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BEFORE THE

IDAHO BOARD OF ENVIRONMENTAL QUALITY

HIDDEN HOLLOW ENERGY LLC, Petitioner, vs. IDAHO DEPARTMENT OF ENVIRONMENTAL QUALITY, Respondent.	Permit to Construct No. P-2009.0098 **PETITION TO INITIATE CONTESTED CASE**

ATTENTION: HEARING COORDINATOR

I. INTRODUCTION

1. This is a formal Petition to initiate a contested case filed by Hidden Hollow Energy LLC ("HHE" or the "Petitioner") with the Idaho Board of Environmental Quality

(the "Board") pursuant to Idaho Code Section 39-107(5), Rules 001.03, 100, and 211 of IDAPA 58.01.23, Rule 003 of IDAPA 58.01.01, and other applicable law.

2. On June 19, 2012, the Idaho Department of Environmental Quality ("DEQ") issued the Air Quality Permit to Construct attached hereto as Exhibit A to HHE (the "Permit"). This Permit governs air emissions from two existing internal combustion engines and two additional proposed internal combustion engines that convert landfill gas produced by the Ada County Hidden Hollow Landfill into energy.

3. By filing this Petition, HHE hereby challenges the following aspects of the Permit:

a. The Permit's requirement that HHE install a hydrogen sulfide ("H_2S") removal system, in order to treat the landfill gas prior to its combustion in HHE's engines. This requirement is located primarily in Permit Condition 13, though other references to this requirement include Conditions 2 and 5(b) and pages 15 and 18 of the Permit.

b. The Permit's requirement that, after installation of the H_2S removal system, H_2S concentrations within the landfill gas combusted in HHE's engines shall not exceed 180 ppmv. This requirement is located primarily in Permit Condition 7, though other references to this requirement include Permit Condition 23.

c. The Permit's incorporation and application of the federal new source performance standards regulations contained in 40 C.F.R. Part 60, Subpart WWW (Standards of Performance for Municipal Solid Waste Landfills) to HHE's engines. Permit Conditions 14-16, 20, 28, and 34, as well as the introductory material found on pages 4, 15, and 18 of the Permit, all incorporate these federal regulations.

d. The Permit's incorporation and application of the federal regulations contained in 40 C.F.R. Part 63, Subpart AAAA (National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills) to HHE's engines. Permit Conditions 17, 18, and 29-33, as well as the introductory material found on pages 4, 15, and 18 of the Permit, all incorporate these federal regulations.

II. PRELIMINARY MATTERS

4. Copies of all pleadings and other correspondence in this matter should be served upon counsel for HHE as follows:

Dylan B. Lawrence, MOFFATT, THOMAS, BARRETT, ROCK & FIELDS, CHARTERED, 101 S. Capitol Boulevard, 10th Floor, Post Office Box 829, Boise, Idaho 83701-0829; Telephone: (208) 345-2000; Facsimile: (208) 385-5384.

In support of its Petition, HHE alleges as follows:

III. IDENTITY OF THE PARTIES

5. HHE is a Delaware limited liability company, duly registered to conduct business in the state of Idaho. HHE's address is Hidden Hollow Energy LLC, c/o Fortistar Methane Group, One North Lexington Avenue, White Plains, New York 10601.

6. Pursuant to Article IV, Section 20 of the Idaho Constitution and Idaho Code Section 39-104(1), DEQ is an executive department and administrative agency of the State of Idaho, with its principal offices located at 1410 N. Hilton, Boise, Idaho 83706-1255. DEQ, through its Director and subject to the oversight of the Board, is responsible for the general supervision of the promotion and protection of the environment within the State of Idaho, including the issuance of air emissions permits. IDAHO CODE §§ 39-104 – 39-106.

IV. STANDING AND JURISDICTION

7. HHE is the permittee under the Permit, and is the owner and operator of the existing engines regulated by the Permit. Therefore, pursuant to Rules 010.01 and 100 of IDAPA 58.01.23, Rule 003 of IDAPA 58.01.01, and other applicable law, HHE has standing to pursue this matter.

8. Pursuant to Idaho Code Section 39-107(5), Rules 001.03, 100, and 211 of IDAPA 58.01.23, and Rule 003 of IDAPA 58.01.01, the Board has jurisdiction of contested cases involving actions or inaction by DEQ. This Petition is timely filed pursuant to Rule 100 of IDAPA 58.01.23. Therefore, the Board has jurisdiction over this matter.

V. FACTUAL AND LEGAL ALLEGATIONS

A. General Allegations

9. HHE owns and operates two internal combustion engines and associated infrastructure, located within Ada County's "Hidden Hollow" landfill site located at 10300 North Seamans Gulch Road, Boise, Idaho (the "Ada County Landfill" or the "Landfill"), that convert landfill gas to energy (HHE's "GTE System" or the "System").

10. DEQ refers to HHE's GTE System as Facility ID No. 001-00214 and to the Ada County Landfill as Facility ID No. 001-00195.

11. HHE has owned and operated its GTE System at the Ada County Landfill since 2008, when it acquired the System from G2 Energy LLC ("G2").

12. Under the ownership and operation of both G2 and HHE, the GTE System has been converting landfill gas to energy since approximately 2006.

13. HHE operates the GTE System at the Ada County Landfill pursuant to that certain "Amended and Restated Landfill Gas Franchise Agreement," dated February 22, 2011

(the "Franchise Agreement") and that certain "Amended Facility Site License Agreement – Amended Right of Way and Operating License Agreement," dated February 22, 2011, which incorporates by reference that certain "Facility Site License Agreement – Right of Way and Operating License Agreement," dated February 22, 2011 (collectively, the "License Agreement").

14. Pursuant to the Franchise Agreement, Ada County is obligated to deliver landfill gas produced by the Landfill and collected by its Landfill gas collection system to HHE's GTE System through September 30, 2031.

15. After delivery of Landfill gas to HHE's GTE System, HHE dewaters, compresses, cools, and filters the gas in a treatment system, prior to combustion in HHE's two existing engines.

16. Pursuant to the License Agreement, Ada County authorizes HHE to occupy a small parcel within the 2,700-acre Ada County Landfill property for the operation of HHE's GTE System.

17. HHE sells the power generated by its GTE System to Idaho Power pursuant to that certain "Firm Energy Sales Agreement," dated October 11, 2005, which was approved by the Idaho Public Utilities Commission on December 6, 2005, pursuant to its Order No. 29928.

18. On or about July 15, 2009, HHE submitted an application to DEQ for a Permit to Construct, seeking authorization to construct two additional engines as part of its GTE System, in order to convert additional Landfill gas into power. In response, DEQ issued Permit to Construct No. P-2009.0098, dated March 1, 2010.

19. Based upon additional information regarding H_2S concentrations in the Ada County Landfill gas, DEQ issued the Permit dated June 19, 2012, as a replacement for the Permit to Construct of March 1, 2010. This is the Permit which HHE now challenges.

B. Allegations Regarding the H_2S Limitation and Removal System (Permit Conditions 7 and 13)

20. Prior to the issuance of the Permit, the air permits issued by DEQ for HHE's GTE System did not contain limitations on the concentrations of H_2S present within the Landfill gas processed through the System.

21. Landfill gas that is not converted to energy through HHE's GTE System is burned in two flares owned and operated by Ada County.

22. In approximately May or June 2011, it was discovered that Ada County's Landfill gas contained higher concentrations of H_2S than previously thought.

23. Based upon this new information, on or about December 22, 2011, Ada County submitted a new Permit to Construct application to DEQ.

24. On or about February 13, 2012, DEQ issued a draft Permit to Construct to Ada County regulating, among other things, air emissions from the County's Landfill gas flares (Permit No. P-2009.0001). Condition 7 of this draft permit would require that landfill gas burned in Ada County's flares contain concentrations of H_2S no greater than 600 ppm.

25. On or about June 19, 2012, DEQ issued the Permit to HHE, which governs air emissions from HHE's two existing engines and two additional proposed engines that have yet to be constructed.

26. The Permit requires that landfill gas processed through HHE's GTE System contain concentrations of H_2S no greater than 180 ppmv. This requirement is embodied

primarily in Condition 7 of the Permit. Additional references to this requirement include, but are not limited to, Permit Condition 23.

27. The source of the Landfill gas combusted by HHE's GTE System or, alternatively, by Ada County's flares, is the same. In other words, all gas combusted either by HHE's GTE System or by the Ada County flares originates from the Ada County Landfill and is collected and supplied by Ada County's Landfill gas collection system.

28. The fact that HHE's GTE System and Ada County's flares combust the same Landfill gas calls the disparate H_2S concentration limits (600 ppm as applied to Ada County (proposed), 180 ppmv as applied to HHE) into serious question.

29. In order to achieve the 180 ppmv H_2S concentration limit, the Permit also requires HHE to install an H_2S removal system. This requirement is embodied primarily in Condition 13 of the Permit. Additional references to this requirement include, but are not limited to, Permit Conditions 2 and 5(b), as well as pages 15 and 18 of the Permit.

30. DEQ regulates concentrations of H_2S in the Landfill gas in order to control emissions of sulfur dioxide ("SO_2") from HHE's engines and Ada County's flares, because H_2S produces SO_2 when combusted.

31. The airshed in question is considered to be in attainment with national ambient air quality standards governing SO_2.

32. Prior permits issued by DEQ to HHE and Ada County concluded that HHE's GTE System was part of the same overall "facility" as the Ada County Landfill for air modeling purposes, pursuant to the definition of "facility" in IDAPA 58.01.01.006.40.

33. In connection with its issuance of the Permit, DEQ reversed itself, concluding that HHE's System and the Ada County Landfill are two separate and distinct facilities for air modeling purposes.

34. In connection with this reversal of position, DEQ incorrectly relied upon and applied various regulatory guidance letters and memoranda authored by the U.S. Environmental Protection Agency ("EPA"), including, but not limited to, that certain "Memorandum" dated June 22, 2007, from Stephen D. Page to EPA's Regional Air Division Directors.

35. Based in part upon its reversal of position, DEQ determined that, for modeling purposes, the "ambient air" associated with the Ada County Landfill is different than the "ambient air" associated with the HHE System, pursuant to the definition of "ambient air" in IDAPA 58.01.01.006.10.

36. More specifically, DEQ determined that for the Ada County Landfill, there is no "ambient air" within the boundaries of the Landfill. Instead, according to DEQ, the ambient air for the Ada County Landfill is external to, and begins at, the boundaries of the Landfill.

37. By contrast, for HHE's System, DEQ determined that the ambient air includes the entire Landfill site, except for the small parcel occupied by the HHE GTE System.

38. The disparity between the 180 ppmv H_2S limitation as applied to HHE and the 600 ppm H_2S limitation as applied to Ada County is a result of DEQ's change in position regarding its previous "one facility" determination and of DEQ's application of disparate "ambient air" boundaries to HHE and Ada County.

39. In addition, other aspects of DEQ's modeling do not satisfy Rule 202.02 of IDAPA 58.01.01, 40 C.F.R. Part 51, App. W (Guideline on Air Quality Models), and other air modeling standards, including, but not limited to, the selection of inappropriate background values, selection of background values based upon other geographic locations, incorrect assumptions regarding public access within the Landfill, and incorrect assumptions regarding the time HHE's GTE System will be operational.

40. The initial capital expenditures and ongoing operating costs associated with a new H_2S removal system threaten the economic feasibility of HHE's landfill gas-to-energy project.

41. Without HHE's project, Landfill gas that would have been converted to energy through HHE's System will instead be combusted by Ada County's flares.

42. Utilizing Landfill gas to produce energy through HHE's System is better for the environment than simply burning the gas in Ada County's flares with no end use, because HHE's System produces power for the consumer power grid that would otherwise have to be produced by other means, while the Ada County flares do not.

43. In addition, HHE's emissions stacks exhibit better dispersion characteristics and therefore produce less pollution at the boundary of the Ada County Landfill than do Ada County's flares.

C. Allegations Regarding the Applicability of 40 C.F.R. Part 60, Subpart WWW, and Part 63, Subpart AAAA

44. Various Conditions of the Permit incorporate the requirements of 40 C.F.R. Part 60, Subpart WWW, and Part 63, Subpart AAAA. These include, but are not necessarily limited to, Permit Conditions 14-18, 20, 28-33, and 34, and the introductory material on pages 4, 15, and 18 of the Permit.

45. However, these regulations do not apply to HHE or its GTE System.

46. According to 40 C.F.R. § 60.752(b)(2)(iii)(C), the owner or operator of a landfill gas collection system may "route the collected gas to a treatment system that processes the collected gas for subsequent sale or use."

47. When a landfill owner or operator uses this option, combustion devices beyond the gas collection and treatment system are exempt from the referenced regulations.

48. After receiving Landfill gas at its delivery point from Ada County, HHE's GTE System treats the gas prior to its combustion for power production and sale.

49. Therefore, 40 C.F.R. Part 60, Subpart WWW does not apply to HHE or its GTE System.

50. In addition, by their own terms, the requirements of 40 C.F.R. Part 60, Subpart WWW only apply to the "owner or operator" of an MSW landfill. *See, e.g.*, 40 C.F.R. §§ 60.752-60.754, 60.756-60.759.

51. Similarly, pursuant to 40 C.F.R. § 63.1935, the requirements of 40 C.F.R. Part 63, Subpart AAAA only apply to those who "own or operate" a MSW landfill.

52. HHE's activities at the Ada County Landfill are limited to its ownership and operation of its own GTE System. It is not the owner or operator of the Ada County Landfill and is not responsible for the disposal of any solid wastes.

53. Therefore, the requirements of 40 C.F.R. Part 60, Subpart WWW, and Part 63, Subpart AAAA do not apply to HHE.

54. If HHE is considered to be the "owner or operator" of a MSW landfill pursuant to these federal regulations, then the "ambient air" analysis applied to HHE should be the same as that applied to the Ada County Landfill. In other words, the "ambient air" should be

the same for the Ada County Landfill and HHE's GTE System, and should begin at the boundary of the Landfill for air modeling purposes.

VI. RESERVATION OF RIGHTS

55. This matter involves complex issues of fact and law. Pursuant to Rule 211 of IDAPA 58.01.23, HHE has identified the aspects and conditions of the Permit that it seeks to challenge, and the factual and legal bases underlying those challenges. As discovery and further research and investigation are conducted, HHE reserves the right to amend, supplement, and refine the bases of its challenge.

VII. PRAYER FOR RELIEF

WHEREFORE, HHE respectfully requests that the Board issue an order:

1. Remanding this matter to DEQ to establish a new H_2S concentration limit in Condition 7 of the Permit, based upon revised air modeling, correction of the errors and deficiencies identified in this Petition, and correction of any other relevant errors or deficiencies identified during this contested case proceeding.

2. Remanding this matter to DEQ to re-evaluate whether the installation of a new H_2S removal system pursuant to Permit Condition 13 is necessary in light of the revised H_2S concentration limit in Condition 7.

3. Confirming that the regulations in 40 C.F.R. Part 60, Subpart WWW do not apply to HHE and its System, and therefore deleting those requirements from the Permit.

4. Confirming that the regulations in 40 C.F.R. Part 63, Subpart AAAA do not apply to HHE and its System, and therefore deleting those requirements from the Permit

5. Granting any other relief in favor of Petitioner that the Board deems necessary and appropriate under the circumstances.

RESPECTFULLY SUBMITTED this 24th day of July, 2012.

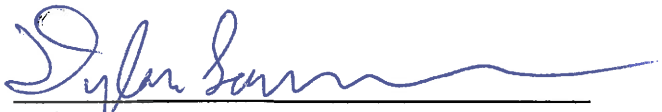
MOFFATT, THOMAS, BARRETT, ROCK & FIELDS, CHARTERED

By _____
Dylan B. Lawrence – Of the Firm
Attorneys for Petitioner

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that on this 24th day of July, 2012, I caused a true and correct copy of the foregoing **PETITION TO INITIATE CONTESTED CASE** to be served by the method indicated below, and addressed to the following:

Hearing Coordinator DEPARTMENT OF ENVIRONMENTAL QUALITY 1410 N. Hilton Boise, ID 83706-1255	( ) U.S. Mail, Postage Prepaid (x) Hand Delivered ( ) Overnight Mail ( ) Facsimile
IDAHO DEPARTMENT OF ENVIRONMENTAL QUALITY 1410 N. Hilton Boise, ID 83706-1255	( ) U.S. Mail, Postage Prepaid (x) Hand Delivered ( ) Overnight Mail ( ) Facsimile



Dylan B. Lawrence

EXHIBIT A

Air Quality

PERMIT TO CONSTRUCT

Permittee	**Hidden Hollow Energy, LLC**
Permit Number	**P-2009.0098**
Project ID	**60803**
Facility ID	**001-00214**
Facility Location	**10300 Seamans Gulch, Boise, Idaho 83702**

Permit Authority

This permit (a) is issued according to the *Rules for the Control of Air Pollution in Idaho (Rules)*, IDAPA 58.01.01.200-228; (b) pertains only to emissions of air contaminants regulated by the state of Idaho and to the sources specifically allowed to be constructed or modified by this permit; (c) has been granted on the basis of design information presented with its application; (d) does not affect the title of the premises upon which the equipment is to be located; (e) does not release the permittee from any liability for any loss due to damage to person or property caused by, resulting from, or arising out of the design, installation, maintenance, or operation of the proposed equipment; (f) does not release the permittee from compliance with other applicable federal, state, tribal, or local laws, regulations, or ordinances; (g) in no manner implies or suggests that the Department of Environmental Quality (DEQ) or its officers, agents, or employees, assume any liability, directly or indirectly, for any loss due to damage to person or property caused by, resulting from, or arising out of design, installation, maintenance, or operation of the proposed equipment. Changes in design, equipment or operations may be considered a modification subject to DEQ review in accordance with IDAPA 58.01.01.200-228.

Date Issued **June 19, 2012**

Morrie Lewis

Morrie Lewis, Permit Writer

Mike Simon

Mike Simon, Stationary Source Manager

PERMIT TO CONSTRUCT SCOPE

Purpose

1. This is a revised permit to construct for a landfill gas-to-energy facility. The facility consists of the landfill gas H_2S Removal System, Hidden Hollow Energy I Engines, and Hidden Hollow Energy 2 Engines. Each of the engines utilizes treated landfill gas from the Ada County Landfill to drive a 1.6-megawatt (MW) generator.

2. This permit establishes emission limits, requirements to install and operate a hydrogen sulfide (H_2S) landfill gas treatment system, and requirements for testing, monitoring, recordkeeping, and reporting.

3. Those permit conditions that have been modified or revised by this permitting action are identified by the permit issuance date citation located directly under the permit condition and on the right hand margin.

4. This PTC replaces Permit to Construct No. P-2009.0098, issued on March 1, 2010.

5. The emission sources regulated by this permit are listed in the following table.

Table 1 REGULATED SOURCES

Sources	Control Equipment
Engine No. 1 - Caterpillar 3520C, 2233 bhp or equivalent [a]	H_2S Removal System [b]
Engine No. 2 – Caterpillar 3520C, 2233 bhp or equivalent [a]	
Engine No. 3 - Caterpillar G3520C, 2233 bhp or equivalent [a]	
Engine No. 4 – Caterpillar G3520C, 2233 bhp or equivalent [a]	

a) "or equivalent" sources have an equivalent or less maximum brake horsepower (bhp) than the source listed in this table; "or equivalent" sources and control methods shall not result in an emission increase or in the emission of any regulated air pollutant not previously emitted (using the definitions provided in IDAPA 58.01.01.006) when compared to the sources and control methods listed in this table.

b) Emissions will be controlled following installation and commencement of operations of the H_2S Removal System.

FACILITY-WIDE CONDITIONS

Process Description

Hidden Hollow Energy LLC operates a landfill gas-to-energy facility utilizing landfill gas from the Ada County Landfill as fuel for four engines to drive 1.6-megawatt (MW) generators. At 100% load, each of the associated engines operates at 2233 brake horsepower (bhp). Hidden Hollow Energy 1, LLC comprises Engine 1 and 2, while Hidden Hollow Energy 2, LLC comprises Engines 3 and 4. All fuel used by each of these engines is obtained from the Ada County Landfill.

The landfill gas collected by the Ada County Landfill undergoes treatment prior to combustion in the engines. The treatment process includes dewatering, compression, cooling, filtration, and hydrogen sulfide (H_2S) removal. Each of the four engines is a control device for the collected landfill gas (in addition the flares operated by Ada County Landfill), and is therefore subject to 40 CFR Part 60, Subpart WWW and Part 63, Subpart AAAA.

Emissions Units	Control Equipment
Engine No. 1 - Caterpillar 3520C, 2233 bhp or equivalent [a,b]	H_2S Removal System [c]
Engine No. 2 – Caterpillar 3520C, 2233 bhp or equivalent [a,b]	
Engine No. 3 - Caterpillar G3520C, 2233 bhp or equivalent [a,b]	
Engine No. 4 – Caterpillar G3520C, 2233 bhp or equivalent [a,b]	

a) Spark ignition (SI), reciprocating internal combustion engines (RICE).

b) "or equivalent" sources have an equivalent or less maximum brake horsepower (bhp) than the source listed in this table; "or equivalent" sources and control methods shall not result in an emission increase or in the emission of any regulated air pollutant not previously emitted (using the definitions provided in IDAPA 58.01.01.006) when compared to the sources and control methods listed in this table.

c) Emissions will be controlled following installation and commencement of operations of the H_2S Removal System.

Emission Limits

6. CO Emission Limit

Combined carbon monoxide (CO) emissions from the four engines shall not exceed 249 tons per any consecutive 12-month period.

[6/19/12]

7. H_2S Concentration Limit

After installation of the landfill gas H_2S Removal System, the H_2S concentration of landfill gas combusted in the engines shall not exceed 180 ppmv.

[6/19/12]

8. Submittal of Information for T1 Permit Application

Within 60 days of permit issuance, the permittee shall submit the requested Tier I operating permit application information identified by DEQ in correspondence dated February 21, 2012.

[6/19/12]

9. Opacity Limit

Emissions from the engine stacks, or any other stack, vent, or functionally equivalent opening associated with engines, shall not exceed 20% opacity for a period or periods aggregating more than three minutes in any 60-minute period as required by IDAPA 58.01.01.625. Opacity shall be determined by the procedures contained in IDAPA 58.01.01.625.

10. Odors

The permittee shall not allow, suffer, cause, or permit the emission of odorous gasses, liquids, or solids to the atmosphere in such quantities as to cause air pollution in accordance with IDAPA 58.01.01.776.01.

[6/19/12]

Operating Requirements

11. Engine Operation and Maintenance

The permittee shall operate and maintain the engines in a manner consistent with the manufacturer's recommendations.

[3/1/10]

12. Allowable Fuel

The engines shall burn landfill gas only.

[3/1/10]

13. H_2S Removal System

The landfill gas H_2S Removal System shall be installed and commence operation no later than 180 days after permit issuance. The H_2S Removal System shall meet the following requirements:

- The H_2S concentration of the landfill gas exiting the H_2S Removal System, prior to being combusted in the engines, shall not exceed the H_2S Concentration Limit (Permit Condition 7).
- The system shall be capable of treating a minimum of 3,350 scfm of landfill gas.
- The system shall be operated by the permittee at all times that landfill gas is combusted in the landfill gas control devices (i.e., flare and internal combustion engines), except for periods of startup, shutdown, scheduled maintenance, safety measures, upset, and breakdown afforded by and determined to comply with the requirements appearing under IDAPA 58.01.01.130-136.
- At least 60 days prior to commencing construction of the landfill gas H_2S Removal System, the permittee shall submit a Permit to Construct application for a permit revision to DEQ in order to incorporate permit conditions relevant to the landfill gas H_2S Removal System design and operational parameters, operating and maintenance procedures, and relevant monitoring, recordkeeping, and reporting requirements.

[6/19/12]

14. NSPS 40 CFR 60, Subpart WWW – Standards for Air Emissions from Municipal Solid Waste Landfills

The permittee shall route all the collected landfill gas to a control system that complies with the requirements in either 40 CFR 60.752(b)(2)(iii)(A), (B) or (C):

- A control system designed and operated to either reduce nonmethane organic compounds (NMOC) by 98 weight percent or reduce the outlet NMOC concentration to less than 20 parts per million by volume, dry basis (ppmvd) as hexane at 3 percent oxygen. The reduction efficiency or parts per million by volume shall be established by an initial performance test to be completed no later than 180 days after the initial startup of the approved control system using the test methods specified in 40 CFR 60.754(d).
    - The control device shall be operated within the parameter ranges established during the initial or most recent performance test. The operating parameters to be monitored are specified in 40 CFR 60.756 (Permit Condition 16).

- Route the collected gas to a treatment system that processes the collected gas for subsequent sale or use. All emissions from any atmospheric vent from the gas treatment system shall be subject to the requirements above.
- Operate the collection and control device installed to comply with this subpart in accordance with the provisions of 40 CFR 60.753, 60.755 and 60.756.

[6/19/12]

15. NSPS 40 CFR 60, Subpart WWW – Operational Standards for Collection and Control Systems

- In accordance with 40 CFR 60.753(e), the permittee shall operate the landfill gas collection and control system such that all collected gases are vented to a control system designed and operated in compliance with 40 CFR 60.752(b)(2)(iii) (Permit Condition 14). In the event the collection or control system is inoperable, the gas mover system shall be shut down and all valves in the collection and control system contributing to venting of the gas to the atmosphere shall be closed within 1 hour.
- In accordance with 40 CFR 60.753(f), the permittee shall operate the control or treatment system at all times when the collected gas is routed to the system.

[6/19/12]

16. NSPS 40 CFR 60, Subpart WWW – Monitoring of Operations

The permittee shall install, calibrate, maintain, and operate according to the manufacturer's specifications, the following equipment in accordance with 40 CFR 60.756(b):

- A temperature monitoring device equipped with a continuous recorder and having a minimum accuracy of ±1 percent of the temperature being measured expressed in degrees Celsius or ±0.5 degrees Celsius, whichever is greater.
- A device that records gas flow rate to the control device. The device shall record the flow to the control device at least every 15 minutes.

[6/19/12]

17. NESHAP 40 CFR 63, Subpart AAAA – Develop a Startup, Shutdown and Malfunction Plan (SSM)

In accordance with 40 CFR 63.1960, the permittee shall develop a written SSM plan for the landfill gas treatment system according to the provisions in 40 CFR 63.6(e)(3).

- The permittee shall develop a written startup, shutdown, and malfunction plan that describes, in detail, procedures for operating and maintaining the source during periods of startup, shutdown, and malfunction; and a program of corrective action for malfunctioning process, air pollution control, and monitoring equipment used to comply with the relevant standard. The startup, shutdown, and malfunction plan does not need to address any scenario that would not cause the source to exceed an applicable emission limitation in the relevant standard. This plan must be developed by the owner or operator by the source's compliance date for that relevant standard. The purpose of the startup, shutdown, and malfunction plan is to—
  - Ensure that, at all times, the owner or operator operates and maintains each affected source, including associated air pollution control and monitoring equipment, in a manner which satisfies the general duty to minimize emissions established by 40 CFR 63.6(e)(1)(i);
  - Ensure that owners or operators are prepared to correct malfunctions as soon as practicable after their occurrence in order to minimize excess emissions of hazardous air pollutants; and
  - Reduce the reporting burden associated with periods of startup, shutdown, and malfunction (including corrective action taken to restore malfunctioning process and air pollution control equipment to its normal or usual manner of operation).

- To satisfy the requirements to develop a startup, shutdown, and malfunction plan, the owner or operator may use the affected source's standard operating procedures (SOP) manual, or an Occupational Safety and Health Administration (OSHA) or other plan, provided the alternative plans meet all the requirements and are made available for inspection or submitted when requested by the DEQ.

[3/1/10]

18. NESHAP 40 CFR 63, Subpart AAAA – Operation and Maintenance Requirements

In accordance with 40 CFR 63.6 (e)(1), the permittee must meet the following operation and maintenance requirements for the landfill gas treatment system:

- At all times, including periods of startup, shutdown, and malfunction, the owner or operator must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. During a period of startup, shutdown, or malfunction, this general duty to minimize emissions requires that the owner or operator reduce emissions from the affected source to the greatest extent which is consistent with safety and good air pollution control practices. The general duty to minimize emissions during a period of startup, shutdown, or malfunction does not require the owner or operator to achieve emission levels that would be required by the applicable standard at other times if this is not consistent with safety and good air pollution control practices, nor does it require the owner or operator to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures (including the startup, shutdown, and malfunction plan required in 40 CFR 63.6(e)(3)), review of operation and maintenance records, and inspection of the source.
- Malfunctions must be corrected as soon as practicable after their occurrence. To the extent that an unexpected event arises during a startup, shutdown, or malfunction, an owner or operator must comply by minimizing emissions during such a startup, shutdown, and malfunction event consistent with safety and good air pollution control practices.
- Operation and maintenance requirements established pursuant to section 112 of the Act are enforceable independent of emissions limitations or other requirements in relevant standards.

[3/1/10]

Performance Testing Requirements

19. CO Performance Testing

- *Hidden Hollow Energy 1*

  An initial performance test shall be conducted in accordance with the procedures specified in NSPS Subpart JJJJ (Permit Conditions 51 through 53). The results of this test shall be used to establish CO emission factors in pounds per million British Thermal Unit (lb/MMBtu) for engines 1 and 2. The most recent test results for each engine shall be used to calculate annual CO emissions to determine compliance with the CO Emission Limit (Permit Condition 6).

  Subsequent testing to verify and re-establish the CO emission factors shall occur at least once every three years.

- *Hidden Hollow Energy 2*

  An initial performance test shall be conducted in accordance with the procedures specified in NSPS Subpart JJJJ (Permit Conditions 51 through 53).

The results of this test shall be used to establish CO emission factors in pounds per million British Thermal Unit (lb/MMBtu) for engines 3 and 4. The most recent test results for each engine shall be used to calculate annual CO emissions to determine compliance with the CO Emission Limit (Permit Condition 6).

Subsequent testing to verify and re-establish the CO emission factors shall occur at least once every three years.

[6/19/12]

20. NSPS 40 CFR 60, Subpart WWW – Test Methods and Procedures

In accordance with 40 CFR 60.754(d), for the performance test required in 40 CFR 60.752(b)(2)(iii)(B) (Permit Condition 14), Method 25, 25C, or Method 18 of Appendix A of 40 CFR 60 must be used to determine compliance with the 98 weight-percent efficiency or the 20 ppmv outlet concentration level, unless another method to demonstrate compliance has been approved by the Administrator as provided by 40 CFR 60.752(b)(2)(i)(B). Method 3 or 3A shall be used to determine oxygen for correcting the NMOC concentration as hexane to 3 percent. In cases where the outlet concentration is less than 50 ppm NMOC as carbon (8 ppm NMOC as hexane), Method 25A should be used in place of Method 25. If using Method 18 of appendix A of this part, the minimum list of compounds to be tested shall be those published in the most recent Compilation of Air Pollutant Emission Factors (AP–42). The following equation shall be used to calculate efficiency:

$$\text{Control Efficiency} = (NMOC_{in} - NMOC_{out}) / (NMOC_{in})$$

Where,

$NMOC_{in}$ = mass of NMOC entering control device

$NMOC_{out}$ = mass of NMOC exiting control device

[6/19/12]

Monitoring and Recordkeeping Requirements

21. Odor Complaints

The permittee shall maintain records of all odor complaints received. If the complaint has merit, the permittee shall take appropriate corrective action as expeditiously as practicable. The records shall include, at a minimum, the date each complaint was received and a description of the following: the complaint, the permittee's assessment of the validity of the complaint, any corrective action taken, and the date the corrective action was taken.

[6/19/12]

22. CO Emissions Monitoring

CO emission factors established during CO Performance Testing (Permit Condition 19) shall be used as part of the compliance demonstration calculation for the CO Emission Limit (Permit Condition 6).

The methane content of the landfill gas shall be monitored and recorded daily. These records shall be used as part of the monthly MMBtu calculation.

On a monthly basis, the permittee shall calculate and record CO emissions from each of the four engines according to the following equation:

$$\text{lb/MMBtu} * \text{MMBtu/month} \div 2000 \text{ lb/T} = \text{T/month}$$

On a monthly basis, CO emissions from the four engines shall be summed together for that month and for the previous 11 months. The total monthly CO emissions and cumulative 12 consecutive month CO emissions shall be calculated and recorded in tons per month (T/mo) and in tons per year (T/yr). Each calculated 12-month CO emissions shall be used to assess excess emissions (Permit Condition 67) for the CO Emission Limit (Permit Condition 6).

Records of the calculations shall be maintained in accordance with the Recordkeeping General Provision.

[6/19/12]

23. H_2S Concentration Monitoring

The permittee shall determine the H_2S concentration, in ppmv, of the landfill gas stream prior to being combusted in the engines. Each H_2S concentration shall be calculated as the average of three consecutive H_2S sample measurements obtained within a fifteen-minute period.

Each calculated H_2S concentration shall be used to assess excess emissions (Permit Condition 67) for the H_2S Concentration Limit (Permit Condition 7). An excess emission occurs each unit operating hour included in the period beginning on the date and hour for which the H_2S concentration of the landfill gas being fired in any engine exceeds the H_2S Concentration Limit (Permit Condition 7) and ending on the date and hour that a subsequent sample is taken that demonstrates compliance with the H_2S Concentration Limit (Permit Condition 7).

[6/19/12]

24. H_2S Concentration Monitoring Schedule

Each H_2S concentration shall be determined as described in the H_2S Concentration Monitoring requirement (Permit Condition 23). H_2S concentration monitoring shall be conducted according to the following schedule:

- Beginning 45 days after permit issuance, and beginning on the day following commencement of operations of the landfill gas H_2S Removal System, the permittee shall monitor H_2S concentration on at least a daily basis.
- If calculated H_2S concentrations do not exceed the H_2S Concentration Limit (Permit Condition 7) for at least five consecutive business days, required H_2S monitoring shall be reduced to a frequency of once per week.
- If calculated H_2S concentrations do not exceed the H_2S Concentration Limit (Permit Condition 7) for at least four consecutive weeks, required H_2S monitoring shall be reduced to a frequency of once every two weeks.
- At any time a H_2S measurement exceeds the H_2S Concentration Limit (Permit Condition 7), H_2S monitoring shall revert to at least a daily basis and applicable excess emissions shall be assessed (Permit Conditions 23 and 67). After monitoring daily for at least five consecutive business days, subsequent H_2S measurements may be applied toward reducing the required monitoring frequency in the manner described above.

[6/19/12]

25. H_2S Concentration Recordkeeping

On a daily basis, the permittee shall record each calculated H_2S concentration and each H_2S sample measurement to ensure compliance with the H_2S Concentration Monitoring requirement (Permit Condition 23).

The monitor used to measure the H_2S concentration of the landfill gas stream shall have a certified accuracy of plus or minus 5%. The monitor shall be calibrated and maintained in accordance with manufacturer specifications.

Records of this information shall be maintained in accordance with the Recordkeeping General Provision (Permit Condition 66).

[6/19/12]

26. Gas Flow Rate Monitoring

Each time the H_2S concentration is monitored and recorded, the flow rate of the landfill gas used in the engines shall also be monitored and recorded in standard cubic feet per minute (scfm).

[6/19/12]

27. H_2S Reporting Requirements

H_2S concentrations and gas flow rates shall be submitted to Idaho DEQ each month beginning on the first of the month following permit issuance.

[6/19/12]

28. NSPS 40 CFR 60, Subpart WWW – Recordkeeping Requirements

- In accordance with 40 CFR 60.758(b), the permittee shall keep up-to-date, readily accessible records for the life of the control equipment of the data listed in paragraphs 40 CFR 60.758(b)(1) through (b)(4) as measured during the initial performance test or compliance determination. Records of subsequent tests or monitoring shall be maintained for a minimum of 5 years. Records of the control device vendor specifications shall be maintained until removal.
  - The average combustion temperature measured at least every 15 minutes and averaged over the same time period of the performance test.
  - The percent reduction of NMOC determined as specified in §60.752(b)(2)(iii)(B) achieved by the control device.
- In accordance with 40 CFR 60.758(c), the permittee shall keep for 5 years up-to-date, readily accessible continuous records of the equipment operating parameters specified to be monitored in 40 CFR 60.756 (Permit Condition 16) as well as up-to-date, readily accessible records for periods of operation during which the parameter boundaries established during the most recent performance test are exceeded.
  - All 3-hour periods of operation during which the average combustion temperature was more than 28 °C below the average combustion temperature during the most recent performance test at which compliance with 40 CFR 60.752(b)(2)(iii) was determined constitute exceedances that shall be recorded and reported under 40 CFR 60.757(f).
  - The permittee shall keep up-to-date, readily accessible continuous records of the indication of flow to the control device or the indication of bypass flow or records of monthly inspections of car-seals or lock-and-key configurations used to seal bypass lines, specified under 40 CFR 60.756.
- In accordance with 40 CFR 60.758(e), the permittee shall keep for at least 5 years up-to-date, readily accessible records of all collection and control system exceedances of the operational standards in 40 CFR 60.753, the reading in the subsequent month whether or not the second reading is an exceedance, and the location of each exceedance.

[6/19/12]

29. NESHAP 40 CFR 63, Subpart AAAA – Recordkeeping of SSM event

In accordance with 40 CFR 63.6 (e)(3), the permittee shall comply with the following recordkeeping requirements for the landfill gas treatment system:

- When actions taken by the owner or operator during a startup or shutdown (and the startup or shutdown causes the source to exceed any applicable emission limitation in the relevant emission standards), or malfunction (including actions taken to correct a malfunction) are consistent with the procedures specified in the affected source's startup, shutdown, and malfunction plan, the owner or operator must keep records for that event which demonstrate that the procedures specified in the plan were followed.
    - These records may take the form of a "checklist," or other effective form of recordkeeping that confirms conformance with the startup, shutdown, and malfunction plan and describes the actions taken for that event.
    - In addition, the permittee shall keep records of these events as specified in paragraph 63.10(b), including records of the occurrence and duration of each startup or shutdown (if the startup or shutdown causes the source to exceed any applicable emission limitation in the relevant emission standards), or malfunction of operation and each malfunction of the air pollution control and monitoring equipment.
    - Furthermore, the permittee shall confirm that actions taken during the relevant reporting period during periods of startup, shutdown, and malfunction were consistent with the affected source's startup, shutdown and malfunction plan in the semiannual (or more frequent) startup, shutdown, and malfunction report required in 40 CFR 63.10(d)(5).
- If an action taken by the permittee during a startup, shutdown, or malfunction (including an action taken to correct a malfunction) is not consistent with the procedures specified in the affected source's startup, shutdown, and malfunction plan, and the source exceeds any applicable emission limitation in the relevant emission standard, then the owner or operator must record the actions taken for that event and must report such actions within 2 working days after commencing actions inconsistent with the plan, followed by a letter within 7 working days after the end of the event, in accordance with 40 CFR 63.10(d)(5) (unless the owner or operator makes alternative reporting arrangements, in advance, with the Administrator).

[3/1/10]

30. NESHAP 40 CFR 63, Subpart AAAA – SSM Plan Maintenance

In accordance with 40 CFR 63.6 (e)(3)(v), the permittee shall comply with the following recordkeeping requirements for the landfill gas treatment system:

- The permittee shall maintain at the affected source a current startup, shutdown, and malfunction plan and must make the plan available upon request for inspection and copying by the Administrator.
- In addition, if the startup, shutdown, and malfunction plan is subsequently revised as provided in 40 CFR 63.6(e)(3)(viii), the owner or operator must maintain at the affected source each previous (i.e., superseded) version of the startup, shutdown, and malfunction plan, and must make each such previous version available for inspection and copying by the Administrator for a period of 5 years after revision of the plan.
- If at any time after adoption of a startup, shutdown, and malfunction plan the affected source ceases operation or is otherwise no longer subject to the provisions of this part, the owner or operator must retain a copy of the most recent plan for 5 years from the date the source ceases operation or is no longer subject to this part and must make the plan available upon request for inspection and copying by the Administrator.
- The Administrator may at any time request in writing that the owner or operator submit a copy of any startup, shutdown, and malfunction plan (or a portion thereof) which is maintained at the affected source or in the possession of the owner or operator.

- Upon receipt of such a request, the owner or operator must promptly submit a copy of the requested plan (or a portion thereof) to the Administrator.
- The owner or operator may elect to submit the required copy of any startup, shutdown, and malfunction plan to the Administrator in an electronic format. If the owner or operator claims that any portion of such a startup, shutdown, and malfunction plan is confidential business information entitled to protection from disclosure under section 114(c) of the Act or 40 CFR 2.301, the material that is claimed as confidential must be clearly designated in the submission.

[3/1/10]

31. NESHAP 40 CFR 63, Subpart AAAA – SSM Plan Revisions by Administrator

In accordance with 40 CFR 63.6 (e)(3)(vii), the permittee shall comply with the following recordkeeping requirements for the landfill gas treatment system:

- Based on the results of a determination made under 40 CFR 63.6(e)(1)(i), the Administrator may require that an owner or operator of an affected source make changes to the startup, shutdown, and malfunction plan for that source. The Administrator must require appropriate revisions to a startup, shutdown, and malfunction plan, if the Administrator finds that the plan:
  - Does not address a startup, shutdown, or malfunction event that has occurred;
  - Fails to provide for the operation of the source (including associated air pollution control and monitoring equipment) during a startup, shutdown, or malfunction event in a manner consistent with the general duty to minimize emissions established by paragraph 40 CFR 63.6(e)(1)(i);
  - Does not provide adequate procedures for correcting malfunctioning process and/or air pollution control and monitoring equipment as quickly as practicable; or
  - Includes an event that does not meet the definition of startup, shutdown, or malfunction listed in 40 CFR 63.2.

[3/1/10]

32. NESHAP 40 CFR 63, Subpart AAAA – SSM Plan Revisions by Permittee

In accordance with 40 CFR 63.6 (e)(3)(viii), the permittee shall comply with the following recordkeeping requirements for the landfill gas treatment system:

- The permittee may periodically revise the startup, shutdown, and malfunction plan for the affected source as necessary to satisfy the requirements of this part or to reflect changes in equipment or procedures at the affected source.
- Unless the permitting authority provides otherwise, the owner or operator may make such revisions to the startup, shutdown, and malfunction plan without prior approval by the Administrator or the permitting authority.
- However, each such revision to a startup, shutdown, and malfunction plan must be reported in the semiannual report required by 40 CFR 63.10(d)(5).
- If the startup, shutdown, and malfunction plan fails to address or inadequately addresses an event that meets the characteristics of a malfunction but was not included in the startup, shutdown, and malfunction plan at the time the owner or operator developed the plan, the owner or operator must revise the startup, shutdown, and malfunction plan within 45 days after the event to include detailed procedures for operating and maintaining the source during similar malfunction events and a program of corrective action for similar malfunctions of process or air pollution control and monitoring equipment.

- In the event that the permittee makes any revision to the startup, shutdown, and malfunction plan which alters the scope of the activities at the source which are deemed to be a startup, shutdown, or malfunction, or otherwise modifies the applicability of any emission limit, work practice requirement, or other requirement in a standard established under this part, the revised plan shall not take effect until after the owner or operator has provided a written notice describing the revision to the permitting authority.

[3/1/10]

33. NESHAP 40 CFR 63, Subpart AAAA – Records and Reports

In accordance with 40 CFR 63.1980, the permittee shall comply with the general provisions of 40 CFR 60 and 63 that are related to the SSM plan and plan reports for the landfill gas treatment system.

Part 63 Citation	Description
§63.2	Definitions
§63.6(e)	Operation and maintenance requirements, startup, shutdown and malfunction plan provisions
§63.10(b)(2)(i)–(v)	General recordkeeping requirements
§63.10(d)(5)	If actions taken during a startup, shutdown and malfunction plan are consistent with the procedures in the startup, shutdown and malfunction plan, this information shall be included in a semi-annual startup, shutdown and malfunction plan report. Any time an action taken during a startup, shutdown and malfunction plan is not consistent with the startup, shutdown and malfunction plan, the source shall report actions taken within 2 working days after commencing such actions, followed by a letter 7 days after the event

General Provision Citation	Subject of Citation	Applies to Subpart
§60.1	General applicability of the General Provisions	Yes
§60.2	Definitions	Yes
§60.3	Units and abbreviations	Yes
§60.4	Address	Yes
§60.7	Notification and Recordkeeping	Yes
§60.11	Compliance with standards and maintenance requirements	Yes
§60.19	General notification and reporting requirements	Yes

[3/1/10]

Reporting Requirements

34. NSPS 40 CFR 60, Subpart WWW – Reporting Requirements

The permittee shall submit an equipment removal report to the Administrator 30 days prior to removal or cessation of operation of the control equipment in accordance with 40 CFR 60.757(e).

[6/19/12]

35. Reporting Address

Any notifications or reporting required by 40 CFR 60 Subpart JJJ or 40 CFR 63 Subpart ZZZZ shall be submitted to both of the following addresses:

EPA Region 10
Director, Office of Air Quality
1200 Sixth Avenue
(OAQ–107)
Seattle, WA 98101

and,

Air Quality Permit Compliance
Department of Environmental Quality
Boise Regional Office
1445 N. Orchard St.
Boise, ID 83706

Phone: (208) 373-0550
Fax: (208) 373-0287

[3/1/10]

Incorporation of Federal Requirements by Reference

36. Unless expressly provided otherwise, any reference in this permit to any document identified in IDAPA 58.01.01.107.03 shall constitute the full incorporation into this permit of that document for the purposes of the reference, including any notes and appendices therein. Documents include, but are not limited to:

- Applicable requirements of Standards of Performance for New Stationary Sources (NSPS), 40 CFR Part 60
- Applicable requirements of National Emission Standards for Hazardous Air Pollutants (NESHAP), 40 CFR Part 63

For permit conditions referencing or cited in accordance with any document incorporated by reference (including permit conditions identified as NSPS and NESHAP), should there be any conflict between the requirements of the permit condition and the requirements of the document, the requirements of the document shall govern, including any amendments to that document.

[6/19/12]

HIDDEN HOLLOW ENERGY I ENGINES

Emissions Units and Control Equipment

The Hidden Hollow Energy I Engines consist of two Caterpillar 3520C spark-ignition internal combustion engines (Engines 1 and 2). The two engines were manufactured prior to June 12, 2006. Therefore, each engine is subject to NESHAP 40 CFR 63, Subpart ZZZZ requirements. These engines are enclosed combustion control devices when combusting landfill gas, subject to the requirements of NSPS 40 CFR Part 60, Subpart WWW and Part 63, Subpart AAAA (refer to the Facility-Wide Conditions section for additional requirements).

Emissions Units	Control Equipment
Engine No. 1 - Caterpillar 3520C, 2233 bhp or equivalent [a]	H_2S Removal System [b]
Engine No. 2 – Caterpillar 3520C, 2233 bhp or equivalent [a]	

a) "or equivalent" sources have an equivalent or less maximum brake horsepower (bhp) than the source listed in this table; "or equivalent" sources and control methods shall not result in an emission increase or in the emission of any regulated air pollutant not previously emitted (using the definitions provided in IDAPA 58.01.01.006) when compared to the sources and control methods listed in this table.

b) Emissions will be controlled following installation and commencement of operations of the H_2S Removal System.

37. NESHAP 40 CFR 63, Subpart ZZZZ – Compliance Date

In accordance with 40 CFR 63.6595(a)(1), the affected source must comply with the applicable emission and operating limitations of the National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, 40 CFR 63, Subpart ZZZZ, by October 19, 2013.

[6/19/12]

Operating Requirements

38. NESHAP 40 CFR 63, Subpart ZZZZ – Emissions and Operating Limitations

In accordance with 40 CFR 63.6603(a), on and after October 19, 2013, the following emission limits or operating restrictions are required for the engine. The permittee must meet the following requirements, except during periods of startup.

- Change oil and filter every 1,440 hours of operation or annually, whichever comes first.
- Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first.
- Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary.

[6/19/12]

39. NESHAP 40 CFR 63, Subpart ZZZZ – General Compliance

On and after October 19, 2013, the permittee shall operate and maintain the engines and associated pollution control equipment (where applicable) in a manner that minimizes emissions in accordance with 40 CFR 63.6605.

[6/19/12]

40. NESHAP 40 CFR 63, Subpart ZZZZ – General Maintenance

In accordance with 63.6625(e)(6) and Table 6 of the Subpart, on and after October 19, 2013, the permittee must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

[6/19/12]

41. NESHAP 40 CFR 63, Subpart ZZZZ – Engine Startup

On and after October 19, 2013, the engine's time spent at idle during startup shall be minimized to a period needed for appropriate and safe loading of the engine, but not to exceed 30 minutes, after which time the emission standards associated with this permit apply in accordance with 40 CFR 63.6625(h).

[6/19/12]

42. NESHAP 40 CFR 63, Subpart ZZZZ – Alternative Maintenance Program

In accordance with 40 CFR 63.6625(j), on and after October 19, 2013, the permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Emissions and Operating Limitations permit condition. The oil analysis must be performed at the same frequency specified for changing the oil. The analysis program must analyze at a minimum the following three parameters: Total Acid Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

[6/19/12]

Monitoring and Recordkeeping Requirements

43. NESHAP 40 CFR 63, Subpart ZZZZ – Reporting of Non-Compliance

In accordance with 40 CFR 63.6640(e), on and after October 19, 2013, the permittee shall report any instance when applicable General Provisions of 40 CFR 63, Subpart A are not being met.

[6/19/12]

44. NESHAP 40 CFR 63, Subpart ZZZZ – Recordkeeping Requirements

In accordance with 40 CFR 63.6655, on and after October 19, 2013, the following records must be kept onsite:

- A copy of each notification and report that was submitted
- Occurrence and duration of each malfunction of operation, control equipment and monitoring equipment
- All required maintenance on the engine(s), control and monitoring equipment
- Corrective Action taken

All records shall be readily accessible in hard copy or electronic form for a minimum of five (5) years after the date of each occurrence, measurement, maintenance procedure, corrective action or report in accordance with 40 CFR 63.6660

[6/19/12]

45. NESHAP 40 CFR 63, Subpart ZZZZ – Record Retention

In accordance with 40 CFR 63.6655(e), the permittee must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan if you own or operate any of the following RICE; an existing stationary RICE located at an area source of HAP emissions subject to management practices as shown in Table 2d to this subpart.

[6/19/12]

HIDDEN HOLLOW ENERGY 2 ENGINES

Emissions Units and Control Equipment

The Hidden Hollow Energy 2 Engines consist of two Caterpillar G3520C spark-ignition internal combustion engines (Engines 3 and 4). The two engines were manufactured on July 1, 2010. Therefore, each engine is subject to NESHAP 40 CFR 60, Subpart JJJJ requirements. These engines are enclosed combustion control devices when combusting landfill gas, subject to the requirements of NSPS 40 CFR Part 60, Subpart WWW and Part 63, Subpart AAAA (refer to the Facility-Wide Conditions section for additional requirements).

Emissions Units	Control Equipment
Engine No. 3 - Caterpillar G3520C, 2233 bhp or equivalent [a]	H_2S Removal System [b]
Engine No. 4 – Caterpillar G3520C, 2233 bhp or equivalent [a]	

a) "or equivalent" sources have an equivalent or less maximum brake horsepower (bhp) than the source listed in this table; "or equivalent" sources and control methods shall not result in an emission increase or in the emission of any regulated air pollutant not previously emitted (using the definitions provided in IDAPA 58.01.01.006) when compared to the sources and control methods listed in this table.

b) Emissions will be controlled folbwing installation and commencement of operations of the H_2S Removal System.

Emission Limits

46. NSPS 40 CFR 60, Subpart JJJJ – Emissions Standards

In accordance with 40 CFR 60.4233, the permittee must comply with the emission standards in Table 1 to this subpart for their stationary SI ICE.

Table 1 to Subpart JJJJ of Part 60—NO_X, CO, and VOC Emission Standards for Stationary Non-Emergency SI Engines ≥100 hp

Engine type and fuel	Maximum engine power	Manufacture date	Emission Standards [a]					
			g/hp-hr			ppmvd at 15% O_2		
			NO_X	CO	VOC [b]	NO_X	CO	VOC [b]
Landfill/Digester Gas	hp≥500	7/1/2010	2.0	5.0	1.0	150	610	80

a) Owners and operators of stationary non-certified SI engines may choose to comply with the emission standards in units of either g/hp-hr or ppmvd at 15 percent O_2.

b) For purposes of this subpart, when calculating emissions of volatile organic compounds, emissions of formaldehyde should not be included.

[3/1/10]

Operating Requirements

47. NSPS 40 CFR 60, Subpart JJJJ – Maintenance plan

In accordance with 40 CFR 60.4243(b)(2)(ii), the permittee shall keep a maintenance plan and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions.

[3/1/10]

48. NSPS 40 CFR 60, Subpart JJJJ – Lifetime Operation and Maintenance

In accordance with 40 CFR 60.4234, the permittee shall operate and maintain stationary SI ICE that achieve the emission standards as required in 40 CFR 60.4233(e) over the entire life of the engine.

[3/1/10]

49. NSPS 40 CFR 60, Subpart JJJJ – AFR Controller Maintenance and Operation

In accordance with 40 CFR 60.4243 (g), the permittee shall maintain and operate the AFR controller in order to ensure proper operation of the engine and control device to minimize emissions at all times.

[3/1/10]

Monitoring and Recordkeeping Requirements

50. NSPS 40 CFR 60, Subpart JJJJ – Records

In accordance with 40 CFR 60.4245 (a)(1) and (2), the permittee shall keep records of the following information:

- For each engine notifications submitted and all documentation supporting any notification.
- Maintenance conducted on each SI engine

The permittee shall maintain these records on-site and be made available to DEQ representatives upon request for a period of at least five years.

[6/19/12]

Performance Testing Requirements

51. NSPS 40 CFR 60, Subpart JJJJ – Performance Test Schedule

In accordance with 40 CFR 60.4243 (b)(2)(ii), the owner or operator shall conduct an initial performance test and conduct subsequent performance testing every 8,760 hours or 3 years, whichever comes first, thereafter to demonstrate compliance on each engine.

- The permittee shall conduct the initial performance test within 60 days after achieving the maximum production rate, but not later than 180 days after initial startup.

[3/1/10]

52. NSPS 40 CFR 60, Subpart JJJJ – Performance Test Procedures

In accordance with 40 CFR 60.4244, the permittee shall follow the procedures:

- Each performance test must be conducted within 10 percent of 100 percent peak (or the highest achievable) load and according to the requirements in §60.8 and under the specific conditions that are specified by Table 2 to Subpart JJJJ.
- The permittee may not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in §60.8(c). If your stationary SI internal combustion engine is non-operational, you do not need to startup the engine solely to conduct a performance test.
- The permittee must conduct three separate test runs for each performance test required in this section, as specified in §60.8(f). Each test run must be conducted within 10 percent of 100 percent peak (or the highest achievable) load and last at least 1 hour.
- To determine compliance with the NO_x mass per unit output emission limitation for each engine, the permittee shall convert the concentration of NO_x in the engine exhaust using the following equation:

$$ER = \frac{C_d * 1.912 * 10^{-3} * Q * T}{HP - hr}$$

Where:

ER = Emission rate of NO_x in g/hp-hr.

C_d = Measured NO_x concentration in parts per million by volume (ppmv).

1.912×10^{-3} = Conversion for ppm NO_x to grams per standard cubic meter @ 20 degrees Celsius.

Q = Stack gas volumetric flow rate, in standard cubic meter per hour, dry basis.

T = Time of test run, in hours.

HP-hr = Brake work of the engine, horsepower-hour.

- To determine compliance with the CO mass per unit output emission limitation, the permittee shall convert the concentration of CO in the engine exhaust using the following equation:

$$ER = \frac{C_d * 1.164 * 10^{-3} * Q * T}{HP - hr}$$

Where:

ER = Emission rate of CO in g/hp-hr.

C_d = Measured CO concentration in parts per million by volume (ppmv).

1.164×10^{-3} = Conversion for ppm CO to grams per standard cubic meter @ 20 degrees Celsius.

Q = Stack gas volumetric flow rate, in standard cubic meter per hour, dry basis.

T = Time of test run, in hours.

HP-hr = Brake work of the engine, horsepower-hour.

- When calculating emissions of VOC, emissions of formaldehyde should not be included. To determine compliance with the VOC mass per unit output emission limitation, the permittee shall convert the concentration of VOC in the engine exhaust using the following equation:

$$ER = \frac{C_d * 1.833 * 10^{-3} * Q * T}{HP - hr}$$

Where:

ER = Emission rate of VOC in g/hp-hr.

C_d = Measured VOC concentration as propane in parts per million by volume (ppmv).

1.833×10^{-3} = Conversion for ppm VOC measured as propane to grams per standard cubic meter @ 20 degrees Celsius.

Q = Stack gas volumetric flow rate, in standard cubic meter per hour, dry basis.

T = Time of test run, in hours.

HP-hr = Brake work of the engine, horsepower-hour.

[3/1/10]

53. As stated in 40 CFR 60.4244 (a), the permittee must comply with the following requirements for performance tests within 10 percent of 100 percent peak (or the highest achievable) load:

Table 2 to Subpart JJJJ of Part 60—Requirements for Performance Tests

For each	Complying with the requirement to	You must	Using	According to the following requirements
1. Stationary SI internal combustion engine demonstrating compliance according to §60.4244.	a. limit the concentration of NO_x in the stationary SI internal combustion engine exhaust.	i. Select the sampling port location and the number of traverse points;	(1) Method 1 or 1A of 40 CFR part 60, appendix A or ASTM Method D6522–00(2005)[a].	(a) If using a control device, the sampling site must be located at the outlet of the control device.
		ii. Determine the O_2 concentration of the stationary internal combustion engine exhaust at the sampling port location;	(2) Method 3, 3A, or 3B[b] of 40 CFR part 60, appendix A or ASTM Method D6522–00(2005)[a].	(b) Measurements to determine O_2 concentration must be made at the same time as the measurements for NO_x concentration.	
		iii. Determine the exhaust flow rate of the stationary internal combustion engine exhaust;	(3) Method 2 or 19 of 40 CFR part 60.		
		iv. If necessary, measure moisture content of the stationary internal combustion engine exhaust at the sampling port location; and	(4) Method 4 of 40 CFR part 60, appendix A, Method 320 of 40 CFR part 63, appendix A, or ASTM D6348–03 (incorporated by reference, see §60.17).	(c) Measurements to determine moisture must be made at the same time as the measurement for NO_x concentration.	
		v. Measure NO_x at the exhaust of the stationary internal combustion engine.	(5) Method 7E of 40 CFR part 60, appendix A, Method D6522–00(2005)[a], Method 320 of 40 CFR part 63, appendix A, or ASTM D6348–03 (incorporated by reference, see §60.17).	(d) Results of this test consist of the average of the three 1-hour or longer runs.	
	b. limit the concentration of CO in the stationary SI internal combustion engine exhaust.	i. Select the sampling port location and the number of traverse points;	(1) Method 1 or 1A of 40 CFR part 60, appendix A.	(a) If using a control device, the sampling site must be located at the outlet of the control device.
		ii. Determine the O_2 concentration of the stationary internal combustion engine exhaust at the sampling port location;	(2) Method 3, 3A, or 3B[b] of 40 CFR part 60, appendix A or ASTM Method D6522–00(2005)[a].	(b) Measurements to determine O_2 concentration must be made at the same time as the measurements for CO concentration.	
		iv. If necessary, measure moisture content of the stationary internal combustion engine exhaust at the sampling	(4) Method 4 of 40 CFR part 60, appendix A, Method 320 of 40 CFR part 63, appendix A, or ASTM D6348–03 (incorporated by reference, see §60.17).	(c) Measurements to determine moisture must be made at the same time as the measurement for CO concentration.	

For each	Complying with the requirement to	You must	Using	According to the following requirements
	port location; and			
	v. Measure CO at the exhaust of the stationary internal combustion engine.	(5) Method 10 of 40 CFR part 60, appendix A, ASTM Method D6522–00(2005)[a], Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348–03 (incorporated by reference, see §60.17).	(d) Results of this test consist of the average of the three 1-hour or longer runs.	
	c. limit the concentration of VOC in the stationary SI internal combustion engine exhaust.	i. Select the sampling port location and the number of traverse points;	(1) Method 1 or 1A of 40 CFR part 60, appendix A.	(a) If using a control device, the sampling site must be located at the outlet of the control device.
	ii. Determine the O_2 concentration of the stationary internal combustion engine exhaust at the sampling port location;	(2) Method 3, 3A, or 3B[b] of 40 CFR part 60, appendix A or ASTM Method D6522–00(2005)[a].	(b) Measurements to determine O_2 concentration must be made at the same time as the measurements for VOC concentration.	
	iii. Determine the exhaust flow rate of the stationary internal combustion engine exhaust;	(3) Method 2 or 19 of 40 CFR part 60.		
	iv. If necessary, measure moisture content of the stationary internal combustion engine exhaust at the sampling port location; and	(4) Method 4 of 40 CFR part 60, appendix A, Method 320 of 40 CFR part 63, appendix A, or ASTM D6348–03 (incorporated by reference, see §60.17).	(c) Measurements to determine moisture must be made at the same time as the measurement for VOC concentration.	
	v. Measure VOC at the exhaust of the stationary internal combustion engine.	(5) Methods 25A and 18 of 40 CFR part 60, appendix A, Method 25A with the use of a methane cutter as described in 40 CFR 1065.265, Method 18 or 40 CFR part 60, appendix A,[c,d] Method 320 of 40 CFR part 63, appendix A, or ASTM D6348–03 (incorporated by reference, see §60.17).	(d) Results of this test consist of the average of the three 1-hour or longer runs.	

a ASTM D6522–00 is incorporated by reference; see 40 CFR 60.17. Also, you may petition the Administrator for approval to use alternative methods for portable analyzer.
b You may use ASME PTC 19.10–1981, Flue and Exhaust Gas Analyses, for measuring the O_2 content of the exhaust gas as an alternative to EPA Method 3B.
c You may use EPA Method 18 of 40 CFR part 60, appendix A, provided that you conduct an adequate presurvey test prior to the emissions test, such as the one described in OTM 11 on EPA's Web site (http://www.epa.gov/ttn/emc/prelim/otm11.pdf).
d You may use ASTM D6420–99 (2004), Test Method for Determination of Gaseous Organic Compounds by Direct Interface Gas Chromatography/Mass Spectrometry as an alternative to EPA Method 18 for measuring total nonmethane organic.

[3/1/10]

Reporting Requirements

54. NSPS 40 CFR 60, Subpart JJJJ – Initial Notification

In accordance with 40 CFR 60.4245, the permittee SI ICE must meet the following notification, reporting and recordkeeping requirements:

If the SI engines have not been certified by an engine manufacturer to meet the emission standards of 40 CFR 60.4231, the permittee must submit an initial notification as required in §60.7(a)(1). The notification must include the following information:

- Name and address of the owner or operator;
- The address of the affected source;
- Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement;
- Emission control equipment; and
- Fuel used.

[3/1/10]

55. NSPS 40 CFR 60, Subpart JJJJ – Performance Test Submittal

In accordance with 60.4245 (d), the permittee must submit a copy of each performance test as conducted in 40 CFR 60.4244 within 60 days after the test has been completed.

[3/1/10]

56. NSPS 40 CFR 60, Subpart JJJJ – General Provisions of 40 CFR 60

In accordance with 40 CFR 60.4246, the permittee shall comply with the following applicable General Provisions of 40 CFR 60:

Table 3 to Subpart JJJJ of Part 60--Applicability of General Provisions to Subpart JJJJ

General Provision Citation	Subject of citation	Applies to subpart	Explanation
§60.1	General applicability of the General Provisions	Yes	
§60.2	Definitions	Yes	Additional terms defined in §60.4248.
§60.3	Units and abbreviations	Yes	
§60.4	Address	Yes	
§60.5	Determination of construction or modification	Yes	
§60.6	Review of plans	Yes	
§60.7	Notification and Recordkeeping	Yes	Except that §60.7 only applies as specified in §60.4245.
§60.8	Performance tests	Yes	Except that §60.8 only applies to owners and operators who are subject to performance testing in subpart JJJJ.
§60.9	Availability of information	Yes	
§60.10	State Authority	Yes	
§60.11	Compliance with standards and maintenance requirements	Yes	Requirements are specified in subpart JJJJ.
§60.12	Circumvention	Yes	
§60.13	Monitoring requirements	No	
§60.14	Modification	Yes	
§60.15	Reconstruction	Yes	
§60.16	Priority list	Yes	
§60.17	Incorporations by reference	Yes	
§60.18	General control device requirements	No	
§60.19	General notification and reporting requirements	Yes	

[3/1/10]

PERMIT TO CONSTRUCT GENERAL PROVISIONS

General Compliance

57. The permittee has a continuing duty to comply with all terms and conditions of this permit. All emissions authorized herein shall be consistent with the terms and conditions of this permit and the Rules for the Control of Air Pollution in Idaho. The emissions of any pollutant in excess of the limitations specified herein, or noncompliance with any other condition or limitation contained in this permit, shall constitute a violation of this permit and the Rules for the Control of Air Pollution in Idaho, and the Environmental Protection and Health Act, Idaho Code §39-101, et seq.

[Idaho Code §39-101, et seq.]

58. The permittee shall at all times (except as provided in the Rules for the Control of Air Pollution in Idaho) maintain in good working order and operate as efficiently as practicable, all treatment or control facilities or systems installed or used to achieve compliance with the terms and conditions of this permit and other applicable Idaho laws for the control of air pollution.

[IDAPA 58.01.01.211, 5/1/94]

59. Nothing in this permit is intended to relieve or exempt the permittee from the responsibility to comply with all applicable local, state, or federal statutes, rules and regulations.

[IDAPA 58.01.01.212.01, 5/1/94]

Inspection and Entry

60. Upon presentation of credentials, the permittee shall allow DEQ or an authorized representative of DEQ to do the following:

- Enter upon the permittee's premises where an emissions source is located or emissions related activity is conducted, or where records are kept under conditions of this permit;
- Have access to and copy, at reasonable times, any records that are kept under the conditions of this permit;
- Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
- As authorized by the Idaho Environmental Protection and Health Act, sample or monitor, at reasonable times, substances or parameters for the purpose of determining or ensuring compliance with this permit or applicable requirements.

[Idaho Code §39-108]

Construction and Operation

61. This permit shall expire if construction has not begun within two years of its issue date, or if construction is suspended for one year.

[IDAPA 58.01.01.211.02, 5/1/94]

62. The permittee shall furnish DEQ written notifications as follows in accordance with IDAPA 58.01.01.211:

- A notification of the date of initiation of construction, within five working days after occurrence; except in the case where pre-permit construction approval has been granted then notification shall be made within five working days after occurrence or within five working days after permit issuance whichever is later;
- A notification of the date of any suspension of construction, if such suspension lasts for one year or more;

- A notification of the anticipated date of initial start-up of the stationary source or facility not more than sixty days or less than thirty days prior to such date; and
- A notification of the actual date of initial start-up of the stationary source or facility within fifteen days after such date.

[IDAPA 58.01.01.211.03, 5/1/94]

Performance Testing

63. If performance testing (air emissions source test) is required by this permit, the permittee shall provide notice of intent to test to DEQ at least 15 days prior to the scheduled test date or shorter time period as approved by DEQ. DEQ, at its option, may have an observer present at any emissions tests conducted on a source. DEQ requests that such testing not be performed on weekends or state holidays.

64. All performance testing shall be conducted in accordance with the procedures in IDAPA 58.01.01.157. Without prior DEQ approval, any alternative testing is conducted solely at the permittee's risk. If the permittee fails to obtain prior written approval by DEQ for any testing deviations, DEQ may determine that the testing does not satisfy the testing requirements. Therefore, at least 30 days prior to conducting any performance test, the permittee is encouraged to submit a performance test protocol to DEQ for approval. The written protocol shall include a description of the test method(s) to be used, an explanation of any or unusual circumstances regarding the proposed test, and the proposed test schedule for conducting and reporting the test.

65. Within 30 days following the date in which a performance test required by this permit is concluded, the permittee shall submit to DEQ a performance test report. The written report shall include a description of the process, identification of the test method(s) used, equipment used, all process operating data collected during the test period, and test results, as well as raw test data and associated documentation, including any approved test protocol.

[IDAPA 58.01.01.157, 4/5/00]

Monitoring and Recordkeeping

66. The permittee shall maintain sufficient records to ensure compliance with all of the terms and conditions of this permit. Records of monitoring information shall include, but not be limited to the following: (a) the date, place, and times of sampling or measurements; (b) the date analyses were performed; (c) the company or entity that performed the analyses; (d) the analytical techniques or methods used; (e) the results of such analyses; and (f) the operating conditions existing at the time of sampling or measurement. All monitoring records and support information shall be retained for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Supporting information includes, but is not limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation and copies of all reports required by this permit. All records required to be maintained by this permit shall be made available in either hard copy or electronic format to DEQ representatives upon request.

[IDAPA 58.01.01.211, 5/1/94]

Excess Emissions

67. The permittee shall comply with the procedures and requirements of IDAPA 58.01.01.130-136 for excess emissions due to startup, shutdown, scheduled maintenance, safety measures, upsets and breakdowns.

[IDAPA 58.01.01.130-136, 4/5/00]

Certification

68. All documents submitted to DEQ, including, but not limited to, records, monitoring data, supporting information, requests for confidential treatment, testing reports, or compliance certification shall contain a certification by a responsible official. The certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document(s) are true, accurate, and complete.

[IDAPA 58.01.01.123, 5/1/94]

False Statements

69. No person shall knowingly make any false statement, representation, or certification in any form, notice, or report required under this permit, or any applicable rule or order in force pursuant thereto.

[IDAPA 58.01.01.125, 3/23/98]

Tampering

70. No person shall knowingly render inaccurate any monitoring device or method required under this permit or any applicable rule or order in force pursuant thereto.

[IDAPA 58.01.01.126, 3/23/98]

Transferability

71. This permit is transferable in accordance with procedures listed in IDAPA 58.01.01.209.06.

[IDAPA 58.01.01.209.06, 4/11/06]

Severability

72. The provisions of this permit are severable, and if any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

[IDAPA 58.01.01.211, 5/1/94]