

SERVICE AGREEMENT

This Service Agreement (“Agreement”) is dated _____ and is between Tetra Tech BAS, Inc., a California corporation; whose address is “21700 Copley Drive, Suite 200, Diamond Bar, CA 91765”, hereinafter referred to as (“Contractor”), and the County of Fresno, a political subdivision of the State of California (“County”).

Recitals

A. The Department of Public Works and Planning – Resources Division (“Department”) requires specialized services to conduct operation and maintenance of the Landfill Gas Collection and Control System (LFGCCS) at the Southeast Regional Landfill Site (Site) in accordance with State and Federal requirements.

B. The County released Request for Quotation (RFQ) No. 26-030 for Operation and Maintenance of Landfill Gas Collection on October 17, 2025 and ended on November 21, 2025. Contractor’s bid response satisfied the requirements of the Department.

C. The Contractor is to provide all the labor, equipment, instruments, and materials to operate and maintain the LFGCCS at the Site.

The parties therefore agree as follows:

Article 1

Contractor’s Services

1.1 **Scope of Services.** The Contractor shall perform all of the services provided in Exhibit A to this Agreement, titled “Scope of Services.”

1.2 **Representation.** The Contractor represents that it is qualified, ready, willing, and able to perform all of the services provided in this Agreement.

1.3 **Compliance with Laws.** The Contractor shall, at its own cost, comply with all applicable federal, state, and local laws and regulations in the performance of its obligations under this Agreement, including but not limited to workers compensation, labor, and confidentiality laws and regulations.

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1 **Article 2**

2 **County's Responsibilities**

3 2.1 The County shall:

4 (A) Compensate the Contractor as provided in this Agreement.

5 (B) Provide a "County Representative" who will represent the County and who will
6 coordinate with the Contractor as appropriate to facilitate Contractor's performance under the
7 provisions of this Agreement. The County Representative will be the County's Director of Public
8 Works and Planning or his/her designee. The Contractor shall communicate and coordinate with
9 the County Representative, who will provide the following services:

10 1. Examine documents submitted to the County by the Contractor and timely
11 render decisions pertaining thereto.

12 2. Provide communication between the Contractor and County officials and
13 commissions (including Department).

14 3. Provide right of entry on designated property for the accomplishment of authorized
15 work.

16 (C) Give reasonably prompt consideration to all matters submitted by the Contractor for
17 approval, so as to avoid any substantial delays in the Contractor's performance of the work. An
18 approval authorization, or request to the Contractor given by the County, will only be binding
19 upon the County under the terms of this Agreement if in writing and signed on behalf of the
20 County by the County Representative or a designee.

21 **Article 3**

22 **Compensation, Invoices, and Payments**

23 3.1 The County agrees to pay, and the Contractor agrees to receive, compensation for the
24 performance of its services under this Agreement as described in this section in Exhibit B to this
25 Agreement, titled "Compensation."

26 3.2 **Maximum Compensation.** The maximum Basic Fee services payable to the
27 Contractor under this Agreement is thirty-six thousand nine hundred fifteen dollars (\$36,915) for
28 the first year, thirty-six thousand nine hundred fifteen dollars (\$36,915) for the second year, and

1 thirty-six thousand nine hundred fifteen dollars (\$36,915) for the third year for a total of one
2 hundred ten thousand seven hundred forty-five dollars (\$110,745). In no event shall the maximum
3 annual allocation for Basic Fee services over the entire potential five-year term of this Agreement
4 be in excess of one hundred eighty-four thousand five hundred seventy-five dollars (\$184,575).
5 The Agreement allows payment for performance of Extra Services in the amount of five hundred
6 thousand (\$500,000), not subject to an annual maximum. If the Agreement is renewed for the
7 maximum two additional years, then the maximum cumulative amount of the Basic Fee and Extra
8 Services hereunder over the entirety of that five-year term would be six hundred eighty-four
9 thousand five hundred seventy-five dollars (\$684,575). The Contractor acknowledges that the
10 County is a local government entity, and does so with notice that the County's powers are limited
11 by the California Constitution and by State law, and with notice that the Contractor may receive
12 compensation under this Agreement only for services performed according to the terms of this
13 Agreement and while this Agreement is in effect, and subject to the maximum amount payable
14 under this section. The Contractor further acknowledges that County employees have no authority
15 to pay the Contractor except as expressly provided in this Agreement.

16 3.3 **Invoices.** The Contractor shall submit monthly invoices to Public Works and Planning
17 – Resources Division via email PWPBusinessOffice@fresnocountyca.gov or send invoices to the
18 following address below. Each invoice shall specifically identify this Agreement number, identify
19 each task to which the work pertains, and clearly identify any and all charges for tasks authorized
20 as Extra Services.

21 Public Works and Planning – Resources Division
22 Attention: Landfill Operations Manager
23 2220 Tulare Street, 6th Floor
24 Fresno, CA 93721-2106
25

26 3.4 The Contractor shall submit each invoice within 60 days after the month in which the
27 Contractor performs services and in any case within 60 days after the end of the term or
28 termination of this Agreement.

1 next one-year extension period. The Director of Public Works and Planning or his or her designee
2 is authorized to sign the written approval on behalf of the County based on the Contractor's
3 satisfactory performance. The extension of this Agreement by the County is not a waiver or
4 compromise of any default or breach of this Agreement by the Contractor existing at the time of
5 the extension whether or not known to the County.

6 **Article 5**

7 **Notices**

8 5.1 **Contact Information.** The persons and their addresses having authority to give and
9 receive notices provided for or permitted under this Agreement include the following:

10 **For the County:**

11 Landfill Operations Manager
12 County of Fresno
13 2220 Tulare Street, 6th Floor
14 Fresno, CA 93721-2106
15 Email: landfill@fresnocountyca.gov
16 Phone: (559) 600-4259

17 **For the Contractor:**

18 Jeffrey M. William, Chief Financial Officer
19 Tetra Tech BAS, Inc.
20 21700 Copley Drive, Suite 200
21 Diamond Bar, CA 91765
22 Email: JWilliams@bas.com
23 Phone: (909) 860-7777

24 5.2 **Change of Contact Information.** Either party may change the information in section
25 5.1 by giving notice as provided in section 5.3.

26 5.3 **Method of Delivery.** Each notice between the County and the Contractor provided for
27 or permitted under this Agreement must be in writing, state that it is a notice provided under this
28 Agreement, and be delivered either by personal service, by first-class United States mail, by an
overnight commercial courier service, by telephonic facsimile transmission, or by Portable
Document Format (PDF) document attached to an email.

(A) A notice delivered by personal service is effective upon service to the recipient.

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1 (B) A notice delivered by first-class United States mail is effective three County
2 business days after deposit in the United States mail, postage prepaid, addressed to the
3 recipient.

4 (C) A notice delivered by an overnight commercial courier service is effective one
5 County business day after deposit with the overnight commercial courier service, delivery
6 fees prepaid, with delivery instructions given for next day delivery, addressed to the
7 recipient.

8 (D) A notice delivered by telephonic facsimile transmission or by PDF document
9 attached to an email is effective when transmission to the recipient is completed (but, if
10 such transmission is completed outside of County business hours, then such delivery is
11 deemed to be effective at the next beginning of a County business day), provided that the
12 sender maintains a machine record of the completed transmission.

13 5.4 **Claims Presentation.** For all claims arising from or related to this Agreement, nothing
14 in this Agreement establishes, waives, or modifies any claims presentation requirements or
15 procedures provided by law, including the Government Claims Act (Division 3.6 of Title 1 of the
16 Government Code, beginning with section 810).

17 **Article 6**

18 **Termination and Suspension**

19 6.1 **Termination for Non-Allocation of Funds.** The terms of this Agreement are
20 contingent on the approval of funds by the appropriating government agency. If sufficient funds
21 are not allocated, then the County, upon at least 30 days' advance written notice to the Contractor,
22 may:

23 (A) Modify the services provided by the Contractor under this Agreement; or

24 (B) Terminate this Agreement.

25 6.2 **Termination for Breach.**

26 (A) Upon determining that a breach (as defined in paragraph (C) below) has occurred,
27 the County may give written notice of the breach to the Contractor. The written notice may
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1 suspend performance under this Agreement, and must provide at least 30 days for the
2 Contractor to cure the breach.

3 (B) If the Contractor fails to cure the breach to the County's satisfaction within the
4 time stated in the written notice, the County may terminate this Agreement immediately.

5 (C) For purposes of this section, a breach occurs when, in the determination of the
6 County, the Contractor has:

- 7 (1) Obtained or used funds illegally or improperly;
- 8 (2) Failed to comply with any part of this Agreement;
- 9 (3) Submitted a substantially incorrect or incomplete report to the County; or
- 10 (4) Improperly performed any of its obligations under this Agreement.

11 **6.3 Termination without Cause.** In circumstances other than those set forth above, the
12 County may terminate this Agreement by giving at least 30 days advance written notice to the
13 Contractor.

14 **6.4 No Penalty or Further Obligation.** Any termination of this Agreement by the County
15 under this Article 6 is without penalty to or further obligation of the County.

16 **6.5 County's Rights upon Termination.** Upon termination for breach under this Article
17 6, the County may demand repayment by the Contractor of any monies disbursed to the
18 Contractor under this Agreement that, in the County's sole judgment, were not expended in
19 compliance with this Agreement. The Contractor shall promptly refund all such monies upon
20 demand. This section survives the termination of this Agreement.

21 **Article 7**

22 **Independent Contractor**

23 **7.1 Status.** In performing under this Agreement, the Contractor, including its officers,
24 agents, employees, and volunteers, is at all times acting and performing as an independent
25 contractor, in an independent capacity, and not as an officer, agent, servant, employee, joint
26 venturer, partner, or associate of the County.

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1 **Article 10**

2 **Inspections, Audits, and Public Records**

3 10.1 **Inspection of Documents.** The Contractor shall make available to the County, and
4 the County may examine at any time during business hours and as often as the County deems
5 necessary, all of the Contractor's records and data with respect to the matters covered by this
6 Agreement, excluding attorney-client privileged communications. The Contractor shall, upon
7 request by the County, permit the County to audit and inspect all of such records and data to
8 ensure the Contractor's compliance with the terms of this Agreement.

9 10.2 **State Audit Requirements.** If the compensation to be paid by the County under this
10 Agreement exceeds \$10,000, the Contractor is subject to the examination and audit of the
11 California State Auditor, as provided in Government Code section 8546.7, for a period of three
12 years after final payment under this Agreement. This section survives the termination of this
13 Agreement.

14 10.3 **Public Records.** The County is not limited in any manner with respect to its public
15 disclosure of this Agreement or any record or data that the Contractor may provide to the County.
16 The County's public disclosure of this Agreement or any record or data that the Contractor may
17 provide to the County may include but is not limited to the following:

18 (A) The County may voluntarily, or upon request by any member of the public or
19 governmental agency, disclose this Agreement to the public or such governmental agency.

20 (B) The County may voluntarily, or upon request by any member of the public or
21 governmental agency, disclose to the public or such governmental agency any record or
22 data that the Contractor may provide to the County, unless such disclosure is prohibited
23 by court order.

24 (C) This Agreement, and any record or data that the Contractor may provide to the
25 County, is subject to public disclosure under the Ralph M. Brown Act (California
26 Government Code, Title 5, Division 2, Part 1, Chapter 9, beginning with section 54950).

27 (D) This Agreement, and any record or data that the Contractor may provide to the
28 County, is subject to public disclosure as a public record under the California Public

1 Records Act (California Government Code, Title 1, Division 7, Chapter 3.5, beginning with
2 section 6250) (“CPRA”).

3 (E) This Agreement, and any record or data that the Contractor may provide to the
4 County, is subject to public disclosure as information concerning the conduct of the
5 people’s business of the State of California under California Constitution, Article 1, section
6 3, subdivision (b).

7 (F) Any marking of confidentiality or restricted access upon or otherwise made with
8 respect to any record or data that the Contractor may provide to the County shall be
9 disregarded and have no effect on the County’s right or duty to disclose to the public or
10 governmental agency any such record or data.

11 **10.4 Public Records Act Requests.** If the County receives a written or oral request under
12 the CPRA to publicly disclose any record that is in the Contractor’s possession or control, and
13 which the County has a right, under any provision of this Agreement or applicable law, to possess
14 or control, then the County may demand, in writing, that the Contractor deliver to the County, for
15 purposes of public disclosure, the requested records that may be in the possession or control of
16 the Contractor. Within five business days after the County’s demand, the Contractor shall (a)
17 deliver to the County all of the requested records that are in the Contractor’s possession or control,
18 together with a written statement that the Contractor, after conducting a diligent search, has
19 produced all requested records that are in the Contractor’s possession or control, or (b) provide
20 to the County a written statement that the Contractor, after conducting a diligent search, does not
21 possess or control any of the requested records. The Contractor shall cooperate with the County
22 with respect to any County demand for such records. If the Contractor wishes to assert that any
23 specific record or data is exempt from disclosure under the CPRA or other applicable law, it must
24 deliver the record or data to the County and assert the exemption by citation to specific legal
25 authority within the written statement that it provides to the County under this section. The
26 Contractor’s assertion of any exemption from disclosure is not binding on the County, but the
27 County will give at least 10 days’ advance written notice to the Contractor before disclosing any
28 record subject to the Contractor’s assertion of exemption from disclosure. The Contractor shall

1 indemnify the County for any court-ordered award of costs or attorney’s fees under the CPRA that
2 results from the Contractor’s delay, claim of exemption, failure to produce any such records, or
3 failure to cooperate with the County with respect to any County demand for any such records.

4 **Article 11**

5 **Disclosure of Self-Dealing Transactions**

6 11.1 **Applicability.** This Article 11 applies if the Contractor is operating as a corporation, or
7 changes its status to operate as a corporation.

8 11.2 **Duty to Disclose.** If any member of the Contractor’s board of directors is party to a
9 self-dealing transaction, he or she shall disclose the transaction by completing and signing a “Self-
10 Dealing Transaction Disclosure Form” (Exhibit C to this Agreement) and submitting it to the
11 County before commencing the transaction or immediately after.

12 11.3 **Definition.** “Self-dealing transaction” means a transaction to which the Contractor is
13 a party and in which one or more of its directors, as an individual, has a material financial interest.

14 **Article 12**

15 **General Terms**

16 12.1 **Modification.** Except as provided in Article 6, “Termination and Suspension,” this
17 Agreement may not be modified, and no waiver is effective, except by written agreement signed
18 by both parties. The Contractor acknowledges that County employees have no authority to modify
19 this Agreement except as expressly provided in this Agreement.

20 12.2 **Non-Assignment.** Neither party may assign its rights or delegate its obligations under
21 this Agreement without the prior written consent of the other party.

22 12.3 **Governing Law.** The laws of the State of California govern all matters arising from or
23 related to this Agreement.

24 12.4 **Jurisdiction and Venue.** This Agreement is signed and performed in Fresno County,
25 California. Contractor consents to California jurisdiction for actions arising from or related to this
26 Agreement, and, subject to the Government Claims Act, all such actions must be brought and
27 maintained in Fresno County.

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1 12.5 **Construction.** The final form of this Agreement is the result of the parties' combined
2 efforts. If anything in this Agreement is found by a court of competent jurisdiction to be ambiguous,
3 that ambiguity shall not be resolved by construing the terms of this Agreement against either party.

4 12.6 **Days.** Unless otherwise specified, "days" means calendar days.

5 12.7 **Headings.** The headings and section titles in this Agreement are for convenience only
6 and are not part of this Agreement.

7 12.8 **Severability.** If anything in this Agreement is found by a court of competent jurisdiction
8 to be unlawful or otherwise unenforceable, the balance of this Agreement remains in effect, and
9 the parties shall make best efforts to replace the unlawful or unenforceable part of this Agreement
10 with lawful and enforceable terms intended to accomplish the parties' original intent.

11 12.9 **Nondiscrimination.** During the performance of this Agreement, the Contractor shall
12 not unlawfully discriminate against any employee or applicant for employment, or recipient of
13 services, because of race, religious creed, color, national origin, ancestry, physical disability,
14 mental disability, medical condition, genetic information, marital status, sex, gender, gender
15 identity, gender expression, age, sexual orientation, military status or veteran status pursuant to
16 all applicable State of California and federal statutes and regulation.

17 12.10 **No Waiver.** Payment, waiver, or discharge by the County of any liability or obligation
18 of the Contractor under this Agreement on any one or more occasions is not a waiver of
19 performance of any continuing or other obligation of the Contractor and does not prohibit
20 enforcement by the County of any obligation on any other occasion.

21 12.11 **Entire Agreement.** This Agreement, including its exhibits, is the entire agreement
22 between the Contractor and the County with respect to the subject matter of this Agreement, and
23 it supersedes all previous negotiations, proposals, commitments, writings, advertisements,
24 publications, and understandings of any nature unless those things are expressly included in this
25 Agreement. If there is any inconsistency between the terms of this Agreement without its exhibits
26 and the terms of the exhibits, then the inconsistency will be resolved by giving precedence first to
27 the terms of this Agreement without its exhibits, and then to the terms of the exhibits.

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1 12.12 **No Third-Party Beneficiaries.** This Agreement does not and is not intended to create
2 any rights or obligations for any person or entity except for the parties.

3 12.13 **Authorized Signature.** The Contractor represents and warrants to the County that:

4 (A) The Contractor is duly authorized and empowered to sign and perform its
5 obligations under this Agreement.

6 (B) The individual signing this Agreement on behalf of the Contractor is duly authorized
7 to do so and his or her signature on this Agreement legally binds the Contractor to the
8 terms of this Agreement.

9 12.14 **Electronic Signatures.** The parties agree that this Agreement may be executed by
10 electronic signature as provided in this section.

11 (A) An “electronic signature” means any symbol or process intended by an individual
12 signing this Agreement to represent their signature, including but not limited to (1) a digital
13 signature; (2) a faxed version of an original handwritten signature; or (3) an electronically
14 scanned and transmitted (for example by PDF document) version of an original
15 handwritten signature.

16 (B) Each electronic signature affixed or attached to this Agreement (1) is deemed
17 equivalent to a valid original handwritten signature of the person signing this Agreement
18 for all purposes, including but not limited to evidentiary proof in any administrative or
19 judicial proceeding, and (2) has the same force and effect as the valid original handwritten
20 signature of that person.

21 (C) The provisions of this section satisfy the requirements of Civil Code section 1633.5,
22 subdivision (b), in the Uniform Electronic Transaction Act (Civil Code, Division 3, Part 2,
23 Title 2.5, beginning with section 1633.1).

24 (D) Each party using a digital signature represents that it has undertaken and satisfied
25 the requirements of Government Code section 16.5, subdivision (a), paragraphs (1)
26 through (5), and agrees that each other party may rely upon that representation.

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1 (E) This Agreement is not conditioned upon the parties conducting the transactions
2 under it by electronic means and either party may sign this Agreement with an original
3 handwritten signature.

4 12.15 **Counterparts.** This Agreement may be signed in counterparts, each of which is an
5 original, and all of which together constitute this Agreement.

6 [SIGNATURE PAGE FOLLOWS]
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1 The parties are signing this Agreement on the date stated in the introductory clause.

2 TETRA TECH BAS, INC.

COUNTY OF FRESNO

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4
5  _____
Jeffrey W. Williams, Vice President

_____ Garry Bredefeld, Chairman of the Board of Supervisors of the County of Fresno

6 21700 Copley Drive, Suite 200
7 Diamond Bar, CA 91765

Attest:
Bernice E. Seidel
Clerk of the Board of Supervisors
County of Fresno, State of California

8 Date: January 21, 2026

9
10 By: _____
Deputy

11 For accounting use only:

12 Org No.: 9020
13 Account No.: 7295
14 Fund No.: 0720
15 Subclass No.: 15000
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Exhibit A

Scope of Services

The County of Fresno - Public Works and Planning Department is requesting quotations for the following work to be performed at the Southeast Regional Disposal Site (SERDS).

The site is located approximately one mile southwest of the City of Parlier, at the corner of Academy and Dinuba Avenues, and occupies some 132 acres (Attachment A). Of this total, only 72 acres were used for waste disposal. The landfill gas collection and control system (LFGCCS) is comprised of a candlestick (open) flare blower system, 87 landfill gas extraction wells, high density polyethylene (HDPE) conveyance piping, valves and other appurtenances. A site map is depicted in Attachment B. The site stopped receiving waste in 1990, and final closure construction was completed during 1998.

Contractor agrees to provide the labor, equipment, instrumentation, and materials to operate and maintain the landfill gas collection and flare system. Contractor must hold and maintain a valid California contractor's license and demonstrate experience by listing references for the operation of three similar systems within the last three years. All work will be performed on a time-and-materials basis, during the operational days and hours of Monday through Friday from 7:00 AM to 4:00 PM, excluding County observed holidays, and in accordance with the current rate schedule submitted by the contractor and incorporated into the final service agreement.

Surface Emission Monitoring (SEM) is currently conducted annually with a grid spacing of 100 feet and a CH₄ emission threshold of 1,000 ppmv in accordance with PTO C-706-1-1 (Attachment C) and San Joaquin Valley Air Pollution Control District (SJVAPCD) Rule 4642 section 6.1 (Attachment D). The work will be divided into the following tasks:

- TASK 1 - Routine landfill gas system operation, monitoring, and maintenance
- TASK 2 - Landfill gas surface emissions testing and reporting
- TASK 3 - Non-routine scheduled maintenance
- TASK 4 - Emergency maintenance
- TASK 5 - Consultation / regulatory agency response

Exhibit A

1 **TASK 1** - Routine Landfill gas system operation, monitoring, and maintenance will include as
2 a minimum the following services:

3 **I. Operation**

4 **A. Monthly**

5 Landfill gas extraction wells and the blower/flare station total flow will be
6 adjusted as required to control landfill gas migration and optimize system
7 performance. The intent is to maintain methane gas levels below five percent
8 by volume at the property boundaries and surface emissions below 1000 parts
9 per million.

10 **II. Monitoring**

11 **A. Monthly**

12 The blower/flare station will be inspected, and the following data will be
13 collected and recorded in a database:

- 14 • Date, time, and name of monitoring personnel
- 15 • Meteorological conditions (wind velocity, ambient temperature, barometric
16 pressure, general weather observations, etc.)
- 17 • Extraction blower operating inlet and outlet temperatures and pressures
- 18 • Methane, oxygen, and carbon dioxide gas concentrations at the flare inlet
- 19 • Landfill gas flow rate to flare
- 20 • Flow control valve positions

21 Landfill gas extraction wells will be monitored. Extraction wells adjusted in
22 response to system balancing activities will be re-inspected within two weeks.
23 Data will be collected and recorded for the following during monthly monitoring
24 and during any re-inspections:

- 25 • Date, time, well number, and name of monitoring personnel
- 26 • Meteorological conditions (wind velocity, ambient temperature, barometric
27 pressure, general weather observations, etc.)
- 28 • Pressure

Exhibit A

- Methane, oxygen, and carbon dioxide concentrations
- Wellhead vacuum and flow (where applicable)
- Header vacuum (where applicable)
- Landfill gas temperature

Where applicable, main header line access ports will be tested for pressure. These results should also be recorded in a database and analyzed for trends indicating possible condensate blockages and/or pipe breakages, etc.

Landfill gas control system blowers, flame arresters, flares, control panel, well fields, and other site features will be observed and recorded for the following:

- Accessibility
- Vandalism
- Malfunctions/Leaks

B. Quarterly

Once each quarter, on-site structures will be monitored in accordance with Sections 20931 through 20933, Title 27 of the California Code of Regulations (CCR). The contractor will document the testing protocols followed, instrument calibration procedures, and any locations where methane readings equal to or in excess of 1.25 percent by volume in air are found. Should such locations be found, the contractor shall immediately notify Fresno County. In addition the following data shall be recorded:

- Date, time, name of monitoring personnel, and location of reading
- Meteorological conditions (wind velocity, ambient temperature, barometric pressure, general weather observations, etc.)
- Methane gas concentration
- Oxygen gas concentration

III. Maintenance

A. Monthly

- Drain/purge water/condensate traps

Exhibit A

- Test alarm signals (telemetry system)
- Lubricate blower and electric motors in accordance with the manufacturer's specifications
- Inspect blower drive belts and replace as necessary

B. Quarterly

- Inspect flame arrester and steam clean flame arrester cartridge
- Inspect burner head, clean if necessary
- Inspect pilot, clean if necessary

C. Annually

- Clean burner head and pilot
- Check all piping systems for corrosion
- At project inception and annually thereafter, prepare and inventory a list of critical spare parts (methane sensors, electrical fuses, sample ports, etc.)

IV. Reporting

A. Monthly

Once each month (due by the end of the following month) the contractor will prepare a detailed report containing the data collected, and a summary of all activities performed at the site during the reporting period. Maintenance repairs and/or system modifications will also be recommended as required.

TASK 2 – Landfill Gas Surface Emission Testing and Reporting

I. Testing – Annually

Surface emissions testing will be conducted in accordance with PTO C-706-1-1 (Attachment C) and SJVAPCD Rule 4642, section 6.1 (Attachment D)

II. Reporting – Annually

After the testing event, a report will be prepared and submitted to Fresno County within 30 days of the Surface Emission Monitoring (SEM). The report will detail equipment calibration procedures, sample locations, and results of emissions

Exhibit A

1 testing along with any recommendations for further action in addition to all
2 applicable reporting requirements contained in Rule 4642.

3 **TASK 3 - Non-routine Scheduled Maintenance**

4 Non-routine scheduled maintenance consists of corrective repair or maintenance
5 work identified by the contractor during regular site visits or by Fresno County staff.
6 Non routine maintenance may include, but is not limited to the following:

- 7 • Remediating and testing of leaks in excess of 1,000 ppm of methane at the
8 landfill surface or along the gas transfer path
- 9 • Raising of wellheads, lateral, or header lines
- 10 • Repairing or replacing non-functional extraction wells, lateral or header lines
- 11 • Repairing or replacing sample or access ports on extraction wells, lateral or
12 header lines
- 13 • Assisting with SJVAPCD or other regulatory agency site inspections
- 14
- 15

16 Work performed under TASK 3 is essential for proper landfill gas system operation;
17 however, it is considered work that can be scheduled to allow for procurement of
18 materials or equipment or assignment of personnel. A “not to exceed” quote shall
19 be provided by the contractor to the County for all non- routine scheduled
20 maintenance and work shall only be performed after written authorization from the
21 County to the contractor.

21 **TASK 4 - Emergency Maintenance**

22 Emergency maintenance is required to provide immediate response to protect life,
23 property, and the environment or to restore system operations. These events may
24 include, but are not limited to:

- 25 • Emergency requests due to site telemetry alarms or at request of County
26 staff
- 27 • Loss of gas flow or flare ignition
- 28 • Odor complaints

Exhibit A

- Repair of main header lines (due to loss of gas flow to blower/flare station)
- Notification to SJVAPCD of system shutdowns or failures

Due to the nature of these items, repairs may be initiated as needed, 24 hours per day, 7 days a week, and 365 days per year. A “not to exceed” quote shall be provided by the contractor to the County for all emergency maintenance work. Emergency maintenance shall only be performed after verbal authorization from Fresno County staff, to be followed by a written authorization confirmation.

TASK 5 - Consultation / Regulatory Agency Response

The Consultation / Regulatory Agency Response (TASK 5) scope of work may include; but is not limited to the following:

- Analysis of SERDS to determine applicability of regulations (existing or proposed) to the site.
- Responses and/or comments prepared on behalf of the County to be submitted to a regulatory agency regarding SERDS.
- Petitions prepared on behalf of the County to be submitted to a regulatory agency regarding SERDS.

A “not to exceed” quote shall be provided by the contractor to the County for all consultation / agency response work. Consultation / agency response work shall only be performed after written authorization from the County to the contractor.

Exhibit B

Compensation

The Contractor will be compensated for performance of its services under this Agreement as provided in this Exhibit B. The Contractor is not entitled to any compensation except as expressly provided in this Exhibit B.

Tasks 1, 2, 3, and 4 will be performed on a flat rate basis. Extra Services will be performed on a time-and-materials basis, at the current rate schedule. Task 5 and Extra Services require written authorization prior to commencement of work, with the exception of emergency services. Emergency services will be performed only after verbal authorization from Fresno County staff, followed by written authorization confirmation.

A. Total Fee:

1. The Total Fee includes both the Basic Fee service and the Extra Services. Basic Fee services will be subject to an annual maximum compensation amount as specified in Exhibit B, Section B. The cumulative amount payable under this Agreement for Extra Services provided under Exhibit B, Section C, however, will not be subject to an annual maximum. This Agreement allows payment for performance of Extra Services in such amount as is required during any contract year, so long as the maximum cumulative amount of the Total Fee is not exceeded.

2. The maximum cumulative amount of the Total Fee for the original three-year term of this Agreement shall be \$610,745 and it is further hereby provided that if the Agreement is renewed as provided for in Article VI, then the maximum cumulative amount of the Total Fee, which includes both the Basic Fee and Extra Services allocations, shall be increased as provided in this Article VIII.A.2, without the need for any amendment of this Agreement. Accordingly, if this Agreement is renewed for one additional year at the conclusion of its original three-year term, the Total Fee hereunder over the entirety of that four-year term would be increased to \$647,660 and likewise, if the Agreement is renewed for the maximum two additional years, then the maximum cumulative amount of the Total Fee hereunder over the entirety of that five-year term would be \$684,575.

Exhibit B

B. Basic Fee:

- Task 1 - Routine LFGCCS Operation, Monitoring and Maintenance
- Task 2 - Landfill Gas Surface Emissions Testing and Reporting

The maximum annual allocation for Basic Fee services hereunder shall be \$36,915. In no event shall services performed under this Agreement be in excess of \$684,575 over the entire potential five-year term of this Agreement, comprised of Basic Fee (Task 1 and Task 2) in the amount of \$184,575 and Extra Services in the amount of \$500,000 (Task 3, Task 4, and Task 5).

TASK 1 – ROUTINE LANDFILL GAS SYSTEM OPERATION, MONITORING, AND MAINTENANCE

TOTAL ANNUAL FEE

Operation (monthly)	\$306 x 12 =	\$3,672
Monitoring (monthly)	\$1,060 x 12 =	\$12,720
Monitoring (quarterly)	\$123 x 4 =	\$492
Maintenance (monthly)	\$536 x 12 =	\$6,432
Maintenance (quarterly)	\$247 x 4 =	\$988
Maintenance (annually)	\$1,705 x 1 =	\$1,705
Reporting (monthly)	\$610 x 12 =	<u>\$7,320</u>

TOTAL FEES ONE YEAR - TASK 1 **\$33,329**

TASK 2 – LANDFILL GAS SURFACE EMISSIONS TESTING AND REPORTING

TOTAL ANNUAL FEE

Testing (annual)	\$2,976 x 1 =	\$2,976
Reporting (annual)	\$610 x 1 =	<u>\$610</u>

TOTAL FEES ONE YEAR - TASK 2 **\$3,586**

TOTAL FEES ONE YEAR - TASK 1 AND TASK 2 **\$36,915**

C. Extra Services:

A cumulative allocation of \$500,000 to pay for authorized Extra Services is provided herein by this Agreement. Payment of Extra Services in excess of \$500,000 is prohibited except upon a

Exhibit B

written Amendment to this Agreement pursuant to the provision of Article 12.1 hereof.

1. 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 services before the CONTRACTOR initiates any work thereon.

2. The following are CONTRACTOR services which are considered as not included in Article III herein but may be required and thus considered Extra Services.

a. Providing unforeseen, extraordinary, or unique services, additional LFGCCS maintenance and/or related work required by regulatory agencies or, items not covered or normally included in the Basic Fee but authorized by the County Representative.

b. Extra Services shall be characterized and invoiced under the following heading, as appropriate to the type of services requested and as authorized by the County Representative:

- Task 3 - Non-Routine Scheduled Maintenance (Extra Services)

Non-routine scheduled maintenance consists of corrective repair or maintenance work identified by the CONTRACTOR during regular Site visits or by COUNTY staff. This work is essential for proper LFGCCS operation; however, it is considered work that can be scheduled to allow for procurement of materials or equipment or assignment of personnel. The CONTRACTOR shall provide a not-to-exceed quote to the COUNTY for all non-routine scheduled maintenance and work will only be performed after authorization from the COUNTY to the CONTRACTOR. Written authorization will be required prior to commencement of the work;

- Task 4 - Emergency Maintenance (Extra Services)

Emergency maintenance is required to provide immediate response to protect life, property, and the environment or to restore system operations. Due to the nature of these items, repairs may have to be initiated as needed, 24 hours per day, 7 days a week, 365 days per year. Emergency maintenance will only be performed after verbal authorization from COUNTY staff, to be followed by a written authorization confirmation.

Exhibit B

- Task 5 – Consultation/Regulatory Agency Response (Extra Services)

Consultation and/or preparation of response to regulatory agency will be provided as needed and will be based on the CONTRACTOR's submittal, in writing, of the proposed scope of work and proposed maximum ("not to exceed") cost for completion thereof. All such proposals shall be submitted to the County in advance of performing any services. The CONTRACTOR will perform services only after receiving from the County Representative written acceptance of the proposal.

3. Fees for Extra Services authorized under Task 3 and 4 (Extra Services) as described above shall be computed at the hourly cost rates and material costs shown in CONTRACTOR'S response to COUNTY's Request for Quotation No. 26-030. Fees for Extra Services requested to be provided by CONTRACTOR under Task 5 (Extra Services) above shall be authorized as maximum ("not to exceed") amounts for specifically defined services.

4. Notwithstanding the provisions of Exhibit B, Section A establishing the hourly rates for Basic Fee services hereunder, the hourly rates for Task 3 and 4 (Extra Services) may be renegotiated annually at CONTRACTOR'S request by submitting the proposed changes to the County Representative at least sixty (60) days prior to the renewal date of this Agreement. Upon review and written approval of the County Representative, the COUNTY may authorize the change in hourly rates.

5. In the event COUNTY expressly authorizes Extra Services, CONTRACTOR shall keep complete records showing the hours and description of activities worked by each person who works on the project and all costs and charges applicable to the Extra Services work authorized. Should there be a claim for Extra Services, the CONTRACTOR agrees and acknowledges that the claimant shall specifically identify the activity, performer of the activity, reason for the activity, and COUNTY official requesting the activity, and that failure to do will result in denial of the claim. CONTRACTOR shall be responsible for all sub-consultants keeping similar records. The CONTRACTOR shall not stop the work, including the work in other areas unrelated to the Extra Services request or claim, unless it can be shown the project work cannot proceed while a claim or request for Extra Services is being evaluated.

Exhibit C

Self-Dealing Transaction Disclosure Form

In order to conduct business with the County of Fresno ("County"), members of a contractor's board of directors ("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 in which one or more of its directors has a material financial interest."

The definition above will be used for purposes of completing this disclosure form.

Instructions

- (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 Code.

The form must be signed by the board member that is involved in the self-dealing transaction described in Sections (3) and (4).

Exhibit C

(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:	

Exhibit D

Insurance Requirements

1. Required Policies

Without limiting the County's right to obtain indemnification from the Contractor or any third parties, Contractor, at its sole expense, shall maintain in full force and effect the following insurance policies throughout the term of this Agreement.

- (A) **Commercial General Liability.** Commercial general liability insurance with limits of not less than Two Million Dollars (\$2,000,000) per occurrence and an annual aggregate of Four Million Dollars (\$4,000,000). This policy must be issued on a per occurrence basis. Coverage must include products, completed operations, property damage, bodily injury, personal injury, and advertising injury. The Contractor shall obtain an endorsement to this policy naming the County of Fresno, its officers, agents, employees, and volunteers, individually and collectively, as additional insureds, but only insofar as the operations under this Agreement are concerned. Such coverage for additional insureds will apply as primary insurance and any other insurance, or self-insurance, maintained by the County is excess only and not contributing with insurance provided under the Contractor's policy.
- (B) **Automobile Liability.** Automobile liability insurance with limits of not less than One Million Dollars (\$1,000,000) per occurrence for bodily injury and for property damages. Coverage must include any auto used in connection with this Agreement.
- (C) **Workers Compensation.** Workers compensation insurance as required by the laws of the State of California with statutory limits.
- (D) **Professional Liability.** Professional liability insurance with limits of not less than One Million Dollars (\$1,000,000) per occurrence and an annual aggregate of Three Million Dollars (\$3,000,000). If this is a claims-made policy, then (1) the retroactive date must be prior to the date on which services began under this Agreement; (2) the Contractor shall maintain the policy and provide to the County annual evidence of insurance for not less than five years after completion of services under this Agreement; and (3) if the policy is canceled or not renewed, and not replaced with another claims-made policy with a retroactive date prior to the date on which services begin under this Agreement, then the Contractor shall purchase extended reporting coverage on its claims-made policy for a minimum of five years after completion of services under this Agreement.
- (E) **Environmental Impairment (Pollution) Liability Insurance.** Limits of not less than \$3,000,000 per occurrence and an annual aggregate of not less than \$5,000,000 including clean-up costs. The policy shall be written on claims made basis.
- (F) Special Endorsements or a separate policy covering explosion and subsequent environmental damages with limits not less than \$3,000,000 per occurrence and \$5,000,000 annual aggregate.

2. Additional Requirements

- (A) **Verification of Coverage.** Within 30 days after the Contractor signs this Agreement, and at any time during the term of this Agreement as requested by the County's Risk Manager or the County Administrative Office, the Contractor shall deliver, or cause its

Exhibit D

broker or producer to deliver, to the County Risk Manager, at 2220 Tulare Street, 16th Floor, Fresno, California 93721, or HRRiskManagement@fresnocountyca.gov, and by mail or email to the person identified to receive notices under this Agreement, certificates of insurance and endorsements for all of the coverages required under this Agreement.

- (i) Each insurance certificate must state that: (1) the insurance coverage has been obtained and is in full force; (2) the County, its officers, agents, employees, and volunteers are not responsible for any premiums on the policy; and (3) the Contractor has waived its right to recover from the County, its officers, agents, employees, and volunteers any amounts paid under any insurance policy required by this Agreement and that waiver does not invalidate the insurance policy.
 - (ii) The commercial general liability insurance certificate must also state, and include an endorsement, that the County of Fresno, its officers, agents, employees, and volunteers, individually and collectively, are additional insureds insofar as the operations under this Agreement are concerned. The commercial general liability insurance certificate must also state that the coverage shall apply as primary insurance and any other insurance, or self-insurance, maintained by the County shall be excess only and not contributing with insurance provided under the Contractor's policy.
 - (iii) The automobile liability insurance certificate must state that the policy covers any auto used in connection with this Agreement.
 - (iv) The professional liability insurance certificate, if it is a claims-made policy, must also state the retroactive date of the policy, which must be prior to the date on which services began under this Agreement.
- (B) **Acceptability of Insurers.** All insurance policies required under this Agreement must be issued by admitted insurers licensed to do business in the State of California and possessing at all times during the term of this Agreement an A.M. Best, Inc. rating of no less than A: VII.
- (C) **Notice of Cancellation or Change.** For each insurance policy required under this Agreement, the Contractor shall provide to the County, or ensure that the policy requires the insurer to provide to the County, written notice of any cancellation or change in the policy as required in this paragraph. For cancellation of the policy for nonpayment of premium, the Contractor shall, or shall cause the insurer to, provide written notice to the County not less than 10 days in advance of cancellation. For cancellation of the policy for any other reason, and for any other change to the policy, the Contractor shall, or shall cause the insurer to, provide written notice to the County not less than 30 days in advance of cancellation or change. The County in its sole discretion may determine that the failure of the Contractor or its insurer to timely provide a written notice required by this paragraph is a breach of this Agreement.
- (D) **County's Entitlement to Greater Coverage.** If the Contractor has or obtains insurance with broader coverage, higher limits, or both, than what is required under this Agreement, then the County requires and is entitled to the broader coverage, higher

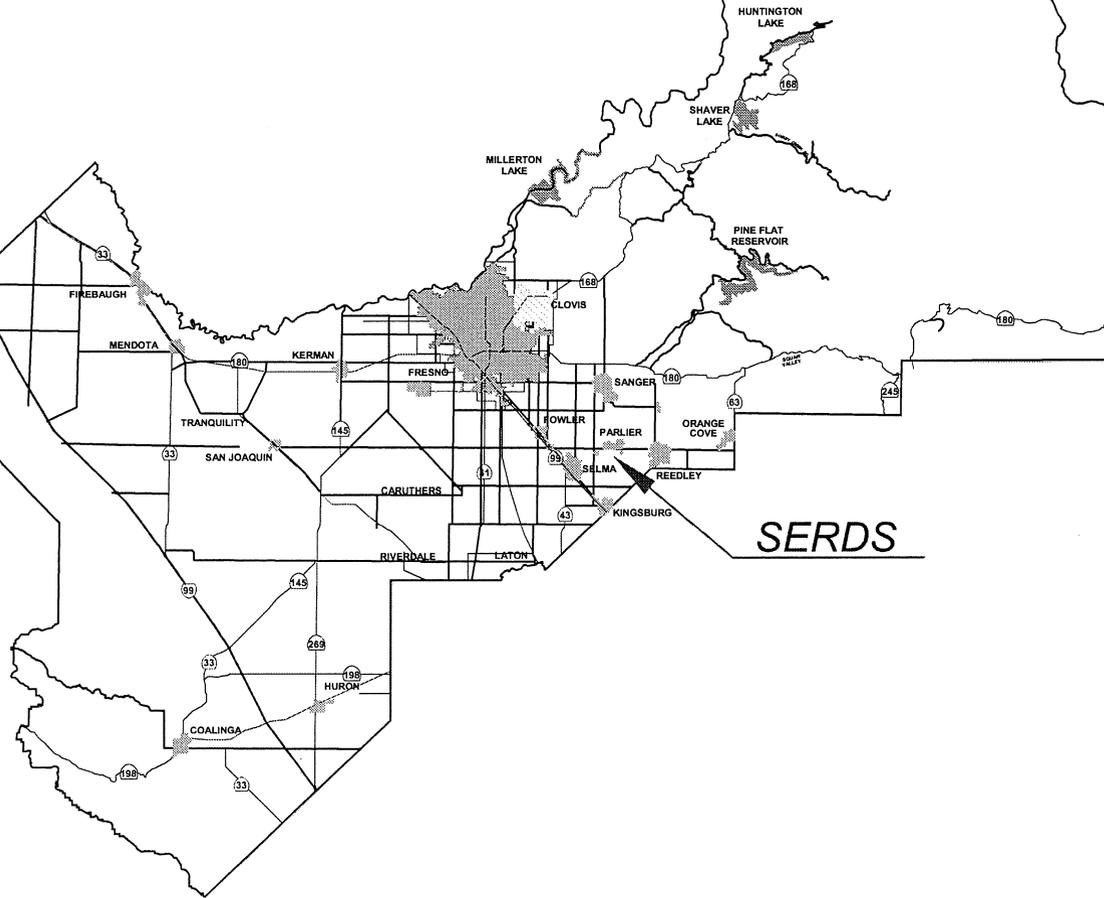
Exhibit D

limits, or both. To that end, the Contractor shall deliver, or cause its broker or producer to deliver, to the County's Risk Manager certificates of insurance and endorsements for all of the coverages that have such broader coverage, higher limits, or both, as required under this Agreement.

- (E) **Waiver of Subrogation.** The Contractor waives any right to recover from the County, its officers, agents, employees, and volunteers any amounts paid under the policy of worker's compensation insurance required by this Agreement. The Contractor is solely responsible to obtain any policy endorsement that may be necessary to accomplish that waiver, but the Contractor's waiver of subrogation under this paragraph is effective whether or not the Contractor obtains such an endorsement.
- (F) **County's Remedy for Contractor's Failure to Maintain.** If the Contractor fails to keep in effect at all times any insurance coverage required under this Agreement, the County may, in addition to any other remedies it may have, suspend or terminate this Agreement upon the occurrence of that failure, or purchase such insurance coverage, and charge the cost of that coverage to the Contractor. The County may offset such charges against any amounts owed by the County to the Contractor under this Agreement.
- (G) **Subcontractors.** The Contractor shall require and verify that all subcontractors used by the Contractor to provide services under this Agreement maintain insurance meeting all insurance requirements provided in this Agreement. This paragraph does not authorize the Contractor to provide services under this Agreement using subcontractors.

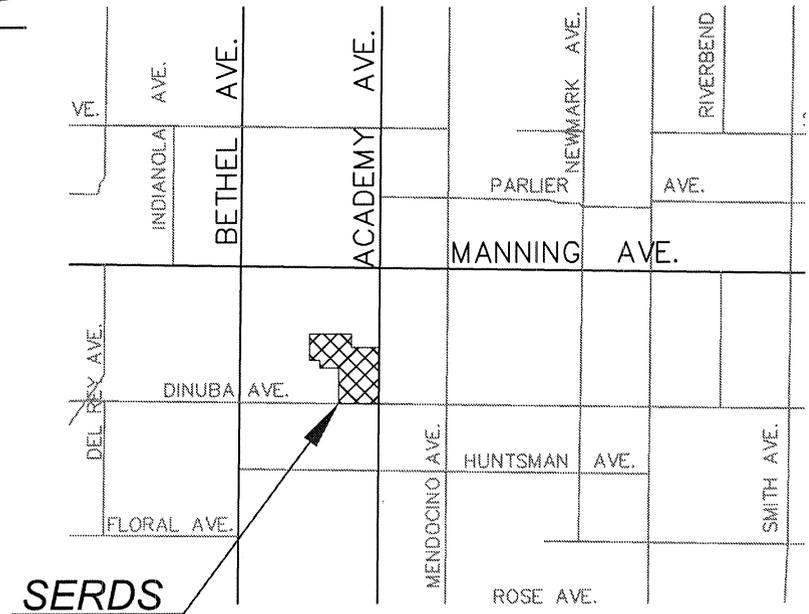
Attachment A

LOCATION MAP



MAP LEGEND

 SOUTH EAST REGIONAL DISPOSAL SITE BOUNDARY



DESIGNED J. EDELL 10/21
 DRAWN J. EDELL 10/21
 CHECKED _____

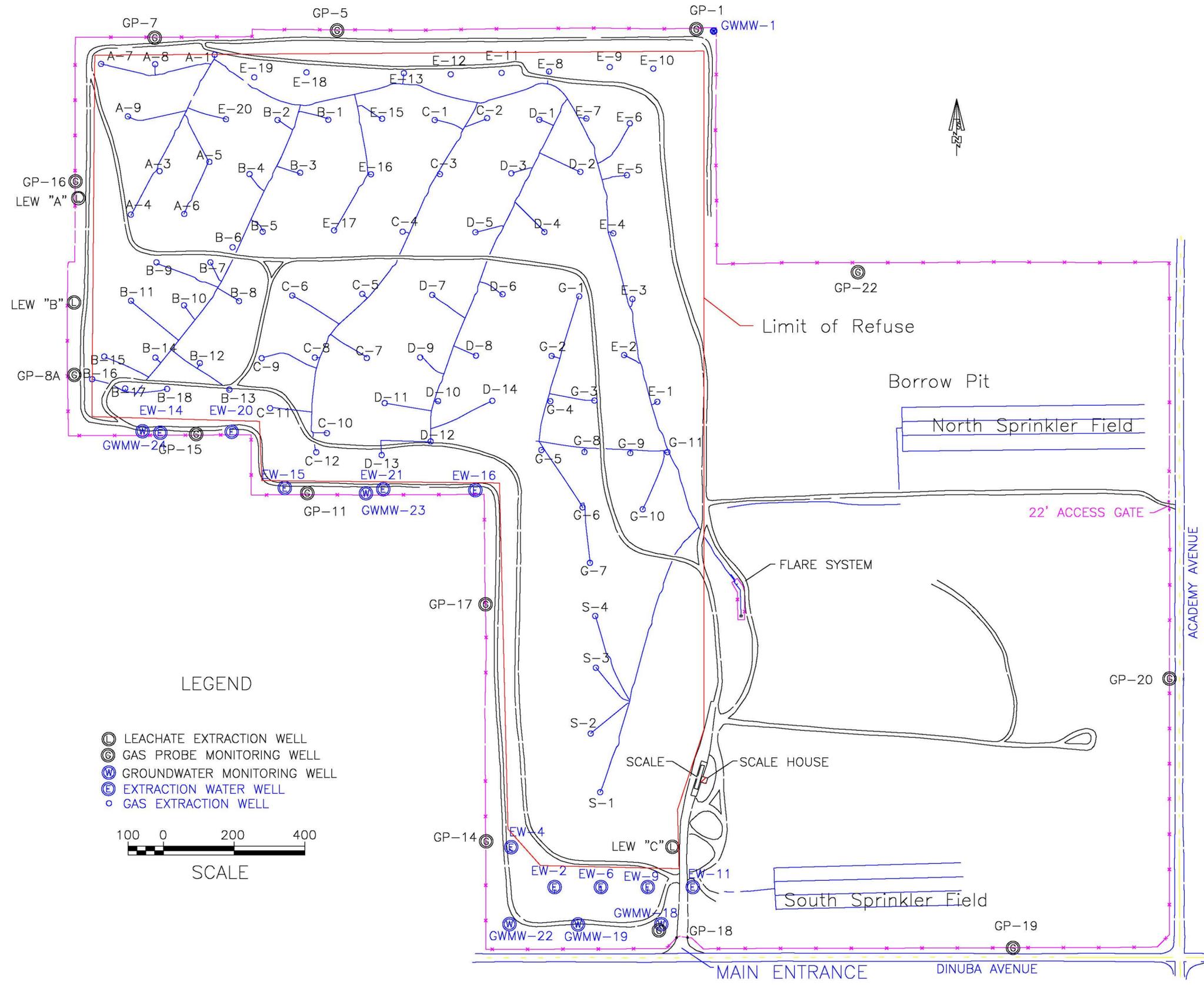
SCALE NONE
 DRAWING NO. 1



DEPARTMENT OF PUBLIC WORKS AND PLANNING

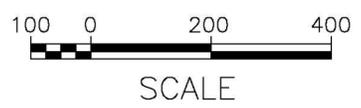
SOUTH EAST REGIONAL DISPOSAL SITE (SERDS)

Attachment B



LEGEND

- ⊙ LEACHATE EXTRACTION WELL
- ⊙ GAS PROBE MONITORING WELL
- ⊙ GROUNDWATER MONITORING WELL
- ⊙ EXTRACTION WATER WELL
- ⊙ GAS EXTRACTION WELL



DRAWN BY: Aerial Photomapping Services 5/31/02
 EDITED BY: Randy Gash 1/25/10
 REVISED

SITE MAP

SOUTH EAST REGIONAL DISPOSAL SITE



DEPARTMENT OF PUBLIC WORKS
 & PLANNING
 RESOURCES DIVISION

SCALE
 1" : 200'



1/1/26 DA
1/6/26 1/6/26

Facility # C-706
FRESNO COUNTY PUBLIC WORKS
2220 TULARE ST, 6TH FLOOR
ATTN: CURTIS LARKIN
FRESNO, CA 93721

Notice of Permit Issuance

The enclosed permit unit requirements authorize the operation of the equipment as described. These permit unit requirements supersede any and all previous permits for the specified equipment.* Please insert these documents into the Facility Permit to Operate, and post copies on or near the equipment as required by District Rule 2010.

Please contact any of our Small Business Assistance (SBA) staff at the numbers below if you have any questions:

Modesto: (209) 557-6446
Fresno: (559) 230-5888
Bakersfield: (661) 392-5665

*Failure to comply with the permit unit requirements may result in enforcement action.

Samir Sheikh

Executive Director/Air Pollution Control Officer

Northern Region

4800 Enterprise Way

Modesto, CA 95356-8718

Tel: (209) 557-6400 FAX: (209) 557-6475

Central Region (Main Office)

1990 E. Gettysburg Avenue

Fresno, CA 93726-0244

Tel: (559) 230-6000 FAX: (559) 230-6061

Southern Region

34946 Flyover Court

Bakersfield, CA 93308-9725

Tel: (661) 392-5500 FAX: (661) 392-5585



Permit to Operate

FACILITY: C-706

EXPIRATION DATE: 12/31/2030

LEGAL OWNER OR OPERATOR:
MAILING ADDRESS:

FRESNO COUNTY PUBLIC WORKS
2220 TULARE ST, 6TH FLOOR
ATTN: CURTIS LARKIN
FRESNO, CA 93721

FACILITY LOCATION:

12716 E DINUBA AVE (LANDFILL FLARE)
SELMA, CA 93662

FACILITY DESCRIPTION:

WASTE DISPOSAL

The Facility's Permit to Operate may include Facility-wide Requirements as well as requirements that apply to specific permit units.

This Permit to Operate remains valid through the permit expiration date listed above, subject to payment of annual permit fees and compliance with permit conditions and all applicable local, state, and federal regulations. This permit is valid only at the location specified above, and becomes void upon any transfer of ownership or location. Any modification of the equipment or operation, as defined in District Rule 2201, will require prior District approval. This permit shall be posted as prescribed in District Rule 2010.

Samir Sheikh
Executive Director / APCO

Brian Clements
Director of Permit Services

Attachment C

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: C-706-1-1

EXPIRATION DATE: 12/31/2030

EQUIPMENT DESCRIPTION:

19.6 MMBTU/HR MCGILL S/N 1667-1 ELEVATED GAS FLARE, 6"D X 15'H, WITH PILOT ASSEMBLY, INTERNAL FLAME ARRESTOR, AND IGNITION PANEL ASSEMBLY

PERMIT UNIT REQUIREMENTS

1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201]
2. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
3. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
4. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
5. The gas collection system shall be operated such that the surface emission testing concentration of total organic compounds (as CH₄) shall not exceed 1000 ppmv at any point on the surface of the solid waste disposal site or along the gas transfer path of the gas collection system. [District Rule 4642]
6. Sampling ports shall be installed on each well head. [District Rule 4642]
7. Gas collection system shall be operated in a manner which maximizes the amount of landfill gas extracted while preventing overdraw that can cause fires or damage the gas collection system. [District Rule 4642]
8. Landfill gas collection system shall be equipped with a control device having VOC destruction efficiency of at least 90% by weight, or reduce the VOC concentration (measured as methane) to 30 ppmv @ 3% O₂. [District Rule 4642]
9. Excavated solid waste shall be covered using fresh soil, plastic sheeting, or vapor retarding foam as necessary to prevent odorous emissions and to minimize the release of landfill gas. [District Rule 4642]
10. Maintenance is defined as any work performed on the gas collection system and/or control device in order to ensure continued compliance with District rules, regulations, and/or Permits to Operate, and to prevent its failure or malfunction. [District Rule 4642]
11. The permittee shall notify the APCO by telephone at least 24 hours before performing any maintenance work that requires the system to be shutdown. The notification shall include a description of work, the date work will be performed and the amount of time needed to complete the maintenance work. [District Rule 4642]
12. During maintenance of the gas collection system or incineration device, emissions of landfill gas shall be minimized during shutdown. [District Rule 4642]
13. The landfill gas collection system and/or control device shall not be shut down for more than 144 cumulative hours for maintenance in any calendar year. [District Rule 4642]
14. Prior to testing of surface emissions, the operator shall submit a written Surface Emissions Testing Protocol for approval by the APCO. [District Rule 4642]
15. Permittee shall maintain records of surface emissions test including: date and time, weather conditions, including precipitation records, areas sampled, calibration records, and test results. [District Rule 4642]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

Attachment C

Permit Unit Requirements for C-706-1-1 (continued)

Page 2 of 2

16. Permittee shall maintain daily records of landfill gas flow rate to any control device(s). [District Rule 4642]
17. Permittee shall maintain records of maintenance related or other collection system and control device downtime, including individual well shutdown. [District Rule 4642]
18. Surface emission testing shall be performed once every six month period per calendar year. Upon completion of two consecutive semi-annual tests without an exceedance of the 1000 ppmv standard, other than non-repeatable, momentary readings, testing may be reduced to once every calendar year. [District Rule 4642]
19. Records shall be kept for at least five years and made available within 24 hours upon request from the District. [District Rule 1070]

These terms and conditions are part of the Facility-wide Permit to Operate.

RULE 4642 SOLID WASTE DISPOSAL SITES (Adopted July 20, 1995; Amended April 16, 1998)

1.0 Purpose

The purpose of this rule is to reduce volatile organic compound (VOC) emissions from solid waste disposal sites.

2.0 Applicability

The provisions of this rule apply to any solid waste disposal sites which has a gas collection system and/or control device in operation, or undergoing maintenance or repair.

3.0 Definitions

3.1 Control Device: any equipment which disposes of the collected gas through combustion, on-site gas treatment and subsequent sale, sale and processing off-site, or other equivalent methods.

3.2 Active Disposal Area: An area in a landfill that has not been closed pursuant to California Code of Regulations Title 14, Chapter 3, Article 7.8 and Title 23, Chapter 15, Article 8.

3.3 Destruction Efficiency: a measure of the efficiency of the control device to combust, transform, or otherwise prevent the emissions of VOC-containing landfill gases to the atmosphere.

3.4 Enclosed Flare: a flare which is composed of multiple gas burners that are grouped in an enclosure, and are staged to operate at a wide range of flow rates. The basic elements of an enclosed flare system are described in the California Air Resources Board's Suggested Control Measure for Landfill Gas Emissions, Appendix E, Section C.1, dated September 13, 1990.

3.5 Energy Recovery Device: any combustion device which uses landfill gas to produce energy in the form of steam or electricity, including, but not limited to, gas turbines, internal combustion engines and boilers.

3.6 Gas Collection System: any device which employs mechanical blowers or compressors to create a pressure gradient and extract landfill gas.

3.7 Hazardous Waste: defined in California Code of Regulation Title 14, Division 7, Chapter 3 (Minimum Standards for Solid Waste Handling and Disposal).

- 3.8 Landfill: any location within the solid waste disposal site used for the permanent disposal of waste where the organic portion of the waste is subject to the natural process of aerobic and anaerobic decomposition.
- 3.9 Landfill Gas: any untreated, raw gas derived through a natural process from the decomposition of organic waste deposited in a landfill, from the evolution of organic species in the waste, or from chemical reactions of substances in the waste.
- 3.10 Maintenance: work performed on a gas collection system and/or control device in order to ensure continued compliance with District rules, regulations, and/or Permits to Operate, and to prevent its failure or malfunction.
- 3.11 Minimization: the shutting of valves, insertion of sewer plugs, or any other similar method that reduces emissions of landfill gas to the atmosphere.
- 3.12 Non-repeatable, Momentary Readings: indications of the presence of organic gases on a portable hydrocarbon detection instrument which persist for less than five seconds and do not recur when the sampling probe is placed in the same location.
- 3.13 Open Flare: a vertically or horizontally oriented open pipe flare from which gases are released into the air before combustion is commenced.
- 3.14 Operator: the owner of a solid waste disposal site and any other person who through lease, franchise agreement, or any other arrangement with the landowner becomes responsible to the APCO for the following requirements for a solid waste disposal site:
- 3.14.1 Obtaining Authority to Construct and/or Permit to Operate for a gas collections system and control device;
 - 3.14.2 Complying with all applicable local air pollution requirements;
 - 3.14.3 The physical operation of the gas collection system and control device; and
 - 3.14.4 Maintaining the gas collection system and control device during the post closure maintenance period.
- 3.15 Portable Hydrocarbon Detection Instrument: a hand held hydrocarbon analyzer using detector types which include, but are not limited to, conductivity, flame ionization, catalytic oxidation, infrared absorption, and photo-ionization, which meet the requirements of USEPA Test Method 21, 40 CFR Part 60.
- 3.16 Repair: work performed on a gas collection system and/or control device in order to return it to compliance with District rules, regulations and/or Permits to operate.

- 3.17 Solid Waste: all putrescible and non-putrescible solid, semisolid, and liquid wastes, including garbage, trash, refuse, paper, rubbish, ashes, industrial wastes, vehicles and parts thereof, discarded home and industrial appliances, manure, vegetable or animal solid and semisolid wastes, sludge, and other discarded solid and semisolid wastes.
- 3.18 Solid Waste Disposal Site: the place, location, tract of land, area, or premises in use, intended to be used, or which has been used for the landfill disposal of wastes and/or evaporation of liquid chemical wastes.
- 3.19 Total Organic Compounds: all hydrocarbon compounds containing hydrogen and carbon with or without other chemical elements.
- 3.20 Volatile Organic Compound (VOC): defined in Rule 1020 (Definitions).
- 4.0 Exemptions
- 4.1 The requirements of this rule shall not apply to:
- 4.1.1 Active disposal areas in a landfill.
- 4.1.2 Any solid waste disposal site which is subject to the requirements of 40 CFR 60 Subpart WWW (Standards of Performance for Municipal Solid Waste Landfills), or Subpart Cc (Emission Guidelines and Compliance Times for Municipal Solid Waste Landfills).
- 4.1.3 Hazardous waste disposal sites.
- 4.2 The requirements of Section 5.1 and 5.2 shall not apply to solid waste disposal sites during maintenance of the landfill gas collection system and/or control device provided the requirements of Section 5.4 are met.
- 4.3 For existing facilities, the installation or modification of an emission control technique performed solely for the purpose of compliance with the requirements of this rule shall be exempt from Best Available Control Technology and Offset requirements of Rule 2201 (New and Modified Stationary Source Review Rule) for all air pollutants provided the conditions in Sections 4.3.1 through 4.3.4 are met.
- 4.3.1 there shall be no change in the physical or operational design of the existing facility, except for those changes to the design needed for the installation or modification of the emission control technique itself;
- 4.3.2 there shall be no change in the permitted rating or permitted operating schedule of the permitted unit;

- 4.3.3 there shall no increase in emissions from the stationary source that will cause or contribute to any violation of a National Ambient Air Quality Standard, Prevention of Significant Deterioration increment, or Air Quality Related Value in Class I areas; and
- 4.3.4 the project shall not result in an increase in permitted emissions or potential to emit of more than 25 tons per year of NO_x, or 25 tons per year of VOC, or 15 tons per year of SO_x, or 15 tons per year of PM-10, or 50 tons per year of CO.

5.0 Requirements

5.1 Solid Waste Disposal Site Gas Collection System

- 5.1.1 The gas collection system shall be operated in such a manner that the surface emissions testing of the landfill shows the concentrations of total organic compounds (measured as methane) do not exceed 1,000 ppmv at any point on the surface of the solid waste disposal site or along the gas transfer path of the gas collection system. Sampling ports shall be installed on each well head. Surface emissions testing shall be conducted according to Section 6.1.1.
- 5.1.2 The gas collection system shall be operated in a manner which maximizes the amount of landfill gas extracted while preventing overdraw that can cause fires or damage the gas collection system.
- 5.1.3 All landfill gas collected by a gas collection system shall be controlled by a control device which meets the requirements of Section 5.2.

5.2 Control Device

- 5.2.1 Except for control devices subject to Section 5.2.2, a control device shall achieve a VOC destruction efficiency of at least 98 percent by weight, or reduce the VOC concentration to 20 ppmv or less (measured as methane) corrected to 3 percent oxygen.
- 5.2.2 For control devices which have an Authority to Construct issued prior to July 20, 1995, such control devices shall achieve a destruction efficiency of at least 90 percent by weight or reduce the VOC concentration to 30 ppmv or less (measured as methane) corrected to 3 percent oxygen.
- 5.2.3 Compliance with the VOC destruction efficiency requirement shall be verified in accordance with Section 6.1.4 and 6.3.2.

5.2.4 An enclosed flare or an open flare may be used as a control device provided the operator submits, for approval by the APCO, a flare manufacturer's written guarantee and supporting data to demonstrate that the flare achieves the VOC destruction efficiency in Section 5.2.1 or 5.2.2. The operator shall maintain and operate the flare according to the manufacturer's specification, and shall meet the following operational requirements:

5.2.4.1 An enclosed flare shall be operated in accordance with the applicable provisions of 40 CFR 60.756(b) and 40 CFR 60.18.

5.2.4.2 An open flare shall be operated in accordance with the applicable provisions of and 40 CFR 60.756(c) and 40 CFR 60.18.

5.3 Emission Control During Excavation of Solid Waste

Whenever buried solid waste is brought to the surface during the installation or preparation of wells, trenches, piping, or other equipment or when landfill solid waste is excavated or moved, the operator shall cover the excavated solid waste using fresh soil, plastic sheeting, or vapor retarding foam as necessary in order to prevent odorous emissions and to minimize the release of landfill gas.

5.4 Emission Control During Maintenance

During maintenance of the gas collection system and/or control device the following conditions shall be met:

5.4.1 Notify the APCO by telephone at least 24 hours before performing any maintenance work that requires the system to be shutdown. The notification shall include a description of work, the date work will be performed and the amount of time needed to complete the maintenance work.

5.4.2 Emissions of landfill gas to the atmosphere shall be minimized during shutdown.

5.4.3 The gas collection system and/or control device shall not be shut down for more than 144 cumulative hours in any calendar year.

6.0 Administrative Requirements

6.1 Test Methods

6.1.1 Surface Emissions Testing

The operator shall perform the surface emission testing of solid waste disposal sites in accordance with Sections 6.1.1 and 6.3.1 to insure the requirements of Section 5.1 are met. Prior to testing, the operator shall submit a written Surface Emission Testing Protocol for approval by the APCO. The testing protocol shall meet the following requirements:

- 6.1.1.1 Testing shall be conducted using a portable hydrocarbon detection test instrument. The instrument shall be calibrated before and after each test using zero air and an approximately 500 parts per million by volume (ppmv) methane based standard calibration gas in accordance with the manufacturer's recommendations. The instrument serial number and instrument calibration data shall be recorded for each calibration and maintained as a permanent record.
- 6.1.1.2 Testing shall be performed by holding the detector probe within three inches of the surface while walking a pattern of parallel paths not more than 90 feet apart over the entire surface area of the solid waste disposal site which contains buried refuse, and along the gas transfer path of the gas collection system. The operator shall monitor the instrument readings at least once every 30 seconds, at normal walking speed (approximately 2 miles per hour), record only the readings that exceed 1,000 ppmv, and geographically locate the specific area on the landfill surface where the exceedances occur. Cracks, holes and other breaches in the solid waste disposal site cover, as well as areas where buried waste interfaces with undisturbed native soil, shall be tested. Sampling is not required on steep slopes or other areas posing an unavoidable hazard to testing personnel.
- 6.1.1.3 Testing shall be terminated when the average wind speed exceeds five miles per hour or the instantaneous wind speed exceeds ten miles per hour. Average wind speed shall be determined on a ten-minute average using an on-site anemometer. The APCO may approve exceptions to the wind speed requirement for solid waste disposal sites which consistently have winds in excess of these limits.

Application for this exemption must be made in writing prior to testing.

- 6.1.1.4 Testing shall be conducted when the solid waste disposal site is dry and no rain is falling. The site is considered dry when there has been no rain for 72 hours prior to testing.
- 6.1.2 Measurement of the volumetric flow shall be performed using CARB Method 2.
- 6.1.3 Heating value of process gas shall be determined by using the latest revision of test method ASTM D1826 or ASTM D3588.
- 6.1.4 The destruction efficiency of the control device shall be evaluated as follows:
 - 6.1.4.1 The operator shall measure, in dry standard cubic feet, the volumetric flow rate of the collected landfill gas entering the control device and the volumetric flow rate of the control device effluent gases;
 - 6.1.4.2 Simultaneous grab samples shall be taken at the inlet to the control device and in the control device. The VOC concentrations of the samples shall be determined by using USEPA Test Method 25;
 - 6.1.4.3 The control device destruction efficiency shall be computed using the following equation:

$$\text{Destruction Efficiency} = \left[1 - \frac{\text{VOC}_o \times \text{exhaust flow}}{\text{VOC}_i \times \text{inlet flow}} \right] \times 100\%$$

Where:

VOC_o = measured concentration of VOC in the control device exhaust

VOC_i = measured concentration of VOC in the landfill gas entering the control device

6.2 Recordkeeping

The operator shall maintain the following written records for a period of five years from the date of each entry. The records shall be made available during normal

business hours from Monday through Friday, and shall be submitted to the APCO upon request.

- 6.2.1 Records of surface emissions tests including: the time; weather conditions, including precipitation records; areas sampled; calibration records; and test results.
- 6.2.2 If applicable, emission control device source test reports showing the VOC destruction efficiency.
- 6.2.3 If applicable, records of flare combustion temperature including the dates and times of temperature readings, net heating value of landfill gas being combusted, volumetric gas flow rate and flare exit velocity.
- 6.2.4 Maintenance-related or other collection system and control device downtime, including individual well shutdown.

6.3 Compliance Testing

The operator shall notify the District not later than 30 days prior to any compliance test required by Section 6.3.1 and 6.3.2. Compliance test reports shall be submitted to the District within 60 days of completion of testing.

- 6.3.1 Surface emissions testing performed to evaluate the effectiveness of a gas collection system shall be conducted at least once in every six month period per calendar year. Upon completion of two successive semi-annual tests without an exceedance of the 1,000 ppmv standard, other than non-repeatable, momentary readings, the testing frequency may be reduced to once every calendar year. Subsequent exceedances of the 1,000 ppmv standard shall result in the re-establishment of the semi-annual testing requirement.
- 6.3.2 Compliance source testing of an energy recovery device used as a control device shall be conducted in accordance with the testing requirements of other applicable District's rules.

6.4 Emission Control Plan

The operator of a solid waste disposal site subject to this rule shall submit an Emission Control Plan as required by Section 7.3 to the APCO indicating the actions to be taken to comply with the requirements of the rule. A written approval of the plan shall be obtained from the APCO prior to implementing the plan. As operating experience is gained and site conditions change, the plan may be revised subject to the approval of the APCO. The plan shall, at a minimum, contain:

- 6.4.1 An engineering evaluation of the expected landfill gas generation rate and design specifications which demonstrate that the gas collection system will meet the requirements of this rule;
- 6.4.2 A map showing the location, spacing, and depths of extraction wells or trenches, and the direction of flow through the header system to the control device;
- 6.4.3 A map showing the areas with steep slopes and other safety hazards to personnel performing the surface emissions testing. A brief explanation of these hazards must be given;
- 6.4.4 Locations of sampling probes;
- 6.4.5 A schedule detailing inspection and maintenance intervals. The schedule must include the dates and durations of expected system shutdowns as well as the work or maintenance expected;
- 6.4.6 Written justification for less than continuous operation of the gas collection system;
- 6.4.7 Operating procedures including system start-up, balancing, routine maintenance, and shutdown;
- 6.4.8 Qualifications and training requirements for all on-site personnel;
- 6.4.9 A description of techniques used to ensure that excess vacuum and gas withdrawal resulting in air intrusion into the landfill are minimized.

7.0 Compliance Schedule

- 7.1 By July 20, 1996, the operator shall submit a Surface Emissions Testing Protocol to the APCO for approval.
- 7.2 Within 12 months after approval of the Surface Emission Testing Protocol by the APCO, the operator shall achieve full compliance with the requirements of this rule.
- 7.3 If any two (2) or more surface emissions tests exceed the 1,000 ppmv standard, the operator shall:
 - 7.3.1 submit an Emission Control Plan and a complete application for Authority to Construct, if necessary, within 12 months from the date of the second test failure;

- 7.3.2 be in full compliance with the rule within 12 months after the Authority to Construct is issued, or after approval of the Emission Control Plan; and
- 7.3.3 conduct compliance testing pursuant to Sections 6.3.1 and 6.3.2.