

February 5, 2020



**ENVIRONMENTAL
INFORMATION
LOGISTICS, LLC**

**672 N. Milford Road
Suite 152
Highland, MI 48357
www.eillc.com**

William F. Durham
Director
WV Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304

Subject: Title V Renewal Application
Allied Waste Sycamore Landfill, LLC.
DAQ Plant ID: 03-54-079-00105

Dear Mr. Durham:

Environmental Information Logistics, LLC (EIL) is pleased to provide you with two electronic copies of the application and a signed hard copy (in blue ink). The electronic applications are provided on two separate USB flash drives. There is no confidential business information (CBI) in this application.

If you have any questions, please contact me at (248) 421-0499.

Sincerely,

ENVIRONMENTAL INFORMATION LOGISTICS, LLC.

Dana A Oleniacz
Senior Project Manager

cc: J. Swann - RSI

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WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION

DIVISION OF AIR QUALITY

601 57th Street SE
Charleston, WV 25304
Phone: (304) 926-0475

www.dep.wv.gov/daq

INITIAL/RENEWAL TITLE V PERMIT APPLICATION - GENERAL FORMS

Section 1: General Information

Form with 10 sections: 1. Name of Applicant, 2. Facility Name or Location, 3. DAQ Plant ID No., 4. Federal Employer ID No. (FEIN), 5. Permit Application Type, 6. Type of Business Entity, 7. Is the Applicant the, 8. Number of onsite employees, 9. Governmental Code, 10. Business Confidentiality Claims.

| | | |
|--|----------------------------|-------------|
| 11. Mailing Address | | |
| Street or P.O. Box: 3475 Sycamore Ridge Road | | |
| City: Hurricane | State: WV | Zip: 25526- |
| Telephone Number: (304) 562-2611 | Fax Number: (304) 562-2358 | |

| | | |
|---|---|---|
| 12. Facility Location | | |
| Street: 3475 Sycamore Ridge Road | City: Hurricane | County: Putnam |
| UTM Easting: 410.4 km | UTM Northing: 4250.3 km | Zone: <input checked="" type="checkbox"/> 17 or <input type="checkbox"/> 18 |
| Directions: : Interstate 64 to Hurricane exit, South on WV State Route 34 fir approximately 2 miles; turn right onto Sycamore Landfill entrance road. | | |
| Portable Source? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | |
| Is facility located within a nonattainment area? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, for what air pollutants? | |
| Is facility located within 50 miles of another state? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | If yes, name the affected state(s). KY OH | |
| Is facility located within 100 km of a Class I Area ¹ ? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, name the area(s). | |
| If no, do emissions impact a Class I Area ¹ ? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | |
| ¹ Class I areas include Dolly Sods and Otter Creek Wilderness Areas in West Virginia, and Shenandoah National Park and James River Face Wilderness Area in Virginia. | | |

| | | |
|---|-----------------------------------|--------------------------------------|
| 13. Contact Information | | |
| Responsible Official: Kevin Bremer | | Title: Area President |
| Street or P.O. Box: 1235 Westlake Drive, Suite 310 | | |
| City: Berwyn | State: PA | Zip: 19312- |
| Telephone Number: (610) 576-2915 | Fax Number: () - | |
| E-mail address: kbremer@republicservices.com | | |
| Environmental Contact: Jason Swann | | Title: Environmental Manager |
| Street or P.O. Box: Industrial Lane – Kyle Industrial Park | | |
| City: Huntington | State: WV | Zip: 25702- |
| Telephone Number: (304) 633-3393 | Fax Number: (304) 525-0721 | |
| E-mail address: jswann@republicservices.com | | |
| Application Preparer: Dana Oleniacz | | Title: Senior Project Manager |
| Company: Environmental Information Logistics, LLC. | | |
| Street or P.O. Box: 672 N. Milford Road, Suite 152 | | |
| City: Highland | State: MI | Zip: 48357- |
| Telephone Number: (248) 421-0499 | Fax Number: () - | |
| E-mail address: doleniacz@eilllc.com | | |

14. Facility Description

List all processes, products, NAICS and SIC codes for normal operation, in order of priority. Also list any process, products, NAICS and SIC codes associated with any alternative operating scenarios if different from those listed for normal operation.

| Process | Products | NAICS | SIC |
|--------------------------------|----------------|--------|------|
| Municipal Solid Waste Landfill | Not applicable | 562212 | 4953 |
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Provide a general description of operations.

Municipal solid waste is received by the landfill and placed into active cells, compacted, and covered with soil. When the cells or cell phases are filled to capacity, they are appropriately closed. The waste material placed in the Landfill decomposes over time and generates landfill gases. Vertical and horizontal wells are drilled into the Closed cells to liberate the gas in a controlled manner. From the well head, a collection system is used to route the Landfill gas to a flare where it is burned prior to being vented to the atmosphere.

15. Provide an **Area Map** showing plant location as **ATTACHMENT A**.

16. Provide a **Plot Plan(s)**, e.g. scaled map(s) and/or sketch(es) showing the location of the property on which the stationary source(s) is located as **ATTACHMENT B**. For instructions, refer to "Plot Plan - Guidelines."

17. Provide a detailed **Process Flow Diagram(s)** showing each process or emissions unit as **ATTACHMENT C**. Process Flow Diagrams should show all emission units, control equipment, emission points, and their relationships.

Section 2: Applicable Requirements

| 18. Applicable Requirements Summary | |
|--|--|
| Instructions: Mark all applicable requirements. | |
| <input checked="" type="checkbox"/> SIP | <input type="checkbox"/> FIP |
| <input type="checkbox"/> Minor source NSR (45CSR13) | <input type="checkbox"/> PSD (45CSR14) |
| <input type="checkbox"/> NESHAP (45CSR34) | <input type="checkbox"/> Nonattainment NSR (45CSR19) |
| <input checked="" type="checkbox"/> Section 111 NSPS | <input type="checkbox"/> Section 112(d) MACT standards |
| <input type="checkbox"/> Section 112(g) Case-by-case MACT | <input type="checkbox"/> 112(r) RMP |
| <input type="checkbox"/> Section 112(i) Early reduction of HAP | <input type="checkbox"/> Consumer/commercial prod. reqts., section 183(e) |
| <input type="checkbox"/> Section 129 Standards/Reqts. | <input type="checkbox"/> Stratospheric ozone (Title VI) |
| <input type="checkbox"/> Tank vessel reqt., section 183(f) | <input type="checkbox"/> Emissions cap 45CSR§30-2.6.1 |
| <input type="checkbox"/> NAAQS, increments or visibility (temp. sources) | <input type="checkbox"/> 45CSR27 State enforceable only rule |
| <input type="checkbox"/> 45CSR4 State enforceable only rule | <input type="checkbox"/> Acid Rain (Title IV, 45CSR33) |
| <input type="checkbox"/> Emissions Trading and Banking (45CSR28) | <input type="checkbox"/> Compliance Assurance Monitoring (40CFR64) |
| <input type="checkbox"/> CAIR NO _x Annual Trading Program (45CSR39) | <input type="checkbox"/> CAIR NO _x Ozone Season Trading Program (45CSR40) |
| <input type="checkbox"/> CAIR SO ₂ Trading Program (45CSR41) | |

| |
|---|
| 19. Non Applicability Determinations |
|---|

List all requirements which the source has determined not applicable and for which a permit shield is requested. The listing shall also include the rule citation and the reason why the shield applies.

45 CSR 01& 45 CSR 26- NOx Budget Trading Program- Sycamore is not a NOx budget source.

45 CSR 02 – To Prevent & Control Particulate Air Pollution from Combustion of Fuel in Indirect Heat Exchange – Sycamore does not operate any indirect heat exchangers

45 CSR 02A-Testing Monitoring Recordkeeping & Reporting Requirements – Sycamore is not subject

45 CSR 03- To Prevent & Control Air Pollution from the Operation of Hot Mix Asphalt plants – Sycamore does not operate a hot mix asphalt plant.

45 CSR 05-To Prevent & Control Air Pollution from the Operation of Coal Preparation Plants, Coal Handling Operations & Coal Refuse Disposal Area- Sycamore is not one of the listed sources subject to this regulation

45 CSR 07- To Prevent & Control Particulate Matter Air Pollution from Manufacturing Processes & Associated Operations – Sycamore does not operate any of the processes subject to this regulation

45 CSR 07A-Compliance Test Procedures for 45 CSR 7-Sycamore is not subject to 45 CSR 07.

45 CSR 08-Ambient Air Quality Standards for Sulfur Oxides and Particulate Matter – This is a regulation that is not applicable to specific sources such as Sycamore

45 CSR 10- To Prevent & Control Air Pollution from the Emission of Sulfur Oxides – Sycamore is not subject to regulations under these provisions.

45 CSR 10A – Testing, Monitoring, Recordkeeping, & Reporting, Requirements Under 45CSR10 – Sycamore is not subject to 45 CSR 10.

45 CSR 11 – Prevention of Air Pollution Emergency Episodes – This is a regulation that is not applicable to specific sources such as Sycamore.

45 CSR 14-Permits for Construction and Major Modification of Major Stationary Sources of Air Pollution for the Prevention of Significant Deterioration – Sycamore is not a PSD source.

45 CSR 17-To Prevent & Control Particulate Matter Air Pollution from Materials Handling, Preparation, Storage & Other Sources of Fugitive Particulate Matter – Sycamore does not operate activities subject to this regulation.

45 CSR 18-To Prevent and Control Emissions from Commercial and Industrial Solid Waste Incineration Units – Sycamore does not operate a solid waste incineration unit.

Permit Shield

19. Non Applicability Determinations (Continued) - Attach additional pages as necessary.

List all requirements which the source has determined not applicable and for which a permit shield is requested. The listing shall also include the rule citation and the reason why the shield applies.

45 CSR 19-Permits for Construction and Major Modification of Major Stationary Sources of Air Pollution Which Cause or Contribute to Nonattainment – Sycamore is not located in and does not impact a nonattainment area.

45 CSR 20-Good Engineering Practice as Applies to Stack Heights – Sycamore does not have any stacks subject to GEP.

45 CSR 21-Reg to Prevent & Control Air Pollution from the Emission of Volatile Organic Compounds – Sycamore does not operate any sources subject to this regulation.

45 CSR 27-To Prevent & Control the Emissions of Toxic Air Pollutants – Sycamore does not have emissions subject to Best Available Control Technology under this regulation.

45 CSR 28-Air Pollutant Emissions Banking & Trading – Sycamore is not a source subject to this program.

45 CSR 29-Reg. Requiring the Submission of Emission Statements for Volatile Organic Compound Emissions & Oxides – Sycamore is not a source subject to this program.

45 CSR 31-Confidential Information – Sycamore is not submitting a Claim of Confidentiality.

45 CSR 32-Serious & Minor Violations of Applicable Rules – Sycamore is not subject to any enforcement activities for serious or minor violations of applicable rules.

45 CSR 33 – Acid Rain – Sycamore is not an acid rain source.

45 CSR 34 – Emission Standard for Hazardous Air Pollutants – Sycamore does not have emissions subject to regulations under this rule.

45 CSR 35 – General Conformity – This regulation is not applicable to specific sources such as Sycamore.

45 CSR 36 – Transportation Conformity – This regulation is not applicable to specific sources such as Sycamore

45 CSR 37 – Mercury Budget Trading Program – Sycamore is not a source subject to regulation under this rule.

45 CSR 38 – Provisions for Determination of Compliance With Air Quality Management Rules – This regulation is not applicable to specific sources such as Sycamore

45 CSR 39- Control of Annual Nitrogen Oxide Emissions to Mitigate Interstate Transport of Fine Particulate Matter and Nitrogen Oxides – Sycamore is not a source subject to regulation under this rule.

45 CSR 40+ Control of Ozone Season Nitrogen Oxide Emissions to Mitigate Interstate Transport of Ozone and Nitrogen Oxides – Sycamore is not a source subject to regulations under this rule.

45 CSR 41-Control of Annual Sulfur Dioxide Emission to Mitigate Interstate Transport of Fine Particulate Matter and Sulfur Dioxide – Sycamore is not a source subject to regulation under this rule.

Permit Shield

20. Facility-Wide Applicable Requirements

List all facility-wide applicable requirements. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements).

45 CSR 04- The landfill is currently subject to this regulation, which prohibits objectionable odors at any location occupied by the public.

45 CSR 06 – The landfill is subject to the provisions of this regulation. Opacity from the flare is maintained below Ringlemann Smoke Chart No. 1.

45 CSR 13- The landfill operates under existing permit No. R13-2242B, and has addressed maximum emissions that could be generated by any and all operating cells.

45 CSR 23- The landfill is subject to the provisions of 40 CFR 60, Subpart WWW and is currently in compliance with that regulation.

45 CSR 23- The landfill is subject to the provisions of 40 CFR 60, Subpart Cf and is currently in compliance with that regulation.

45 CSR 25- The landfill does not accept RCRA hazardous waste.

40 CFR 60, Subpart WWW – The landfill is subject to the NSPS since it is a municipal solid waste landfill with design capacity greater than 2.5 million cubic meters. The landfill is currently in compliance with the provisions under the regulation.

40 CFR 60, Subpart Cf – The landfill is subject to the NSPS since it is a municipal solid waste landfill with design capacity greater than 2.5 million cubic meters. The landfill is currently in compliance with the provisions under the regulation.

Permit Shield

For all facility-wide applicable requirements listed above, provide monitoring/testing / recordkeeping / reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number and/or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

45 CSR 04-No compliance methods specified. The site has not had any odor violations

45 CSR 06-Compliance based upon visual observations indicating no visible emissions.

45 CSR 13- No Compliance methods specified. Potential emissions from the entire site have been addressed.

45 CSR 23+The site is in compliance with the provisions of 40 CFR 60, Subpart WWW as applicable.

45 CSR 25 – The site is in compliance with the regulations since it does not accept RCRA hazardous waste.

40 CFR 60, Subpart WWW – Compliance is based on timely reporting of NMOC emissions, maintaining records required under the NSPS, testing to determine the site-specific NMOC emission rate concentration and timely submittal of a gas collection and control plan should emissions be determined to be greater than 50 Mg

40 CFR 60, Subpart Cf – Compliance is based on timely reporting of NMOC emissions, maintaining records required under the NSPS, testing to determine the site-specific NMOC emission rate concentration and timely submittal of a gas collection and control plan should emissions be determined to be greater than 34 Mg

Are you in compliance with all facility-wide applicable requirements? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

20. Facility-Wide Applicable Requirements (Continued) - Attach additional pages as necessary.

List all facility-wide applicable requirements. For each applicable requirement, include the rule citation and/or permit with the condition number.

Permit Shield

For all facility-wide applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number and/or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Are you in compliance with all facility-wide applicable requirements? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

Section 3: Facility-Wide Emissions

| 23. Facility-Wide Emissions Summary [Tons per Year] | |
|--|---------------------|
| Criteria Pollutants | Potential Emissions |
| Carbon Monoxide (CO) | 73.0 |
| Nitrogen Oxides (NO _x) | 13.4 |
| Lead (Pb) | 0.0 |
| Particulate Matter (PM _{2.5}) ¹ | 1.4 |
| Particulate Matter (PM ₁₀) ¹ | 1.4 |
| Total Particulate Matter (TSP) | 1.4 |
| Sulfur Dioxide (SO ₂) | 12.1 |
| Volatile Organic Compounds (VOC) | 1.0 |
| Hazardous Air Pollutants ² | Potential Emissions |
| Total HAPs | 2.8 |
| | |
| | |
| | |
| | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions |
| | |
| | |
| | |
| | |

¹PM_{2.5} and PM₁₀ are components of TSP.
²For HAPs that are also considered PM or VOCs, emissions should be included in both the HAPs section and the Criteria Pollutants section.

Section 4: Insignificant Activities

| 24. Insignificant Activities (Check all that apply) | |
|--|---|
| <input checked="" type="checkbox"/> | 1. Air compressors and pneumatically operated equipment, including hand tools. |
| <input type="checkbox"/> | 2. Air contaminant detectors or recorders, combustion controllers or shutoffs. |
| <input checked="" type="checkbox"/> | 3. Any consumer product used in the same manner as in normal consumer use, provided the use results in a duration and frequency of exposure which are not greater than those experienced by consumer, and which may include, but not be limited to, personal use items; janitorial cleaning supplies, office supplies and supplies to maintain copying equipment. |
| <input checked="" type="checkbox"/> | 4. Bathroom/toilet vent emissions. |
| <input type="checkbox"/> | 5. Batteries and battery charging stations, except at battery manufacturing plants. |
| <input type="checkbox"/> | 6. Bench-scale laboratory equipment used for physical or chemical analysis, but not lab fume hoods or vents. Many lab fume hoods or vents might qualify for treatment as insignificant (depending on the applicable SIP) or be grouped together for purposes of description. |
| <input type="checkbox"/> | 7. Blacksmith forges. |
| <input type="checkbox"/> | 8. Boiler water treatment operations, not including cooling towers. |
| <input checked="" type="checkbox"/> | 9. Brazing, soldering or welding equipment used as an auxiliary to the principal equipment at the source. |
| <input type="checkbox"/> | 10. CO ₂ lasers, used only on metals and other materials which do not emit HAP in the process. |
| <input checked="" type="checkbox"/> | 11. Combustion emissions from propulsion of mobile sources, except for vessel emissions from Outer Continental Shelf sources. |
| <input type="checkbox"/> | 12. Combustion units designed and used exclusively for comfort heating that use liquid petroleum gas or natural gas as fuel. |
| <input checked="" type="checkbox"/> | 13. Comfort air conditioning or ventilation systems not used to remove air contaminants generated by or released from specific units of equipment. |
| <input type="checkbox"/> | 14. Demineralized water tanks and demineralizer vents. |
| <input type="checkbox"/> | 15. Drop hammers or hydraulic presses for forging or metalworking. |
| <input type="checkbox"/> | 16. Electric or steam-heated drying ovens and autoclaves, but not the emissions from the articles or substances being processed in the ovens or autoclaves or the boilers delivering the steam. |
| <input type="checkbox"/> | 17. Emergency (backup) electrical generators at residential locations. |
| <input type="checkbox"/> | 18. Emergency road flares. |
| <input type="checkbox"/> | 19. Emission units which do not have any applicable requirements and which emit criteria pollutants (CO, NO _x , SO ₂ , VOC and PM) into the atmosphere at a rate of less than 1 pound per hour and less than 10,000 pounds per year aggregate total for each criteria pollutant from all emission units. Please specify all emission units for which this exemption applies along with the quantity of criteria pollutants emitted on an hourly and annual basis: _____ _____ _____ _____ _____ _____ _____ _____ _____ |

| 24. Insignificant Activities (Check all that apply) | |
|--|---|
| <input type="checkbox"/> | <p>20. Emission units which do not have any applicable requirements and which emit hazardous air pollutants into the atmosphere at a rate of less than 0.1 pounds per hour and less than 1,000 pounds per year aggregate total for all HAPs from all emission sources. This limitation cannot be used for any source which emits dioxin/furans nor for toxic air pollutants as per 45CSR27.</p> <p>Please specify all emission units for which this exemption applies along with the quantity of hazardous air pollutants emitted on an hourly and annual basis:</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> |
| <input type="checkbox"/> | 21. Environmental chambers not using hazardous air pollutant (HAP) gases. |
| <input type="checkbox"/> | 22. Equipment on the premises of industrial and manufacturing operations used solely for the purpose of preparing food for human consumption. |
| <input type="checkbox"/> | 23. Equipment used exclusively to slaughter animals, but not including other equipment at slaughterhouses, such as rendering cookers, boilers, heating plants, incinerators, and electrical power generating equipment. |
| <input type="checkbox"/> | 24. Equipment used for quality control/assurance or inspection purposes, including sampling equipment used to withdraw materials for analysis. |
| <input type="checkbox"/> | 25. Equipment used for surface coating, painting, dipping or spray operations, except those that will emit VOC or HAP. |
| <input checked="" type="checkbox"/> | 26. Fire suppression systems. |
| <input type="checkbox"/> | 27. Firefighting equipment and the equipment used to train firefighters. |
| <input type="checkbox"/> | 28. Flares used solely to indicate danger to the public. |
| <input checked="" type="checkbox"/> | 29. Fugitive emission related to movement of passenger vehicle provided the emissions are not counted for applicability purposes and any required fugitive dust control plan or its equivalent is submitted. |
| <input type="checkbox"/> | 30. Hand-held applicator equipment for hot melt adhesives with no VOC in the adhesive formulation. |
| <input checked="" type="checkbox"/> | 31. Hand-held equipment for buffing, polishing, cutting, drilling, sawing, grinding, turning or machining wood, metal or plastic. |
| <input type="checkbox"/> | 32. Humidity chambers. |
| <input type="checkbox"/> | 33. Hydraulic and hydrostatic testing equipment. |
| <input checked="" type="checkbox"/> | 34. Indoor or outdoor kerosene heaters. |
| <input type="checkbox"/> | 35. Internal combustion engines used for landscaping purposes. |
| <input type="checkbox"/> | 36. Laser trimmers using dust collection to prevent fugitive emissions. |
| <input type="checkbox"/> | 37. Laundry activities, except for dry-cleaning and steam boilers. |
| <input type="checkbox"/> | 38. Natural gas pressure regulator vents, excluding venting at oil and gas production facilities. |
| <input type="checkbox"/> | 39. Oxygen scavenging (de-aeration) of water. |
| <input type="checkbox"/> | 40. Ozone generators. |

| 24. Insignificant Activities (Check all that apply) | |
|--|--|
| <input type="checkbox"/> | 41. Plant maintenance and upkeep activities (e.g., grounds-keeping, general repairs, cleaning, painting, welding, plumbing, re-tarring roofs, installing insulation, and paving parking lots) provided these activities are not conducted as part of a manufacturing process, are not related to the source's primary business activity, and not otherwise triggering a permit modification. (Cleaning and painting activities qualify if they are not subject to VOC or HAP control requirements. Asphalt batch plant owners/operators must still get a permit if otherwise requested.) |
| <input checked="" type="checkbox"/> | 42. Portable electrical generators that can be moved by hand from one location to another. "Moved by Hand" means that it can be moved without the assistance of any motorized or non-motorized vehicle, conveyance, or device. |
| <input type="checkbox"/> | 43. Process water filtration systems and demineralizers. |
| <input type="checkbox"/> | 44. Repair or maintenance shop activities not related to the source's primary business activity, not including emissions from surface coating or de-greasing (solvent metal cleaning) activities, and not otherwise triggering a permit modification. |
| <input type="checkbox"/> | 45. Repairs or maintenance where no structural repairs are made and where no new air pollutant emitting facilities are installed or modified. |
| <input type="checkbox"/> | 46. Routing calibration and maintenance of laboratory equipment or other analytical instruments. |
| <input type="checkbox"/> | 47. Salt baths using nonvolatile salts that do not result in emissions of any regulated air pollutants. Shock chambers. |
| <input type="checkbox"/> | 48. Shock chambers. |
| <input type="checkbox"/> | 49. Solar simulators. |
| <input type="checkbox"/> | 50. Space heaters operating by direct heat transfer. |
| <input type="checkbox"/> | 51. Steam cleaning operations. |
| <input type="checkbox"/> | 52. Steam leaks. |
| <input type="checkbox"/> | 53. Steam sterilizers. |
| <input type="checkbox"/> | 54. Steam vents and safety relief valves. |
| <input checked="" type="checkbox"/> | 55. Storage tanks, reservoirs, and pumping and handling equipment of any size containing soaps, vegetable oil, grease, animal fat, and nonvolatile aqueous salt solutions, provided appropriate lids and covers are utilized. |
| <input type="checkbox"/> | 56. Storage tanks, vessels, and containers holding or storing liquid substances that will not emit any VOC or HAP. Exemptions for storage tanks containing petroleum liquids or other volatile organic liquids should be based on size limits such as storage tank capacity and vapor pressure of liquids stored and are not appropriate for this list. |
| <input type="checkbox"/> | 57. Such other sources or activities as the Director may determine. |
| <input type="checkbox"/> | 58. Tobacco smoking rooms and areas. |
| <input type="checkbox"/> | 59. Vents from continuous emissions monitors and other analyzers. |

Section 5: Emission Units, Control Devices, and Emission Points

| |
|---|
| 25. Equipment Table |
| Fill out the Title V Equipment Table and provide it as ATTACHMENT D . |
| 26. Emission Units |
| For each emission unit listed in the Title V Equipment Table , fill out and provide an Emission Unit Form as ATTACHMENT E . |
| For each emission unit not in compliance with an applicable requirement, fill out a Schedule of Compliance Form as ATTACHMENT F . |
| 27. Control Devices |
| For each control device listed in the Title V Equipment Table , fill out and provide an Air Pollution Control Device Form as ATTACHMENT G . |
| For any control device that is required on an emission unit in order to meet a standard or limitation for which the potential pre-control device emissions of an applicable regulated air pollutant is greater than or equal to the Title V Major Source Threshold Level, refer to the Compliance Assurance Monitoring (CAM) Form(s) for CAM applicability. Fill out and provide these forms, if applicable, for each Pollutant Specific Emission Unit (PSEU) as ATTACHMENT H . |

Section 6: Certification of Information

28. Certification of Truth, Accuracy and Completeness and Certification of Compliance

*Note: This Certification must be signed by a responsible official. The **original**, signed in **blue ink**, must be submitted with the application. Applications without an **original** signed certification will be considered as incomplete.*

a. Certification of Truth, Accuracy and Completeness

I certify that I am a responsible official (as defined at 45CSR§30-2.38) and am accordingly authorized to make this submission on behalf of the owners or operators of the source described in this document and its attachments. I certify under penalty of law that I have personally examined and am familiar with the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine and/or imprisonment.

b. Compliance Certification

Except for requirements identified in the Title V Application for which compliance is not achieved, I, the undersigned hereby certify that, based on information and belief formed after reasonable inquiry, all air contaminant sources identified in this application are in compliance with all applicable requirements.

Responsible official (type or print)

Name: Kevin Bremer

Title: Area President

Responsible official's signature:

Signature: 

Signature Date: 2-3-2020

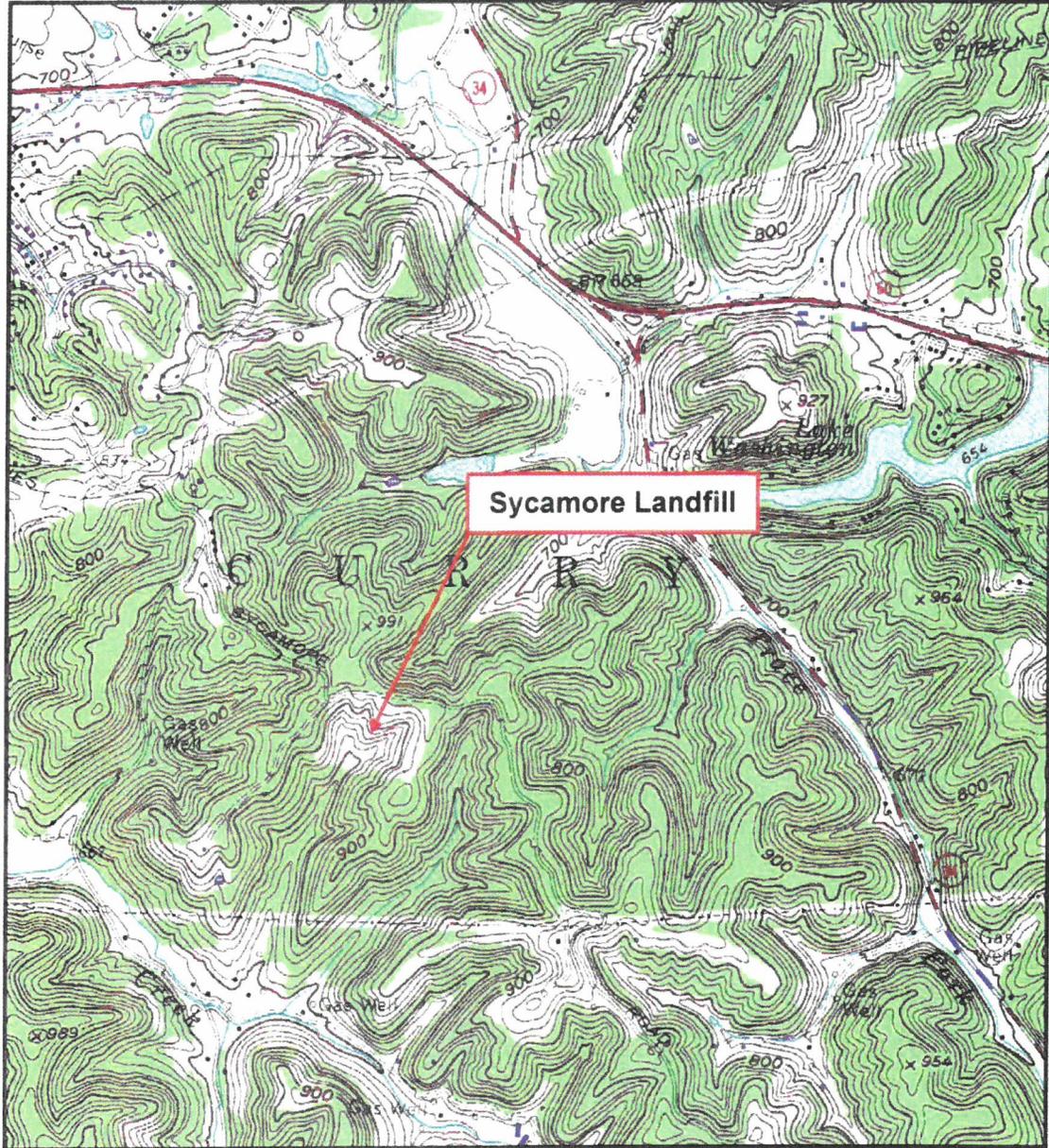
(Must be signed and dated in blue ink)

Note: Please check all applicable attachments included with this permit application:

| | |
|-------------------------------------|---|
| <input checked="" type="checkbox"/> | ATTACHMENT A: Area Map |
| <input checked="" type="checkbox"/> | ATTACHMENT B: Plot Plan(s) |
| <input checked="" type="checkbox"/> | ATTACHMENT C: Process Flow Diagram(s) |
| <input checked="" type="checkbox"/> | ATTACHMENT D: Equipment Table |
| <input type="checkbox"/> | ATTACHMENT E: Emission Unit Form(s) |
| <input type="checkbox"/> | ATTACHMENT F: Schedule of Compliance Form(s) |
| <input checked="" type="checkbox"/> | ATTACHMENT G: Air Pollution Control Device Form(s) |
| <input type="checkbox"/> | ATTACHMENT H: Compliance Assurance Monitoring (CAM) Form(s) |

All of the required forms and additional information can be found and downloaded from, the DEP website at www.dep.wv.gov/dag, requested by phone (304) 926-0475, and/or obtained through the mail.

ATTACHMENT A
AREA MAP



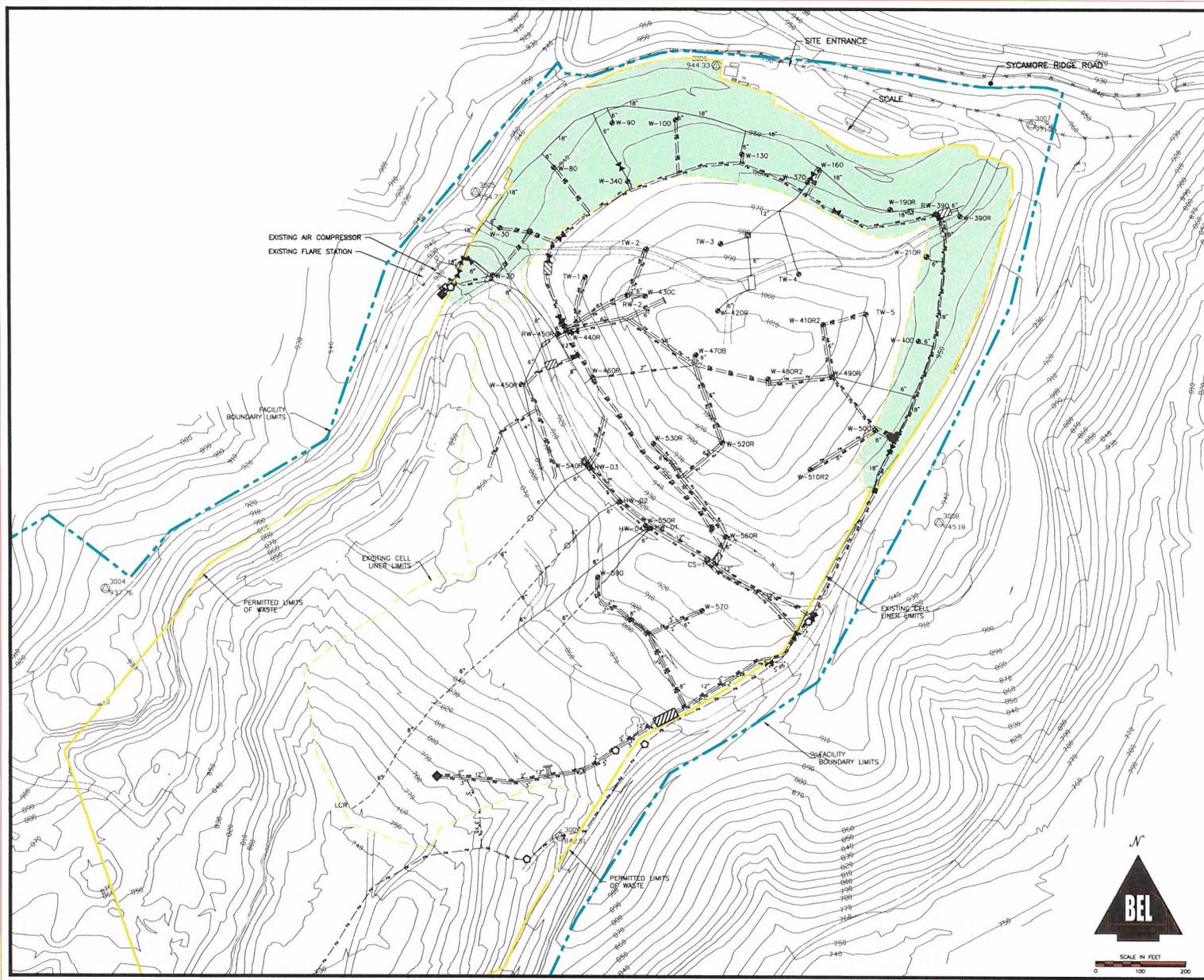
Sycamore Landfill

Attachment A

ATTACHMENT B

PLOT PLAN

Z:\Users\edk\OneDrive\Documents\2019\AS-Built\2019 Sycamore LFG AS-Built\12.03.19.dwg



LEGEND

- FACILITY PROPERTY BOUNDARY
- PERMITTED LIMITS OF WASTE
- CELL LINER BOUNDARY
- FINAL COVER AREA
- EXISTING 10' CONTOUR
- EXISTING 2' CONTOUR
- EXISTING LANDFILL GAS HEADER
- EXISTING HORIZONTAL LFG COLLECTOR
- EXISTING FORCEMAIN
- EXISTING AIRLINE
- W-530R EXISTING LFG WELL
- HW-02 EXISTING HORIZONTAL WELL
- EXISTING LFG CONDENSATE SUMP
- EXISTING HEADER ACCESS RISER
- EXISTING FORCEMAIN CLEANOUT
- EXISTING BLIND FLANGE
- EXISTING VALVE
- EXISTING ROAD CROSSING
- EXISTING CONDENSATE SUMP
- EXISTING ROCK SUMP
- EXISTING FORCEMAIN VALVE VAULT

NOTES:
 1. AERIAL PHOTOGRAPHY PROVIDED BY COOPER AERIAL SURVEYS DATED NOVEMBER 24, 2017.
 2. AS-BUILT SURVEY COMPLETED BY KENWIGGS, INC. ON NOVEMBER 2, 2018.

SYCAMORE LANDFILL

**2019 LFG SYSTEM
 CONSTRUCTION
 AS-BUILT DRAWING
 PLAN VIEW**

| | |
|------------------|----------------------|
| DATE: 12/04/2019 | PROJECT NO. 2019.244 |
| DRAWN BY: P715 | CHECK BY: |
| REV. DATE | DESCRIPTION |
| | |



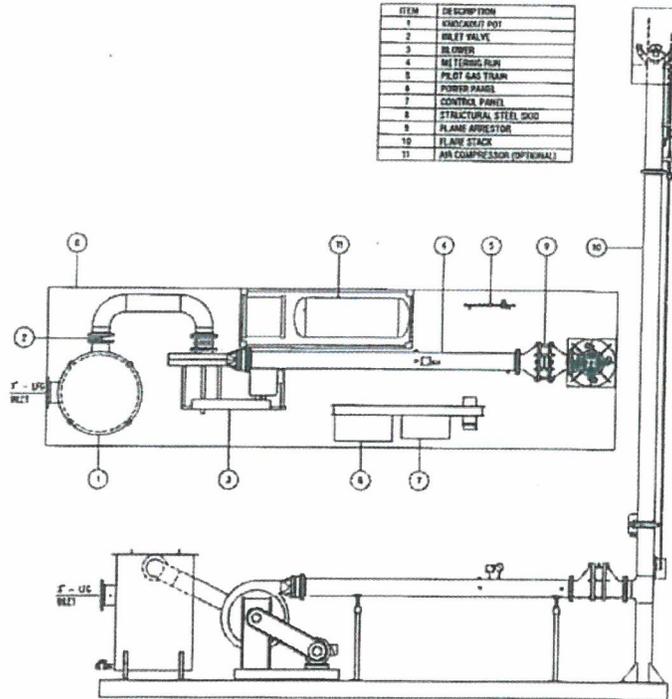
DRAWING
1
 of 1



ATTACHMENT C
PROCESS FLOW DIAGRAM

Flare Layout

| ITEM | DESCRIPTION |
|------|---------------------------|
| 1 | KNOCKOUT POT |
| 2 | WILEY VALVE |
| 3 | SILVER |
| 4 | WETTING FILM |
| 5 | PILOT GAS TRAIN |
| 6 | POWER PANEL |
| 7 | CONTROL PANEL |
| 8 | STRUCTURAL STEEL SKID |
| 9 | FLAME ARRESTOR |
| 10 | FLAME STACK |
| 11 | AIR COMPRESSOR (OPTIONAL) |



ATTACHMENT D
EQUIPMENT TABLE

ATTACHMENT E
EMISSION UNIT FORM

ATTACHMENT E - Emission Unit Form

Emission Unit Description

| | | |
|--------------------------------------|-------------------------------------|--|
| Emission unit ID number: 1 | Emission unit name: Flare | List any control devices associated with this emission unit: Flare |
|--------------------------------------|-------------------------------------|--|

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
The gas rate can be regulated through manual shutoff valves. The maximum capacity of the flare is 1,500 cfm (90,000 cf/hr).

| | | |
|-----------------------------------|----------------------|-----------------------|
| Manufacturer: John Zink | Model number: | Serial number: |
|-----------------------------------|----------------------|-----------------------|

| | | |
|-----------------------------------|-----------------------------------|--|
| Construction date: 2012 | Installation date: 2012 | Modification date(s): MM/DD/YYYY |
|-----------------------------------|-----------------------------------|--|

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
1500 cfm

| | | |
|---|-----------------------------------|---|
| Maximum Hourly Throughput: 90,000 | Maximum Annual Throughput: | Maximum Operating Schedule: 24/7/52 |
|---|-----------------------------------|---|

Fuel Usage Data (fill out all applicable fields)

| | |
|--|--|
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired |
|--|--|

| | |
|--|---|
| Maximum design heat input and/or maximum horsepower rating: | Type and Btu/hr rating of burners: |
|--|---|

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|-----------|---------------------|------------------|-----------|
| | | | |
| | | | |
| | | | |

| <i>Emissions Data</i> | | |
|--|---------------------|------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | 16.7 | 73.0 |
| Nitrogen Oxides (NO _x) | 3.06 | 13.4 |
| Lead (Pb) | 0.0 | 0.0 |
| Particulate Matter (PM _{2.5}) | 0.77 | 1.4 |
| Particulate Matter (PM ₁₀) | 0.77 | 1.4 |
| Total Particulate Matter (TSP) | 0.77 | 1.4 |
| Sulfur Dioxide (SO ₂) | 2.77 | 12.1 |
| Volatile Organic Compounds (VOC) | 0.22 | 1.0 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Total HAP | 0.63 | 2.8 |
| See attached table | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| | | |
| | | |
| | | |

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Emissions are based on the amount of gas that is directed at the flare and emission factors found in AP-42

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

45 CSR 06 To Prevent and Control Air Pollution from Combustion of Refuse: The landfill flare is subject to the provisions of this regulation. Opacity from the flare is maintained below Ringelmann Smoke Chart No. 1.

45 CSR 13 Permits for Construction, Modification, Relocation, and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Temporary Permits, General Permits, and Procedures for Evaluation. The landfill is subject to the requirements of Rule 6.

45 CSR 23 To Prevent and Control Emissions from Municipal Solid Waste Landfills. The landfill is subject to the NSPS. The facility has a design capacity greater than 2.5 million cubic meters. The landfill is in compliance with the provisions under this regulation. The landfill is not subject to the control requirements of the NSPS, but voluntarily operates in a manner to reduce the NMOC emissions

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

45 CSR 06- No compliance method specified. The flare will minimize odors generated at the site due to proper operation and maintenance.

45 CSR 13-The site is in compliance with this regulation via obtaining the proper permits for operation of the flare.

45 CSR 13 –Compliance based upon visual observations indicating no visible emissions

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT F
SCHEDULE OF COMPLIANCE FORMS
(NOT APPLICABLE)

ATTACHMENT G
AIR POLLUTION CONTROL DEVICE FORM

ATTACHMENT H
COMPLIANCE ASSURANCE MONITORING (CAM) FORM
(NOT APPLICABLE)

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number:

1

List all emission units associated with this control device.

Cells 1-3

Manufacturer:

John Zink

Model number:

Installation date:

2012

Type of Air Pollution Control Device:

- | | | |
|---|--|---|
| <input type="checkbox"/> Baghouse/Fabric Filter | <input type="checkbox"/> Venturi Scrubber | <input type="checkbox"/> Multiclone |
| <input type="checkbox"/> Carbon Bed Adsorber | <input type="checkbox"/> Packed Tower Scrubber | <input type="checkbox"/> Single Cyclone |
| <input type="checkbox"/> Carbon Drum(s) | <input type="checkbox"/> Other Wet Scrubber | <input type="checkbox"/> Cyclone Bank |
| <input type="checkbox"/> Catalytic Incinerator | <input type="checkbox"/> Condenser | <input type="checkbox"/> Settling Chamber |
| <input type="checkbox"/> Thermal Incinerator | <input checked="" type="checkbox"/> Flare | <input type="checkbox"/> Other (describe) _____ |
| <input type="checkbox"/> Wet Plate Electrostatic Precipitator | | <input type="checkbox"/> Dry Plate Electrostatic Precipitator |

List the pollutants for which this device is intended to control and the capture and control efficiencies.

| Pollutant | Capture Efficiency | Control Efficiency |
|-------------|--------------------|--------------------|
| NMOC as VOC | 75% per AP-42 | 98% |
| | | |
| | | |
| | | |

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

The flare burns landfill gas. Gas rate can be regulated through manual shutoff valves. Maximum capacity of the flare is 1,500 cfm. The flare is equipped with 2 thermocouples: one for the pilot, one for the flare. In the event of flame failure, a signal is sent to shut down the flame. Subsequently, the flare cools to a set point and the ignition process is initiated to relight the pilot and restart the flare.

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.**

Not applicable because source is subject to an NSPS which was proposed after 11/15/90.

Describe the parameters monitored and/or methods used to indicate performance of this control device.

1. Must operate a heat-sensing device at the pilot light or the flame to indicate the continuous presence of a flame. If the device senses flame failure, the flame system will automatically attempt to reignite the flame. In the event of pilot flame failure, an audible and/or visible alarm shall be activated.
2. The exit gas velocity from the flare shall not be less than 2.17 feet/second and shall not exceed 60 feet/second.