichloroethene	22	0.5	µg/L	SMR
11/5/04	Trichloroethene	18	0.5	µg/L	SMR
12/2/04	Trichloroethene	16	0.5	µg/L	SMR
1/5/05	Trichloroethene	14	0.5	µg/L	SMR
2/4/05	Trichloroethene	11	0.5	µg/L	SMR
2/23/05	Trichloroethene	67	0.5	µg/L	SMR
3/18/97	Trichlorofluoromethane	1.6	not avail	µg/L	SMR
9/30/97	**Trichlorofluoromethane**	**1.6**	**not avail**	**µg/L**	**SMR**
4/25/02	Trichlorofluoromethane	0.59	not avail	µg/L	RWD
4/30/02	Trichlorofluoromethane	2.9	not avail	µg/L	RWD
5/6/02	Trichlorofluoromethane	0.31	not avail	µg/L	RWD
5/6/02	Trichlorofluoromethane	0.27	not avail	µg/L	RWD
5/6/02	Trichlorofluoromethane	0.25	not avail	µg/L	RWD
5/7/02	Trichlorofluoromethane	0.29	not avail	µg/L	RWD
9/11/02	Trichlorofluoromethane	0.49	not avail	µg/L	RWD
9/20/02	Trichlorofluoromethane	0.43	not avail	µg/L	RWD
4/3/03	Trichlorofluoromethane	1.45	not avail	µg/L	RWD
9/25/03	**Trichlorofluoromethane**	**3.5**	not avail	µg/L	RWD
1/15/04	**Zinc**	**130**	50	µg/L	SMR
5/5/04	Zinc	90	50	µg/L	SMR

Table 2
Summary of Monitoring Results
Effluent from the GWRS

SAMPLE DATE	PARAMETER		RESULT	DETECTION LIMIT	UNITS	SOURCE
1/13/04	1,1,1,2-Tetrachloroethane	<	0.5	0.5	µg/L	SMR
2/9/04	1,1,1,2-Tetrachloroethane	<	0.5	0.5	µg/L	SMR
3/9/04	1,1,1,2-Tetrachloroethane	<	0.5	0.5	µg/L	SMR
4/7/04	1,1,1,2-Tetrachloroethane	<	0.5	0.5	µg/L	SMR
5/5/04	1,1,1,2-Tetrachloroethane	<	0.5	0.5	µg/L	SMR
5/11/04	1,1,1,2-Tetrachloroethane	<	0.5	0.5	µg/L	SMR
6/1/04	1,1,1,2-Tetrachloroethane	<	0.5	0.5	µg/L	SMR
7/1/04	1,1,1,2-Tetrachloroethane	<	0.5	0.5	µg/L	SMR
8/9/04	1,1,1,2-Tetrachloroethane	<	0.5	0.5	µg/L	SMR
8/23/04	1,1,1,2-Tetrachloroethane	<	0.5	0.5	µg/L	SMR
9/16/04	1,1,1,2-Tetrachloroethane	<	0.5	0.5	µg/L	SMR
10/6/04	1,1,1,2-Tetrachloroethane	<	0.5	0.5	µg/L	SMR
10/6/04	1,1,1,2-Tetrachloroethane	<	0.5	0.5	µg/L	SMR
11/5/04	1,1,1,2-Tetrachloroethane	<	0.5	0.5	µg/L	SMR
12/2/04	1,1,1,2-Tetrachloroethane	<	0.5	0.5	µg/L	SMR
1/5/05	1,1,1,2-Tetrachloroethane	<	0.5	0.5	µg/L	SMR
2/4/05	1,1,1,2-Tetrachloroethane	<	0.5	0.5	µg/L	SMR
2/23/05	1,1,1,2-Tetrachloroethane	<	0.5	0.5	µg/L	SMR
1/13/04	1,1,1-Trichloroethane	<	0.5	0.5	µg/L	SMR
2/9/04	1,1,1-Trichloroethane	<	0.5	0.5	µg/L	SMR
3/9/04	1,1,1-Trichloroethane	<	0.5	0.5	µg/L	SMR
4/7/04	1,1,1-Trichloroethane	<	0.5	0.5	µg/L	SMR
5/5/04	1,1,1-Trichloroethane	<	0.5	0.5	µg/L	SMR
5/11/04	1,1,1-Trichloroethane	<	0.5	0.5	µg/L	SMR
6/1/04	1,1,1-Trichloroethane	<	0.5	0.5	µg/L	SMR
7/1/04	1,1,1-Trichloroethane	<	0.5	0.5	µg/L	SMR
8/9/04	1,1,1-Trichloroethane	<	0.5	0.5	µg/L	SMR
8/23/04	1,1,1-Trichloroethane	<	0.5	0.5	µg/L	SMR
9/16/04	1,1,1-Trichloroethane	<	0.5	0.5	µg/L	SMR
10/6/04	1,1,1-Trichloroethane	<	0.5	0.5	µg/L	SMR
10/6/04	1,1,1-Trichloroethane	<	0.5	0.5	µg/L	SMR
11/5/04	1,1,1-Trichloroethane	<	0.5	0.5	µg/L	SMR
12/2/04	1,1,1-Trichloroethane	<	0.5	0.5	µg/L	SMR
1/5/05	1,1,1-Trichloroethane	<	0.5	0.5	µg/L	SMR
2/4/05	1,1,1-Trichloroethane	<	0.5	0.5	µg/L	SMR
2/23/05	1,1,1-Trichloroethane	<	0.5	0.5	µg/L	SMR
1/13/04	1,1,2,2-Tetrachloroethane	<	0.5	0.5	µg/L	SMR
2/9/04	1,1,2,2-Tetrachloroethane	<	0.5	0.5	µg/L	SMR
3/9/04	1,1,2,2-Tetrachloroethane	<	0.5	0.5	µg/L	SMR
4/7/04	1,1,2,2-Tetrachloroethane	<	0.5	0.5	µg/L	SMR
5/5/04	1,1,2,2-Tetrachloroethane	<	0.5	0.5	µg/L	SMR
5/11/04	1,1,2,2-Tetrachloroethane	<	0.5	0.5	µg/L	SMR
6/1/04	1,1,2,2-Tetrachloroethane	<	0.5	0.5	µg/L	SMR
7/1/04	1,1,2,2-Tetrachloroethane	<	0.5	0.5	µg/L	SMR
8/9/04	1,1,2,2-Tetrachloroethane	<	0.5	0.5	µg/L	SMR
8/23/04	1,1,2,2-Tetrachloroethane	<	0.5	0.5	µg/L	SMR

Table 2
Summary of Monitoring Results
Effluent from the GWRS

SAMPLE DATE	PARAMETER		RESULT	DETECTION LIMIT	UNITS	SOURCE
9/16/04	1,1,2,2-Tetrachloroethane	<	0.5	0.5	µg/L	SMR
10/6/04	1,1,2,2-Tetrachloroethane	<	0.5	0.5	µg/L	SMR
10/6/04	1,1,2,2-Tetrachloroethane	<	0.5	0.5	µg/L	SMR
11/5/04	1,1,2,2-Tetrachloroethane	<	0.5	0.5	µg/L	SMR
12/2/04	1,1,2,2-Tetrachloroethane	<	0.5	0.5	µg/L	SMR
1/5/05	1,1,2,2-Tetrachloroethane	<	0.5	0.5	µg/L	SMR
2/4/05	1,1,2,2-Tetrachloroethane	<	0.5	0.5	µg/L	SMR
2/23/05	1,1,2,2-Tetrachloroethane	<	0.5	0.5	µg/L	SMR
1/13/04	1,1,2-Trichloroethane	<	0.5	0.5	µg/L	SMR
2/9/04	1,1,2-Trichloroethane	<	0.5	0.5	µg/L	SMR
3/9/04	1,1,2-Trichloroethane	<	0.5	0.5	µg/L	SMR
4/7/04	1,1,2-Trichloroethane	<	0.5	0.5	µg/L	SMR
5/5/04	1,1,2-Trichloroethane	<	0.5	0.5	µg/L	SMR
5/11/04	1,1,2-Trichloroethane	<	0.5	0.5	µg/L	SMR
6/1/04	1,1,2-Trichloroethane	<	0.5	0.5	µg/L	SMR
7/1/04	1,1,2-Trichloroethane	<	0.5	0.5	µg/L	SMR
8/9/04	1,1,2-Trichloroethane	<	0.5	0.5	µg/L	SMR
8/23/04	1,1,2-Trichloroethane	<	0.5	0.5	µg/L	SMR
9/16/04	1,1,2-Trichloroethane	<	0.5	0.5	µg/L	SMR
10/6/04	1,1,2-Trichloroethane	<	0.5	0.5	µg/L	SMR
10/6/04	1,1,2-Trichloroethane	<	0.5	0.5	µg/L	SMR
11/5/04	1,1,2-Trichloroethane	<	0.5	0.5	µg/L	SMR
12/2/04	1,1,2-Trichloroethane	<	0.5	0.5	µg/L	SMR
1/5/05	1,1,2-Trichloroethane	<	0.5	0.5	µg/L	SMR
2/4/05	1,1,2-Trichloroethane	<	0.5	0.5	µg/L	SMR
2/23/05	1,1,2-Trichloroethane	<	0.5	0.5	µg/L	SMR
12/6/96	1,1-Dichloroethane	<	0.5	not avail	µg/L	SMR
3/4/97	1,1-Dichloroethane	<	0.5	not avail	µg/L	SMR
7/16/97	1,1-Dichloroethane	<	0.5	not avail	µg/L	SMR
8/29/97	1,1-Dichloroethane	<	1	not avail	µg/L	SMR
9/3/97	1,1-Dichloroethane	<	1	not avail	µg/L	SMR
12/8/97	1,1-Dichloroethane	<	1	not avail	µg/L	SMR
1/21/98	1,1-Dichloroethane	<	1	not avail	µg/L	SMR
3/12/98	1,1-Dichloroethane	<	0.5	not avail	µg/L	SMR
6/18/98	1,1-Dichloroethane	<	0.5	not avail	µg/L	SMR
9/2/98	1,1-Dichloroethane	<	0.5	not avail	µg/L	SMR
1/13/04	1,1-Dichloroethane	<	1	1	µg/L	SMR
2/9/04	1,1-Dichloroethane	<	1	1	µg/L	SMR
3/9/04	1,1-Dichloroethane	<	1	1	µg/L	SMR
4/7/04	1,1-Dichloroethane	<	1	1	µg/L	SMR
5/5/04	1,1-Dichloroethane	<	1	1	µg/L	SMR
5/11/04	1,1-Dichloroethane	<	1	1	µg/L	SMR
6/1/04	1,1-Dichloroethane	<	1	1	µg/L	SMR
7/1/04	1,1-Dichloroethane	<	1	1	µg/L	SMR
8/9/04	1,1-Dichloroethane	<	1	1	µg/L	SMR
8/23/04	1,1-Dichloroethane	<	1	1	µg/L	SMR

Table 2
Summary of Monitoring Results
Effluent from the GWRS

SAMPLE DATE	PARAMETER		RESULT	DETECTION LIMIT	UNITS	SOURCE
9/16/04	1,1-Dichloroethane	<	1	1	µg/L	SMR
10/6/04	1,1-Dichloroethane	<	1	1	µg/L	SMR
10/6/04	1,1-Dichloroethane	<	1	1	µg/L	SMR
11/5/04	1,1-Dichloroethane	<	1	1	µg/L	SMR
12/2/04	1,1-Dichloroethane	<	1	1	µg/L	SMR
1/5/05	1,1-Dichloroethane	<	1	1	µg/L	SMR
2/4/05	1,1-Dichloroethane	<	1	1	µg/L	SMR
2/23/05	1,1-Dichloroethane	<	1	1	µg/L	SMR
12/6/96	1,1-Dichloroethene	<	0.5	not avail	µg/L	SMR
3/4/97	1,1-Dichloroethene	<	0.5	not avail	µg/L	SMR
7/16/97	1,1-Dichloroethene	<	0.5	not avail	µg/L	SMR
8/29/97	1,1-Dichloroethene	<	0.5	not avail	µg/L	SMR
9/3/97	1,1-Dichloroethene	<	0.5	not avail	µg/L	SMR
12/8/97	1,1-Dichloroethene	<	0.5	not avail	µg/L	SMR
1/21/98	1,1-Dichloroethene	<	0.5	not avail	µg/L	SMR
3/12/98	1,1-Dichloroethene	<	0.5	not avail	µg/L	SMR
6/18/98	1,1-Dichloroethene	<	0.5	not avail	µg/L	SMR
9/2/98	1,1-Dichloroethene	<	0.5	not avail	µg/L	SMR
1/13/04	1,1-Dichloroethene	<	0.5	0.5	µg/L	SMR
2/9/04	1,1-Dichloroethene	<	0.5	0.5	µg/L	SMR
3/9/04	1,1-Dichloroethene	<	0.5	0.5	µg/L	SMR
4/7/04	1,1-Dichloroethene	<	0.5	0.5	µg/L	SMR
5/5/04	1,1-Dichloroethene	<	0.5	0.5	µg/L	SMR
5/11/04	1,1-Dichloroethene	<	0.5	0.5	µg/L	SMR
6/1/04	1,1-Dichloroethene	<	0.5	0.5	µg/L	SMR
7/1/04	1,1-Dichloroethene	<	0.5	0.5	µg/L	SMR
8/9/04	1,1-Dichloroethene	<	0.5	0.5	µg/L	SMR
8/23/04	1,1-Dichloroethene	<	0.5	0.5	µg/L	SMR
9/16/04	1,1-Dichloroethene	<	0.5	0.5	µg/L	SMR
10/6/04	1,1-Dichloroethene	<	0.5	0.5	µg/L	SMR
10/6/04	1,1-Dichloroethene	<	0.5	0.5	µg/L	SMR
11/5/04	1,1-Dichloroethene	<	0.5	0.5	µg/L	SMR
12/2/04	1,1-Dichloroethene	<	0.5	0.5	µg/L	SMR
1/5/05	1,1-Dichloroethene	<	0.5	0.5	µg/L	SMR
2/4/05	1,1-Dichloroethene	<	0.5	0.5	µg/L	SMR
2/23/05	1,1-Dichloroethene	<	0.5	0.5	µg/L	SMR
1/13/04	1,2-Dichlorobenzene	<	0.5	0.5	µg/L	SMR
2/9/04	1,2-Dichlorobenzene	<	0.5	0.5	µg/L	SMR
3/9/04	1,2-Dichlorobenzene	<	0.5	0.5	µg/L	SMR
4/7/04	1,2-Dichlorobenzene	<	0.5	0.5	µg/L	SMR
5/5/04	1,2-Dichlorobenzene	<	0.5	0.5	µg/L	SMR
5/11/04	1,2-Dichlorobenzene	<	0.5	0.5	µg/L	SMR
6/1/04	1,2-Dichlorobenzene	<	0.5	0.5	µg/L	SMR
7/1/04	1,2-Dichlorobenzene	<	0.5	0.5	µg/L	SMR
8/9/04	1,2-Dichlorobenzene	<	0.5	0.5	µg/L	SMR
8/23/04	1,2-Dichlorobenzene	<	0.5	0.5	µg/L	SMR

Table 2
Summary of Monitoring Results
Effluent from the GWRS

SAMPLE DATE	PARAMETER		RESULT	DETECTION LIMIT	UNITS	SOURCE
9/16/04	1,2-Dichlorobenzene	<	0.5	0.5	µg/L	SMR
10/6/04	1,2-Dichlorobenzene	<	0.5	0.5	µg/L	SMR
10/6/04	1,2-Dichlorobenzene	<	0.5	0.5	µg/L	SMR
11/5/04	1,2-Dichlorobenzene	<	0.5	0.5	µg/L	SMR
12/2/04	1,2-Dichlorobenzene	<	0.5	0.5	µg/L	SMR
1/5/05	1,2-Dichlorobenzene	<	0.5	0.5	µg/L	SMR
2/4/05	1,2-Dichlorobenzene	<	0.5	0.5	µg/L	SMR
2/23/05	1,2-Dichlorobenzene	<	0.5	0.5	µg/L	SMR
1/13/04	1,2-Dichloroethane	<	0.5	0.5	µg/L	SMR
2/9/04	1,2-Dichloroethane	<	0.5	0.5	µg/L	SMR
3/9/04	1,2-Dichloroethane	<	0.5	0.5	µg/L	SMR
4/7/04	1,2-Dichloroethane	<	0.5	0.5	µg/L	SMR
5/5/04	1,2-Dichloroethane	<	0.5	0.5	µg/L	SMR
5/11/04	1,2-Dichloroethane	<	0.5	0.5	µg/L	SMR
6/1/04	1,2-Dichloroethane	<	0.5	0.5	µg/L	SMR
7/1/04	1,2-Dichloroethane	<	0.5	0.5	µg/L	SMR
8/9/04	1,2-Dichloroethane	<	0.5	0.5	µg/L	SMR
8/23/04	1,2-Dichloroethane	<	0.5	0.5	µg/L	SMR
9/16/04	1,2-Dichloroethane	<	0.5	0.5	µg/L	SMR
10/6/04	1,2-Dichloroethane	<	0.5	0.5	µg/L	SMR
10/6/04	1,2-Dichloroethane	<	0.5	0.5	µg/L	SMR
11/5/04	1,2-Dichloroethane	<	0.5	0.5	µg/L	SMR
12/2/04	1,2-Dichloroethane	<	0.5	0.5	µg/L	SMR
1/5/05	1,2-Dichloroethane	<	0.5	0.5	µg/L	SMR
2/4/05	1,2-Dichloroethane	<	0.5	0.5	µg/L	SMR
2/23/05	1,2-Dichloroethane	<	0.5	0.5	µg/L	SMR
1/13/04	1,2-Dichloropropane	<	0.5	0.5	µg/L	SMR
2/9/04	1,2-Dichloropropane	<	0.5	0.5	µg/L	SMR
3/9/04	1,2-Dichloropropane	<	0.5	0.5	µg/L	SMR
4/7/04	1,2-Dichloropropane	<	0.5	0.5	µg/L	SMR
5/5/04	1,2-Dichloropropane	<	0.5	0.5	µg/L	SMR
5/11/04	1,2-Dichloropropane	<	0.5	0.5	µg/L	SMR
6/1/04	1,2-Dichloropropane	<	0.5	0.5	µg/L	SMR
7/1/04	1,2-Dichloropropane	<	0.5	0.5	µg/L	SMR
8/9/04	1,2-Dichloropropane	<	0.5	0.5	µg/L	SMR
8/23/04	1,2-Dichloropropane	<	0.5	0.5	µg/L	SMR
9/16/04	1,2-Dichloropropane	<	0.5	0.5	µg/L	SMR
10/6/04	1,2-Dichloropropane	<	0.5	0.5	µg/L	SMR
10/6/04	1,2-Dichloropropane	<	0.5	0.5	µg/L	SMR
11/5/04	1,2-Dichloropropane	<	0.5	0.5	µg/L	SMR
12/2/04	1,2-Dichloropropane	<	0.5	0.5	µg/L	SMR
1/5/05	1,2-Dichloropropane	<	0.5	0.5	µg/L	SMR
2/4/05	1,2-Dichloropropane	<	0.5	0.5	µg/L	SMR
2/23/05	1,2-Dichloropropane	<	0.5	0.5	µg/L	SMR
1/13/04	1,3-Dichlorobenzene	<	0.5	0.5	µg/L	SMR
2/9/04	1,3-Dichlorobenzene	<	0.5	0.5	µg/L	SMR

Table 2
Summary of Monitoring Results
Effluent from the GWRS

SAMPLE DATE	PARAMETER		RESULT	DETECTION LIMIT	UNITS	SOURCE
3/9/04	1,3-Dichlorobenzene	<	0.5	0.5	µg/L	SMR
4/7/04	1,3-Dichlorobenzene	<	0.5	0.5	µg/L	SMR
5/5/04	1,3-Dichlorobenzene	<	0.5	0.5	µg/L	SMR
5/11/04	1,3-Dichlorobenzene	<	0.5	0.5	µg/L	SMR
6/1/04	1,3-Dichlorobenzene	<	0.5	0.5	µg/L	SMR
7/1/04	1,3-Dichlorobenzene	<	0.5	0.5	µg/L	SMR
8/9/04	1,3-Dichlorobenzene	<	0.5	0.5	µg/L	SMR
8/23/04	1,3-Dichlorobenzene	<	0.5	0.5	µg/L	SMR
9/16/04	1,3-Dichlorobenzene	<	0.5	0.5	µg/L	SMR
10/6/04	1,3-Dichlorobenzene	<	0.5	0.5	µg/L	SMR
10/6/04	1,3-Dichlorobenzene	<	0.5	0.5	µg/L	SMR
11/5/04	1,3-Dichlorobenzene	<	0.5	0.5	µg/L	SMR
12/2/04	1,3-Dichlorobenzene	<	0.5	0.5	µg/L	SMR
1/5/05	1,3-Dichlorobenzene	<	0.5	0.5	µg/L	SMR
2/4/05	1,3-Dichlorobenzene	<	0.5	0.5	µg/L	SMR
2/23/05	1,3-Dichlorobenzene	<	0.5	0.5	µg/L	SMR
1/13/04	1,4-Dichlorobenzene	<	0.5	0.5	µg/L	SMR
2/9/04	1,4-Dichlorobenzene	<	0.5	0.5	µg/L	SMR
3/9/04	1,4-Dichlorobenzene	<	0.5	0.5	µg/L	SMR
4/7/04	1,4-Dichlorobenzene	<	0.5	0.5	µg/L	SMR
5/5/04	1,4-Dichlorobenzene	<	0.5	0.5	µg/L	SMR
5/11/04	1,4-Dichlorobenzene	<	0.5	0.5	µg/L	SMR
6/1/04	1,4-Dichlorobenzene	<	0.5	0.5	µg/L	SMR
7/1/04	1,4-Dichlorobenzene	<	0.5	0.5	µg/L	SMR
8/9/04	1,4-Dichlorobenzene	<	0.5	0.5	µg/L	SMR
8/23/04	1,4-Dichlorobenzene	<	0.5	0.5	µg/L	SMR
9/16/04	1,4-Dichlorobenzene	<	0.5	0.5	µg/L	SMR
10/6/04	1,4-Dichlorobenzene	<	0.5	0.5	µg/L	SMR
10/6/04	1,4-Dichlorobenzene	<	0.5	0.5	µg/L	SMR
11/5/04	1,4-Dichlorobenzene	<	0.5	0.5	µg/L	SMR
12/2/04	1,4-Dichlorobenzene	<	0.5	0.5	µg/L	SMR
1/5/05	1,4-Dichlorobenzene	<	0.5	0.5	µg/L	SMR
2/4/05	1,4-Dichlorobenzene	<	0.5	0.5	µg/L	SMR
2/23/05	1,4-Dichlorobenzene	<	0.5	0.5	µg/L	SMR
1/13/04	Benzene	<	0.5	0.5	µg/L	SMR
2/9/04	Benzene	<	0.5	0.5	µg/L	SMR
3/9/04	Benzene	<	0.5	0.5	µg/L	SMR
4/7/04	Benzene	<	0.5	0.5	µg/L	SMR
5/5/04	Benzene	<	0.5	0.5	µg/L	SMR
5/11/04	Benzene	<	0.5	0.5	µg/L	SMR
6/1/04	Benzene	<	0.5	0.5	µg/L	SMR
7/1/04	Benzene	<	0.5	0.5	µg/L	SMR
8/9/04	Benzene	<	0.5	0.5	µg/L	SMR
8/23/04	Benzene	<	0.5	0.5	µg/L	SMR
9/16/04	Benzene	<	0.5	0.5	µg/L	SMR
10/6/04	Benzene	<	0.5	0.5	µg/L	SMR

Table 2
Summary of Monitoring Results
Effluent from the GWRS

SAMPLE DATE	PARAMETER		RESULT	DETECTION LIMIT	UNITS	SOURCE
10/6/04	Benzene	<	0.5	0.5	µg/L	SMR
11/5/04	Benzene	<	0.5	0.5	µg/L	SMR
12/2/04	Benzene	<	0.5	0.5	µg/L	SMR
1/5/05	Benzene	<	0.5	0.5	µg/L	SMR
2/4/05	Benzene	<	0.5	0.5	µg/L	SMR
2/23/05	Benzene	<	0.5	0.5	µg/L	SMR
1/13/04	Bromobenzene	<	0.5	0.5	µg/L	SMR
2/9/04	Bromobenzene	<	0.5	0.5	µg/L	SMR
3/9/04	Bromobenzene	<	0.5	0.5	µg/L	SMR
4/7/04	Bromobenzene	<	0.5	0.5	µg/L	SMR
5/5/04	Bromobenzene	<	0.5	0.5	µg/L	SMR
5/11/04	Bromobenzene	<	0.5	0.5	µg/L	SMR
6/1/04	Bromobenzene	<	0.5	0.5	µg/L	SMR
7/1/04	Bromobenzene	<	0.5	0.5	µg/L	SMR
8/9/04	Bromobenzene	<	0.5	0.5	µg/L	SMR
8/23/04	Bromobenzene	<	0.5	0.5	µg/L	SMR
9/16/04	Bromobenzene	<	0.5	0.5	µg/L	SMR
10/6/04	Bromobenzene	<	0.5	0.5	µg/L	SMR
10/6/04	Bromobenzene	<	0.5	0.5	µg/L	SMR
11/5/04	Bromobenzene	<	0.5	0.5	µg/L	SMR
12/2/04	Bromobenzene	<	0.5	0.5	µg/L	SMR
1/5/05	Bromobenzene	<	0.5	0.5	µg/L	SMR
2/4/05	Bromobenzene	<	0.5	0.5	µg/L	SMR
2/23/05	Bromobenzene	<	0.5	0.5	µg/L	SMR
1/13/04	Bromoform	<	0.5	0.5	µg/L	SMR
2/9/04	Bromoform	<	0.5	0.5	µg/L	SMR
3/9/04	Bromoform	<	0.5	0.5	µg/L	SMR
4/7/04	Bromoform	<	0.5	0.5	µg/L	SMR
5/5/04	Bromoform	<	0.5	0.5	µg/L	SMR
5/11/04	Bromoform	<	0.5	0.5	µg/L	SMR
6/1/04	Bromoform	<	0.5	0.5	µg/L	SMR
7/1/04	Bromoform	<	0.5	0.5	µg/L	SMR
8/9/04	Bromoform	<	0.5	0.5	µg/L	SMR
8/23/04	Bromoform	<	0.5	0.5	µg/L	SMR
9/16/04	Bromoform	<	0.5	0.5	µg/L	SMR
10/6/04	Bromoform	<	0.5	0.5	µg/L	SMR
10/6/04	Bromoform	<	0.5	0.5	µg/L	SMR
11/5/04	Bromoform	<	0.5	0.5	µg/L	SMR
12/2/04	Bromoform	<	0.5	0.5	µg/L	SMR
1/5/05	Bromoform	<	0.5	0.5	µg/L	SMR
2/4/05	Bromoform	<	0.5	0.5	µg/L	SMR
2/23/05	Bromoform	<	0.5	0.5	µg/L	SMR
1/13/04	Bromomethane	<	1	1	µg/L	SMR
2/9/04	Bromomethane	<	1	1	µg/L	SMR
3/9/04	Bromomethane	<	1	1	µg/L	SMR
4/7/04	Bromomethane	<	1	1	µg/L	SMR

Table 2
Summary of Monitoring Results
Effluent from the GWRS

SAMPLE DATE	PARAMETER		RESULT	DETECTION LIMIT	UNITS	SOURCE
5/5/04	Bromomethane	<	1	1	µg/L	SMR
5/11/04	Bromomethane	<	1	1	µg/L	SMR
6/1/04	Bromomethane	<	1	1	µg/L	SMR
7/1/04	Bromomethane	<	1	1	µg/L	SMR
8/9/04	Bromomethane	<	1	1	µg/L	SMR
8/23/04	Bromomethane	<	1	1	µg/L	SMR
9/16/04	Bromomethane	<	1	1	µg/L	SMR
10/6/04	Bromomethane	<	1	1	µg/L	SMR
10/6/04	Bromomethane	<	1	1	µg/L	SMR
11/5/04	Bromomethane	<	1	1	µg/L	SMR
12/2/04	Bromomethane	<	1	1	µg/L	SMR
1/5/05	Bromomethane	<	1	1	µg/L	SMR
2/4/05	Bromomethane	<	1	1	µg/L	SMR
2/23/05	Bromomethane	<	1	1	µg/L	SMR
1/13/04	Carbontetrachloride	<	0.5	0.5	µg/L	SMR
2/9/04	Carbontetrachloride	<	0.5	0.5	µg/L	SMR
3/9/04	Carbontetrachloride	<	0.5	0.5	µg/L	SMR
4/7/04	Carbontetrachloride	<	0.5	0.5	µg/L	SMR
5/5/04	Carbontetrachloride	<	0.5	0.5	µg/L	SMR
5/11/04	Carbontetrachloride	<	0.5	0.5	µg/L	SMR
6/1/04	Carbontetrachloride	<	0.5	0.5	µg/L	SMR
7/1/04	Carbontetrachloride	<	0.5	0.5	µg/L	SMR
8/9/04	Carbontetrachloride	<	0.5	0.5	µg/L	SMR
8/23/04	Carbontetrachloride	<	0.5	0.5	µg/L	SMR
9/16/04	Carbontetrachloride	<	0.5	0.5	µg/L	SMR
10/6/04	Carbontetrachloride	<	0.5	0.5	µg/L	SMR
10/6/04	Carbontetrachloride	<	0.5	0.5	µg/L	SMR
11/5/04	Carbontetrachloride	<	0.5	0.5	µg/L	SMR
12/2/04	Carbontetrachloride	<	0.5	0.5	µg/L	SMR
1/5/05	Carbontetrachloride	<	0.5	0.5	µg/L	SMR
2/4/05	Carbontetrachloride	<	0.5	0.5	µg/L	SMR
2/23/05	Carbontetrachloride	<	0.5	0.5	µg/L	SMR
1/13/04	Chlorobenzene	<	0.5	0.5	µg/L	SMR
2/9/04	Chlorobenzene	<	0.5	0.5	µg/L	SMR
3/9/04	Chlorobenzene	<	0.5	0.5	µg/L	SMR
4/7/04	Chlorobenzene	<	0.5	0.5	µg/L	SMR
5/5/04	Chlorobenzene	<	0.5	0.5	µg/L	SMR
5/11/04	Chlorobenzene	<	0.5	0.5	µg/L	SMR
6/1/04	Chlorobenzene	<	0.5	0.5	µg/L	SMR
7/1/04	Chlorobenzene	<	0.5	0.5	µg/L	SMR
8/9/04	Chlorobenzene	<	0.5	0.5	µg/L	SMR
8/23/04	Chlorobenzene	<	0.5	0.5	µg/L	SMR
9/16/04	Chlorobenzene	<	0.5	0.5	µg/L	SMR
10/6/04	Chlorobenzene	<	0.5	0.5	µg/L	SMR
10/6/04	Chlorobenzene	<	0.5	0.5	µg/L	SMR
11/5/04	Chlorobenzene	<	0.5	0.5	µg/L	SMR

Table 2
Summary of Monitoring Results
Effluent from the GWRS

SAMPLE DATE	PARAMETER		RESULT	DETECTION LIMIT	UNITS	SOURCE
12/2/04	Chlorobenzene	<	0.5	0.5	µg/L	SMR
1/5/05	Chlorobenzene	<	0.5	0.5	µg/L	SMR
2/4/05	Chlorobenzene	<	0.5	0.5	µg/L	SMR
2/23/05	Chlorobenzene	<	0.5	0.5	µg/L	SMR
1/13/04	Chloroethane	<	0.5	0.5	µg/L	SMR
2/9/04	Chloroethane	<	0.5	0.5	µg/L	SMR
3/9/04	Chloroethane	<	0.5	0.5	µg/L	SMR
4/7/04	Chloroethane	<	0.5	0.5	µg/L	SMR
5/5/04	Chloroethane	<	0.5	0.5	µg/L	SMR
5/11/04	Chloroethane	<	0.5	0.5	µg/L	SMR
6/1/04	Chloroethane	<	0.5	0.5	µg/L	SMR
7/1/04	Chloroethane	<	0.5	0.5	µg/L	SMR
8/9/04	Chloroethane	<	0.5	0.5	µg/L	SMR
8/23/04	Chloroethane	<	0.5	0.5	µg/L	SMR
9/16/04	Chloroethane	<	0.5	0.5	µg/L	SMR
10/6/04	Chloroethane	<	0.5	0.5	µg/L	SMR
10/6/04	Chloroethane	<	0.5	0.5	µg/L	SMR
11/5/04	Chloroethane	<	0.5	0.5	µg/L	SMR
12/2/04	Chloroethane	<	0.5	0.5	µg/L	SMR
1/5/05	Chloroethane	<	0.5	0.5	µg/L	SMR
2/4/05	Chloroethane	<	0.5	0.5	µg/L	SMR
2/23/05	Chloroethane	<	0.5	0.5	µg/L	SMR
1/13/04	Chloroform	<	0.5	0.5	µg/L	SMR
2/9/04	Chloroform	<	0.5	0.5	µg/L	SMR
3/9/04	Chloroform	<	0.5	0.5	µg/L	SMR
4/7/04	Chloroform	<	0.5	0.5	µg/L	SMR
5/5/04	Chloroform	<	0.5	0.5	µg/L	SMR
5/11/04	Chloroform	<	0.5	0.5	µg/L	SMR
6/1/04	Chloroform	<	0.5	0.5	µg/L	SMR
7/1/04	Chloroform	<	0.5	0.5	µg/L	SMR
8/9/04	Chloroform	<	0.5	0.5	µg/L	SMR
8/23/04	Chloroform	<	0.5	0.5	µg/L	SMR
9/16/04	Chloroform	<	0.5	0.5	µg/L	SMR
10/6/04	Chloroform	<	0.5	0.5	µg/L	SMR
10/6/04	Chloroform	<	0.5	0.5	µg/L	SMR
11/5/04	Chloroform	<	0.5	0.5	µg/L	SMR
12/2/04	Chloroform	<	0.5	0.5	µg/L	SMR
1/5/05	Chloroform	<	0.5	0.5	µg/L	SMR
2/4/05	Chloroform	<	0.5	0.5	µg/L	SMR
2/23/05	Chloroform	<	0.5	0.5	µg/L	SMR
1/13/04	Chloromethane	<	0.5	0.5	µg/L	SMR
2/9/04	Chloromethane	<	1	1	µg/L	SMR
3/9/04	Chloromethane	<	0.5	0.5	µg/L	SMR
4/7/04	Chloromethane	<	0.5	0.5	µg/L	SMR
5/5/04	Chloromethane	<	0.5	0.5	µg/L	SMR
5/11/04	Chloromethane	<	0.5	0.5	µg/L	SMR

Table 2
Summary of Monitoring Results
Effluent from the GWRS

SAMPLE DATE	PARAMETER		RESULT	DETECTION LIMIT	UNITS	SOURCE
6/1/04	Chloromethane	<	0.5	0.5	µg/L	SMR
7/1/04	Chloromethane	<	0.5	0.5	µg/L	SMR
8/9/04	Chloromethane	<	0.5	0.5	µg/L	SMR
8/23/04	Chloromethane	<	0.5	0.5	µg/L	SMR
9/16/04	Chloromethane	<	1	1	µg/L	SMR
10/6/04	Chloromethane	<	0.5	0.5	µg/L	SMR
10/6/04	Chloromethane	<	0.5	0.5	µg/L	SMR
11/5/04	Chloromethane	<	0.5	0.5	µg/L	SMR
12/2/04	Chloromethane	<	0.5	0.5	µg/L	SMR
1/5/05	Chloromethane	<	0.5	0.5	µg/L	SMR
2/4/05	Chloromethane	<	0.5	0.5	µg/L	SMR
2/23/05	Chloromethane	<	0.5	0.5	µg/L	SMR
12/6/96	Chromium	<	10	filtered	µg/L	SMR
3/4/97	Chromium	<	10	unfiltered	µg/L	SMR
7/16/97	Chromium	<	10	unfiltered	µg/L	SMR
9/3/97	Chromium	<	10	unfiltered	µg/L	SMR
12/8/97	Chromium	<	10	unfiltered	µg/L	SMR
1/21/98	Chromium	<	10	unfiltered	µg/L	SMR
3/12/98	Chromium	<	10	filtered	µg/L	SMR
6/18/98	Chromium	<	10	filtered	µg/L	SMR
9/2/98	Chromium	<	10	filtered	µg/L	SMR
1/13/04	**Chromium**		**4**	1	µg/L	SMR
2/9/04	Chromium		2	1	µg/L	SMR
3/9/04	Chromium		4	1	µg/L	SMR
3/9/04	Chromium		2	1	µg/L	SMR
4/7/04	Chromium		3	1	µg/L	SMR
5/5/04	Chromium		3	1	µg/L	SMR
6/1/04	**Chromium**	**<**	**50**	50	µg/L	SMR
7/1/04	Chromium	<	10	10	µg/L	SMR
8/9/04	Chromium	<	10	10	µg/L	SMR
9/16/04	Chromium	<	10	10	µg/L	SMR
10/6/04	Chromium	<	50	50	µg/L	SMR
10/6/04	Chromium	<	50	50	µg/L	SMR
11/5/04	Chromium	<	50	50	µg/L	SMR
12/2/04	Chromium	<	50	50	µg/L	SMR
1/5/05	Chromium	<	10	10	µg/L	SMR
2/4/05	Chromium	<	50	50	µg/L	SMR
12/6/96	cis-1,2-Dichloroethene	<	0.5	not avail	µg/L	SMR
3/4/97	cis-1,2-Dichloroethene	<	0.5	not avail	µg/L	SMR
7/16/97	cis-1,2-Dichloroethene	<	0.5	not avail	µg/L	SMR
8/29/97	cis-1,2-Dichloroethene	<	0.5	not avail	µg/L	SMR
9/3/97	cis-1,2-Dichloroethene	<	0.5	not avail	µg/L	SMR
12/8/97	cis-1,2-Dichloroethene	<	0.5	not avail	µg/L	SMR
1/21/98	cis-1,2-Dichloroethene	<	0.5	not avail	µg/L	SMR
3/12/98	cis-1,2-Dichloroethene	<	0.5	not avail	µg/L	SMR
6/18/98	cis-1,2-Dichloroethene	<	0.5	not avail	µg/L	SMR

Table 2
Summary of Monitoring Results
Effluent from the GWRS

SAMPLE DATE	PARAMETER		RESULT	DETECTION LIMIT	UNITS	SOURCE
9/2/98	cis-1,2-Dichloroethene	<	0.5	not avail	µg/L	SMR
1/13/04	cis-1,2-Dichloroethene	<	0.5	0.5	µg/L	SMR
2/9/04	cis-1,2-Dichloroethene	<	0.5	0.5	µg/L	SMR
3/9/04	cis-1,2-Dichloroethene	<	0.5	0.5	µg/L	SMR
4/7/04	cis-1,2-Dichloroethene	<	0.5	0.5	µg/L	SMR
5/5/04	cis-1,2-Dichloroethene	<	0.5	0.5	µg/L	SMR
5/11/04	cis-1,2-Dichloroethene	<	0.5	0.5	µg/L	SMR
6/1/04	cis-1,2-Dichloroethene	<	0.5	0.5	µg/L	SMR
7/1/04	cis-1,2-Dichloroethene		1.6	0.5	µg/L	SMR
8/9/04	cis-1,2-Dichloroethene		2.9	0.5	µg/L	SMR
8/23/04	**cis-1,2-Dichloroethene**		**3.4**	0.5	µg/L	SMR
9/16/04	cis-1,2-Dichloroethene	<	0.5	0.5	µg/L	SMR
10/6/04	cis-1,2-Dichloroethene	<	0.5	0.5	µg/L	SMR
10/6/04	cis-1,2-Dichloroethene	<	0.5	0.5	µg/L	SMR
11/5/04	cis-1,2-Dichloroethene	<	0.5	0.5	µg/L	SMR
12/2/04	cis-1,2-Dichloroethene	<	0.5	0.5	µg/L	SMR
1/5/05	cis-1,2-Dichloroethene	<	0.5	0.5	µg/L	SMR
2/4/05	cis-1,2-Dichloroethene	<	0.5	0.5	µg/L	SMR
2/23/05	cis-1,2-Dichloroethene	<	0.5	0.5	µg/L	SMR
1/13/04	cis-1,3-Dichloropropene	<	0.5	0.5	µg/L	SMR
2/9/04	cis-1,3-Dichloropropene	<	0.5	0.5	µg/L	SMR
3/9/04	cis-1,3-Dichloropropene	<	0.5	0.5	µg/L	SMR
4/7/04	cis-1,3-Dichloropropene	<	0.5	0.5	µg/L	SMR
5/5/04	cis-1,3-Dichloropropene	<	0.5	0.5	µg/L	SMR
5/11/04	cis-1,3-Dichloropropene	<	0.5	0.5	µg/L	SMR
6/1/04	cis-1,3-Dichloropropene	<	0.5	0.5	µg/L	SMR
7/1/04	cis-1,3-Dichloropropene	<	0.5	0.5	µg/L	SMR
8/9/04	cis-1,3-Dichloropropene	<	0.5	0.5	µg/L	SMR
8/23/04	cis-1,3-Dichloropropene	<	0.5	0.5	µg/L	SMR
9/16/04	cis-1,3-Dichloropropene	<	0.5	0.5	µg/L	SMR
10/6/04	cis-1,3-Dichloropropene	<	0.5	0.5	µg/L	SMR
10/6/04	cis-1,3-Dichloropropene	<	0.5	0.5	µg/L	SMR
11/5/04	cis-1,3-Dichloropropene	<	0.5	0.5	µg/L	SMR
12/2/04	cis-1,3-Dichloropropene	<	0.5	0.5	µg/L	SMR
1/5/05	cis-1,3-Dichloropropene	<	0.5	0.5	µg/L	SMR
2/4/05	cis-1,3-Dichloropropene	<	0.5	0.5	µg/L	SMR
2/23/05	cis-1,3-Dichloropropene	<	0.5	0.5	µg/L	SMR
1/13/04	Copper	<	5	5	µg/L	SMR
2/9/04	Copper	<	5	5	µg/L	SMR
3/9/04	Copper	<	5	5	µg/L	SMR
4/7/04	Copper	<	5	5	µg/L	SMR
5/5/04	Copper	<	5	5	µg/L	SMR
6/1/04	**Copper**	**<**	**50**	50	ug/L	SMR
7/1/04	Copper	<	5	5	µg/L	SMR
8/9/04	Copper	<	5	5	µg/L	SMR
9/16/04	Copper	<	5	5	µg/L	SMR

Table 2
Summary of Monitoring Results
Effluent from the GWRS

SAMPLE DATE	PARAMETER		RESULT	DETECTION LIMIT	UNITS	SOURCE
10/6/04	Copper	<	50	50	ug/L	SMR
10/6/04	Copper	<	50	50	ug/L	SMR
11/5/04	Copper	<	50	50	ug/L	SMR
1/5/05	Copper	<	5	5	µg/L	SMR
2/4/05	Copper	<	50	50	ug/L	SMR
1/13/04	Dibromochloromethane	<	0.5	0.5	µg/L	SMR
2/9/04	Dibromochloromethane	<	0.5	0.5	µg/L	SMR
3/9/04	Dibromochloromethane	<	0.5	0.5	µg/L	SMR
4/7/04	Dibromochloromethane	<	0.5	0.5	µg/L	SMR
5/5/04	Dibromochloromethane	<	0.5	0.5	µg/L	SMR
5/11/04	Dibromochloromethane	<	0.5	0.5	µg/L	SMR
6/1/04	Dibromochloromethane	<	0.5	0.5	µg/L	SMR
7/1/04	Dibromochloromethane	<	0.5	0.5	µg/L	SMR
8/9/04	Dibromochloromethane	<	0.5	0.5	µg/L	SMR
8/23/04	Dibromochloromethane	<	0.5	0.5	µg/L	SMR
9/16/04	Dibromochloromethane	<	0.5	0.5	µg/L	SMR
10/6/04	Dibromochloromethane	<	0.5	0.5	µg/L	SMR
10/6/04	Dibromochloromethane	<	0.5	0.5	µg/L	SMR
11/5/04	Dibromochloromethane	<	0.5	0.5	µg/L	SMR
12/2/04	Dibromochloromethane	<	0.5	0.5	µg/L	SMR
1/5/05	Dibromochloromethane	<	0.5	0.5	µg/L	SMR
2/4/05	Dibromochloromethane	<	0.5	0.5	µg/L	SMR
2/23/05	Dibromochloromethane	<	0.5	0.5	µg/L	SMR
1/13/04	Dibromomethane	<	0.5	0.5	µg/L	SMR
2/9/04	Dibromomethane	<	0.5	0.5	µg/L	SMR
3/9/04	Dibromomethane	<	0.5	0.5	µg/L	SMR
4/7/04	Dibromomethane	<	0.5	0.5	µg/L	SMR
5/5/04	Dibromomethane	<	0.5	0.5	µg/L	SMR
5/11/04	Dibromomethane	<	0.5	0.5	µg/L	SMR
6/1/04	Dibromomethane	<	0.5	0.5	µg/L	SMR
7/1/04	Dibromomethane	<	0.5	0.5	µg/L	SMR
8/9/04	Dibromomethane	<	0.5	0.5	µg/L	SMR
8/23/04	Dibromomethane	<	0.5	0.5	µg/L	SMR
9/16/04	Dibromomethane	<	0.5	0.5	µg/L	SMR
10/6/04	Dibromomethane	<	0.5	0.5	µg/L	SMR
10/6/04	Dibromomethane	<	0.5	0.5	µg/L	SMR
11/5/04	Dibromomethane	<	0.5	0.5	µg/L	SMR
12/2/04	Dibromomethane	<	0.5	0.5	µg/L	SMR
1/5/05	Dibromomethane	<	0.5	0.5	µg/L	SMR
2/4/05	Dibromomethane	<	0.5	0.5	µg/L	SMR
2/23/05	Dibromomethane	<	0.5	0.5	µg/L	SMR
1/13/04	Dichlorobromomethane	<	0.5	0.5	ug/L	SMR
2/9/04	Dichlorobromomethane	<	0.5	0.5	ug/L	SMR
3/9/04	Dichlorobromomethane	<	0.5	0.5	ug/L	SMR
4/7/04	Dichlorobromomethane	<	0.5	0.5	ug/L	SMR
5/5/04	Dichlorobromomethane	<	0.5	0.5	ug/L	SMR

Table 2
Summary of Monitoring Results
Effluent from the GWRS

SAMPLE DATE	PARAMETER		RESULT	DETECTION LIMIT	UNITS	SOURCE
5/11/04	Dichlorobromomethane	<	0.5	0.5	ug/L	SMR
6/1/04	Dichlorobromomethane	<	0.5	0.5	ug/L	SMR
7/1/04	Dichlorobromomethane	<	0.5	0.5	ug/L	SMR
8/9/04	Dichlorobromomethane	<	0.5	0.5	ug/L	SMR
8/23/04	Dichlorobromomethane	<	0.5	0.5	ug/L	SMR
9/16/04	Dichlorobromomethane	<	0.5	0.5	ug/L	SMR
10/6/04	Dichlorobromomethane	<	0.5	0.5	ug/L	SMR
10/6/04	Dichlorobromomethane	<	0.5	0.5	ug/L	SMR
11/5/04	Dichlorobromomethane	<	0.5	0.5	ug/L	SMR
12/2/04	Dichlorobromomethane	<	0.5	0.5	ug/L	SMR
1/5/05	Dichlorobromomethane	<	0.5	0.5	ug/L	SMR
2/4/05	Dichlorobromomethane	<	0.5	0.5	ug/L	SMR
2/23/05	Dichlorobromomethane	<	0.5	0.5	ug/L	SMR
12/6/96	Dichlorodifluoromethane	<	0.5	not avail	µg/L	SMR
3/4/97	Dichlorodifluoromethane	<	0.5	not avail	µg/L	SMR
7/16/97	Dichlorodifluoromethane	<	0.5	not avail	µg/L	SMR
8/29/97	Dichlorodifluoromethane	<	0.5	not avail	µg/L	SMR
9/3/97	Dichlorodifluoromethane	<	0.5	not avail	µg/L	SMR
12/8/97	Dichlorodifluoromethane	<	0.5	not avail	µg/L	SMR
1/21/98	Dichlorodifluoromethane	<	0.5	not avail	µg/L	SMR
3/12/98	Dichlorodifluoromethane	<	1	not avail	µg/L	SMR
6/18/98	Dichlorodifluoromethane	<	1	not avail	µg/L	SMR
9/2/98	Dichlorodifluoromethane	<	1	not avail	µg/L	SMR
1/13/04	Dichlorodifluoromethane	<	1	1	µg/L	SMR
2/9/04	Dichlorodifluoromethane	<	1	1	µg/L	SMR
3/9/04	Dichlorodifluoromethane	<	1	1	µg/L	SMR
4/7/04	Dichlorodifluoromethane	<	1	1	µg/L	SMR
5/5/04	Dichlorodifluoromethane	<	1	1	µg/L	SMR
5/11/04	Dichlorodifluoromethane	<	1	1	µg/L	SMR
6/1/04	Dichlorodifluoromethane	<	1	1	µg/L	SMR
7/1/04	Dichlorodifluoromethane	<	1	1	µg/L	SMR
8/9/04	Dichlorodifluoromethane	<	1	1	µg/L	SMR
8/23/04	Dichlorodifluoromethane	<	1	1	µg/L	SMR
9/16/04	Dichlorodifluoromethane	<	1	1	µg/L	SMR
10/6/04	Dichlorodifluoromethane	<	1	1	µg/L	SMR
10/6/04	Dichlorodifluoromethane	<	1	1	µg/L	SMR
11/5/04	Dichlorodifluoromethane	<	1	1	µg/L	SMR
12/2/04	Dichlorodifluoromethane	<	1	1	µg/L	SMR
1/5/05	Dichlorodifluoromethane	<	1	1	µg/L	SMR
2/4/05	Dichlorodifluoromethane	<	1	1	µg/L	SMR
2/23/05	Dichlorodifluoromethane	<	1	1	µg/L	SMR
1/13/04	Ethylbenzene	<	0.5	0.5	µg/L	SMR
2/9/04	Ethylbenzene	<	0.5	0.5	µg/L	SMR
3/9/04	Ethylbenzene	<	0.5	0.5	µg/L	SMR
4/7/04	Ethylbenzene	<	0.5	0.5	µg/L	SMR
5/5/04	Ethylbenzene	<	0.5	0.5	µg/L	SMR

Table 2
Summary of Monitoring Results
Effluent from the GWRS

SAMPLE DATE	PARAMETER		RESULT	DETECTION LIMIT	UNITS	SOURCE
5/11/04	Ethylbenzene	<	0.5	0.5	µg/L	SMR
6/1/04	Ethylbenzene	<	0.5	0.5	µg/L	SMR
7/1/04	Ethylbenzene	<	0.5	0.5	µg/L	SMR
8/9/04	Ethylbenzene	<	0.5	0.5	µg/L	SMR
8/23/04	Ethylbenzene	<	0.5	0.5	µg/L	SMR
9/16/04	Ethylbenzene	<	0.5	0.5	µg/L	SMR
10/6/04	Ethylbenzene	<	0.5	0.5	µg/L	SMR
10/6/04	Ethylbenzene	<	0.5	0.5	µg/L	SMR
11/5/04	Ethylbenzene	<	0.5	0.5	µg/L	SMR
12/2/04	Ethylbenzene	<	0.5	0.5	µg/L	SMR
1/5/05	Ethylbenzene	<	0.5	0.5	µg/L	SMR
2/4/05	Ethylbenzene	<	0.5	0.5	µg/L	SMR
2/23/05	Ethylbenzene	<	0.5	0.5	µg/L	SMR
1/13/04	Freon 113	<	0.5	0.5	µg/L	SMR
2/9/04	Freon 113	<	0.5	0.5	µg/L	SMR
3/9/04	Freon 113	<	0.5	0.5	µg/L	SMR
4/7/04	Freon 113	<	0.5	0.5	µg/L	SMR
5/5/04	Freon 113	<	0.5	0.5	µg/L	SMR
5/11/04	Freon 113	<	0.5	0.5	µg/L	SMR
6/1/04	Freon 113	<	0.5	0.5	µg/L	SMR
7/1/04	Freon 113	<	0.5	0.5	µg/L	SMR
8/9/04	Freon 113	<	0.5	0.5	µg/L	SMR
8/23/04	Freon 113	<	0.5	0.5	µg/L	SMR
9/16/04	Freon 113	<	0.5	0.5	µg/L	SMR
10/6/04	Freon 113	<	0.5	0.5	µg/L	SMR
10/6/04	Freon 113	<	0.5	0.5	µg/L	SMR
11/5/04	Freon 113	<	0.5	0.5	µg/L	SMR
12/2/04	Freon 113	<	0.5	0.5	µg/L	SMR
1/5/05	Freon 113	<	0.5	0.5	µg/L	SMR
2/4/05	Freon 113	<	0.5	0.5	µg/L	SMR
2/23/05	Freon 113	<	0.5	0.5	µg/L	SMR
1/13/04	Hardness		160	1	mg/L	SMR
5/5/04	Hardness		130	1	mg/L	SMR
6/1/04	Hardness		140	1	mg/L	SMR
7/1/04	Hardness		140	1	mg/L	SMR
8/9/04	Hardness		140	1	mg/L	SMR
9/16/04	Hardness		140	1	mg/L	SMR
10/6/04	Hardness		140	1	mg/L	SMR
10/6/04	Hardness		140	1	mg/L	SMR
11/5/04	Hardness		130	1	mg/L	SMR
12/2/04	Hardness		120	1	mg/L	SMR
1/5/05	Hardness		120	1	mg/L	SMR
2/4/05	Hardness		110	1	mg/L	SMR
2/9/04	Lead	<	5	5	µg/L	SMR
1/13/04	meta- and para-Xylenes	<	0.5	0.5	µg/L	SMR
2/9/04	meta- and para-Xylenes	<	0.5	0.5	µg/L	SMR

Table 2
Summary of Monitoring Results
Effluent from the GWRS

SAMPLE DATE	PARAMETER		RESULT	DETECTION LIMIT	UNITS	SOURCE
3/9/04	meta- and para-Xylenes	<	0.5	0.5	µg/L	SMR
4/7/04	meta- and para-Xylenes	<	0.5	0.5	µg/L	SMR
5/5/04	meta- and para-Xylenes	<	0.5	0.5	µg/L	SMR
5/11/04	meta- and para-Xylenes	<	0.5	0.5	µg/L	SMR
6/1/04	meta- and para-Xylenes	<	0.5	0.5	µg/L	SMR
7/1/04	meta- and para-Xylenes	<	0.5	0.5	µg/L	SMR
8/9/04	meta- and para-Xylenes	<	0.5	0.5	µg/L	SMR
8/23/04	meta- and para-Xylenes	<	0.5	0.5	µg/L	SMR
9/16/04	meta- and para-Xylenes	<	0.5	0.5	µg/L	SMR
10/6/04	meta- and para-Xylenes	<	1	1	µg/L	SMR
10/6/04	meta- and para-Xylenes	<	1	1	µg/L	SMR
11/5/04	meta- and para-Xylenes	<	0.5	0.5	µg/L	SMR
12/2/04	meta- and para-Xylenes	<	0.5	0.5	µg/L	SMR
1/5/05	meta- and para-Xylenes	<	0.5	0.5	µg/L	SMR
2/4/05	meta- and para-Xylenes	<	0.5	0.5	µg/L	SMR
2/23/05	meta- and para-Xylenes	<	0.5	0.5	µg/L	SMR
12/6/96	Methylene Chloride	<	2	not avail	µg/L	SMR
3/4/97	Methylene Chloride	<	2	not avail	µg/L	SMR
7/16/97	Methylene Chloride	<	2	not avail	µg/L	SMR
8/29/97	Methylene Chloride	<	2	not avail	µg/L	SMR
9/3/97	Methylene Chloride	<	2	not avail	µg/L	SMR
12/8/97	Methylene Chloride	<	2	not avail	µg/L	SMR
1/21/98	Methylene Chloride	<	2	not avail	µg/L	SMR
3/12/98	Methylene Chloride	<	5	not avail	µg/L	SMR
6/18/98	Methylene Chloride	<	5	not avail	µg/L	SMR
9/2/98	Methylene Chloride	<	5	not avail	µg/L	SMR
1/13/04	Methylene Chloride	<	0.5	0.5	µg/L	SMR
2/9/04	Methylene Chloride	<	0.5	0.5	µg/L	SMR
3/9/04	Methylene Chloride	<	0.5	0.5	µg/L	SMR
4/7/04	Methylene Chloride	<	0.5	0.5	µg/L	SMR
5/5/04	Methylene Chloride	<	0.5	0.5	µg/L	SMR
5/11/04	Methylene Chloride	<	0.5	0.5	µg/L	SMR
6/1/04	Methylene Chloride	<	0.5	0.5	µg/L	SMR
7/1/04	Methylene Chloride	<	0.5	0.5	µg/L	SMR
8/9/04	Methylene Chloride	<	0.5	0.5	µg/L	SMR
8/23/04	Methylene Chloride	<	0.5	0.5	µg/L	SMR
9/16/04	Methylene Chloride	<	0.5	0.5	µg/L	SMR
10/6/04	Methylene Chloride	<	0.5	0.5	µg/L	SMR
10/6/04	Methylene Chloride	<	0.5	0.5	µg/L	SMR
11/5/04	Methylene Chloride	<	0.5	0.5	µg/L	SMR
12/2/04	Methylene Chloride	<	0.5	0.5	µg/L	SMR
1/5/05	Methylene Chloride	<	0.5	0.5	µg/L	SMR
2/4/05	Methylene Chloride	<	0.5	0.5	µg/L	SMR
2/23/05	Methylene Chloride	<	0.5	0.5	µg/L	SMR
1/13/04	Methyl-tert-butylether	<	0.5	0.5	µg/L	SMR
2/9/04	Methyl-tert-butylether	<	0.5	0.5	µg/L	SMR

Table 2
Summary of Monitoring Results
Effluent from the GWRS

SAMPLE DATE	PARAMETER		RESULT	DETECTION LIMIT	UNITS	SOURCE
3/9/04	Methyl-tert-butylether	<	0.5	0.5	µg/L	SMR
4/7/04	Methyl-tert-butylether	<	0.5	0.5	µg/L	SMR
5/5/04	Methyl-tert-butylether	<	0.5	0.5	µg/L	SMR
5/11/04	Methyl-tert-butylether	<	0.5	0.5	µg/L	SMR
6/1/04	Methyl-tert-butylether	<	0.5	0.5	µg/L	SMR
7/1/04	Methyl-tert-butylether	<	0.5	0.5	µg/L	SMR
8/9/04	Methyl-tert-butylether	<	0.5	0.5	µg/L	SMR
8/23/04	Methyl-tert-butylether	<	0.5	0.5	µg/L	SMR
9/16/04	Methyl-tert-butylether	<	0.5	0.5	µg/L	SMR
10/6/04	Methyl-tert-butylether	<	0.5	0.5	µg/L	SMR
10/6/04	Methyl-tert-butylether	<	0.5	0.5	µg/L	SMR
11/5/04	Methyl-tert-butylether	<	0.5	0.5	µg/L	SMR
12/2/04	Methyl-tert-butylether	<	0.5	0.5	µg/L	SMR
1/5/05	Methyl-tert-butylether	<	0.5	0.5	µg/L	SMR
2/4/05	Methyl-tert-butylether	<	0.5	0.5	µg/L	SMR
2/23/05	Methyl-tert-butylether	<	0.5	0.5	µg/L	SMR
1/13/04	ortho-Xylene	<	0.5	0.5	µg/L	SMR
2/9/04	ortho-Xylene	<	0.5	0.5	µg/L	SMR
3/9/04	ortho-Xylene	<	0.5	0.5	µg/L	SMR
4/7/04	ortho-Xylene	<	0.5	0.5	µg/L	SMR
5/5/04	ortho-Xylene	<	0.5	0.5	µg/L	SMR
5/11/04	ortho-Xylene	<	0.5	0.5	µg/L	SMR
6/1/04	ortho-Xylene	<	0.5	0.5	µg/L	SMR
7/1/04	ortho-Xylene	<	0.5	0.5	µg/L	SMR
8/9/04	ortho-Xylene	<	0.5	0.5	µg/L	SMR
8/23/04	ortho-Xylene	<	0.5	0.5	µg/L	SMR
9/16/04	ortho-Xylene	<	0.5	0.5	µg/L	SMR
10/6/04	ortho-Xylene	<	0.5	0.5	µg/L	SMR
10/6/04	ortho-Xylene	<	0.5	0.5	µg/L	SMR
11/5/04	ortho-Xylene	<	0.5	0.5	µg/L	SMR
12/2/04	ortho-Xylene	<	0.5	0.5	µg/L	SMR
1/5/05	ortho-Xylene	<	0.5	0.5	µg/L	SMR
2/4/05	ortho-Xylene	<	0.5	0.5	µg/L	SMR
2/23/05	ortho-Xylene	<	0.5	0.5	µg/L	SMR
1/13/04	pH		8.8	N/A	Std. Unit	SMR
4/7/04	pH		7.9	N/A	Std. Unit	SMR
7/1/04	pH		7.8	N/A	Std. Unit	SMR
8/9/04	pH		7.8	N/A	Std. Unit	SMR
9/16/04	pH		7.8	N/A	Std. Unit	SMR
10/6/04	pH		7.1	N/A	Std. Unit	SMR

Table 2
Summary of Monitoring Results
Effluent from the GWRS

SAMPLE DATE	PARAMETER		RESULT	DETECTION LIMIT	UNITS	SOURCE
10/6/04	pH		7.1	N/A	Std. Unit	SMR
11/5/04	pH		7.7	N/A	Std. Unit	SMR
12/2/04	pH		7.4	N/A	Std. Unit	SMR
1/5/05	pH		7.7	N/A	Std. Unit	SMR
2/4/05	pH		7.7	N/A	Std. Unit	SMR
2/9/04	Silver	<	10	10	µg/L	SMR
12/6/96	Tetrachloroethene	<	0.5	not avail	µg/L	SMR
3/4/97	Tetrachloroethene	<	0.5	not avail	µg/L	SMR
7/16/97	Tetrachloroethene	<	0.5	not avail	µg/L	SMR
8/29/97	Tetrachloroethene	<	0.5	not avail	µg/L	SMR
9/3/97	Tetrachloroethene	<	0.5	not avail	µg/L	SMR
12/8/97	Tetrachloroethene	<	0.5	not avail	µg/L	SMR
1/21/98	Tetrachloroethene	<	0.5	not avail	µg/L	SMR
3/12/98	Tetrachloroethene	<	0.5	not avail	µg/L	SMR
6/18/98	Tetrachloroethene	<	0.5	not avail	µg/L	SMR
9/2/98	Tetrachloroethene	<	0.5	not avail	µg/L	SMR
1/13/04	Tetrachloroethene	<	0.5	0.5	µg/L	SMR
2/9/04	Tetrachloroethene	<	0.5	0.5	µg/L	SMR
3/9/04	Tetrachloroethene	<	0.5	0.5	µg/L	SMR
4/7/04	Tetrachloroethene	<	0.5	0.5	µg/L	SMR
5/5/04	Tetrachloroethene	<	0.5	0.5	µg/L	SMR
5/11/04	Tetrachloroethene	<	0.5	0.5	µg/L	SMR
6/1/04	Tetrachloroethene	<	0.5	0.5	µg/L	SMR
7/1/04	Tetrachloroethene	<	0.5	0.5	µg/L	SMR
8/9/04	Tetrachloroethene	<	0.5	0.5	µg/L	SMR
8/23/04	Tetrachloroethene	<	0.5	0.5	µg/L	SMR
9/16/04	Tetrachloroethene	<	0.5	0.5	µg/L	SMR
10/6/04	Tetrachloroethene	<	0.5	0.5	µg/L	SMR
10/6/04	Tetrachloroethene	<	0.5	0.5	µg/L	SMR
11/5/04	Tetrachloroethene	<	0.5	0.5	µg/L	SMR
12/2/04	Tetrachloroethene	<	0.5	0.5	µg/L	SMR
1/5/05	Tetrachloroethene	<	0.5	0.5	µg/L	SMR
2/4/05	Tetrachloroethene	<	0.5	0.5	µg/L	SMR
2/23/05	Tetrachloroethene	<	0.5	0.5	µg/L	SMR
1/13/04	Toluene	<	0.5	0.5	µg/L	SMR
2/9/04	Toluene	<	0.5	0.5	µg/L	SMR
3/9/04	Toluene	<	0.5	0.5	µg/L	SMR
4/7/04	Toluene	<	0.5	0.5	µg/L	SMR
5/5/04	Toluene	<	0.5	0.5	µg/L	SMR
5/11/04	Toluene	<	0.5	0.5	µg/L	SMR
6/1/04	Toluene	<	0.5	0.5	µg/L	SMR

Table 2
Summary of Monitoring Results
Effluent from the GWRS

SAMPLE DATE	PARAMETER		RESULT	DETECTION LIMIT	UNITS	SOURCE
7/1/04	Toluene	<	0.5	0.5	µg/L	SMR
8/9/04	Toluene	<	0.5	0.5	µg/L	SMR
8/23/04	Toluene	<	0.5	0.5	µg/L	SMR
9/16/04	Toluene	<	0.5	0.5	µg/L	SMR
10/6/04	Toluene	<	0.5	0.5	µg/L	SMR
10/6/04	Toluene	<	0.5	0.5	µg/L	SMR
11/5/04	Toluene	<	0.5	0.5	µg/L	SMR
12/2/04	Toluene	<	0.5	0.5	µg/L	SMR
1/5/05	Toluene	<	0.5	0.5	µg/L	SMR
2/4/05	Toluene	<	0.5	0.5	µg/L	SMR
2/23/05	Toluene	<	0.5	0.5	µg/L	SMR
1/13/04	trans-1,2-Dichloroethene	<	0.5	0.5	µg/L	SMR
2/9/04	trans-1,2-Dichloroethene	<	0.5	0.5	µg/L	SMR
3/9/04	trans-1,2-Dichloroethene	<	0.5	0.5	µg/L	SMR
4/7/04	trans-1,2-Dichloroethene	<	0.5	0.5	µg/L	SMR
5/5/04	trans-1,2-Dichloroethene	<	0.5	0.5	µg/L	SMR
5/11/04	trans-1,2-Dichloroethene	<	0.5	0.5	µg/L	SMR
6/1/04	trans-1,2-Dichloroethene	<	0.5	0.5	µg/L	SMR
7/1/04	trans-1,2-Dichloroethene	<	0.5	0.5	µg/L	SMR
8/9/04	trans-1,2-Dichloroethene	<	0.5	0.5	µg/L	SMR
8/23/04	trans-1,2-Dichloroethene	<	0.5	0.5	µg/L	SMR
9/16/04	trans-1,2-Dichloroethene	<	0.5	0.5	µg/L	SMR
10/6/04	trans-1,2-Dichloroethene	<	0.5	0.5	µg/L	SMR
10/6/04	trans-1,2-Dichloroethene	<	0.5	0.5	µg/L	SMR
11/5/04	trans-1,2-Dichloroethene	<	0.5	0.5	µg/L	SMR
12/2/04	trans-1,2-Dichloroethene	<	0.5	0.5	µg/L	SMR
1/5/05	trans-1,2-Dichloroethene	<	0.5	0.5	µg/L	SMR
2/4/05	trans-1,2-Dichloroethene	<	0.5	0.5	µg/L	SMR
2/23/05	trans-1,2-Dichloroethene	<	0.5	0.5	µg/L	SMR
1/13/04	trans-1,3-Dichloropropene	<	0.5	0.5	µg/L	SMR
2/9/04	trans-1,3-Dichloropropene	<	0.5	0.5	µg/L	SMR
3/9/04	trans-1,3-Dichloropropene	<	0.5	0.5	µg/L	SMR
4/7/04	trans-1,3-Dichloropropene	<	0.5	0.5	µg/L	SMR
5/5/04	trans-1,3-Dichloropropene	<	0.5	0.5	µg/L	SMR
5/11/04	trans-1,3-Dichloropropene	<	0.5	0.5	µg/L	SMR
6/1/04	trans-1,3-Dichloropropene	<	0.5	0.5	µg/L	SMR
7/1/04	trans-1,3-Dichloropropene	<	0.5	0.5	µg/L	SMR
8/9/04	trans-1,3-Dichloropropene	<	0.5	0.5	µg/L	SMR
8/23/04	trans-1,3-Dichloropropene	<	0.5	0.5	µg/L	SMR
9/16/04	trans-1,3-Dichloropropene	<	0.5	0.5	µg/L	SMR
10/6/04	trans-1,3-Dichloropropene	<	0.5	0.5	µg/L	SMR
10/6/04	trans-1,3-Dichloropropene	<	0.5	0.5	µg/L	SMR
11/5/04	trans-1,3-Dichloropropene	<	0.5	0.5	µg/L	SMR
12/2/04	trans-1,3-Dichloropropene	<	0.5	0.5	µg/L	SMR
1/5/05	trans-1,3-Dichloropropene	<	0.5	0.5	µg/L	SMR
2/4/05	trans-1,3-Dichloropropene	<	0.5	0.5	µg/L	SMR

Table 2
Summary of Monitoring Results
Effluent from the GWRS

SAMPLE DATE	PARAMETER		RESULT	DETECTION LIMIT	UNITS	SOURCE
2/23/05	trans-1,3-Dichloropropene	<	0.5	0.5	µg/L	SMR
12/6/96	Trichloroethene	<	0.5	not avail	µg/L	SMR
3/4/97	Trichloroethene	<	0.5	not avail	µg/L	SMR
7/16/97	Trichloroethene	<	0.5	not avail	µg/L	SMR
8/29/97	Trichloroethene	<	0.5	not avail	µg/L	SMR
9/3/97	Trichloroethene	<	0.5	not avail	µg/L	SMR
12/8/97	Trichloroethene	<	0.5	not avail	µg/L	SMR
1/21/98	Trichloroethene	<	0.5	not avail	µg/L	SMR
3/12/98	Trichloroethene	<	0.5	not avail	µg/L	SMR
6/18/98	Trichloroethene	<	0.5	not avail	µg/L	SMR
9/2/98	Trichloroethene	<	0.5	not avail	µg/L	SMR
1/13/04	Trichloroethene	<	0.5	0.5	µg/L	SMR
2/9/04	Trichloroethene	<	0.5	0.5	µg/L	SMR
3/9/04	Trichloroethene	<	0.5	0.5	µg/L	SMR
4/7/04	Trichloroethene	<	0.5	0.5	µg/L	SMR
5/5/04	Trichloroethene	<	0.5	0.5	µg/L	SMR
5/11/04	Trichloroethene	<	0.5	0.5	µg/L	SMR
6/1/04	Trichloroethene	<	0.5	0.5	µg/L	SMR
7/1/04	Trichloroethene	<	0.5	0.5	µg/L	SMR
8/9/04	Trichloroethene	<	0.5	0.5	µg/L	SMR
8/23/04	**Trichloroethene**		**0.74**	0.5	µg/L	SMR
9/16/04	Trichloroethene	<	0.5	0.5	µg/L	SMR
10/6/04	Trichloroethene	<	0.5	0.5	µg/L	SMR
10/6/04	Trichloroethene	<	0.5	0.5	µg/L	SMR
11/5/04	Trichloroethene	<	0.5	0.5	µg/L	SMR
12/2/04	Trichloroethene	<	0.5	0.5	µg/L	SMR
1/5/05	Trichloroethene	<	0.5	0.5	µg/L	SMR
2/4/05	Trichloroethene	<	0.5	0.5	µg/L	SMR
2/23/05	Trichloroethene	<	0.5	0.5	µg/L	SMR
12/6/96	Trichlorofluoromethane	<	0.5	not avail	µg/L	SMR
3/4/97	Trichlorofluoromethane	<	0.5	not avail	µg/L	SMR
7/16/97	Trichlorofluoromethane	<	0.5	not avail	µg/L	SMR
8/29/97	Trichlorofluoromethane	<	0.5	not avail	µg/L	SMR
9/3/97	Trichlorofluoromethane	<	0.5	not avail	µg/L	SMR
12/8/97	Trichlorofluoromethane	<	0.5	not avail	µg/L	SMR
1/21/98	Trichlorofluoromethane	<	0.5	not avail	µg/L	SMR
3/12/98	Trichlorofluoromethane	<	2	not avail	µg/L	SMR
6/18/98	Trichlorofluoromethane	<	2	not avail	µg/L	SMR
9/2/98	Trichlorofluoromethane	<	2	not avail	µg/L	SMR
1/13/04	Trichlorofluoromethane	<	0.5	0.5	µg/L	SMR
2/9/04	Trichlorofluoromethane	<	0.5	0.5	µg/L	SMR
3/9/04	Trichlorofluoromethane	<	0.5	0.5	µg/L	SMR
4/7/04	Trichlorofluoromethane	<	0.5	0.5	µg/L	SMR
5/5/04	Trichlorofluoromethane	<	0.5	0.5	µg/L	SMR
5/11/04	Trichlorofluoromethane	<	0.5	0.5	µg/L	SMR
6/1/04	Trichlorofluoromethane	<	0.5	0.5	µg/L	SMR

Table 2
Summary of Monitoring Results
Effluent from the GWRS

SAMPLE DATE	PARAMETER		RESULT	DETECTION LIMIT	UNITS	SOURCE
7/1/04	Trichlorofluoromethane	<	0.5	0.5	µg/L	SMR
8/9/04	Trichlorofluoromethane	<	0.5	0.5	µg/L	SMR
8/23/04	Trichlorofluoromethane	<	0.5	0.5	µg/L	SMR
9/16/04	Trichlorofluoromethane	<	0.5	0.5	µg/L	SMR
10/6/04	Trichlorofluoromethane	<	0.5	0.5	µg/L	SMR
10/6/04	Trichlorofluoromethane	<	0.5	0.5	µg/L	SMR
11/5/04	Trichlorofluoromethane	<	0.5	0.5	µg/L	SMR
12/2/04	Trichlorofluoromethane	<	0.5	0.5	µg/L	SMR
1/5/05	Trichlorofluoromethane	<	0.5	0.5	µg/L	SMR
2/4/05	Trichlorofluoromethane	<	0.5	0.5	µg/L	SMR
2/23/05	Trichlorofluoromethane	<	0.5	0.5	µg/L	SMR
4/7/04	Turbidity Screen Prep	<	0.1	0.1	NTU	SMR
1/13/04	Vinyl chloride	<	0.5	0.5	µg/L	SMR
2/9/04	Vinyl chloride	<	0.5	0.5	µg/L	SMR
3/9/04	Vinyl chloride	<	0.5	0.5	µg/L	SMR
4/7/04	Vinyl chloride	<	0.5	0.5	µg/L	SMR
5/5/04	Vinyl chloride	<	0.5	0.5	µg/L	SMR
5/11/04	Vinyl chloride	<	0.5	0.5	µg/L	SMR
6/1/04	Vinyl chloride	<	0.5	0.5	µg/L	SMR
7/1/04	Vinyl chloride	<	0.5	0.5	µg/L	SMR
8/9/04	Vinyl chloride	<	0.5	0.5	µg/L	SMR
8/23/04	Vinyl chloride	<	0.5	0.5	µg/L	SMR
9/16/04	Vinyl chloride	<	0.5	0.5	µg/L	SMR
10/6/04	Vinyl chloride	<	0.5	0.5	µg/L	SMR
10/6/04	Vinyl chloride	<	0.5	0.5	µg/L	SMR
11/5/04	Vinyl chloride	<	0.5	0.5	µg/L	SMR
12/2/04	Vinyl chloride	<	0.5	0.5	µg/L	SMR
1/5/05	Vinyl chloride	<	0.5	0.5	µg/L	SMR
2/4/05	Vinyl chloride	<	0.5	0.5	µg/L	SMR
2/23/05	Vinyl chloride	<	0.5	0.5	µg/L	SMR
1/13/04	Xylenes (Total)	<	0.5	0.5	µg/L	SMR
2/9/04	Xylenes (Total)	<	0.5	0.5	µg/L	SMR
3/9/04	Xylenes (Total)	<	0.5	0.5	µg/L	SMR
4/7/04	Xylenes (Total)	<	0.5	0.5	µg/L	SMR
5/5/04	Xylenes (Total)	<	0.5	0.5	µg/L	SMR
5/11/04	Xylenes (Total)	<	0.5	0.5	µg/L	SMR
6/1/04	Xylenes (Total)	<	0.5	0.5	µg/L	SMR
7/1/04	Xylenes (Total)	<	0.5	0.5	µg/L	SMR
8/9/04	Xylenes (Total)	<	0.5	0.5	µg/L	SMR
8/23/04	Xylenes (Total)	<	0.5	0.5	µg/L	SMR
9/16/04	Xylenes (Total)	<	0.5	0.5	µg/L	SMR
10/6/04	Xylenes (Total)	<	0.5	0.5	µg/L	SMR
10/6/04	Xylenes (Total)	<	0.5	0.5	µg/L	SMR
11/5/04	Xylenes (Total)	<	0.5	0.5	µg/L	SMR
12/2/04	Xylenes (Total)	<	0.5	0.5	µg/L	SMR
1/5/05	Xylenes (Total)	<	0.5	0.5	µg/L	SMR

Table 2
Summary of Monitoring Results
Effluent from the GWRS

SAMPLE DATE	PARAMETER		RESULT	DETECTION LIMIT	UNITS	SOURCE
2/4/05	Xylenes (Total)	<	0.5	0.5	µg/L	SMR
2/23/05	Xylenes (Total)	<	0.5	0.5	µg/L	SMR
1/13/04	**Zinc**	**<**	**50**	50	µg/L	SMR
2/9/04	Zinc	<	50	50	µg/L	SMR
3/9/04	Zinc	<	50	50	µg/L	SMR
4/7/04	Zinc	<	50	50	µg/L	SMR
5/5/04	Zinc	<	50	50	µg/L	SMR
6/1/04	Zinc	<	50	50	ug/L	SMR
7/1/04	Zinc	<	50	50	µg/L	SMR
8/9/04	Zinc	<	50	50	µg/L	SMR
9/16/04	Zinc	<	50	50	µg/L	SMR
10/6/04	Zinc	<	50	50	ug/L	SMR
10/6/04	Zinc	<	50	50	ug/L	SMR
11/5/04	Zinc	<	50	50	ug/L	SMR
12/2/04	Zinc	<	50	50	ug/L	SMR
1/5/05	Zinc	<	50	50	µg/L	SMR
2/4/05	Zinc	<	50	50	ug/L	SMR

Table 3
Summary of RPA

Parameter	Criterion Source	Beneficial Use Being Addressed	Limit	Units	MEC	RP?
Benzene	California Primary MCL	Chemical Constituents	1	ug/L	0.66	N
	Tastes and Odors	Odor threshold	170	ug/L		
	Californa Toxics Rule (USEPA) for sources of drinking water	CTR - Human Health	1.2	ug/L		
Chromium (III) (5A)	USEPA IRIS Reference Dose	Toxicity Humans	10,500	ug/L	not reported	I
	National Toxics Rule (USEPA) aquatic	NTR - acute	237	ug/L		
	National Toxics Rule (USEPA) aquatic	NTR - chronic	28	ug/L		
Chromium (VI) (5B)	Water Quality for Agriculture	Agriculture	100	ug/L	not reported	I
	USEPA IRIS Reference Dose	Toxicity - humans	21	ug/L		
	Californa Toxics Rule (USEPA) aquatic	CTR - chronic	11	ug/L		
	Californa Toxics Rule (USEPA) aquatic	CTR - acute	16	ug/L		
Chromium (total)	**California Primary MCL**	**Chemical Constituents**	**50**	**ug/L**	**660**	**Y**
Dichlorodifluoromethane	**USEPA National Ambient WQ Criteria for sources of drinking water**	**Toxicity - humans**	**0.19**	**ug/L**	**1.2**	**Y**
Trichlorofluoromethane	**USEPA National Ambient WQ Criteria for sources of drinking water**	**Toxicity - humans**	**0.19**	**ug/L**	**3.5**	**Y**
1,1-Dichloroethane (28)	**California Primary MCL**	**Chemical Constituents**	**5**	**ug/L**	**32**	**Y**
((1,1-DCA))	Cal/EPA Cancer Potency Factor	Toxicity - humans	6.1	ug/L		
1,1-Dichloroethylene	California Primary MCL	Chemical Constituents	6	ug/L		
(1,1-DCE)	Tastes and Odors	Odor threshold	1500	ug/L		
	National Toxics Rule (USEPA) for sources of drinking water	**NTR - human health**	**0.057**	**ug/L**	**25**	**Y**
cis-1,2-Dichloroethylene	**California Primary MCL**	**Chemical Constituents**	**6**	**ug/L**	**360**	**Y**
	USEPA MCL Goal	Toxicity - humans	70	ug/L		
trans-1,2-Dichloroethylene	California Primary MCL	Chemical Constituents	10	ug/L	ND	N
	Tastes and Odors	Odor threshold	260	ug/L		
	Californa Toxics Rule (USEPA) for sources of drinking water	CTR - Human Health	700	ug/L		

Table 3
Summary of RPA

Parameter	Criterion Source	Beneficial Use Being Addressed	Limit	Units	MEC	RP?
1,2-Dichloropropane	California Primary MCL	Chemical Constituents	5	ug/L		
	Tastes and Odors	Odor threshold	10	ug/L		
	Toxicity - aquatic life	Toxicity - acute	23,000	ug/L		
	Toxicity - aquatic life	Toxicity - chronic	5,700	ug/L		
	Californa Toxics Rule (USEPA) for sources of drinking water	CTR - Human Health	0.52	ug/L	ND	N
Tetrachloroethylene (38) (PCE)	California Primary MCL	Chemical Constituents	5	ug/L		
	Tastes and Odors	Odor threshold	170	ug/L		
	USEPA National Ambient W Q Criteria	Toxicity - acute	5280	ug/L		
	USEPA National Ambient W Q Criteria	Toxicity - chronic	840	ug/L		
	NTR (USEPA) sources of drinking water	**NTR - human health**	**0.8**	**ug/L**	**540**	**Y**
Toluene	California Primary MCL	Chemical Constituents	150	ug/L		
	Taste & Odor Threshold	Tastes and Odors	42	ug/L	0.73	N
	CTR for sources of drinking water	CTR - Human Health	6,800	ug/L		
1,1,1-Trichloroethane (41) ((1,1,1-TCA))	California Primary MCL	Chemical Constituents	200	ug/L	0.85	N
	Tastes and Odors	Odor threshold	970	ug/L		
	Toxicity - humans	USEPA MCL Goal	200	ug/L		
Trichloroethylene (43) (TCE)	California Primary MCL	Chemical Constituents	5	ug/L		
	Tastes and Odors	Odor threshold	310	ug/L		
	USEPA National Water Quality Aquatic Toxicity Information	Toxicity - acute	45,000	ug/L		
	CTR - for sources of drinking water	**CTR - Human Health**	**2.7**	**ug/L**	**14000**	**Y**
Dichloromethane (36)	CTR - sources of drinking water	CTR - Human Health	4.7	ug/L		
((Methylene Chloride))	Cal/EPA Cancer Potency Factor	Toxicity - humans	2.5	ug/L	ND	**I**
Chloroform	CA Primary MCL (total trihalomethanes)	Chemical Constituents	100	ug/L		
	USEPA Primary MCL (total trihalomethanes)	Chemical Constituents	80	ug/L		
	Tastes and Odors	Odor threshold	2,400	ug/L		
	Cal/EPA Cancer Potency Factor	Toxicity - humans	1.1	ug/L	ND	N
	USEPA National Ambient W Q Criteria	Toxicity - acute	28,900	ug/L		
	USEPA National Ambient W Q Criteria	Toxicity - chronic	1,240	ug/L		

Table 3
Summary of RPA

Parameter	Criterion Source	Beneficial Use Being Addressed	Limit	Units	MEC	RP?
Copper	California Primary MCL	Chemical Constituents	1300	ug/L		
	California Secondary MCL	Chemical Constituents	1000	ug/L		
	Water Quality for Agriculture	Agriculture	200	ug/L		
	California Secondary MCL	Tastes and Odors	1000	ug/L		
	CTR - sources of drinking water	CTR - Human Health	1300	ug/L		
	CTR - aquatic life	CTR - acute	1.4	ug/L		
	CTR - aquatic life	**CTR - chronic**	**1.2**	**ug/L**	**14**	**Y**
Zinc	California Secondary MCL	Chemical Constituents	5000	ug/L		
	Water Quality for Agriculture	Agriculture	2000	ug/L		
	California Secondary MCL	Tastes and Odors	5000	ug/L		
	USEPA IRIS Reference Dose	Toxicity - humans	2100	ug/L		
	CTR - aquatic life	**CTR - acute**	**15.3**	**ug/L**	**130**	**Y**
	CTR - aquatic life	CTR - chronic	15.3	ug/L		
Silver	California Secondary MCL	Chemical Constituents	100	ug/L		
	California Secondary MCL	Tastes and Odors	100	ug/L		
	USEPA IRIS Reference Dose	Toxicity - humans	35	ug/L		
	CTR - aquatic life	CTR - acute	0.1	ug/L	ND	**I**

Table 4
Summary of Effluent Limits
Calculations and Comparison[8]

		Applicable Criteria			Effluent Limits based on Human Health			Effluent Limits based on Aquatic Life				
	Units	Acute	Chronic	Human Health	ECA[1]	Average Monthly[2] (ug/L)	Maximum Daily[3] (ug/L)	LTA_a[4]	LTA_c[5]	Min LTA	Maximum Daily[6] (ug/L)	Average Monthly[7] (ug/L)
CTR CONSTITUENTS												
Methylene chloride	ug/L	n/a	n/a	2.5	2.5	2.5	5.0	n/a	n/a	n/a	n/a	n/a
TCE	ug/L	45000	n/a	2.7	2.7	2.7	5.4	14445	n/a	14445	44924	22390
PCE	ug/L	5280	840	0.8	0.8	0.8	1.6	1695	443	443	1377	686
Chloroform	ug/L	28900	1240	1.1	1.1	1.1	2.2	9277	653	653	2032	1013
1,1,1-TCA	ug/L	n/a	n/a	200	200	200	402	n/a	n/a	n/a	n/a	n/a
Trans-1,2-DCE	ug/L	n/a	n/a	10	10	10	20	n/a	n/a	n/a	n/a	n/a
1,1-DCA	ug/L	n/a	n/a	5	5	5	10	n/a	n/a	n/a	n/a	n/a
1,2-DCP	ug/L	23000	5700	0.52	0.52	0.52	1.0	7383	3004	3004	9342	4656
Chromium VI	ug/L	16	11	21	21	21	42	5.14	5.80	5.14	16	8
1,1-DCE	ug/L	N/A	N/A	0.057	0.057	0.06	0.11	n/a	n/a	n/a	n/a	n/a
Copper[9]	ug/L	1.4	1.2	200	200	200	402	0.46	0.62	0.46	1.4	0.7
Chromium III[9]	ug/L	237	28	10500	10500	10500	21105	76	15	15	46	23
Zinc[9]	ug/L	15.3	15.3	2000	2000	2000	4020	4.9	8.1	4.9	15.3	7.6
NON-CTR CONSTITUENTS												
Dischlorodifluoromethane	ug/L	n/a	n/a	0.19	0.19	0.19	0.38	n/a	n/a	n/a	n/a	n/a
Trichlorofluoromethane	ug/L	n/a	n/a	0.19	0.19	0.19	0.38	n/a	n/a	n/a	n/a	n/a
Cis-1,2-DCE	ug/L	n/a	n/a	6	6	6.0	12.1	n/a	n/a	n/a	n/a	n/a

1 ECA = Effluent Concentration Allowance = Most stringent water quality objective (WQO) or criteria when dilution is not considered

2 For Human Health the Average Monthly Effluent Limit (AMEL) = ECA_{HH}

3 For Human Health the Maximum Daily Effluent Limit (MDEL) = AMEL * (multiplier) for this Order the multiplier is 2.01 using a default CV=0.6

4 LTA_{acute} = ECA_{acute} * (multiplier) for this Order the multiplier is 0.321

5 $LTA_{chronic}$= $ECA_{chronic}$ * (multiplier) for this Order the multiplier is 0.527

6 For Aquatic Life the Maximum Daily Effluent Limit (MDEL)= Minimum LTA * (multiplier) for this Order the Multiplier is 3.11 assuming default n=4 and CV=0.6

7 For Aquatic Life the Average Monthly Effluent Limit (AMEL) = Minimum LTA * (multiplier) for this Order the Multiplier is 1.55 assuming default n=4 and CV=0.6

8 SIP, Section 1.4 Effluent Limit Calculation Equations and definitions provided on page two of this table.

9 Criteria developed using a minimum receiving water hardness concentration of 8.8 mg/L as CaCO

Table 4
Summary of Effluent Limits
Calculations and Comparison[8]

Section 1.4 of the SIP equations for determining Effluent Limitations:

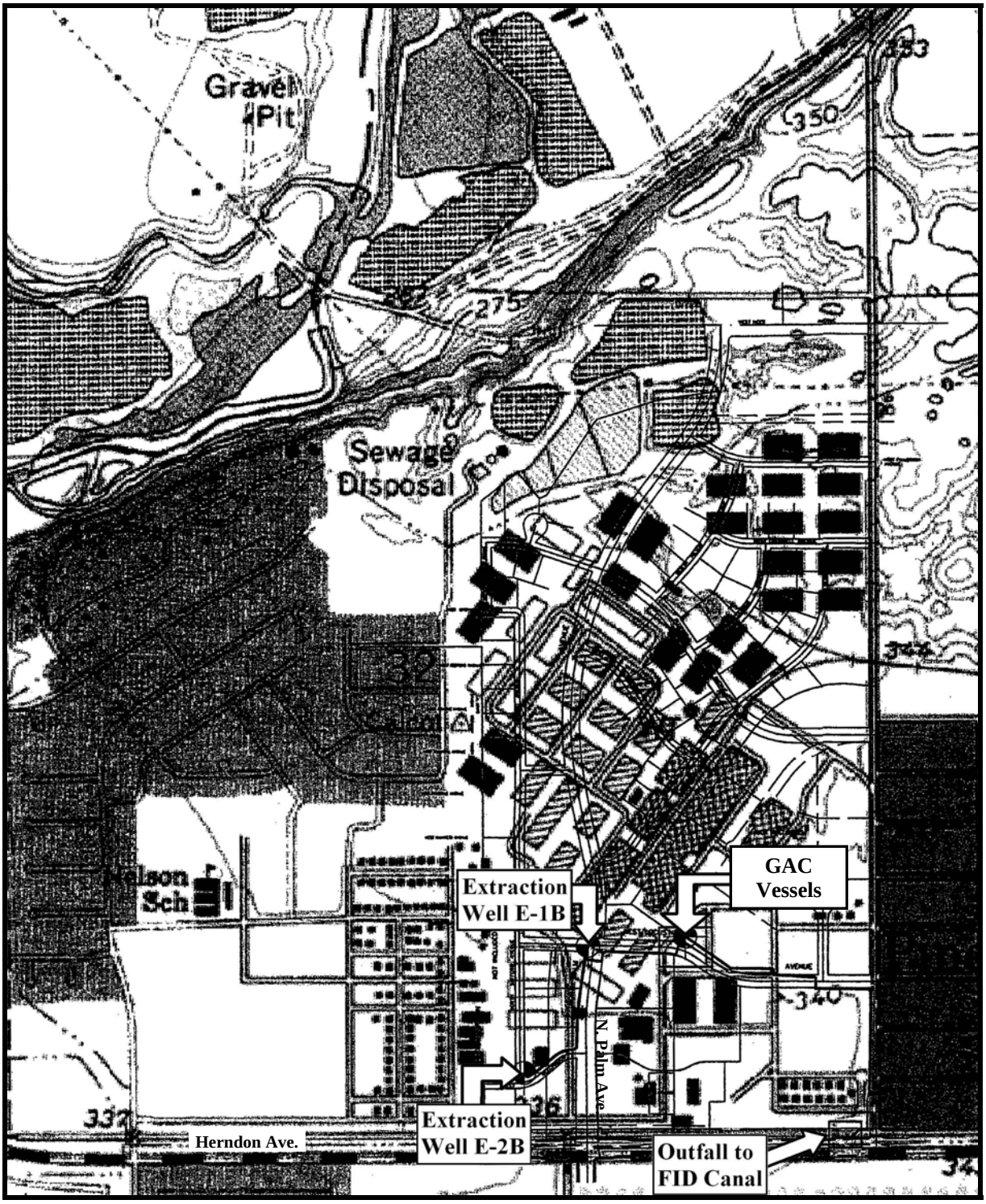
ECA = C + D (C - B) when C > B, and
ECA = C when C <= B

Where:
ECA – Effluent concentration allowance
C = the priority pollutant criterion/objective or WQO/WQC;
D = the dilution credit (for this analysis D=0); and
B = the ambient background concentration

$AMEL_{human\ health}$ = ECA
$MDEL_{human\ health}$ = ECA * MDEL/AMEL multiplier (from Table 2)
LTA_{acute} = ECA_{acute} * ECA multiplieracute99 (from Table 1)
$LTA_{chronic}$ = $ECA_{chronic}$ * ECA multiplierchronic99 (from Table 1)
$AMEL_{aquatic\ life}$ = LTA * AMEL multiplier95 (from Table 2) utilizing most stringent LTA
$MDEL_{aquatic\ life}$ = LTA * MDEL multiplier99 (from Table 2) utilizing most stringent LTA

Where:
LTA=Long Term Average
AMEL= Average Monthly Effluent Limitation
MDEL=Maximum Daily Effluent Limitation

ATTACHMENT A



Drawing Reference:
Section 32, T12S, R20E, MDB&M

U.S.G.S TOPOGRAPHIC MAPS
7.5 MINUTE QUADRANGLE

SITE LOCATION MAP
WDRs ORDER NO. R5-2006-0016
NPDES NO. CA0083046
The Vendo Company
Groundwater Remediation System
Fresno County

N
W E
S

NOT TO SCALE