STATE OF CALIFORNIA
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION

MONITORING AND REPORTING PROGRAM NO. CI-4992
FOR
COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY
(CALABASAS LANDFILL)

(File No. 60-118)

TENTATIVE

General

1. Monitoring responsibilities of the Sanitation Districts of Los Angeles County (Discharger) for the Calabasas Landfill (Landfill) are specified in California Water Code (CWC) section 13225(a), section 13267(b) and section 13387(b), and State Water Resources Control Board (SWRCB) Resolution No. 93-62. This self-monitoring program is issued pursuant to California Regional Water Quality Control Board, Los Angeles Region (Regional Board) Order No. R4-2009-XXXX. The principal purposes of a self-monitoring program by a waste discharger are:

   a. To document compliance with discharge requirements and prohibitions established by the Regional Board;

   b. To facilitate self-policing by the waste discharger in the prevention and abatement of pollution arising from waste discharge; and

   c. To prepare water quality analyses.

2. The Discharger shall implement this monitoring and reporting program (M&RP), as described in section F (Requirements for Groundwater Monitoring) of Regional Board Order No. R4-2009-XXXX. The Discharger shall implement this M&RP during the first monitoring period immediately following adoption of this Order.

3. The Discharger shall submit any reports required by this Order electronically, in accordance with section 3890 et. seq. of the 23 CCR, division 3. In addition, complete paper copies of any Joint Technical Document (or addenda thereto), Closure/Post-Closure Plan, Final Design Report or Construction Quality Assurance Report, shall be submitted to this Regional Board office by the required electronic submittal date.

4. The Discharger shall comply with the requirements of 27 CCR section 20415 for any water quality monitoring program developed to satisfy 27 CCR section 20420, section 20425, or section 20430 and the requirements of this Order.

   a. Groundwater monitoring shall meet the requirements of 27 CCR section 20415(b) and 40 CFR section 258.51 (a, c, and d);

b. Surface water monitoring shall meet the requirements of 27 CCR section 20415(c) and shall be conducted in accordance with Item No. 16(b) of this M&RP. In addition, whenever possible, the Discharger shall measure volumetric flow or, at a minimum, visually estimate the flow rate for all surface water monitoring points with flowing water (i.e. any flowing seeps or springs that develop during the development or operation of the Landfill);

c. An unsaturated zone monitoring program is required by 27 CCR section 21769. However, as described in Finding No. 27 of Order No. R4-2009-XXXX, unsaturated zone monitoring attempted at the Landfill has proved ineffective. Through adoption of this Order the Regional Board approves that an unsaturated zone monitoring program is not required for continued operation of the Landfill.

Monitoring Program

5. For the purposes of this monitoring program the terms "monitoring well", "extraction well", "observation well", "piezometer", and "sump" are synonymous.

6. Annual Appendix II Leachate Scan - Pursuant to 40 CFR section 258.55(b), the Discharger shall sample leachate in October from the LCRSs from the 80-Acre Liner, D-Cut Liner, and combined P-Cut/97-Cut/99-Cut/Southeastern Cut/North Ridge Cut Liners and shall analyze the samples for all constituents of 40 CFR Appendix II (Appendix II) that have not, to date, been detected in the Landfill's leachate and verified by re-sampling as well as any other constituent directed by the Regional Board's Executive Officer (Executive Officer). If the October leachate testing identifies any previously undetected Appendix II constituent(s), the Discharger shall obtain a single leachate retest sample the following April and analyze it for all such new constituents. Any constituents verified in the April retest shall become part of the COC list for corresponding downgradient monitoring wells. The Discharger shall include a prominent notification of these new COCs in the next scheduled monitoring report. The current COC list compiled from annual leachate monitoring from the 80-Acre Liner, D-Cut Liner, and combined P-Cut/97-Cut/99-Cut/Southeastern Cut/North Ridge Cut Liners LCRSs are indicated in Table 1 of this M&RP.

7. The existing compliance groundwater monitoring system at the Landfill (see Figure 1, attached)includes three monitoring wells (R02A, R02B, M22B) for the Barrier 1 area, four monitoring wells (R06A, R06B, EMP10, EMP11) for the Barrier 2 area, one monitoring well (M18D) for the Barrier 3 area, one monitoring well (M19R) for the Barrier 4 area , eight monitoring wells (R07A, R07B, R08B, M20S, P64S, P67S, P68S, P69S) for the Barrier 5 area, and two monitoring wells (M15B, M16A) for the Barrier 6 area. Because the Discharger has established ranges of background groundwater quality at the Landfill and documented the heterogeneous nature of the groundwater quality at the Landfill, the Executive Officer finds that no concurrent background groundwater monitoring point are likely representative of any single downgradient monitoring well.

Therefore, inter-well background water quality monitoring for this M&RP are not required unless directed by the Executive Officer. Monitoring elements include the validating of intra-well background data sets (Item No. 13, below); detection of man-made constituents in background wells (Item No. 17); and ongoing background well testing (Item No. 18).

8. Existing piezometers, monitoring wells and extraction wells at the Landfill are shown on Figures 2-4 (attached).

Sampling and Analytical Methods

9. Groundwater monitoring shall be conducted on a quarterly basis as shown in the following schedule:

Period	Sampling Period
January – March	February
April - June	May
July – September	August
October – December	November

10. MPar List - At any given time, the MPar list for the Landfill shall include all constituents listed for the compliance monitoring wells in Table 2 of this M&RP. The attached list is the MPar list as of the effective date of Order No. R4-2009-XXXX. Any time a new constituent is added to the MPar list, as discussed below, the Discharger shall provide the Regional Board with an updated list of this table. MPars vary for unlined versus lined portions of the Landfill. For the unlined areas (Subsurface Barriers 1, 2 and 5) of the Landfill the MPars consist of general organic and inorganic indicators of concern, all Appendix I VOCs, any anthropogenic Appendix II constituents detected in groundwater, and any COCs detected and verified in groundwater samples obtained as part of the five-year scans under Item No. 12(b) of this M&RP. For lined areas (Barriers 3, 4, and 6) the MPars consist of general organic and inorganic indicators of concern, and any anthropogenic Appendix II constituents previously detected in groundwater, and any COCs detected and verified in the five-year scans under Item No. 12(b) of this M&RP.

11. COC List - As of the effective date of Order No. R4-2009-XXXX, the list of potential COCs consists of those constituents listed in Table 3 of this M&RP. As above, COCs vary for unlined versus lined portions of the Landfill. For the unlined areas (Subsurface Barriers 1, 2 and 5) the COCs include all Appendix II constituents not identified as Mpars as well as any other constituent directed by the Executive Officer. For lined areas (Subsurface Barriers 3, 4, and 6), the COC list includes all Appendix II constituents detected and verified in the annual leachate testing under Item No. 6 of this M&RP as well as any other constituent directed by the Executive Officer. Subsequently, the Discharger shall note prominently the constituent(s) added to the COC list in the next scheduled monitoring report.

12. This Order recognizes that there has been a release from the Barriers 1, 2, and 5 areas of the Landfill. Therefore, the Discharger shall continue to comply with a federal AMP and state CAP requirements for the known releases by incorporating the following monitoring and analysis requirements.

    a. COC scans for the releases have previously been completed.

    b. Five-Yearly COC Scan - Every five years, the Discharger shall analyze a sample from each compliance groundwater monitoring point known to be within the release ["affected well," as described in Item No. 12(c) of this M&RP] for the detectable presence (including trace determinations) of all COCs that are not yet on the MPar list. This constitutes the means by which the Discharger continues to meet the requirements of 40 CFR section 258.55(b-d).

        i. During each such COC scanning event, the Discharger shall obtain and analyze a minimum of one sample from each required well (sufficient to obtain a datum for each COC that is subject to the scan). Upon detecting a COC that is not yet on the MPar list, the Discharger shall, within 30 days, take a single resample from the indicating affected well(s) and reanalyze it only for the newly-detected constituent(s).

        ii. Any COC detected in samples collected from a groundwater monitoring well, and verified by a retest, automatically becomes part of the MPar list for the Landfill. The Discharger shall notify Regional Board staff of any such change immediately via phone followed by more formal notification via fax, email, or writing within fourteen days and inclusion of a notice thereof in the facility operating record. The Discharger shall note prominently the constituent(s) added to the MPar list in the next scheduled monitoring report, along with a listing of which well(s) were involved in this detection and verification. This constitutes the means by which the Discharger shall meet the requirements of 40 CFR section 258.55(d)(2).

    c. Five-Year COC Scans only at Affected Point of Compliance (POC) Wells - Pursuant to 40 CFR section 258.55(b), the Regional Board hereby limits the scope of five-yearly COC list scans, under Item No. 12(b) of this M&RP, to "affected wells" (those groundwater monitoring points that are within the plume, as indicated by their having at least one MPar that is in tracking mode (see Item No. 13(f)(ii)) that are along the Landfill's POC. Nevertheless, the Executive Officer can, at any time, increase the scope of the affected wells that shall be subject to COC scanning to include selected groundwater monitoring points, whether or not they are located along the POC, that provide a strong indication of a release.

13. Statistical Data Analysis Methodology

a. For the purposes of this M&RP, Minimum Level (ML) and Reporting Limit (RL), as described in Attachment 1, are functionally equivalent to method detection limit (MDL) and practical quantitation limit (PQL) with regard to reporting and statistical evaluation requirements. For this purpose, MLs and RLs shall be derived by the laboratory for each analytical procedure, according to the SWRCB's *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (the State Implementation Policy or SIP) and the State of California's laboratory accreditation procedures. Sample results greater than or equal to the ML/RL shall be reported "as measured" by the laboratory. Sample results less than the ML/RL shall be reported as less than the numeric values of the ML/RL. Nominal ML and RL values shall be reported with all data. Correspondingly, any reference to "detections at or above the trace level" shall be substituted with "detections at or above the Minimum Level"

b. Intra-Well Comparisons are Standard **-** The Mpars for each compliance well that are subject to routine data analysis are indicated in the attached Table 2. Except as otherwise provided in Item Nos. 13(b)(i)(B & C) and 12(g)(ii) of this M&RP, intra-well comparison methods shall be used at all compliance wells for all MPars that are subject to data analysis under this Order and shall be used to test individual "background" (e.g., upgradient) wells regarding unexpected increases in man-made constituents (e.g., VOCs), as follows:

i. Pre-Detection Background Data Set **-** Initially, except as otherwise provided in Item Nos. 13(b)(i)(C & D) or 17, for each given MPar at a given downgradient monitoring well (well/MPar pair), the proposed background data set shall consist of all validated data from that compliance well and parameter, from the previous five-year period. Every two years, following the adoption of this Order, as part of the annual monitoring summary report (see 27 CCR section 20415(e)(14) and Item No. 42 of this M&RP), the Discharger shall add the newer data to the background data set for each well/MPar pair after validating (via a method approved by the Executive Officer) that the new data does not contain data indicating an increase over the existing background data. At that time, the Discharger shall also retire the oldest two years of background data for the well/MPar, thereby producing a data set covering the then-previous five years. The Discharger shall validate the proposed intra-well background data set as follows for each MPar at each well (initially) or, subsequently, at a new well or for a new MPar at an existing well. The Discharger shall report the validated or updated background data set, for each affected well/MPar pair, in the next scheduled monitoring report. Initial background data validation shall be as follows:

A. Accelerated Background Data Procurement **-** if there are less than ten post-1997 data points available, for a given MPar at any background or compliance well, the Discharger shall implement the accelerated data procurement effort described in Item No. 15 of this M&RP to achieve a minimum background sample size. A minimum background sample size of 10 data points per well shall be acquired prior to initiating the intra-well background data set validation procedure described below unless the Discharger makes a technical submittal that is approved by the Executive Officer for a smaller minimum background sample size;

B. Validate Upgradient Data for Man-Made MPars **-** for any MPar that is a non-metallic Appendix II constituent (i.e., that is man-made), the initial intra-well data validation under Item No. 13(b)(i)(C) shall utilize only data from those upgradient (or sidegradient) background wells whose data from the previous five years, for that constituent, exceeds the constituent's MDL in less than 10% of the well's data. Such man-made constituents should not be detectable at background wells except in error (around 1% of the time) or because the constituent comes either from the Landfill or from another source. Therefore, for any background well rejected pursuant to this item, for a given MPar, if the Discharger has not already explained the constituent's presence at that well to the satisfaction of the Executive Officer, the Discharger shall conduct an investigation under Item No. 17 of this M&RP. If there are one or more non-rejected background wells, the Discharger shall use their data to validate each well/MPar pair's proposed intra-well background data set, under Item No. 13(b)(i)(C); and

C. Intra-Well Background Validation for New Well/MPar Pairs **-** for all compliance wells initially and, subsequently, for new wells or a new MPar at an existing well, to determine whether the existing data for that MPar at that well can be used as its intra-well comparison background data set:

1. Commonly Quantified Constituents **-** for any MPar that, absent the existence of the Landfill, would usually be detected in groundwater at concentrations exceeding the constituent's PQL, the Discharger shall validate the proposed intra-well background data at each compliance well by comparing it to a pooled box-and-whiskers plot, for that MPar, from all "background" (upgradient or sidegradient background) wells completed in the same

groundwater body. If any such constituent's median concentration (for a downgradient well) exceeds the pooled background plot's 75th percentile (upper boundary of the box, in a box-and-whisker plot), then that compliance well's existing data cannot be used as the intra-well comparison background data set for that well/MPar pair. Such a well/MPar pair shall be tested, beginning no later than the next scheduled reporting period, using an inter-well comparison data analysis method (against the applicable background well(s)) that the Executive Officer agrees meets the requirements of 27 CCR section 20415(e)(9). Otherwise (i.e., for a well/MPar pair whose existing data's median is less than the pooled background plot's 75th percentile), that existing data shall be used as the initial background data set for intra-well comparisons for that well/MPar pair; or

2. Rarely Quantified Constituents **-** for an MPar that, absent the existence of the Landfill, would seldom be detected in groundwater (e.g., non-metallic Appendix II constituents), the Discharger shall identify the highest value from the pooled data set from all background wells that have passed validation under Item No. 13(b)(i)(B) or, in a case where all applicable upgradient well data is non-detect, the MDL. The Discharger shall use this value as a basis of comparison to validate the data points in the proposed intra-well background data set. The initial intra-well background data set for that downgradient well shall consist of all data points in the proposed intra-well background data set that are less than this value.

ii. Post-Detection Background Data Set **-** For any constituent that is in "tracking mode" (see Item No. 13(f)(ii) of this M&RP), at a given well, its background data set shall be the background data set that was in effect when the well/MPar pair exhibited a measurably significant increase.

c. Performance Standards **-** All data analysis methods (statistical or non-statistical) shall meet the requirements of 27 CCR section 20415(e)(9).

d. Retest is Part of the Method **-** In the event that an approved data analysis method provides a preliminary indication that a given MPar has exhibited a measurably significant increase at a given well, the Discharger shall conduct a verification procedure in the form of a discrete retest, in accordance with 27 CCR section 20415(e)(8)(E). The retest is part of the data analysis method, therefore, a

measurably significant increase exists only if either or both of the retest samples validates the preliminary indication. The Discharger has the discretion to accept that the preliminary indication confirms a measurably significant increase at a given monitoring well and forgo verification retesting procedures.

e. Limited Retest Scope **-** For any given groundwater monitoring point, the Discharger shall perform the verification procedure only for those MPars that have shown a preliminary indication at that well during that reporting period. At any time, the Discharger may demonstrate, in accordance with 27 CCR section 20420(k)(7), that a source other than the Landfill caused an MPar to produce a measurably significant increase at a given well or that the evidence is an artifact caused by an error in sampling, analysis, or statistical evaluation, or by natural variation in the ground water.

f. Water Quality Monitoring Approach **-** The monitoring approach used for each well/MPar pair shall be controlled by whether that MPar has exhibited a measurably significant increase at that well. Therefore, the Discharger shall monitor each well/MPar pair in one of two modes, as follows:

i. Detection Mode **-** For an MPar that has not produced a measurably significant increase at that well, the purpose of monitoring, for that well/MPar pair, is to watch for the MPar arrival at that well at a concentration strong enough to trigger a measurably significant indication using an appropriate statistical or non-statistical data analysis method; or

ii. Tracking Mode **-** For an MPar that has produced a measurably significant increase at a given well, the purpose of the monitoring, for that well/MPar pair, is to verify the suitability and effectiveness of the existing or proposed corrective measures by tracking changes in the MPar concentration at that location via an evolving concentration-versus-time plot.

g. Detection Mode Data Analyses **-** The following applies to all detection mode data analyses (i.e., this provision does not apply to the scans under Item Nos. 12(b) or 6 of this M&RP, or to well/MPar pairs that are in tracking mode):

i. MPars Readily Detectable in Background **-** At any given groundwater monitoring point, the Discharger shall apply an approved statistical analysis method for each detection mode MPar that exceeds its respective MDL in 10% or more of the applicable background data set. For each well/MPar pair (separately), an approved statistical analysis is a method, other than analysis of variance (ANOVA), that is either validated and analyzed by the SANITAS® water quality data analysis software (distributed by Intelligent Decisions Technology, Inc., 203 South Main

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Street, Longmont, CO 80501, Tel: 303-774-9120) or that the Executive Officer agrees meets the performance standards of 27 CCR section 20415(e)(9). If using SANITAS®, the Discharger shall use the "CA Standards" and "CA Retest" settings (under the "Options" pull-down menu). Otherwise:

A. For any such well/MPar pair that, as of the effective date of this Order, does not have an approved statistical analysis method, the Discharger shall propose and substantiate an appropriate statistical method within 90 days of the adoption of this Order;

B. After the adoption of this Order, for any new MPar that qualifies for statistical analysis by meeting the above 10% rule at a given well, the Discharger shall propose and substantiate an appropriate statistical method for that well/MPar pair as part of the background data validation under Item No. 13(b)(i)(C).

ii. MPars not Readily Detectable in Background **-** For any monitoring point at which one or more detection mode MPars exceed their respective MDL in less than 10% of the applicable background data set, the Discharger shall analyze the data for these MPars via the California Non-statistical Data Analysis Method (CNSDAM) test described in Item No. 14 of this M&RP.

14. California Non-statistical Data Analysis Method

a. Non-Statistical Method for Detection Mode for MPars Seldom Found in Background - For any given compliance (downgradient) well, regardless of the monitoring program (Detection Monitoring Program [DMP], Evaluation Monitoring Program [EMP], Assessment Monitoring Program [AMP], or Corrective Action Program [CAP]), the Discharger shall use this data analysis method, jointly, for all constituents on the "scope list" of Item No. 14(a)(i) of this M&RP (or, for each retest sample, the modified scope list of Item No. 14(b)(ii)).

i. Scope List – Within 90 days of the effective date of this Order, the Discharger shall create a current "scope list" showing each detection mode MPar, at that well, that exceeds its MDL in less than 10% of its background data.

ii. Two Triggers - From the scope list made under Item No. 14(a)(i), above, for an initial test (or, for a retest, the modified scope list under Item No. 14(b) below), the Discharger shall identify each MPar in the current sample from that well that exceeds either its respective MDL or PQL. The Discharger shall conclude that these exceeding MPars provide a

preliminary indication (or, for a retest, provide a measurably significant indication) of a change in the nature or extent of the release, at that well, if either:

A. Two or more of the MPars on a monitoring well's scope list exceed their respective MDL; or

B. At least one of the MPars on a monitoring well's scope list equals or exceeds its respective PQL.

b. Discrete Retest:

i. In the event that the Discharger concludes (pursuant to Item No. 14(a)(ii) above) that there is a preliminary indication, then the Discharger shall immediately notify Regional Board staff by phone, followed by more formal notification via fax, email, or writing within fourteen days and inclusion of a notice thereof in the facility operating record. The Discharger shall, within 30 days of such indication, collect two new (retest) samples from the indicating compliance well.

ii. For any given compliance well, the Discharger shall analyze the retest samples only for those constituents indicated in that well's original test, under Item No. 14(a)(ii) of this M&RP, and these indicated constituents shall comprise the well's "modified scope list." As soon as the retest data are available, the Discharger shall apply the same test (under Item No. 14(a)(ii) above, but using this modified scope list) to separately analyze each of the two suites of retest data at that compliance well.

iii. If either (or both) of the retest samples trip either (or both) of the triggers under Item No. 13(a)(ii), then the Discharger shall conclude that there is a measurably significant increase at that well for the constituent(s) indicated in the validating retest sample(s). Furthermore, thereafter, the Discharger shall monitor the indicated constituent(s) in tracking mode (instead of detection mode; see Item No. 13(f)(ii) of this M&RP) at that well, shall remove the constituent(s) from the scope list created (under Item No. 14(a)(i) of this M&RP) for that well, notify the Regional Board by phone, followed by more formal notification via fax, email, or writing within fourteen days and inclusion of a notice thereof in the facility operating record. The Discharger shall highlight this conclusion and these changes in the next scheduled monitoring report.

c. The Discharger may propose alternative non-statistical methods for MPars seldom found in background to be approved by the Executive Officer.

15. Establishing Initial COC Data:

For any COC that does not have the minimum background sample size required at any given background and compliance well, the Discharger shall establish the prevailing concentration of that constituent at each such data-deficient well by taking and analyzing one sample monthly at each data-deficient background and downgradient monitoring point until each such well has at least ten data points, or fewer if approved by the Executive Officer. For any background or compliance well installed after the effective date of this Order, the Discharger shall establish the prevailing concentration for each COC by using this accelerated sampling schedule for up to ten months. These data shall be used, as described in Item No. 13(b)(i)(A-C) of this Order, in the event that the COC becomes an MPar. For any constituent for which monthly sampling would be too frequent to obtain reasonably independent data, even using the post-sampling purge approach described in 27 CCR section 20415(e)(12)(B), the Discharger shall include, for approval by the Executive Officer, a proposed date for completion of data procurement and a well-specific and constituent-specific technical validation for any wait of more than one month between successive sampling dates.

16. Other Monitoring

a. Unsaturated zone monitoring is not required at the Landfill.

b. The Discharger shall satisfy all stormwater monitoring requirements pursuant Order No. R4-2009-XXXX regulating surface water discharges. Specifically, the Discharger shall satisfy requirements of NPDES permit WDID No. 4B196000294, industrial stormwater permit WDID No. 4 19I006192, and any revisions to the permit.

17. Frequent Detection of a Man-Made Constituent in a Background Well - Any time a (upgradient or sidegradient) background well exhibits an excessive frequency or proportion of trace-level or numerical concentration data for any MPar (under Items Nos. 13 or 18) or COC (under Item Nos. 15 or 18) that is a non-metallic Appendix II constituent, the Discharger shall conduct an investigation under this paragraph. For such a constituent: an "excessive proportion" constitutes a condition, under Item No. 13(b)(i)(A), where 10% or more of the data from that background well exceeds the MPar MDL; and an "excessive frequency" constitutes a condition, under Item No. 18, in which new data at that background well exceeds the constituent's MDL for two successive samples. Given either condition, the Discharger shall notify the Regional Board immediately by phone followed by more formal notification via fax, email, or writing within fourteen days and inclusion of a notice thereof in the facility operating record. The Discharger shall, within 180 days thereafter, submit a report, acceptable to the Executive Officer, that examines the possibility that this constituent originated from the Landfill (e.g., using a concentration gradient analysis) and that proposes appropriate changes to the monitoring program. If, after reviewing this report, the Executive Officer:

a. Concludes that the evidence indicates the man-made constituent originated from a source other than the Landfill, then the Executive Officer will make appropriate changes to the monitoring program, including switching to an appropriate statistical inter-well comparison procedure, for that constituent, for all detection-mode analyses at the Landfill, using a suite of background data that reflects the expected concentration for that constituent; or

b. Is unable to conclude that the evidence indicates the detected man-made constituent came from a source other than the Landfill, then the Discharger shall:

i. List this constituent as an MPar, if it is not already so listed, in the next scheduled monitoring report and shall note this change prominently in the report's synopsis;

ii. Shall include this background well as part of the release, for that MPar and, thereafter, shall address this well/MPar pair in tracking mode (i.e., as part of the release), in spite of the well's being a background well, beginning with the next scheduled monitoring report; and

iii. If there is not at least one other background well unaffected by this constituent, shall, within 90 days, install a new upgradient or sidegradient background well in a portion of the aquifer that will provide data representative of background conditions for the Landfill's compliance wells, and shall carry out an accelerated sampling schedule, for that constituent, under Item No. 15, to provide representative background data for validating the use of intra-well comparison testing under Item No. 13 above.

18. Ongoing Background Well Testing - Even though most data analysis will be via intra-well comparisons, the Discharger shall continue to monitor background wells, for each MPar and COC, each time that MPar or COC is monitored at downgradient wells. Each year in which there is new background well data for a constituent (i.e., quarterly for MPars and every five years for non-MPar COCs), the Discharger shall include the new data in the annual monitoring summary report (see 27 CCR section 20415(e)(14) and Item No. 42 of this M&RP) as a time-versus-concentration plot for that background well and constituent. Any time such a plot (for a given well and constituent) shows two successive data points in excess of the MDL for any non-metallic Appendix II constituent that has not already been investigated at that well, under Item No. 17, the Discharger shall notify the Regional Board immediately by phone followed by more formal notification via fax, email, or writing within fourteen days and inclusion of a notice thereof in the facility operating record. The Discharger shall initiate an investigation under Item No. 17 within 30 days of noting this condition.

19. Monitoring Data Information **-** For each MPar addressed during a given reporting period, the Discharger shall include in the monitoring report a listing of the prevailing MDL and PQL for that MPar, together with an indication as to whether the MDL, PQL, or both have changed since the prior reporting period. The Discharger shall require the analytical laboratory to report all applicable censored data (trace level and non-detect determinations). In the event that an MDL and/or PQL for an Mpar changes, the Discharger shall highlight that change in the report's summary and the report shall include an explanation for the change that is approved by the owner/director of the analytical laboratory.

20. WQPS **-** Under this Order, pursuant to 27 CCR section 20415(e)(7), the Landfill is in violation of its WQPS any time a given detection mode well/MPar pair exhibits a measurably significant increase over the applicable background data set (and changes to tracking mode), as determined by an appropriate statistical or non-statistical data analysis method. All well/MPar pairs in tracking mode remain in violation of the WQPS until completion of a successful proof period that ends the CAP (see 27 CCR section 20430(g) and 40 CFR section 258.58(e)). Pursuant to 27 CCR section 20390, the WQPS for groundwater at the Landfill consists of the following components:

    a. COCs (see 27 CCR section 20395) **-** At any given time, the COCs are those listed in Table 3 of this M&RP, including any updates made pursuant to Item No. 11 of this M&RP. Nevertheless, under this Order, statistical and non-statistical data analysis is limited to those COCs that are on the current MPar list by virtue of their being present in detectable levels either in groundwater or in that portion of the groundwater that is affected by the release;

    b. Concentration Limits **-** At any given time, the concentration limit of a given well/MPar pair is its applicable background data set, as determined or updated pursuant to Item Nos. 13(b) or 17 of this M&RP (see 27 CCR section 20400(b)(2)). Nevertheless, during a CAP, the concentration limits may also include, for a given MPar, a numerical concentration limit greater than background adopted by the Regional Board pursuant to 27 CCR section 20400(b)(3)-(d) for application only to those monitoring points that are within the plume;

    c. POC and Monitoring Wells **-** The POC consists of an imaginary vertical surface that is located, in map view, along the hydraulically downgradient limit of waste placement at the Landfill and that extends downward through the uppermost aquifer underlying the Landfill (i.e. the line indicated as "Landfill Area" in Figure 4, attached). At the Landfill there are no POC monitoring wells at this time so that for the purposes of this M&RP POC monitoring points shall consist of the current compliance monitoring wells listed in Item No. 7.

    d. Compliance Period **-** The compliance period for the Landfill is six years (see 27

CCR section 20410). Each time the standard is not met (i.e. releases discovered), the Landfill shall begin a compliance period on the date the Regional Board directs the Discharger to begin an EMP. If the CAP has not achieved compliance with the standard by the scheduled end of the compliance period, the compliance period is automatically extended until the Landfill has been in continuous compliance for at least three consecutive years.

21. Unless otherwise approved by the Executive Officer, all analyses shall be conducted at a laboratory certified for such analyses by the DHS. All analyses shall be conducted in accordance with the latest edition of "*Test Methods for Evaluating Physical/Chemical Methods*" (SW-846) promulgated by the USEPA (or equivalent standard methods as approved by the Executive Officer) and in accordance with an approved sampling and analysis plan. Water and waste analysis shall be performed by a laboratory approved for these analyses by the State of California. Specific methods of analysis must be identified. If methods other than USEPA-approved methods or standard methods are used, the exact methodology must be submitted for review and must be approved by the Executive Officer prior to use. For any analyses performed for which no procedures are specified in the EPA guidelines or in this M&RP, the constituent or parameter analyzed, and the method or procedure used, must be specified in the corresponding monitoring report. The director of the laboratory whose name appears on the certification shall supervise all analytical work in his/her laboratory and shall approve all reports of such work submitted to the Regional Board. All monitoring instruments and equipment shall be properly calibrated and maintained to ensure accuracy of measurements. In addition, the Discharger is responsible for seeing that the laboratory analysis of all samples meet the following restrictions:

    a. The methods and analysis and the detection limits used must be appropriate for the expected concentrations. For detection monitoring of any constituent or parameter that is found in concentrations which produce more than 90% non-numerical determinations (i.e. "trace" or "ND") in data from background monitoring points for that medium, the analytical methods having the lowest facility-specific MDL shall be selected from among those methods which would provide valid results in light of any matrix effects involved.

    b. Trace results falling between the MDL and the facility-specific practical quantitation limit (PQL), shall be reported as such, and shall be accompanied both by the estimated MDL and PQL values for that analytical run and by an estimate of the constituent's concentration.

    c. MDLs and PQLs shall be derived by the laboratory for each analytical procedure, according to State of California laboratory accreditation procedures. These MDLs and PQLs shall reflect the detection and quantitation capabilities of the specific analytical procedure and equipment used by the lab, rather than simply being quoted from USEPA analytical method manuals. If the lab suspects that, due to a

change in matrix or other effects, the true detection limit or quantitation limit for a particular analytical run differs significantly from the laboratory-derived MDL/PQL values, the results shall be flagged accordingly, along with an estimate of the detection limit and quantitation limit actually achieved.

d. All quality assurance / quality control (QA/QC) data shall be reported, along with the sample results to which it applies, including the method, equipment, and analytical detection limits, the recovery rates, an explanation (corrective action) of any QA/QC measure that is outside the laboratory control limits, the results of equipment and method blanks, the results of spiked and surrogate samples, the frequency of quality control analysis, and the name and qualifications of the person(s) performing the analyses. Sample results shall be reported unadjusted for blank results or spike recovery.

e. Upon receiving written approval from the Executive Officer, an alternative statistical or non-statistical procedure can be used for determining the significance of analytical results for a constituent that is a common laboratory contaminant (i.e., methylene chloride, acetone, diethylhexyl phthalate, and di-n-octyl phthalate) during any given reporting period in which QA/QC samples show evidence of laboratory contamination for that constituent. Nevertheless, analytical results involving detection of these analytes in any sample shall be reported and flagged for easy reference by Regional Board staff.

f. Within 90 days of the adoption of Order No. R4-2009-XXXX, the discharger shall submit a technical report for approval by the Executive Officer for an analytical methodology to report unknown chromatographic peaks, along with an estimate of the concentration of the unknown analyte.

g. In cases where contaminants are detected in QA/QC samples (i.e. field, trip, or lab blanks), the accompanying sample results shall be appropriately flagged.

22. Proper chain of custody procedures shall be used.

23. All compliance groundwater monitoring system wells shall be equipped with dedicated sampling pumps.

24. All metals analyses shall be for total metals using unfiltered samples. Metals samples must be preserved in accordance with the specified laboratory methods, however care shall be taken that the dissolved metals samples are not exposed to acids until after filtering. The Discharger may elect to also obtain filtered metals representative of the dissolved phase. If so the Discharger must report the results of both the filtered and unfiltered.

25. No filtering of samples taken for organics analyses shall be permitted. Samples for

organic analyses shall be taken with a sampling method that minimizes volatilization and degradation of potential constituents.

26. The Discharger may submit additional data to the Regional Board not required by this program in order to simplify reporting to other regulatory agencies.

27. If the Discharger performs analyses for any parameter more frequently than required by this M&RP using approved analytical methods, the results of those analyses shall be included in the monitoring program.

28. Thirty-Day Sample Procurement Limitation:
For any given monitored medium, the samples taken from all monitoring points to satisfy the data analysis requirements for a given reporting period shall all be taken within a span of 30 days, and shall be taken in a manner that insures sample independence to the greatest extent feasible [27 CCR section 20415(e)(12)(B)]. Groundwater sampling shall also include an accurate determination of the groundwater surface elevation and field parameters (temperature, pH, electrical conductivity, turbidity) for that monitoring point [27 CCR section 20415(e)(13)]; groundwater elevations taken prior to purging the well and sampling for monitoring parameters shall be used to fulfill groundwater flow rate/direction analyses required under Item No. 40(b)(i) of this M&RP. Statistical or non-statistical analysis shall be carried out as soon as the data is available, in accordance with statistical and non-statistical analyses requirements described in this M&RP.

29. The groundwater monitoring program must be carried out during the active life of the Landfill, during the closure and postclosure maintenance period, and during any interim periods when no wastes are deposited at the Landfill.

30. The Discharger shall describe the effectiveness of the CAP in the semi-annual groundwater monitoring reports due every February 15 and August 15.

31. Quarterly observations and measurements of the static groundwater levels shall be made on all compliance monitoring wells, and records of such observations shall be submitted with the quarterly monitoring reports. Compliance wells affected by pumping shall be measured prior to pumping insofar as is possible. All compliance monitoring wells shall be sounded annually during the fourth quarter to determine total depth.

32. Pumping data regarding fluid pumped from each monitoring well (other than for analytical samples) shall be reported to the Regional Board each month in the monthly waste disposal report and shall include:

    a. Date and quantity of fluid pumped, and the method of disposal or reuse purpose, if reused.

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b. If no fluid was pumped during the month from any monitoring well, a statement to that effect shall be submitted.

Waste Disposal Reporting Requirements

33. The results of the waste-load-checking program shall be submitted in quarterly monitoring reports. The Discharger shall report all hazardous or unacceptable (to this site) wastes inadvertently received at this site and their disposition. The following details shall be included:

a. The source (if known), including the hauler, of the unacceptable wastes and dated received and/or discovered.

b. Identification of waste (if known) and the amount of waste.

c. The name and address of the hauler who removed the waste from this site.

d. The ultimate point of disposal for the waste.

e. Actions by the Discharger to prevent recurrence of the attempted depositing of unacceptable wastes by this source or individual (if applicable).

f. If no unacceptable wastes were received (or discovered) during the month, the report shall so state.

34. The results of dewatered sewage sludge testing shall be submitted in the quarterly monitoring reports. In addition to reporting the quantity of dewatered sewage sludge deposited each month, quarterly samples of incoming sludge shall be obtained and analyzed as follows:

a. A time-composite sludge sample shall be collected during a 24-hour period. The composite sample shall consist of 12 sub-samples taken at two-hour intervals. The sub-samples shall be mixed as completely as possible into a single sample. The total percent solids of the sample shall be reported.

b. An extraction solution of the sludge shall be prepared for analyses using the WET method as contained in 22 CCR, division 4.5, chapter 11, appendix II. All testing shall be done on 48-hour extracts. The extracts shall be analyzed for the soluble threshold limit concentration (STLC) for the following metals: antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, mercury, molybdenum, nickel, selenium, silver, thallium, vanadium, and zinc. The digested

sludge shall also be analyzed quarterly for following parameters: polychlorinated biphenyls (PCBs), trichloroethylene (TCE), perchloroethylene (PCE), carbon tetrachloride, DDT DDE, DDD, Endrin, Lindane, Methoxychlor, Toxaphene, 2,4-D and 2,4,5-TP (Silvex).

c. These results shall be reported in the corresponding quarterly report.

d. If the Discharger performs sludge analyses more frequently than required by this program, the results of those analyses shall be included in the corresponding quarterly report.

35. Wastewater reuse reporting shall accompany quarterly monitoring reports and include the following:

a. A statement that, during the reporting period, all wastewater was used only as specified, and for the uses specified in Order No. R4-2009-XXXX.

b. Approximate acreage and locations receiving reused water for irrigation.

c. Analytical results for wastewater shall be submitted with the corresponding quarterly monitoring report. If a wastewater source was not sampled or measured during the reporting period, the reason for the omission shall be given. If no wastewater was reused from a source, a statement to that effect shall be provided in lieu of analyses.

d. Records of operational problems, mechanical breakdowns, and diversions to emergency storage or disposal associated with any violations, or potential violations of Order No. R4-2009-XXXX.

e. Any corrective actions taken.

f. If all or a portion of the wastewater was not reused because of a failure to meet the limits specified in Order No. R4-2009-XXXX, the report shall so state and identify the disposition of the effluent.

36. Waste disposal reporting of the following information shall be filed with this Regional Board each month:

a. A tabular list of the estimated average monthly quantities (in cubic yards and tons) and types of materials deposited each month.

b. An estimate of the remaining capacity (in cubic yards and tons), and the remaining life of the site in years and months.

c. A certification that all wastes were deposited in compliance with the Regional Board's requirements, and that no wastes were deposited outside of the boundaries of the landfill as specified in Order No. R4-2009-XXXX.

37. Waste disposal information for the following items shall be compiled on a monthly basis and shall accompany quarterly monitoring reports**:**

a. A description of the location and estimate of the seepage rate or flow of all known seeps and springs at the site.

b. The estimated amount of water used at the landfill for landscape irrigation, compaction, dust control, etc., during the month. (If a source other than potable water is used, the source and amount of water from each source shall also be reported).

c. Quantities of liquid pumped from the leachate monitoring sumps and/or extraction wells, including dates or removal, and the ultimate point of disposal, if other than an onsite leachate treatment plant. If no liquid was detected or pumped during the reporting period, a statement to that effect shall be submitted.

d. A map of the site that indicates the area(s) where disposal is taking place or will begin. The map shall be submitted with the annual report. If a new area is landfilled, it shall be identified in the corresponding quarterly report.

Records to be Maintained

38. Written reports shall be maintained by the Discharger or its laboratory and shall be retained for a minimum of five years. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge or when requested by the Regional Board. Such records shall show the following for each sample:

a. Identity of sample and of the monitoring point from which it was taken, along with the identity of the individual who obtained the sample;

b. Date and time of sampling;

c. Date and time that analyses were started and completed, and the name of the personnel performing each analysis;

d. Complete procedures used, including method of preserving the sample, and the identity and volumes of reagents used;

e. Calculations of results; and

f. Results of analyses, and the MDL and PQL for each analysis.

Reports to be Filed with the Board

39. Electronic quarterly and annual monitoring reports shall be submitted pursuant the following schedule. Every five years, the Discharger shall also submit a report concerning the direct analysis of all COCs (COC report), alternating between the monitoring periods. The COC report may be included in a corresponding quarterly report.

Period	Sampling Period	Reporting Date
January – March	March	May 15th
April - June	June	August 15
July – September	September	November 15th
October – December	December	February 15
January – December		May 15(Annual Report)

The Discharger can combine the annual report with the May 15 quarterly report but all required information must be included in the combined report. In the event monitoring is not performed as above because of unforeseen circumstances, substitute monitoring shall be performed as soon as possible after these times, and the reason for the delay shall be given.

40. The quarterly monitoring reports shall be comprised of at least the following:

a. Letter of Transmittal:
A letter detailing the essential points of the monitoring program shall accompany each report. Such a letter shall include a discussion of any requirement violations found since the last such report was submitted, and shall describe actions taken or planned for correcting those violations. If the Discharger has previously submitted a detailed time schedule for correcting said requirement violations, a reference to the correspondence transmitting such schedule will be satisfactory. If no violations have occurred since the last submittal, this shall be stated in the letter of transmittal. Monitoring reports and the letter transmitting the monitoring reports shall be signed by a principal executive officer at the level of vice-president or above, or by his/her duly authorized representative, if such representative is responsible for the overall operation of the facility from which the discharge originates. The letter shall contain a statement by the official, under penalty of perjury, that to the best of the signer's knowledge the report is true, complete, and correct;

b. Each report shall include a compliance evaluation summary. The summary shall contain at least:

i. For each monitored groundwater body, a description and graphical

presentation of the velocity and direction of the groundwater flow under/around the Landfill, based upon water level elevations taken during the collection of the water quality data submitted in the report. In the case where this cannot be determined with meaningful results, a statement to the nature of the groundwater flow and general flow characteristics will suffice.

ii. Pre-Sampling Purge for Samples Obtained from Wells:
For each monitoring point addressed by the report, a description of the method and time of water level measurement, of the type of pump used for purging and the placement of the pump in the well, and of the method of purging (the pumping rate, the equipment and methods used to monitor field pH, temperature, electrical conductivity and turbidity during purging, the calibration of the field equipment, results of the pH, temperature, electrical conductivity, and turbidity testing, and the method of disposing of the purge water).

iii. Sampling:
For each monitoring point addressed by the report, a description of the sampling procedure (number and description of the samples, field blanks, travel blanks, and duplicate samples taken, the date and time of sampling, the name of the person taking the samples, and any other observations).

iv. A separate section titled "Summary of Non-Compliance" which discusses the compliance record and the corrective actions taken or planned that may be needed to bring the Discharger into full compliance with waste discharge requirements. This section shall be located at the front of the report and shall clearly list all non-compliance with discharge requirements.

c. Unless otherwise approved by the Executive Officer, monitoring reports shall be submitted in PDF or JPEG format (tabular laboratory analytical data may be submitted in MS Excel or Access format). The data shall be summarized in such a manner as to clearly illustrate whether the facility is operating in compliance with Order No. R4-2009-XXXX. The cover letter, the main report text, and any tables and/or figures that are directly quoted in the main report, shall be submitted. The submittal shall be signed by a responsible officer(s) of the Discharger. All original laboratory reports, quality assurance and quality control (QA/QC) data, and filed records that are used to prepare the reports must be kept in the Landfill's operating record, as required in 27 CCR section 20415(e)(16). These data must be available for Regional Board staff review, if required.

d. A map or aerial photograph showing the locations of observation stations and monitoring points;

e. Laboratory results for groundwater, surface water, LCRS, reuse water, and dewatered sludge shall be summarized in the report. For each report, include laboratory statements of results of all analyses demonstrating compliance with Item No. 21 of this M&RP;

f. An evaluation of the effectiveness of the run-off/run-on control facilities;

g. A summary and certification of completion of all standard observations listed below for the Landfill and the perimeter of the Landfill.

i. Along the perimeter of the Landfill:

A. Evidence of liquid leaving or entering the Landfill, estimated size of affected area, and flow rate;

B. Evidence of odors: presence or absence, characterization, source, and distance of travel from source; and

C. Evidence of erosion and/or of exposed refuse.

ii. For the Landfill:

A. Evidence of ponded water at any point on the waste management facility;

B. Evidence of odors: presence or absence, characterization, source, and distance of travel from source;

C. Evidence of erosion and/or of exposed refuse; and

41. Contingency Reporting

a. The Discharger shall report by telephone to Regional Board staff any seepage from the disposal area immediately after it is discovered. A written report shall be filed with the Regional Board within seven days of the verbal report, containing at least the following information:

i. A map showing the location(s) of seepage;

ii. An estimate of the flow rate;

iii. A description of the nature of the discharge (e.g., all pertinent observations and analyses); and

iv. Corrective measures underway or proposed.

42. The Discharger shall submit an annual summary report to the Regional Board covering the previous monitoring year. The annual report shall be submitted no later than May 15 of each year. This report shall contain:

a. A graphical presentation of analytical data [27 CCR section 20415(e)(14)]:
For each monitoring point, submit in graphical format the laboratory analytical data for all samples taken within at least the previous five calendar years. Each such graph shall plot the concentration of one or more constituents over time for a given monitoring point, at a scale appropriate to show trends or variations in water quality. The graphs shall plot each datum, rather than plotting mean values. For any given constituent or parameter, the scale for background plots shall be the same as that used to plot downgradient data. On the basis of any aberrations noted in the plotted date, the Executive Officer may direct the Discharger to carry out a preliminary investigation [27 CCR section 20080(d)(2)], the results of which will determine whether or not a release is indicated;

b. A comprehensive discussion of the compliance record, and the result of any corrective actions taken, or planned, which may be needed to bring the Discharger into full compliance with the WDRs;

c. A written summary of the groundwater analyses, indicating any changes made since the previous annual report;

d. A discussion of any routinely-revised intra-well background monitoring data; and

e. An evaluation of the effectiveness of the run on/run-off control facilities, pursuant to 27 CCR section 20340 (b-d).

43. Reporting

a. Each monitoring report shall contain the following statement:

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

b. A duly authorized representative of the Discharger may sign the documents if:

i. The authorization is made in writing by the person described above;

ii. The authorization specified an individual or person having responsibility for the overall operation of the regulated disposal system; and

iii. The written authorization is submitted to the Executive Officer.

c. Submit monitoring reports to:

California Regional Water Quality Control Board
Los Angeles Region
320 W. 4th Street, Suite 200
Los Angeles, California 90013
ATTN: Information Technology Unit

Ordered by _____

Tracy J. Egoscue
Executive Officer
April 2, 2009

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TABLE 1 – CONSTITUENTS DETECTED AND CONFIRMED DURING ANNUAL LEACHATE MONITORING (April 2, 2009)

Constituent	COC Lists[1]		
	LCRS[2]	DLCS[2]	PSLC[2]
General Parameters			
Ammonia Nitrogen	✔	✔	✔
Boron	✔	✔	✔
Electrical Conductivity	✔	✔	✔
pH	✔	✔	✔
Total Alkalinity	✔	✔	✔
Total Dissolved Solids	✔	✔	✔
Total Hardness	✔	✔	✔
Anions			
Bicarbonate Alkalinity	✔	✔	✔
Chloride	✔	✔	✔
Fluoride	✔	✔	✔
Nitrate Nitrogen	✔	✔	---
Sulfate	✔	✔	✔
Cations			
Calcium Hardness	✔	✔	✔
Iron	✔ T&S[3]	✔ T&S	✔ T&S
Magnesium Hardness	✔	✔	✔
Manganese	✔ T&S	✔ T&S	✔ T&S
Potassium	✔	✔	✔
Sodium	✔	✔	✔
Organics			
Soluble Biochemical Oxygen Demand	✔ T&S	✔ T&S	✔ T&S
Soluble Chemical Oxygen Demand	✔ T&S	✔ T&S	✔ T&S
Total Organic Carbon	✔	✔	✔
Total Organic Halogen (Tox)	✔	✔	✔

1. ✔ = On confirmed COC List; "---" = Not on COC List.
2. LCRS = 80-acre liquid collection and removal system;
   PSLC = liquids in Liner 1-, Liner 2-, P-, 97-, 99-, Southeastern-, and North Ridge (Phase 1 and 2a) Cut Liner and LCRS collection systems;
   DLCS = liquids in the D-Cut collection systems
3. T = Total portion of constituent (Unfiltered);
   S = Soluble portion of constituent (Filtered).

TABLE 1 (Cont.) – CONSTITUENTS DETECTED AND CONFIRMED DURING ANNUAL LEACHATE MONITORING (April 2, 2009)

Constituent	COC Lists[1]		
	LCRS[2]	DLCS[2]	PSLC[2]
General Parameters			
Ammonia Nitrogen	✔	✔	✔
Boron	✔	✔	✔
Electrical Conductivity	✔	✔	✔
pH	✔	✔	✔
Total Alkalinity	✔	✔	✔
Total Dissolved Solids	✔	✔	✔
Total Hardness	✔	✔	✔
Anions			
Bicarbonate Alkalinity	✔	✔	✔
Chloride	✔	✔	✔
Fluoride	✔	✔	✔
Nitrate Nitrogen	✔	✔	---
Sulfate	✔	✔	✔
Cations			
Calcium Hardness	✔	✔	✔
Iron	✔ T&S[3]	✔ T&S	✔ T&S
Magnesium Hardness	✔	✔	✔
Manganese	✔ T&S	✔ T&S	✔ T&S
Potassium	✔	✔	✔
Sodium	✔	✔	✔
Organics			
Soluble Biochemical Oxygen Demand	✔ T&S	✔ T&S	✔ T&S
Soluble Chemical Oxygen Demand	✔ T&S	✔ T&S	✔ T&S
Total Organic Carbon	✔	✔	✔
Total Organic Halogen (Tox)	✔	✔	✔

1. ✔ = On confirmed COC List; "---" = Not on COC List.
2. LCRS = 80-acre liquid collection and removal system;
   PSLC = liquids in Liner 1-, Liner 2-, P-, 97-, 99-, Southeastern-, and North Ridge (Phase 1 and 2a) Cut Liner and LCRS collection systems;
   DLCS = liquids in the D-Cut collection systems
3. T = Total portion of constituent (Unfiltered);
   S = Soluble portion of constituent (Filtered).

TABLE 2 – MPars FOR MONTORING PROGRAM WELLS (April 2, 2009)

MPars for Monitoring Well R02A

Group	Constituent	
General	pH	✔
General	TDS	TBD
General	Chloride	TBD
General	Sulfate	TBD
General	Ammonia, Nitrogen	TBD
General	Nitrate Nitrogen	TBD
General	Boron	✔
General	TOX	TBD
General	Calcium Hardness	✔
General	Magnesium Hardness	✔
General	Sodium	✔
General	Potassium	✔
General	Total Alkalinity	✔
General	Bicarbonate Alkalinity	✔
General	BOD	TBD
General	COD	TBD
General	TOC	TBD
General	nitrite	TBD
Metal	Chromium	TBD
Metal	Mercury	TBD
Metal	Lead	TBD
VOC	Acetone	TM
VOC	Acrylonitrile	ND
VOC	Benzene	TM
VOC	Bromochloromethane	ND
VOC	Bromodichloromethane	ND
VOC	Bromoform	ND
VOC	Carbon disulfide	ND
VOC	Carbon tetrachloride	ND
VOC	Chlorobenzene	TM
VOC	Chloroethane	ND
VOC	Chloroform	ND
VOC	Dibromochloromethane	ND
VOC	1,2-Dibromo-3-Chloropropane	ND

Group	Constituent	
VOC	1,2-Dibromoethane	ND
VOC	o-Dichlorobenzene	ND
VOC	p-Dichlorobenzene	TM
VOC	trans-1,4-Dichloro-2-butene	ND
VOC	1,1-Dichloroethane	TM
VOC	1,2-Dichloroethane	TM
VOC	1,1-Dichloroethylene	TM
VOC	cis-1,2-Dichloroethylene	TM
VOC	trans-1,2-Dichloroethylene	TM
VOC	1,2-Dichloropropane	ND
VOC	cis-1,3-Dichloropropene	ND
VOC	trans-1,3-Dichloropropene	ND
VOC	Ethyl benzene	ND
VOC	2-Hexanone	ND
VOC	Methyl bromide	ND
VOC	Methyl chloride	ND
VOC	Methyl Ethyl Ketone	ND
VOC	Methyl iodide	ND
VOC	4-Methyl-2-pentanone	ND
VOC	Methylene bromide	ND
VOC	Methylene chloride	TM
VOC	Styrene	ND
VOC	1,1,1,2-Tetrachloroethane	ND
VOC	1,1,2,2-Tetrachloroethane	ND
VOC	Tetrachloroethylene	TM
VOC	Toluene	ND
VOC	1,1,1,-Trichloroethane	TM
VOC	1,1,2,-Trichloroethane	ND
VOC	Trichloroethylene	TM
VOC	Trichlorofluoromethane (CFC11)	ND
VOC	1,2,3-Trichloropropane	ND
VOC	Vinyl acetate	ND
VOC	Vinyl Chloride	TM
VOC	Xylenes, m- & o+p	ND

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The units for concentration limits indicated are mg/L.

✔ = MPar not subject to routine statistical analysis.
ND = The concentration limit for man-made constituents is the laboratory detection limit.
– = Constituent not required to be monitored based on LCRS monitoring results.
TM = Tracking mode; MPar concentration versus time plot required.
TBD = Concentration Limit to be determined using Statistical Data Analysis Methodology.

TABLE 2 (CONT.) – MPars FOR MONTORING PROGRAM WELLS (April 2, 2009)

MPars for Monitoring Well M02B

Group	Constituent	
General	pH	✔
General	TDS	TBD
General	Chloride	TBD
General	Sulfate	TBD
General	Ammonia, Nitrogen	TBD
General	Nitrate Nitrogen	TBD
General	Boron	✔
General	TOX	TBD
General	Calcium Hardness	✔
General	Magnesium Hardness	✔
General	Sodium	✔
General	Potassium	✔
General	Total Alkalinity	✔
General	Bicarbonate Alkalinity	✔
General	BOD	TBD
General	COD	TBD
General	TOC	TBD
General	nitrite	TBD
Metal	Chromium	TBD
Metal	Mercury	TBD
Metal	Lead	TBD
VOC	Acetone	ND
VOC	Acrylonitrile	ND
VOC	Benzene	ND
VOC	Bromochloromethane	ND
VOC	Bromodichloromethane	ND
VOC	Bromoform	ND
VOC	Carbon disulfide	ND
VOC	Carbon tetrachloride	ND
VOC	Chlorobenzene	ND
VOC	Chloroethane	ND
VOC	Chloroform	ND
VOC	Dibromochloromethane	ND
VOC	1,2-Dibromo-3-Chloropropane	ND

Group	Constituent	
VOC	1,2-Dibromoethane	ND
VOC	o-Dichlorobenzene	ND
VOC	p-Dichlorobenzene	ND
VOC	trans-1,4-Dichloro-2-butene	ND
VOC	1,1-Dichloroethane	ND
VOC	1,2-Dichloroethane	ND
VOC	1,1-Dichloroethylene	ND
VOC	cis-1,2-Dichloroethylene	ND
VOC	trans-1,2-Dichloroethylene	ND
VOC	1,2-Dichloropropane	ND
VOC	cis-1,3-Dichloropropene	ND
VOC	trans-1,3-Dichloropropene	ND
VOC	Ethyl benzene	ND
VOC	2-Hexanone	ND
VOC	Methyl bromide	ND
VOC	Methyl chloride	ND
VOC	Methyl Ethyl Ketone	ND
VOC	Methyl iodide	ND
VOC	4-Methyl-2-pentanone	ND
VOC	Methylene bromide	ND
VOC	Methylene chloride	TM
VOC	Styrene	ND
VOC	1,1,1,2-Tetrachloroethane	ND
VOC	1,1,2,2-Tetrachloroethane	ND
VOC	Tetrachloroethylene	TM
VOC	Toluene	TM
VOC	1,1,1,-Trichloroethane	TM
VOC	1,1,2,-Trichloroethane	ND
VOC	Trichloroethylene	ND
VOC	Trichlorofluoromethane (CFC11)	ND
VOC	1,2,3-Trichloropropane	ND
VOC	Vinyl acetate	ND
VOC	Vinyl Chloride	ND
VOC	Xylenes, m- & o+p	ND

TENTATIVE

The units for concentration limits indicated are mg/L.

✔ = MPar not subject to routine statistical analysis.
ND = The concentration limit for man-made constituents is the laboratory detection limit.
- = Constituent not required to be monitored based on LCRS monitoring results.
TM = Tracking mode; MPar concentration versus time plot required.
TBD = Concentration Limit to be determined using Statistical Data Analysis Methodology.

TABLE 2 (CONT.) – MPars FOR MONTORING PROGRAM WELLS (April 2, 2009)

MPars for Monitoring Well M22B

Group	Constituent	
General	pH	✔
General	TDS	TBD
General	Chloride	TBD
General	Sulfate	TBD
General	Ammonia, Nitrogen	TBD
General	Nitrate Nitrogen	TBD
General	Boron	✔
General	TOX	TBD
General	Calcium Hardness	✔
General	Magnesium Hardness	✔
General	Sodium	✔
General	Potassium	✔
General	Total Alkalinity	✔
General	Bicarbonate Alkalinity	✔
General	BOD	TBD
General	COD	TBD
General	TOC	TBD
General	nitrite	TBD
Metal	Chromium	TBD
Metal	Mercury	TBD
Metal	Lead	TBD
VOC	Acetone	ND
VOC	Acrylonitrile	ND
VOC	Benzene	ND
VOC	Bromochloromethane	ND
VOC	Bromodichloromethane	ND
VOC	Bromoform	ND
VOC	Carbon disulfide	ND
VOC	Carbon tetrachloride	ND
VOC	Chlorobenzene	ND
VOC	Chloroethane	ND
VOC	Chloroform	ND
VOC	Dibromochloromethane	ND
VOC	1,2-Dibromo-3-Chloropropane	ND

Group	Constituent	
VOC	1,2-Dibromoethane	TM
VOC	o-Dichlorobenzene	ND
VOC	p-Dichlorobenzene	TM
VOC	trans-1,4-Dichloro-2-butene	ND
VOC	1,1-Dichloroethane	TM
VOC	1,2-Dichloroethane	TM
VOC	1,1-Dichloroethylene	ND
VOC	cis-1,2-Dichloroethylene	TM
VOC	trans-1,2-Dichloroethylene	ND
VOC	1,2-Dichloropropane	ND
VOC	cis-1,3-Dichloropropene	ND
VOC	trans-1,3-Dichloropropene	ND
VOC	Ethyl benzene	ND
VOC	2-Hexanone	ND
VOC	Methyl bromide	ND
VOC	Methyl chloride	ND
VOC	Methyl Ethyl Ketone	ND
VOC	Methyl iodide	ND
VOC	4-Methyl-2-pentanone	ND
VOC	Methylene bromide	ND
VOC	Methylene chloride	TM
VOC	Styrene	ND
VOC	1,1,1,2-Tetrachloroethane	ND
VOC	1,1,2,2-Tetrachloroethane	ND
VOC	Tetrachloroethylene	ND
VOC	Toluene	ND
VOC	1,1,1,-Trichloroethane	ND
VOC	1,1,2,-Trichloroethane	ND
VOC	Trichloroethylene	TM
VOC	Trichlorofluoromethane (CFC11)	ND
VOC	1,2,3-Trichloropropane	ND
VOC	Vinyl acetate	ND
VOC	Vinyl Chloride	TM
VOC	Xylenes, m- & o+p	ND

TENTATIVE

The units for concentration limits indicated are mg/L.

✔ = MPar not subject to routine statistical analysis.
ND = The concentration limit for man-made constituents is the laboratory detection limit.
- = Constituent not required to be monitored based on LCRS monitoring results.
TM = Tracking mode; MPar concentration versus time plot required.
TBD = Concentration Limit to be determined using Statistical Data Analysis Methodology.

TABLE 2 (CONT.) – MPars FOR MONTORING PROGRAM WELLS (April 2, 2009)

MPars for Monitoring Well R06A

Group	Constituent	
General	pH	✔
General	TDS	TBD
General	Chloride	TBD
General	Sulfate	TBD
General	Ammonia, Nitrogen	TBD
General	Nitrate Nitrogen	TBD
General	Boron	✔
General	TOX	TBD
General	Calcium Hardness	✔
General	Magnesium Hardness	✔
General	Sodium	✔
General	Potassium	✔
General	Total Alkalinity	✔
General	Bicarbonate Alkalinity	✔
General	BOD	TBD
General	COD	TBD
General	TOC	TBD
General	nitrite	TBD
Metal	Chromium	TBD
Metal	Mercury	TBD
Metal	Lead	TBD
VOC	Acetone	TM
VOC	Acrylonitrile	ND
VOC	Benzene	TM
VOC	Bromochloromethane	ND
VOC	Bromodichloromethane	ND
VOC	Bromoform	ND
VOC	Carbon disulfide	ND
VOC	Carbon tetrachloride	TM
VOC	Chlorobenzene	ND
VOC	Chloroethane	TM
VOC	Chloroform	ND
VOC	Dibromochloromethane	ND
VOC	1,2-Dibromo-3-Chloropropane	ND

Group	Constituent	
VOC	1,2-Dibromoethane	ND
VOC	o-Dichlorobenzene	ND
VOC	p-Dichlorobenzene	ND
VOC	trans-1,4-Dichloro-2-butene	ND
VOC	1,1-Dichloroethane	TM
VOC	1,2-Dichloroethane	TM
VOC	1,1-Dichloroethylene	TM
VOC	cis-1,2-Dichloroethylene	TM
VOC	trans-1,2-Dichloroethylene	TM
VOC	1,2-Dichloropropane	TM
VOC	cis-1,3-Dichloropropene	ND
VOC	trans-1,3-Dichloropropene	ND
VOC	Ethyl benzene	ND
VOC	2-Hexanone	ND
VOC	Methyl bromide	ND
VOC	Methyl chloride	ND
VOC	Methyl Ethyl Ketone	TM
VOC	Methyl iodide	ND
VOC	4-Methyl-2-pentanone	ND
VOC	Methylene bromide	ND
VOC	Methylene chloride	TM
VOC	Styrene	ND
VOC	1,1,1,2-Tetrachloroethane	ND
VOC	1,1,2,2-Tetrachloroethane	ND
VOC	Tetrachloroethylene	TM
VOC	Toluene	TM
VOC	1,1,1,-Trichloroethane	TM
VOC	1,1,2,-Trichloroethane	ND
VOC	Trichloroethylene	TM
VOC	Trichlorofluoromethane (CFC11)	ND
VOC	1,2,3-Trichloropropane	ND
VOC	Vinyl acetate	ND
VOC	Vinyl Chloride	TM
VOC	Xylenes, m- & o+p	ND

TENTATIVE

The units for concentration limits indicated are mg/L.

✔ = MPar not subject to routine statistical analysis.
ND = The concentration limit for man-made constituents is the laboratory detection limit.
- = Constituent not required to be monitored based on LCRS monitoring results.
TM = Tracking mode; MPar concentration versus time plot required.
TBD = Concentration Limit to be determined using Statistical Data Analysis Methodology.

TABLE 2 (CONT.) – MPars FOR MONTORING PROGRAM WELLS (April 2, 2009)

MPars for Monitoring Well R06B

Group	Constituent	
General	pH	✔
General	TDS	TBD
General	Chloride	TBD
General	Sulfate	TBD
General	Ammonia, Nitrogen	TBD
General	Nitrate Nitrogen	TBD
General	Boron	✔
General	TOX	TBD
General	Calcium Hardness	✔
General	Magnesium Hardness	✔
General	Sodium	✔
General	Potassium	✔
General	Total Alkalinity	✔
General	Bicarbonate Alkalinity	✔
General	BOD	TBD
General	COD	TBD
General	TOC	TBD
General	nitrite	TBD
Metal	Chromium	TBD
Metal	Mercury	TBD
Metal	Lead	TBD
VOC	Acetone	TM
VOC	Acrylonitrile	ND
VOC	Benzene	TM
VOC	Bromochloromethane	ND
VOC	Bromodichloromethane	ND
VOC	Bromoform	ND
VOC	Carbon disulfide	ND
VOC	Carbon tetrachloride	TM
VOC	Chlorobenzene	ND
VOC	Chloroethane	ND
VOC	Chloroform	ND
VOC	Dibromochloromethane	ND
VOC	1,2-Dibromo-3-Chloropropane	ND

Group	Constituent	
VOC	1,2-Dibromoethane	ND
VOC	o-Dichlorobenzene	ND
VOC	p-Dichlorobenzene	ND
VOC	trans-1,4-Dichloro-2-butene	ND
VOC	1,1-Dichloroethane	TM
VOC	1,2-Dichloroethane	TM
VOC	1,1-Dichloroethylene	TM
VOC	cis-1,2-Dichloroethylene	TM
VOC	trans-1,2-Dichloroethylene	TM
VOC	1,2-Dichloropropane	TM
VOC	cis-1,3-Dichloropropene	ND
VOC	trans-1,3-Dichloropropene	ND
VOC	Ethyl benzene	ND
VOC	2-Hexanone	ND
VOC	Methyl bromide	ND
VOC	Methyl chloride	ND
VOC	Methyl Ethyl Ketone	ND
VOC	Methyl iodide	ND
VOC	4-Methyl-2-pentanone	ND
VOC	Methylene bromide	ND
VOC	Methylene chloride	TM
VOC	Styrene	ND
VOC	1,1,1,2-Tetrachloroethane	ND
VOC	1,1,2,2-Tetrachloroethane	ND
VOC	Tetrachloroethylene	TM
VOC	Toluene	TM
VOC	1,1,1,-Trichloroethane	TM
VOC	1,1,2,-Trichloroethane	ND
VOC	Trichloroethylene	TM
VOC	Trichlorofluoromethane (CFC11)	ND
VOC	1,2,3-Trichloropropane	ND
VOC	Vinyl acetate	ND
VOC	Vinyl Chloride	TM
VOC	Xylenes, m- & o+p	ND

TENTATIVE

The units for concentration limits indicated are mg/L.

✔ = MPar not subject to routine statistical analysis.
ND = The concentration limit for man-made constituents is the laboratory detection limit.
\- = Constituent not required to be monitored based on LCRS monitoring results.
TM = Tracking mode; MPar concentration versus time plot required.
TBD = Concentration Limit to be determined using Statistical Data Analysis Methodology.

TABLE 2 (CONT.) – MPars FOR MONTORING PROGRAM WELLS (April 2, 2009)

MPars for Monitoring Well EMP-10

Group	Constituent	
General	pH	✔
General	TDS	TBD
General	Chloride	TBD
General	Sulfate	TBD
General	Ammonia, Nitrogen	TBD
General	Nitrate Nitrogen	TBD
General	Boron	✔
General	TOX	TBD
General	Calcium Hardness	✔
General	Magnesium Hardness	✔
General	Sodium	✔
General	Potassium	✔
General	Total Alkalinity	✔
General	Bicarbonate Alkalinity	✔
General	BOD	TBD
General	COD	TBD
General	TOC	TBD
General	nitrite	TBD
Metal	Chromium	TBD
Metal	Mercury	TBD
Metal	Lead	TBD
VOC	Acetone	TM
VOC	Acrylonitrile	ND
VOC	Benzene	ND
VOC	Bromochloromethane	ND
VOC	Bromodichloromethane	ND
VOC	Bromoform	ND
VOC	Carbon disulfide	ND
VOC	Carbon tetrachloride	ND
VOC	Chlorobenzene	ND
VOC	Chloroethane	ND
VOC	Chloroform	ND
VOC	Dibromochloromethane	ND
VOC	1,2-Dibromo-3-Chloropropane	ND

Group	Constituent	
VOC	1,2-Dibromoethane	ND
VOC	o-Dichlorobenzene	ND
VOC	p-Dichlorobenzene	ND
VOC	trans-1,4-Dichloro-2-butene	ND
VOC	1,1-Dichloroethane	ND
VOC	1,2-Dichloroethane	TM
VOC	1,1-Dichloroethylene	ND
VOC	cis-1,2-Dichloroethylene	ND
VOC	trans-1,2-Dichloroethylene	ND
VOC	1,2-Dichloropropane	ND
VOC	cis-1,3-Dichloropropene	ND
VOC	trans-1,3-Dichloropropene	ND
VOC	Ethyl benzene	ND
VOC	2-Hexanone	ND
VOC	Methyl bromide	ND
VOC	Methyl chloride	ND
VOC	Methyl Ethyl Ketone	ND
VOC	Methyl iodide	ND
VOC	4-Methyl-2-pentanone	ND
VOC	Methylene bromide	ND
VOC	Methylene chloride	TM
VOC	Styrene	ND
VOC	1,1,1,2-Tetrachloroethane	ND
VOC	1,1,2,2-Tetrachloroethane	ND
VOC	Tetrachloroethylene	ND
VOC	Toluene	ND
VOC	1,1,1,-Trichloroethane	ND
VOC	1,1,2,-Trichloroethane	ND
VOC	Trichloroethylene	ND
VOC	Trichlorofluoromethane (CFC11)	ND
VOC	1,2,3-Trichloropropane	ND
VOC	Vinyl acetate	ND
VOC	Vinyl Chloride	ND
VOC	Xylenes, m- & o+p	ND

TENTATIVE

The units for concentration limits indicated are mg/L.

✔ = MPar not subject to routine statistical analysis.
ND = The concentration limit for man-made constituents is the laboratory detection limit.
- = Constituent not required to be monitored based on LCRS monitoring results.
TM = Tracking mode; MPar concentration versus time plot required.
TBD = Concentration Limit to be determined using Statistical Data Analysis Methodology.

TABLE 2 (CONT.) – MPars FOR MONTORING PROGRAM WELLS (April 2, 2009)
MPars for Monitoring Well EMP-11

Group	Constituent	
General	pH	✔
General	TDS	TBD
General	Chloride	TBD
General	Sulfate	TBD
General	Ammonia, Nitrogen	TBD
General	Nitrate Nitrogen	TBD
General	Boron	✔
General	TOX	TBD
General	Calcium Hardness	✔
General	Magnesium Hardness	✔
General	Sodium	✔
General	Potassium	✔
General	Total Alkalinity	✔
General	Bicarbonate Alkalinity	✔
General	BOD	TBD
General	COD	TBD
General	TOC	TBD
General	nitrite	TBD
Metal	Chromium	TBD
Metal	Mercury	TBD
Metal	Lead	TBD
VOC	Acetone	ND
VOC	Acrylonitrile	ND
VOC	Benzene	✔ a
VOC	Bromochloromethane	ND
VOC	Bromodichloromethane	ND
VOC	Bromoform	ND
VOC	Carbon disulfide	ND
VOC	Carbon tetrachloride	ND
VOC	Chlorobenzene	ND
VOC	Chloroethane	ND
VOC	Chloroform	ND
VOC	Dibromochloromethane	ND
VOC	1,2-Dibromo-3-Chloropropane	ND

Group	Constituent	
VOC	1,2-Dibromoethane	ND
VOC	o-Dichlorobenzene	ND
VOC	p-Dichlorobenzene	ND
VOC	trans-1,4-Dichloro-2-butene	ND
VOC	1,1-Dichloroethane	ND
VOC	1,2-Dichloroethane	TM
VOC	1,1-Dichloroethylene	ND
VOC	cis-1,2-Dichloroethylene	ND
VOC	trans-1,2-Dichloroethylene	ND
VOC	1,2-Dichloropropane	ND
VOC	cis-1,3-Dichloropropene	ND
VOC	trans-1,3-Dichloropropene	ND
VOC	Ethyl benzene	✔ a
VOC	2-Hexanone	ND
VOC	Methyl bromide	ND
VOC	Methyl chloride	ND
VOC	Methyl Ethyl Ketone	TM
VOC	Methyl iodide	ND
VOC	4-Methyl-2-pentanone	ND
VOC	Methylene bromide	ND
VOC	Methylene chloride	TM
VOC	Styrene	ND
VOC	1,1,1,2-Tetrachloroethane	ND
VOC	1,1,2,2-Tetrachloroethane	ND
VOC	Tetrachloroethylene	ND
VOC	Toluene	✔ a
VOC	1,1,1,-Trichloroethane	ND
VOC	1,1,2,-Trichloroethane	ND
VOC	Trichloroethylene	ND
VOC	Trichlorofluoromethane (CFC11)	ND
VOC	1,2,3-Trichloropropane	ND
VOC	Vinyl acetate	ND
VOC	Vinyl Chloride	ND
VOC	Xylenes, m- & o+p	✔ a

TENTATIVE

The units for concentration limits indicated are mg/L.

✔ = MPar not subject to routine statistical analysis.
ND = The concentration limit for man-made constituents is the laboratory detection limit.
- = Constituent not required to be monitored based on LCRS monitoring results.
TM = Tracking mode; MPar concentration versus time plot required.
TBD = Concentration Limit to be determined using Statistical Data Analysis Methodology.
a = This constituent is naturally occuring in this well.

TABLE 2 (CONT.) – MPars FOR MONTORING PROGRAM WELLS (April 2, 2009)

MPars for Monitoring Well M18D

Group	Constituent	
General	pH	6.84
General	TDS	706.3
General	Chloride	44.1
General	Sulfate	175
General	Ammonia, Nitrogen	TBD
General	Nitrate Nitrogen	9.87
General	Boron	✔
General	TOX	TBD
General	Calcium Hardness	✔
General	Magnesium Hardness	✔
General	Sodium	✔
General	Potassium	✔
General	Total Alkalinity	✔
General	Bicarbonate Alkalinity	✔
General	BOD	TBD
General	COD	TBD
General	TOC	TBD
General	nitrite	TBD
Metal	Chromium	-
Metal	Mercury	-
Metal	Lead	-
VOC	Acetone	-
VOC	Acrylonitrile	-
VOC	Benzene	ND
VOC	Bromochloromethane	-
VOC	Bromodichloromethane	-
VOC	Bromoform	-
VOC	Carbon disulfide	-
VOC	Carbon tetrachloride	-
VOC	Chlorobenzene	ND
VOC	Chloroethane	-
VOC	Chloroform	-
VOC	Dibromochloromethane	-
VOC	1,2-Dibromo-3-Chloropropane	-

Group	Constituent	
VOC	1,2-Dibromoethane	-
VOC	o-Dichlorobenzene	ND
VOC	p-Dichlorobenzene	ND
VOC	trans-1,4-Dichloro-2-butene	-
VOC	1,1-Dichloroethane	ND
VOC	1,2-Dichloroethane	ND
VOC	1,1-Dichloroethylene	ND
VOC	cis-1,2-Dichloroethylene	ND
VOC	trans-1,2-Dichloroethylene	ND
VOC	1,2-Dichloropropane	ND
VOC	cis-1,3-Dichloropropene	-
VOC	trans-1,3-Dichloropropene	-
VOC	Ethyl benzene	ND
VOC	2-Hexanone	-
VOC	Methyl bromide	-
VOC	Methyl chloride	-
VOC	Methyl Ethyl Ketone	-
VOC	Methyl iodide	-
VOC	4-Methyl-2-pentanone	-
VOC	Methylene bromide	-
VOC	Methylene chloride	-
VOC	Styrene	-
VOC	1,1,1,2-Tetrachloroethane	-
VOC	1,1,2,2-Tetrachloroethane	-
VOC	Tetrachloroethylene	ND
VOC	Toluene	ND
VOC	1,1,1,-Trichloroethane	-
VOC	1,1,2,-Trichloroethane	-
VOC	Trichloroethylene	ND
VOC	Trichlorofluoromethane (CFC11)	ND
VOC	1,2,3-Trichloropropane	-
VOC	Vinyl acetate	-
VOC	Vinyl Chloride	ND
VOC	Xylenes, m- & o+p	-

TENTATIVE

The units for concentration limits indicated are mg/L.

✔ = MPar not subject to routine statistical analysis.

ND = The concentration limit for man-made constituents is the laboratory detection limit.

\- = Constituent not required to be monitored based on LCRS monitoring results.

TM = Tracking mode; MPar concentration versus time plot required.

TBD = Concentration Limit to be determined using Statistical Data Analysis Methodology.

TABLE 2 (CONT.) – MPars FOR MONTORING PROGRAM WELLS (April 2, 2009)

MPars for Monitoring Well M19R

Group	Constituent	
General	pH	5.86
General	TDS	3,286
General	Chloride	98.7
General	Sulfate	2,029
General	Ammonia, Nitrogen	TBD
General	Nitrate Nitrogen	0.451
General	Boron	✔
General	TOX	TBD
General	Calcium Hardness	✔
General	Magnesium Hardness	✔
General	Sodium	✔
General	Potassium	✔
General	Total Alkalinity	✔
General	Bicarbonate Alkalinity	✔
General	BOD	TBD
General	COD	TBD
General	TOC	TBD
General	nitrite	TBD
Metal	Chromium	-
Metal	Mercury	-
Metal	Lead	-
VOC	Acetone	-
VOC	Acrylonitrile	-
VOC	Benzene	ND
VOC	Bromochloromethane	-
VOC	Bromodichloromethane	-
VOC	Bromoform	-
VOC	Carbon disulfide	-
VOC	Carbon tetrachloride	-
VOC	Chlorobenzene	ND
VOC	Chloroethane	-
VOC	Chloroform	-
VOC	Dibromochloromethane	-
VOC	1,2-Dibromo-3-Chloropropane	-

Group	Constituent	
VOC	1,2-Dibromoethane	-
VOC	o-Dichlorobenzene	ND
VOC	p-Dichlorobenzene	ND
VOC	trans-1,4-Dichloro-2-butene	-
VOC	1,1-Dichloroethane	ND
VOC	1,2-Dichloroethane	ND
VOC	1,1-Dichloroethylene	ND
VOC	cis-1,2-Dichloroethylene	ND
VOC	trans-1,2-Dichloroethylene	ND
VOC	1,2-Dichloropropane	ND
VOC	cis-1,3-Dichloropropene	-
VOC	trans-1,3-Dichloropropene	-
VOC	Ethyl benzene	ND
VOC	2-Hexanone	-
VOC	Methyl bromide	-
VOC	Methyl chloride	-
VOC	Methyl Ethyl Ketone	-
VOC	Methyl iodide	-
VOC	4-Methyl-2-pentanone	-
VOC	Methylene bromide	-
VOC	Methylene chloride	-
VOC	Styrene	-
VOC	1,1,1,2-Tetrachloroethane	-
VOC	1,1,2,2-Tetrachloroethane	-
VOC	Tetrachloroethylene	ND
VOC	Toluene	ND
VOC	1,1,1,-Trichloroethane	-
VOC	1,1,2,-Trichloroethane	-
VOC	Trichloroethylene	ND
VOC	Trichlorofluoromethane (CFC11)	ND
VOC	1,2,3-Trichloropropane	-
VOC	Vinyl acetate	-
VOC	Vinyl Chloride	ND
VOC	Xylenes, m- & o+p	-

TENTATIVE

The units for concentration limits indicated are mg/L.

✔ = MPar not subject to routine statistical analysis.

ND = The concentration limit for man-made constituents is the laboratory detection limit.

\- = Constituent not required to be monitored based on LCRS monitoring results.

TM = Tracking mode; MPar concentration versus time plot required.

TBD = Concentration Limit to be determined using Statistical Data Analysis Methodology.

TABLE 2 (CONT.) – MPars FOR MONTORING PROGRAM WELLS (April 2, 2009)

MPars for Monitoring Well R07A

Group	Constituent	
General	pH	✔
General	TDS	TBD
General	Chloride	TBD
General	Sulfate	TBD
General	Ammonia, Nitrogen	TBD
General	Nitrate Nitrogen	TBD
General	Boron	✔
General	TOX	TBD
General	Calcium Hardness	✔
General	Magnesium Hardness	✔
General	Sodium	✔
General	Potassium	✔
General	Total Alkalinity	✔
General	Bicarbonate Alkalinity	✔
General	BOD	TBD
General	COD	TBD
General	TOC	TBD
General	nitrite	TBD
Metal	Chromium	TBD
Metal	Mercury	TBD
Metal	Lead	TBD
VOC	Acetone	ND
VOC	Acrylonitrile	ND
VOC	Benzene	TM
VOC	Bromochloromethane	ND
VOC	Bromodichloromethane	ND
VOC	Bromoform	ND
VOC	Carbon disulfide	ND
VOC	Carbon tetrachloride	ND
VOC	Chlorobenzene	TM
VOC	Chloroethane	TM
VOC	Chloroform	ND
VOC	Dibromochloromethane	ND
VOC	1,2-Dibromo-3-Chloropropane	ND

Group	Constituent	
VOC	1,2-Dibromoethane	ND
VOC	o-Dichlorobenzene	TM
VOC	p-Dichlorobenzene	TM
VOC	trans-1,4-Dichloro-2-butene	ND
VOC	1,1-Dichloroethane	TM
VOC	1,2-Dichloroethane	TM
VOC	1,1-Dichloroethylene	TM
VOC	cis-1,2-Dichloroethylene	TM
VOC	trans-1,2-Dichloroethylene	TM
VOC	1,2-Dichloropropane	TM
VOC	cis-1,3-Dichloropropene	ND
VOC	trans-1,3-Dichloropropene	ND
VOC	Ethyl benzene	ND
VOC	2-Hexanone	ND
VOC	Methyl bromide	ND
VOC	Methyl chloride	ND
VOC	Methyl Ethyl Ketone	ND
VOC	Methyl iodide	ND
VOC	4-Methyl-2-pentanone	ND
VOC	Methylene bromide	ND
VOC	Methylene chloride	TM
VOC	Styrene	ND
VOC	1,1,1,2-Tetrachloroethane	ND
VOC	1,1,2,2-Tetrachloroethane	TM
VOC	Tetrachloroethylene	TM
VOC	Toluene	TM
VOC	1,1,1,-Trichloroethane	ND
VOC	1,1,2,-Trichloroethane	ND
VOC	Trichloroethylene	TM
VOC	Trichlorofluoromethane (CFC11)	ND
VOC	1,2,3-Trichloropropane	ND
VOC	Vinyl acetate	ND
VOC	Vinyl Chloride	TM
VOC	Xylenes, m- & o+p	ND

TENTATIVE

The units for concentration limits indicated are mg/L.

✔ = MPar not subject to routine statistical analysis.
ND = The concentration limit for man-made constituents is the laboratory detection limit.
\- = Constituent not required to be monitored based on LCRS monitoring results.
TM = Tracking mode; MPar concentration versus time plot required.
TBD = Concentration Limit to be determined using Statistical Data Analysis Methodology.

TABLE 2 (CONT.) – MPars FOR MONTORING PROGRAM WELLS (April 2, 2009)

MPars for Monitoring Well M07B

Group	Constituent	
General	pH	✔
General	TDS	TBD
General	Chloride	TBD
General	Sulfate	TBD
General	Ammonia, Nitrogen	TBD
General	Nitrate Nitrogen	TBD
General	Boron	✔
General	TOX	TBD
General	Calcium Hardness	✔
General	Magnesium Hardness	✔
General	Sodium	✔
General	Potassium	✔
General	Total Alkalinity	✔
General	Bicarbonate Alkalinity	✔
General	BOD	TBD
General	COD	TBD
General	TOC	TBD
General	nitrite	TBD
Metal	Chromium	TBD
Metal	Mercury	TBD
Metal	Lead	TBD
VOC	Acetone	TM
VOC	Acrylonitrile	ND
VOC	Benzene	ND
VOC	Bromochloromethane	ND
VOC	Bromodichloromethane	ND
VOC	Bromoform	ND
VOC	Carbon disulfide	ND
VOC	Carbon tetrachloride	ND
VOC	Chlorobenzene	ND
VOC	Chloroethane	ND
VOC	Chloroform	ND
VOC	Dibromochloromethane	ND
VOC	1,2-Dibromo-3-Chloropropane	ND

Group	Constituent	
VOC	1,2-Dibromoethane	ND
VOC	o-Dichlorobenzene	ND
VOC	p-Dichlorobenzene	ND
VOC	trans-1,4-Dichloro-2-butene	ND
VOC	1,1-Dichloroethane	TM
VOC	1,2-Dichloroethane	TM
VOC	1,1-Dichloroethylene	ND
VOC	cis-1,2-Dichloroethylene	TM
VOC	trans-1,2-Dichloroethylene	TM
VOC	1,2-Dichloropropane	ND
VOC	cis-1,3-Dichloropropene	ND
VOC	trans-1,3-Dichloropropene	ND
VOC	Ethyl benzene	ND
VOC	2-Hexanone	ND
VOC	Methyl bromide	ND
VOC	Methyl chloride	ND
VOC	Methyl Ethyl Ketone	ND
VOC	Methyl iodide	ND
VOC	4-Methyl-2-pentanone	ND
VOC	Methylene bromide	ND
VOC	Methylene chloride	TM
VOC	Styrene	ND
VOC	1,1,1,2-Tetrachloroethane	ND
VOC	1,1,2,2-Tetrachloroethane	ND
VOC	Tetrachloroethylene	TM
VOC	Toluene	ND
VOC	1,1,1,-Trichloroethane	ND
VOC	1,1,2,-Trichloroethane	ND
VOC	Trichloroethylene	TM
VOC	Trichlorofluoromethane (CFC11)	ND
VOC	1,2,3-Trichloropropane	ND
VOC	Vinyl acetate	ND
VOC	Vinyl Chloride	TM
VOC	Xylenes, m- & o+p	ND

TENTATIVE

The units for concentration limits indicated are mg/L.

✔ = MPar not subject to routine statistical analysis.
ND = The concentration limit for man-made constituents is the laboratory detection limit.
\- = Constituent not required to be monitored based on LCRS monitoring results.
TM = Tracking mode; MPar concentration versus time plot required.
TBD = Concentration Limit to be determined using Statistical Data Analysis Methodology.

TABLE 2 (CONT.) – MPars FOR MONTORING PROGRAM WELLS (April 2, 2009)

MPars for Monitoring Well M08B

Group	Constituent	
General	pH	✔
General	TDS	TBD
General	Chloride	TBD
General	Sulfate	TBD
General	Ammonia, Nitrogen	TBD
General	Nitrate Nitrogen	TBD
General	Boron	✔
General	TOX	TBD
General	Calcium Hardness	✔
General	Magnesium Hardness	✔
General	Sodium	✔
General	Potassium	✔
General	Total Alkalinity	✔
General	Bicarbonate Alkalinity	✔
General	BOD	TBD
General	COD	TBD
General	TOC	TBD
General	nitrite	TBD
Metal	Chromium	TBD
Metal	Mercury	TBD
Metal	Lead	TBD
VOC	Acetone	TM
VOC	Acrylonitrile	ND
VOC	Benzene	ND
VOC	Bromochloromethane	ND
VOC	Bromodichloromethane	ND
VOC	Bromoform	ND
VOC	Carbon disulfide	ND
VOC	Carbon tetrachloride	ND
VOC	Chlorobenzene	ND
VOC	Chloroethane	ND
VOC	Chloroform	ND
VOC	Dibromochloromethane	ND
VOC	1,2-Dibromo-3-Chloropropane	ND

Group	Constituent	
VOC	1,2-Dibromoethane	ND
VOC	o-Dichlorobenzene	ND
VOC	p-Dichlorobenzene	TM
VOC	trans-1,4-Dichloro-2-butene	ND
VOC	1,1-Dichloroethane	TM
VOC	1,2-Dichloroethane	TM
VOC	1,1-Dichloroethylene	ND
VOC	cis-1,2-Dichloroethylene	TM
VOC	trans-1,2-Dichloroethylene	ND
VOC	1,2-Dichloropropane	ND
VOC	cis-1,3-Dichloropropene	ND
VOC	trans-1,3-Dichloropropene	ND
VOC	Ethyl benzene	ND
VOC	2-Hexanone	ND
VOC	Methyl bromide	ND
VOC	Methyl chloride	TM
VOC	Methyl Ethyl Ketone	ND
VOC	Methyl iodide	ND
VOC	4-Methyl-2-pentanone	ND
VOC	Methylene bromide	ND
VOC	Methylene chloride	TM
VOC	Styrene	ND
VOC	1,1,1,2-Tetrachloroethane	ND
VOC	1,1,2,2-Tetrachloroethane	ND
VOC	Tetrachloroethylene	TM
VOC	Toluene	ND
VOC	1,1,1,-Trichloroethane	ND
VOC	1,1,2,-Trichloroethane	ND
VOC	Trichloroethylene	TM
VOC	Trichlorofluoromethane (CFC11)	ND
VOC	1,2,3-Trichloropropane	ND
VOC	Vinyl acetate	ND
VOC	Vinyl Chloride	TM
VOC	Xylenes, m- & o+p	ND

TENTATIVE

The units for concentration limits indicated are mg/L.

✔ = MPar not subject to routine statistical analysis.

ND = The concentration limit for man-made constituents is the laboratory detection limit.

\- = Constituent not required to be monitored based on LCRS monitoring results.

TM = Tracking mode; MPar concentration versus time plot required.

TBD = Concentration Limit to be determined using Statistical Data Analysis Methodology.

TABLE 2 (CONT.) – MPars FOR MONTORING PROGRAM WELLS (April 2, 2009)

MPars for Monitoring Well M20S

Group	Constituent	
General	pH	✔
General	TDS	TBD
General	Chloride	TBD
General	Sulfate	TBD
General	Ammonia, Nitrogen	TBD
General	Nitrate Nitrogen	TBD
General	Boron	✔
General	TOX	TBD
General	Calcium Hardness	✔
General	Magnesium Hardness	✔
General	Sodium	✔
General	Potassium	✔
General	Total Alkalinity	✔
General	Bicarbonate Alkalinity	✔
General	BOD	TBD
General	COD	TBD
General	TOC	TBD
General	nitrite	TBD
Metal	Chromium	TBD
Metal	Mercury	TBD
Metal	Lead	TBD
VOC	Acetone	ND
VOC	Acrylonitrile	ND
VOC	Benzene	TM
VOC	Bromochloromethane	ND
VOC	Bromodichloromethane	ND
VOC	Bromoform	ND
VOC	Carbon disulfide	ND
VOC	Carbon tetrachloride	ND
VOC	Chlorobenzene	TM
VOC	Chloroethane	ND
VOC	Chloroform	ND
VOC	Dibromochloromethane	ND
VOC	1,2-Dibromo-3-Chloropropane	ND

Group	Constituent	
VOC	1,2-Dibromoethane	ND
VOC	o-Dichlorobenzene	ND
VOC	p-Dichlorobenzene	ND
VOC	trans-1,4-Dichloro-2-butene	ND
VOC	1,1-Dichloroethane	TM
VOC	1,2-Dichloroethane	TM
VOC	1,1-Dichloroethylene	ND
VOC	cis-1,2-Dichloroethylene	TM
VOC	trans-1,2-Dichloroethylene	TM
VOC	1,2-Dichloropropane	TM
VOC	cis-1,3-Dichloropropene	ND
VOC	trans-1,3-Dichloropropene	ND
VOC	Ethyl benzene	ND
VOC	2-Hexanone	ND
VOC	Methyl bromide	ND
VOC	Methyl chloride	ND
VOC	Methyl Ethyl Ketone	ND
VOC	Methyl iodide	ND
VOC	4-Methyl-2-pentanone	ND
VOC	Methylene bromide	ND
VOC	Methylene chloride	TM
VOC	Styrene	ND
VOC	1,1,1,2-Tetrachloroethane	ND
VOC	1,1,2,2-Tetrachloroethane	ND
VOC	Tetrachloroethylene	TM
VOC	Toluene	TM
VOC	1,1,1,-Trichloroethane	ND
VOC	1,1,2,-Trichloroethane	ND
VOC	Trichloroethylene	TM
VOC	Trichlorofluoromethane (CFC11)	ND
VOC	1,2,3-Trichloropropane	ND
VOC	Vinyl acetate	ND
VOC	Vinyl Chloride	TM
VOC	Xylenes, m- & o+p	ND

TENTATIVE

The units for concentration limits indicated are mg/L.

✔ = MPar not subject to routine statistical analysis.

ND = The concentration limit for man-made constituents is the laboratory detection limit.

\- = Constituent not required to be monitored based on LCRS monitoring results.

TM = Tracking mode; MPar concentration versus time plot required.

TBD = Concentration Limit to be determined using Statistical Data Analysis Methodology.

TABLE 2 (CONT.) – MPars FOR MONTORING PROGRAM WELLS (April 2, 2009)

MPars for Monitoring Well P64S

Group	Constituent	
General	pH	✔
General	TDS	TBD
General	Chloride	TBD
General	Sulfate	TBD
General	Ammonia, Nitrogen	TBD
General	Nitrate Nitrogen	TBD
General	Boron	✔
General	TOX	TBD
General	Calcium Hardness	✔
General	Magnesium Hardness	✔
General	Sodium	✔
General	Potassium	✔
General	Total Alkalinity	✔
General	Bicarbonate Alkalinity	✔
General	BOD	TBD
General	COD	TBD
General	TOC	TBD
General	nitrite	TBD
Metal	Chromium	TBD
Metal	Mercury	TBD
Metal	Lead	TBD
VOC	Acetone	ND
VOC	Acrylonitrile	ND
VOC	Benzene	ND
VOC	Bromochloromethane	ND
VOC	Bromodichloromethane	ND
VOC	Bromoform	ND
VOC	Carbon disulfide	ND
VOC	Carbon tetrachloride	ND
VOC	Chlorobenzene	TM
VOC	Chloroethane	TM
VOC	Chloroform	ND
VOC	Dibromochloromethane	ND
VOC	1,2-Dibromo-3-Chloropropane	ND

Group	Constituent	
VOC	1,2-Dibromoethane	ND
VOC	o-Dichlorobenzene	TM
VOC	p-Dichlorobenzene	TM
VOC	trans-1,4-Dichloro-2-butene	ND
VOC	1,1-Dichloroethane	TM
VOC	1,2-Dichloroethane	TM
VOC	1,1-Dichloroethylene	ND
VOC	cis-1,2-Dichloroethylene	TM
VOC	trans-1,2-Dichloroethylene	TM
VOC	1,2-Dichloropropane	TM
VOC	cis-1,3-Dichloropropene	ND
VOC	trans-1,3-Dichloropropene	ND
VOC	Ethyl benzene	ND
VOC	2-Hexanone	ND
VOC	Methyl bromide	ND
VOC	Methyl chloride	ND
VOC	Methyl Ethyl Ketone	ND
VOC	Methyl iodide	ND
VOC	4-Methyl-2-pentanone	ND
VOC	Methylene bromide	ND
VOC	Methylene chloride	ND
VOC	Styrene	ND
VOC	1,1,1,2-Tetrachloroethane	ND
VOC	1,1,2,2-Tetrachloroethane	ND
VOC	Tetrachloroethylene	TM
VOC	Toluene	ND
VOC	1,1,1,-Trichloroethane	ND
VOC	1,1,2,-Trichloroethane	ND
VOC	Trichloroethylene	TM
VOC	Trichlorofluoromethane (CFC11)	ND
VOC	1,2,3-Trichloropropane	ND
VOC	Vinyl acetate	ND
VOC	Vinyl Chloride	TM
VOC	Xylenes, m- & o+p	ND

TENTATIVE

The units for concentration limits indicated are mg/L.

✔ = MPar not subject to routine statistical analysis.
ND = The concentration limit for man-made constituents is the laboratory detection limit.
\- = Constituent not required to be monitored based on LCRS monitoring results.
TM = Tracking mode; MPar concentration versus time plot required.
TBD = Concentration Limit to be determined using Statistical Data Analysis Methodology.

TABLE 2 (CONT.) – MPars FOR MONTORING PROGRAM WELLS (April 2, 2009)

MPars for Monitoring Well P67S

Group	Constituent	
General	pH	✔
General	TDS	TBD
General	Chloride	TBD
General	Sulfate	TBD
General	Ammonia, Nitrogen	TBD
General	Nitrate Nitrogen	TBD
General	Boron	✔
General	TOX	TBD
General	Calcium Hardness	✔
General	Magnesium Hardness	✔
General	Sodium	✔
General	Potassium	✔
General	Total Alkalinity	✔
General	Bicarbonate Alkalinity	✔
General	BOD	TBD
General	COD	TBD
General	TOC	TBD
General	nitrite	TBD
Metal	Chromium	TBD
Metal	Mercury	TBD
Metal	Lead	TBD
VOC	Acetone	TM
VOC	Acrylonitrile	ND
VOC	Benzene	ND
VOC	Bromochloromethane	ND
VOC	Bromodichloromethane	ND
VOC	Bromoform	ND
VOC	Carbon disulfide	ND
VOC	Carbon tetrachloride	ND
VOC	Chlorobenzene	ND
VOC	Chloroethane	ND
VOC	Chloroform	ND
VOC	Dibromochloromethane	ND
VOC	1,2-Dibromo-3-Chloropropane	ND

Group	Constituent	
VOC	1,2-Dibromoethane	ND
VOC	o-Dichlorobenzene	ND
VOC	p-Dichlorobenzene	ND
VOC	trans-1,4-Dichloro-2-butene	ND
VOC	1,1-Dichloroethane	ND
VOC	1,2-Dichloroethane	TM
VOC	1,1-Dichloroethylene	ND
VOC	cis-1,2-Dichloroethylene	ND
VOC	trans-1,2-Dichloroethylene	ND
VOC	1,2-Dichloropropane	ND
VOC	cis-1,3-Dichloropropene	ND
VOC	trans-1,3-Dichloropropene	ND
VOC	Ethyl benzene	ND
VOC	2-Hexanone	ND
VOC	Methyl bromide	ND
VOC	Methyl chloride	ND
VOC	Methyl Ethyl Ketone	ND
VOC	Methyl iodide	ND
VOC	4-Methyl-2-pentanone	ND
VOC	Methylene bromide	ND
VOC	Methylene chloride	ND
VOC	Styrene	ND
VOC	1,1,1,2-Tetrachloroethane	ND
VOC	1,1,2,2-Tetrachloroethane	ND
VOC	Tetrachloroethylene	ND
VOC	Toluene	ND
VOC	1,1,1,-Trichloroethane	ND
VOC	1,1,2,-Trichloroethane	ND
VOC	Trichloroethylene	ND
VOC	Trichlorofluoromethane (CFC11)	ND
VOC	1,2,3-Trichloropropane	ND
VOC	Vinyl acetate	ND
VOC	Vinyl Chloride	ND
VOC	Xylenes, m- & o+p	ND

TENTATIVE

The units for concentration limits indicated are mg/L.

✔ = MPar not subject to routine statistical analysis.
ND = The concentration limit for man-made constituents is the laboratory detection limit.
- = Constituent not required to be monitored based on LCRS monitoring results.
TM = Tracking mode; MPar concentration versus time plot required.
TBD = Concentration Limit to be determined using Statistical Data Analysis Methodology.

TABLE 2 (CONT.) – MPars FOR MONTORING PROGRAM WELLS (April 2, 2009)

MPars for Monitoring Well P68S

Group	Constituent	
General	pH	✔
General	TDS	TBD
General	Chloride	TBD
General	Sulfate	TBD
General	Ammonia, Nitrogen	TBD
General	Nitrate Nitrogen	TBD
General	Boron	✔
General	TOX	TBD
General	Calcium Hardness	✔
General	Magnesium Hardness	✔
General	Sodium	✔
General	Potassium	✔
General	Total Alkalinity	✔
General	Bicarbonate Alkalinity	✔
General	BOD	TBD
General	COD	TBD
General	TOC	TBD
General	nitrite	TBD
Metal	Chromium	TBD
Metal	Mercury	TBD
Metal	Lead	TBD
VOC	Acetone	TM
VOC	Acrylonitrile	ND
VOC	Benzene	TM
VOC	Bromochloromethane	ND
VOC	Bromodichloromethane	ND
VOC	Bromoform	ND
VOC	Carbon disulfide	ND
VOC	Carbon tetrachloride	ND
VOC	Chlorobenzene	ND
VOC	Chloroethane	ND
VOC	Chloroform	ND
VOC	Dibromochloromethane	ND
VOC	1,2-Dibromo-3-Chloropropane	ND

Group	Constituent	
VOC	1,2-Dibromoethane	ND
VOC	o-Dichlorobenzene	ND
VOC	p-Dichlorobenzene	ND
VOC	trans-1,4-Dichloro-2-butene	ND
VOC	1,1-Dichloroethane	ND
VOC	1,2-Dichloroethane	TM
VOC	1,1-Dichloroethylene	ND
VOC	cis-1,2-Dichloroethylene	ND
VOC	trans-1,2-Dichloroethylene	ND
VOC	1,2-Dichloropropane	ND
VOC	cis-1,3-Dichloropropene	ND
VOC	trans-1,3-Dichloropropene	ND
VOC	Ethyl benzene	ND
VOC	2-Hexanone	ND
VOC	Methyl bromide	ND
VOC	Methyl chloride	ND
VOC	Methyl Ethyl Ketone	ND
VOC	Methyl iodide	ND
VOC	4-Methyl-2-pentanone	ND
VOC	Methylene bromide	ND
VOC	Methylene chloride	ND
VOC	Styrene	ND
VOC	1,1,1,2-Tetrachloroethane	ND
VOC	1,1,2,2-Tetrachloroethane	ND
VOC	Tetrachloroethylene	ND
VOC	Toluene	ND
VOC	1,1,1,-Trichloroethane	ND
VOC	1,1,2,-Trichloroethane	ND
VOC	Trichloroethylene	ND
VOC	Trichlorofluoromethane (CFC11)	ND
VOC	1,2,3-Trichloropropane	ND
VOC	Vinyl acetate	ND
VOC	Vinyl Chloride	ND
VOC	Xylenes, m- & o+p	ND

TENTATIVE

The units for concentration limits indicated are mg/L.

✔ = MPar not subject to routine statistical analysis.
ND = The concentration limit for man-made constituents is the laboratory detection limit.
- = Constituent not required to be monitored based on LCRS monitoring results.
TM = Tracking mode; MPar concentration versus time plot required.
TBD = Concentration Limit to be determined using Statistical Data Analysis Methodology.

TABLE 2 (CONT.) – MPars FOR MONTORING PROGRAM WELLS (April 2, 2009)

MPars for Monitoring Well P69S

Group	Constituent	
General	pH	✔
General	TDS	TBD
General	Chloride	TBD
General	Sulfate	TBD
General	Ammonia, Nitrogen	TBD
General	Nitrate Nitrogen	TBD
General	Boron	✔
General	TOX	TBD
General	Calcium Hardness	✔
General	Magnesium Hardness	✔
General	Sodium	✔
General	Potassium	✔
General	Total Alkalinity	✔
General	Bicarbonate Alkalinity	✔
General	BOD	TBD
General	COD	TBD
General	TOC	TBD
General	nitrite	TBD
Metal	Chromium	TBD
Metal	Mercury	TBD
Metal	Lead	TBD
VOC	Acetone	ND
VOC	Acrylonitrile	ND
VOC	Benzene	ND
VOC	Bromochloromethane	ND
VOC	Bromodichloromethane	ND
VOC	Bromoform	ND
VOC	Carbon disulfide	ND
VOC	Carbon tetrachloride	ND
VOC	Chlorobenzene	ND
VOC	Chloroethane	ND
VOC	Chloroform	ND
VOC	Dibromochloromethane	ND
VOC	1,2-Dibromo-3-Chloropropane	ND

Group	Constituent	
VOC	1,2-Dibromoethane	ND
VOC	o-Dichlorobenzene	ND
VOC	p-Dichlorobenzene	ND
VOC	trans-1,4-Dichloro-2-butene	ND
VOC	1,1-Dichloroethane	ND
VOC	1,2-Dichloroethane	ND
VOC	1,1-Dichloroethylene	ND
VOC	cis-1,2-Dichloroethylene	ND
VOC	trans-1,2-Dichloroethylene	ND
VOC	1,2-Dichloropropane	ND
VOC	cis-1,3-Dichloropropene	ND
VOC	trans-1,3-Dichloropropene	ND
VOC	Ethyl benzene	ND
VOC	2-Hexanone	ND
VOC	Methyl bromide	ND
VOC	Methyl chloride	ND
VOC	Methyl Ethyl Ketone	ND
VOC	Methyl iodide	ND
VOC	4-Methyl-2-pentanone	ND
VOC	Methylene bromide	ND
VOC	Methylene chloride	ND
VOC	Styrene	ND
VOC	1,1,1,2-Tetrachloroethane	ND
VOC	1,1,2,2-Tetrachloroethane	ND
VOC	Tetrachloroethylene	ND
VOC	Toluene	ND
VOC	1,1,1,-Trichloroethane	ND
VOC	1,1,2,-Trichloroethane	ND
VOC	Trichloroethylene	ND
VOC	Trichlorofluoromethane (CFC11)	ND
VOC	1,2,3-Trichloropropane	ND
VOC	Vinyl acetate	ND
VOC	Vinyl Chloride	ND
VOC	Xylenes, m- & o+p	ND

TENTATIVE

The units for concentration limits indicated are mg/L.

✔ = MPar not subject to routine statistical analysis.
ND = The concentration limit for man-made constituents is the laboratory detection limit.
- = Constituent not required to be monitored based on LCRS monitoring results.
TM = Tracking mode; MPar concentration versus time plot required.
TBD = Concentration Limit to be determined using Statistical Data Analysis Methodology.

TABLE 2 (CONT.) – MPars FOR MONTORING PROGRAM WELLS (April 2, 2009)

MPars for Monitoring Well P69S

Group	Constituent	
General	pH	6.87
General	TDS	4,338
General	Chloride	573.3
General	Sulfate	1,893
General	Ammonia, Nitrogen	TBD
General	Nitrate Nitrogen	0.171
General	Boron	✔
General	TOX	TBD
General	Calcium Hardness	✔
General	Magnesium Hardness	✔
General	Sodium	✔
General	Potassium	✔
General	Total Alkalinity	✔
General	Bicarbonate Alkalinity	✔
General	BOD	TBD
General	COD	TBD
General	TOC	TBD
General	nitrite	TBD
Metal	Chromium	-
Metal	Mercury	-
Metal	Lead	-
VOC	Acetone	-
VOC	Acrylonitrile	-
VOC	Benzene	ND
VOC	Bromochloromethane	-
VOC	Bromodichloromethane	-
VOC	Bromoform	-
VOC	Carbon disulfide	-
VOC	Carbon tetrachloride	-
VOC	Chlorobenzene	ND
VOC	Chloroethane	-
VOC	Chloroform	-
VOC	Dibromochloromethane	-
VOC	1,2-Dibromo-3-Chloropropane	-

Group	Constituent	
VOC	1,2-Dibromoethane	-
VOC	o-Dichlorobenzene	ND
VOC	p-Dichlorobenzene	ND
VOC	trans-1,4-Dichloro-2-butene	-
VOC	1,1-Dichloroethane	ND
VOC	1,2-Dichloroethane	ND
VOC	1,1-Dichloroethylene	ND
VOC	cis-1,2-Dichloroethylene	ND
VOC	trans-1,2-Dichloroethylene	ND
VOC	1,2-Dichloropropane	ND
VOC	cis-1,3-Dichloropropene	-
VOC	trans-1,3-Dichloropropene	-
VOC	Ethyl benzene	ND
VOC	2-Hexanone	-
VOC	Methyl bromide	-
VOC	Methyl chloride	-
VOC	Methyl Ethyl Ketone	-
VOC	Methyl iodide	-
VOC	4-Methyl-2-pentanone	-
VOC	Methylene bromide	-
VOC	Methylene chloride	-
VOC	Styrene	-
VOC	1,1,1,2-Tetrachloroethane	-
VOC	1,1,2,2-Tetrachloroethane	-
VOC	Tetrachloroethylene	ND
VOC	Toluene	ND
VOC	1,1,1,-Trichloroethane	-
VOC	1,1,2,-Trichloroethane	-
VOC	Trichloroethylene	ND
VOC	Trichlorofluoromethane (CFC11)	ND
VOC	1,2,3-Trichloropropane	-
VOC	Vinyl acetate	-
VOC	Vinyl Chloride	ND
VOC	Xylenes, m- & o+p	-

TENTATIVE

The units for concentration limits indicated are mg/L.

✔ = MPar not subject to routine statistical analysis.

ND = The concentration limit for man-made constituents is the laboratory detection limit.

\- = Constituent not required to be monitored based on LCRS monitoring results.

TM = Tracking mode; MPar concentration versus time plot required.

TBD = Concentration Limit to be determined using Statistical Data Analysis Methodology.

TABLE 2 (CONT.) – MPars FOR MONTORING PROGRAM WELLS (April 2, 2009)

MPars for Monitoring Well P69S

Group	Constituent	
General	pH	6.78
General	TDS	4,898
General	Chloride	403.9
General	Sulfate	2,532
General	Ammonia, Nitrogen	TBD
General	Nitrate Nitrogen	4.06
General	Boron	✔
General	TOX	TBD
General	Calcium Hardness	✔
General	Magnesium Hardness	✔
General	Sodium	✔
General	Potassium	✔
General	Total Alkalinity	✔
General	Bicarbonate Alkalinity	✔
General	BOD	TBD
General	COD	TBD
General	TOC	TBD
General	nitrite	TBD
Metal	Chromium	-
Metal	Mercury	-
Metal	Lead	-
VOC	Acetone	-
VOC	Acrylonitrile	-
VOC	Benzene	ND
VOC	Bromochloromethane	-
VOC	Bromodichloromethane	-
VOC	Bromoform	-
VOC	Carbon disulfide	-
VOC	Carbon tetrachloride	-
VOC	Chlorobenzene	ND
VOC	Chloroethane	-
VOC	Chloroform	-
VOC	Dibromochloromethane	-
VOC	1,2-Dibromo-3-Chloropropane	-

Group	Constituent	
VOC	1,2-Dibromoethane	-
VOC	o-Dichlorobenzene	ND
VOC	p-Dichlorobenzene	ND
VOC	trans-1,4-Dichloro-2-butene	-
VOC	1,1-Dichloroethane	ND
VOC	1,2-Dichloroethane	ND
VOC	1,1-Dichloroethylene	ND
VOC	cis-1,2-Dichloroethylene	ND
VOC	trans-1,2-Dichloroethylene	ND
VOC	1,2-Dichloropropane	ND
VOC	cis-1,3-Dichloropropene	-
VOC	trans-1,3-Dichloropropene	-
VOC	Ethyl benzene	ND
VOC	2-Hexanone	-
VOC	Methyl bromide	-
VOC	Methyl chloride	-
VOC	Methyl Ethyl Ketone	-
VOC	Methyl iodide	-
VOC	4-Methyl-2-pentanone	-
VOC	Methylene bromide	-
VOC	Methylene chloride	-
VOC	Styrene	-
VOC	1,1,1,2-Tetrachloroethane	-
VOC	1,1,2,2-Tetrachloroethane	-
VOC	Tetrachloroethylene	ND
VOC	Toluene	ND
VOC	1,1,1,-Trichloroethane	-
VOC	1,1,2,-Trichloroethane	-
VOC	Trichloroethylene	ND
VOC	Trichlorofluoromethane (CFC11)	ND
VOC	1,2,3-Trichloropropane	-
VOC	Vinyl acetate	-
VOC	Vinyl Chloride	ND
VOC	Xylenes, m- & o+p	-

TENTATIVE

The units for concentration limits indicated are mg/L.

✔ = MPar not subject to routine statistical analysis.

ND = The concentration limit for man-made constituents is the laboratory detection limit.

\- = Constituent not required to be monitored based on LCRS monitoring results.

TM = Tracking mode; MPar concentration versus time plot required.

TBD = Concentration Limit to be determined using Statistical Data Analysis Methodology.

TABLE 3 – CONSTITUENTS OF CONCERN FOR MONTORING PROGRAM WELLS (April 2, 2009)

Group	Constituent
VOC	Acetone
VOC	Acrylonitrile
VOC	Benzene
VOC	Bromochloromethane
VOC	Bromodichloromethane
VOC	Bromoform
VOC	Carbon disulfide
VOC	Carbon tetrachloride
VOC	Chlorobenzene
VOC	Chloroethane
VOC	Chloroform
VOC	Dibromochloromethane
VOC	1,2-Dibromo-3-Chloropropane
VOC	1,2-Dibromoethane
VOC	o-Dichlorobenzene
VOC	p-Dichlorobenzene
VOC	trans-1,4-Dichloro-2-butene
VOC	1,1-Dichloroethane
VOC	1,2-Dichloroethane
VOC	1,1-Dichloroethylene
VOC	cis-1,2-Dichloroethylene
VOC	trans-1,2-Dichloroethylene
VOC	1,2-Dichloropropane
VOC	cis-1,3-Dichloropropene
VOC	trans-1,3-Dichloropropene
VOC	Ethyl benzene
VOC	2-Hexanone
VOC	Methyl bromide
VOC	Methyl chloride
VOC	Methyl Ethyl Ketone
VOC	Methyl iodide
VOC	4-Methyl-2-pentanone
VOC	Methylene bromide
VOC	Methylene chloride
VOC	Styrene
VOC	1,1,1,2-Tetrachloroethane
VOC	1,1,2,2-Tetrachloroethane
VOC	Tetrachloroethylene
VOC	Toluene
VOC	1,1,1,-Trichloroethane
VOC	1,1,2,-Trichloroethane
VOC	Trichloroethylene
VOC	Trichlorofluoromethane (CFC11)
VOC	1,2,3-Trichloropropane
VOC	Vinyl acetate
VOC	Vinyl Chloride
VOC	Xylenes, m- & o+p
VOC	Acetonitrile
VOC	Acrolein
VOC	Allyl chloride
VOC	Chloroprene
VOC	m-Dichlorobenzene
VOC	Dichlorodifluoromethane (CFC12)
VOC	1,3-Dichloropropane
VOC	2,2-Dichloropropane
VOC	1,1-Dichloropropene
VOC	Ethyl methacrylate
VOC	Isobutyl alcohol
VOC	Methacrylontrile
VOC	Methyl methacrylate
VOC	Propionitrile
BNA	Acenaphthene
BNA	Acenaphthylene
BNA	Acetophenone
BNA	2-Acetylaminoflourene
BNA	4-Aminobiphenyl
BNA	Anthracene
BNA	Benzo(a)anthrancene
BNA	Benzo(b)fluoranthene
BNA	Benzo(k)fluoranthene
BNA	Benzo(ghi)perylene
BNA	Benzo(a)pyrene
BNA	Benzyl alcohol

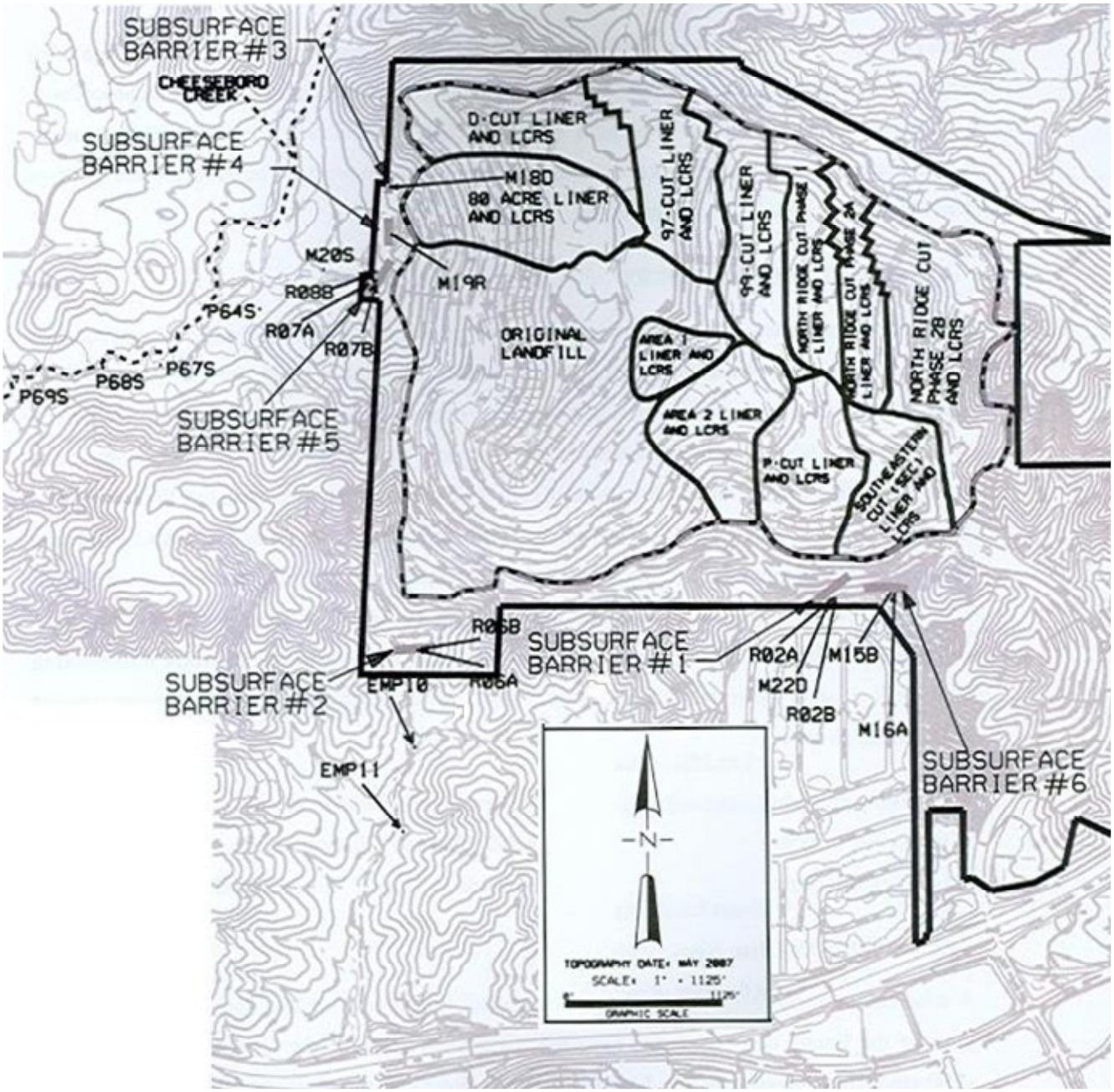
Group	Constituent
BNA	Bis(2-chloroethoxy) methane
BNA	Bis(2-chloroethyl) ether
BNA	Bis(2-chloro-1-methylethyl) ether
BNA	Bis(2-ethylhexyl) phthalate
BNA	4-Bromophenyl phenyl ether
BNA	Butyl benzyl phthalate
BNA	p-Chloroaniline
BNA	Chlorobenzilate
BNA	p-Chloro-m-cresol
BNA	2-Chloronaphthalane
BNA	2-Chlorophenol
BNA	4-Chlorophenyl phenyl ether
BNA	Chrysene
BNA	M+p Cresol
BNA	o- Cresol
BNA	Diallate
BNA	Dibenz(a,h)anthracene
BNA	Dibenzofuran
BNA	Di-n-butyl phthalate
BNA	3,3'-Dichlorobenzidine
BNA	2,4-Dichlorophenol
BNA	2-6- Dichlorophenol
BNA	Diethyl phthalate
BNA	p-(Dimethylamino)azobenzene
BNA	7,12-Dimethylbenz(a)anthracene
BNA	3,3'-Dimethylbenzidine
BNA	2,4-Dimethylphenol
BNA	Dimethyl phthalate
BNA	m-Dinitrobenzene
BNA	4,6-Dinitro-o-cresol
BNA	2,4-Dinitrophenol
BNA	2,4-Dinitrotoluene
BNA	2,6-Dinitrotoluene
BNA	Di-n-octyl phthalate
BNA	Diphenyamine
BNA	Ethyl methansulfonate
BNA	Famphur
BNA	Fluoranthene
BNA	Fluorene
BNA	Hexachlorobenzene
BNA	Hexachlorobutadiene
BNA	Hexachlorocycopentadiene
BNA	Hexachloroethane
BNA	Hexachloropropene
BNA	Indeno(1,2,3-c,d)pyrene
BNA	Isodrin
BNA	Isophorone
BNA	Isosafrole
BNA	Kepone
BNA	Methapyrilene
BNA	3-Methylcholanthrene
BNA	Methyl methanesulfonate
BNA	2-Methylnaphthalene
BNA	Naphthalene
BNA	1,4-Naphthoquinone
BNA	1-Naphthylamine
BNA	2-Naphthylamine
BNA	o-Nitroaniline
BNA	m-Nitroaniline
BNA	p- Nitroaniline
BNA	Nitrobenzene
BNA	2-Nitrophenol
BNA	4-Nitrophenol
BNA	N-Nitrosodi-n-butylamine
BNA	N-Nitrosodiethylamine
BNA	N-Nitrosodimethylamine
BNA	N-Nitrosodiphenylamine
BNA	N-Nitrosodipropylamine
BNA	N-Nitrosomethylethylamine
BNA	N-Nitrosopiperidine
BNA	N-Nitrosopyrrolidine
BNA	5-Nitro-o-toluidine

Group	Constituent
BNA	Pentachlorobenzene
BNA	Pentachloronitrobenzene
BNA	Pentachlorophenol
BNA	Phenacetin
BNA	Phenanthrene
BNA	Phenol
BNA	p-Phenylenediamine
BNA	Pronamide
BNA	Pyrene
BNA	Safrole
BNA	1,2,4,5-Tetrachlorobenzene
BNA	2,3,4,6-Tetrachlorophenol
BNA	o-Toluidine
BNA	1,2,4-Trichlorobenzene
BNA	2,4,5-Trichlorophenol
BNA	2,4,6-Trichlorophenol
BNA	0,0,0-Triethyl Phosphorothioate
BNA	sym-Trinitrobenzene
Pesticide	Aldrin
Pesticide	alpha-BHC
Pesticide	beta-BHC
Pesticide	delta-BHC
Pesticide	gamma-BHC (Lindane)
Pesticide	Chlordane
Pesticide	4,4'-DDD
Pesticide	4,4'-DDE
Pesticide	4,4'-DDT
Pesticide	Dieldrin
Pesticide	Endosulfan I
Pesticide	Endosulfan II
Pesticide	Endosulfan sulfate
Pesticide	Endrin
Pesticide	Endrin aldehyde
Pesticide	Heptachlor
Pesticide	Heptachlor epoxide
Pesticide	Aroclor 1016
Pesticide	Aroclor 1221
Pesticide	Aroclor 1232
Pesticide	Aroclor 1242
Pesticide	Aroclor 1248
Pesticide	Aroclor 1254
Pesticide	Aroclor 1260
Pesticide	Methoxyclor
Pesticide	Toxaphene
Herbicide	2,4-D
Herbicide	Dinoseb
Herbicide	Silvex
Herbicide	2,4,5-Trichlorophenoxyacetic acid
Organophosphorus	Thionazin
Organophosphorus	Dimethoate
Organophosphorus	Disulfoton
Organophosphorus	Methyl parathion
Organophosphorus	Parathion
Organophosphorus	Phorate
Metal	Iron
Metal	Antimony
Metal	Arsenic
Metal	Barium
Metal	Beryllium
Metal	Cadmium
Metal	Chromium
Metal	Cobalt
Metal	Copper
Metal	Lead
Metal	Mercury
Metal	Nickel
Metal	Selenium
Metal	Silver
Metal	Thallium
Metal	Tin
Metal	Vanadium
Metal	Zinc

TENTATIVE

The shaded constituents are those that have been detected and verified in the annual leachate testing.

FIGURE 1:
EXISTING COMPLIANCE MONITORING WELLS



TENTATIVE

FIGURE 2:
BARRIERS 1 AND 6 AREA EXISTING MONITORING WELLS, PIEZOMETERS, AND EXTRACTION WELLS

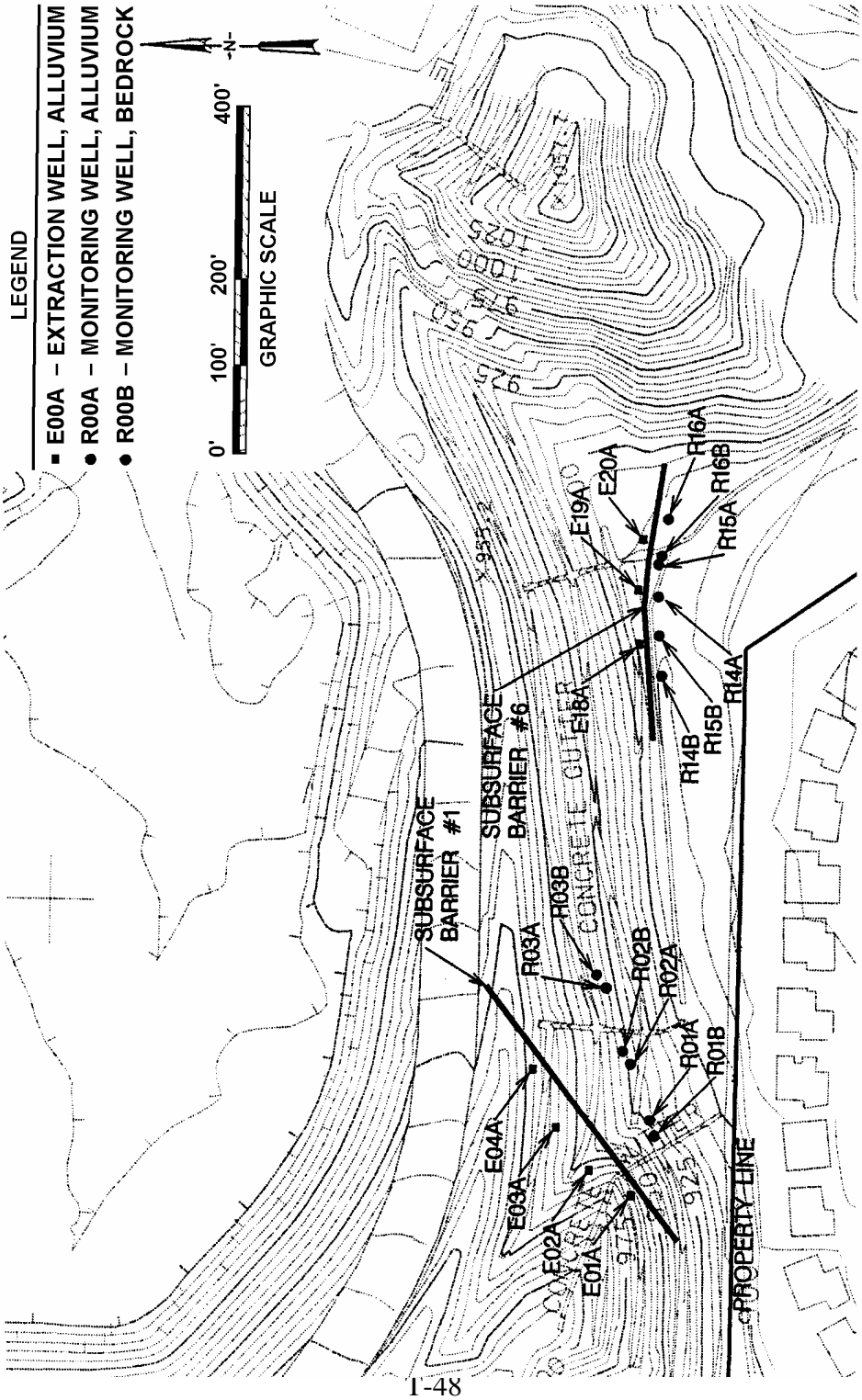
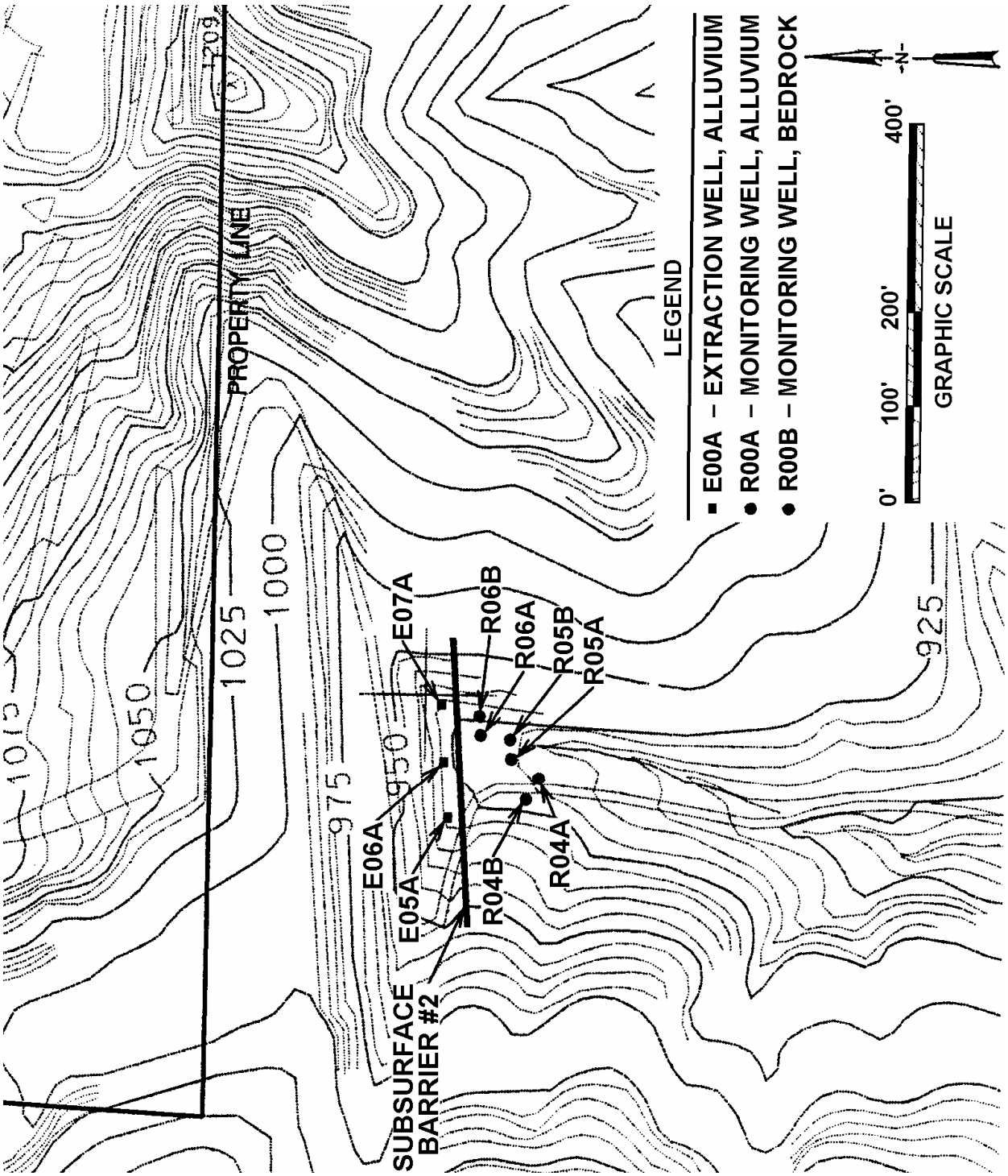
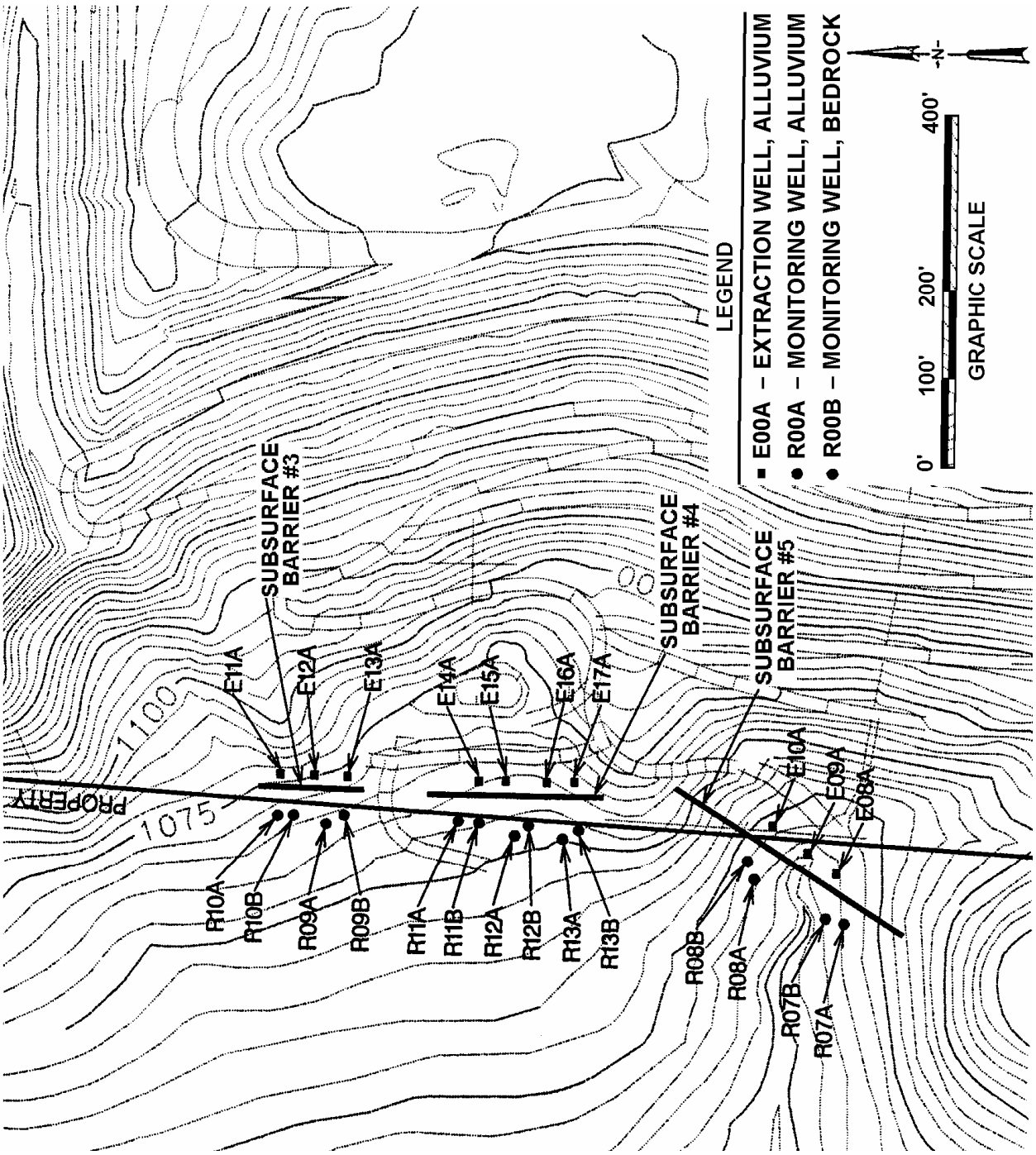


FIGURE 3:
BARRIER 2AREA EXISTING MONITORING WELLS, PIEZOMETERS, AND EXTRACTION WELLS



TENTATIVE

FIGURE 4:
BARRIER 3, 4, 5 AREA EXISTING MONITORING WELLS, PIEZOMETERS, AND EXTRACTION WELLS



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