

AGREEMENT

THIS AGREEMENT ("Agreement") is made and entered into this 6th day of June, 2017 ("Effective Date") by and between the COUNTY OF FRESNO, a Political Subdivision of the State of California, hereinafter referred to as "COUNTY", and SOMA Environmental Engineering, Inc., whose address is 6620 Owens Dr., Suite A, Pleasanton, California, 94588, hereinafter referred to as "CONTRACTOR".

W I T N E S S E T H:

WHEREAS, the COUNTY requires specialized consultant services to conduct the State-required detection monitoring services for the American Avenue Landfill, Coalinga Disposal Site, and Southeast Regional Solid Waste Landfill; and

WHEREAS, the CONTRACTOR is qualified and willing to provide the COUNTY the professional services required for this project;

NOW, THEREFORE, the parties hereto have and by these presents do agree as follows:

1. OBLIGATIONS OF THE CONTRACTOR**A. Summary of Tasks:**

- | | |
|--------|--|
| Task 1 | Coordinate with COUNTY's contracted laboratory for electronic delivery of laboratory analytical data; |
| Task 2 | Preparation and submittal of semi-annual detection monitoring reports and annual monitoring summary report for the American Avenue Landfill. Address issues from regulatory agencies as defined below in the last paragraph of this Article 1; |
| Task 3 | Preparation and submittal of semi-annual detection monitoring reports and annual monitoring summary report for the Coalinga Disposal Site. Address issues from regulatory agencies as defined below in the las paragraph of this Article 1 ; |

Task 4 Preparation and submittal of semi-annual detection monitoring reports and annual monitoring summary report for the Southeast Regional Solid Waste Landfill. Address issues from regulatory agencies as defined in the immediately following paragraph.

CONTRACTOR is expected to provide sample analysis for each respective site, recommendations for regulatory compliance and notifications based on site specific Waste Discharge Requirements (WDR), which may be revised during the term of this agreement. Additionally, CONTRACTOR is expected to respond to all comments from the Regional Water Quality Control Board (RWQCB) and all other reviewing agencies. Comments are considered to include changes to the report submitted based on errors or omissions, and/or preference in wording descriptions by the RWQCB and all other reviewing agencies. The regulatory compliance and notification recommendations and responses shall be at no additional cost to the COUNTY and shall be completed in the time frame specified by the RWQCB and/or all other reviewing agencies.

B. Description of Tasks:

Task 1 – Coordinate with COUNTY’s contracted laboratory for electronic delivery of laboratory analytical data

CONTRACTOR shall make arrangements with COUNTY’s contracted laboratory to have all laboratory analytical data delivered to CONTRACTOR. Preferred method of transfer and format are at the CONTRACTOR’s discretion, providing that the agreed upon format is compatible with COUNTY software and conforming to AB 2886 GeoTracker requirements in accordance with Title 23 of the California Code of Regulations (CCR) Section 3893 and all other applicable laws and regulations. The contracted laboratory is obligated to the COUNTY through an Agreement, with deadlines to be met for submittal of necessary analytical data.

Task 2 – Detection Monitoring Reports for American Avenue Landfill

a) Semi-Annual Monitoring Reports

Each report is to be prepared in accordance with the Monitoring and Reporting Program No. R5-2012-0064 of WDR Order R5-2012-0064 (the relevant pages of which have been excerpted and are attached hereto as Exhibit "A") and in full compliance with all applicable provisions of Title 27 of the CCR. A Semi-Annual Evaluation Report of the Corrective Action Program in accordance with Title 27 CCR Section 20430h will be prepared by an independent firm based upon its own review, conducted under separate contract with COUNTY and included as an Appendix to CONSULTANT's Detection Monitoring Report. Said report will be prepared in two (2) hard copies each in a three ring "D" binder not to exceed 4" in width. Each copy of the report will include a compact disc (CD) with appropriate data in the format detailed in the RWQCB letter dated 8 November, 2000 (a true and correct copy of which is attached hereto as Exhibit "D") as well as all tables included in the report in Excel format and one (1) copy of the report in its entirety in a searchable Portable Document File (PDF) format. A third and fourth copy of this CD shall also be provided separately to the COUNTY. The spine of the hard copies will clearly display the title of the report and reporting period.

b) Annual Monitoring Summary Report

Each report is to be prepared in accordance with Exhibit "A". An Annual (Second Semi-Annual) Evaluation Report of the Corrective Action Program in accordance with Title 27 CCR Section 20430h will be prepared by an independent firm based upon its own review, conducted under separate contract with COUNTY and included as an Appendix to CONSULTANT's Detection Monitoring Report. Said report will be prepared in two (2) hard copies each in a three ring "D" binder not to exceed 4" in width. Each copy of the report will include a compact disc (CD) with appropriate data in the format detailed in the RWQCB letter dated 8 November, 2000 (Exhibit "D" hereto) as well as all tables included in the report in Excel format and one (1) copy of the report in its entirety in a searchable Portable Document File (PDF) format. A third and fourth copy of this CD shall also be provided separately to the COUNTY. The spine of the hard copies will

1 clearly display the title of the report and reporting period. The second semi-annual
2 period report and annual report for the respective year may be combined into a single
3 report submittal.

4 *c) Compilation of Information in the Required Format for Electronic Submittal*
5 *(GeoTracker)*

6 All reports are to follow the format outlined in the State Water Resources Control
7 Board's (SWRCB) website:
8 http://www.waterboards.ca.gov/ust/cleanup/electronic_reporting/index.html (see link on
9 website entitled "Electronic Reporting Roles and Responsibilities"), and as required by
10 Title 23 of the CCR, Division 3, Chapter 30 (see particularly Article 2 of said Chapter 30,
11 entitled "Electronic Submittal of Information"), and by Title 27 of the CCR, Division 3
12 (also entitled "Electronic Submittal of Information"). CONTRACTOR also shall consider
13 the letter dated 12 January, 2005 from the RWQCB regarding electronic submittal of
14 information, a true and correct copy of which is attached hereto as Exhibit "E".

15 *d) Submittal of Data and Reports*

16 Reports shall be submitted to the COUNTY for review and approval. Final data
17 also shall be submitted to the COUNTY for approval, and then the approved data shall
18 be uploaded by CONTRACTOR into the GeoTracker system, in accordance with the
19 regulations promulgated pursuant to California Assembly Bill 2886 (Cal. Stats 2000,
20 Chapter 727, referenced herein as "AB 2886"), which regulations are set forth in Title 23
21 and in Title 27 of the CCR, as referenced above.

22 Task 3 – Detection Monitoring Reports for Coalinga Disposal Site

23 *a) Semi-Annual Monitoring Reports*

24 Each report is to be prepared in accordance with the Monitoring and Reporting
25 Program No. R5-2014-0058 of WDR Order R5-2014-0058 (the relevant pages of which
26 have been excerpted and are attached hereto as Exhibit "B") and in full compliance with
27 Title 27 of the CCR. Said report will be prepared in two (2) hard copies each in a three
28 ring "D" binder not to exceed 4" in width. Each copy of the report will include a compact

1 disc (CD) with appropriate data in the format detailed in the RWQCB letter dated 8
2 November, 2000 (Exhibit "D" hereto) as well as all tables included in the report in Excel
3 format and one (1) copy of the report in its entirety in a searchable Portable Document
4 File (PDF) format. A third and fourth copy of this CD shall also be provided separately
5 to the COUNTY. The spine of the hard copies will clearly display the title of the report
6 and reporting period.

7 *b) Annual Monitoring Summary Report*

8 Each report is to be prepared in accordance with Exhibit "B". Said report will be
9 prepared in two (2) hard copies each in a three ring "D" binder not to exceed 4" in width.
10 Each copy of the report will include a compact disc (CD) with appropriate data in the
11 format detailed in the RWQCB letter dated 8 November, 2000 (Exhibit "D" hereto) as
12 well as all tables included in the report in Excel format and one (1) copy of the report in
13 its entirety in a searchable Portable Document File (PDF) format. A third and fourth
14 copy of this CD shall also be provided separately to the COUNTY. The spine of the
15 hard copies will clearly display the title of the report and reporting period. The second
16 semi-annual period report and annual report for the respective year may be combined
17 into a single report submittal.

18 *c) Compilation of Information in the Required Format for Electronic*
19 *Submittal (GeoTracker)*

20 All reports are to follow the format outlined in the SWRCB's website and as
21 required by Title 23 and Title 27 of the CCR, as referenced hereinabove.

22 *d) Submittal of Data and Reports*

23 Reports shall be submitted to the COUNTY for review and approval. Final data
24 also shall be submitted to the COUNTY for approval, and then the approved data shall
25 be uploaded by CONTRACTOR into the GeoTracker system, in accordance with AB
26 2886 and the implementing regulations set forth in Title 23 and Title 27 of the CCR, as
27 referenced hereinabove.

1 Task 4 – Detection Monitoring Reports for Southeast Regional Solid Waste

2 Landfill

3 *a) Semi-Annual Monitoring Reports*

4 Each report is to be prepared in accordance with the Monitoring and Reporting
5 Program No. 99-124 of WDR Order 99-124 (the relevant pages of which have been
6 excerpted and are attached hereto as Exhibit “C”) and in full compliance with all
7 applicable provisions of Title 27 of the CCR. A Semi-Annual Evaluation Report of the
8 Corrective Action Program in accordance with Title 27 CCR Section 20430h will be
9 prepared by an independent firm based upon its own review, conducted under separate
10 contract with COUNTY and included as an Appendix to CONSULTANT’s Detection
11 Monitoring Report. Said report will be prepared in two (2) hard copies each in a three
12 ring “D” binder not to exceed 4” in width. Each copy of the report will include a compact
13 disc (CD) with appropriate data in the format detailed in the RWQCB letter dated 8
14 November, 2000 (Exhibit “D” hereto) as well as all tables included in the report in Excel
15 format and one (1) copy of the report in its entirety in a searchable Portable Document
16 File (PDF) format. A third and fourth copy of this CD shall also be provided separately
17 to the COUNTY. The spine of the hard copies will clearly display the title of the report
18 and reporting period.

20 *b) Annual Monitoring Summary Report*

21 Each report is to be prepared in accordance with Exhibit “C”. An Annual (Second
22 Semi-Annual) Evaluation Report of the Corrective Action Program in accordance with
23 Title 27 California Code of Regulation (CCR) Section (§) 20430h will be prepared by an
24 independent firm based upon its own review, conducted under separate contract with
25 COUNTY and included as an Appendix to CONSULTANT’s Detection Monitoring
26 Report. Said report will be prepared in two (2) hard copies each in a three ring “D”
27 binder not to exceed 4” in width. Each copy of the report will include a compact disc
28 (CD) with appropriate data in the format detailed in the RWQCB letter dated 8

November, 2000 (attached hereto as Exhibit "D") as well as all tables included in the report in Excel format and one (1) copy of the report in its entirety in a searchable Portable Document File (PDF) format. A third and fourth copy of this CD shall also be provided separately to the COUNTY. The spine of the hard copies will clearly display the title of the report and reporting period. The second semi-annual period report and annual report for the respective year may be combined into a single report submittal.

c) Compilation of Information in the Required Format for Electronic Submittal (GeoTracker)

All reports are to follow the format outlined in the SWRCB's website and as required by Title 23 and Title 27 of the CCR, as referenced hereinabove.

d) Submittal of Data and Reports

Reports shall be submitted to the COUNTY for review and approval. Final data also shall be submitted to the COUNTY for approval, and then the approved data shall be uploaded by CONTRACTOR into the GeoTracker system, in accordance with AB 2886 and the implementing regulations set forth in Title 23 and Title 27 of the CCR, as referenced hereinabove.

All reports required under Tasks 2 through 4, inclusive, shall be submitted to the COUNTY within fifteen (15) working days of CONTRACTOR's receipt of all appropriate data. (In the event the COUNTY's contracted laboratory fails to send all of its analytical data according to schedule, the CONTRACTOR shall notify the COUNTY promptly of such failure.) Should the CONTRACTOR not submit a report within the deadline for its submission as specified herein, the CONTRACTOR will incur a penalty for each late report as follows: twenty-percent (20%) of the report cost for the first late report; forty-percent (40%) of the report cost for the second late report; and fifty-percent (50%) of the report cost for the third and each successive late report. The penalties are cumulative and shall be applicable as to all reports required during any contract year under Tasks 2 through 4, inclusive. The specified percentages will reset at the beginning of a new contract year.

1 CONTRACTOR understands and agrees that the COUNTY shall retain full
2 ownership rights of the reports and the work-product of CONTRACTOR for the project,
3 to the fullest extent permitted by law. All documents, including electronic data files,
4 required in performing services under this Agreement shall be submitted to, and shall
5 remain the property of the COUNTY.

6 CONTRACTOR is expected to provide recommendations to COUNTY for
7 regulatory compliance and notifications based on site specific Waste Discharge
8 Requirements (WDR) and sample analysis for each respective site. Additionally,
9 CONTRACTOR is expected to respond to all comments from the Regional Water
10 Quality Control Board (RWQCB) and all other reviewing agencies. The term
11 "comments" in that context shall include requested changes to the report as initially
12 submitted, whether based on perceived errors or omissions, and/or the commenting
13 agency's preference in word choice or descriptions. These responses shall be provided
14 by CONTRACTOR at no additional cost to the COUNTY and shall be completed in the
15 time frame specified by the RWQCB and/or all other reviewing agencies.

16 If this project requires services that are not part of the Basic Services specified in
17 this Article 1 of the Agreement, the CONTRACTOR may be requested by the COUNTY
18 to provide Extra Services. These Extra Services must be pre-approved and authorized
19 in writing by the COUNTY Representative before work can commence. Extra Services
20 provisions are included in Article 5 "Compensation/Invoicing" of this Agreement.

21 **C. CONTRACTOR's Basic Fee Services:**

22 Throughout the length of the project, the CONTRACTOR shall consult,
23 communicate and meet with COUNTY's project committee and staff as often as
24 necessary in order to verify, refine, and complete the project requirements and review
25 the progress of the project. CONTRACTOR shall prepare brief minutes of the meetings
26 attended and shall provide a copy of all such minutes to the COUNTY. The list of bid
27 conditions and requirements is included in Exhibit "F".
28

Services required of the CONTRACTOR for each of the three (3) disposal sites shall include, but are not necessarily limited to the following items (as more thoroughly described in the immediately preceding Section 1.B.) related to the preparation of necessary reports and/or the Electronic Submittal of Information (ESI) to the State's GeoTracker system:

1. General Reporting Tasks:

- a) Obtain data electronically from the Lab;
- b) Compile analytical results into tables;
- c) Analyze data noting any significant results, such as detections, changes from historical results, etc.;
- d) Notify the COUNTY representative if such results trigger required regulatory action by the COUNTY;
- e) Perform statistical analysis of applicable groundwater quality data as required by the regulations, using the computer software program SANITAS by NIC (formerly IDT, Inc) – No software substitutions will be allowed. SANITAS is a state-of-the art statistical analysis software program designed to evaluate and analyze specific data. SANITAS provides state-specific statistical procedures to ensure that a facility's ground water quality statistical analysis procedures meet all relevant regulations. NIC has built SANITAS to provide rapid and cost-effective ground water quality statistical analyses;
- f) Prepare the quarterly, semi-annual, and/or annual detection monitoring reports to comply with all regulations, orders, programs, etc., applicable for each respective disposal site;
- g) Provide recommendations to the COUNTY regarding COUNTY's efforts to comply with the Detection Monitoring Program at each disposal site, if deemed appropriate by the CONTRACTOR.

1 2. Electronic Submittal of Information (ESI):

- 2 a) Check electronic data received from the Lab to make sure it agrees
- 3 with the hard copy of Lab reports (this includes a QA/QC check of
- 4 the EDF file from the Lab);
- 5 b) Analyze data and if anomalous results are found, confirm the
- 6 results in question with the Lab;
- 7 c) Ensure that the data is in the correct format for electronic submittal
- 8 and that it will be accepted by the GeoTracker system. The data
- 9 format is to be checked by using the Electronic Deliverable
- 10 Consistency Check (EDCC) program, which is designed to check
- 11 the consistency of file formats of reports produced in the Electronic
- 12 Deliverable Format (EDF) as Electronic Data Deliverables (EDDs);
- 13 d) Obtain access and submit final data into the GeoTracker system
- 14 (after it is approved by the COUNTY), in accordance with the
- 15 regulations promulgated pursuant to California Assembly Bill 2886
- 16 (Cal. Stats 2000, Chapter 727, referenced herein as "AB 2886"),
- 17 which regulations are set forth in Title 23 and in Title 27 of the
- 18 CCR, as referenced above. The CONTRACTOR's basic steps for
- 19 ESI are outlined below:
- 20 i. Upload groundwater monitoring data received from the Lab
- 21 (EDF data);
- 22 ii. Upload groundwater depth information (Geo_Well data) for each
- 23 well;
- 24 iii. Upload each Detection Monitoring Report in its entirety
- 25 (Geo_Report data), in PDF format

26 **D. Related Services performed by the COUNTY:**

- 27 a) COUNTY will perform monitoring and sampling of applicable
- 28 mediums. Samples will be submitted by COUNTY to a certified

laboratory for analysis; samples for each site will be submitted individually to the laboratory and at different times. Therefore, the samples for the different sites will be staggered, with samples for all sites usually being submitted to the laboratory within a period of four to five weeks. However, overlapping is possible due to some sites having more wells to be sampled than others.

- b) COUNTY will provide field monitoring data to CONTRACTOR;
- c) COUNTY will review and approve all reports and data prior to CONTRACTOR submitting into the GeoTracker system. The reviewing process for each report could take the COUNTY up to three (3) weeks to complete.

2. OBLIGATIONS OF THE COUNTY

The COUNTY will:

- A. Compensate the CONTRACTOR as provided in this Agreement.
- B. Provide a "COUNTY Representative" who will represent the COUNTY and who will cooperate with the CONTRACTOR as necessary or appropriate to facilitate the CONTRACTOR's performance under the provisions of this Agreement. The COUNTY Representative will be the Director of the Department of Public Works and Planning or his/her designee. The CONTRACTOR shall communicate and coordinate with the COUNTY Representative who will provide the following services:
 - i. Examine documents submitted to the COUNTY by the CONTRACTOR and timely render decisions pertaining thereto.
 - ii. Provide communication between the CONTRACTOR and COUNTY officials and commissions (including user Department).
 - iii. Provide right of entry on designated property, if required.

1 C. Give reasonably prompt consideration to all matters submitted by the
2 CONTRACTOR for approval to the end that there will be no
3 substantial delays in the CONTRACTOR's program of work. An
4 approval, authorization or request to the CONTRACTOR given by the
5 COUNTY will only be binding upon the COUNTY under the terms of
6 this Agreement if in writing and signed on behalf of the COUNTY by
7 the COUNTY Representative or a designee.

8 D. Perform all groundwater sampling at each landfill.

9 E. Transport samples to laboratory for analysis.

10 F. Provide CONTRACTOR a hard copy of field parameter notes for each
11 sampling event at each disposal site.

12 G. Provide CONTRACTOR copies of revised WDR's upon COUNTY
13 receipt of WDR's from the RWQCB.

14 3. TERM

15 The term of this Agreement shall be for a period of three (3) years,
16 commencing on the Effective Date. This Agreement may be extended for two (2)
17 additional consecutive twelve (12) month extension period upon written approval of both
18 parties no later than thirty (30) days prior to the first day of the next twelve (12) month
19 extension period. The Director of Public Works and Planning or his or her designee is
20 authorized to execute such written approval on behalf of COUNTY based on
21 CONTRACTOR'S satisfactory performance.

22 4. TERMINATION

23 A. Non-Allocation of Funds - The terms of this Agreement, and the
24 services to be provided thereunder, are contingent on the approval of funds by the
25 appropriating government agency. Should sufficient funds not be allocated, the services
26 provided may be modified, or this Agreement terminated, at any time by giving the
27 CONTRACTOR thirty (30) days advance written notice.

1 **B. Breach of Contract** - The COUNTY may immediately suspend or
2 terminate this Agreement in whole or in part, where in the determination of the COUNTY
3 there is:

- 4 1) An illegal or improper use of funds;
5 2) A failure to comply with any term of this Agreement;
6 3) A substantially incorrect or incomplete report submitted to the
7 COUNTY;
8 4) Improperly performed service.

9 In no event shall any payment by the COUNTY constitute a waiver by the
10 COUNTY of any breach of this Agreement or any default which may then exist on the
11 part of the CONTRACTOR, nor shall such payment impair or prejudice any remedy
12 available to the COUNTY with respect to the breach or default. The COUNTY shall have
13 the right to demand of the CONTRACTOR the repayment to the COUNTY of any funds
14 disbursed to the CONTRACTOR under this Agreement, which in the judgment of the
15 COUNTY were not expended in accordance with the terms of this Agreement. The
16 CONTRACTOR shall promptly refund any such funds upon demand.

17 **C. Without Cause** - Under circumstances other than those set forth
18 above, this Agreement may be terminated by COUNTY upon the giving of thirty (30)
19 days advance written notice of an intention to terminate to CONTRACTOR.

20 **5. COMPENSATION/INVOICING**: COUNTY agrees to pay
21 CONTRACTOR and CONTRACTOR agrees to receive compensation as follows:

22 **A. Basic Fee**:

23 Notwithstanding any other provision in this Agreement, the Basic Fee for
24 the Basic Services required of the CONTRACTOR as specified in Article 1 hereinabove,
25 shall be paid at the rates shown in the CONTRACTOR's response to COUNTY's
26 Request for Quotation No. 17-054 (a true and correct copy of which is attached hereto
27 as Exhibit "G" and incorporated by this reference) and shall not exceed an annual
28

maximum of \$20,677 for each contract year. These rates as listed in Exhibit "G" are to remain in effect for the entire duration of this Agreement.

1) Upon written agreement and authorization by both COUNTY and CONTRACTOR, the Task amounts listed in Exhibit "G" may be modified within the maximum limits of the Total Basic Fee for any contract year.

B. Extra Services:

1) A maximum annual allocation of \$10,195 to pay for authorized Extra Services is provided herein by this Agreement. Payment of Extra Services in excess of \$10,195 is prohibited except upon a written Amendment to this Agreement pursuant to the provisions specified herein.

2) The CONTRACTOR shall submit a request for authorization to perform Extra Services and an appropriate fee schedule for said Extra Services. The CONTRACTOR shall not undertake any Extra Services without the advance written authorization of the COUNTY Representative. The CONTRACTOR and the COUNTY shall expressly confirm in writing the authorization and maximum cost for any such Extra Services before the CONTRACTOR is compensated for any work thereon.

3) Payment for Extra Services will be at the identical hourly and cost rates set forth in Exhibit "G" to this Agreement.

4) The following are CONTRACTOR services which are considered as not included herein, but may be required and thus considered Extra Services.

a) Providing unforeseen, extraordinary, or unique services or items that are not covered or ordinarily included in the Basic Fee, but which have been specifically authorized by the COUNTY Representative.

b) Making changes to documents, which are ordered by the COUNTY subsequent to COUNTY approval thereof (excludes changes to documents resulting from comments by regulatory agencies).

1 5) In the event COUNTY Representative expressly authorizes Extra
2 Services, CONTRACTOR shall keep complete records showing the hours and
3 description of activities worked by each person who works on the project and all costs
4 and charges applicable to the Extra Services work authorized. Should there be a claim
5 for Extra Services, the CONTRACTOR hereby acknowledges and agrees that he shall
6 identify the activity, performer of the activity, reason for the activity, and COUNTY
7 official requesting the activity or the claim will be denied. CONTRACTOR shall be
8 responsible for all subcontractors (if any are approved in accordance with Article 8)
9 keeping similar records. The CONTRACTOR shall not stop the work, including the work
10 in other areas unrelated to the Extra Services request or claim, unless it can be shown
11 the project work cannot proceed while a claim or request for Extra Services is being
12 evaluated.

13 6) CONTRACTOR shall submit separate invoices for Extra Services,
14 accompanied by copies of invoices for work performed by any approved subcontractors
15 and costs for approved incidentals.

16 In no event shall services performed under this Agreement exceed the maximum annual
17 amount of \$30,872. It is understood that all expenses incidental to CONTRACTOR's
18 performance of services under this Agreement shall be borne by CONTRACTOR.

19 **C. Payments:**

20 1) Progress payments will be made by the COUNTY upon
21 receipt and approval of the CONTRACTOR's semi-annual invoices based on the
22 COUNTY's evaluation of the completion of the respective components of the projects(s).
23 Invoices shall specifically identify this Agreement number, the Disposal Site and Task
24 number to which the work pertains, and shall clearly identify any and all charges for
25 tasks authorized as Extra Services. All invoices shall be submitted with the
26 documentation identified below in Paragraph 4 of this Section5.C. CONTRACTOR
27 shall submit semi-annual invoices to:

28 Resources Division
 Attn: Curtis Larkin, Senior Engineer

COUNTY of Fresno
Department of Public Works and Planning
2220 Tulare Street, Sixth Floor
Fresno, CA 93721-2106

2) Upon receipt of a proper invoice, the COUNTY Department of Public Works and Planning will take a maximum of ten (10) working days to review, approve, and submit it to the COUNTY Auditor-Controller/Treasurer-Tax Collector. Unsatisfactory or inaccurate invoices may be returned to the CONTRACTOR for correction and resubmittal. Payment will be issued to CONTRACTOR within forty (40) calendar days of the date the Auditor-Controller/Treasurer-Tax Collector receives the approved invoice.

3) An unresolved dispute over a possible error or omission may cause payment of CONTRACTOR fees in the disputed amount to be withheld by the COUNTY.

4) Concurrently with the invoices, the CONTRACTOR shall provide its certification acceptable to the COUNTY, and shall provide, on COUNTY request, copies of issued checks, receipts, or other COUNTY pre-approved documentation, that complete payment has been made to all subcontractors as provided herein for all previous invoices paid by the COUNTY.

5) Final invoice shall be submitted to COUNTY no later than sixty (60) days after project is completed. Payment shall not be made until all post-project services are completed, including but not limited to furnishing of required reports.

6) In the event the COUNTY reduces the scope of the project, the CONTRACTOR will be compensated on a pro rata basis for actual work completed and accepted by the COUNTY in accordance with the terms of this Agreement.

D. Compensation Records: The CONTRACTOR shall keep complete records showing the hours and description of activities performed by each person who works on the project and all associated costs or charges applicable to work covered by the Basic Fee and approved Extra Services. The CONTRACTOR will be responsible for all

1 approved subcontractors keeping similar records.

2 **6. INDEPENDENT CONTRACTOR:** In performance of the work, duties
3 and obligations assumed by CONTRACTOR under this Agreement, it is mutually
4 understood and agreed that CONTRACTOR, including any and all of the
5 CONTRACTOR's officers, agents, and employees will at all times be acting and
6 performing as an independent CONTRACTOR, and shall act in an independent capacity
7 and not as an officer, agent, servant, employee, joint venturer, partner, or associate of
8 the COUNTY. Furthermore, COUNTY shall have no right to control or supervise or
9 direct the manner or method by which CONTRACTOR shall perform its work and
10 function. However, COUNTY shall retain the right to administer this Agreement so as to
11 verify that CONTRACTOR is performing its obligations in accordance with the terms
12 and conditions thereof.

13 CONTRACTOR and COUNTY shall comply with all applicable provisions of law
14 and the rules and regulations, if any, of governmental authorities having jurisdiction over
15 matters the subject thereof.

16 Because of its status as an independent CONTRACTOR, CONTRACTOR shall
17 have absolutely no right to employment rights and benefits available to COUNTY
18 employees. CONTRACTOR shall be solely liable and responsible for providing to, or on
19 behalf of, its employees all legally-required employee benefits. In addition,
20 CONTRACTOR shall be solely responsible and save COUNTY harmless from all
21 matters relating to payment of CONTRACTOR's employees, including compliance with
22 Social Security withholding and all other regulations governing such matters. It is
23 acknowledged that during the term of this Agreement, CONTRACTOR may be providing
24 services to others unrelated to the COUNTY or to this Agreement.

25 **7. MODIFICATION:** Any matters of this Agreement may be modified
26 from time to time by the written consent of all the parties without, in any way, affecting
27 the remainder.
28

1 **8. NON-ASSIGNMENT:** Neither party shall assign, transfer or
2 sub-contract this Agreement, or any of its respective rights or duties hereunder, without
3 the prior written consent of the other party.

4 **9. HOLD HARMLESS:** CONTRACTOR agrees to indemnify, save, hold
5 harmless, and at COUNTY's request, defend the COUNTY, its officers, agents, and
6 employees from any and all costs and expenses, damages, liabilities, claims, and
7 losses occurring or resulting to COUNTY in connection with the performance, or failure
8 to perform, by CONTRACTOR, its officers, agents, or employees under this Agreement,
9 and from any and all costs and expenses, damages, liabilities, claims, and losses
10 occurring or resulting to any person, firm, or corporation who may be injured or
11 damaged by the performance, or failure to perform, of CONTRACTOR, its officers,
12 agents, or employees under this Agreement.

13 **10. INSURANCE**

14 Prior to commencing the duties under the Agreement with the COUNTY, the
15 CONTRACTOR shall furnish the COUNTY, at no additional cost to the COUNTY,
16 certificates for the following insurance policies which shall be kept in force during the
17 term of the Agreement (i.e., until the Agreement is terminated or it expires), and for such
18 additional time as may be specified herein with respect to a particular type of policy.

19 **A. Commercial General Liability**

20 Commercial General Liability Insurance with limits of not less than One Million
21 Dollars (\$1,000,000) per occurrence and an annual aggregate of Two Million Dollars
22 (\$2,000,000). This policy shall be issued on a per occurrence basis. The COUNTY
23 may require specific coverages including completed operations, products liability,
24 contractual liability, Explosion-Collapse-Underground, fire legal liability or any other
25 liability insurance deemed necessary because of the nature of this contract.

26 **B. Automobile Liability**

27 Comprehensive Automobile Liability Insurance with limits for bodily injury of not
28 less than Two Hundred Fifty Thousand Dollars (\$250,000.00) per person, Five Hundred

1 Thousand Dollars (\$500,000.00) per accident and for property damages of not less than
2 Fifty Thousand Dollars (\$50,000.00), or such coverage with a combined single limit of
3 Five Hundred Thousand Dollars (\$500,000.00). Coverage should include owned and
4 non-owned vehicles used in connection with this Agreement.

5 **C. Professional Liability**

6 If CONTRACTOR employs licensed professional staff, (e.g., P.E., Ph.D., etc.) in
7 providing services, Professional Liability Insurance with limits of not less than One
8 Million Dollars (\$1,000,000.00) per claim, Three Million Dollars (\$3,000,000.00) annual
9 aggregate. This coverage shall be issued on a per claim basis. CONTRACTOR agrees
10 that it shall maintain, at its sole expense, in full force and effect for a period of two (2)
11 years past the date of the final payment to CONTRACTOR, including the resolution of
12 all claims, disputes, and matters in question regarding the services provided under this
13 Agreement.

14 **D. Worker's Compensation**

15 A policy of Worker's Compensation insurance as may be required by the
16 California Labor Code.

17 CONTRACTOR shall obtain endorsements to the Commercial General Liability
18 insurance naming the COUNTY of Fresno, its officers, agents, and employees,
19 individually and collectively, as additional insured, but only insofar as the operations
20 under this Agreement are concerned. Such coverage for additional insured shall apply
21 as primary insurance and any other insurance, or self-insurance, maintained by
22 COUNTY, its officers, agents and employees shall be excess only and not contributing
23 with insurance provided under CONTRACTOR's policies herein. This insurance shall
24 not be cancelled or changed without a minimum of thirty (30) days advance written
25 notice given to COUNTY.

26 Prior to commencing the duties under the Agreement with the COUNTY, the
27 CONTRACTOR shall provide to the COUNTY all certificates of insurance and
28

endorsements as stated above for all of the foregoing policies, as required herein, which shall be delivered to:

Curtis Larkin, Senior Engineer
Resources Division, Department of Public Works and Planning
2220 Tulare Street, 6th Floor
Fresno, CA 93720

The certificates of insurance and endorsements shall state that such insurance coverage has been obtained and is in full force; that the COUNTY of Fresno, its officers, agents and employees will not be responsible for any premiums on the policies; that such Commercial General Liability insurance names the COUNTY of Fresno, its officers, agents and employees, individually and collectively, as additional insured, but only insofar as the operations under this Agreement are concerned; that such coverage for additional insured shall apply as primary insurance and any other insurance, or self-insurance, maintained by COUNTY, its officers, agents and employees, shall be excess only and not contributing with insurance provided under CONTRACTOR's policies herein; and that this insurance shall not be cancelled or changed without a minimum of thirty (30) days advance, written notice given to COUNTY.

In the event CONTRACTOR fails to keep in effect at all times insurance coverage as herein provided, the COUNTY may, in addition to other remedies it may have, suspend or terminate this Agreement upon the occurrence of such event.

11. AUDITS AND INSPECTIONS: The CONTRACTOR shall at any time during business hours, and as often as the COUNTY may deem necessary, make available to the COUNTY for examination all of its records and data with respect to the matters covered by this Agreement. The CONTRACTOR shall, upon request by the COUNTY, permit the COUNTY to audit and inspect all of such records and data necessary to ensure CONTRACTOR's compliance with the terms of this Agreement.

If this Agreement exceeds ten thousand dollars (\$10,000.00), CONTRACTOR shall be subject to the examination and audit of the Auditor General for a period of three (3) years after final payment under contract (Government Code Section 8546.7).

1 **12. NOTICES:** The persons and their addresses having authority to give
2 and receive notices under this Agreement include the following:

3 COUNTY

CONTRACTOR

4 Department of Public Works and Planning
5 John R. Thompson, Deputy Director
6 Resources and Administration
2220 Tulare Street, 6th Floor
Fresno, CA 93721

SOMA Environmental Engineering, Inc.
Mansour Sepehr, PhD, PE
6620 Owens Dr., Suite A
Pleasanton, CA 94588

7 Any and all notices between the COUNTY and the CONTRACTOR provided for
8 or permitted under this Agreement or by law shall be in writing and shall be deemed
9 duly served when personally delivered to one of the parties, or in lieu of such personal
10 services, when deposited in the United States Mail, postage prepaid, addressed to such
11 party.

12 **13. ERRORS OR OMISSION CLAIMS AND DISPUTES:**

13 **A. Definitions:**

14 1) A "CONTRACTOR" is a duly licensed Architect or Engineer,
15 or other provider of professional services, acting as a business entity (owner,
16 partnership, corporation, joint venture or other business association) in accordance with
17 the terms of an Agreement with the COUNTY.

18 2) A "Claim" is a demand or assertion by one of the parties
19 seeking, as a matter of right, adjustment or interpretation of contract terms, payment of
20 money, extension of time, change orders, or other relief with respect to the terms of the
21 contract. The term "Claim" also includes other disputes and matters in question
22 between the COUNTY and CONTRACTOR arising out of or relating to the contract.
23 Claims must be made by written notice. The provisions of Government Code section
24 901, et seq., shall apply to every claim made to COUNTY. The responsibility to
25 substantiate claims shall rest with the party making the claim. The term "Claim" also
26 includes any allegation of an error or omission by the CONTRACTOR.

1 **B.** In the spirit of cooperation between the COUNTY and
2 CONTRACTOR, the following procedures are established in the event of any claim or
3 dispute alleging an error, omission, or negligent act of the CONTRACTOR.

4 1) Claims, disputes or other matters in question between the
5 parties, arising out of or relating to this Agreement, shall not be subject to arbitration,
6 but shall be subject to the following procedures.

7 2) The project manager of COUNTY and CONTRACTOR shall
8 meet and confer and attempt to reach agreement on any dispute, including what
9 damages have occurred, the measure of damages and what proportion of damages, if
10 any, shall be paid by either party. The parties agree to consult and consider the use of
11 mediation or other form of dispute resolution prior to resorting to litigation.

12 3) If the COUNTY and CONTRACTOR cannot reach
13 agreement under Article 13.B.2., the disputed issues may, upon concurrence by all
14 parties, be submitted to a panel of three (3) for a recommended resolution. The
15 CONTRACTOR and the COUNTY shall each select one (1) member of the panel, and
16 the third member shall be selected by the other two panel members. The discovery
17 rights provided by California Code of Civil Procedure for civil proceedings shall be
18 available and enforceable to resolve the disputed issues. Either party requesting this
19 dispute resolution process shall, when invoking the rights to this panel, give to the other
20 party a notice describing the claims, disputes and other matters in question. Prior to 20
21 days before the initial meeting of the panel, both parties shall submit all documents such
22 party intends to rely upon to resolve such dispute. If it is determined by the panel that
23 any party has relied on such documentation, but has failed to previously submit such
24 documentation on a timely basis to the other party, the other party shall be entitled to a
25 20-day continuance of such initial meeting of the panel. The decision by the panel is
26 not a condition precedent to arbitration, mediation or litigation.

27 4) Upon receipt of the panel's recommended resolution of the
28 dispute issues, the COUNTY and the CONTRACTOR shall again meet and confer and

attempt to reach agreement. If the parties still are unable to reach agreement, each party shall have recourse to all appropriate legal and equitable remedies.

C. The procedures to be followed in the resolution of claims and disputes may be modified any time by mutual agreement of the parties hereto.

D. The CONTRACTOR shall continue to perform its obligations under this Agreement pending resolution of any dispute, and the COUNTY shall continue to make payments of all undisputed amounts due under this Agreement.

E. When a claim by either party has been made alleging the CONTRACTOR's error, omission or negligent act, the COUNTY Project Manager and the CONTRACTOR shall meet and confer within twenty-one (21) days after the written notice of the claim has been provided.

14. JOINDER OF PARTIES: The CONTRACTOR, the CONTRACTOR's contractors of any tier (if any), approved subcontractors of any tier (if any), suppliers and construction lenders all shall be bound by the dispute resolution provisions of this Agreement, and immediately upon demand of COUNTY or CONTRACTOR, shall participate in and shall become parties to the dispute resolution process, provided they have signed any document that incorporates or refers to the dispute resolution provisions of this Agreement. Failure, whether intended or inadvertent, of CONTRACTOR to ensure that such nonparties have signed such a document shall inure only to CONTRACTOR's detriment, if any there be. COUNTY shall not suffer a detriment by CONTRACTOR's action or inaction in this regard. If such a party after due notice fails to appear at and participate in the dispute resolution proceedings, the panel established in accordance with the provisions of Article 13.B.3., shall make a decision based on evidence introduced by the party or parties who do participate.

15. CONTRACTOR'S OBLIGATIONS AS TO REGULATORY REQUIREMENTS The CONTRACTOR shall analyze and comply fully with requirements of all relevant regulatory codes including, but not limited to, applicable provisions of California Code of Regulations (CCR) Titles 14, 22, 23 and 27. The CONTRACTOR's attention is also directed to comply with all applicable Monitoring and

1 Reporting Programs, Waste Discharge Requirements (WDRs) for each disposal site,
2 Standard Provisions and Reporting Requirements.

3 **16. PARTIES BOUND BY AGREEMENT:** This Agreement shall be
4 binding upon the COUNTY, the CONTRACTOR, and their respective successors in
5 interest, legal representatives, executors, administrators, and assigns with respect to all
6 covenants as set forth herein.

7 **17. COMPLIANCE WITH LAWS:** CONTRACTOR shall comply with
8 Federal, State, and local laws, ordinances, regulations, and Fresno COUNTY Charter
9 Provisions applicable and in effect when professional services are performed.

10 **18. AMENDMENTS:** Any changes to this Agreement requested either by
11 the COUNTY or CONTRACTOR may be effected only if mutually agreed upon in writing
12 by duly authorized representatives of the parties hereto. This Agreement shall not be
13 modified or amended, nor shall any rights of a party hereto be waived, except by such a
14 writing.

15 **19. CONTRACTOR'S LEGAL AUTHORITY:** Each individual executing this
16 Agreement on behalf of CONTRACTOR hereby covenants, warrants, and represents:
17 (i) that he or she is duly authorized to execute and deliver this Agreement on behalf of
18 such corporation in accordance with a duly adopted resolution of the corporation's board
19 of directors and in accordance with such corporation's articles of incorporation or charter
20 and bylaws; (ii) that this Agreement is binding upon such corporation; and (iii) that
21 CONTRACTOR is a duly organized and legally existing Nevada corporation in good
22 standing and authorized to do business in the State of California.

23 **20. OWNERSHIP OF DOCUMENTS:**
24 CONTRACTOR understands and agrees that COUNTY shall retain full ownership rights
25 of the drawings or figures and the work-product of CONTRACTOR for the project, to the
26 fullest extent permitted by law. In this regard, CONTRACTOR acknowledges and
27 agrees that CONTRACTOR's services are on behalf of COUNTY and are "works made
28 for hire," as that term is defined in copyright law, by COUNTY; that the drawings or

1 figures and work-product to be prepared by CONTRACTOR are for the sole and
2 exclusive use of COUNTY, and shall be the sole property of COUNTY and its assigns,
3 and the COUNTY and its assigns shall be the sole owner of all patents, copyrights,
4 trademarks, trade secrets and other contractual and intangible rights in connection
5 therewith; that all the rights, title, and interest in and to the drawings or figures and
6 work-product will be transferred to COUNTY by CONTRACTOR, and CONTRACTOR
7 will assist COUNTY to obtain and enforce patents, copyrights, trademarks, trade
8 secrets, and all contractual and other rights of any kind or nature relating to COUNTY's
9 ownership of said drawings or figures and work-product; and that COUNTY shall be and
10 become the owner of such drawings or figures and work product, free and clear of any
11 claim by CONTRACTOR or anyone claiming any right through CONTRACTOR.
12 CONTRACTOR further acknowledges and agrees that COUNTY's ownership rights in
13 such drawings or figures and work product shall apply regardless of whether such
14 drawings or figures or work product, or any copies thereof, are in the possession of
15 CONTRACTOR, or any other person, firm, corporation, or entity. For the purpose of
16 this Agreement the terms "drawings or figures and work-product" shall mean all reports
17 and study findings, discoveries, developments, designs, improvements, inventions,
18 formulas, processes, techniques, or specific know-how and data generated or
19 conceived or reduced to practice or learning by CONTRACTOR, either alone or jointly
20 with others, that result from the tasks assigned to CONTRACTOR by COUNTY under
21 this Agreement.

22 All documents, including calculations and electronic data files, required in performing
23 services under this Agreement shall be submitted to, and shall remain the property of
24 the COUNTY.

25 **21. GOVERNING LAW:** Venue for any action arising out of or related to
26 this Agreement shall only be in Fresno COUNTY, California. The rights and obligations
27 of the parties and all interpretation and performance of this Agreement shall be
28 governed in all respects by the laws of the State of California.

1 **22. CONFLICT OF INTEREST:** The CONTRACTOR shall comply with the
2 provisions of the COUNTY's Conflict of Interest Code, attached hereto as Exhibit "H"
3 and incorporated herein by this reference. Such compliance shall include the filing of
4 annual statements pursuant to the regulations of the State Fair Political Practices
5 Commission as promulgated in Title 2 of the CCR.

6 **23. DISCLOSURE OF SELF-DEALING TRANSACTIONS:** This provision
7 is only applicable if the CONTRACTOR is operating as a corporation (a for-profit or non-
8 profit corporation) or if during the term of this Agreement, the CONTRACTOR changes
9 its status to operate as a corporation. Members of the CONTRACTOR's Board of
10 Directors shall disclose any self-dealing transactions that they are a party to while
11 CONTRACTOR is providing goods or performing services under this Agreement. A self-
12 dealing transaction mean a transaction to which the CONTRACTOR is a party and in
13 which one or more of its directors has a material financial interest. Members of the
14 Board of Directors shall disclose any self-dealing transactions that they are a party to by
15 completing and signing a Self-Dealing Transaction Disclosure Form (Exhibit "I" hereto),
16 and submitting it to COUNTY prior to commencing with the self-dealing transaction or
17 immediately thereafter.

18 **24. SEVERABILITY:** Should any provision herein be found or deemed to
19 be invalid, this Agreement shall be construed as not containing such provision, and all
20 other provisions which are otherwise lawful shall remain in full force and effect, and to
21 this end the provisions of this Agreement are hereby declared to be severable.


22 **25. ENTIRE AGREEMENT:** This Agreement constitutes the entire
23 agreement between the CONTRACTOR and COUNTY with respect to the subject
24 matter hereof and supersedes all previous agreement negotiations, proposals,
25 commitments, writings, advertisements, publications, and understandings of any nature
26 whatsoever unless expressly included in this Agreement.

1 IN WITNESS WHEREOF, the parties have executed this Agreement on the date
2 set forth above.

3
4 CONTRACTOR
5 SOMA ENVIRONMENTAL
6 ENGINEERING, INC.
6620 OWENS DR., SUITE A
PLEASANTON, CA 94588


COUNTY OF FRESNO

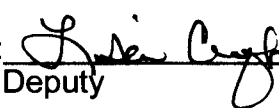
7 By: 
8 Mansour Sépehr
Title: President


Brian Pacheco, Chairman
Board of Supervisors

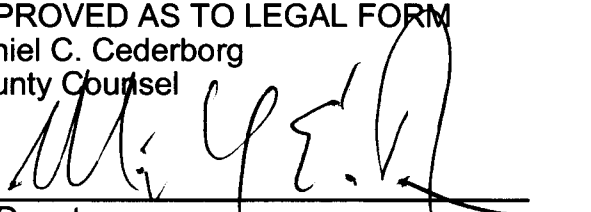
9
10 REVIEWED AND RECOMMENDED FOR
11 APPROVAL

ATTEST:
Bernice E. Seidel, Clerk
Board of Supervisors

12 By: 
13 Steven E. White, Director
14 Department of Public Works and
Planning

By: 
Deputy

15 APPROVED AS TO LEGAL FORM
16 Daniel C. Cederborg
County Counsel

17 By: 
18 Deputy

19 APPROVED AS TO ACCOUNTING FORM
20 Oscar J. Garcia, CPA
21 Auditor-Controller/Treasurer-Tax Collector

22 By: 
23 Deputy

24 FOR ACCOUNTING USE ONLY

25 Fund: 0700 0710 0720
Subclass: 15000 15000 15000
26 Org. No.: 9026 9028 9020
Account: 7295 7295 7295

Exhibit "A"

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM NO. R5-2012-0064 FOR COUNTY OF FRESNO AMERICAN AVENUE MUNICIPAL SOLID WASTE LANDFILL CLASS III LANDFILL CONSTRUCTION, OPERATION, AND CORRECTIVE ACTION FRESNO COUNTY

This monitoring and reporting program (MRP) is issued pursuant to California Water Code section 13267 and incorporates requirements for groundwater, surface water, and unsaturated zone monitoring and reporting; facility monitoring, maintenance, and reporting; and financial assurances reporting contained in California Code of Regulations, Title 27, section 20005, et seq. (hereafter Title 27), Waste Discharge Requirements (WDRs) Order No. R5-2012-0064, and the Standard Provisions and Reporting Requirements (SPRRs) dated January 2012. Compliance with this MRP is ordered by the WDRs and the Discharger shall not implement any changes to this MRP unless a revised MRP is issued by the Central Valley Water Board or the Executive Officer.

A. MONITORING

The Discharger shall comply with the detection monitoring program provisions of Title 27 for groundwater, surface water, and the unsaturated zone in accordance with Standard Monitoring Specifications in Section I of the SPRRs and the Monitoring Specifications in Section F of the WDRs. All monitoring shall be conducted in accordance with the approved 27 November 1996 (revised 25 May 2011) *Sample Collection and Analysis Plan*, which includes quality assurance/quality control standards.

All compliance monitoring wells established for the detection monitoring program shall constitute the monitoring points for the groundwater Water Quality Protection Standard. All detection monitoring program groundwater monitoring wells, unsaturated zone monitoring devices, leachate, and surface water monitoring points shall be sampled and analyzed for monitoring parameters and constituents of concern (COCs) as indicated and listed in Tables I through VI.

The Discharger may use alternative analytical test methods, including new USEPA approved methods, provided the methods have method detection limits equal to or lower than the analytical methods specified in this Monitoring and Reporting Program, are approved by the Executive Officer, and are incorporated into the Sample Collection and Analysis Plan.

The monitoring program of this MRP includes:

<u>Section</u>	<u>Monitoring Program</u>
A.1	Groundwater Monitoring
A.2	Unsaturated Zone Monitoring
A.3	Leachate Monitoring, Seep Monitoring, and LCRS Testing
A.4	Facility Monitoring
A.5	Corrective Action Monitoring

1. Groundwater Monitoring

The Discharger shall operate and maintain a groundwater detection monitoring system that complies with the applicable provisions of Title 27, sections 20415 and 20420. The detection monitoring system shall be certified by a California-licensed professional civil engineer or geologist as meeting the requirements of Title 27. The current groundwater detection monitoring system meets the applicable requirements of Title 27. The Discharger shall revise the groundwater detection monitoring system (after review and approval by Central Valley Water Board staff) as needed each time a new landfill cell or module is constructed.

The current groundwater monitoring network shall consist of the following:

<u>Well</u>	<u>Status</u>	<u>Zone</u>	<u>Units Being Monitored</u>
BMW-1,2	Background	Saturated	Phase I, II & III
BMW-3, DMW-16,17	Reclassified as Background	Saturated	Phase I, II & III
DMW-6,10	Detection	Saturated	Phase I & II
DMW-18, 19	Detection	Saturated	Phase II
DMW-21, 22, 23, 24	Detection	Saturated	Phase III
DMW-2, 4, 8, 12, 20, 25	Corrective Action	Saturated	Phase I & II

Groundwater samples shall be collected from the background wells, detection monitoring wells, corrective action monitoring wells and any additional wells added as part of the approved groundwater monitoring system. The collected samples shall be analyzed for the parameters and constituents listed in Table I in accordance with the specified methods and frequencies. The Discharger shall collect, preserve, and transport groundwater samples in accordance with the approved Sample Collection and Analysis Plan.

Once per quarter, including the times of expected highest and lowest elevations of the water levels in the wells, the Discharger shall measure the groundwater elevation in each well, determine groundwater flow direction, and estimate groundwater flow rates in the uppermost aquifer and in any zones of perched water and in any additional portions of the zone of saturation monitored, pursuant to Title 27, section 20415(e)(15). The results shall be reported semiannually.

Samples collected for the COC monitoring specified in Table I shall be collected and analyzed in accordance with the methods listed in Table VI every five years. Five-year COCs were last monitored in 2007 and shall be monitored again in **2012** and reported in **2013**. The results shall be reported in the Annual Monitoring Report for the year in which the samples were collected.

2. Unsaturated Zone Monitoring

The Discharger shall operate and maintain an unsaturated zone detection monitoring system that complies with the applicable provisions of Title 27, sections 20415 and 20420. The current unsaturated zone detection monitoring system meets the applicable requirements of Title 27. The Discharger shall install unsaturated zone monitoring devices (after review and approval by Central Valley Water Board staff) each time the landfill constructs a new cell or module.

The current unsaturated zone monitoring network shall consist of:

<u>Mon Pt.</u>	<u>Status</u>	<u>Units Being Monitored</u>
M1L1, M1L2, M1L3, & M1L4	Detection	Phase II, Module 1
M2L1, M2L2, M2L3, & M2L4	Detection	Phase II, Module 2
M3L1, M3L2, M3L3, & M3L4	Detection	Phase II, Module 3
M4L1, M4L2, M4L3, & M4L4	Detection	Phase II, Module 4

<u>Mon Pt.</u>	<u>Status</u>	<u>Units Being Monitored</u>
M5L1	Detection	Phase II, Module 6
M6L1	Detection	Phase II, Module 6
M7L1	Detection	Phase II, Module 7
M8L1	Detection	Phase II, Module 8
P3M1LYS	Detection	Phase III, Module 1
P3M2LYS	Detection	Phase III, Module 2
P3M3LYS	Detection	Phase III, Module 3

Unsaturated zone samples shall be collected from the monitoring network listed above and shall be analyzed for the parameters and constituents listed in Table II in accordance with the specified methods and frequencies (pan lysimeters need only be sampled when liquid is present). Pan lysimeters shall be inspected for the presence of liquid **monthly**. If liquid is detected in a previously dry pan lysimeter, the Discharger shall verbally notify Central Valley Water Board staff within **seven days** and shall immediately sample and test the liquid for Field and Monitoring Parameters listed in Table II. Samples collected for the 5-year COC analyses specified in Table II shall be collected and analyzed in accordance with the methods listed in Table VI every five years, beginning again in **2012** (does not include soil-pore gas).

The Discharger shall collect, preserve, and transport samples in accordance with the quality assurance/quality control standards contained in the approved Sample Collection and Analysis Plan.

Monitoring results for the unsaturated zone shall be included in monitoring reports and shall include an evaluation of potential impacts of the facility on the unsaturated zone and compliance with the Water Quality Protection Standard.

3. Leachate Monitoring, Seep Monitoring, and Annual LCRS Testing

Leachate Monitoring: The Discharger shall operate and maintain leachate collection and removal system (LCRS) sumps, conduct monitoring of any detected leachate seeps, and conduct annual testing of each LCRS in accordance with Title 27 and this monitoring program.

The current LCRS leachate sump monitoring points are:

<u>Mon Pt.</u>	<u>Unit Where Sump is Located</u>
Sump 1	Phase II, Module 1
Sump 2	Phase II, Module 2
Sump 3	Phase II, Module 3
Sump 4	Phase II, Module 4
Sump 5	Phase II, Module 5
Sump 6	Phase II, Module 6
Sump 7	Phase II, Module 7
Sump 8	Phase II, Module 8
P3M1LCH	Phase III, Module 1
P3M2LCH	Phase III, Module 2
P3M3LCH	Phase III, Module 3

All LCRS sumps shall be inspected monthly for the presence of leachate, and flow shall be recorded in accordance with Table III. If leachate is detected in a previously dry sump, the Discharger shall verbally notify Central Valley Water Board staff within **seven days** and shall immediately sample and test the leachate for Field and Monitoring Parameters listed in Table III. Leachate in the LCRS sump shall then be sampled for all parameters and constituents in accordance with the frequencies listed in Table III whenever liquid is present. All LCRS sump samples shall be analyzed for the 5-year COCs specified in Table III every five years, beginning again in **2012**.

Seep Monitoring: Leachate that seeps to the surface from a landfill unit shall be sampled and analyzed for the Field and Monitoring Parameters listed in Table III upon detection. The quantity of leachate shall be estimated and reported as Leachate Flow Rate (in gallons/day). Reporting for leachate seeps shall be conducted as required in Section B.3 of this MRP, below.

Annual LCRS Testing: All LCRSs shall be tested annually pursuant to Title 27, section 20340(d) to demonstrate proper operation. The results of these tests shall be reported to the Central Valley Water Board in the Annual Monitoring Report and shall include comparisons with earlier tests made under comparable conditions.

4. Facility Monitoring

a. Annual Facility Inspection

Annually, prior to the anticipated rainy season, but no later than **30 September**, the Discharger shall conduct an inspection of the facility. The inspection shall assess repair and maintenance needed for drainage control systems, cover systems, and groundwater monitoring wells; and shall assess preparedness for winter conditions (including but not limited to erosion and sedimentation control). The Discharger shall take photos of any problems areas before and after repairs. Any necessary construction, maintenance, or repairs shall be completed by **31 October**. Annual facility inspection reporting shall be submitted as required in Section B.4 of this MRP.

b. Major Storm Events

The Discharger shall inspect all precipitation, diversion, and drainage facilities and all landfill side slopes for damage **within 7 days** following major storm events capable of causing damage or significant erosion. The Discharger shall take photos of any problems areas before and after repairs. Necessary repairs shall be completed **within 30 days** of the inspection. Notification and reporting requirements for major storm events shall be conducted as required in Section B.5 of this MRP.

c. Standard Observations

The Discharger shall conduct Standard Observations at the landfill in accordance with this section of the MRP. Standard observations shall be conducted in accordance with the following schedule:

<u>Landfill Unit Type</u>	<u>Frequency</u>	<u>Season</u>
Active	Weekly	Wet: 1 October to 30 April
Active	Monthly	Dry: 1 May to 30 September
Inactive/Closed	Monthly	Wet: 1 October to 30 April
Inactive/Closed	Quarterly	Dry: 1 May to 30 September

The Standard Observations shall include:

1) For the landfill units:

- a) Evidence of ponded water at any point on the landfill outside of any contact storm water/leachate diversions structures on the active face (show affected area on map); and
- b) Evidence of erosion and/or of day-lighted refuse.

2) Along the perimeter of the landfill units:

- a) Evidence of leachate seeps, estimated size of affected area, and flow rate (show affected area on map); and
- b) Evidence of erosion and/or of day-lighted refuse.

3) For receiving waters:

- a) Floating and suspended materials of waste origin - presence or absence, source, and size of affected area; and
- b) Discoloration and turbidity - description of color, source, and size of affected area.

Results of Standard Observations shall be submitted in the semiannual monitoring reports required in Section B.1 of this MRP.

5. Corrective Action Monitoring

The Discharger shall conduct corrective action monitoring to demonstrate the effectiveness of corrective action in accordance with Title 27, section 20430 and this MRP. Groundwater monitoring wells that are in a corrective action monitoring program shall be monitored in accordance with the groundwater monitoring requirements in parts A.1 and A.2 of this MRP.

Corrective Action Monitoring data analysis shall include the following:

- a. Nature and Extent
 - 1) Comparisons with concentration limit to identify any new or previously undetected constituents at a monitoring point.
- b. Effectiveness of Corrective Action
 - 1) Preparation of time series plots for representative waste constituents.
 - 2) Trend analysis for each waste constituent.
 - 3) The need for additional corrective action measures and/or monitoring wells.
 - 4) Submit a comprehensive effectiveness evaluation report every five years; to be submitted with the five year COC analyses.

The results of the above analysis, including a narrative discussion, shall be included in each semiannual report and summarized in the Annual Report, as specified under reporting Section B below. The semiannual monitoring reports shall also include a discussion of the progress of corrective action toward returning to compliance with the Water Quality Protection Standard, as specified in Section 20430(h) of Title 27.

B. REPORTING

The Discharger shall submit the following reports in accordance with the required schedule:

Reporting Schedule

<u>Section</u>	<u>Report</u>	<u>End of Reporting Period</u>	<u>Due Date</u>
B.1	Semiannual Monitoring Report	30 June, 31 December	31 August, 28 February
B.2	Annual Monitoring Report	31 December	28 February
B.3	Seep Reporting	Continuous	Immediately & 7 Days
B.4	Annual Facility Inspection Report	31 October	15 November
B.5	Major Storm Event Reporting	Continuous	7 days from damage discovery
B.6	Survey and Iso-Settlement Map for Closed Landfills	Every Five Years	At Closure Completion and Every Five Years
B.7	Financial Assurances Report	31 December	1 June

Reporting Requirements

The Discharger shall submit monitoring reports **semiannually** with the data and information as required in this Monitoring and Reporting Program and as required in WDRs Order No. R5-2012-0064 and the Standard Provisions and Reporting Requirements (particularly Section I: "Standard Monitoring Specifications" and Section J: "Response to a Release"). In reporting the monitoring data required by this program, the Discharger shall arrange the data in tabular form so that the date, the constituents, the concentrations, and the units are readily discernible. The data shall be summarized in such a manner so as to illustrate clearly the compliance with waste discharge requirements or the lack thereof. Data shall also be submitted in a digital format, such as a computer disk.

Field and laboratory tests shall be reported in each monitoring report. Semiannual and annual monitoring reports shall be submitted to the Central Valley Water Board in accordance with the above schedule for the calendar period in which samples were

taken or observations made. In addition, the Discharger shall enter all monitoring data and monitoring reports into the online Geotracker database as required by Division 3 of Title 27.

The results of **all monitoring** conducted at the site shall be reported to the Central Valley Water Board in accordance with the reporting schedule above for the calendar period in which samples were taken or observations made.

The Discharger shall retain records of all monitoring information, including all calibration and maintenance records, all original strip chart recordings of continuous monitoring instrumentation, copies of all reports required by this Order, and records of all data used to complete the application for this Order. Records shall be maintained throughout the life of the facility including the post-closure period. Such records shall be legible and shall show the following for each sample:

- a) Sample identification and the monitoring point or background monitoring point from which it was taken, along with the identity of the individual who obtained the sample;
- b) Date, time, and manner of sampling;
- c) Date and time that analyses were started and completed, and the name of the personnel and laboratory performing each analysis;
- d) Complete procedure used, including method of preserving the sample, and the identity and volumes of reagents used;
- e) Calculation of results; and
- f) Results of analyses, and the MDL and PQL for each analysis. All peaks shall be reported.

Required Reports

1. **Semiannual Monitoring Report:** Monitoring reports shall be submitted semiannually and are due on **31 August** and **28 February**. Each semiannual monitoring report shall contain at least the following:

- a) For each groundwater monitoring point addressed by the report, a description of:
 - 1) The time of water level measurement;
 - 2) The type of pump - or other device - used for purging and the elevation of the pump intake relative to the elevation of the screened interval;
 - 3) The method of purging used to stabilize water quality indicators in the well bore before the sample is taken including the pumping rate; the equipment and methods used to monitor field pH, temperature, and conductivity during

purging; results of pH, temperature, conductivity, and turbidity testing; and the method of disposing of the purge water;

- 4) The type of pump - or other device - used for sampling, if different than the pump or device used for purging; and
 - 5) A statement that the sampling procedure was conducted in accordance with the approved Sample Collection and Analysis Plan.
- b) A map or aerial photograph showing the locations of observation stations, monitoring points, and background monitoring points.
 - c) The estimated quarterly groundwater flow rate and direction in the uppermost aquifer, in any zones of perched water, and in any additional zone of saturation monitored based upon water level elevations taken prior to the collection of the water quality data submitted in the report [Title 27, section 20415(e)(15)].
 - d) Cumulative tabulated monitoring data for all monitoring points and constituents for groundwater, unsaturated zone, leachate, and surface water.
Concentrations below the laboratory reporting limit shall not be reported as "ND" unless the reporting limit is also given in the table. Otherwise they shall be reported "<" the reporting limit (e.g., <0.10). Units shall be as required in Tables I through IV unless specific justification is given to report in other units. Refer to the SPRRs Section I "Standard Monitoring Specifications" for requirements regarding MDLs and PQLs.
 - e) Laboratory statements of results of all analyses evaluating compliance with requirements.
 - f) An evaluation of the concentration of each monitoring parameter (or 5-year COC when five year COC sampling is conducted) as compared to the current concentration limits, and the results of any required verification testing for constituents exceeding a concentration limit. Report any actions taken under Section J: Response to a Release for verified exceedances of a concentration limit.
 - g) An evaluation of the effectiveness of the leachate monitoring and control facilities, and of the run-off/run-on control facilities. Include a summary of any instances where leachate depth on an MSW landfill liner system exceeded 30 cm (excluding the leachate sump), and information about the required notification and corrective action in Standard Facility Specification E.13 of the SPRRs.
 - h) A summary of all Standard Observations for the reporting period required in Section A.4.c of this MRP.
 - i) A summary of inspection, leak search, and repair of final covers on any closed landfill units in accordance with an approved final post-closure maintenance

plan as required by Standard Closure and Post-Closure Maintenance Specifications G.26 through G.29 of the SPRRs.

2. **Annual Monitoring Report:** The Discharger shall submit an Annual Monitoring Report to the Central Valley Water Board by **28 February** covering the reporting period of the previous monitoring year. If desired, the Annual Monitoring Report may be combined with the second semiannual report, but if so, shall clearly state that it is both a semi-annual and annual monitoring report in its title. Each Annual Monitoring Report shall contain the following information:
 - a) All detected monitoring parameters shall be graphed to show historical trends at each monitoring point and background monitoring point, for all samples taken within at least the previous five calendar years. If a 5-year COC event was performed, then these parameters shall also be graphically presented. Each such graph shall plot the concentration of one or more constituents for the period of record for a given monitoring point or background 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. Graphical analysis of monitoring data may be used to provide significant evidence of a release.
 - b) An evaluation of the monitoring parameters with regards to the cation/anion balance, and a graphical presentation using a Stiff diagram, a Piper graph, or a Schoeller plot.
 - c) All historical monitoring data for which there are detectable results, including data for the previous year, shall be submitted in tabular form in a digital file format such as a computer disk. The Central Valley Water Board regards the submittal of data in hard copy and in digital format as "...the form necessary for..." statistical analysis [Title 27, section 20420(h)], that facilitates periodic review by the Central Valley Water Board.
 - d) Hydrographs of each well showing the elevation of groundwater with respect to the elevations of the top and bottom of the screened interval and the elevation of the pump intake. Hydrographs of each well shall be prepared quarterly and submitted annually.
 - e) 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 waste discharge requirements.
 - f) A map showing the area and elevations in which filling has been completed during the previous calendar year and a comparison to final closure design contours, and include a projection of the year in which each discrete landfill module will be filled.
 - g) A written summary of the monitoring results, indicating any changes made or observed since the previous Annual Monitoring Report.

- h) The results of the annual testing of leachate collection and removal systems required under Standard Facility Specification E.14 of the SPRRs.
 - i) Updated concentration limits for each monitoring parameter at each monitoring well based on the new data set.
 - j) A comprehensive discussion of any Corrective Action Program required by this MRP under Section A.6.
3. **Seep Reporting:** The Discharger shall report by telephone any seepage from the disposal area **immediately** after it is discovered. A written report shall be filed with the Central Valley Water Board **within seven days**, containing at least the following information:
- a) A map showing the location(s) of seepage;
 - b) An estimate of the flow rate;
 - c) A description of the nature of the discharge (e.g., all pertinent observations and analyses);
 - d) Verification that samples have been submitted for analyses of the Field Parameters and Monitoring Parameters listed in Table III of this MRP, and an estimated date that the results will be submitted to the Central Valley Water Board; and
 - e) Corrective measures underway or proposed, and corresponding time schedule.
4. **Annual Facility Inspection Reporting:** By **15 November** of each year, the Discharger shall submit a report describing the results of the inspection and the repair measures implemented, preparations for winter, and include photographs of any problem areas and the repairs. Refer to Section A.4.a of this MRP, above.
5. **Major Storm Event Reporting:** Following major storm events capable of causing damage or significant erosion, the Discharger **immediately** shall notify Central Valley Water Board staff of any damage or significant erosion upon discovery and report subsequent repairs within **14 days** of completion of the repairs, including photographs of the problem and the repairs. Refer to Section A.4.b of this MRP, above.
6. **Financial Assurances Report:** By **1 June** of each year, the Discharger shall submit a copy of the annual financial assurances report due to CalRecycle that updates the financial assurances for closure, post-closure maintenance, and corrective action. Refer to Financial Assurances Specifications E.1 through E.3 of the WDRs.

C. WATER QUALITY PROTECTION STANDARD AND COMPLIANCE PERIOD

1. Water Quality Protection Standard Report

For each waste management unit, the Water Quality Protection Standard shall consist of all COCs, the concentration limit for each constituent of concern, the verification retesting procedure to confirm measurably significant evidence of a release, the point of compliance, and all water quality monitoring points for each monitored medium.

The Water Quality Protection Standard for naturally occurring waste constituents consists of the COCs, the concentration limits, and the point of compliance and all monitoring points. Any proposed changes to the Water Quality Protection Standard other than annual update of the concentration limits shall be submitted in a report for review and approval.

The report shall:

- a. Identify **all distinct bodies of surface and ground water** that could be affected in the event of a release from a waste management unit or portion of a unit. This list shall include at least the uppermost aquifer and any permanent or ephemeral zones of perched groundwater underlying the facility.
- b. Include a map showing the monitoring points and background monitoring points for the surface water monitoring program, groundwater monitoring program, and the unsaturated zone monitoring program. The map shall include the point of compliance in accordance with Title 27, section 20405.
- c. Evaluate the perennial direction(s) of groundwater movement within the uppermost groundwater zone(s).
- d. Include a proposed statistical method for calculating concentration limits for monitoring parameters and constituents of concern that are detected in 10% or greater of the background data (naturally-occurring constituents) using a statistical procedure from Title 27, section 20415(e)(8)(A-D)] or section 20415(e)(8)(E).
- e. Include a retesting procedure to confirm or deny measurably significant evidence of a release pursuant to Title 27, section 20415(e)(8)(E) and section 20420(j)(1-3).

The Water Quality Protection Standard shall be certified by a California-registered civil engineer or geologist as meeting the requirements of Title 27. If subsequent sampling of the background monitoring point(s) indicates significant

water quality changes due to either seasonal fluctuations or other reasons unrelated to waste management activities at the site, the Discharger may request modification of the Water Quality Protection Standard.

The Discharger proposed the methods for calculating concentration limits in the 20 February 2002 (revised 15 May 2002) *Water Quality Protection Standard Report*. The WQPS report proposed the use of Interwell data analysis to calculate tolerance limits for the monitored constituents.

The Water Quality Protection Standard shall be updated, at a minimum, every five years; or as required by natural changes in background water quality.

2. Monitoring Parameters

Monitoring parameters are a select group of constituents that are monitored during each monitoring event that are the waste constituents, reaction products, hazardous constituents, and physical parameters that provide a reliable indication of a release from a waste management unit. The monitoring parameters for all waste management units are those listed in Tables I through V for the specified monitored medium.

3. Constituents of Concern (COCs)

The COCs include a larger group of waste constituents, their reaction products, and hazardous constituents that are reasonably expected to be in or derived from waste contained in the waste management unit, and are required to be monitored every five years [Title 27, sections 20395 and 20420(g)]. The COCs for all waste management units at the facility are those listed in Tables I through IV for the specified monitored medium, and Table VI. The Discharger shall monitor all COCs every five years, or more frequently as required in accordance with a Corrective Action Program. The last 5-year COC report was submitted to the Central Valley Water Board in the 2008 *Annual Monitoring Report*, and 5-year COCs are due to be monitored again in **2013**.

4. Concentration Limits

For a naturally occurring constituent of concern, the concentration limit for each constituent of concern shall be determined as follows:

- a. By calculation in accordance with a statistical method pursuant to Title 27, section 20415(e)(8); or
- b. By an alternate statistical method meeting the requirements of Title 27, section 20415(e)(8)(E).

5. Retesting Procedures for Confirming Evidence of a Release

If monitoring results indicate measurably significant evidence of a release, as described in Standard Monitoring Specification I.45 of the SPRRs, then:

- a. For analytes that are detected in less than 10% of the background samples (such as non-naturally occurring constituents), the Discharger shall use the non-statistical retesting procedure required in Standard Monitoring Specification I.46 of the SPRRs.
- b. For analytes that are detected in 10% or greater of the background samples (naturally occurring constituents), the Discharger shall use one of the statistical retesting procedure as required in Standard Monitoring Specification I.47 of the SPRRs.

6. Point of Compliance

The point of compliance for the water standard at each waste management unit is a vertical surface located at the hydraulically downgradient limit of the Unit that extends through the uppermost aquifer underlying the unit. The monitoring locations are those approved in the Detection Monitoring Program approved by the Executive Officer.

7. Compliance Period

The compliance period for each waste management unit shall be the number of years equal to the active life of the unit plus the closure period. The compliance period is the minimum period during which the Discharger shall conduct a water quality monitoring program subsequent to a release from the waste management unit. The compliance period shall begin anew each time the Discharger initiates an evaluation monitoring program [Title 27, section 20410].

8. Monitoring Points

A monitoring point is a well, device, or location specified in the waste discharge requirements at which monitoring is conducted and at which the water quality protection standard applies. The monitoring points for each monitored medium are listed in Section A of this MRP.

D. TRANSMITTAL LETTER FOR ALL REPORTS

A transmittal letter explaining the essential points shall accompany each report. At a minimum, the transmittal letter shall identify any violations found since the last report was submitted, and whether the violations were corrected. If no violations have occurred since the last submittal, this shall be stated in the transmittal letter. The

transmittal letter shall also state that a discussion of any violations found since the last report was submitted, and a description of the actions taken or planned for correcting those violations, including any references to previously submitted time schedules, is contained in the accompanying report. The transmittal letter shall contain a statement by the discharger, or the discharger's authorized agent, under penalty of perjury, that to the best of the signer's knowledge the report is true, accurate, and complete.

The Discharger shall implement the above monitoring program on the effective date of this Program.

Ordered by 
for PAMELA C. CREEDON, Executive Officer

8 June 2012
(Date)

TABLE I
GROUNDWATER DETECTION MONITORING PROGRAM

<u>Parameter</u>	<u>Units</u>	<u>Sampling Frequency</u>	<u>Reporting Frequency</u>
Field Parameters			
Groundwater Elevation	Ft. & 100ths, M.S.L.	Quarterly	Semiannual
Temperature	°F	Semiannual	Semiannual
Electrical Conductivity	umhos/cm	Semiannual	Semiannual
pH	pH units	Semiannual	Semiannual
Turbidity	Turbidity units	Semiannual	Semiannual

Monitoring Parameters

Total Dissolved Solids (TDS)	mg/L ¹	Semiannual	Semiannual
Chloride	mg/L	Semiannual	Semiannual
Carbonate	mg/L	Semiannual	Semiannual
Bicarbonate	mg/L	Semiannual	Semiannual
Nitrate - Nitrogen	mg/L	Semiannual	Semiannual
Sulfate	mg/L	Semiannual	Semiannual
Calcium	mg/L	Semiannual	Semiannual
Magnesium	mg/L	Semiannual	Semiannual
Potassium	mg/L	Semiannual	Semiannual
Sodium	mg/L	Semiannual	Semiannual
Volatile Organic Compounds	ug/L ²	Semiannual	Semiannual
(USEPA Method 8260B, short list, see Table V)			

5-Year Constituents of Concern (see Table VI)

Total Organic Carbon	mg/L	5 years	2013
Inorganics (dissolved)	ug/L	5 years	and every 5 years thereafter
Volatile Organic Compounds (USEPA Method 8260B, extended list)	ug/L	5 years	" "
Semi-Volatile Organic Compounds (USEPA Method 8270D)	ug/L	5 years	" "
Chlorophenoxy Herbicides (USEPA Method 8151A)	ug/L	5 years	" "
Organophosphorus Compounds (USEPA Method 8141B)	ug/L	5 years	" "

¹ Milligrams per liter

² Micrograms per liter

TABLE II
UNSATURATED ZONE DETECTION MONITORING PROGRAM

PAN LYSIMETERS¹ (or other vadose zone monitoring device)

<u>Parameter</u>	<u>Units</u>	<u>Sampling Frequency</u>	<u>Reporting Frequency</u>
Field Parameters			
Electrical Conductivity	umhos/cm	Semiannual	Semiannual
pH	pH units	Semiannual	Semiannual
Volume of liquid removed	gallons	Monthly	Semiannual
Monitoring Parameters			
Total Dissolved Solids (TDS)	mg/L	Semiannual	Semiannual
Chloride	mg/L	Semiannual	Semiannual
Carbonate	mg/L	Semiannual	Semiannual
Bicarbonate	mg/L	Semiannual	Semiannual
Nitrate - Nitrogen	mg/L	Semiannual	Semiannual
Sulfate	mg/L	Semiannual	Semiannual
Calcium	mg/L	Semiannual	Semiannual
Magnesium	mg/L	Semiannual	Semiannual
Potassium	mg/L	Semiannual	Semiannual
Sodium	mg/L	Semiannual	Semiannual
Volatile Organic Compounds (USEPA Method 8260B, short list, see Table V)	ug/L	Semiannual	Semiannual
5-Year Constituents of Concern (see Table VI)			
Total Organic Carbon	mg/L	5 years	2013
Inorganics (dissolved)	ug/L	5 years	and every 5 years
Volatile Organic Compounds (USEPA Method 8260B, extended list)	ug/L	5 years	thereafter
Semi-Volatile Organic Compounds (USEPA Method 8270D)	ug/L	5 years	" "
Chlorophenoxy Herbicides (USEPA Method 8151A)	ug/L	5 years	" "
Organophosphorus Compounds (USEPA Method 8141B)	ug/L	5 years	" "

¹ Pan lysimeters shall be inspected for the presence of liquid **monthly**. If liquid is detected in a previously dry pan lysimeter, the Discharger shall verbally notify Central Valley Water Board staff within **seven days** and shall immediately sample and test the liquid for Field and Monitoring Parameters listed in Table II.

TABLE III
LEACHATE MONITORING ¹, SEEP MONITORING ², AND LCRS TESTING ³

<u>Parameter</u>	<u>Units</u>	<u>Sampling Frequency</u>	<u>Reporting Frequency</u>
Field Parameters			
Total Flow	Gallons	Monthly	Semiannual
Flow Rate	Gallons/Day	Monthly	Semiannual
Electrical Conductivity	umhos/cm	Quarterly	Semiannual
pH	pH units	Quarterly	Semiannual
Monitoring Parameters			
Total Dissolved Solids (TDS)	mg/L	Annually	Annually
Chloride	mg/L	Annually	Annually
Carbonate	mg/L	Annually	Annually
Bicarbonate	mg/L	Annually	Annually
Nitrate - Nitrogen	mg/L	Annually	Annually
Sulfate	mg/L	Annually	Annually
Calcium	mg/L	Annually	Annually
Magnesium	mg/L	Annually	Annually
Potassium	mg/L	Annually	Annually
Sodium	mg/L	Annually	Annually
Volatile Organic Compounds (USEPA Method 8260B, short list, see Table V)	ug/L	Annually	Annually
5-Year Constituents of Concern (see Table VI)			
Total Organic Carbon	mg/L	5 years	2013
Inorganics (dissolved)	ug/L	5 years	and every 5 years
Volatile Organic Compounds (USEPA Method 8260B, extended list)	ug/L	5 years	thereafter
Semi-Volatile Organic Compounds (USEPA Method 8270D)	ug/L	5 years	" "
Chlorophenoxy Herbicides (USEPA Method 8151A)	ug/L	5 years	" "
Organophosphorus Compounds (USEPA Method 8141B)	ug/L	5 years	" "
LCRS Testing ³	---	Annually	Annually

¹ If leachate is detected in a previously dry sump, the Discharger shall verbally notify Central Valley Water Board staff within **seven days** and shall immediately sample and test the leachate for Field and Monitoring Parameters listed in Table III. Leachate in the LCRS sump shall then be sampled for all parameters and constituents in accordance with the frequencies listed in Table III whenever liquid is present.

² Leachate seeps shall be sampled and analyzed for the Field and Monitoring Parameters in this table upon detection. The quantity of leachate shall be estimated and reported in gallons/day. Also, refer to Section B.3

³ The Discharger shall test each LCRS annually pursuant to Title 27, section 20340(d) to demonstrate proper operation. The results of the tests shall be compared with earlier tests made under comparable conditions.

TABLE IV
SURFACE WATER DETECTION MONITORING PROGRAM

<u>Parameter</u>	<u>Units</u>	<u>Sampling Frequency</u> ¹	<u>Reporting Frequency</u>
Field Parameters			
Electrical Conductivity	umhos/cm	Semiannual	Semiannual
pH	pH units	Semiannual	Semiannual
Turbidity	Turbidity units	Semiannual	Semiannual
Flow to Waters of U.S.	Yes or No	Semiannual	Semiannual
Monitoring Parameters			
Total Dissolved Solids (TDS)	mg/L	Semiannual	Semiannual
Carbonate	mg/L	Semiannual	Semiannual
Bicarbonate	mg/L	Semiannual	Semiannual
Chloride	mg/L	Semiannual	Semiannual
Nitrate - Nitrogen	mg/L	Semiannual	Semiannual
Sulfate	mg/L	Semiannual	Semiannual
Calcium	mg/L	Semiannual	Semiannual
Magnesium	mg/L	Semiannual	Semiannual
Potassium	mg/L	Semiannual	Semiannual
Sodium	mg/L	Semiannual	Semiannual
Volatile Organic Compounds (USEPA Method 8260B, short list, see Table V)	ug/L	Semiannual	Semiannual
5-Year Constituents of Concern (see Table VI)			
Total Organic Carbon	mg/L	5 years	2013
Inorganics (dissolved)	ug/L	5 years	and every 5 years
Volatile Organic Compounds (USEPA Method 8260B, extended list)	ug/L	5 years	thereafter
Semi-Volatile Organic Compounds (USEPA Method 8270D)	ug/L	5 years	" "
Chlorophenoxy Herbicides (USEPA Method 8151A)	ug/L	5 years	" "
Organophosphorus Compounds (USEPA Method 8141B)	ug/L	5 years	" "

¹ Semiannual surface water monitoring is required twice per year when there is water present at the designated surface water monitoring point any time during the reporting period (1 January to 30 June or 1 July to 31 December). Reporting shall include whether there was flow from the facility to waters of the U.S. when the samples were collected.

TABLE V

MONITORING PARAMETERS FOR DETECTION MONITORING

Surrogates for Metallic Constituents:

pH
Total Dissolved Solids
Electrical Conductivity
Chloride
Sulfate
Nitrate nitrogen

Volatile Organic Compounds, short list:

USEPA Method 8260B

Acetone
Acrylonitrile
Benzene
Bromochloromethane
Bromodichloromethane
Bromoform (Tribromomethane)
Carbon disulfide
Carbon tetrachloride
Chlorobenzene
Chloroethane (Ethyl chloride)
Chloroform (Trichloromethane)
Dibromochloromethane (Chlorodibromomethane)
1,2-Dibromo-3-chloropropane (DBCP)
1,2-Dibromoethane (Ethylene dibromide; EDB)
o-Dichlorobenzene (1,2-Dichlorobenzene)
m-Dichlorobenzene (1,3-Dichlorobenzene)
p-Dichlorobenzene (1,4-Dichlorobenzene)
trans-1,4-Dichloro-2-butene
Dichlorodifluoromethane (CFC-12)
1,1-Dichloroethane (Ethylidene chloride)
1,2-Dichloroethane (Ethylene dichloride)
1,1 -Dichloroethylene (1,1 -Dichloroethene; Vinylidene chloride)
cis- 1,2-Dichloroethylene (cis- 1,2-Dichloroethene)
trans-1,2-Dichloroethylene (trans-1,2-Dichloroethene)
1,2-Dichloropropane (Propylene dichloride)
cis- 1,3-Dichloropropene
trans- 1,3-Dichloropropene
Di-isopropylether (DIPE)
Ethanol
Ethyltertiary butyl ether
Ethylbenzene
2-Hexanone (Methyl butyl ketone)
Hexachlorobutadiene
Methyl bromide (Bromomethene)
Methyl chloride (Chloromethane)

TABLE V
MONITORING PARAMETERS FOR DETECTION MONITORING

Continued

Methylene bromide (Dibromomethane)
Methylene chloride (Dichloromethane)
Methyl ethyl ketone (MEK: 2-Butanone)
Methyl iodide (Iodomethane)
Methyl t-butyl ether
4-Methyl-2-pentanone (Methyl isobutylketone)
Naphthalene
Styrene
Tertiary amyl methyl ether
Tertiary butyl alcohol
1,1,1,2-Tetrachloroethane
1,1,2,2-Tetrachloroethane
Tetrachloroethylene (Tetrachloroethene; Perchloroethylene)
Toluene
1,2,4-Trichlorobenzene
1,1,1-Trichloroethane (Methylchloroform)
1,1,2-Trichloroethane
Trichloroethylene (Trichloroethene)
Trichlorofluoromethane (CFC- 11)
1,2,3-Trichloropropane
Vinyl acetate
Vinyl chloride
Xylenes

TABLE VI
5-YEAR COCs & APPROVED USEPA ANALYTICAL METHODS

Inorganics (dissolved):

USEPA Method

Aluminum	6010
Antimony	7041
Barium	6010
Beryllium	6010
Cadmium	7131A
Chromium	6010
Cobalt	6010
Copper	6010
Silver	6010
Tin	6010
Vanadium	6010
Zinc	6010
Iron	6010
Manganese	6010
Arsenic	7062
Lead	7421
Mercury	7470A
Nickel	7521
Selenium	7742
Thallium	7841
Cyanide	9010C
Sulfide	9030B

Volatile Organic Compounds, extended list:

USEPA Method 8260B

Acetone
Acetonitrile (Methyl cyanide)
Acrolein
Acrylonitrile
Allyl chloride (3-Chloropropene)
Benzene
Bromochloromethane (Chlorobromomethane)
Bromodichloromethane (Dibromochloromethane)
Bromoform (Tribromomethane)
Carbon disulfide
Carbon tetrachloride
Chlorobenzene
Chloroethane (Ethyl chloride)
Chloroform (Trichloromethane)
Chloroprene
Dibromochloromethane (Chlorodibromomethane)
1,2-Dibromo-3-chloropropane (DBCP)
1,2-Dibromoethane (Ethylene dibromide; EDB)
o-Dichlorobenzene (1,2-Dichlorobenzene)

TABLE VI

5-YEAR COCs & APPROVED USEPA ANALYTICAL METHODS

Continued

m-Dichlorobenzene (1,3-Dichlorobenzene)
p-Dichlorobenzene (1,4-Dichlorobenzene)
trans- 1,4-Dichloro-2-butene
Dichlorodifluoromethane (CFC 12)
1,1 -Dichloroethane (Ethylidene chloride)
1,2-Dichloroethane (Ethylene dichloride)
1,1 -Dichloroethylene (1, I-Dichloroethene; Vinylidene chloride)
cis- 1,2-Dichloroethylene (cis- 1,2-Dichloroethene)
trans- 1,2-Dichloroethylene (trans- 1,2-Dichloroethene)
1,2-Dichloropropane (Propylene dichloride)
1,3-Dichloropropane (Trimethylene dichloride)
2,2-Dichloropropane (Isopropylidene chloride)
1,1 -Dichloropropene
cis- 1,3-Dichloropropene
trans- 1,3-Dichloropropene
Di-isopropylether (DIPE)
Ethanol
Ethyltertiary butyl ether
Ethylbenzene
Ethyl methacrylate
Hexachlorobutadiene
2-Hexanone (Methyl butyl ketone)
Isobutyl alcohol
Methacrylonitrile
Methyl bromide (Bromomethane)
Methyl chloride (Chloromethane)
Methyl ethyl ketone (MEK; 2-Butanone)
Methyl iodide (Iodomethane)
Methyl t-butyl ether
Methyl methacrylate
4-Methyl-2-pentanone (Methyl isobutyl ketone)
Methylene bromide (Dibromomethane)
Methylene chloride (Dichloromethane)
Naphthalene
Propionitrile (Ethyl cyanide)
Styrene
Tertiary amyl methyl ether
Tertiary butyl alcohol
1,1,1,2-Tetrachloroethane
1,1,2,2-Tetrachloroethane
Tetrachloroethylene (Tetrachloroethene; Perchloroethylene; PCE)
Toluene
1,2,4-Trichlorobenzene

TABLE VI

5-YEAR COCs & APPROVED USEPA ANALYTICAL METHODS

Continued

1,1,1 -Trichloroethane (Methylchloroform)
1,1,2-Trichloroethane
Trichloroethylene (Trichloroethene; TCE)
Trichlorofluoromethane (CFC- 11)
1,2,3-Trichloropropane
Vinyl acetate
Vinyl chloride (Chloroethene)
Xylene (total)

Semi-Volatile Organic Compounds:

USEPA Method 8270D - base, neutral, & acid extractables

Acenaphthene
Acenaphthylene
Acetophenone
2-Acetylaminofluorene (2-AAF)
Aldrin
4-Aminobiphenyl
Anthracene
Benzo[a]anthracene (Benzanthracene)
Benzo[b]fluoranthene
Benzo[k]fluoranthene
Benzo[g,h,i]perylene
Benzo[a]pyrene
Benzyl alcohol
Bis(2-ethylhexyl) phthalate
alpha-BHC
beta-BHC
delta-BHC
gamma-BHC (Lindane)
Bis(2-chloroethoxy)methane
Bis(2-chloroethyl) ether (Dichloroethyl ether)
Bis(2-chloro-1-methylethyl) ether (Bis(2-chloroisopropyl) ether; DCIP)
4-Bromophenyl phenyl ether
Butyl benzyl phthalate (Benzyl butyl phthalate)
Chlordane
p-Chloroaniline
Chlorobenzilate
p-Chloro-m-cresol (4-Chloro-3-methylphenol)
2-Chloronaphthalene
2-Chlorophenol
4-Chlorophenyl phenyl ether
Chrysene
o-Cresol (2-methylphenol)
m-Cresol (3-methylphenol)
p-Cresol (4-methylphenol)

TABLE VI

5-YEAR COCs & APPROVED USEPA ANALYTICAL METHODS

Continued

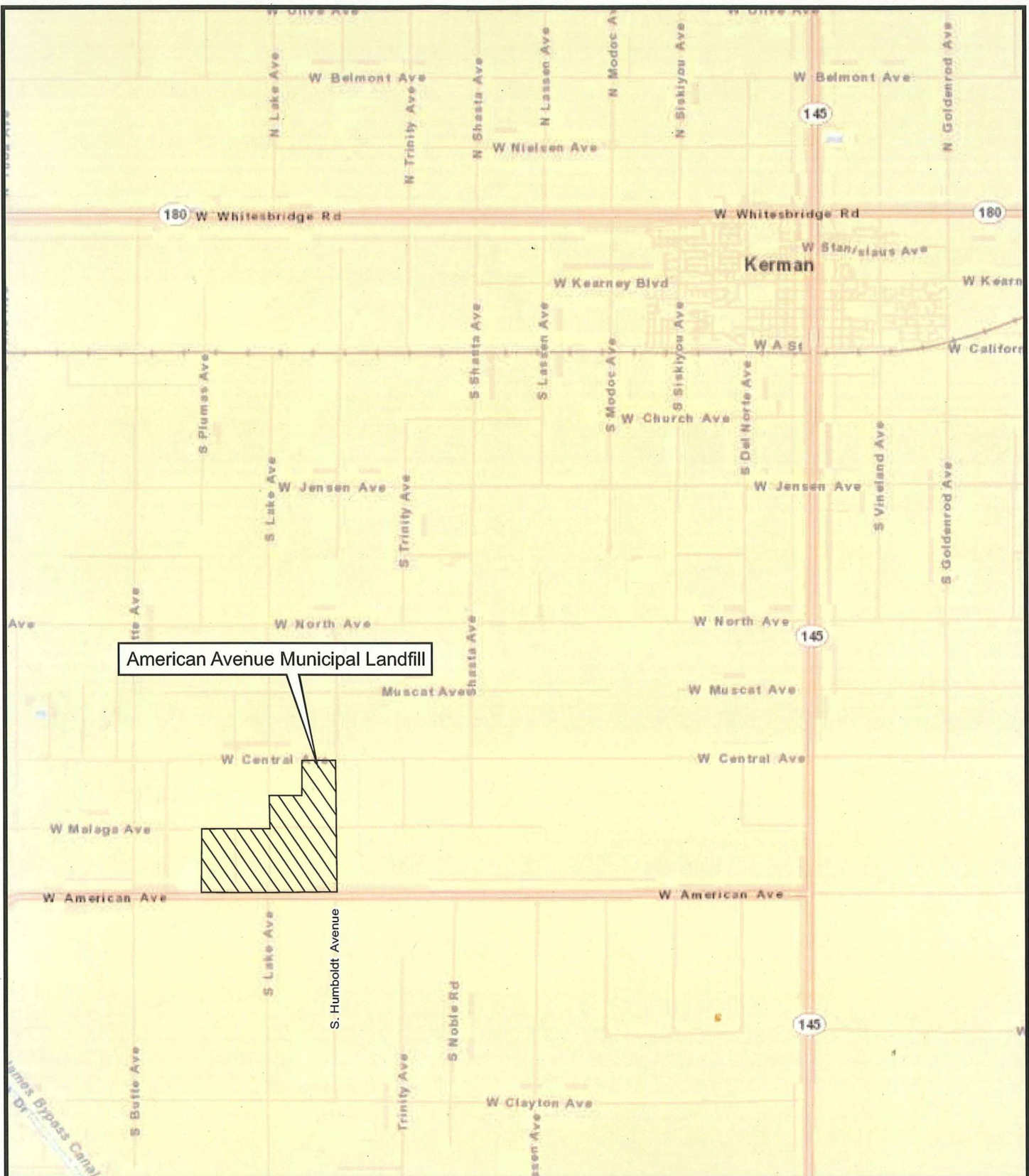
4,4'-DDD
4,4'-DDE
4,4'-DDT
Diallate
Dibenz[a,h]anthracene
Dibenzofuran
Di-n-butyl phthalate
3,3'-Dichlorobenzidine
2,4-Dichlorophenol
2,6-Dichlorophenol
Dieldrin
Diethyl phthalate
p-(Dimethylamino)azobenzene
7,12-Dimethylbenz[a]anthracene
3,3'-Dimethylbenzidine
2,4-Dimethylphenol (m-Xylenol)
Dimethyl phthalate
m-Dinitrobenzene
4,6-Dinitro-o-cresol (4,6-Dinitro-2-methylphenol)
2,4-Dinitrophenol
2,4-Dinitrotoluene
2,6-Dinitrotoluene
Di-n-octyl phthalate
Diphenylamine
Endosulfan I
Endosulfan II
Endosulfan sulfate
Endrin
Endrin aldehyde
Ethyl methanesulfonate
Famphur
Fluoranthene
Fluorene
Heptachlor
Heptachlor epoxide
Hexachlorobenzene
Hexachlorocyclopentadiene
Hexachloroethane
Hexachloropropene
Indeno(1,2,3-c,d)pyrene
Isodrin
Isophorone
Isosafrole
Kepone
Methapyrilene
Methoxychlor
3-Methylcholanthrene

TABLE VI

5-YEAR COCs & APPROVED USEPA ANALYTICAL METHODS

Continued

Methyl methanesulfonate
2-Methylnaphthalene
1,4-Naphthoquinone
1-Naphthylamine
2-Naphthylamine
o-Nitroaniline (2-Nitroaniline)
m-Nitroaniline (3-Nitroaniline)
p-Nitroaniline (4-Nitroaniline)
Nitrobenzene
o-Nitrophenol (2-Nitrophenol)
p-Nitrophenol (4-Nitrophenol)
N-Nitrosodi-n-butylamine (Di-n-butylNitrosamine)
N-Nitrosodiethylamine (DiethylNitrosamine)
N-Nitrosodimethylamine (DimethylNitrosamine)
N-Nitrosodiphenylamine (DiphenylNitrosamine)
N-Nitrosodipropylamine (N-Nitroso-N-dipropylamine; Di-n-propylNitrosamine)
N-Nitrosomethylethylamine (MethylethylNitrosamine)
N-Nitrosopiperidine
N-Nitrosospyrrolidine
5-Nitro-o-toluidine
Pentachlorobenzene
Pentachloronitrobenzene (PCNB)
Pentachlorophenol
Phenacetin
Phenanthrene
Phenol
p-Phenylenediamine
Polychlorinated biphenyls (PCBs; Aroclors)
Pronamide
Pyrene
Safrole
1,2,4,5-Tetrachlorobenzene
2,3,4,6-Tetrachlorophenol
o-Toluidine
Toxaphene
2,4,5-Trichlorophenol
0,0,0-Triethyl phosphorothioate
sym-Trinitrobenzene



Map Source:

ESRI's ArcGIS Online premium services
Sections 32 & 33, T14S, R17E, MDB&M



LOCATION MAP

ORDER NO. R5-2012-0064

WASTE DISCHARGE REQUIREMENTS

FOR

COUNTY OF FRESNO

AMERICAN AVENUE MUNICIPAL SOLID WASTE LANDFILL

CLASS III LANDFILL






CONSTRUCTION, OPERATION, AND CORRECTIVE ACTION

FRESNO COUNTY

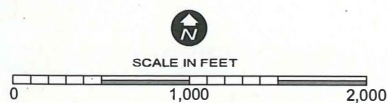
ATTACHMENT A



Explanation

-  Detection Monitoring Program (DMP) Well
-  DMP Background Well
-  Evaluation Monitoring Program (EMP) Well
-  Inactive Monitoring Well removed from DMP
-  Property Boundary

Map Source:
ESRI's ArcGIS Online premium services
Sections 32 & 33, T14S, R17E, MDB&M



SITE MAP

ORDER NO. R5-2012-0064
WASTE DISCHARGE REQUIREMENTS

FOR
COUNTY OF FRESNO
AMERICAN AVENUE MUNICIPAL SOLID WASTE LANDFILL
CLASS III LANDFILL
CONSTRUCTION, OPERATION, AND CORRECTIVE ACTION
FRESNO COUNTY

ATTACHMENT B

INFORMATION SHEET

WASTE DISCHARGE REQUIREMENTS ORDER NO. R5-2012-0064
FOR COUNTY OF FRESNO
CONSTRUCTION, OPERATION, AND CORRECTIVE ACTION
AMERICAN AVENUE MUNICIPAL SOLID WASTE LANDFILL
FRESNO COUNTY

The County of Fresno (hereafter Discharger) owns and operates the American Avenue Municipal Solid Waste Landfill, at 18950 W. American Ave, about five miles southwest of the City of Kerman.

The California Regional Water Quality Control Board, Central Valley Region, (hereafter Central Valley Water Board) adopted Order 5-2005-0067 on 29 April 2005, which classified the Unit as a Class III landfill as defined in Title 27, California Code of Regulations, Section 20005 et seq. (hereafter Title 27). The proposed Order revises the existing Waste Discharge Requirements to provide for changes in the monitoring and reporting program, allow for future expansion, allow excavation of an existing unlined waste management unit (Phase 1), and implement corrective action.

The landfill consists of a closed unlined waste management unit (WMU) covering 30 acres (Phase I), and active-composite-lined WMU covering 160 acres (Phase II 8 modules), and a 250 acre composite lined WMU (Phase III) comprised of active Modules 1-3 and future Modules 4-12.

The facility is located near the trough of the San Joaquin Valley, which is the southern portion of the Central Valley of California. The Central Valley is a large, northwest trending structural trough bounded by the Sierra Nevada to the east and the Coast Ranges to the west, and filled with both marine and continental deposits of Jurassic to Holocene age.

The first encountered groundwater ranges from about 112 feet to 140 feet below the native ground surface. Groundwater elevations range from 48 feet MSL to 70 feet MSL. The groundwater is unconfined. The depth to groundwater fluctuates seasonally as much as 10 feet. The direction of groundwater flow is generally toward the southeast. The direction of groundwater flow varies seasonally and periodically flows toward the south. The estimated average groundwater gradient is approximately 0.0016 feet per foot

Volatile organic compounds (VOCs) were first detected in groundwater when the detection monitoring wells were installed in 1987. Several waste constituents were detected in 1987 at concentrations below primary water quality standards including: chloroethane; chloromethane; dichlorodifluoromethane; cis-1,3-dichloropropylene; tetrachloroethylene; 1,1,1-trichloroethane; trichloroethylene;

and trichlorofluoromethane. These and other volatile organics continue to be detected sporadically in detection monitoring wells at concentrations below primary water quality standards.

The Discharger submitted an Addendum to the Evaluation Monitoring Program dated November 2009, to the original Evaluation Monitoring Program (1 February 2006), detailing the current release of waste constituents to groundwater, which are: 1,2,3-trichloropropane, 1,2-dichloropropane, dichlorodifluoromethane, trichlorofluoromethane, 1,1-dichloroethane, tetrachloroethene, and trichloroethene.

The Discharger completed an Evaluation Monitoring Program for the release of waste constituents to the groundwater. The nature of the release was demonstrated to be volatile organic compounds that originated from landfill gas. The extent of the release is a plume downgradient from the Phase I waste management unit approximately 2,400 feet to the eastern boundary of the facility.

The Discharger completed an Engineering Feasibility Study in accordance with Section 20425 (c) of Title 27. The Engineering Feasibility Study concluded that the most technically and economically feasible corrective action alternative is monitored natural attenuation in conjunction with landfill gas extraction. The Discharger submitted an Amended Report of Waste Discharge for Corrective Action in accordance with Section 20425(d) of Title 27.

Section 20080(b) of Title 27 allows the Central Valley Water Board to consider the approval of an engineered alternative to the prescriptive standard for landfill liner systems. In order to approve an engineered alternative in accordance with Title 27, sections 20080(c)(1) and (2), the Discharger must demonstrate that the prescriptive design is unreasonably and unnecessarily burdensome and will cost substantially more than an alternative which will meet the criteria contained in Title 27, section 20080(b), or would be impractical and would not promote attainment of applicable performance standards.

The Discharger demonstrated that the proposed engineered alternative liner system is consistent with the performance goal addressed by the particular prescriptive standard, and provides protection against water quality impairment equivalent to the prescriptive standard in accordance with Title 27, section 20080(b)(2).

The engineered alternative liner proposed by the Discharger for the bottom liner of the future landfill modules consists of, in ascending order: subgrade; geosynthetic clay liner (GCL); 60-mil HDPE single sided textured geomembrane; geonet drainage layer, non-woven filter geotextile, two-foot thick soil operations

layer, and an LCRS. The components for the side slope are proposed to be constructed of the same materials and in the same sequence and manner as the bottom liner system, with the exception of the subgrade. The subgrade for the side slopes will not be over excavated and replaced with an engineered fill. It will be prepared in an appropriate manner using accepted engineering and construction methods so as to provide a surface that is smooth and free from rocks, sticks, and other debris that could damage or otherwise limit the performance of the geosynthetic clay layers and/or geomembranes.

The action to revise waste discharge requirements for this existing facility is exempt from the provisions of the California Environmental Quality Act (CEQA), Public Resource Code section 21000, et seq., and the CEQA guidelines, in accordance with Title 14, section 15301.

This order requires full containment of wastes and does not permit degradation of surface or groundwater. Further antidegradation analysis is therefore not needed. The discharge is consistent with the antidegradation provisions of State Water Resource Control Board Resolution No. 68-16.

Exhibit "B"

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM NO. R5-2014-0058 FOR COUNTY OF FRESNO AND CHEVRON USA, INC. COALINGA SOLID WASTE DISPOSAL SITE CLASS III LANDFILL CLOSURE AND POST-CLOSURE MAINTENANCE FRESNO COUNTY

This monitoring and reporting program (MRP) is issued pursuant to California Water Code section 13267 and incorporates requirements for groundwater monitoring and reporting; facility monitoring, maintenance, and reporting; and financial assurances reporting contained in California Code of Regulations, title 27, section 20005, et seq. (hereafter Title 27), Waste Discharge Requirements (WDRs) Order No. R5-2014-0058, and the Standard Provisions and Reporting Requirements (SPRRs) dated January 2012. Compliance with this MRP is ordered by the WDRs and the Discharger shall not implement any changes to this MRP unless a revised MRP is issued by the Central Valley Water Board or the Executive Officer.

A. MONITORING

The Discharger shall comply with the detection monitoring program provisions of Title 27 for groundwater in accordance with Standard Monitoring Specifications in Section I of the SPRRs and the Monitoring Specifications in Section G of the WDRs. All monitoring shall be conducted in accordance with the approved 27 November 1996 *Sample Collection and Analysis Plan*, and the 25 May 2011 *Amendment to Sampling and Analysis Plan*, which includes quality assurance/quality control standards.

All compliance monitoring wells established for the detection monitoring program shall constitute the monitoring points for the groundwater Water Quality Protection Standard. All detection monitoring program groundwater monitoring wells, and leachate seeps shall be sampled and analyzed for monitoring parameters and constituents of concern (COCs) as indicated and listed in Tables I through IV.

The Discharger may use alternative analytical test methods, including new USEPA approved methods, provided the methods have method detection limits equal to or lower than the analytical methods specified in this Monitoring and Reporting Program, and are identified in the approved Sample Collection and Analysis Plan.

The monitoring program of this MRP includes:

<u>Section</u>	<u>Monitoring Program</u>
A.1	Groundwater Monitoring
A.2	Leachate Seep Monitoring
A.3	Facility Monitoring

1. Groundwater Monitoring

The Discharger shall operate and maintain a groundwater detection monitoring system that complies with the applicable provisions of Title 27, sections 20415 and 20420. The detection monitoring system shall be certified by a California-licensed professional civil engineer or geologist as meeting the requirements of Title 27. The current groundwater detection monitoring system meets the applicable requirements of Title 27.

The current groundwater monitoring network shall consist of the following:

<u>Well</u>	<u>Status</u>
CMW-1	Active – DMP well
CMW-2A	Active – DMP well
CMW-3	Active – Non DMP well
CMW-4	Active – DMP well
CMW-5	Active – Non DMP well
CMW-6	Active – Non DMP well
CMW-7	Active – DMP well

Groundwater samples shall be collected from the detection monitoring wells, and any additional wells added as part of the approved groundwater monitoring system. The collected samples shall be analyzed for the parameters and constituents listed in Table I in accordance with the specified methods and frequencies. The Discharger shall collect, preserve, and transport groundwater samples in accordance with the approved Sample Collection and Analysis Plan.

Once per quarter, the Discharger shall measure the groundwater elevation in each well, determine groundwater flow direction, and estimate groundwater flow rates in the uppermost aquifer and in any zones of perched water and in any additional portions of the zone of saturation monitored. The results shall be reported semiannually, including the times of expected highest and lowest elevations of the water levels in the wells, pursuant to Title 27, section 20415(e)(15).

Samples collected for the COC monitoring specified in Table I shall be collected and analyzed in accordance with the methods listed in Table IV every five years. Five-year COCs were last monitored in 2012 and shall be monitored again in **2017**. The results shall be reported in the Annual Monitoring Report for the year in which the samples were collected.

2. Leachate Seep Monitoring

Seep Monitoring: Leachate that seeps to the surface from a landfill unit shall be sampled and analyzed for the Field and Monitoring Parameters listed in Table II upon detection. The quantity of leachate shall be estimated and reported as Leachate Flow Rate (in gallons/day). Reporting for leachate seeps shall be conducted as required in Section B.3 of this MRP, below.

3. Facility Monitoring

a. Annual Facility Inspection

Annually, prior to the anticipated rainy season, but no later than **30 September**, the Discharger shall conduct an inspection of the facility. The inspection shall assess repair and maintenance needed for drainage control systems, cover systems, and groundwater monitoring wells; and shall assess preparedness for winter conditions (including but not limited to erosion and sedimentation control). The Discharger shall take photos of any problems areas before and after repairs. Any necessary construction, maintenance, or repairs shall be completed by **31 October**. Annual facility inspection reporting shall be submitted as required in Section B.4 of this MRP.

b. Major Storm Events

The Discharger shall inspect all precipitation, diversion, and drainage facilities and all landfill side slopes for damage **within 7 days** following major storm events capable of causing damage or significant erosion. The Discharger shall take photos of any problems areas before and after repairs. Necessary repairs shall be completed **within 30 days** of the inspection. Notification and reporting requirements for major storm events shall be conducted as required in Section B.5 of this MRP.

c. Five-Year Iso-Settlement Survey for Closed Units

For closed landfill units, the Discharger shall conduct a five-year iso-settlement survey and produce an iso-settlement map accurately depicting the estimated total change in elevation of each portion of the final cover's low-hydraulic-conductivity layer. For each portion of the

landfill, this map shall show the total lowering of the surface elevation of the final cover, relative to the baseline topographic map [Title 27, section 21090(e)(1 & 2)]. Reporting shall be in accordance with Section B.6 of this MRP.

d. **Standard Observations**

The Discharger shall conduct Standard Observations at the landfill in accordance with this section of the MRP. Standard observations shall be conducted in accordance with the following schedule:

<u>Landfill Unit Type</u>	<u>Frequency</u>	<u>Season</u>
Active	Weekly	Wet: 1 October to 30 April
Active	Monthly	Dry: 1 May to 30 September
Inactive/Closed	Monthly	Wet: 1 October to 30 April
Inactive/Closed	Quarterly	Dry: 1 May to 30 September

The Standard Observations shall include:

- 1) For the landfill units:
 - a) Evidence of ponded water at any point on the landfill outside of any contact storm water/leachate diversions structures on the active face (show affected area on map); and
 - b) Evidence of erosion and/or of day-lighted refuse.
- 2) Along the perimeter of the landfill units:
 - a) Evidence of leachate seeps, estimated size of affected area, and flow rate (show affected area on map); and
 - b) Evidence of erosion and/or of day-lighted refuse.
- 3) For receiving waters:
 - a) Floating and suspended materials of waste origin - presence or absence, source, and size of affected area; and
 - b) Discoloration and turbidity - description of color, source, and size of affected area.

Results of Standard Observations shall be submitted in the semiannual monitoring reports required in Section B.1 of this MRP.

B. REPORTING

The Discharger shall submit the following reports in accordance with the required schedule:

Reporting Schedule

<u>Section</u>	<u>Report</u>	<u>End of Reporting Period</u>	<u>Due Date</u>
B.1	Semiannual Monitoring Report	30 June, 31 December	1 August, 1 February
B.2	Annual Monitoring Report	31 December	1 February
B.3	Seep Reporting	Continuous	Immediately & 7 Days
B.4	Annual Facility Inspection Report	31 October	15 November
B.5	Major Storm Event Reporting	Continuous	Immediately upon damage discovery & 14 days after repair completion
B.6	Survey and Iso-Settlement Map for Closed Landfills	Every Five Years	At Closure Completion and Every Five Years
B.7	Financial Assurances Report	31 December	1 June

Reporting Requirements

The Discharger shall submit monitoring reports **semiannually** with the data and information as required in this Monitoring and Reporting Program and as required in WDRs Order No. R5-2014-0058 and the Standard Provisions and Reporting Requirements (particularly Section I: "Standard Monitoring Specifications" and Section J: "Response to a Release"). In reporting the monitoring data required by this program, the Discharger shall arrange the data in tabular form so that the date, the constituents, the concentrations, and the units are readily discernible. The data shall be summarized in such a manner so as to illustrate clearly the compliance with waste discharge requirements or the lack thereof. Data shall also be submitted in a digital format, such as a computer disk.

Field and laboratory tests shall be reported in each monitoring report. Semiannual and annual monitoring reports shall be submitted to the Central Valley Water Board in accordance with the above schedule for the calendar period in which samples were taken or observations made. In addition, the Discharger shall enter all monitoring data and monitoring reports into the online Geotracker database as required by Division 3 of Title 27.

The results of **all monitoring** conducted at the site shall be reported to the Central Valley Water Board in accordance with the reporting schedule above for the calendar period in which samples were taken or observations made.

The Discharger shall retain records of all monitoring information, including all calibration and maintenance records, all original strip chart recordings of continuous monitoring instrumentation, copies of all reports required by this Order, and records of all data used to complete the application for this Order. Records shall be maintained throughout the life of the facility including the post-closure period. Such records shall be legible and shall show the following for each sample:

- a) Sample identification and the monitoring point or background monitoring point from which it was taken, along with the identity of the individual who obtained the sample;
- b) Date, time, and manner of sampling;
- c) Date and time that analyses were started and completed, and the name of the personnel and laboratory performing each analysis;
- d) Complete procedure used, including method of preserving the sample, and the identity and volumes of reagents used;
- e) Calculation of results; and
- f) Results of analyses, and the MDL and PQL for each analysis. All peaks shall be reported.

Required Reports

1. **Semiannual Monitoring Report:** Monitoring reports shall be submitted semiannually and are due on **1 August** and **1 February**. Each semiannual monitoring report shall contain at least the following:
 - a) For each groundwater monitoring point addressed by the report, a description of:
 - 1) The time of water level measurement;
 - 2) The type of pump - or other device - used for purging and the elevation of the pump intake relative to the elevation of the screened interval;

- 3) The method of purging used to stabilize water in the well bore before the sample is taken including the pumping rate; the equipment and methods used to monitor field pH, temperature, and conductivity during purging; results of pH, temperature, conductivity, and turbidity testing; and the method of disposing of the purge water;
 - 4) The type of pump - or other device - used for sampling, if different than the pump or device used for purging; and
 - 5) A statement that the sampling procedure was conducted in accordance with the approved Sample Collection and Analysis Plan.
- b) A map or aerial photograph showing the locations of observation stations, monitoring points, and background monitoring points.
 - c) The estimated quarterly groundwater flow rate and direction in the uppermost aquifer, in any zones of perched water, and in any additional zone of saturation monitored based upon water level elevations taken prior to the collection of the water quality data submitted in the report [Title 27, section 20415(e)(15)].
 - d) Cumulative tabulated monitoring data for all monitoring points and constituents for groundwater, and leachate. Concentrations below the laboratory reporting limit shall not be reported as "ND" unless the reporting limit is also given in the table. Otherwise they shall be reported "<" the reporting limit (e.g., <0.10). Units shall be as required in Tables I and II unless specific justification is given to report in other units. Refer to the SPRRs Section I "Standard Monitoring Specifications" for requirements regarding MDLs and PQLs.
 - e) Laboratory statements of results of all analyses evaluating compliance with requirements.
 - f) An evaluation of the concentration of each monitoring parameter (or 5-year COC when five year COC sampling is conducted) as compared to the current concentration limits, and the results of any required verification testing for constituents exceeding a concentration limit. Report any actions taken under Section J: Response to a Release for verified exceedances of a concentration limit.
 - g) An evaluation of the effectiveness of run-off/run-on control facilities.
 - h) A summary of all Standard Observations for the reporting period required in Section A.3.d of this MRP.
 - i) A summary of inspection, leak search, and repair of final covers on any closed landfill units in accordance with an approved final post-closure maintenance plan as required by Standard Closure and Post-Closure Maintenance Specifications G.26 through G.29 of the SPRRs.

2. **Annual Monitoring Report:** The Discharger shall submit an Annual Monitoring Report to the Central Valley Water Board by **1 February** covering the reporting period of the previous monitoring year. If desired, the Annual Monitoring Report may be combined with the second semiannual report, but if so, shall clearly state that it is both a semi-annual and annual monitoring report in its title. Each Annual Monitoring Report shall contain the following information:
- a) All monitoring parameters shall be graphed to show historical trends at each monitoring point and background monitoring point, for all samples taken within at least the previous five calendar years. If a 5-year COC event was performed, then these parameters shall also be graphically presented. Each such graph shall plot the concentration of one or more constituents for the period of record for a given monitoring point or background 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. Graphical analysis of monitoring data may be used to provide significant evidence of a release.
 - b) An evaluation of the monitoring parameters with regards to the cation/anion balance, and a graphical presentation using a Stiff diagram, a Piper graph, or a Schoeller plot.
 - c) All historical monitoring data for which there are detectable results, including data for the previous year, shall be submitted in tabular form in a digital file format such as a computer disk. The Central Valley Water Board regards the submittal of data in hard copy and in digital format as "...the form necessary for..." statistical analysis [Title 27, section 20420(h)], that facilitates periodic review by the Central Valley Water Board.
 - d) Hydrographs of each well showing the elevation of groundwater with respect to the elevations of the top and bottom of the screened interval and the elevation of the pump intake. Hydrographs of each well shall be prepared quarterly and submitted annually.
 - e) 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 waste discharge requirements.
 - f) A written summary of the monitoring results, indicating any changes made or observed since the previous Annual Monitoring Report.
 - g) Updated concentration limits for each monitoring parameter at each monitoring well based on the new data set.
3. **Seep Reporting:** The Discharger shall report by telephone any seepage from the disposal area **immediately** after it is discovered. A written report shall be filed with the Central Valley Water Board **within seven days**, containing at least the following information:

- a) A map showing the location(s) of seepage;
 - b) An estimate of the flow rate;
 - c) A description of the nature of the discharge (e.g., all pertinent observations and analyses);
 - d) Verification that samples have been submitted for analyses of the Field Parameters and Monitoring Parameters listed in Table II of this MRP, and an estimated date that the results will be submitted to the Central Valley Water Board; and
 - e) Corrective measures underway or proposed, and corresponding time schedule.
4. **Annual Facility Inspection Reporting:** By **15 November** of each year, the Discharger shall submit a report describing the results of the inspection and the repair measures implemented, preparations for winter, and include photographs of any problem areas and the repairs. Refer to Section A.3.a of this MRP, above.
5. **Major Storm Event Reporting:** Following major storm events capable of causing damage or significant erosion, the Discharger **immediately** shall notify Central Valley Water Board staff of any damage or significant erosion upon discovery and report subsequent repairs within **14 days** of completion of the repairs, including photographs of the problem and the repairs. Refer to Section A.3.b of this MRP, above.
6. **Survey and Iso-Settlement Map for Closed Landfills:** The Discharger shall conduct a survey and submit an iso-settlement map for each closed area of the landfill every five years pursuant to Title 27, section 21090(e). Refer to Section A.3.c of this MRP, above.
7. **Financial Assurances Report:** By **1 June** of each year, the Discharger shall submit a copy of the annual financial assurances report due to CalRecycle that updates the financial assurances for closure, post-closure maintenance, and corrective action. Refer to Financial Assurances Specifications F.1 through F.3 of the WDRs.

C. WATER QUALITY PROTECTION STANDARD AND COMPLIANCE PERIOD

1. Water Quality Protection Standard Report

For each waste management unit, the Water Quality Protection Standard shall consist of all COCs, the concentration limit for each constituent of concern, the verification retesting procedure to confirm measurably significant evidence of a release, the point of compliance, and all water quality monitoring points for each monitored medium.

The Water Quality Protection Standard for naturally occurring waste constituents consists of the COCs, the concentration limits, and the point of compliance and all monitoring points. Any proposed changes to the Water Quality Protection Standard other than annual update of the concentration limits shall be submitted in a report for review and approval.

The report shall:

- a. Identify **all distinct bodies of surface and ground water** that could be affected in the event of a release from a waste management unit or portion of a unit. This list shall include at least the uppermost aquifer and any permanent or ephemeral zones of perched groundwater underlying the facility.
- b. Include a map showing the monitoring points and background monitoring points for the groundwater monitoring program. The map shall include the point of compliance in accordance with Title 27, section 20405.
- c. Evaluate the perennial direction(s) of groundwater movement within the uppermost groundwater zone(s).
- d. Include a proposed statistical method for calculating concentration limits for monitoring parameters and constituents of concern that are detected in 10% or greater of the background data (naturally-occurring constituents) using a statistical procedure from Title 27, section 20415(e)(8)(A-D)] or section 20415(e)(8)(E).
- e. Include a retesting procedure to confirm or deny measurably significant evidence of a release pursuant to Title 27, section 20415(e)(8)(E) and section 20420(j)(1-3).

The Water Quality Protection Standard shall be certified by a California-registered civil engineer or geologist as meeting the requirements of Title 27. If subsequent sampling of the background monitoring point(s) indicates significant water quality changes due to either seasonal fluctuations or other reasons unrelated to waste management activities at the site, the Discharger may request modification of the Water Quality Protection Standard.

The Discharger proposed the methods for calculating concentration limits in the 21 January 2009 *Water Quality Protection Standard Report*. The WQPS report proposed to use Intrawell data analysis to calculate tolerance limits for the monitored constituents.

The Water Quality Protection Standard shall be updated annually for each monitoring well using new and historical monitoring data.

2. Monitoring Parameters

Monitoring parameters are a select group of constituents that are monitored during each monitoring event that are the waste constituents, reaction products, hazardous constituents, and physical parameters that provide a reliable indication of a release from a waste management unit. The monitoring parameters for all waste management units are those listed in Tables I through III for the specified monitored medium.

3. Constituents of Concern (COCs)

The COCs include a larger group of waste constituents, their reaction products, and hazardous constituents that are reasonably expected to be in or derived from waste contained in the waste management unit, and are required to be monitored every five years [Title 27, sections 20395 and 20420(g)]. The COCs for all waste management units at the facility are those listed in Tables I and II for the specified monitored medium, and Table IV. The Discharger shall monitor all COCs every five years, or more frequently as required in accordance with a Corrective Action Program. The last 5-year COC report was submitted to the Central Valley Water Board in the 2012 *Annual Monitoring Report*, and 5-year COCs are due to be monitored again in **2017**.

4. Concentration Limits

For a naturally occurring constituent of concern, the concentration limit for each constituent of concern shall be determined as follows:

- a. By calculation in accordance with a statistical method pursuant to Title 27, section 20415(e)(8); or
- b. By an alternate statistical method meeting the requirements of Title 27, section 20415(e)(8)(E).

The methods for calculating concentration limits were included in the 21 January 2009 *Water Quality Protection Standard Report*. The WQPS report proposed to use Intrawell data analysis to calculate tolerance limits for the monitored constituents.

5. Retesting Procedures for Confirming Evidence of a Release

If monitoring results indicate measurably significant evidence of a release, as described in Standard Monitoring Specification I.45 of the SPRRs, then:

- a. For analytes that are detected in less than 10% of the background samples (such as non-naturally occurring constituents), the Discharger shall use the

non-statistical retesting procedure required in Standard Monitoring Specification I.46 of the SPRRs.

- b. For analytes that are detected in 10% or greater of the background samples (naturally occurring constituents), the Discharger shall use one of the statistical retesting procedure as required in Standard Monitoring Specification I.47 of the SPRRs.

6. Point of Compliance

The point of compliance for the water standard at each waste management unit is a vertical surface located at the hydraulically downgradient limit of the Unit that extends through the uppermost aquifer underlying the unit. The following are monitoring locations at the point of compliance:

Point of Compliance Monitoring Wells

CMW-1
CMW-2A
CMW-4
CMW-7

7. Compliance Period

The compliance period for each waste management unit shall be the number of years equal to the active life of the unit plus the closure period. The compliance period is the minimum period during which the Discharger shall conduct a water quality monitoring program subsequent to a release from the waste management unit. The compliance period shall begin anew each time the Discharger initiates an evaluation monitoring program [Title 27, section 20410].

8. Monitoring Points

A monitoring point is a well, device, or location specified in the waste discharge requirements, which monitoring is conducted and at which the water quality protection standard applies. The monitoring points for each monitored medium are listed in Section A of this MRP.

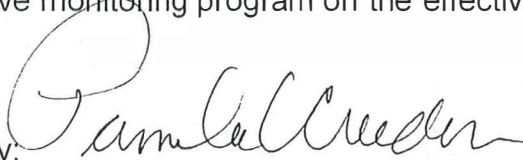
D. TRANSMITTAL LETTER FOR ALL REPORTS

A transmittal letter explaining the essential points shall accompany each report. At a minimum, the transmittal letter shall identify any violations found since the last report was submitted, and if the violations were corrected. If no violations have occurred since the last submittal, this shall be stated in the transmittal letter. The transmittal letter shall also state that a discussion of any violations found since the last report was submitted, and a description of the actions taken or planned for correcting those

violations, including any references to previously submitted time schedules, is contained in the accompanying report. The transmittal letter shall contain a statement by the discharger, or the discharger's authorized agent, under penalty of perjury, that to the best of the signer's knowledge the report is true, accurate, and complete.

The Discharger shall implement the above monitoring program on the effective date of this Program.

Ordered by:



PAMELA C. CREEDON, Executive Officer

3/28/14

(Date)

TABLE I
GROUNDWATER DETECTION MONITORING PROGRAM

<u>Parameter</u>	<u>Units</u>	<u>Sampling Frequency</u>	<u>Reporting Frequency</u>
Field Parameters			
Groundwater Elevation	Ft. & 100ths, M.S.L.	Quarterly	Semiannual
Temperature	°F	Semiannual	Semiannual
Electrical Conductivity	umhos/cm	Semiannual	Semiannual
pH	pH units	Semiannual	Semiannual
Turbidity	Turbidity units	Semiannual	Semiannual
Monitoring Parameters			
Total Dissolved Solids (TDS)	mg/L ¹	Semiannual	Semiannual
Chloride	mg/L	Semiannual	Semiannual
Carbonate	mg/L	Semiannual	Semiannual
Bicarbonate	mg/L	Semiannual	Semiannual
Nitrate - Nitrogen	mg/L	Semiannual	Semiannual
Sulfate	mg/L	Semiannual	Semiannual
Calcium	mg/L	Semiannual	Semiannual
Magnesium	mg/L	Semiannual	Semiannual
Potassium	mg/L	Semiannual	Semiannual
Sodium	mg/L	Semiannual	Semiannual
Volatile Organic Compounds (USEPA Method 8260B, short list, see Table IV)	ug/L ²	Semiannual	Semiannual
5-Year Constituents of Concern (see Table V)			
Total Organic Carbon	mg/L	5 years	5 years
Inorganics (dissolved)	ug/L	5 years	5 years
Volatile Organic Compounds (USEPA Method 8260B, extended list)	ug/L	5 years	5 years
Semi-Volatile Organic Compounds (USEPA Method 8270D)	ug/L	5 years	5 years
Chlorophenoxy Herbicides (USEPA Method 8151A)	ug/L	5 years	5 years
Organophosphorus Compounds (USEPA Method 8141B)	ug/L	5 years	5 years

¹ Milligrams per liter

² Micrograms per liter

TABLE II
LEACHATE SEEP MONITORING ¹

<u>Parameter</u>	<u>Units</u>	<u>Sampling Frequency</u>	<u>Reporting Frequency</u>
Field Parameters			
Total Flow	Gallons	Monthly	Semiannual
Flow Rate	Gallons/Day	Monthly	Semiannual
Electrical Conductivity	umhos/cm	Quarterly	Semiannual
pH	pH units	Quarterly	Semiannual
Monitoring Parameters			
Total Dissolved Solids (TDS)	mg/L	Annually	Annually
Chloride	mg/L	Annually	Annually
Carbonate	mg/L	Annually	Annually
Bicarbonate	mg/L	Annually	Annually
Nitrate - Nitrogen	mg/L	Annually	Annually
Sulfate	mg/L	Annually	Annually
Calcium	mg/L	Annually	Annually
Magnesium	mg/L	Annually	Annually
Potassium	mg/L	Annually	Annually
Sodium	mg/L	Annually	Annually
Volatile Organic Compounds	ug/L	Annually	Annually
(USEPA Method 8260B, short list, see Table IV)			
5-Year Constituents of Concern (see Table V)			
Total Organic Carbon	mg/L	5 years	5 years
Inorganics (dissolved)	ug/L	5 years	5 years
Volatile Organic Compounds	ug/L	5 years	5 years
(USEPA Method 8260B, extended list)			
Semi-Volatile Organic Compounds	ug/L	5 years	5 years
(USEPA Method 8270D)			
Chlorophenoxy Herbicides	ug/L	5 years	5 years
(USEPA Method 8151A)			
Organophosphorus Compounds	ug/L	5 years	5 years
(USEPA Method 8141B)			

¹ Leachate seeps shall be sampled and analyzed for the Field and Monitoring Parameters in this table upon detection. The quantity of leachate shall be estimated and reported in gallons/day. Also, refer to Section B.3

TABLE III

MONITORING PARAMETERS FOR DETECTION MONITORING

Surrogates for Metallic Constituents:

pH
Total Dissolved Solids
Electrical Conductivity
Chloride
Sulfate
Nitrate nitrogen

Volatile Organic Compounds, short list:

USEPA Method 8260B

Acetone
Acrylonitrile
Benzene
Bromochloromethane
Bromodichloromethane
Bromoform (Tribromomethane)
Carbon disulfide
Carbon tetrachloride
Chlorobenzene
Chloroethane (Ethyl chloride)
Chloroform (Trichloromethane)
Dibromochloromethane (Chlorodibromomethane)
1,2-Dibromo-3-chloropropane (DBCP)
1,2-Dibromoethane (Ethylene dibromide; EDB)
o-Dichlorobenzene (1,2-Dichlorobenzene)
m-Dichlorobenzene (1,3-Dichlorobenzene)
p-Dichlorobenzene (1,4-Dichlorobenzene)
trans-1,4-Dichloro-2-butene
Dichlorodifluoromethane (CFC-12)
1,1-Dichloroethane (Ethylidene chloride)
1,2-Dichloroethane (Ethylene dichloride)
1,1 -Dichloroethylene (1,1 -Dichloroethene; Vinylidene chloride)
cis- 1,2-Dichloroethylene (cis- 1,2-Dichloroethene)
trans-1,2-Dichloroethylene (trans-1,2-Dichloroethene)
1,2-Dichloropropane (Propylene dichloride)
cis- 1,3-Dichloropropene
trans- 1,3-Dichloropropene
Di-isopropylether (DIPE)
Ethanol
Ethyltertiary butyl ether
Ethylbenzene
2-Hexanone (Methyl butyl ketone)
Hexachlorobutadiene
Methyl bromide (Bromomethene)
Methyl chloride (Chloromethane)

TABLE III
MONITORING PARAMETERS FOR DETECTION MONITORING

Continued

Methylene bromide (Dibromomethane)
Methylene chloride (Dichloromethane)
Methyl ethyl ketone (MEK: 2-Butanone)
Methyl iodide (Iodomethane)
Methyl t-butyl ether
4-Methyl-2-pentanone (Methyl isobutylketone)
Naphthalene
Styrene
Tertiary amyl methyl ether
Tertiary butyl alcohol
1,1,1,2-Tetrachloroethane
1,1,2,2-Tetrachloroethane
Tetrachloroethylene (Tetrachloroethene; Perchloroethylene)
Toluene
1,2,4-Trichlorobenzene
1,1,1-Trichloroethane (Methylchloroform)
1,1,2-Trichloroethane
Trichloroethylene (Trichloroethene)
Trichlorofluoromethane (CFC- 11)
1,2,3-Trichloropropane
Vinyl acetate
Vinyl chloride
Xylenes

TABLE IV
5-YEAR COCs & APPROVED USEPA ANALYTICAL METHODS

<u>Inorganics (dissolved):</u>	<u>USEPA Method</u>
Aluminum	6010
Antimony	7041
Barium	6010
Beryllium	6010
Cadmium	7131A
Chromium	6010
Cobalt	6010
Copper	6010
Silver	6010
Tin	6010
Vanadium	6010
Zinc	6010
Iron	6010
Manganese	6010
Arsenic	7062
Lead	7421
Mercury	7470A
Nickel	7521
Selenium	7742
Thallium	7841
Cyanide	9010C
Sulfide	9030B

Volatile Organic Compounds, extended list:

USEPA Method 8260B

Acetone
Acetonitrile (Methyl cyanide)
Acrolein
Acrylonitrile
Allyl chloride (3-Chloropropene)
Benzene
Bromochloromethane (Chlorobromomethane)
Bromodichloromethane (Dibromochloromethane)
Bromoform (Tribromomethane)
Carbon disulfide
Carbon tetrachloride
Chlorobenzene
Chloroethane (Ethyl chloride)
Chloroform (Trichloromethane)
Chloroprene
Dibromochloromethane (Chlorodibromomethane)
1,2-Dibromo-3-chloropropane (DBCP)
1,2-Dibromoethane (Ethylene dibromide; EDB)
o-Dichlorobenzene (1,2-Dichlorobenzene)

TABLE IV

5-YEAR COCs & APPROVED USEPA ANALYTICAL METHODS

Continued

m-Dichlorobenzene (1,3-Dichlorobenzene)
p-Dichlorobenzene (1,4-Dichlorobenzene)
trans- 1,4-Dichloro-2-butene
Dichlorodifluoromethane (CFC 12)
1,1 -Dichloroethane (Ethylidene chloride)
1,2-Dichloroethane (Ethylene dichloride)
1,1 -Dichloroethylene (1, 1-Dichloroethene; Vinylidene chloride)
cis- 1,2-Dichloroethylene (cis- 1,2-Dichloroethene)
trans- 1,2-Dichloroethylene (trans- 1,2-Dichloroethene)
1,2-Dichloropropane (Propylene dichloride)
1,3-Dichloropropane (Trimethylene dichloride)
2,2-Dichloropropane (Isopropylidene chloride)
1,1 -Dichloropropene
cis- 1,3-Dichloropropene
trans- 1,3-Dichloropropene
Di-isopropylether (DIPE)
Ethanol
Ethyltertiary butyl ether
Ethylbenzene
Ethyl methacrylate
Hexachlorobutadiene
2-Hexanone (Methyl butyl ketone)
Isobutyl alcohol
Methacrylonitrile
Methyl bromide (Bromomethane)
Methyl chloride (Chloromethane)
Methyl ethyl ketone (MEK; 2-Butanone)
Methyl iodide (Iodomethane)
Methyl t-butyl ether
Methyl methacrylate
4-Methyl-2-pentanone (Methyl isobutyl ketone)
Methylene bromide (Dibromomethane)
Methylene chloride (Dichloromethane)
Naphthalene
Propionitrile (Ethyl cyanide)
Styrene
Tertiary amyl methyl ether
Tertiary butyl alcohol
1,1,1,2-Tetrachloroethane
1,1,2,2-Tetrachloroethane
Tetrachloroethylene (Tetrachloroethene; Perchloroethylene; PCE)
Toluene

TABLE IV

5-YEAR COCs & APPROVED USEPA ANALYTICAL METHODS

Continued

1,2,4-Trichlorobenzene
1,1,1 -Trichloroethane (Methylchloroform)
1,1,2-Trichloroethane
Trichloroethylene (Trichloroethene; TCE)
Trichlorofluoromethane (CFC- 11)
1,2,3-Trichloropropane
Vinyl acetate
Vinyl chloride (Chloroethene)
Xylene (total)

Semi-Volatile Organic Compounds:

USEPA Method 8270D - base, neutral, & acid extractables

Acenaphthene
Acenaphthylene
Acetophenone
2-Acetylaminofluorene (2-AAF)
Aldrin
4-Aminobiphenyl
Anthracene
Benzo[a]anthracene (Benzanthracene)
Benzo[b]fluoranthene
Benzo[k]fluoranthene
Benzo[g,h,i]perylene
Benzo[a]pyrene
Benzyl alcohol
Bis(2-ethylhexyl) phthalate
alpha-BHC
beta-BHC
delta-BHC
gamma-BHC (Lindane)
Bis(2-chloroethoxy)methane
Bis(2-chloroethyl) ether (Dichloroethyl ether)
Bis(2-chloro-1-methylethyl) ether (Bis(2-chloroisopropyl) ether; DCIP)
4-Bromophenyl phenyl ether
Butyl benzyl phthalate (Benzyl butyl phthalate)
Chlordane
p-Chloroaniline
Chlorobenzilate
p-Chloro-m-cresol (4-Chloro-3-methylphenol)
2-Chloronaphthalene
2-Chlorophenol
4-Chlorophenyl phenyl ether
Chrysene
o-Cresol (2-methylphenol)
m-Cresol (3-methylphenol)

TABLE IV

5-YEAR COCs & APPROVED USEPA ANALYTICAL METHODS

Continued

p-Cresol (4-methylphenol)
4,4'-DDD
4,4'-DDE
4,4'-DDT
Diallate
Dibenz[a,h]anthracene
Dibenzofuran
Di-n-butyl phthalate
3,3'-Dichlorobenzidine
2,4-Dichlorophenol
2,6-Dichlorophenol
Dieldrin
Diethyl phthalate
p-(Dimethylamino)azobenzene
7,12-Dimethylbenz[a]anthracene
3,3'-Dimethylbenzidine
2,4-Dimethylphenol (m-Xylenol)
Dimethyl phthalate
m-Dinitrobenzene
4,6-Dinitro-o-cresol (4,6-Dinitro-2-methylphenol)
2,4-Dinitrophenol
2,4-Dinitrotoluene
2,6-Dinitrotoluene
Di-n-octyl phthalate
Diphenylamine
Endosulfan I
Endosulfan II
Endosulfan sulfate
Endrin
Endrin aldehyde
Ethyl methanesulfonate
Famphur
Fluoranthene
Fluorene
Heptachlor
Heptachlor epoxide
Hexachlorobenzene
Hexachlorocyclopentadiene
Hexachloroethane
Hexachloropropene
Indeno(1,2,3-c,d)pyrene
Isodrin
Isophorone
Isosafrole
Kepone
Methapyrilene
Methoxychlor

TABLE IV

5-YEAR COCs & APPROVED USEPA ANALYTICAL METHODS

Continued

3-Methylcholanthrene
Methyl methanesulfonate
2-Methylnaphthalene
1,4-Naphthoquinone
1-Naphthylamine
2-Naphthylamine
o-Nitroaniline (2-Nitroaniline)
m-Nitroaniline (3-Nitroaniline)
p-Nitroaniline (4-Nitroaniline)
Nitrobenzene
o-Nitrophenol (2-Nitrophenol)
p-Nitrophenol (4-Nitrophenol)
N-Nitrosodi-n-butylamine (Di-n-butyl nitrosamine)
N-Nitrosodiethylamine (Diethyl nitrosamine)
N-Nitrosodimethylamine (Dimethyl nitrosamine)
N-Nitrosodiphenylamine (Diphenyl nitrosamine)
N-Nitrosodipropylamine (N-Nitroso-N-dipropylamine; Di-n-propyl nitrosamine)
N-Nitrosomethylethylamine (Methylethyl nitrosamine)
N-Nitrosopiperidine
N-Nitrosopyrrolidine
5-Nitro-o-toluidine
Pentachlorobenzene
Pentachloronitrobenzene (PCNB)
Pentachlorophenol
Phenacetin
Phenanthrene
Phenol
p-Phenylenediamine
Polychlorinated biphenyls (PCBs; Aroclors)
Pronamide
Pyrene
Safrole
1,2,4,5-Tetrachlorobenzene
2,3,4,6-Tetrachlorophenol
o-Toluidine
Toxaphene
2,4,5-Trichlorophenol
0,0,0-Triethyl phosphorothioate
sym-Trinitrobenzene

TABLE IV

5-YEAR COCs & APPROVED USEPA ANALYTICAL METHODS

Continued

Chlorophenoxy Herbicides:

USEPA Method 8151A

2,4-D (2,4-Dichlorophenoxyacetic acid)
Dinoseb (DNBP; 2-sec-Butyl-4,6-dinitrophenol)
Silvex (2,4,5-Trichlorophenoxypropionic acid; 2,4,5-TP)
2,4,5-T (2,4,5-Trichlorophenoxyacetic acid)

Organophosphorus Compounds:

USEPA Method 8141B

Atrazine
Chlorpyrifos
0,0-Diethyl 0-2-pyrazinyl phosphorothioate (Thionazin)
Diazinon
Dimethoate
Disulfoton
Methyl parathion (Parathion methyl)
Parathion
Phorate
Simazine

INFORMATION SHEET

ORDER R5-2014-0058
COUNTY OF FRESNO AND CHEVRON USA, INC.
CLOSURE AND POST-CLOSURE MAINTENANCE
COALINGA SOLID WASTE DISPOSAL SITE
FRESNO COUNTY

The County of Fresno operates and Chevron USA, Inc., (a Delaware Corporation) (landowner), hereinafter referred to jointly as "Discharger", own and operate the Coalinga Solid Waste Disposal Site (facility) about two miles south of Coalinga. The City of Coalinga leased the site from Chevron USA and began landfill operations from 1961 until 1969. In 1969, the County of Fresno took over operations until the landfill ceased accepting waste on 10 November 2009.

The proposed Order revises the existing WDRs to provide for closure and post-closure maintenance. The facility contains two unlined units, the northern unit covers approximately 14 acres, and the southern unit covers approximately 38 acres.

The facility is located along the eastern edge of the Coast Ranges adjacent to the southern San Joaquin Valley and on the northeast flank of a northwest plunging anticline. The Tulare and San Joaquin Formations are exposed at the site. The Plio-Pleistocene Tulare Formation is exposed in the northern half of the site and consists generally of stream deposited, crossbedded silty sandstone and conglomerate. Some thin-bedded sandstone, clays, and limestones representing lake deposits are also present in this formation. The base of the Tulare Formation consists of diatomaceous white silty clay located just above a pelecypod deposit containing *Mya* species. The underlying Pliocene age San Joaquin Formation is exposed in the southern half of the site and consists of marine deposited, fine-grained silty sandstone, silt, and clay. The base of the San Joaquin Formation is comprised of the Cascajo Conglomerate layer, which is blue colored conglomerate and sandstone averaging about 50 feet in thickness. The formations dip approximately 17 degrees to the north.

Based upon the most recent monitoring report (1st Semiannual 2013), the first encountered groundwater ranges from about 146 feet to 206 feet below the native ground surface. Groundwater elevations range from about 514 feet MSL to 689 feet MSL. The direction of groundwater flow is generally toward the northeast. The estimated average groundwater gradient is approximately 0.044 feet per foot. The estimated average groundwater flow rate is 30.3 feet per year.

The detection monitoring system has been operating at the facility since 1990. To date, no releases from the Units have been confirmed.

The Discharger submitted a report titled Design of Evapotranspirative Final (ET) Cover in December 2011. Central Valley Water Board staff, in a letter dated 11 July 2012, concurred with the Dischargers ET final cover design proposal. The proposed final cover consists of an ET cover, which is an engineered alternative. In an ET cover design, the low-hydraulic conductivity layer is replaced by a vegetated soil layer that is engineered and constructed to absorb moisture during precipitation events and expel moisture by evaporation and transpiration before it flows through the base of the cover. The proposed ET final cover consists of a 3.5-foot thick evapotranspirative cover and vegetative layer that incorporates the existing 1.8-foot thick interim soil cover. The Discharge submitted a Final Closure/Post-Closure Maintenance Plan in January 2013. Staff found the Final Closure/Post-Closure Maintenance Plan complete and adequate in a letter dated 18 October 2013.



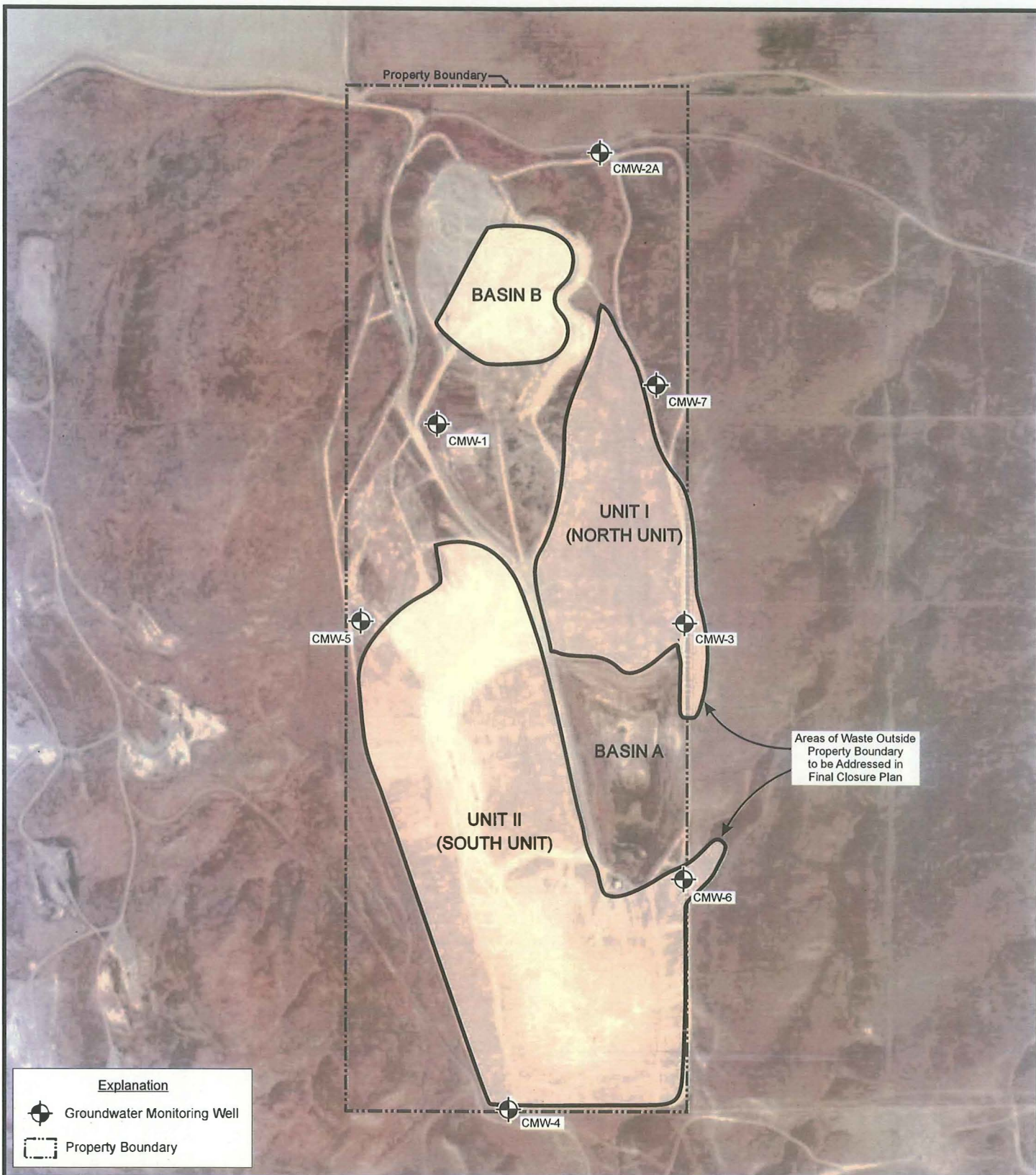
Map Source:
ESRI's ArcGIS Online premium services
Section 9, T21S, R15E, MDB&M



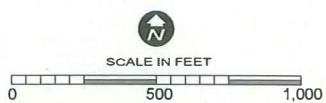
LOCATION MAP

ORDER NO. R5-2014-0058
WASTE DISCHARGE REQUIREMENTS
FOR
COUNTY OF FRESNO
AND CHEVRON USA, INC.
COALINGA SOLID WASTE DISPOSAL SITE
CLASS III LANDFILL
CLOSURE AND POST-CLOSURE MAINTENANCE
FRESNO COUNTY

ATTACHMENT A



Map Source:
 ESRI's ArcGIS Online premium services
 Section 9, T21S, R15E, MDB&M



SITE MAP
 ORDER NO. R5-2014-0058
 WASTE DISCHARGE REQUIREMENTS
 FOR
 COUNTY OF FRESNO
 AND CHEVRON USA, INC.
 COALINGA SOLID WASTE DISPOSAL SITE
 CLASS III LANDFILL
 CLOSURE AND POST-CLOSURE MAINTENANCE
 FRESNO COUNTY

ATTACHMENT B

Exhibit "C"

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM NO. 99-124 FOR SOUTHEAST REGIONAL SOLID WASTE COMMISSION FOR POST-CLOSURE MAINTENANCE SOUTHEAST REGIONAL MUNICIPAL SOLID WASTE LANDFILL FRESNO COUNTY

Compliance with this Monitoring and Reporting Program, with Title 27, California Code of Regulations, Section 20005, et seq. (hereafter Title 27), and with the Standard Provisions and Reporting Requirements dated August 1997, is ordered by Waste Discharge Requirements Order No. 99-124.

Failure to comply with this Program, or with the Standard Provisions and Reporting Requirements, constitutes noncompliance with the Waste Discharge Requirements and with the California Water Code, which can result in the imposition of civil monetary liability.

A. REQUIRED MONITORING REPORTS

<u>Report</u>	<u>Due</u>
1. Groundwater Monitoring (Section D.1)	See Table I
2. Annual Monitoring Summary Report (Standard Provisions and Reporting Requirements)	Annually
3. Facility Monitoring (Section D.5)	As necessary
4. Response to a Release (Standard Provisions and Reporting Requirements)	As necessary

B. REPORTING

The Discharger shall report monitoring data and information as required in this Monitoring and Reporting Program and as required in the Standard Provisions and Reporting Requirements. Reports which do not comply with the required format will be **REJECTED** and the Discharger shall be deemed to be in noncompliance with the waste discharge requirements. In reporting the monitoring data required by this program, the Discharger shall arrange the data in tabular form so that the date, the constituents, the concentrations, and the units are readily discernible. Data shall also be submitted in a digital database format acceptable to the Executive Officer. The data shall be summarized in such a manner so as to illustrate clearly the compliance with waste discharge requirements or the lack

MONITORING AND REPORTING PROGRAM NO. 99-124
SOUTHEAST REGIONAL SOLID WASTE COMMISSION
POST-CLOSURE MAINTENANCE
SOUTHEAST REGIONAL MUNICIPAL SOLID WASTE LANDFILL
FRESNO COUNTY

-2-

thereof. A short discussion of the monitoring results, including notations of any water quality violations, shall precede the tabular summaries.

Field and laboratory tests shall be reported in each monitoring report. Monthly, quarterly, semiannual, and annual monitoring reports shall be submitted to Board staff in accordance with the following schedule for the calendar period in which samples were taken or observations made. The results of any monitoring done more frequently than required at the locations specified herein shall be reported to Board staff.

<u>Sampling Frequency</u>	<u>Reporting Frequency</u>	<u>Reporting Periods End</u>	<u>Report Date Due</u>
Monthly	Quarterly	Last Day of Month	by Quarterly Schedule
Quarterly	Quarterly	31 March	31 August
		30 June	31 August
		30 September	28 February
		31 December	28 February
Semi-Annually	Semi-Annually	30 June	31 August
		31 December	28 February
Annually	Annually	31 December	28 February

The annual report to be submitted to Board staff shall contain both tabular and graphical summaries of the monitoring data obtained during the previous twelve months, so as to show historical trends at each well. The report shall include a discussion of compliance with the waste discharge requirements and the water quality protection standard.

C. WATER QUALITY PROTECTION STANDARD AND COMPLIANCE PERIOD

1. Water Quality Protection Standard Report

For each waste management unit, the water quality protection standard consists of a list of constituents of concern and monitoring parameters, concentration limits for each constituent of concern, the point of compliance, and all monitoring points.

The Discharger shall submit a proposed water quality protection standard for review and approval within one year from the date of adoption of this Monitoring and Reporting Program by the Board. The Executive Officer shall review the data and the proposed water quality protection standard in determining the final water quality protection standard for each monitored medium.

The report shall:

- a) Identify all distinct bodies of ground water that could be affected in the event of a release from a waste management unit or portion of a waste management unit. This list shall include at least the uppermost aquifer and any permanent or ephemeral zones of perched groundwater underlying the waste management facility.
- b) Include a map showing the monitoring points and background monitoring points for the saturated zone(s) and showing the point of compliance in accordance with §20405 of Title 27.
- c) Evaluate the perennial direction(s) of groundwater movement within the uppermost groundwater zone(s).

If subsequent sampling of the background monitoring point(s) indicates significant water quality changes due to either seasonal fluctuations or other reasons unrelated to waste management activities at the site, the Discharger may request modification of the water quality protection standard.

2. Constituents of Concern

The constituents of concern are the waste constituents, reaction products, and hazardous constituents that are reasonably expected to be in or derived from waste contained in the waste management unit. The constituents of concern for all waste management units at the facility are those listed in Table IV. The Discharger shall monitor all constituents of concern in Table IV every five years, or more frequently as required in accordance with a Corrective Action Program.

a. Monitoring Parameters

Monitoring parameters are the waste constituents, reaction products, hazardous constituents, and physical parameters that provide a reliable indication of a release from a waste management unit. The monitoring parameters for all waste management units are those listed in Tables I through IV for the specified monitored medium.

3. Concentration Limits

The concentration limits for each constituent of concern are as follows:

- a. for naturally occurring constituents of concern, the concentration limit shall be the calculated statistical concentration limit.

MONITORING AND REPORTING PROGRAM NO. 99-124
SOUTHEAST REGIONAL SOLID WASTE COMMISSION
POST-CLOSURE MAINTENANCE
SOUTHEAST REGIONAL MUNICIPAL SOLID WASTE LANDFILL
FRESNO COUNTY

-4-

- b. for anthropogenic (not naturally occurring) constituents, which have no natural and, therefore, no background values, the concentration limit (water quality protection standard) shall be the detection limit of the analytical method(s) used.

The Discharger shall use the statistical method approved by the Executive Officer and the groundwater quality data obtained from the detection monitoring program to revise the concentration limits annually. The Discharger shall submit the revised concentration limits to the Executive Officer for review and approval in the annual monitoring report.

4. Point of Compliance

The point of compliance for each waste management unit is the vertical surface located at the hydraulically downgradient limit of the waste management unit that extends through the uppermost aquifer underlying the unit.

a. Monitoring Points

All downgradient wells established for groundwater monitoring shall constitute the monitoring points for the groundwater quality protection standard. All approved monitoring wells and leachate monitoring points shall be sampled and analyzed for monitoring parameters and constituents of concern as indicated and listed in Tables I through IV.

5. Compliance Period

The compliance period for each waste management unit shall be the number of years equal to the active life of the waste management unit plus the closure period. The compliance period is the minimum period during which the Discharger shall conduct a water quality monitoring program subsequent to a release from the unit. The compliance period shall begin anew each time the Discharger initiates an evaluation monitoring program.

D. MONITORING

The Discharger shall comply with the detection monitoring provisions of Title 27 for groundwater in accordance with Detection Monitoring Specification D.2 and D.3 of Waste Discharger Requirements Order No. 99-124. All monitoring shall be conducted in accordance with a Sample Collection and Analysis Plan, which includes quality assurance/quality control standards, that is acceptable to the Executive Officer.

Method detection limits and practical quantitation limits shall be reported. All peaks shall be reported, including those which cannot be quantified and/or specifically identified. Metals shall be analyzed in accordance with the methods listed in Table IV.

The Discharger may use alternative analytical test methods, including new EPA approved methods, provided the methods have method detection limits equal to or lower than the analytical methods specified in this Monitoring and Reporting Program.

1. Groundwater

The Discharger shall install and operate a groundwater detection monitoring system that complies with the applicable provisions of §20415 and §20420 of Title 27 in accordance with a Detection Monitoring Plan approved by the Executive Officer. The Discharger shall collect, preserve, and transport groundwater samples in accordance with the approved Sample Collection and Analysis Plan.

The Discharger shall determine groundwater flow rate and direction in the uppermost aquifer and in any zones of perched water and in any additional zone of saturation monitored pursuant to this Monitoring and Reporting Program, and report the results quarterly, including the times of highest and lowest elevations of the water levels in the wells.

Groundwater samples shall be collected from the point of compliance wells, background wells, and any additional wells added as part of the approved groundwater monitoring system. Samples shall be collected and analyzed for the monitoring parameters in accordance with the methods and frequency specified in Table I. All monitoring parameters shall be graphed so as to show historical trends at each well. The monitoring parameters shall also be evaluated annually with regards to the cation/anion balance, and the results shall be graphically presented using a Stiff diagram or a Piper graph. Samples for the constituents of concern specified in Table I shall be collected and analyzed in accordance with the methods listed in Table IV every five years.

2. Facility Monitoring

a. Facility Inspection

Annually, no later than 30 September and within 7 days following a major storm event, the Discharger shall conduct an inspection of the facility. The inspection shall assess damage to the drainage control system, groundwater monitoring equipment (including wells, etc.), and shall include the Standard Observations defined in the Standard Provisions and Reporting Requirements (Definition 24). Any necessary construction, maintenance, or repairs shall be

Aug-91

MONITORING AND REPORTING PROGRAM NO. 99-124
SOUTHEAST REGIONAL SOLID WASTE COMMISSION
POST-CLOSURE MAINTENANCE
SOUTHEAST REGIONAL MUNICIPAL SOLID WASTE LANDFILL
FRESNO COUNTY

-6-

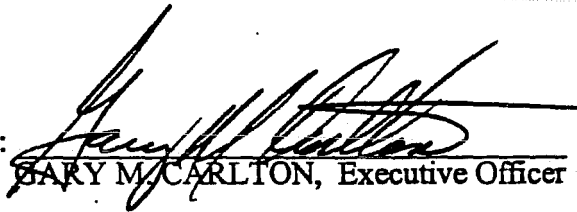
completed by 31 October and within 30 days of a major storm event. By 15 November of each year, and within 45 days of a major storm event, the Discharger shall submit an annual report describing the results of the inspection and the repair measures implemented.

b. Storm Events

The Discharger shall inspect all precipitation, diversion, and drainage facilities for damage within 7 days following *major storm events*. Necessary repairs shall be completed within 30 days of the inspection. The Discharger shall report any damage and subsequent repairs within 45 days of completion of the repairs.

The Discharger shall implement the above monitoring program on the effective date of this Program.

Ordered by:


GARY M. CARLTON, Executive Officer

17 September 1999
(Date)

DEE

MONITORING AND REPORTING PROGRAM No. 99-124
 SOUTHEAST REGIONAL SOLID WASTE COMMISSION
 POST-CLOSURE MAINTENANCE
 SOUTHEAST REGIONAL MUNICIPAL SOLID WASTE LANDFILL
 FRESNO COUNTY

-7-

TABLE I
GROUNDWATER DETECTION MONITORING PROGRAM

<u>Parameter</u>	<u>Units</u>	<u>Frequency</u>
Field Parameters		
Groundwater Elevation	Ft. & hundredths, M.S.L.	Quarterly
Temperature	°C	Quarterly
Specific Conductance	µmhos/cm	Quarterly
pH	pH units	Quarterly
Turbidity	Turbidity units	Quarterly
Monitoring Parameters		
Total Dissolved Solids (TDS)	mg/L	Semi-annual
Chloride	mg/L	Semi-annual
Carbonate	mg/L	Semi-annual
Bicarbonate	mg/L	Semi-annual
Nitrate - Nitrogen	mg/L	Semi-annual
Sulfate	mg/L	Semi-annual
Calcium	mg/L	Semi-annual
Magnesium	mg/L	Semi-annual
Potassium	mg/L	Semi-annual
Sodium	mg/L	Semi-annual
Volatile Organic Compounds (USEPA Methods 601/602, see Table III)	µg/L	Semi-annual
Constituents of Concern (see Table IV)		
Total Organic Carbon	mg/L	5 years
Inorganics (dissolved)	mg/L	5 years
Volatile Organic Compounds (USEPA Method 8260, extended list)	µg/L	5 years
Semi-Volatile Organic Compounds (USEPA Method 8270)	µg/L	5 years
Chlorophenoxy Herbicides (USEPA Method 8150)	µg/L	5 years
Organophosphorus Compounds (USEPA Method 8141)	µg/L	5 years

MONITORING AND REPORTING PROGRAM NO. 99-124
 SOUTHEAST REGIONAL SOLID WASTE COMMISSION
 POST-CLOSURE MAINTENANCE
 SOUTHEAST REGIONAL MUNICIPAL SOLID WASTE LANDFILL
 FRESNO COUNTY

-8-

TABLE II
LEACHATE DETECTION MONITORING PROGRAM

<u>Parameter</u>	<u>Units</u>	<u>Frequency</u>
Field Parameters		
Total Flow	Gallons	Quarterly
Flow Rate	Gallons/Day	Quarterly
Specific Conductance	µmhos/cm	Quarterly
pH	pH units	Quarterly
Monitoring Parameters		
Total Dissolved Solids (TDS)	mg/L	Quarterly
Chloride	mg/L	Quarterly
Sulfate	mg/L	Quarterly
Nitrate - Nitrogen	mg/L	Quarterly
Volatile Organic Compounds (USEPA Methods 601/602, see Table III)	µg/L	Quarterly
Constituents of Concern (see Table IV)		
Total Organic Carbon	mg/L	5 years
Carbonate	mg/L	5 years
Bicarbonate Alkalinity	mg/L	5 years
Inorganics (dissolved)	mg/L	5 years
Volatile Organic Compounds (USEPA Method 8260, extended list)	µg/L	5 years
Semi-Volatile Organic Compounds (USEPA Method 8270)	µg/L	5 years
Chlorophenoxy Herbicides (USEPA Method 8150)	µg/L	5 years
Organophosphorus Compounds (USEPA Method 8141)	µg/L	5 years

TABLE III

MONITORING PARAMETERS FOR DETECTION MONITORING

Constituents included in VOC:

USEPA Methods 601 and 602 Benzene
Bromodichloromethane
Bromoform (Tribromomethane)
Bromomethane
Carbon tetrachloride
Chlorobenzene
Chloroethane (Ethyl chloride)
Chloroform (Trichloromethane)
Chloromethane
Dibromochloromethane (Chlorodibromomethane)
o-Dichlorobenzene (1,2-Dichlorobenzene)
1,3-Dichlorobenzene
p-Dichlorobenzene (1,4-Dichlorobenzene)
Dichlorodifluoromethane
1,1-Dichloroethane (Ethylidene chloride)
1,2-Dichloroethane (Ethylene dichloride)
1,1 -Dichloroethylene (1,1 -Dichloroethene; Vinylidene chloride)
trans-1,2-Dichloroethylene (trans-1,2-Dichloroethene)
1,2-Dichloropropane (Propylene dichloride)
cis- 1,3-Dichloropropene
trans-1,3-Dichloropropene
Ethylbenzene
Methylene chloride (Dichloromethane)
1,1,2,2-Tetrachloroethane
Tetrachloroethylene (Tetrachloroethene; Perchloroethylene)
Toluene
1,1,1-Trichloroethane (Methylchloroform)
1,1,2-Trichloroethane
Trichloroethylene (Trichloroethene)
Trichlorofluoromethane (CFC- 11)
Vinyl chloride
Xylene(s)

TABLE IV

CONSTITUENTS OF CONCERN & APPROVED USEPA ANALYTICAL METHODS

Inorganics (dissolved):

USEPA Method

Aluminum	6010
Antimony	6010
Barium	6010
Beryllium	6010
Cadmium	6010
Chromium	6010
Cobalt	6010
Copper	6010
Silver	6010
Tin	6010
Vanadium	6010
Zinc	6010
Iron	6010
Manganese	6010
Arsenic	7061
Lead	7421
Mercury	7470
Nickel	7520
Selenium	7741
Thallium	7841
Cyanide	9010
Sulfide	9030

Volatile Organic Compounds:

USEPA Method 8260

Acetone
Acetonitrile (Methyl cyanide)
Acrolein
Acrylonitrile
Allyl chloride (3-Chloropropene)
Benzene
Bis(2-ethylhexyl) phthalate
Bromochloromethane (Chlorobromomethane)
Bromodichloromethane (Dibromochloromethane)
Bromoform (Tribromomethane)
Carbon disulfide
Carbon tetrachloride
Chlorobenzene
Chloroethane (Ethyl chloride)
Chloroform (Trichloromethane)
Chloroprene

TABLE IV
CONSTITUENTS OF CONCERN & APPROVED USEPA ANALYTICAL METHODS
(Continued)

Dibromochloromethane (Chlorodibromomethane)
1,2-Dibromo-3-chloropropane (DBCP)
1,2-Dibromoethane (Ethylene dibromide; EDB)
o-Dichlorobenzene (1,2-Dichlorobenzene)
m-Dichlorobenzene (1,3-Dichlorobenzene)
p-Dichlorobenzene (1,4-Dichlorobenzene)
trans- 1,4-Dichloro-2-butene
Dichlorodifluoromethane (CFC 12)
1,1 -Dichloroethane (Ethylidene chloride)
1,2-Dichloroethane (Ethylene dichloride)
1,1 -Dichloroethylene (1, 1-Dichloroethene; Vinylidene chloride)
cis- 1,2-Dichloroethylene (cis- 1,2-Dichloroethene)
trans- 1,2-Dichloroethylene (trans- 1,2-Dichloroethene)
1,2-Dichloropropane (Propylene dichloride)
1,3-Dichloropropane (Trimethylene dichloride)
2,2-Dichloropropane (Isopropylidene chloride)
1,1 -Dichloropropene
cis- 1,3-Dichloropropene
trans- 1,3-Dichloropropene
Ethylbenzene
Hexachlorobutadiene
2-Hexanone (Methyl butyl ketone)
Isobutyl alcohol
Isodrin
Methacrylonitrile
Methyl bromide (Bromomethane)
Methyl chloride (Chloromethane)
Methyl ethyl ketone (MEK; 2-Butanone)
Methyl iodide (Iodomethane)
Methyl methacrylate
4-Methyl-2-pentanone (Methyl isobutyl ketone)
Methylene bromide (Dibromomethane)
Methylene chloride (Dichloromethane)
Naphthalene
Propionitrile (Ethyl cyanide)
Styrene
1,1,1,2-Tetrachloroethane
1,1,2,2-Tetrachloroethane
Tetrachloroethylene (Tetrachloroethene; Perchloroethylene; PCE)
Toluene 1,2,4-Trichlorobenzene
1,1,1 -Trichloroethane, Methylchloroform
1,1,2-Trichloroethane

TABLE IV
CONSTITUENTS OF CONCERN & APPROVED USEPA ANALYTICAL METHODS
(Continued)

Trichloroethylene (Trichloroethene; TCE)
Trichlorofluoromethane (CFC- 11)
1,2,3-Trichloropropane
Vinyl acetate
Vinyl chloride (Chloroethene)
Xylene (total)

Semi-Volatile Organic Compounds:

USEPA Method 8270 - base, neutral, & acid extractables

Acenaphthene
Acenaphthylene
Acetophenone
2-Acetylaminofluorene (2-AAF)
Aldrin
4-Aminobiphenyl
Anthracene
Benzo[a]anthracene (Benzanthracene)
Benzo[b]fluoranthene
Benzo[k]fluoranthene
Benzo[g,h,i]perylene
Benzo[a]pyrene
Benzyl alcohol
alpha-BHC
beta-BHC
delta-BHC
gamma-BHC (Lindane)
Bis(2-chloroethoxy)methane
Bis(2-chloroethyl) ether (Dichloroethyl ether)
Bis(2-chloro-1-methylethyl) ether (Bis(2-chloroisopropyl) ether; DCIP)
4-Bromophenyl phenyl ether
Butyl benzyl phthalate (Benzyl butyl phthalate)
Chlordane
p-Chloroaniline
Chlorobenzilate
p-Chloro-m-cresol (4-Chloro-3-methylphenol)
2-Chloronaphthalene
2-Chlorophenol
4-Chlorophenyl phenyl ether
Chrysene
o-Cresol (2-methylphenol)
m-Cresol (3-methylphenol)

TABLE IV
CONSTITUENTS OF CONCERN & APPROVED USEPA ANALYTICAL METHODS
(Continued)

p-Cresol (4-methylphenol)
4,4'-DDD
4,4'-DDE
4,4'-DDT
Diallate
Dibenz[a,h]anthracene
Dibenzofuran
Di-n-butyl phthalate
o-Dichlorobenzene (1,2-Dichlorobenzene)
m-Dichlorobenzene (1,3-Dichlorobenzene)
p-Dichlorobenzene (1,4-Dichlorobenzene)
3,3'-Dichlorobenzidine
2,4-Dichlorophenol
2,6-Dichlorophenol
Dieldrin
Diethyl phthalate
p-(Dimethylamino)azobenzene
7,12-Dimethylbenz[a]anthracene
3,3'-Dimethylbenzidine
2,4-Dimethylphenol (m-Xylenol)
Dimethyl phthalate
m-Dinitrobenzene
4,6-Dinitro-o-cresol (4,6-Dinitro-2-methylphenol)
2,4-Dinitrophenol
2,4-Dinitrotoluene
2,6-Dinitrotoluene
Di-n-octyl phthalate
Diphenylamine
Endosulfan I
Endosulfan II
Endosulfan sulfate
Endrin
Endrin aldehyde
Ethyl methacrylate
Ethyl methanesulfonate
Famphur
Fluoranthene
Fluorene
Heptachlor
Heptachlor epoxide
Hexachlorobenzene
Hexachlorobutadiene

TABLE IV
CONSTITUENTS OF CONCERN & APPROVED USEPA ANALYTICAL METHODS
(Continued)

Hexachlorocyclopentadiene
Hexachloroethane
Hexachloropropene
Indeno(1,2,3-c,d)pyrene
Isophorone
Isosafrole
Kepone
Methapyrilene
Methoxychlor
3-Methylcholanthrene
Methyl methanesulfonate
2-Methylnaphthalene
Naphthalene
1,4-Naphthoquinone
1-Naphthylamine
2-Naphthylamine
o-Nitroaniline (2-Nitroaniline)
m-Nitroaniline (3-Nitroaniline)
p-Nitroaniline (4-Nitroaniline)
Nitrobenzene
o-Nitrophenol (2-Nitrophenol)
p-Nitrophenol (4-Nitrophenol)
N-Nitrosodi-n-butylamine (Di-n-butylnitrosamine)
N-Nitrosodiethylamine (Diethylnitrosamine)
N-Nitrosodimethylamine (Dimethylnitrosamine)
N-Nitrosodiphenylamine (Diphenylnitrosamine)
N-Nitrosodipropylamine (N-Nitroso-N-dipropylamine; Di-n-propylnitrosamine)
N-Nitrosomethylethylamine (Methylethylnitrosamine)
N-Nitrosopiperidine
N-Nitrosopyrrolidine
5-Nitro-o-toluidine
Pentachlorobenzene
Pentachloronitrobenzene (PCNB)
Pentachlorophenol
Phenacetin
Phenanthrene
Phenol
p-Phenylenediamine
Polychlorinated biphenyls (PCBs; Aroclors)
Pronamide
Pyrene
Safrole

TABLE IV

**CONSTITUENTS OF CONCERN & APPROVED USEPA ANALYTICAL METHODS
(Continued)**

1,2,4,5-Tetrachlorobenzene
2,3,4,6-Tetrachlorophenol
o-Toluidine
Toxaphene
1,2,4-Trichlorobenzene
2,4,5-Trichlorophenol
1,2,4,6-Trichlorophenol
0,0,0-Triethyl phosphorothioate
sym-Trinitrobenzene

Chlorophenoxy Herbicides:

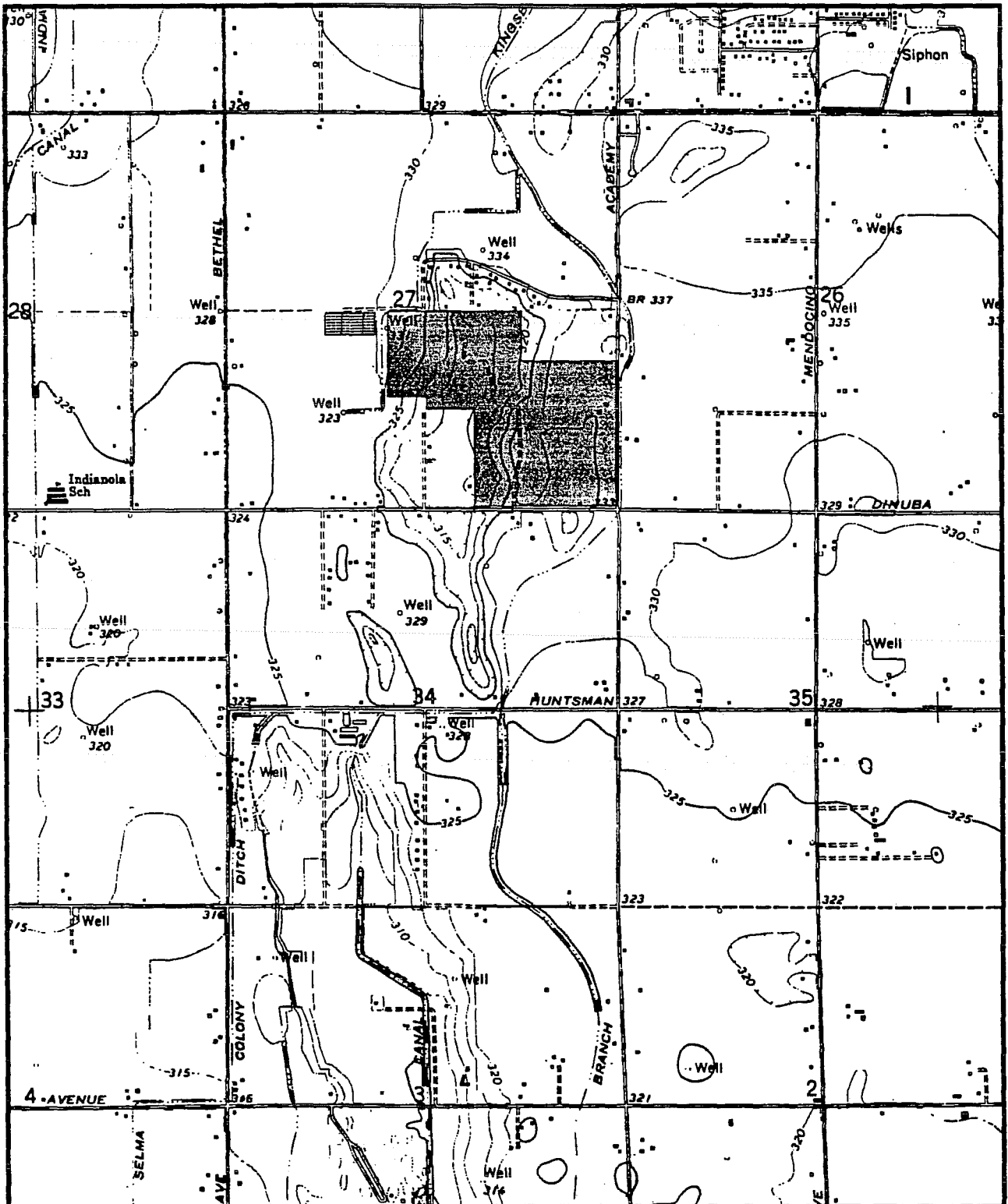
USEPA Method 8150

2,4-D (2,4-Dichlorophenoxyacetic acid)
Dinoseb (DNBP; 2-sec-Butyl-4,6-dinitrophenol)
Silvex (2,4,5-Trichlorophenoxypropionic acid; 2,4,5-TP)
2,4,5-T (2,4,5-Trichlorophenoxyacetic acid)

Organophosphorus Compounds:

USEPA Method 8141

0,0-Diethyl 0-2-pyrazinyl phosphorothioate (Thionazin)
Dimethoate
Disulfoton
Methyl parathion (Parathion methyl)
Parathion
Phorate



ATTACHMENT A

ORDER NO. _____

SOUTHEAST REGIONAL SOLID WASTE COMMISSION
SOUTHEAST REGIONAL MUNICIPAL SOLID WASTE LANDFILL
FRESNO COUNTY



1" = 2000'

Selma, CA U.S.G.S. 7 1/2 Min. Quadrangle

Exhibit "D"



California Regional Water Quality Control Board Central Valley Region

Steven T. Butler, Chair

Winston H. Hickox
Secretary for
Environmental
Protection

Fresno Branch Office
Internet Address: <http://www.swrcb.ca.gov/~rwqcb5>
2614 East Ashlan Avenue Fresno, California 93726



Gray Davis
Governor

Harris Hays
Fresno County Public Works and Development Services
2220 Tulare St, Sixth Floor
Fresno, CA 93721

8 November 2000

DIGITAL DATABASE FORMAT FOR MONITORING DATA

Some of your monitoring and reporting programs contain wording to the effect that you must submit data "in a digital database format acceptable to the Executive." This requirement is now typically included in all Title 27 permits adopted. This letter defines what constitutes a "digital database format acceptable to the Executive Officer." In general, this format is one that can be readily imported by Board staff into a standard database program. Specific requirements are as follows:

File-Format Requirements – Board staff currently use Microsoft Access 2000, so any file format from which Access can import data is acceptable. Acceptable formats include but are not necessarily limited to Access, dBase, Excel, Lotus 1-2-3, Paradox, or tab- or comma-delimited text files.

Table-Structure Requirements – The preferred table structure for monitoring data includes at a minimum the following fields or columns:

Column	Data	Format
1	Sampling Location	Text
2.	Date Sampled	Date
3	Constituent Name	Text
4	Analytical Result	Number
5	Quantitation Limit	Number
6	Detection Limit	Number
7	Detection Flag ¹	Text

¹ The detection flag would indicate whether a constituent was undetected, present in trace amounts or exceeded a censoring limit.

Variations from this preferred structure will be considered on a case-by-case basis. In any case, all analyzed constituents should be included, whether detected or not, and sufficient data should be included to enable the original laboratory data sheet to be located for each sampled constituent. Note that a table structure that simply reproduces the tables in the monitoring report will generally not be acceptable.

If you have any questions, please contact Stanley Gilbert by phone at (559) 445-5652 or by e-mail at gilbers@rb5f.swrcb.ca.gov.

LONNIE M. WASS
Supervising Engineer

California Environmental Protection Agency

Exhibit "E"

State Water Resources Control Board



Alan Lloyd
Secretary for
Environmental
Protection

Division of Water Quality

1001 I Street • Sacramento, California 95814 • (916) 341-5455
Mailing Address: P.O. Box 2231 • Sacramento, California • 95812
Fax (916) 341-5463 • <http://www.swrcb.ca.gov>



Arnold Schwarzenegger
Governor

January 12, 2005

RECEIVED
JAN 18 2005

FRESNO COUNTY
DEPT. OF
PUBLIC WORKS & PLANNING

To Whom It May Concern:

SUBJECT: NEW REGULATIONS - ELECTRONIC SUBMITTAL OF INFORMATION

The State Water Resources Control Board (SWRCB) has recently adopted and gained approval from the Office of Administrative Law (OAL) for regulations that require the electronic submittal of information (ESI) for groundwater cleanup programs including the Land Disposal Program (i.e., active and closed landfills, mines, land treatment units, surface impoundments, and waste piles). The text of the regulations can be found at:

http://www.waterboards.ca.gov/ust/cleanup/electronic_reporting/docs/final_electronic_regs_dec04.pdf

For several years, parties responsible for cleanup of leaks from underground storage tanks (LUST) have been required to submit groundwater analytical data, the surveyed locations of monitoring wells, and certain other data to the SWRCB's GeoTracker database over the internet. Beginning January 1, 2005, electronic submittal of these items and a portable data format (PDF) copy of the full report is being extended to include all SWRCB groundwater cleanup programs including the Land Disposal Program. The GeoTracker system is already capable of accepting this electronic information and currently has information submitted by responsible parties for over 10,000 LUST sites statewide. This information is available to the public at <http://www.geotracker.swrcb.ca.gov/>.

Beginning July 1, 2005, a paper copy of these reports will no longer be required for the Land Disposal Program upon submittal of the electronic copy unless the Regional Water Board specifically requires the paper copy to be submitted. The electronic copy is intended replace the need for a paper copy and is expected to be relied upon for all public information requests, regulatory review, and compliance/enforcement activities.

Training and Outreach

A series of training and outreach sessions will be held for regulators and the public. In January 2005, a user outreach meeting will be held in Southern California to introduce the ESI program to new users and to discuss more detailed questions with experienced users:

Exhibit "E"

Addressee

- 2 -

January 12, 2005

Date: Monday, January 24, 2005
Time: 10am - 4pm
Location: Irvine Civic Center
1 Civic Center Plaza
Irvine, CA 92606

locations if you plan to attend by e-mailing Maria P. Mello at: pmello@waterboards.ca.gov.

Additional user outreach meetings will be held in Northern and Southern California in the future based upon demand. The GeoTracker system will be announcing future sessions to all regulators, consultants and responsible parties who hold a GeoTracker password. You will also need a GeoTracker password for submitting data and reports. You can obtain instructions for receiving a GeoTracker password at our Electronic Submittal of Information (ESI) website:

http://www.swrcb.ca.gov/ust/cleanup/electronic_reporting/index.html

Our ESI website also contains information that will aid your transition to electronic data and reporting submittal. If you have any questions or need additional information, please contact me either by e-mail (jmello@waterboards.ca.gov) or telephone (916-341-5622).

Sincerely,

/s/

Joseph Mello
Land Disposal Program Manager

Exhibit "F"

Quotation No. 17-054

Page 23

BID REQUIREMENTS

The successful bidder shall provide all labor, material, equipment, taxes, transportation, shipping, etc., to provide written annual, semi-annual and quarterly Detection Monitoring Reports as described in the site-specific Monitoring and Reporting Programs included as Attachment "A", "B" and "C".

Bids shall reflect the following conditions and requirements:

Bidder to respond:

"COMPLY"
OR/
"NOT
COMPLY"

1. Bidder has read and understands the site-specific Attachments labeled "A", "B" and "C" attached hereto, which outlines the procedure of generating the appropriate Detection Monitoring Reports. COMPLY
2. Bidder is prepared to generate the Detection Monitoring Reports to the acceptance of the RWQCB and will address all comments made by the RWQCB in regards to said reports at no additional cost to County. COMPLY
3. Bidder will submit said reports and submit to the County within fifteen (15) working days of receiving all appropriate data as detailed in the Scope of Work. COMPLY
4. Bidder will submit said reports to the County, said reports will be prepared in two (2) hard copies, each in a three ring "D" binder not to exceed 4" in width which will include a data CD and one copy of all data in its entirety in a CD format, as specified in the Scope of Work. COMPLY
5. Bidder shall coordinate with current County contracted analytical laboratory for electronic delivery of all analytical data. COMPLY
6. Bidder has read and understands the penalties as described in each Task of the Scope of Work regarding failure to submit reports within the specified time period. COMPLY
7. Bidder will provide hourly labor and direct cost rates. COMPLY
8. Bidder has read and is prepared to adhere to all requirements of all relevant regulatory codes to include but not limited to, applicable provisions of California Code of Regulations (CCR) Titles 14, 22, 23, and 27. COMPLY
9. Prior to delivery of the first written report, bidder shall provide a draft copy to the County for review and comment. COMPLY
10. Bidder has read and is prepared to adhere to all requirements of all relevant regulatory codes to include but not limited to: Chapter 30 – Electronic Submittal of Information of Title 23 of the CCR (for State's GeoTracker system); Division 3 – Electronic Submittal of Information of Title 27 of the CCR; AB 2886 – Electronic Reporting Roles and Responsibilities. COMPLY

Exhibit "G"

Quotation No. 17-054

Page 22

QUOTATION SCHEDULE

Vendor Name: SOMA ENVIRONMENTAL ENGINEERING, INC.

A. Basic Fee:

Task 1 Electronic Transfer / Delivery

Cost to be apportioned as follows:

	<u>Per Period</u>	<u>No. of Periods</u>	<u>Total Amount</u>
American Avenue Landfill	<u>297.00</u>	<u>2</u>	<u>\$ 594.00</u>
Coalinga Disposal Site	<u>99.00</u>	<u>2</u>	<u>\$ 198.00</u>
Southeast Regional Landfill	<u>198.00</u>	<u>2</u>	<u>\$ 396.00</u>
Task 1 Combined Total for All Sites:			<u>\$ 1,188.00</u>

Task 2 American Avenue Landfill

	<u>Total Amount</u>
Semi-Annual Report:	<u>\$ 4,662.25</u>
Annual Report:	<u>\$ 5,162.25</u>
Task 2 Total Fee:	<u>\$ 9,824.50</u>

Task 3 Coalinga Disposal Site

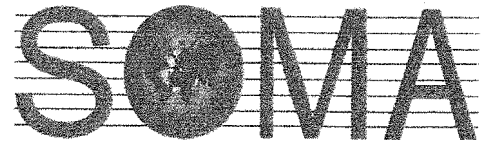
	<u>Total Amount</u>
Semi-Annual Report:	<u>\$ 2,304.50</u>
Annual Report:	<u>\$ 2,404.50</u>
Task 3 Total Fee:	<u>\$ 4,709.00</u>

Task 4 Southeast Regional Municipal Landfill

	<u>Total Amount</u>
Semi-Annual Report:	<u>\$ 2,327.50</u>
Annual Report:	<u>\$ 2,627.50</u>
Task 4 Total Fee:	<u>\$ 4,955.00</u>

Grand Total Basic Fee (Tasks 1-4): **\$ 20,676.50**

B. Attach Hourly Fee Schedule



ENVIRONMENTAL ENGINEERING, INC.
6620 Owens Drive, Suite A • Pleasanton, CA 94588
TEL (925)734-6400 • FAX (925)734-6401
www.somaenv.com

SOMA Environmental Engineering, Inc.
2017 Schedule of Charges

Charges for work performed on a project will be calculated and billed at the rates and categories shown below. The labor rates include all fringe benefits, burdens, and fees. Changes within the calendar year will not be made on a project without prior notification.

Professional Services

Principal Hydrogeologist	\$165/hour
Principal Toxicologist	\$165/hour
Project Manager	\$139/hour
Project Engineer/Geologist	\$119/hour
Staff Engineer/Geologist	\$ 99/hour
Senior Technician	\$ 92/hour
Technician	\$ 79/hour
Graphics/Auto CADD	\$ 73/hour
Administrative Assistant	\$ 59/hour
Automobile	\$.54/mile

Fifteen percent will be added to outside services for which SOMA administers a subcontractor, such as drilling, surveying, or other field services; laboratory testing; or equipment rentals. This charge includes taxes, administration fees, processing fees and carrying costs. Time for providing of expert testimony and depositions will be charged at a rate of \$180 per hour for Principal and \$140 per hour for Senior Staff.

Exhibit "H"

Resolution No. 07-525

BEFORE THE BOARD OF SUPERVISORS
OF THE COUNTY OF FRESNO
STATE OF CALIFORNIA

In the matter of) No.
Amendment of Standard Conflict of)
Interest Code for All County)
Departments)

Whereas, the Political Reform Act, Government Code section 81000 et seq., requires state and local government agencies to adopt and promulgate conflict of interest codes; and

Whereas, the Fair Political Practices Commission has adopted a regulation, Title 2, California Code of Regulations, section 18730, which contains the terms of a standard conflict of interest code, and which may be amended by the Fair Political Practices Commission after public notices and hearings to conform to amendments to the Political Reform Act; and

Whereas, any local agency may incorporate this standard conflict of interest code, and thereafter need not amend its code to conform to future amendments to the Political Reform Act or its regulations; and

Whereas, the Board of Supervisors may adopt the standard conflict of interest code on behalf of all County departments.

Now therefore be it resolved, that the terms of Title 2, California Code of Regulations, section 18730, and any amendments to it duly adopted by the Fair Political Practices Commission, are hereby incorporated by reference and, along with the Exhibits A and B approved previously, today, or in the future, by this Board for each County department, in which officers and employees are designated and disclosure categories are set forth, constitute the conflict of interest codes of each County department.

1 Conflict of interest forms shall be filed as follows:

2 1. As required by Government Code section 87500, subdivision (e), the County
3 Administrative Officer, District Attorney, County Counsel, and Auditor-Controller/Treasurer-
4 Tax Collector shall file one original of their statements with the County Clerk, who shall make
5 and retain a copy and forward the original to the Fair Political Practices Commission, which
6 shall be the filing officer.

7 2. As required by Government Code section 87500, subdivision (j), all other
8 department heads shall file one original of their statements with their departments. The filing
9 officer of each department shall make and retain a copy and forward the original to the Clerk
10 to the Board of Supervisors, who shall be the filing officer.


11 3. All other designated employees shall file one original of their statements
12 with their departments.

13 Adopted at a regular meeting of the Board of Supervisors, held on the 2nd day of
14 October, 2007, by the following vote, to wit:

15 Ayes: Supervisors Larson, Perea, Anderson, Case and Waterston

16 Noes: None

17 Absent: None

18
19 
20 _____
Chairman, Board of Supervisors

21
22 Attest:

23
24 
25 _____
Clerk

CERTIFICATE OF DELIVERY OF DOCUMENT

I am employed by the County of Fresno as a Deputy Clerk of the Board of Supervisors. On October 2, 2007, I delivered a copy of Resolution No. 07-525 to the Chairperson of the Fresno County Board of Supervisors.

Gael Storm
Gael Storm, Deputy Clerk

EXHIBIT "A"

PUBLIC WORKS AND PLANNING

<u>Classification</u>	<u>Category</u>
Accountant I / II	2, 3
Architect	1
Assistant Real Property Agent	1
Associate Real Property Agent	1
Building Inspector I / II	1
Building Plans Engineer	1
Capital Projects Division Manager	1
Chief Building Inspector	1
Chief of Field Surveys	1
Community Development Manager	1
Consultant	*
Deputy Director of Planning	1
Deputy Director of Public Works	1
Development Services Manager	1
Director of Public Works and Planning	1
Disposal Site Supervisor	1
Engineer I / II / III	1
Field Survey Supervisor	1
Housing Rehabilitation Specialist I / II	1
Planner I / II / III	1
Principal Accountant	1
Principal Engineer	1
Principal Planner	1
Principal Staff Analyst	1
Public Works and Planning Business Manager	1
Public Works Division Engineer	1
Resources Manager	1
Road Maintenance Supervisor	2, 3
Road Superintendent	1
Senior Accountant	2, 3
Senior Architect	1
Senior Economic Development Analyst	1
Senior Engineer	1
Senior Engineering Technician	1
Senior Geologist	1

Classification**Category**

Senior Information Technology Analyst	1
Senior Planner	1
Senior Real Property Agent	1
Senior Staff Analyst	1
Senior Systems and Procedures Analyst	1
Staff Analyst I / II / III	1
Supervising Accountant	2, 3
Supervising Building Inspector	1
Supervising Engineer	1
Supervising Water/Sewer Specialist	2, 3
Systems and Procedures Analyst I / II / III	1
Systems and Procedures Manager	1
Traffic Maintenance Supervisor	2, 3

- * Consultants shall be included in the list of designated employees and shall disclose pursuant to the broadest disclosure category in the code subject to the following limitation: The Director of Public Works and Planning may determine in writing that a particular consultant, although a "designated position", is hired to perform a range of duties that is limited in scope and thus is not required to fully comply with the disclosure requirements in this section. Such written determination shall include a description of the consultant's duties and, based upon that description, a statement of the extent of disclosure requirements. The Director of Public Works and Planning's determination is a public record and shall be retained for public inspection in the same manner and location as this conflict of interest code.

EXHIBIT "B"

PUBLIC WORKS AND PLANNING

1. Persons in this category shall disclose all reportable investments, interests in real property, sources of income (including gifts), and business positions. Financial interests (other than gifts) are reportable only if located within or subject to the jurisdiction of Fresno County, or if the business entity is doing business or planning to do business in the jurisdiction, or has done business within the jurisdiction at any time during the two years prior to the filing of the statement. Real property shall be deemed to be within the jurisdiction of the County if the property or any part of it is located within or not more than two miles outside the boundaries of the County (including its incorporated cities) or within two miles of any land owned or used by the County.
2. Persons in this category shall disclose all reportable investments in, income from (including gifts), and business positions with any business entity which, within the last two years, has contracted or in the future foreseeably may contract with Fresno County through its Public Works and Planning Department, Solid Waste Commissions within the jurisdiction, or to any other joint powers agency which Fresno County is a member to provide services, supplies, materials, machinery, or equipment to the County.
3. Persons in this category shall disclose all interests in real property within the jurisdiction of Fresno County. Real Property shall be deemed to be within the jurisdiction if the property or any part of it is located within or not more than two miles outside the boundaries of Fresno County (including its incorporated cities) or within two miles of any land owned or used by the County.

Exhibit "I"

SELF-DEALING TRANSACTION DISCLOSURE (FINANCIAL)

Non-corporate bidders may disregard this section.

Bidders shall complete a SELF-DEALING TRANSACTION DISCLOSURE FORM, provided herein, for each applicable corporate director of the bidding company. The signed form(s) shall be submitted as a part of the company's proposal or quotation.

Complete the form and indicate "NONE" under part 3 when your company is a corporation and no directors are involved with a Self-Dealing Transaction. The form must be signed by an individual authorized to legally bind the corporation when no directors have a Self-Dealing Transaction.

DISCLOSURE OF SELF-DEALING TRANSACTIONS: The following provision will be incorporated into ensuing agreements. It shall apply only when the CONTRACTOR is operating as a corporation (a for-profit or non-profit corporation) or if during the term of the agreement, CONTRACTOR changes its status to operate as a corporation.

This provision is only applicable if the CONTRACTOR is operating as a corporation (a for-profit or non-profit corporation) or if during the term of this agreement, the CONTRACTOR changes its status to operate as a corporation.

Members of the CONTRACTOR's Board of Directors shall disclose any self-dealing transactions that they are a party to while CONTRACTOR is providing goods or performing services under this agreement. A self-dealing transaction shall mean a transaction to which the CONTRACTOR is a party and in which one or more of its directors has a material financial interest. Members of the Board of Directors shall disclose any self-dealing transactions that they are a party to by completing and signing a Self-Dealing Transaction Disclosure Form (Exhibit #) and submitting it to the COUNTY prior to commencing with the self-dealing transaction or immediately thereafter.

SELF-DEALING TRANSACTION DISCLOSURE FORM INSTRUCTIONS

In order to conduct business with the County of Fresno (hereinafter referred to as "County"), members of a contractor's board of directors (hereinafter referred to as "County Contractor"), must disclose any self-dealing transactions that they are a party to while providing goods, performing services, or both for the County. A self-dealing transaction is defined below:

"A self-dealing transaction means a transaction to which the corporation is a party and which one or more of its directors has a material financial interest"

The definition above will be utilized for purposes of completing the disclosure form.

- (1) Enter board member's name, job title (if applicable), and date this disclosure is being made.
- (2) Enter the board member's company/agency name and address.
- (3) Describe in detail the nature of the self-dealing transaction that is being disclosed to the County. At a minimum, include a description of the following:
 - a. The name of the agency/company with which the corporation has the transaction; and
 - b. The nature of the material financial interest in the Corporation's transaction that the board member has.
- (4) Describe in detail why the self-dealing transaction is appropriate based on applicable provisions of the Corporations Codes.
- (5) Form must be signed by the board member that is involved in the self-dealing transaction described in Sections (3) and (4).

Form provided on following page.

SELF-DEALING TRANSACTION DISCLOSURE FORM

(1) Company Board Member Information:

Name: _____ Date: _____

Job Title: _____

(2) Company/Agency Name and Address:

(3) Disclosure (Please describe the nature of the self-dealing transaction you are a party to)

(4) Explain why this self-dealing transaction is consistent with the requirements of Corporations Code 5233 (a)

(5) Authorized Signature

Signature: _____ Date: _____