

Serena McIlwain, Secretary Suzanne E. Dorsey, Deputy Secretary

Mr. Derek S. Kramer, Chief Operating Officer Ingenco Wholesale Power, LLC Archaea Energy 4444 Westheimer Road, Ste. G450 Houston, TX 77027

JAN 2 4 2024

Dear Mr. Kramer:

Re: Renewal Part 70/ Title V Operating Permit 24-045-0287

Enclosed, please find the Renewal Part 70/Title V Operating Permit and Fact Sheet for the Ingenco Wholesale Power, LLC facility located in Wicomico County, MD. The Permit will expire on February 28, 2028.

The Code of Maryland Regulations (COMAR) 26.11.03.11 states the following:

If the Department denies a Part 70 permit or issues it with terms and conditions that are objectionable to the applicant, the applicant may request that a contested case hearing be held regarding the permit. This request shall be made to the Department in writing not later than 15 days after the applicant receives notice that the permit has been denied or of the objectionable terms and conditions. The request shall include the basis for the request and refer to any objectionable terms and conditions.

Please note the following revised condition in the Permit under Section II, General Conditions, Number 5, Permit Renewal:

The Permittee shall submit to the Department a completed application for renewal of this Part 70 permit 12 months before the expiration of the permit. Upon submitting a complete application, the Permittee may continue to operate this facility pending final action by the Department on the renewal.

If you have any questions, please feel free to contact Ms. Marcie Gurley, Chief, Technical Support Division, at marcie.gurley@maryland.gov, or (410) 537-3230.

Sincerely,

Suna Yi Sariscak, Manager Air Quality Permits Program Air & Radiation Administration

SYS/jm

Enclosures

cc: EPA Region III (w/encl)

Meridith Spurlock (as listed in the signoff sheet)

Wes Moore Governor State of



DEPARTMENT OF THE ENVIRONMENT

Air and Radiation Administration 1800 Washington Boulevard, Suite 720 Baltimore, MD 21230

Construction Permit	Part 70 X Operating Permit
TNO	JAN 2 4 2024

PERMIT NO. 24-045-0287 DATE ISSUED

To be paid in accordance PERMIT FEE

with COMAR 26.11.02.19B

EXPIRATION DATE

February 28, 2028

LEGAL OWNER & ADDRESS

Archaea Energy, Inc. 4444 Westheimer Road, Suite G450 Houston, TX 77027 Attn: Mr. Derek S. Kramer Chief Operating Officer

SITE

Ingenco Wicomico Plant 6967 Brick Kiln Road Salisbury, MD 21801 Wicomico County AI # 31504

SOURCE DESCRIPTION

A landfill gas generation facility consisting of eighteen (18) Detroit Diesel Series 60 engines.

This source is subject to the conditions described on the attached pages.

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Program Manager

Director Air and Radiation Administration

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SECTION I SOURCE IDENTIFICATION

1. DESCRIPTION OF FACILITY

INGENCO Wholesale Power LLC is a 6-Megawatt (MW) landfill gas generation facility located within the Newland Park Sanitary Landfill – 6849 Brick Kiln Road, Salisbury Maryland. The applicable Standard Industrial Classification (SIC) Code is 4931.

The facility received a Maryland Public Service Commission (PSC) Certificate of Public Convenience and Necessity (CPCN) Order No. 80722 (Case No. 9044) on April 8, 2006, for the construction of a 6 MW landfill gas-supplied electric generating facility.

The facility consists of eighteen (18) Detroit Diesel Series 60 engines each mated to a 350-kW generator. The engines are grouped into three six-engine modules (Group B, Group C, Group D; Engines B1-B6, C1-C6, D1-D6). The engines in each group vent to a common stack for that group. Engines are typically operated on a rotating basis so that each engine will be operated about the same amount of time under the same conditions. The engines are fueled by No. 2 fuel oil, or No. 2 fuel oil and landfill gas from Newland Park Sanitary Landfill.

2. FACILITY INVENTORY LIST

Emissions Unit Number	MDE - ARA Registration Number	Emissions Unit Name and Description	Date of Installation
Engines 1- 18	9-0135; 9- 0136, & 9- 0137	Eighteen (18) Detroit Diesel Series 60 engines each mated to a 350-kW generator. The engines are grouped into three six-engine modules (Group B, Group C, Group D: Engines B1-B6, C1-C6, D1-D6).	April 2007

SECTION II GENERAL CONDITIONS

1. **DEFINITIONS**

[COMAR 26.11.01.01] and [COMAR 26.11.02.01]

The words or terms in this Part 70 permit shall have the meanings established under COMAR 26.11.01 and .02 unless otherwise stated in this permit.

2. ACRONYMS

ARA	Air and Radiation Administration
BACT	Best Available Control Technology
Btu	British thermal unit
CAA	Clean Air Act
CAM	Compliance Assurance Monitoring
CEM	Continuous Emissions Monitor
CFR	Code of Federal Regulations
CO	Carbon Monoxide
COMAR	Code of Maryland Regulations
EPA	United States Environmental Protection Agency
FR	Federal Register
gr	grains
HAP	Hazardous Air Pollutant
MACT	Maximum Achievable Control Technology
MDE	Maryland Department of the Environment
MVAC	Motor Vehicle Air Conditioner
NESHAPS	National Emission Standards for Hazardous Air Pollutants
NO_x	Nitrogen Oxides
NSPS	New Source Performance Standards
NSR	New Source Review
OTR	Ozone Transport Region
PM	Particulate Matter
PM10	Particulate Matter with Nominal Aerodynamic Diameter of 10
	micrometers or less
ppm	parts per million
ppb	parts per billion
PSD	Prevention of Significant Deterioration
PTC	Permit to construct
PTO	Permit to operate (State)
SIC	Standard Industrial Classification
SO ₂	Sulfur Dioxide

TAP Toxic Air Pollutant tpy tons per year VE Visible Emissions

VOC Volatile Organic Compounds

3. EFFECTIVE DATE

The effective date of the conditions in this Part 70 permit is the date of permit issuance, unless otherwise stated in the permit.

4. PERMIT EXPIRATION

[COMAR 26.11.03.13B(2)]

Upon expiration of this permit, the terms of the permit will automatically continue to remain in effect until a new Part 70 permit is issued for this facility provided that the Permittee has submitted a timely and complete application and has paid applicable fees under COMAR 26.11.02.16.

Otherwise, upon expiration of this permit the right of the Permittee to operate this facility is terminated.

5. PERMIT RENEWAL

[COMAR 26.11.03.02B(3)] and [COMAR 26.11.03.02E]

The Permittee shall submit to the Department a completed application for renewal of this Part 70 permit at least 12 months before the expiration of the permit. Upon submitting a completed application, the Permittee may continue to operate this facility pending final action by the Department on the renewal.

The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall submit such supplementary facts or corrected information no later than 10 days after becoming aware that this occurred. The Permittee shall also provide additional information as necessary to address any requirements that become applicable to the facility after the date a completed application was submitted, but prior to the release of a draft permit. This information shall be submitted to the Department no later than 20 days after a new requirement has been adopted.

6. CONFIDENTIAL INFORMATION

[COMAR 26.11.02.02G]

In accordance with the provisions of the State Government Article, Sec. 10-611 et seq., Annotated Code of Maryland, all information submitted in an application shall be considered part of the public record and available for inspection and copying, unless the Permittee claims that the information is confidential when it is submitted to the Department. At the time of the request for inspection or copying, the Department will make a determination with regard to the confidentiality of the information. The Permittee, when requesting confidentiality, shall identify the information in a manner specified by the Department and, when requested by the Department, promptly provide specific reasons supporting the claim of confidentiality. Information submitted to the Department without a request that the information be deemed confidential may be made available to the public. Subject to approval of the Department, the Permittee may provide a summary of confidential information that is suitable for public review. The content of this Part 70 permit is not subject to confidential treatment.

7. PERMIT ACTIONS

[COMAR 26.11.03.06E(3)] and [COMAR 26.11.03.20(A)]

This Part 70 permit may be revoked or reopened and revised for cause. The filing of an application by the Permittee for a permit revision or renewal; or a notification of termination, planned changes or anticipated noncompliance by the facility, does not stay a term or condition of this permit.

The Department shall reopen and revise, or revoke the Permittee's Part 70 permit under the following circumstances:

- Additional requirements of the Clean Air Act become applicable to this facility and the remaining permit term is 3 years or more;
- b. The Department or the EPA determines that this Part 70 permit contains a material mistake, or is based on false or inaccurate information supplied by or on behalf of the Permittee;

- c. The Department or the EPA determines that this Part 70 permit must be revised or revoked to assure compliance with applicable requirements of the Clean Air Act; or
- d. Additional requirements become applicable to an affected source under the Federal Acid Rain Program.

8. PERMIT AVAILABILITY

[COMAR 26.11.02.13G]

The Permittee shall maintain this Part 70 permit in the vicinity of the facility for which it was issued, unless it is not practical to do so, and make this permit immediately available to officials of the Department upon request.

9. REOPENING THE PART 70 PERMIT FOR CAUSE BY THE EPA

[COMAR 26.11.03.20B]

The EPA may terminate, modify, or revoke and reissue a permit for cause as prescribed in 40 CFR §70.7(g)

10. TRANSFER OF PERMIT

[COMAR 26.11.02.02E]

The Permittee shall not transfer this Part 70 permit except as provided in COMAR 26.11.03.15.

11. REVISION OF PART 70 PERMITS – GENERAL CONDITIONS

[COMAR 26.11.03.14] and [COMAR 26.11.03.06A(8)]

- a. The Permittee shall submit an application to the Department to revise this Part 70 permit when required under COMAR 26.11.03.15 -.17.
- b. When applying for a revision to a Part 70 permit, the Permittee shall comply with the requirements of COMAR 26.11.03.02 and .03 except that the application for a revision need include only information listed that is related to the proposed change to the source and revision to

the permit. This information shall be sufficient to evaluate the proposed change and to determine whether it will comply with all applicable requirements of the Clean Air Act.

- c. The Permittee may not change any provision of a compliance plan or schedule in a Part 70 permit as an administrative permit amendment or as a minor permit modification unless the change has been approved by the Department in writing.
- d. A permit revision is not required for a change that is provided for in this permit relating to approved economic incentives, marketable permits, emissions trading, and other similar programs.

12. SIGNIFICANT PART 70 OPERATING PERMIT MODIFICATIONS

[COMAR 26.11.03.17]

The Permittee may apply to the Department to make a significant modification to its Part 70 Permit as provided in COMAR 26.11.03.17 and in accordance with the following conditions:

- a. A significant modification is a revision to the federally enforceable provisions in the permit that does not qualify as an administrative permit amendment under COMAR 26.11.03.15 or a minor permit modification as defined under COMAR 26.11.03.16.
- b. This permit does not preclude the Permittee from making changes, consistent with the provisions of COMAR 26.11.03, that would make the permit or particular terms and conditions of the permit irrelevant, such as by shutting down or reducing the level of operation of a source or of an emissions unit within the source. Air pollution control equipment shall not be shut down or its level of operation reduced if doing so would violate any term of this permit.
- c. Significant permit modifications are subject to all requirements of COMAR 26.11.03 as they apply to permit issuance and renewal, including the requirements for applications, public participation, and review by affected states and EPA, except:
 - (1) An application need include only information pertaining to the proposed change to the source and modification of this permit, including a description of the change and modification, and any

new applicable requirements of the Clean Air Act that will apply if the change occurs;

- (2) Public participation, and review by affected states and EPA, is limited to only the application and those federally enforceable terms and conditions of the Part 70 permit that are affected by the significant permit modification.
- d. As provided in COMAR 26.11.03.15B(5), an administrative permit amendment may be used to make a change that would otherwise require a significant permit modification if procedures for enhanced preconstruction review of the change are followed that satisfy the requirements of 40 CFR 70.7(d)(1)(v).
- e. Before making a change that qualifies as a significant permit modification, the Permittee shall obtain all permits-to-construct and approvals required by COMAR 26.11.02.
- f. The Permittee shall not make a significant permit modification that results in a violation of any applicable requirement of the Clean Air Act.
- g. The permit shield in COMAR 26.11.03.23 applies to a final significant permit modification that has been issued by the Department, to the extent applicable under COMAR 26.11.03.23.

13. MINOR PERMIT MODIFICATIONS

[COMAR 26.11.03.16]

The Permittee may apply to the Department to make a minor modification to the federally enforceable provisions of this Part 70 permit as provided in COMAR 26.11.03.16 and in accordance with the following conditions:

- a. A minor permit modification is a Part 70 permit revision that:
 - (1) Does not result in a violation of any applicable requirement of the Clean Air Act:
 - (2) Does not significantly revise existing federally enforceable monitoring, including test methods, reporting, record keeping, or compliance certification requirements except by:

- (a) Adding new requirements,
- (b) Eliminating the requirements if they are rendered meaningless because the emissions to which the requirements apply will no longer occur, or
- (c) Changing from one approved test method for a pollutant and source category to another;
- (3) Does not require or modify a:
 - (a) Case-by-case determination of a federally enforceable emissions standard,
 - (b) Source specific determination for temporary sources of ambient impacts, or
 - (c) Visibility or increment analysis;
- (4) Does not seek to establish or modify a federally enforceable permit term or condition for which there is no corresponding underlying applicable requirement of the Clean Air Act, but that the Permittee has assumed to avoid an applicable requirement to which the source would otherwise be subject, including:
 - (a) A federally enforceable emissions standard applied to the source pursuant to COMAR 26.11.02.03 to avoid classification as a Title I modification; and
 - (b) An alternative emissions standard applied to an emissions unit pursuant to regulations promulgated under Section 112(i)(5) of the Clean Air Act
- (5) Is not a Title I modification; and
- (6) Is not required under COMAR 26.11.03.17 to be processed as a significant modification to this Part 70 permit.
- b. Application for a Minor Permit Modification

The Permittee shall submit to the Department an application for a minor permit modification that satisfies the requirements of COMAR 26.11.03.03 which includes the following:

- (1) A description of the proposed change, the emissions resulting from the change, and any new applicable requirements that will apply if the change is made;
- (2) The proposed minor permit modification;
- (3) Certification by a responsible official, in accordance with COMAR 26.11.02.02F, that:
 - (a) The proposed change meets the criteria for a minor permit modification, and
 - (b) The Permittee has obtained or applied for all required permits-to-construct required by COMAR 26.11.03.16 with respect to the proposed change;
- (4) Completed forms for the Department to use to notify the EPA and affected states, as required by COMAR 26.11.03.07-.12.
- c. Permittee's Ability to Make Change
 - (1) For changes proposed as minor permit modifications to this permit that will require the applicant to obtain a permit to construct, the permit to construct must be issued prior to the new change.
 - (2) During the period of time after the Permittee applies for a minor modification but before the Department acts in accordance with COMAR 26.11.03.16F(2):
 - (a) The Permittee shall comply with applicable requirements of the Clean Air Act related to the change and the permit terms and conditions described in the application for the minor modification.
 - (b) The Permittee is not required to comply with the terms and conditions in the permit it seeks to modify. If the Permittee fails to comply with the terms and conditions in the application during this time, the terms and conditions of both this permit and the application for modification may be enforced against it.

- d. The Permittee is subject to enforcement action if it is determined at any time that a change made under COMAR 26.11.03.16 is not within the scope of this regulation.
- e. Minor permit modification procedures may be used for Part 70 permit modifications involving the use of economic incentives, marketable permits, emissions trading, and other similar approaches, but only to the extent that the minor permit modification procedures are explicitly provided for in regulations approved by the EPA as part of the Maryland SIP or in other applicable requirements of the Clean Air Act.

14. ADMINISTRATIVE PART 70 OPERATING PERMIT AMENDMENTS

[COMAR 26.11.03.15]

The Permittee may apply to the department to make an administrative permit amendment as provided in COMAR 26.11.03.15 and in accordance with the following conditions:

- a. An application for an administrative permit amendment shall:
 - (1) Be in writing;
 - (2) Include a statement certified by a responsible official that the proposed amendment meets the criteria in COMAR 26.11.03.15 for an administrative permit amendment, and
 - (3) Identify those provisions of this part 70 permit for which the amendment is requested, including the basis for the request.
- b. An administrative permit amendment:
 - (1) Is a correction of a typographical error;
 - (2) Identifies a change in the name, address, or phone number of a person identified in this permit, or a similar administrative change involving the Permittee or other matters which are not directly related to the control of air pollution;
 - (3) requires more frequent monitoring or reporting by the Permittee;

- (4) Allows for a change in ownership or operational control of a source for which the Department determines that no other revision to the permit is necessary and is documented as per COMAR 26.11.03.15B(4);
- (5) Incorporates into this permit the requirements from preconstruction review permits or approvals issued by the Department in accordance with COMAR 26.11.03.15B(5), but only if it satisfies 40 CFR 70.7(d)(1)(v);
- (6) Incorporates any other type of change, as approved by the EPA, which is similar to those in COMAR 26.11.03.15B(1)—(4);
- (7) Notwithstanding COMAR 26.11.03.15B(1)—(6), all modifications to acid rain control provisions included in this Part 70 permit are governed by applicable requirements promulgated under Title IV of the Clean Air Act; or
- (8) Incorporates any change to a term or condition specified as State-only enforceable, if the Permittee has obtained all necessary permits-to-construct and approvals that apply to the change.
- c. The Permittee may make the change addressed in the application for an administrative amendment upon receipt by the Department of the application, if all permits-to-construct or approvals otherwise required by COMAR 26.11.02 prior to making the change have first been obtained from the Department.
- d. The permit shield in COMAR 26.11.03.23 applies to administrative permit amendments made under Section B(5) of COMAR 26.11.03.15, but only after the Department takes final action to revise the permit.
- e. The Permittee is subject to enforcement action if it is determined at any time that a change made under COMAR 26.11.03.15 is not within the scope of this regulation.

15. OFF-PERMIT CHANGES TO THIS SOURCE

[COMAR 26.11.03.19]

The Permittee may make off-permit changes to this facility as provided in COMAR 26.11.03.19 and in accordance with the following conditions:

- a. The Permittee may make a change to this permitted facility that is not addressed or prohibited by the federally enforceable conditions of this Part 70 permit without obtaining a Part 70 permit revision if:
 - (1) The Permittee has obtained all permits and approvals required by COMAR 26.11.02 and .03;
 - (2) The change is not subject to any requirements under Title IV of the Clean Air Act;
 - (3) The change is not a Title I modification; and
 - (4) The change does not violate an applicable requirement of the Clean Air Act or a federally enforceable term or condition of the permit.
- b. For a change that qualifies under COMAR 26.11.03.19, the Permittee shall provide contemporaneous written notice to the Department and the EPA, except for a change to an emissions unit or activity that is exempt from the Part 70 permit application, as provided in COMAR 26.11.03.04. This written notice shall describe the change, including the date it was made, any change in emissions, including the pollutants emitted, and any new applicable requirements of the Clean Air Act that apply as a result of the change.
- c. Upon satisfying the requirements of COMAR 26.11.03.19, the Permittee may make the proposed change.
- d. The Permittee shall keep a record describing:
 - (1) Changes made at the facility that result in emissions of a regulated air pollutant subject to an applicable requirement of the Clean Air Act, but not otherwise regulated under this permit; and
 - (2) The emissions resulting from those changes.

- e. Changes that qualify under COMAR 26.11.03.19 are not subject to the requirements for Part 70 revisions.
- f. The Permittee shall include each off-permit change under COMAR 26.11.03.19 in the application for renewal of the part 70 permit.
- g. The permit shield in COMAR 26.11.03.23 does not apply to off-permit changes made under COMAR 26.11.03.19.
- h. The Permittee is subject to enforcement action if it is determined that an off-permit change made under COMAR 26.11.03.19 is not within the scope of this regulation.

16. ON-PERMIT CHANGES TO SOURCES

[COMAR 26.11.03.18]

The Permittee may make on-permit changes that are allowed under Section 502(b)(10) of the Clean Air Act as provided in COMAR 26.11.03.18 and in accordance with the following conditions:

- a. The Permittee may make a change to this facility without obtaining a revision to this Part 70 permit if:
 - The change is not a Title I modification;
 - (2) The change does not result in emissions in excess of those expressly allowed under the federally enforceable provisions of the Part 70 permit for the permitted facility or for an emissions unit within the facility, whether expressed as a rate of emissions or in terms of total emissions;
 - (3) The Permittee has obtained all permits and approvals required by COMAR 26.11.02 and .03;
 - (4) The change does not violate an applicable requirement of the Clean Air Act;
 - (5) The change does not violate a federally enforceable permit term or condition related to monitoring, including test methods, record keeping, reporting, or compliance certification requirements;

- (6) The change does not violate a federally enforceable permit term or condition limiting hours of operation, work practices, fuel usage, raw material usage, or production levels if the term or condition has been established to limit emissions allowable under this permit;
- (7) If applicable, the change does not modify a federally enforceable provision of a compliance plan or schedule in this Part 70 permit unless the Department has approved the change in writing; and
- (8) This permit does not expressly prohibit the change under COMAR 26.11.03.18.
- b. The Permittee shall notify the Department and the EPA in writing of a proposed on-permit change under COMAR 26.11.03.18 not later than 7 days before the change is made. The written information shall include the following information:
 - (1) A description of the proposed change;
 - (2) The date on which the change is proposed to be made;
 - (3) Any change in emissions resulting from the change, including the pollutants emitted;
 - (4) Any new applicable requirement of the Clean Air Act; and
 - (5) Any permit term or condition that would no longer apply.
- c. The responsible official of this facility shall certify in accordance with COMAR 26.11.02.02F that the proposed change meets the criteria for the use of on-permit changes under COMAR 26.11.03.18.
- d. The Permittee shall attach a copy of each notice required by condition b. above to this Part 70 permit.
- e. On-permit changes that qualify under COMAR 26.11.03.18 are not subject to the requirements for part 70 permit revisions.
- f. Upon satisfying the requirements under COMAR 26.11.03.18, the Permittee may make the proposed change.

- g. The permit shield in COMAR 26.11.03.23 does not apply to on-permit changes under COMAR 26.11.03.18.
- h. The Permittee is subject to enforcement action if it is determined that an on-permit change made under COMAR 26.11.03.18 is not within the scope of the regulation or violates any requirement of the State air pollution control law.

17. FEE PAYMENT

[COMAR 26.11.02.16A(2) & (5)(b)]

- a. The fee for this Part 70 permit is as prescribed in Regulation .19 of COMAR 26.11.02.
- b. The fee is due on and shall be paid on or before each 12-month anniversary date of the permit.
- c. Failure to pay the annual permit fee constitutes cause for revocation of the permit by the Department.

18. REQUIREMENTS FOR PERMITS-TO-CONSTRUCT AND APPROVALS [COMAR 26.11.02.09.]

The Permittee may not construct or modify or cause to be constructed or modified any of the following sources without first obtaining, and having in current effect, the specified permits-to-construct and approvals:

- New Source Review source, as defined in COMAR 26.11.01.01, approval required, except for generating stations constructed by electric companies;
- b. Prevention of Significant Deterioration source, as defined in COMAR 26.11.01.01, approval required, except for generating stations constructed by electric companies;
- c. New Source Performance Standard source, as defined in COMAR 26.11.01.01, permit to construct required, except for generating stations constructed by electric companies;

- d. National Emission Standards for Hazardous Air Pollutants source, as defined in COMAR 26.11.01.01, permit to construct required, except for generating stations constructed by electric companies;
- A stationary source of lead that discharges one ton per year or more
 of lead or lead compounds measured as elemental lead, permit to
 construct required, except for generating stations constructed by
 electric companies;
- f. All stationary sources of air pollution, including installations and air pollution control equipment, except as listed in COMAR 26.11.02.10, permit to construct required;
- g. In the event of a conflict between the applicability of (a.— e.) above and an exemption listed in COMAR 26.11.02.10, the provision that requires a permit applies.
- h. Approval of a PSD or NSR source by the Department does not relieve the Permittee obtaining an approval from also obtaining all permits-to-construct required by (c.—g.) above.

19. CONSOLIDATION OF PROCEDURES FOR PUBLIC PARTICIPATION [COMAR 26.11.02.11C] and [COMAR 26.11.03.01K]

The Permittee may request the Department to authorize special procedures for the Permittee to apply simultaneously, to the extent possible, for a permit to construct and a revision to this permit.

These procedures may provide for combined public notices, informational meetings, and public hearings for both permits but shall not adversely affect the rights of a person, including EPA and affected states, to obtain information about the application for a permit, to comment on an application, or to challenge a permit that is issued.

These procedures shall not alter any existing permit procedures or time frames.

20. PROPERTY RIGHTS

[COMAR 26.11.03.06E(4)]

This Part 70 permit does not convey any property rights of any sort, or any exclusive privileges.

21. SEVERABILITY

[COMAR 26.11.03.06A(5)]

If any portion of this Part 70 permit is challenged, or any term or condition deemed unenforceable, the remainder of the requirements of the permit continues to be valid.

22. INSPECTION AND ENTRY

[COMAR 26.11.03.06G(3)]

The Permittee shall allow employees and authorized representatives of the Department, the EPA, and local environmental health agencies, upon presentation of credentials or other documents as may be required by law, to:

- a. Enter at a reasonable time without delay and without prior notification the Permittee's property where a Part 70 source is located, emissions-related activity is conducted, or records required by this permit are kept;
- b. Have access to and make copies of records required by the permit;
- c. Inspect all emissions units within the facility subject to the permit and all related monitoring systems, air pollution control equipment, and practices or operations regulated or required by the permit; and
- d. Sample or monitor any substances or parameters at or related to the emissions units at the facility for the purpose of determining compliance with the permit.

23. DUTY TO PROVIDE INFORMATION

[COMAR 26.11.03.06E(5)]

The Permittee shall furnish to the Department, within a reasonable time specified by the Department, information requested in writing by the Department in order to determine whether the Permittee is in compliance with the federally enforceable conditions of this Part 70 permit, or whether cause exists for revising or revoking the permit. Upon request, the Permittee shall also furnish to the Department records required to be kept under the permit.

For information claimed by the Permittee to be confidential and therefore potentially not discloseable to the public, the Department may require the Permittee to provide a copy of the records directly to the EPA along with a claim of confidentiality.

The Permittee shall also furnish to the Department, within a reasonable time specified by the Department, information or records requested in writing by the Department in order to determine if the Permittee is in compliance with the State-only enforceable conditions of this permit.

24. COMPLIANCE REQUIREMENTS

[COMAR 26.11.03.06E(1)] and [COMAR 26.11.03.06A(11)] and [COMAR 26.11.02.05]

The Permittee shall comply with the conditions of this Part 70 permit. Noncompliance with the permit constitutes a violation of the Clean Air Act, and/or the Environment Article Title 2 of the Annotated Code of Maryland and may subject the Permittee to:

- a. Enforcement action,
- b. Permit revocation or revision,
- c. Denial of the renewal of a Part 70 permit, or
- d. Any combination of these actions.

The conditions in this Part 70 permit are enforceable by EPA and citizens under the Clean Air Act except for the State-only enforceable conditions.

Under Environment Article Section 2-609, Annotated Code of Maryland, the Department may seek immediate injunctive relief against a person who violates this permit in such a manner as to cause a threat to human health or the environment.

25. CREDIBLE EVIDENCE

Nothing in this permit shall be interpreted to preclude the use of credible evidence to demonstrate noncompliance with any term of this permit.

26. NEED TO HALT OR REDUCE ACTIVITY NOT A DEFENSE

[COMAR 26.11.03.06E(2)]

The need to halt or reduce activity in order to comply with the conditions of this permit may not be used as a defense in an enforcement action.

27. CIRCUMVENTION

[COMAR 26.11.01.06]

The Permittee may not install or use any article, machine, equipment or other contrivance, the use of which, without resulting in a reduction in the total weight of emissions, conceals or dilutes emissions which would otherwise constitute a violation of any applicable air pollution control regulation.

28. PERMIT SHIELD

[COMAR 26.11.03.23]

A permit shield as described in COMAR 26.11.03.23 shall apply only to terms and conditions in this Part 70 permit that have been specifically identified as covered by the permit shield. Neither this permit nor COMAR 26.11.03.23 alters the following:

a. The emergency order provisions in Section 303 of the Clean Air Act, including the authority of EPA under that section;

- b. The liability of the Permittee for a violation of an applicable requirement of the Clean Air Act before or when this permit is issued or for a violation that continues after issuance;
- c. The requirements of the Acid Rain Program, consistent with Section 408(a) of the Clean Air Act;
- The ability of the Department or EPA to obtain information from a source pursuant to Maryland law and Section 114 of the Clean Air Act; or
- e. The authority of the Department to enforce an applicable requirement of the State air pollution control law that is not an applicable requirement of the Clean Air Act.

29. ALTERNATE OPERATING SCENARIOS

[COMAR 26.11.03.06A(9)]

For all alternate operating scenarios approved by the Department and contained within this permit, the Permittee, while changing from one approved scenario to another, shall contemporaneously record in a log maintained at the facility each scenario under which the emissions unit is operating and the date and time the scenario started and ended.

SECTION III PLANT WIDE CONDITIONS

1. PARTICULATE MATTER FROM CONSTRUCTION AND DEMOLITION

[COMAR 26.11.06.03D]

The Permittee shall not cause or permit any building, its appurtenances, or a road to be used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne.

2. OPEN BURNING

[COMAR 26.11.07]

Except as provided in COMAR 26.11.07.04, the Permittee shall not cause or permit an open fire from June 1 through August 31 of any calendar year. Prior to any open burning, the Permittee shall request and receive approval from the Department.

3. AIR POLLUTION EPISODE

[COMAR 26.11.05.04]

When requested by the Department, the Permittee shall prepare in writing standby emissions reduction plans, consistent with good industrial practice and safe operating procedures, for reducing emissions creating air pollution during periods of Alert, Warning, and Emergency of an air pollution episode.

4. REPORT OF EXCESS EMISSIONS AND DEVIATIONS

[COMAR 26.11.01.07] and [COMAR 26.11.03.06C(7)]

The Permittee shall comply with the following conditions for occurrences of excess emissions and deviations from requirements of this permit, including those in <u>Section VI – State-only Enforceable Conditions</u>:

a. Report any deviation from permit requirements that could endanger human health or the environment, by orally notifying the Department immediately upon discovery of the deviation;

- Promptly report all occurrences of excess emissions that are expected to last for one hour or longer by orally notifying the Department of the onset and termination of the occurrence;
- c. When requested by the Department the Permittee shall report all deviations from permit conditions, including those attributed to malfunctions as defined in COMAR 26.11.01.07A, within 5 days of the request by submitting a written description of the deviation to the Department. The written report shall include the cause, dates and times of the onset and termination of the deviation, and an account of all actions planned or taken to reduce, eliminate, and prevent recurrence of the deviation;
- d. The Permittee shall submit to the Department semi-annual monitoring reports that confirm that all required monitoring was performed, and that provide accounts of all deviations from permit requirements that occurred during the reporting periods. Reporting periods shall be January 1 through June 30 and July 1 through December 31, and reports shall be submitted within 30 days of the end of each reporting period. Each account of deviation shall include a description of the deviation, the dates and times of onset and termination, identification of the person who observed or discovered the deviation, causes and corrective actions taken, and actions taken to prevent recurrence. If no deviations from permit conditions occurred during a reporting period, the Permittee shall submit a written report that so states.
- e. When requested by the Department, the Permittee shall submit a written report to the Department within 10 days of receiving the request concerning an occurrence of excess emissions. The report shall contain the information required in COMAR 26.11.01.07D(2).

5. ACCIDENTAL RELEASE PROVISIONS

[COMAR 26.11.03.03B(23)] and [40 CFR 68]

Should the Permittee become subject to 40 CFR 68 during the term of this permit, the Permittee shall submit risk management plans by the date specified in 40 CFR 68.150 and shall certify compliance with the requirements of 40 CFR 68 as part of the annual compliance certification as required by 40 CFR 70.

The Permittee shall initiate a permit revision or reopening according to the procedures of 40 CFR 70.7 to incorporate appropriate permit conditions into the Permittee's Part 70 permit.

6. GENERAL TESTING REQUIREMENTS

[COMAR 26.11.01.04]

The Department may require the Permittee to conduct, or have conducted, testing to determine compliance with this Part 70 permit. The Department, at its option, may witness or conduct these tests. This testing shall be done at a reasonable time, and all information gathered during a testing operation shall be provided to the Department.

7. EMISSIONS TEST METHODS

[COMAR 26.11.01.04]

Compliance with the emissions standards and limitations in this Part 70 permit shall be determined by the test methods designated and described below or other test methods submitted to and approved by the Department.

Reference documents of the test methods approved by the Department include the following:

- a. 40 CFR 60, appendix A
- b. 40 CFR 51, appendix M
- c. The Department's Technical Memorandum 91-01 "Test Methods and Equipment Specifications for Stationary Sources", (January 1991), as amended through Supplement 3, (October 1, 1997)

8. EMISSIONS CERTIFICATION REPORT

[COMAR 26.11.01.05-1] and [COMAR 26.11.02.19C] and [COMAR 26.11.02.19D]

The Permittee shall certify actual annual emissions of regulated pollutants from the facility on a calendar year basis.

- a. The certification shall be on forms obtained from the Department and submitted to the Department not later than April 1 of the year following the year for which the certification is required;
- b. The individual making the certification shall certify that the information is accurate to the individual's best knowledge. The individual shall be:
 - (1) Familiar with each source for which the certifications forms are submitted, and
 - (2) Responsible for the accuracy of the emissions information;
- c. The Permittee shall maintain records necessary to support the emissions certification including the following information if applicable:
 - (1) The total amount of actual emissions of each regulated pollutant and the total of all regulated pollutants;
 - (2) An explanation of the methods used to quantify the emissions and the operating schedules and production data that were used to determine emissions, including significant assumptions made:
 - (3) Amounts, types and analyses of all fuels used;
 - (4) Emissions data from continuous emissions monitors that are required by this permit, including monitor calibration and malfunction information;
 - (5) Identification, description, and use records of all air pollution control equipment and compliance monitoring equipment including:
 - (a) Significant maintenance performed,
 - (b) Malfunctions and downtime, and
 - (c) Episodes of reduced efficiency of all equipment;
 - (6) Limitations on source operation or any work practice standards that significantly affect emissions; and
 - (7) Other relevant information as required by the Department.

9. COMPLIANCE CERTIFICATION REPORT

[COMAR 26.11.03.06G(6) and (7)]

The Permittee shall submit to the Department and EPA Region III a report certifying compliance with each term of this Part 70 permit including each applicable standard, emissions limitation, and work practice for the previous calendar year by April 1 of each year.

- a. The compliance certification shall include:
 - (1) The identification of each term or condition of this permit which is the basis of the certification:
 - (2) The compliance status;
 - (3) Whether the compliance was continuous or intermittent;
 - (4) The methods used for determining the compliance status of each source, currently and over the reporting period; and
 - (5) Any other information required to be reported to the Department that is necessary to determine the compliance status of the Permittee with this permit.
- b. The Permittee shall submit the compliance certification reports to the Department and EPA simultaneously.

10. CERTIFICATION BY RESPONSIBLE OFFICIAL

[COMAR 26.11.02.02F]

All application forms, reports, and compliance certifications submitted pursuant to this permit shall be certified by a responsible official as to truth, accuracy, and completeness. The Permittee shall expeditiously notify the Department of an appointment of a new responsible official.

The certification shall be in the following form:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system

designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

11. SAMPLING AND EMISSIONS TESTING RECORD KEEPING

[COMAR 26.11.03.06C(5)]

The Permittee shall gather and retain the following information when sampling and testing for compliance demonstrations:

- a. The location as specified in this permit, and the date and time that samples and measurements are taken;
- b. All pertinent operating conditions existing at the time that samples and measurements are taken;
- c. The date that each analysis of a sample or emissions test is performed and the name of the person taking the sample or performing the emissions test;
- d. The identity of the Permittee, individual, or other entity that performed the analysis;
- e. The analytical techniques and methods used; and
- f. The results of each analysis.

12. GENERAL RECORDKEEPING

[COMAR 26.11.03.06C(6)]

The Permittee shall retain records of all monitoring data and information that support the compliance certification for a period of five (5) years from the date that the monitoring, sample measurement, application, report or emissions test was completed or submitted to the Department.

These records and support information shall include:

- All calibration and maintenance records;
- All original data collected from continuous monitoring instrumentation;
- c. Records which support the annual emissions certification; and
- d. Copies of all reports required by this permit.

13. GENERAL CONFORMITY

[COMAR 26.11.26.09]

The Permittee shall comply with the general conformity requirements of 40 CFR 93, Subpart B and COMAR 26.11.26.09.

14. ASBESTOS PROVISIONS

[40 CFR 61, Subpart M]

The Permittee shall comply with 40 CFR 61, Subpart M when conducting any renovation or demolition activities at the facility.

15. OZONE DEPLETING REGULATIONS

[40 CFR 82, Subpart F]

The Permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for MVACs in subpart B:

- a. Persons opening appliances for maintenance, service, repair, or disposal shall comply with the prohibitions and required practices pursuant to 40 CFR 82.154 and 82.156.
- b. Equipment used during the maintenance, service, repair or disposal of appliances shall comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.

- c. Persons performing maintenance, service, repairs or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.
- d. Persons disposing of small appliances, MVACS, and MVAC-like appliances as defined in 40 CFR 82.152, shall comply with record keeping requirements pursuant to 40 CFR 82.155.
- e. Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.
- f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.

16. ACID RAIN PERMIT

Not applicable

SECTION IV PLANT SPECIFIC CONDITIONS

This section provides tables that include the emissions standards, emissions limitations, and work practices applicable to each emissions unit located at this facility. The Permittee shall comply with all applicable emissions standards, emissions limitations and work practices included herein.

The tables also include testing, monitoring, record keeping and reporting requirements specific to each emissions unit. In addition to the requirements included here in **Section IV**, the Permittee is also subject to the general testing, monitoring, record keeping, and reporting requirements included in **Section III** – **Plant Wide Conditions** of this permit.

Unless otherwise provided in the specific requirements for an emissions unit, the Permittee shall maintain at the facility for at least five (5) years, and shall make available to the Department upon request, all records that the Permittee is required under this section to establish. [Reference: COMAR 26.11.03.06C(5)(g)]

Table IV - 1

1.0 Emissions Unit Number(s): Engines 1-18

Engines 1-18: Eighteen (18) Detroit Diesel Series 60 engines each mated to a 350-kW generator. The engines are grouped into three sixengine modules (Group B, Group C, Group D; Engines B1-B6, C1-C6, D1-D6). [ARA Reg. Nos. 9-0135, 9-016 & 9-0137]

1.1 Applicable Standards/Limits:

A. Control of Visible Emissions

COMAR 26.11.09.05E. - <u>Stationary Internal Combustion Engine Powered Equipment</u>.

- "(2) Emissions During Idle Mode. A person may not cause or permit the discharge of emissions from any engine, operating at idle, greater than 10 percent opacity.
- (3) Emissions During Operating Mode. A person may not cause or permit the discharge of emissions from any engine, operating at other than idle conditions, greater than 40 percent opacity.
- (4) Exceptions.
- (a) Section E(2) of this regulation does not apply for a period of 2 consecutive minutes after a period of idling of 15 consecutive minutes for the purpose of clearing the exhaust system.

Table IV - 1

- (b) Section E(2) of this regulation does not apply to emissions resulting directly from cold engine start-up and warm-up for the following maximum periods:
- (i) Engines that are idled continuously when not in service: 30 minutes;
- (ii) All other engines: 15 minutes.
- (c) Section E(2) and (3) of this regulation do not apply while maintenance, repair, or testing is being performed by qualified mechanics."

B. Control of Sulfur Oxides Emissions

COMAR 26.11.09.07 – <u>Control od Sulfur Oxides from Fuel-burning</u> Equipment

- "A. <u>Sulfur Content Limitations for Fuel</u>. A person may not burn, sell, or make available for sale any fuel with a sulfur content by weight in excess of or which otherwise exceeds the following limitations: (1) In Areas I, II, V, and VI:
- (a) The combustion of all solid fuels on a premises where the sum total maximum rated heat input of all fuel burning equipment located on the premises is 100 million Btu (106 gigajoules) per hour or greater may not result in a total emission of oxides of sulfur in excess of 3.5 pounds per million Btu (1.50 kilograms per gigajoule) actual heat input per hour;
- (b) Residual fuel oils, 2.0 percent;
- (c) Distillate fuel oils, 0.3 percent;
- (d) Process gas used as fuel, 0.3 percent."

C. Operational Limits

[Reference: CPCN Case No: 9044]

- (1) The Permittee shall only burn landfill gas collected from the Newland Park Landfill and/or No. 2 fuel oil in the eighteen (18) engines. The engines shall be operated with a 24-hour (calendar day) average timing for each operating mode that is no more than one degree different from the timing used in the respective initial performance tests.
- (2) Except during periods of start-up, shutdown, or malfunction, INGENCO Wholesale Power (IWP) shall limit the emissions from each engine to the following:

PM10:

0.2 lb./MMBtu

This limit is in force in order for the LFG generation facility to meet the PM₁₀ 24-hr NAAQS under COMAR 26.11.04.04.

(3) The annual emissions from all 18 engines shall meet the following limits for any consecutive 12-month rolling sum total:

	Table IV – 1
NO _X :	< 100 tpy
VOC:	< 50 tpy

CO:

Note: These limits are in force in order for the LFG generation facility to avoid NA-NSR and PSD applicability requirements.

< 250 tpy

- (4) Except during periods of "shifting modes", the LFG generation facility shall only be operated with each engine in one of the following three modes:
 - a) Mode 1 Each engine at maximum production and firing only No. 2 fuel oil.
 - b) Mode 2 Each engine at maximum production and firing No. 2 fuel oil and up to 30 percent landfill gas.
 - c) Mode 3 Each engine at maximum production and firing No. 2 fuel oil with at least 81 percent landfill gas, but no more than 96 percent landfill gas.

A period of "shifting modes" shall not exceed 15 minutes.

- (5) The LFG generation facility emissions shall be calculated under the following requirements:
 - monthly as the sum of the emissions under each of the operating modes described below according to the following equations:

$$NOx (lbs) = \left[\left(\frac{\left(A \times CV_{liq} \right) \times 1MMBtu}{1,000,000Btu} \right) \times ENOx(1) \right] + \left[\left(\frac{\left(B \times CV_{LFG} \right) \times 1MMBtu}{1,000,000Btu} \right) \times ENOx (LFG) \right]$$

$$CO (lbs) = \left[\left(\frac{\left(A \times CV_{liq} \right) \times IMMBtu}{1,000,000Btu} \right) \times ECOx(l) \right] + \left[\left(\frac{\left(B \times CV_{LFG} \right) \times IMMBtu}{1,000,000Btu} \right) \times ECOx(LFG) \right]$$

A = gallons of No. 2 fuel oil consumed under each operating range for any given time

B = cubic feet of landfill gas consumed under each operating range for any given time period.

CV_{liq} = calorific value (heat content) in Btu/gallon of No. 2 fuel oil.

CV_{LFG} = calorific value (heat content) in Btu/cubic foot of treated landfill gas.

And the following fuel-specific emission factors:

 $ENO_X(I)$ = Emissions factor for NO_X from No. 2 fuel oil

 $ENO_X(LFG)$ = Emissions factor for NO_X from LFG

ECO(I) = Emissions factor for CO from No. 2 fuel oil

ECO(LFG) = Emissions factor for CO from LFG

Table IV - 1

- b) The fuel specific ENOx and ECO values used for the IWP LFG generation facility shall be determined based on initial stack testing of the facility emissions. ENOx and ECO values shall be defined thereafter based on the most recent stack testing data. Fuel-specific ENOx values shall be determined for each of the "NOx operating modes": 100% No. 2 fuel oil, 1 30% LFG, and 81 96% LFG. Fuel-specific ECO values shall be determined for the "CO operating modes": 0-30% LFG and 81-96% LFG. The method for determining these factors is specified in Condition 20 of CPCN Case No. 9044.
- c) Each equation is valid only if the total heat input contribution from treated landfill gas is less than or equal to 96% of the total heat input for any period of continuous dual-fuel operation, expressed as the ratio of treated landfill gas heat input to total fuel heat input (for each period of continuous dual-fuel operation), according to the following equation:

$$HI_{LFG} = \frac{B \times CV_{LFG}}{(A \times CV_{liq}) + (B \times CV_{LFG})} \times 100 \le 96\%$$

d) Subsequently the previous 12-month, rolling emissions will be calculated and recorded for each pollutant by summing the prior consecutive 12 months' emissions.

1.2 Testing Requirements:

A. <u>Control of Visible Emissions</u> See Monitoring Requirements

B. <u>Control of Sulfur Oxides Emissions</u> See Monitoring Requirements.

C. Operational Limits.

Subsequent stack testing for PM₁₀, VOCs, NOx, CO shall be performed at least once per Title V permit term (every five years). During each Title V permit term, IWP is required to test the module of engines that has not been tested for the longest duration of time.

Testing shall be performed when operating at a minimum of 90 percent of the design engine load. If testing cannot be performed at the minimum engine load, then the actual engine load during testing shall become the

Table IV - 1

allowable permitted engine load for that operating mode. [Reference: CPCN Case No. 9044]

1.3 Monitoring Requirements:

A. Control of Visible Emissions

The Permittee shall demonstrate compliance with the opacity limitation by conducting an annual EPA Method 9 observation for 15 minutes per unit during non-idle mode. It will be acceptable to observe all four stacks in succession during the 15-second observation intervals, as allowed in Method 9. [Reference: COMAR 26.11.03.06C]

B. Control of Sulfur Oxides Emissions

The Permittee shall obtain a certification from the fuel supplier indicating that the fuel oil is in compliance with the limitation on the sulfur content of the fuel oil or obtain sulfur in fuel analyses of gas that is representative of oil burned. [Reference: COMAR 26.11.03.06C]

C. Operational Limits.

The Permittee shall continuously monitor the timing of each engine. IWP shall calculate and record each engine's 24-hour (calendar day) average timing value for each operating mode.

The Permittee shall install, operate and maintain a device that continuously measures and records the flow of treated LFG and No. 2 fuel oil to each engine. This data shall be sorted by the operating mode in which each engine is operating at the time using the operating modes identified in Part III, Condition 16 of the CPCN case No. 9044.

The Permittee shall perform routine and preventative maintenance in accordance with manufacturer's specifications.

[Reference: COMAR 26.11.03.06C & CPCN Case No. 9044]

1.4 Record Keeping Requirements:

<u>Note</u>: All records must be maintained for a period of at least 5 years. [Reference: COMAR 26.11.03.06C(5)(g)].

A. Control of Visible Emissions

The Permittee shall keep a copy of the visible emissions readings and the certification of the visible emission reader(s) for at least five years on site and make available to the Department upon request. [Reference: COMAR 26.11.03.06C]

Table IV - 1

B. Control of Sulfur Oxides Emissions

The Permittee shall maintain for at least five (5) years documents certifying the sulfur content of gas received or copies of the sulfur in fuel analyses. [Reference: COMAR 26.11.09.07C].

C. Operational Limits.

The Permittee shall measure and record the following:

- a) gallons of No. 2 fuel oil consumed under each operating range for any given time period;
- b) cubic feet of landfill gas consumed under each operating range for any given time period;
- c) percent methane in the LFG at least daily to calculate the heat content of the LFG (In the event of any equipment malfunction causing a failure to record the daily reading, the highest percent methane reading over the previous 30 days shall be used);
- d) heat content of No. 2 fuel oil, as provided by the vendor analysis, per shipment; and
- e) the sulfur content of No. 2 fuel oil, as provided by the vendor analysis, per shipment.

The Permittee shall calculate the NOx, VOC and CO emissions on a daily basis using the quantities of LFG and No. 2 fuel oil, the gas fraction condition, and the most recent data on heat contents of the LFG and No. 2 fuel oil. At the end of each calendar month, IWP shall record the monthly total emissions of NOx, VOC and CO and re-calculate the 12-month rolling total emissions data for each pollutant for comparison to the annual emission limits.

All records and logs shall be maintained at the LFG generation facility for at least five years after the completion of the calendar year in which they were collected. These data shall be readily available for inspection by representatives of Air and Radiation Administration.

The Permittee shall maintain a record of the date, time and description of maintenance performed on the engines and shall submit records to the Department upon request.

[Reference: CPCN Case No. 9044 & COMAR 26.11.03.06C]

1.5 Reporting Requirements:

A. Control of Visible Emissions

The Permittee shall report incidents of visible emissions in accordance with Section III Condition 4 "Report of Excess Emissions and Deviations".

Table IV - 1

B. Control of Sulfur Oxides Emissions

The Permittee shall report fuel supplier certification or sulfur in fuel analyses to the Department upon request. [Reference: COMAR 26.11.09.07C].

C. Operational Limits.

At least 30 days prior to conducting any compliance stack test, IWP shall submit a test protocol to ARMA for review and approval. Compliance stack testing shall be conducted in accordance with ARA Technical Memorandum (TM) 91-01, "Test Methods and Equipment Specifications for Stationary Sources" (January 1991), as amended through Supplement 3 (1 October,1997), 40 CFR 51, 40 CFR 60, or subsequent test protocols approved by ARA.

If EPA Method 19 is used to determine lb./MMBtu emission values, IWP shall use a site-specific F-factor calculated using the LFG constituent data and equations described in Method 19. Test ports shall be located in accordance with TM 91-01 (January 1991), or subsequent or alternative measures approved by ARA.

Final results of each compliance stack test must be submitted to MDE-ARA within 60 days of completion of the test. Analytical data shall be submitted to ARA directly from the emission testing company. IWP shall provide MDE-ARA with copies of the testing results and the new site-specific, fuel-specific emission factors. Upon review and approval by MDE, the new, site-specific ENOx and ECO values shall be used for the NOx and CO emission calculations.

The Permittee shall report the 12-month rolling sum total of emissions for NOx, VOC and CO to the Department in the annual emission certification report due on April 1 of each year.

[Reference: CPCN Case No. 9044 & COMAR 26.11.02.19C].

Table IV - 1a

1a.0 Emissions Unit Number(s): Engines 1-18

Engines 1-18: Eighteen (18) Detroit Diesel Series 60 engines each mated to a 350-kW generator. The engines are grouped into three sixengine modules (Group B, Group C, Group D; Engines B1-B6, C1-C6, D1-D6). [ARA Reg. Nos. 9-0135, 9-0136 & 9-0137]

	Table IV – 1a
1a.1	Applicable Standards/Limits:
	Control of HAP Emissions 40 CFR Part 63 Subpart ZZZZ—National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines §63.6585 - Am I subject to this subpart? "You are subject to this subpart if you own or operate a stationary RICE at a major or area source of HAP emissions, except if the stationary RICE is being tested at a stationary RICE test cell/stand. (c) An area source of HAP emissions is a source that is not a major source." §63.6590 - What parts of my plant does this subpart cover? "This subpart applies to each affected source. (a) Affected source. An affected source is any existing, new, or reconstructed stationary RICE located at a major or area source of HAP emissions, excluding stationary RICE being tested at a stationary RICE test cell/stand. (1) Existing stationary RICE. (iii) For stationary RICE located at an area source of HAP emissions, stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before June 12, 2006." §63.6595 - When do I have to comply with this subpart? "(a) Affected sources. (1), or an existing stationary SI RICE located at
	an area source of HAP emissions, you must comply with the applicable emission limitations, operating limitations, and other requirements no later than October 19, 2013." Emission and Operating Limitations
	§63.6603 - What emission limitations, operating limitations, and other requirements must I meet if I own or operate an existing stationary RICE located at an area source of HAP emissions? "Compliance with the numerical emission limitations established in this subpart is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in §63.6620 and Table 4 to this subpart. (a) If you own or operate an existing stationary RICE located at an area source of HAP emissions, you must comply with the requirements in Table 2d to this subpart and the operating limitations in Table 2b to this subpart that apply to you."

Table IV - 1a

Table 2d to Subpart ZZZZ of Part 63—Requirements for Existing Stationary RICE Located at Area Sources of HAP Emissions

As stated in §§63.6603 and 63.6640, you must comply with the following requirements for existing stationary RICE located at area sources of HAP emissions:

For each.	You must meet the following requirement, except during periods of startup	During periods of startup you must.
13. Non-emergency, non-black start stationary RICE which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis	a. Change oil and filter every 1,440 hours of operation or annually, whichever comes first; 1 b. Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first, and replace as necessary; and	
	c. Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary.	

¹Sources have the option to utilize an oil analysis program as described in §63.6625(i) or (j) in order to extend the specified oil change requirement in Table 2d of this subpart.

²If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in Table 2d of this subpart, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under federal, state, or local law has abated. Sources must report any failure to perform the management practice on the schedule required and the federal, state or local law under which the risk was deemed unacceptable.

"(d) If you own or operate an existing non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP emissions that is certified to the Tier 1 or Tier 2 emission standards in Table 1 of 40 CFR 89.112 and that is subject to an enforceable state or local standard that requires the engine to be replaced no later than June 1, 2018, you may until January 1, 2015, or 12 years after the installation date of the engine (whichever is later), but not later than June 1, 2018, choose to comply with the management practices that are shown for stationary non-emergency CI RICE with a site rating of less than or equal to 300 HP in Table 2d of this subpart instead of the applicable emission limitations in Table 2d, operating limitations in Table 2b, and crankcase

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ventilation system requirements in §63.6625(g). You must comply with the emission limitations in Table 2d and operating limitations in Table 2b that apply for non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP emissions by January 1, 2015, or 12 years after the installation date of the engine (whichever is later), but not later than June 1, 2018. You must also comply with the crankcase ventilation system requirements in §63.6625(g) by January 1, 2015, or 12 years after the installation date of the engine (whichever is later), but not later than June 1, 2018."

General Compliance Requirements

§63.6605 - What are my general requirements for complying with this subpart?

- "(a) You must be in compliance with the emission limitations, operating limitations, and other requirements in this subpart that apply to you at all times."
- "(b) At all times you 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. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this 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, review of operation and maintenance records, and inspection of the source."

1a.2 | Testing Requirements:

Control of HAP Emissions

§63.6612 - By what date must I conduct the initial performance tests or other initial compliance demonstrations if I own or operate an existing stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing stationary RICE located at an area source of HAP emissions?

"If you own or operate an existing stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing stationary RICE located at an area source of HAP emissions you are subject to the requirements of this section.

(a) You must conduct any initial performance test or other initial compliance demonstration according to Tables 4 and 5 to this subpart

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that apply to you within 180 days after the compliance date that is specified for your stationary RICE in §63.6595 and according to the provisions in §63.7(a)(2).

- (b) An owner or operator is not required to conduct an initial performance test on a unit for which a performance test has been previously conducted, but the test must meet all of the conditions described in paragraphs (b)(1) through (4) of this section.
- (1) The test must have been conducted using the same methods specified in this subpart, and these methods must have been followed correctly.
- (2) The test must not be older than 2 years.
- (3) The test must be reviewed and accepted by the Administrator.
- (4) Either no process or equipment changes must have been made since the test was performed, or the owner or operator must be able to demonstrate that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite process or equipment changes."

1a.3 | Monitoring Requirements:

Control of HAP Emissions

§63.6625 - What are my monitoring, installation, collection, operation, and maintenance requirements?

- "(e) If you own or operate any of the following stationary RICE, you 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) An **existing non-emergency**, non-black start stationary RICE located at an area source of HAP emissions which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis."
- "(g) If you own or operate an **existing non-emergency**, non-black start CI engine greater than or equal to 300 HP that is not equipped with a closed crankcase ventilation system, you must comply with either paragraph (g)(1) or paragraph (2) of this section. Owners and operators must follow the manufacturer's specified maintenance requirements for operating and maintaining the open or closed crankcase ventilation systems and replacing the crankcase filters or can request the Administrator to approve different maintenance requirements that are as

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protective as manufacturer requirements. Existing CI engines located at area sources in areas of Alaska that meet either §63.6603(b)(1) or §63.6603(b)(2) do not have to meet the requirements of this paragraph (g). Existing CI engines located on offshore vessels that meet §63.6603(c) do not have to meet the requirements of this paragraph (g). (1) Install a closed crankcase ventilation system that prevents crankcase emissions from being emitted to the atmosphere, or (2) Install an open crankcase filtration emission control system that reduces emissions from the crankcase by filtering the exhaust stream to remove oil mist, particulates and metals."

- "(h) If you operate a new, reconstructed, or **existing stationary engine**, you must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Tables 1a, 2a, 2c, and 2d to this subpart apply."
- "(i) If you own or operate a stationary CI engine that is subject to the work, operation or management practices in items 1 or 2 of Table 2c to this subpart or in items 1 or 4 of Table 2d to this subpart, you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d to this subpart. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base 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 business 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 business 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."

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§63.6640 - How do I demonstrate continuous compliance with the emission limitations, operating limitations, and other requirements?

"(a) You must demonstrate continuous compliance with each emission limitation, operating limitation, and other requirements in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to this subpart that apply to you according to methods specified in Table 6 to this subpart."

<u>Table 6 to Subpart ZZZZ of Part 63—Continuous Compliance With Emission Limitations, and Other Requirements</u>

As stated in §63.6640, you must continuously comply with the emissions and operating limitations and work or management practices as required by the following:

For each.	Complying with the requirement to.	You must demonstrate continuous compliance by.
9 existing non-emergency stationary SI RICE located at an area source of HAP which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis,	practices	i. Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or ii. Develop and follow 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.

1a.4 Record Keeping Requirements:

Note: All records must be maintained for a period of at least 5 years. [Reference: COMAR 26.11.03.06C(5)(g)].

Control of HAP Emissions

§63.6655 - What records must I keep?

- "(e) You 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 stationary RICE;
- (3) An existing stationary RICE located at an area source of HAP emissions subject to management practices as shown in Table 2d to this subpart."

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1a.5 Reporting Requirements:

Control of HAP Emissions

§63.6645 - What notifications must I submit and when?

- "(a) You must submit all of the notifications in §§63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) through (e), and (g) and (h) that apply to you by the dates specified if you own or operate any of the following;
- (2) An existing stationary RICE located at an area source of HAP emissions.
- (5) This requirement does not apply if you own or operate an existing stationary RICE less than 100 HP, an existing stationary emergency RICE, or an existing stationary RICE that is not subject to any numerical emission standards.
- "§63.6640(b) You must report each instance in which you did not meet each emission limitation or operating limitation in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to this subpart that apply to you. These instances are deviations from the emission and operating limitations in this subpart. These deviations must be reported according to the requirements in §63.6650. If you change your catalyst, you must reestablish the values of the operating parameters measured during the initial performance test. When you reestablish the values of your operating parameters, you must also conduct a performance test to demonstrate that you are meeting the required emission limitation applicable to your stationary RICE."
- "§63.6640(e) You must also report each instance in which you did not meet the requirements in Table 8 to this subpart that apply to you. If you own or operate a new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions (except new or reconstructed 4SLB engines greater than or equal to 250 and less than or equal to 500 brake HP), a new or reconstructed stationary RICE located at an area source of HAP emissions, or any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in Table 8 to this subpart: An existing 2SLB stationary RICE, an existing 4SLB stationary RICE, an existing emergency stationary RICE, an existing limited use stationary RICE, or an existing stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis."

SECTION V INSIGNIFICANT ACTIVITIES

This section provides a list of insignificant emissions units that were reported in the Title V permit application. The applicable Clean Air Act requirements, if any, are listed below the insignificant activity.

(1) No. 1 Fuel burning equipment using gaseous fuels or no. 1 or no. 2 fuel oil, and having a heat input less than 1,000,000 Btu (1.06 gigajoules) per hour;

[For Areas I, II, V, and VI]

The fuel burning unit is subject to the following requirements:

COMAR 26.11.09.05A(1), which establishes that the Permittee may not cause or permit the discharge of emissions from any fuel burning equipment, other than water in an uncombined form, which is greater than 20 percent opacity.

Exceptions: COMAR 26.11.09.05A(2) does not apply to emissions during load changing, soot blowing, start-up, or adjustments or occasional cleaning of control equipment if:

- (a) The visible emissions are not greater than 40 percent opacity; and
- (b) The visible emissions do not occur for more than 6 consecutive minutes in any sixty minute period.

[For Distillate Fuel Oil]

COMAR 26.11.09.07A(1)(c), which establishes that the Permittee may not burn, sell, or make available for sale any distillate fuel with a sulfur content by weight in excess of 0.3 percent.

(2) No. <u>18</u> Stationary internal combustion engines with an output less than 500 brake horsepower (373 kilowatts) and which are not used to generate electricity for sale or for peak or load shaving;

The <u>affected units</u> are subject to the following requirements:

(A) COMAR 26.11.09.05E(2), Emissions During Idle Mode: The Permittee may not cause or permit the discharge of

emissions from any engine, operating at idle, greater than 10 percent opacity.

- (B) COMAR 26.11.09.05E(3), Emissions During Operating Mode: The Permittee may not cause or permit the discharge of emissions from any engine, operating at other than idle conditions, greater than 40 percent opacity.
- (C) Exceptions:
 - (i) COMAR 26.11.09.05E(2) does not apply for a period of 2 consecutive minutes after a period of idling of 15 consecutive minutes for the purpose of clearing the exhaust system.
 - (ii) COMAR 26.11.09.05E(2) does not apply to emissions resulting directly from cold engine start-up and warm-up for the following maximum periods:
 - (a) Engines that are idled continuously when not in service: 30 minutes
 - (b) all other engines: 15 minutes.
 - (iii) COMAR 26.11.09.05E(2) & (3) do not apply while maintenance, repair or testing is being performed by qualified mechanics.
- (3) Water cooling towers and water-cooling ponds unless used for evaporative cooling of water from barometric jets or barometric condensers, or used in conjunction with an installation requiring a permit to operate;
- (4) Containers, reservoirs, or tanks used exclusively for:
 - (a) No. 2 Storage of lubricating oils;
 - (b) No. __1 Storage of Numbers 1, 2, 4, 5, and 6 fuel oil and aviation iet engine fuel;
- (5) Comfort air conditioning subject to requirements of Title VI of the Clean Air Act;

SECTION VI STATE-ONLY ENFORCEABLE CONDITIONS

The Permittee is subject to the following State-only enforceable requirements:

Applicable Regulations:

- (a) COMAR 26.11.06.08 <u>Nuisance</u>. "An installation or premises may not be operated or maintained in such a manner that a nuisance or air pollution is created. Nothing in this regulation relating to the control of emissions may in any manner be construed as authorizing or permitting the creation of, or maintenance of, nuisance or air pollution."
- (b) COMAR 26.11.06.09 Odors. "A person may not cause or permit the discharge into the atmosphere of gases, vapors, or odors beyond the property line in such a manner that nuisance or air pollution is created."

BACKGROUND

INGENCO Wholesale Power LLC is a 6-Megawatt (MW) landfill gas generation facility located within the Newland Park Sanitary Landfill – 6967 Brick Kiln Road, Salisbury Maryland. The applicable Standard Industrial Classification (SIC) Code is 4931.

The facility received a Maryland Public Service Commission (PSC) Certificate of Public Convenience and Necessity (CPCN) Order No. 80722 (Case No. 9044) on April 8, 2006, for the construction of a 6 MW landfill gas-supplied electric generating facility.

The facility consists of eighteen (18) Detroit Diesel Series 60 engines each mated to a 350-kW generator. The engines are grouped into three six-engine modules (Group B, Group C, Group D; Engines B1-B6, C1-C6, D1-D6). The engines in each group vent to a common stack for that group. Engines are typically operated on a rotating basis so that each engine will be operated about the same amount of time under the same conditions. The engines are fueled by No. 2 fuel oil or No. 2 fuel oil and landfill gas from Newland Park Sanitary Landfill.

INGENCO uses Detroit Diesel Series 60 engines. They are compression ignition engines. The engines are pre-2000 models, usually 1996-1998. The engine control modules (ECM) have been replaced by a proprietary engine control module (PCM) developed by INGENCO that is optimized for dual fuel operations with landfill gas at high ratios of energy from landfill gas to the total energy required for operation (gas fraction). The PCM allows for things like retarded timing to reduce NOx emissions rates.

The engines are diesel and do not have spark plugs. Methane combustion requires a pilot charge of liquid fuel. The achievable gas fraction is limited by the minimum amount of fuel required by the injectors and the landfill gas methane content. Reduced minimum fuel required by the injectors increases the gas fraction, which reduces generation cost and reduced emissions rates. In the current configuration, the 96% limit in the facility permit exceeds what is achieved.

INGENCO plans to do some, or all, of the following to increase the gas fraction: (1) reprogram injector firing to reduce the minimum liquid fuel; (2) replace the injectors with injectors that require less fuel; (3) replace the cam with a cam designed for lower fuel injectors and (4) dilute the fuel with water by emulsifying the fuel.

New Source Performance Standards (NSPS -40 CFR Part 60)

The engines are not subject to the requirements of 40 CFR Part 60 Subpart III—Standards of Performance for Stationary Compression Ignition Internal Combustion Engines since they were manufactured prior to April 1, 2006 and were not modified or reconstructed after July 11, 2005. The engines are compression ignition pre-2000 models (manufactured during 1996-1998 timeframe).

EPA considers a compression ignition engine that uses 98% or more gaseous fuel to be spark ignited even though the engines do not have any sparking device. INGENCO will maintain the gas fraction below 98% so that there is no consideration of applicability of Subpart JJJJ.

National Emissions Standards for Hazardous Air Pollutants for Stationary (NESHAP – 40 CFR Part 63)

The engines are subject to the requirements of 40 CFR Part 63 Subpart ZZZZ—National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines. The engines are considered existing stationary CI RICE located at an area source of HAP emissions and must comply with applicable emission limitations and operating limitations no later than October 19, 2013.

More than 10% of the energy used by the engines on an annual basis comes from landfill gas. This exempts the engines from the emissions requirements. The Maintenance standard in Table 2d, item 13 is applicable (non-emergency, non-black start stationary RICE which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis).

The following table summarizes the actual emissions from INGENCO Wholesale Power based on its Annual Emission Certification Reports:

Table 1: Actual Emissions

Year	NO _x (TPY)	SO _X (TPY)	PM ₁₀ (TPY)	CO (TPY)	VOC (TPY)	Total HAP (TPY)
2020	33.03	1.37	3.44	70.33	0.062	0.05
2019	31.45	1.34	0.076	68.19	0.08	0.21
2018	44.12	3.71	3.29	65.31	23.27	0.30
2017	22.17	1.58	1.87	41.80	7.96	0.11
2016	36.23	2.19	0.23	65.93	23.25	0.14

The major source threshold for triggering Title V permitting requirements in Wicomico County 50 tons per year for VOC, 100 tons for NOx, and 100 tons per year for any other criteria pollutants and 10 tons for a single HAP or 25 tons per year for total HAPs Since the potential CO emission from the facility are greater than the major source threshold, INGENCO Wholesale Power is required to obtain a Title V – Part 70 Operating Permit under COMAR 26.11.03.01.

Changes since the last Title V Permit

This Part 70 Operating Permit is a renewal permit. No changes have occurred at the facility since the last Part 70 permit was issued.

Compliance Assurance Monitoring

INGENCO Wholesale Power conducted a Compliance Assurance Monitoring (CAM) analysis for the facility and determined that the facility is not subject to the (CAM) Rule 40 CFR Subpart 64.

CAM is intended to provide a reasonable assurance of compliance with applicable requirements under the Clean Air Act for large emission units that rely on air pollution control (APC) equipment to achieve compliance. The CAM approach establishes monitoring for the purpose of: (1) documenting continued operation of the control measures within ranges of specified indicators of performance (such as emissions, control device parameters, and process parameters) that are designed to provide a reasonable assurance of compliance with applicable requirements; (2) indicating any excursions from these ranges; and (3) responding to the data so that the cause or causes of the excursions are corrected. In order for a unit to be subject to CAM, the unit must be located at a major source, be subject to an emission limitation or standard, use a control device to achieve compliance, have post-control emissions of at least 100% of the major source amount (for initial CAM submittals), and must not otherwise be exempt from CAM. Applicability determinations are made on a pollutant-by-pollutant basis for each emission unit.

INGENCO Wholesale Power does not have any air pollution control equipment on the generators to achieve compliance with applicable requirements. Therefore, the facility is not subject to the CAM Rule.

GREENHOUSE GAS (GHG) EMISSIONS

INGENCO Wholesale Power emits the following greenhouse gases (GHGs) related to Clean Air Act requirements: carbon dioxide, methane, and nitrous oxide. These GHGs originate from various processes (i.e., waste decomposition and landfill gas fugitives, gas flaring, internal combustion engines, and garage boilers) contained within the facility premises applicable to INGENCO Wholesale Power. The facility has not triggered Prevention of Significant Deterioration (PSD) requirements for GHG emissions; therefore, there are no applicable GHG Clean Air Act requirements. While there may be no applicable requirements as a result of PSD, emission certifications report for the years 2018, 2019, and 2020, showed that INGENCO Wholesale Power is not a major source (threshold: 100,000tpy CO₂e) for GHG's (see Table 3 shown below). The Permittee shall quantify facility wide GHGs emissions and report them in accordance with Section 3 of the Part 70 permit.

The following table summarizes the actual GHG CO₂eq emissions from INGENCO Wholesale Power based on its Annual Emission Certification Reports:

Table 3: Greenhouse Gases Emissions Summary

GHG	Conversion factor	2018 tpy CO ₂ e	2019 tpy CO ₂ e	2020 tpy CO ₂ e
Carbon dioxide CO ₂	1	11,271.16	10,569.25	17,912.00
Methane CH ₄	25	322.17	342.06	354.54
Nitrous Oxide N ₂ O	298	0.130	0.129	0.129
Total GHG CO _{2eq}		11,593.46	10,911.35	18,266.67

On February 3, 2022, the Department received the INGENCO Wholesale Power LLC's Part 70-permit renewal application. An administrative completeness review was conducted, and the application was deemed to be complete and completeness determination letter was sent on February 17, 2022, granting the facility an application shield.

EMISSION UNIT IDENTIFICATION

INGENCO Wholesale Power has identified the following emission units as being subject to Title V permitting requirements and having applicable requirements.

Table 2: Emission Unit Identification

Emissions Unit Number	MDE-ARA Registration Number	Emissions Unit Name and Description	Date of Installation
Engines 1-18	9-0135, 9-0136 & 9-0137	Eighteen (18) Detroit Diesel Series 60 engines each mated to a 350-kW generator. The engines are grouped into three six-engine modules (Group B, Group C, Group D: B1-B6; C1-C6; D1-D6)	April 2007

AN OVERVIEW OF THE PART 70 PERMIT

The Fact Sheet is an informational document. If there are any discrepancies between the Fact Sheet and the Part 70 permit, the Part 70 permit is the enforceable document.

Section I of the Part 70 Permit contains a brief description of the facility and an inventory list of the emissions units for which applicable requirements are identified in Section IV of the permit.

Section II of the Part 70 Permit contains the general requirements that relate to administrative permit actions. This section includes the procedures for renewing, amending, reopening, and transferring permits, the relationship to permits to construct and approvals, and the general duty to provide information and to comply with all applicable requirements.

Section III of the Part 70 Permit contains the general requirements for testing, record keeping and reporting; and requirements that affect the facility as a whole, such as open burning, air pollution episodes, particulate matter from construction and demolition activities, asbestos provisions, ozone depleting substance provisions, general conformity, and acid rain permit. This section includes the requirement to report excess emissions and deviations, to submit an annual emissions certification report and an annual compliance certification report, and results of sampling and testing.

Section IV of the Part 70 Permit identifies the emissions standards, emissions limitations, operational limitations, and work practices applicable to each emissions unit located at the facility. For each standard, limitation, and work practice, the permit identifies the basis upon which the Permittee will demonstrate compliance. The basis will include testing, monitoring, record keeping, and reporting requirements. The demonstration may include one or more of these methods.

Section V of the Part 70 Permit contains a list of insignificant activities. These activities emit very small quantities of regulated air pollutants and do not require a permit to construct or registration with the Department. For insignificant activities that are subject to a requirement under the Clean Air Act, the requirement is listed under the activity.

Section VI of the Part 70 Permit contains State-only enforceable requirements. Section VI identifies requirements that are not based on the Clean Air Act, but solely on Maryland air pollution regulations. These requirements generally relate to the prevention of nuisances and implementation of Maryland's Air Toxics Program.

REGULATORY REVIEW/TECHNICAL REVIEW/COMPLIANCE METHODOLOGY

Emission Units: Engines 1-18

Engines 1-18: Eighteen (18) Detroit Diesel Series 60 engines each mated to a 350-kW generator. The engines are grouped into three six-engine modules (Group B, Group C, Group D; Engines B1-B6, C1-C6, D1-D6). [ARA Reg. Nos. 9-0135, 9-016 & 9-0137]

The engines in each group vents to a common stack for that group. Engines are typically operated so on a rotating basis so that each engine will be operated about the same amount time under the same conditions. This is a dual-fired peaking facility.

A Certificate of Public Convenience and Necessity (CPCN) Order No. 80722 (Case No. 9044) was issued on April 8, 2006, to construct a six-megawatt (6-MW) landfill gas-supplied electric generating facility at the Newland Park Landfill located in Wicomico County Maryland.

Compliance Status:

During the October 22, 2020, inspection report there was no visible emissions observed. Group C (C2, C3, C5, C6) and Group D (D1, D3, D6) engines were running at 94% during the inspection. Group C was operating at 285-kW and Group D at 270-kW. A method 9 was conducted on the stack of engines and average opacity of 0% was observed for a 12-minute period.

The current stack test was performed on February 15, 2022, on Engines Group C operating at 92% gas fraction at about 96%rated output capacity when operating only on landfill gas and 100% on fuel oil at 87% rated output capacity. The results are as follows:

Modes	% Fuel used	Emission	Emission Factors, lbs./MMBtu		
		PM ₁₀	NOx	CO	VOC
Mode 1	100% fuel oil	0.045	2.056	0.136	0.017
Mode 2	92% LFG	0.021	0.488	0.998	0.052

The test complied with the PM limit of 0.20 lb./MMBTU in each of the modes. There are no limits for emission factors for the other pollutants, but the factors are required to be used in calculating annual emissions of the various pollutants which have annual emission limits.

Applicable Standards and limits:

A. Control of Visible Emissions

COMAR 26.11.09.05E. - <u>Stationary Internal Combustion Engine Powered</u> Equipment.

- "(2) Emissions During Idle Mode. A person may not cause or permit the discharge of emissions from any engine, operating at idle, greater than 10 percent opacity.
- (3) <u>Emissions During Operating Mode</u>. A person may not cause or permit the discharge of emissions from any engine, operating at other than idle conditions, greater than 40 percent opacity.

(4) Exceptions.

- (a) Section E(2) of this regulation does not apply for a period of 2 consecutive minutes after a period of idling of 15 consecutive minutes for the purpose of clearing the exhaust system.
- (b) Section E(2) of this regulation does not apply to emissions resulting directly from cold engine start-up and warm-up for the following maximum periods:
- (i) Engines that are idled continuously when not in service: 30 minutes;
- (ii) All other engines: 15 minutes.
- (c) Section E(2) and (3) of this regulation do not apply while maintenance, repair, or testing is being performed by qualified mechanics."

Compliance Demonstration:

The Permittee shall demonstrate compliance with the opacity limitation by conducting an annual EPA Method 9 observation for 15 minutes per unit during

non-idle mode. It will be acceptable to observe all four stacks in succession during the 15-second observation intervals, as allowed in Method 9. The Permittee shall keep a copy of the visible emissions readings and the certification of the visible emission reader(s) for at least five years on site and make available to the Department upon request. [Reference: COMAR 26.11.03.06C] The Permittee shall report incidents of visible emissions in accordance with Section III Condition 4 "Report of Excess Emissions and Deviations".

B. Control of Sulfur Oxides Emissions

COMAR 26.11.09.07 — Control od Sulfur Oxides from Fuel-burning Equipment "A. Sulfur Content Limitations for Fuel. A person may not burn, sell, or make available for sale any fuel with a sulfur content by weight in excess of or which otherwise exceeds the following limitations: (1) In Areas I, II, V, and VI:

- (a) The combustion of all solid fuels on a premises where the sum total maximum rated heat input of all fuel burning equipment located on the premises is 100 million Btu (106 gigajoules) per hour or greater may not result in a total emission of oxides of sulfur in excess of 3.5 pounds per million Btu (1.50 kilograms per gigajoule) actual heat input per hour;
- (b) Residual fuel oils, 2.0 percent;
- (c) Distillate fuel oils, 0.3 percent;
- (d) Process gas used as fuel, 0.3 percent."

Compliance Demonstration:

The Permittee shall obtain fuel suppliers' certification indicating that the fuel oil complies with the limitation on the sulfur content of the fuel or obtain sulfur in fuel analyses that is representative of oil burned. The Permittee shall maintain on site for at least five years documents certifying the sulfur content of fuel received or copies of the sulfur in fuel analyses. The Permittee shall report fuel supplier certifications or sulfur in fuel analyses to the Department upon request. [Reference: COMAR 26.11.03.06C]

C. Operational Limits

[Reference: CPCN Case No: 9044]

(1) The Permittee shall only burn landfill gas collected from the Newland Park Landfill and/or No. 2 fuel oil in the eighteen (18) engines. The engines shall be operated with a 24-hour (calendar day) average timing for each operating mode that is no more than one degree different from the timing used in the respective initial performance tests.

INGENCO WHOLEALE POWER, LLC. WICOMICO PLANT

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(2) Except during periods of start-up, shutdown, or malfunction, INGENCO Wholesale Power (IWP) shall limit the emissions from each engine to the following:

PM₁₀:

0.2 lb./MMBtu

This limit is in force in order for the LFG generation facility to meet the PM₁₀ 24-hr NAAQS under COMAR 26.11.04.04.

(3) The annual emissions from all 18 engines shall meet the following limits for any consecutive 12-month rolling sum total:

NOx:

< 100 tpy

VOC:

< 50 tpy

CO:

< 250 tpy

Note: These limits are in force in order for the LFG generation facility to avoid NA-NSR and PSD applicability requirements.

- (4) Except during periods of "shifting modes", the LFG generation facility shall only be operated with each engine in one of the following three modes:
 - a) Mode 1 Each engine at maximum production and firing only No. 2 fuel oil.
 - b) Mode 2 Each engine at maximum production and firing No. 2 fuel oil and up to 30 percent landfill gas.
 - c) Mode 3 Each engine at maximum production and firing No. 2 fuel oil with at least 81 percent landfill gas, but no more than 96 percent landfill gas.

A period of "shifting modes" shall not exceed 15 minutes.

- (5) The LFG generation facility emissions shall be calculated under the following requirements:
 - monthly as the sum of the emissions under each of the operating modes described below according to the following equations:

$$NOx (lbs) = \left[\left(\frac{\left(A \times CV_{liq} \right) \times 1MMBtu}{1,000,000Btu} \right) \times ENOx(1) \right] + \left[\left(\frac{\left(B \times CV_{LFG} \right) \times 1MMBtu}{1,000,000Btu} \right) \times ENOx (LFG) \right]$$

$$CO (lbs) = \left[\left(\frac{\left(A \times CV_{liq} \right) \times IMMBtu}{1,000,000Btu} \right) \times ECOx(l) \right] + \left[\left(\frac{\left(B \times CV_{LFG} \right) \times IMMBtu}{1,000,000Btu} \right) \times ECOx(LFG) \right]$$

A = gallons of No. 2 fuel oil consumed under each operating range for any given time period.

B = cubic feet of landfill gas consumed under each operating range for any given time period.

CV_{liq} = calorific value (heat content) in Btu/gallon of No. 2 fuel oil.

CV_{LFG} = calorific value (heat content) in Btu/cubic foot of treated landfill gas.

And the following fuel-specific emission factors:

ENO_X(I) = Emissions factor for NO_X from No. 2 fuel oil ENO_X(LFG) = Emissions factor for NO_X from LFG ECO(I) = Emissions factor for CO from No. 2 fuel oil ECO(LFG) = Emissions factor for CO from LFG

- b) The fuel specific ENO_X and ECO values used for the IWP LFG generation facility shall be determined based on initial stack testing of the facility emissions. ENO_X and ECO values shall be defined thereafter based on the most recent stack testing data. Fuel-specific ENO_X values shall be determined for each of the "NO_X operating modes": 100% No. 2 fuel oil, 1 30% LFG, and 81 96% LFG. Fuel-specific ECO values shall be determined for the "CO operating modes": 0-30% LFG and 81-96% LFG. The method for determining these factors is specified in Condition 20 of CPCN Case No. 9044.
- c) Each equation is valid only if the total heat input contribution from treated landfill gas is less than or equal to 96% of the total heat input for any period of continuous dual-fuel operation, expressed as the ratio of treated landfill gas heat input to total fuel heat input (for each period of continuous dual-fuel operation), according to the following equation:

$$HI_{LFG} = \frac{B \times CV_{LFG}}{\left(A \times CV_{liq}\right) + \left(B \times CV_{LFG}\right)} \times 100 \le 96\%$$

d) Subsequently the previous 12-month, rolling emissions will be calculated and recorded for each pollutant by summing the prior consecutive 12 months' emissions.

Compliance Demonstration:

Subsequent stack testing for PM₁₀, VOCs, NOx, CO shall be performed at least once per Title V permit term (every five years). During each Title V permit term, IWP is required to test the module of engines that has not been tested for the longest duration of time.

Testing shall be performed when operating at a minimum of 90 percent of the design engine load. If testing cannot be performed at the minimum engine load, then the actual engine load during testing shall become the allowable permitted engine load for that operating mode. [Reference: CPCN Case No. 9044] The Permittee shall continuously monitor the timing of each engine. IWP shall calculate and record each engine's 24-hour (calendar day) average timing value for each operating mode.

The Permittee shall install, operate and maintain a device that continuously measures and records the flow of treated LFG and No. 2 fuel oil to each engine. This data shall be sorted by the operating mode in which each engine is

operating at the time using the operating modes identified in Part III, Condition 16 of the CPCN case No. 9044.

The Permittee shall perform routine and preventative maintenance in accordance with manufacturer's specifications.

[Reference: COMAR 26.11.03.06C & CPCN Case No. 9044]

The Permittee shall measure and record the following:

- a) gallons of No. 2 fuel oil consumed under each operating range for any given time period;
- b) cubic feet of landfill gas consumed under each operating range for any given time period;
- c) percent methane in the LFG at least daily to calculate the heat content of the LFG (In the event of any equipment malfunction causing a failure to record the daily reading, the highest percent methane reading over the previous 30 days shall be used);
- d) heat content of No. 2 fuel oil, as provided by the vendor analysis, per shipment; and
- e) the sulfur content of No. 2 fuel oil, as provided by the vendor analysis, per shipment.

The Permittee shall calculate the NOx, VOC and CO emissions on a daily basis using the quantities of LFG and No. 2 fuel oil, the gas fraction condition, and the most recent data on heat contents of the LFG and No. 2 fuel oil. At the end of each calendar month, IWP shall record the monthly total emissions of NOx, VOC and CO and re-calculate the 12-month rolling total emissions data for each pollutant for comparison to the annual emission limits.

All records and logs shall be maintained at the LFG generation facility for at least five years after the completion of the calendar year in which they were collected. These data shall be readily available for inspection by representatives of Air and Radiation Administration.

The Permittee shall maintain a record of the date, time and description of maintenance performed on the engines and shall submit records to the Department upon request.

[Reference: CPCN Case No. 9044 & COMAR 26.11.03.06C]

At least 30 days prior to conducting any compliance stack test, IWP shall submit a test protocol to ARMA for review and approval. Compliance stack testing shall be conducted in accordance with ARA Technical Memorandum (TM) 91-01, "Test Methods and Equipment Specifications for Stationary Sources" (January 1991), as amended through Supplement 3 (1 October, 1997), 40 CFR 51, 40 CFR 60, or subsequent test protocols approved by ARA.

If EPA Method 19 is used to determine lb./MMBtu emission values, IWP shall use a site-specific F-factor calculated using the LFG constituent data and equations described in Method 19. Test ports shall be located in accordance with TM 91-01 (January 1991), or subsequent or alternative measures approved by ARA.

Final results of each compliance stack test must be submitted to MDE-ARA within 60 days of completion of the test. Analytical data shall be submitted to ARA directly from the emission testing company. IWP shall provide MDE-ARA with copies of the testing results and the new site-specific, fuel-specific emission factors. Upon review and approval by MDE, the new, site-specific ENOx and ECO values shall be used for the NOx and CO emission calculations.

The Permittee shall report the 12-month rolling sum total of emissions for NOx, VOC and CO to the Department in the annual emission certification report due on April 1 of each year.

[Reference: CPCN Case No. 9044 & COMAR 26.11.02.19C].

Emission Units: Engines 1-18 (Cont'd)

Engines 1-18: Eighteen (18) Detroit Diesel Series 60 engines each mated to a 350-kW generator. The engines are grouped into three six-engine modules (Group B, Group C, Group D; Engines B1-B6, C1-C6, D1-D6). [ARA Reg. Nos. 9-0135, 9-016 & 9-0137]

Compliance Status

Per Full Compliance Report performed on October 22, 2020, the facility reports that oil is changed every 400 hours. Hoses and belts are checked daily, but comprehensive inspection and maintenance are performed every four weeks. Engines have no plugs (compression engines) per operators. Records of maintenance are kept on site.

Applicable Standards and limits:

Control of HAP Emissions

40 CFR Part 63 Subpart ZZZZ—National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

§63.6585 - Am I subject to this subpart?

"You are subject to this subpart if you own or operate a stationary RICE at a major or **area source of HAP emissions**, except if the stationary RICE is being tested at a stationary RICE test cell/stand.

(c) An area source of HAP emissions is a source that is not a major source." **§63.6590 -** What parts of my plant does this subpart cover?

"This subpart applies to each affected source.

- (a) Affected source. An affected source is any **existing**, new, or reconstructed stationary RICE located at a major or **area source of HAP emissions**, excluding stationary RICE being tested at a stationary RICE test cell/stand.
- (1) Existing stationary RICE.
- (iii) For stationary RICE located at an area source of HAP emissions, stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before **June 12, 2006**."

§63.6595 - When do I have to comply with this subpart?

"(a) Affected sources. (1) ..., or an existing stationary SI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations, operating limitations, and other requirements no later than **October 19, 2013**."

Emission and Operating Limitations

§63.6603 - What emission limitations, operating limitations, and other requirements must I meet if I own or operate an existing stationary RICE located at an area source of HAP emissions?

"Compliance with the numerical emission limitations established in this subpart is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in §63.6620 and Table 4 to this subpart.

(a) If you own or operate an existing stationary RICE located at an area source of HAP emissions, you must comply with the requirements in Table 2d to this subpart and the operating limitations in Table 2b to this subpart that apply to you."

<u>Table 2d to Subpart ZZZZ of Part 63—Requirements for Existing Stationary RICE Located at Area Sources of HAP Emissions</u>

As stated in §§63.6603 and 63.6640, you must comply with the following requirements for existing stationary RICE located at area sources of HAP emissions:

For each.	You must meet the following requirement, except during periods of startup	During periods of startup you must.
13. Non-emergency, non-black start stationary RICE which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis	a. Change oil and filter every 1,440 hours of operation or annually, whichever comes first; b. Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first, and replace as necessary; and	

c. Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace	
as necessary.	

Sources have the option to utilize an oil analysis program as described in §63.6625(i) or (j) in order to extend the specified oil change requirement in Table 2d of this subpart.

²If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in Table 2d of this subpart, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under federal, state, or local law has abated. Sources must report any failure to perform the management practice on the schedule required and the federal, state or local law under which the risk was deemed unacceptable.

"(d) If you own or operate an existing non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP emissions that is certified to the Tier 1 or Tier 2 emission standards in Table 1 of 40 CFR 89.112 and that is subject to an enforceable state or local standard that requires the engine to be replaced no later than June 1, 2018, you may until January 1, 2015, or 12 years after the installation date of the engine (whichever is later), but not later than June 1, 2018, choose to comply with the management practices that are shown for stationary non-emergency CI RICE with a site rating of less than or equal to 300 HP in Table 2d of this subpart instead of the applicable emission limitations in Table 2d, operating limitations in Table 2b, and crankcase ventilation system requirements in §63.6625(g). You must comply with the emission limitations in Table 2d and operating limitations in Table 2b that apply for non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP emissions by January 1, 2015, or 12 years after the installation date of the engine (whichever is later), but not later than June 1, 2018. You must also comply with the crankcase ventilation system requirements in §63.6625(g) by January 1, 2015, or 12 years after the installation date of the engine (whichever is later), but not later than June 1, 2018."

General Compliance Requirements

§63.6605 - What are my general requirements for complying with this subpart? "(a) You must be in compliance with the emission limitations, operating limitations, and other requirements in this subpart that apply to you at all times." "(b) At all times you 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. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this 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, review of operation and maintenance records, and inspection of the source."

Compliance Demonstration:

Control of HAP Emissions

§63.6612 - By what date must I conduct the initial performance tests or other initial compliance demonstrations if I own or operate an existing stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing stationary RICE located at an area source of HAP emissions?

"If you own or operate an existing stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing stationary RICE located at an area source of HAP emissions you are subject to the requirements of this section.

- (a) You must conduct any initial performance test or other initial compliance demonstration according to Tables 4 and 5 to this subpart that apply to you within 180 days after the compliance date that is specified for your stationary RICE in §63.6595 and according to the provisions in §63.7(a)(2).
- (b) An owner or operator is not required to conduct an initial performance test on a unit for which a performance test has been previously conducted, but the test must meet all of the conditions described in paragraphs (b)(1) through (4) of this section.
- (1) The test must have been conducted using the same methods specified in this subpart, and these methods must have been followed correctly.
- (2) The test must not be older than 2 years.
- (3) The test must be reviewed and accepted by the Administrator.
- (4) Either no process or equipment changes must have been made since the test was performed, or the owner or operator must be able to demonstrate that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite process or equipment changes."

§63.6625 - What are my monitoring, installation, collection, operation, and maintenance requirements?

"(e) If you own or operate any of the following stationary RICE, you 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) An **existing non-emergency**, non-black start stationary RICE located at an area source of HAP emissions which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis."
- "(g) If you own or operate an **existing non-emergency**, non-black start CI engine greater than or equal to 300 HP that is not equipped with a closed crankcase ventilation system, you must comply with either paragraph (q)(1) or paragraph (2) of this section. Owners and operators must follow the manufacturer's specified maintenance requirements for operating and maintaining the open or closed crankcase ventilation systems and replacing the crankcase filters or can request the Administrator to approve different maintenance requirements that are as protective as manufacturer requirements. Existing CI engines located at area sources in areas of Alaska that meet either §63.6603(b)(1) or §63.6603(b)(2) do not have to meet the requirements of this paragraph (g). Existing CI engines located on offshore vessels that meet §63.6603(c) do not have to meet the requirements of this paragraph (g). (1) Install a closed crankcase ventilation system that prevents crankcase emissions from being emitted to the atmosphere, or (2) Install an open crankcase filtration emission control system that reduces emissions from the crankcase by filtering the exhaust stream to remove oil mist, particulates and metals."
- "(h) If you operate a new, reconstructed, or **existing stationary engine**, you must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Tables 1a, 2a, 2c, and 2d to this subpart apply."
- "(i) If you own or operate a stationary CI engine that is subject to the work, operation or management practices in items 1 or 2 of Table 2c to this subpart or in items 1 or 4 of Table 2d to this subpart, you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d to this subpart. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base 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 business 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 business 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."

§63.6640 - How do I demonstrate continuous compliance with the emission limitations, operating limitations, and other requirements?

"(a) You must demonstrate continuous compliance with each emission limitation, operating limitation, and other requirements in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to this subpart that apply to you according to methods specified in Table 6 to this subpart."

Table 6 to Subpart ZZZZ of Part 63—Continuous Compliance With Emission Limitations, and Other Requirements

As stated in §63.6640, you must continuously comply with the emissions and operating limitations

and work or management practices as required by the following:

For each.	Complying with the requirement to.	You must demonstrate continuous compliance by.
, ,		i. Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or ii. Develop and follow 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.

§63.6655 - What records must I keep?

- "(e) You 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 stationary RICE;
- (3) An existing stationary RICE located at an area source of HAP emissions subject to management practices as shown in Table 2d to this subpart."
- §63.6645 What notifications must I submit and when?
- "(a) You must submit all of the notifications in §§63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) through (e), and (g) and (h) that apply to you by the dates specified if you own or operate any of the following;

- (2) An existing stationary RICE located at an area source of HAP emissions.
- (5) This requirement does not apply if you own or operate an existing stationary RICE less than 100 HP, an existing stationary emergency RICE, or an existing stationary RICE that is not subject to any numerical emission standards.
- "§63.6640(b) You must report each instance in which you did not meet each emission limitation or operating limitation in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to this subpart that apply to you. These instances are deviations from the emission and operating limitations in this subpart. These deviations must be reported according to the requirements in §63.6650. If you change your catalyst, you must reestablish the values of the operating parameters measured during the initial performance test. When you reestablish the values of your operating parameters, you must also conduct a performance test to demonstrate that you are meeting the required emission limitation applicable to your stationary RICE."
- "§63.6640(e) You must also report each instance in which you did not meet the requirements in Table 8 to this subpart that apply to you. If you own or operate a new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions (except new or reconstructed 4SLB engines greater than or equal to 250 and less than or equal to 500 brake HP), a new or reconstructed stationary RICE located at an area source of HAP emissions, or any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in Table 8 to this subpart: An existing 2SLB stationary RICE, an existing 4SLB stationary RICE, an existing emergency stationary RICE, an existing limited use stationary RICE, or an existing stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis."

COMPLIANCE SCHEDULE

INGENCO Wholesale Power is currently in compliance with all applicable air quality regulations.

TITLE IV - ACID RAIN

Not Applicable.

<u>TITLE VI – OZONE DEPLETING SUBSTANCES</u>

INGENCO Wholesale Power is not subject to Title VI requirements.

SECTION 112(r) - ACCIDENTAL RELEASE

INGENCO Wholesale Power is not subject to the requirements of Section 112(r).

PERMIT SHIELD

INGENCO Wholesale Power did not request a permit shield.

INSIGNIFICANT ACTIVITIES

This section provides a list of insignificant emissions units that were reported in the Title V permit application. The applicable Clean Air Act requirements, if any, are listed below the insignificant activity.

(1) No. _ 1 Fuel burning equipment using gaseous fuels or no. 1 or no. 2 fuel oil, and having a heat input less than 1,000,000 Btu (1.06 gigajoules) per hour;

[For Areas I, II, V, and VI]

The *fuel burning unit* is subject to the following requirements:

COMAR 26.11.09.05A(1), which establishes that the Permittee may not cause or permit the discharge of emissions from any fuel burning equipment, other than water in an uncombined form, which is greater than 20 percent opacity.

Exceptions: COMAR 26.11.09.05A(2) does not apply to emissions during load changing, soot blowing, start-up, or adjustments or occasional cleaning of control equipment if:

(a) The visible emissions are not greater than 40 percent opacity; and

(b) The visible emissions do not occur for more than 6 consecutive minutes in any sixtyminute period.

[For Distillate Fuel Oil]

COMAR 26.11.09.07A(1)(c), which establishes that the Permittee may not burn, sell, or make available for sale any distillate fuel with a sulfur content by weight in excess of 0.3 percent.

(2) No. 18 Stationary internal combustion engines with an output less than 500 brake horsepower (373 kilowatts) and which are not used to generate electricity for sale or for peak or load shaving;

The <u>affected units</u> are subject to the following requirements:

- (A) COMAR 26.11.09.05E(2), Emissions During Idle Mode: The Permittee may not cause or permit the discharge of emissions from any engine, operating at idle, greater than 10 percent opacity.
- (B) COMAR 26.11.09.05E(3), Emissions During Operating Mode: The Permittee may not cause or permit the discharge of emissions from any engine, operating at other than idle conditions, greater than 40 percent opacity.
- (C) Exceptions:
 - (i) COMAR 26.11.09.05E(2) does not apply for a period of 2 consecutive minutes after a period of idling of 15 consecutive minutes for the purpose of clearing the exhaust system.
 - (ii) COMAR 26.11.09.05E(2) does not apply to emissions resulting directly from cold engine start-up and warm-up for the following maximum periods:
 - (a) Engines that are idled continuously when not in service: 30 minutes
 - (b) all other engines: 15 minutes.

(iii) COMAR 26.11.09.05E(2) & (3) do not apply while

	maintenance, repair or testing is being performed by qualified mechanics.
(3)	Water cooling towers and water-cooling ponds unless used for evaporative cooling of water from barometric jets or barometric condensers, or used in conjunction with an installation requiring a permit to operate;
(4)	Containers, reservoirs, or tanks used exclusively for:
	(a) No. 2 Storage of lubricating oils;
	(b) No1 _ Storage of Numbers 1, 2, 4, 5, and 6 fuel oil and aviation jet engine fuel;
(5)	Comfort air conditioning subject to requirements of Title VI of the Clean Air Act;

STATE ONLY ENFORCEABLE REQUIREMENTS

This section of the permit contains state-only enforceable requirements. The requirements in this section will not be enforced by the U.S. Environmental Protection Agency. The requirements in this section are not subject to COMAR 26.11.03 10 - Public Petitions for Review to EPA Regarding Part 70 Permits.

Applicable Regulations

- (a) COMAR 26.11.06.08 <u>Nuisance</u>. "An installation or premises may not be operated or maintained in such a manner that a nuisance or air pollution is created. Nothing in this regulation relating to the control of emissions may in any manner be construed as authorizing or permitting the creation of, or maintenance of, nuisance or air pollution."
- (b) COMAR 26.11.06.09 Odors. "A person may not cause or permit the discharge into the atmosphere of gases, vapors, or odors beyond the property line in such a manner that nuisance or air pollution is created."