

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

ORDER NO. R5-2002-0107

NPDES NO.CA0083615

WASTE DISCHARGE REQUIREMENTS
FOR
STATE CENTER COMMUNITY COLLEGE DISTRICT
GROUNDWATER CLEANUP SYSTEM
FRESNO COUNTY

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

1. State Center Community College District (hereafter Discharger) submitted a Report of Waste Discharge, dated 14 May 1999, to renew waste discharge requirements to discharge treated groundwater from a groundwater cleanup system (GWCS) and condensate water from campus air conditioners (hereafter collectively referred to as wastewater) under the National Pollutant Discharge Elimination System (NPDES). The Discharger proposes to continue to discharge treated groundwater from the GWCS to land to irrigate crops, and to the Kings River when there is no irrigation demand. Waste Discharge Requirements (WDRs) Order No. 94-332 was adopted by the Regional Board on 9 December 1994 and administratively extended on 19 June 2000 by the Executive Officer.
2. The GWCS is on the Reedley College campus and owned and operated by the Discharger. The GWCS consists of an extraction well, a granular activated carbon adsorption treatment facility, monitoring wells, two storage ponds, and an outfall line to the Kings River. The initial breakthrough time for the granular activated carbon unit was approximately 35 days, but is now approximately 3 to 4 months. The contaminated groundwater passes through a sand separator and a 1-micron screen before being treated by the GWCS. Half of the flow through the GWCS is directed through one pair of granular activated carbon (GAC) units and the other half of the flow through the GWCS is directed through a parallel pair of GAC units. The split flows reunite prior to sampling, as shown in Attachment C.
3. The RWD and self monitoring reports describe the discharge as follows:

Maximum Daily Flow of GWCS:	0.144 million gallons per day (mgd)
Design Flow of GWCS:	0.144 mgd

The Discharger discharges wastewater at two locations, as shown in Attachment A, which is attached hereto and part of this Order by reference. The discharges are identified below by serial number:

001 - Treated groundwater is discharged to two ponds lined with impermeable synthetic liners. The ponds have a combined surface area of 1.48 acres. During the period from March to October, the Reedley College campus air chiller units also discharge non-contact cooling water (approximately 1.3 mgd) to the ponds. The water accumulated in

the ponds is periodically discharged to 12 acres (reclamation area) owned by the Discharger (Assessor's Parcel Nos. 363-060-10 and 363-010-56), to irrigate crops. The reclamation area is in portions of Section 22, T15S, R23E, MDB&M. The Discharger is also investigating the possibility of discharging the wastewater to other locations including Alta Irrigation District facilities and Reedley College landscaping and athletic fields,

002 – Throughout the year when irrigation demand is low and other recycling options are unavailable, the ponds overflow the treated groundwater to the campus storm drain system, which discharges to the Kings River. The outfall is in Section 22, T15S, R23E, MDB&M (Latitude 36^o, 36', 30" North, Longitude 119^o, 48', 0" East).

4. On 29 April 1986, the Discharger reported that one of its two underground fuel storage tanks (UFSTs) was leaking fuel hydrocarbons. An investigation of the site by BSK & Associates, Geotechnical Consultants (hereafter BSK), determined that the soil beneath the leaking UFST was contaminated and that the leaking UFST may have polluted groundwater.
5. On 18 May 1988, a report was received from BSK entitled *Phase 6 Work Plan, Lateral and Vertical Extent of Groundwater Contamination, Kings River Community College* (hereafter Phase 6 Work Plan). The Phase 6 Work Plan included analyses of groundwater samples taken from monitoring wells upgradient and downgradient of the UFST leak. Groundwater samples taken downgradient of the underground tank leak showed concentrations of volatile organics, including Trichloroethene (TCE) and 1,1-Dichloroethene, which BSK believed was from a source other than the UFSTs.

The Phase 6 Work Plan documents maximum detected constituent concentrations as follows:

Constituents	Units	Concentrations	MCL
Total Petroleum Hydrocarbons	µg/l	1200	----
Benzene	µg/l	64	1.0
Toluene	µg/l	0.9	1000
Xylene	µg/l	13.8	1750
1,1-Dichloroethene	µg/l	6.2	6.0
Chloromethane	µg/l	1.6	----
TCE	µg/l	45.2	5.0

6. On 11 May 1989, a report was received from BSK entitled *Phase 5 Report, Heavily Contaminated Soil Clean-Up, Kings River Community College* (hereafter Phase 5 Report). The Phase 5 Report describes the actions taken by BSK and All American Trenching to cleanup the contaminated soil. The actions included the removal of the UFSTs, the excavation and disposal of the contaminated soil, and the construction of a passive soil venting system (PSVS) within the contaminated site to vent fuel hydrocarbons into the atmosphere.

7. In August 1990, a report was received from Kleinfelder, Inc. entitled *Phase VI Groundwater and Soil Assessment* (hereafter Kleinfelder Report). The Kleinfelder Report evaluated the lateral and vertical migration of the fuel hydrocarbons and TCE in the groundwater and indicated that groundwater was contaminated with TCE, Benzene, and 1,2-Dichloroethane. However, the Kleinfelder investigation did not detect Total Petroleum Hydrocarbons, Toluene, 1,1-Dichloroethene, and Chloromethane, which were detected in the previous investigation conducted by BSK.

The Kleinfelder Report documents constituent concentrations in groundwater as follows:

<u>Constituents</u>	<u>Units</u>	<u>Concentrations</u>	<u>MCL</u>
Benzene	µg/l	120	1.0
1,2-Dichloroethane	µg/l	2.9	0.5
TCE	µg/l	0.6 - 73	5.0

8. On 16 July 1993, Blair, Church, and Flynn submitted a report prepared by Kenneth D. Schmidt and Associates entitled *Extent of Volatile Halocarbons in Groundwater and Pilot Extraction Well Testing at Kings River Community College* (Hereafter BC&F Report). The BC&F Report indicated that groundwater contamination was limited to TCE in a very localized area, primarily near Monitoring Well Nos. 6 and 11, as shown in Attachment B. Reported TCE concentrations were between 60 - 250 µg/l, well in excess of the MCL of 5.0 µg/l. The vertical extent of the contamination was determined to be between 75 and 100 feet below ground surface, based on detection of TCE in monitoring well MW-6 (screened from 55 to 75 feet bgs) and no detection of TCE in MW-10 (screened from 80 to 100 feet bgs). The Regional Board is unaware of any subsequent sampling and analysis of groundwater monitoring wells at the site.
9. Order No. 94-332 requires that from March to October all treated effluent be discharged to the Discharger's agricultural land. During November through February when irrigation demand is low, Order No. 94-332 permits the Discharger to discharge the treated groundwater to the Kings River.
10. On 31 October 2000, a notice of violation (NOV) was issued to the Discharger for discharging wastewater to the Kings River during a part of the year not authorized by WDRs Order No. 94-332 and for exceeding the monthly median limit of 0.5 µg/l for TCE. The Discharger reported TCE effluent concentrations of 0.89 µg/l and 2.1 µg/l for February and March 2000. The Discharger failed to conduct confirmation sampling, upon which the low frequency monitoring depended.
11. On 3 January 2001, Blair, Church, and Flynn filed a report entitled *Report Pursuant to Notice of Violation* (hereafter NOV Report) that was in response to the NOV. The NOV Report described how the volume of water in the storage ponds is greater during the summer months when the condensate from the Discharger's two air conditioner units is discharged to the storage ponds.

The NOV Report also describes how only 12 acres of the initial 172-acre reclamation area are owned and operated by the Discharger. The remaining 160 acres are owned by the Discharger and leased to others who choose to use water provided by Alta Irrigation District rather than the treated groundwater to irrigate the land. In an 8 January 2002 letter, the Discharger described the possibility of discharging the treated groundwater to other locations including Alta Irrigation District facilities and Reedley College landscaping and athletic fields. The NOV Report requested, based upon the reduced capacity of the reclamation area, the greater wastewater flow in the summer months, and provided the Discharger gives first priority to the irrigation of the reclamation area and any other approved recycling alternatives, that discharge from the storage ponds to the Kings River (Discharge 002) be allowed as needed throughout the year.

12. To address the TCE violation, in January 2001, the Discharger began mid-treatment monitoring in both treatment streams of the GWCS. When TCE or other pollutants are detected in either treatment stream by the mid-treatment monitoring, the Discharger replaces all four GAC units.
13. The *Water Quality Control Plan for the Tulare Lake Basin, 2nd Edition*, (hereafter Basin Plan) designates beneficial uses, establishes narrative and numerical water quality objectives, and contains implementation programs and policies to achieve water quality objectives for all waters of the Basin. The Basin Plan includes plans and policies of the State Water Resources Control Board (SWRCB) incorporated by reference. Pursuant to section 13263(a) of the California Water Code (CWC), waste discharge requirements must implement the Basin Plan.
14. The GWCS is within the South Valley Floor Hydrologic Unit, Alta Hydrologic Area (No. 551.60) and the Kings Groundwater Basin (Detailed Analysis Unit No. 239).
15. The Basin Plan designates the following beneficial uses of the Kings River downstream of the discharge between the Friant-Kern Canal and Peoples Weir: municipal, agricultural, industrial process supply; water contact recreation and noncontact water recreation; warm freshwater habitat; groundwater recharge; and preservation and enhancement of fish, wildlife and other aquatic resources.
16. The Basin Plan designates the following beneficial uses of groundwater in the Kings Groundwater Basin: municipal, agricultural, industrial service, and industrial process supply, except where lesser beneficial uses are specifically designated in the Basin Plan.
17. Groundwater in the area is about 63 feet below ground surface (bgs) and moves generally southeasterly. The direction of groundwater flow at the site is influenced by seepage from the Kings River west of the site; extraction wells east of the site in the City of Reedley; and supply well No. 1, which is on-site. Background quality of the water is good, with a specific electrical conductivity of approximately 240 $\mu\text{mhos/cm}$.
18. Soils in the area are comprised mostly of silty fine sands and medium sands, which are fairly permeable. However, silty clays are encountered at about 40 feet bgs.

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19. Average annual precipitation and evaporation for the area are 10 inches and in excess of 64 inches, respectively.
20. The GWCS is not within a 100-year floodplain.
21. According to the RWD, monitoring reports, and data from the Kings River Conservation District, the following conditions are typical for Kings River upstream of Discharge No. 002:

<u>Constituent</u>	<u>Kings River</u>	<u>Units</u>
Temperature	62.8	°F
pH	7.1	pH Units
Conductivity	186	µmhos/cm
Total Dissolved Solids	39	mg/l
Dissolved Oxygen	8.3	mg/l

22. According to the RWD, quarterly influent monitoring data submitted by the Discharger, data from the 1993 sampling and analysis of groundwater monitoring wells, and data from other Regional Board sources, the following conditions are typical for groundwater in the vicinity of the discharge:

<u>Constituent</u>	<u>Groundwater</u>	<u>Units</u>
Temperature	68.1	°F
pH	7.6	pH Units
Conductivity	364	µmhos/cm
Total Dissolved Solids	242	mg/l
Dissolved Oxygen	4.8	mg/l

23. USEPA adopted the National Toxics Rule (NTR) on 5 February 1993 and the California Toxics Rule (CTR) on 18 May 2000. These Rules contain water quality standards applicable to this discharge. The State Water Resources Control Board, on 26 April 2000 adopted the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* hereafter referred to as the Implementation Policy) that contains guidance on the implementation of the NTR and the CTR.
24. 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. Therefore, this Order contains provisions that:
 - a. Require the discharger to provide information as to whether the levels of priority pollutants in the discharge, as specified in the NTR and CTR cause or contribute to an in-stream

excursion above a water quality objective;

- b. If the discharge has a reasonable potential to cause or contribute to an in-stream excursion above a water quality objective, requires the Discharger to submit information to calculate effluent limits for those constituents; and
 - c. Allows the reopening of this Order to include effluent limitations for those constituents.
25. 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.
 26. 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. Best practicable treatment and control for cleanup of groundwater contaminated by volatile organic compounds is to remove all pollutants as completely as possible from the water. All constituents are required to be removed to a level below corresponding analytical detection limits. Some degradation of the receiving water could occur if constituents were present in effluent below the detection limit, but such degradation would be undetectable. *Due to the relatively low conductivity 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 contaminated groundwater, and the use of the treated groundwater for irrigation, both benefit the people of the state.*
 27. The U.S. Environmental Protection Agency (EPA) and the Regional Board have classified this discharge as a *minor* discharge.
 28. 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, and 307 (Toxic and Pretreatment Effluent Standards) of the Clean Water Act (CWA) and amendments thereto that are applicable to the discharge are specified herein.
 29. Section 13267 of the California Water Code (CWC) states, in part, that:

In conducting an investigation specified in subdivision (a), the regional board may require that any person who has discharged, discharges, or is suspected of having discharged or discharging or who proposes to discharge within its region, or any citizen or domiciliary, or political agency or entity of this state who has discharged, discharges, or is suspected of discharging, or who proposes to discharge waste outside of its region that could affect the quality of waters of the state 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 reports and the benefits to be obtained from the

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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.

30. The monitoring and reporting program required by this Order and the attached Monitoring and Reporting Program No. R5-2002-0107 are necessary to assure compliance with these waste discharge requirements. The Discharger operates the facility that discharges the waste subject to this Order.
31. The groundwater portion of Monitoring and Reporting Program No. R5-2002-0107 is necessary to delineate groundwater pollutant plumes and determine how remediation efforts are progressing. Existing data and information about the site show the presence of various chemicals, including benzene, toluene, ethylbenzene, and xylenes (BTEX); total petroleum hydrocarbons as gasoline (TPH-g); trichloroethylene (TCE); and 1,2-dichloroethylene (1,2-DCE), emanating from the property and resulting from the Discharger's current or past operation.
32. The action to adopt an NPDES permit is exempt from the provisions of Chapter 3 of the California Environmental Quality Act (CEQA) (Public Resources Code Section 21000, et seq.) requiring preparation of an environmental impact report or negative declaration, in accordance with Section 13389 of the California Water Code.
33. The information in the attached Information Sheet was considered in developing the Findings of this Order. The attached Information Sheet is part of this Order.
34. The Discharger and interested agencies and persons were notified of intent to prescribe waste discharge requirements in this Order and provided with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.
35. In a public meeting, all comments pertaining to the discharge were heard and considered.
36. This Order shall serve as an NPDES permit pursuant to Section 402 of the Clean Water Act, and amendments thereto, and shall take effect upon the date of hearing, provided US-EPA has no objections.

IT IS HEREBY ORDERED, that coverage under Order No. 94-332 is rescinded and that, pursuant to CWC Sections 13263, 13267, 13377, and 13383, State Center Community College District, 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 Clean Water Act and regulations and guidelines adopted thereunder, shall comply with the following when discharging from the above described groundwater cleanup system:

A. Discharge Prohibitions:

1. Discharge of material other than non-contact cooling water and treated groundwater from the investigation and cleanup of VOCs and other pollutants from groundwater as described in

Finding [No. 2](#), is prohibited.

2. The by-pass or overflow of untreated or partially treated groundwater 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 California Water Code, is prohibited.

B. Effluent Limitations:

1. The daily maximum flow from the GWCS shall not exceed [0.15](#) mgd.
2. The daily maximum discharge to the 12-acre reclamation area (Discharge No. 001) shall not exceed [0.66](#) mgd.
3. The daily maximum discharge to the Kings River (Discharge No. 002) shall not exceed [1.45](#) mgd.
4. The discharge from the GWCS shall not exceed the following limits:

<u>Constituent</u>	<u>Units</u>	<u>Maximum</u>
TPHs ¹	µg/l	50.0
Benzene	µg/l	0.5
Ethylbenzene	µg/l	0.5
Toluene	µg/l	0.5
Xylene	µg/l	0.5
1,1-Dichloroethene	µg/l	0.5
Chloromethane	µg/l	0.5
1,2-Dichloroethane	µg/l	0.5
Trichloroethene	µg/l	0.5
Other VOCs ²	µg/l	0.5
<u>MTBE plus other ether oxygenates³</u>	<u>µg/l</u>	<u>5.0</u>

¹ Total Petroleum Hydrocarbons as gasoline.

² Other Volatile Organic Compounds typically detected by EPA Method 8021B.

³ The limit applies to the sum of MTBE, Di-isopropyl Ether (DIPE), Ethyl Tertiary Butyl Ether (ETBE), and Tertiary Amyl Methyl Ether (TAME).

5. The sum of the concentrations of the constituents listed in [Effluent Limitation B.4](#) with the exception of TPHs, in any single sample, shall not exceed 5 µg/l (where nondetectable shall be considered equal to zero).
6. The discharge shall not have a pH less than [6.0](#) nor greater than [9.0](#).
7. Survival of aquatic organisms in 96-hour bioassays of undiluted waste shall be no less than:

- (a) Minimum for any one bioassay -----70%
- (b) Median for any three or more consecutive bioassays -----90%

- 8. Ponds shall be managed to prevent breeding of mosquitoes. Dead algae and debris shall not accumulate on the water surface.
- 9. Discharge No. 001 shall be the primary discharge option.

C. Solid Waste:

- 1. Spent carbon, and other residual solids removed from liquid wastes or used to treat liquid wastes shall be recycled or disposed of in a manner that is consistent with Division 3, Title 27, of the CCR and approved by the Executive Officer.
- 2. Any proposed change in spent carbon use or solids disposal practice from a previously approved practice shall be reported to the Executive Officer at least **90 days** in advance of the change.

D. Groundwater Limitations:

Discharge No. 001, in combination with other sources, shall not cause underlying groundwater to contain concentrations of waste constituents that exceed background water quality.

E. Receiving Water Limitations:

Receiving Water Limitations for the Kings River are based upon water quality objectives contained in the Basin Plan and the Plan. As such, they are a required part of this permit.

Discharge No. 002 shall not cause the following in the receiving water:

- 1. Concentrations of dissolved oxygen to fall below **7.0 mg/l**.
- 2. Oils, greases, waxes, or other materials to form a visible film or coating on the water surface or on the stream bottom.
- 3. Oils, greases, waxes, floating material (liquids, solids, foams, and scum) or suspended material to create a nuisance or adversely affect beneficial uses.
- 4. Aesthetically undesirable discoloration.
- 5. Fungi, slime, or other objectionable growths.
- 6. The turbidity to increase as follows:

- a. More than 1 Nephelometric Turbidity Unit (NTU) where natural turbidity is between 0 and 5 NTU.
 - b. More than 20 percent where natural turbidity is between 5 and 50 NTU.
 - c. More than 10 NTU where natural turbidity is between 50 and 100 NTU.
 - d. More than 10 percent where natural turbidity is greater than 100 NTU.
7. The normal ambient pH to fall below 6.5, exceed 8.3, or change by more than 0.3 units.
 8. The monthly average ambient temperature to increase more than 5°F, or to be altered to a degree that adversely affects beneficial uses.
 9. Deposition of material that causes nuisance or adversely affects beneficial uses.
 10. Radionuclides to be present in concentrations that exceed maximum contaminant levels specified in the California Code of Regulations, Title 22; that harm human, plant, animal, or aquatic life; or that result in the accumulation of radionuclides in the food web to an extent that presents a hazard to human, plant, animal, or aquatic life.
 11. Aquatic communities and populations including vertebrate, invertebrate, and plant species, to be degraded.
 12. Toxic pollutants to be present in the water column, sediments or biota in concentrations that adversely affect beneficial uses; that produce detrimental physiological response in human, plant, animal, or aquatic life; or that bioaccumulate in aquatic resources at levels which are harmful to human health.
 13. Violation of any applicable water quality standard for receiving waters adopted by the Regional Board or the State Water Resources Control Board pursuant to the CWA and regulations adopted thereunder.
 14. Taste or odor-producing substances that impart undesirable tastes or odors to the water, to fish flesh or other edible products of aquatic origin, or that cause nuisance or adversely affect beneficial uses.

F. Provisions:

1. The Discharger shall comply with the *Standard Provisions and Reporting Requirements for Waste Discharge Requirements (NPDES)*, dated 1 March 1991, which are part of this Order. This attachment and its individual paragraphs are referred to as *Standard Provisions(s)*.
2. The Discharger shall comply with Monitoring and Reporting Program No. R5-2002-0107 (MRP), which is a 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. The Discharger shall conduct the chronic toxicity testing specified in MRP No. R5-2002-0107. 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 water quality objective 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.13. Additionally, if a chronic toxicity water quality objective is adopted by the State Water Resources Control Board, this Order may be reopened to include an effluent limitation based on that objective.
4. The Discharger shall conduct monitoring as specified in Monitoring and Reporting Program No. R5-2002-107 to determine if the discharge contains priority pollutants identified in the California Toxics Rule and National Toxics Rule. Samples for priority pollutants are required from **October 2002**. The results must be submitted no later than the **1st day of the second month** following sample collection. A dry weather effluent sample shall be tested for dioxin and the results submitted no later than **1 March 2004**. The results shall conform to Provision F.14.
5. If the Regional Board determines that specific pollutants in the discharge have reasonable potential to cause or contribute to an exceedance of a water quality objective, this Order will be reopened for consideration of additional or revision of appropriate numerical effluent or receiving water limitations for the problem constituents.
6. If any constituent listed in [Effluent Limitation B.4](#) is detected in a mid-treatment sample, the Discharger shall replace all four GAC units within **35** days of the date the sample was collected.
7. If any constituent listed in [Effluent Limitation B.4](#) is detected in an effluent sample, the Discharger shall replace all four GAC units within **21** days of the date the sample was collected.
8. Any voluntarily shut down of the GWCS due to the detection of any constituent listed in [Effluent Limitation B.4](#) in a mid-treatment sample shall not exceed **14** days.
9. By **9 December 2002**, the Discharger shall submit a technical report for review and approval by the Executive Officer describing a work plan for utilizing the discharge alternatives as

described by [Finding Nos. 2 and 11](#). The technical report shall conform to Provision [F.14](#).

10. By **12 August 2002**, the Discharger shall submit an operation and maintenance plan (O&M Plan) for review and approval by the Executive Officer. 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 GWCS 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 US-EPA approved method);
 - b. Proposed list of 8021B 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.

A copy of the O&M Plan shall be kept at the GWCS 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](#).

11. The Discharger shall employ [Best Practical Treatment Control](#) (BPTC), including proper operation and maintenance, to comply with this Order.
12. This permit may be reopened, and effluent limits may be added, deleted, or modified 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 facility.
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 responsible for the work.

15. 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, the name and 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 California Water Code. Transfer shall be approved or disapproved by the Executive Officer.

16. The Discharger shall notify the Regional Board when the clean-up activities covered by these requirements are complete, so that this Order may be rescinded and the Discharger will no longer be covered by this Order or be responsible for payment of annual fees.
17. 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.
18. A copy of this Order shall be kept at the site for reference by personnel operating the GWCS. Key operating personnel shall be familiar with its contents.
19. The Regional Board will review this Order periodically and will revise requirements when necessary.
20. This Order expires on **7 June 2007**, and the Discharger must file a Report of Waste Discharge in accordance with Title 23, CCR, not later than **9 December 2006**, 180 days in advance of such date in application for renewal of waste discharge requirements if it wishes to continue the discharge.

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I, GARY M. CARLTON, Executive Officer, do hereby certify the foregoing is a full, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Central Valley Region on 7 June 2002.

THOMAS R. PINKOS, Acting Executive Officer

JRL:6/7/02

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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 this Monitoring and Reporting Program. All analyses shall be performed in accordance with the latest edition of *Guidelines Establishing Test Procedures for Analysis of Pollutants*, promulgated by EPA (40 CFR 136) or other procedures approved by the Board. In reporting data, the Discharger shall indicate whether any analysis was performed using a method not in conformance with EPA'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. 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 prior to entering the GWCS at approximately the same time as effluent samples. Influent samples shall be representative of the volume and quality of extracted groundwater. The time of collection of samples shall be recorded. Influent monitoring should include at least the following:

Constituents	Units	Type of Sample	Sampling Frequency
Flow	mgd	Metered	Continuous
Specific Conductivity @25°C	µmhos/cm	Grab	Quarterly
pH	pH Units	Grab	Quarterly
TPHs ^{1,2}	µg/l	Grab	Quarterly
Priority Pollutants:			
Benzene ³	µg/l	Grab	Quarterly
Ethylbenzene ³	µg/l	Grab	Quarterly
Toluene ³	µg/l	Grab	Quarterly
Xylene ³ µg/l		Grab	Quarterly
1,1-Dichloroethene ³	µg/l	Grab	Quarterly
Chloromethane ³	µg/l	Grab	Quarterly
1,2-Dichloroethane ³	µg/l	Grab	Quarterly
TCE ³	µg/l	Grab	Quarterly
Other VOCs ^{3,4,5}	µg/l	Grab	Quarterly
MTBE ⁶	µg/l	Grab	Quarterly
TBA ⁶	µg/l	Grab	Quarterly

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<u>Constituents</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>
TAME ⁶	µg/l	Grab	Quarterly
DIPE ⁶	µg/l	Grab	Quarterly
ETBE ⁶	µg/l	Grab	Quarterly

- ¹ By EPA Method 8015, or equivalent approved method acceptable to the Executive Officer.
² TPHs = Total Petroleum Hydrocarbons
³ By EPA Method 8021B, or equivalent approved method acceptable to the Executive Officer.
⁴ All typical constituents detected by EPA Method 8021B.
⁵ VOCs = Volatile Organic Compounds
⁶ If these constituents are not present in any monitoring well or extraction well at the cleanup site, the monitoring well documentation may be submitted in lieu of the influent monitoring for these constituents. Confirmation samples on an annual basis shall be submitted to verify the absence of these chemicals.

MID-TREATMENT MONITORING

In order to detect breakthrough of the GAC units, samples shall be collected between each GAC unit. Mid-Treatment samples should be representative of the volume and quality of the discharge. Time of collection of samples shall be recorded. Mid-Treatment monitoring shall include at least the following:

<u>Constituents</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>
TPHs ^{1,2}	mg/l	Grab	Monthly ⁷
Priority Pollutants:			
Benzene ³	µg/l	Grab	Monthly ⁷
Ethylbenzene ³	µg/l	Grab	Monthly ⁷
Toluene ³	µg/l	Grab	Monthly ⁷
Xylene ³ µg/l	µg/l	Grab	Monthly ⁷
1,1-Dichloroethene ³	µg/l	Grab	Monthly ⁷
Chloromethane ³	µg/l	Grab	Monthly ⁷
1,2-Dichloroethane ³	µg/l	Grab	Monthly ⁷
TCE ³	µg/l	Grab	Monthly ⁷
Other VOCs ^{3,4,5}	µg/l	Grab	Monthly ⁷
MTBE ⁶	µg/l	Grab	Monthly ⁷
TBA ⁶	µg/l	Grab	Monthly ⁷
TAME ⁶	µg/l	Grab	Monthly ⁷
DIPE ⁶	µg/l	Grab	Monthly ⁷
ETBE ⁶	µg/l	Grab	Monthly ⁷

- ¹ By EPA Method 8015, or equivalent approved method acceptable to the Executive Officer.
² TPHs = Total Petroleum Hydrocarbons
³ By EPA Method 8021B, or equivalent approved method acceptable to the Executive Officer.
⁴ All typical constituents detected by EPA Method 8021B.
⁵ VOCs = Volatile Organic Compounds

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- ⁶ If these constituents are not present in any monitoring well or extraction well at the cleanup site, the monitoring well documentation may be submitted in lieu of the influent monitoring for these constituents. Confirmation samples on an annual basis shall be submitted to verify the absence of these chemicals.
- ⁷ If constituent is detected in either a mid-treatment or effluent sample, the Discharger shall replace all four GAC units within 35 days of the date the sample was collected. Certification of compliance shall be included with the monthly report.

EFFLUENT MONITORING

Effluent samples shall be collected just prior to discharge to the irrigation ponds. Effluent samples should 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:

<u>Constituents</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>
Flow	mgd	Metered	Continuous
Specific Conductivity @25°C	µmhos/cm	Grab	Daily
pH	pH Units	Grab	Daily
Acute Toxicity	% survival	Grab	Annual
Hardness	mg/l CaCO ₃	Grab	Quarterly ⁷
TPHs ^{1,2}	mg/l	Grab	Quarterly ⁷
Priority Pollutants:			
Benzene ³	µg/l	Grab	Quarterly ⁷
Ethylbenzene ³	µg/l	Grab	Quarterly ⁷
Toluene ³	µg/l	Grab	Quarterly ⁷
Xylene ³ µg/l		Grab	Quarterly ⁷
1,1-Dichloroethene ³	µg/l	Grab	Quarterly ⁷
Chloromethane ³	µg/l	Grab	Quarterly ⁷
1,2-Dichloroethane ³	µg/l	Grab	Quarterly ⁷
TCE ³	µg/l	Grab	Quarterly ⁷
Other VOCs ^{3,4,5}	µg/l	Grab	Quarterly ⁷
MTBE ⁶	µg/l	Grab	Quarterly ⁷
TBA ⁶	µg/l	Grab	Quarterly ⁷
TAME ⁶	µg/l	Grab	Quarterly ⁷
DIPE ⁶	µg/l	Grab	Quarterly ⁷
ETBE ⁶	µg/l	Grab	Quarterly ⁷

¹ By EPA Method 8015M, or equivalent approved method acceptable to the Executive Officer.

² TPHs = Total Petroleum Hydrocarbons as gasoline

³ By EPA Method 8021B, or equivalent approved method acceptable to the Executive Officer.

⁴ All typical constituents detected by EPA Method 8021B.

⁵ VOCs = Volatile Organic Compounds

⁶ If these constituents are not present in any monitoring well or extraction well at the cleanup site, the monitoring well documentation may be submitted in lieu of the influent monitoring for these constituents. Confirmation samples on an annual basis shall be submitted to verify the absence of these chemicals.

⁷ If constituent is detected in either a mid-treatment or effluent sample, the Discharger shall replace all four GAC units within 21 days of the date the sample was collected. Certification of compliance shall be included with the quarterly report.

CALIFORNIA TOXICS RULE EFFLUENT MONITORING

A. Priority Pollutants

The Discharger shall monitor the effluent for priority pollutants semiannually. One sample is required and shall be collected in **October 2002**. Results of sampling shall be submitted by the **first day of the second month** following sampling. Reporting shall conform with *Policy for Implementation of Toxics Standards for Inland Surface Waters, Bays and Estuaries of California* Reporting Requirements, Section 2.4 et seq. Effluent 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.

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Suggested Test Method</u> ¹
Volatile Organics	µg/L	Grab	EPA 8260B ²
Semi-Volatile Organics	µg/L	Grab	EPA 8260B ²
	µg/L	Grab	EPA 8270C ²
Inorganics	µg/L	Grab	EPA 6020 ²
	µg/L	Grab	EPA 7196A ²
Pesticides	µg/L	Grab	EPA 8081A ²
PCBs	µg/L	Grab	EPA 8082 ²

¹ Alternate USEPA approved test methods may be used with approval from the Executive Officer.

² Report all detected peaks.

B. Dioxin

The Discharger shall test for each of the 17 TCDD congeners listed in Table 4, *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (Implementation Policy). The Discharger shall report the analytical results of the effluent monitoring for each congener, including the quantifiable limit and the minimum detection level (MDL), and the measured or estimated concentration. The Discharger shall multiply each measured or estimated congener concentration by its respective toxicity equivalence factor (TEF) value and report the sum of these values. The Discharger must monitor effluent for the presence of the 17 congeners once during **dry weather** and for one year during the next three years. On 23 July 2001, the Discharger submitted the required dioxin monitoring results for the wet weather sampling event. Results of dioxin sampling shall be submitted by the **first day of the second month** following sampling. All results must be submitted no later than **1 March 2004**. Reporting shall conform with Implementation Policy Reporting Requirements Section 2.4 et seq.

THREE SPECIES CHRONIC TOXICITY MONITORING

Chronic toxicity monitoring shall be conducted to determine whether the effluent is contributing toxicity to the receiving water. The testing shall be conducted as specified in EPA 600/4-91-002, or later amendment. Chronic toxicity samples shall be collected at the last point of discharge prior to its

entering the receiving water. A dilution series is not required if the receiving water is considered ephemeral. 24-hour composite samples shall be representative of the volume and quality of the discharge. Time of collection of samples 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 test 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 with 14 days. Chronic toxicity monitoring shall include the following:

Species: *Pimephales promelas*, *Ceriodaphnia dubia*, and *Selenastrum capricornutum*

Frequency: Once per year

Dilution Series: (If applicable)

	<u>Dilutions (%)</u>					<u>Controls</u>	
	100	50	20	12.5	6.25	Receiving Water	Lab Water
% Effluent	100	50	25	12.5	6.25	0	0
% Dilution Water ¹	0	50	75	87.5	93.75	100	0
<u>% Lab Water</u>	0	0	0	0	0	0	100

¹ Dilution water shall be receiving water from upstream in the receiving water, or out of the influence of the discharge. If there is not dilution water in the receiving water unaffected by the discharge, then a dilution series test is not applicable. The dilution series may be altered upon approval of Regional Board staff.

GROUNDWATER MONITORING

Prior to construction of any new groundwater monitoring or extraction wells, the Discharger shall submit plans and specifications to the Executive Officer for review and approval. Once installed, all new wells shall be added to the monitoring program and shall be sampled and analyzed according to the schedule below.

Monitoring wells with free phase petroleum product or visible sheen shall be monitored for product thickness and depth to water only. The volume of extracted groundwater also shall be provided in quarterly monitoring reports as specified earlier in the **Influent Monitoring** portion of this MRP. Sample collection and analysis shall follow standard EPA protocol. The fourteen monitoring wells (MW-1 through 14), one extraction well (EW-1), and three nearby water supply wells (No. 1 through

No. 3), as shown on Attachment B, and any wells installed subsequently, shall follow the monitoring schedule below:

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Constituents	EPA Analytical Method	Max. Detection Limit (µg/l) ¹	Sampling Frequency ^{2,3,4}
Depth to Groundwater	---	---	Quarterly
Halogenated and Volatile Organic Compounds (full list)	8021B	0.5	Quarterly
Total Petroleum Hydrocarbons	8015M	50	Quarterly
MTBE ²	8260b	0.5	Quarterly
TBA ²	8260b	0.5	Quarterly
TAME ²	8260b	0.5	Quarterly
DIPE ²	8260b	0.5	Quarterly
ETBE ²	8260b	0.5	Quarterly

¹ For nondetectable results.

² Fuel oxygenates, including MTBE, methanol, ethanol, tertiary butyl alcohol (TBA), tertiary amyl methyl ether (TAME), di-isopropyl ether (DIPE), and ethyl tertiary butyl ether (ETBE) shall be analyzed in monitoring wells MW-1, MW-4, MW-5, and MW-6 during the first two monitoring events. If results are nondetectable for fuel oxygenates in all wells for both sampling events, no further monitoring for oxygenates is required. If a fuel oxygenate is detected, it shall be added to the quarterly monitoring program for the well in which it was detected.

³ All wells will be monitored quarterly for water levels and the presence and thickness of free product.

⁴ The Discharger may petition the Executive Officer to modify the sampling frequency shown above after completing four quarters of monitoring. The Discharger may implement those changes after receiving written approval from our office.

An annual report shall be submitted to the Board by **1 February** of each year. This report shall contain an evaluation of the effectiveness and progress of the investigation and remediation, and may be submitted with the fourth quarter monitoring report. The annual report shall contain the following minimum information:

- a. Both tabular and graphical summaries of all data obtained during the previous year;
- b. Groundwater contour maps and pollutant concentration maps containing all data obtained during the previous year;
- c. A discussion of the long-term trends in the concentrations of the pollutants in the groundwater monitoring wells;
- d. An analysis of whether the pollutant plume is being captured by an extraction system or is continuing to spread;
- e. A description of all remedial activities conducted during the year, an analysis of their effectiveness in removing the pollutants, and plans to improve remediation system effectiveness;
- f. The anticipated date for completion of cleanup activities;

- g. An identification of any data gaps and potential deficiencies/redundancies in the monitoring system or reporting program;
- h. If desired, a proposal and rationale for any revisions to the groundwater sampling plan frequency and/or list of analytes.

REPORTING

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 each calendar quarter. Quarterly groundwater monitoring results shall be submitted as a separate and distinct technical report and shall include the following:

- a. A summary of all data obtained during the previous quarters;
- b. Groundwater elevation contour maps and pollutant concentration maps portraying current quarter data;
- c. Copies of laboratory analytical reports and chain of custody; and
- d. Copies of field data sheets/logs for monitoring well sampling.

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.

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, monthly averages, and medians should be determined and recorded.

By **1 February** of each year, the Discharger shall submit a 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. Records of the amount of GAC used and serviced;
- e. A description of the groundwater sampling event, including field logs. At a minimum, field logs shall contain water quality parameters measured before, during, and after purging, method of purging, depth of water, volume of water purged, etc.;
- f. Groundwater contour maps for all groundwater zones, if applicable;

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- g. Iso-contour pollutant concentration maps for all groundwater zones, if applicable;
- h. A table showing well construction details such as well number, groundwater zone being monitored, coordinates (northings and eastings), reference point elevation, and depth to top and bottom of screen, and total well depth;
- i. A table showing historical lateral and vertical (if applicable) flow directions and gradients;
- j. Cumulative data tables containing the water quality analytical results and depth to groundwater;
- k. A copy of the laboratory analytical data report;
- l. If applicable, the status of any ongoing remediation, including cumulative information on the mass of pollutant removed from the subsurface, system operating time, the effectiveness of the remediation system, and any field notes pertaining to the operation and maintenance of the system; and
- m. If applicable, the reasons for and duration of all interruptions in the operation of any remediation system, and actions planned or taken to correct and prevent interruptions.

All reports submitted in response to this Order shall comply with the signatory requirements of Standard Provision D.6 and [Provision F.14](#) of WDRs Order No. R5-2002-0107.

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

Ordered by: _____
THOMAS R. PINKOS, Acting Executive Officer

7 June 2002

(Date)

JRL:6/7/02

INFORMATION SHEET

ORDER NO. R5-2002-0107
STATE CENTER COMMUNITY COLLEGE DISTRICT
GROUNDWATER CLEANUP SYSTEM
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The State Center Community College District proposes to discharge treated groundwater from a groundwater cleanup system (GWCS) to land and the Kings River. The GWCS discharges treated groundwater and campus air chiller condensate water at a constant rate of 0.144 million gallon per day (mgd) to two storage ponds. The GWCS consists of an extraction well, granular activated carbon absorption treatment facility, monitoring wells, two storage ponds, and an outfall to the Kings River. The water accumulated in the ponds is periodically discharged to 12 acres (reclamation area) owned by the Discharger to irrigate crops. Throughout the year when irrigation demand is low and other recycling options are unavailable, the ponds overflow the treated groundwater to the campus storm drain system, which discharges to the Kings River. The Discharger is also investigating the possibility of discharging the wastewater to other locations including Alta Irrigation District facilities and Reedley College landscaping and athletic fields.

The groundwater has been determined to be contaminated by investigations conducted by BSK & Associates (hereafter, BSK), Kleinfelder Inc. (hereafter, Kleinfelder), and Blair, Church and Flynn (hereafter, BC&F). The investigations detected Benzene, Toluene, Xylene, Trichloroethene (TCE), 1,1-Dichloroethene, 1,2-Dichloroethane and Chloromethane with Benzene, 1,1-Dichloroethene, 1,2-Dichloroethane, and TCE concentrations exceeding the primary Maximum Contaminant Levels (MCLs) for drinking water established by the State Department of Health Services. However, the latest investigation conducted by BC&F detected only TCE in the groundwater at levels in excess of MCLs established by the State Department of Health Services.

The Basin Plan designates the following beneficial uses of the Kings River downstream of the discharge between the Friant-Kern Canal and Peoples Weir: municipal, agricultural, industrial process supply; water contact recreation and noncontact water recreation; warm freshwater habitat; groundwater recharge; and preservation and enhancement of fish, wildlife and other aquatic resources.

Groundwater in the area is about 63 feet below ground surface (bgs) and moves generally southeasterly. The direction of groundwater flow at the site is influenced by seepage from the Kings River, west of the site, pumping of wells east of the site in the City of Reedley, and the pumping of supply well No. 1, which is on-site. Background area water quality is good, with a specific electrical conductivity of approximately 240 $\mu\text{mhos/cm}$. The beneficial uses of underlying groundwater are domestic, industrial, and agricultural supply.

The contaminated groundwater passes through a sand separator and a 1-micron screen before treated by the GWCS. Half of the flow through the GWCS is directed through one pair of granular activated carbon (GAC) units and the other half of the flow through the GWCS is directed through a parallel pair of GAC units. The breakthrough time for the GWCS is approximately 3 to 4 months. As is current practice, the Discharger is required to replace all of the GAC units if any constituent listed in [Effluent Limitation B.4](#) is detected in either a mid-treatment or effluent sample. The four granular activated carbon units are capable of treating volatile organic compounds (VOCs) in groundwater to non-detectable levels. Proposed effluent limits for VOCs are based on the US-EPA Method 8021B detection limits and are less than State and US-EPA Primary Maximum Contaminant Levels.

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The proposed quarterly effluent monitoring frequency is sufficient based on the breakthrough time of the GAC units and because the Discharger has proposed operational control, and as a condition of this Order is required, to service all GAC units when waste constituents are detected by mid treatment sampling (indicating breakthrough of the primary GAC unit). The requirement to replace all GAC units will ensure that the secondary GAC unit is always new and will provide polishing of the treated groundwater. Under these circumstances, the secondary GAC unit will be capable of removing any VOCs that break through the primary GAC unit until all four units are replaced.

Receiving water monitoring is not required by this Order because historic data have demonstrated the discharge has no discernable impact to the receiving water and effluent monitoring will ensure VOCs are not discharged to the receiving water.

Groundwater monitoring is necessary to delineate groundwater pollutant plumes and monitor progress of remediation efforts until closure is appropriate.

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. Best practicable treatment and control for cleanup of groundwater contaminated by volatile organic compounds is to remove all pollutants as completely as possible from the water. All constituents are required to be removed to a level below corresponding analytical detection limits. Some resulting degradation of the receiving water could occur if constituents were present below the detection limit, but such degradation would be undetectable. [Due to the relatively low conductivity 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 contaminated groundwater, and the use of the treated groundwater for irrigation, both benefit the people of the state.](#)

The action to adopt an NPDES permit is exempt from the provisions of Chapter 3 of the California Environmental Quality Act (CEQA) (Public Resources Code Section 21000, et seq.) requiring preparation of an environmental impact report or negative declaration, in accordance with Section 13389 of the California Water Code.

JRL:6/7/02