

PROPOSED

Issuance Date

CERTIFIED MAIL
RETURN RECEIPT REQUESTED
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07-xxx E CAB
File No. 0088-11

Mr. Thomas M. Kovar
Refinery Manager
Chevron USA Products Company
Hawaii Refinery
91-480 Malakole Street
Kapolei, Hawaii 96707-1807

Dear Mr. Kovar:

Subject: Covered Source Permit (CSP) No. 0088-02-C
Significant Modification Application No. 0088-11
Chevron USA Products Company
Hybrid Energy Plant
Located at 91-480 Malakole Street, Kapolei, Oahu
Date of Expiration: Issuance Date + 5 years

The subject Covered Source Permit is issued in accordance with Hawaii Administrative Rules, Title 11, Chapter 60.1. The issuance of this permit is based on the plans, specifications, and information submitted as part of your significant modification application dated May 25, 2006 and additional information dated August 23, 2006. A receipt for the application fee of \$3000.00 is enclosed.

The Covered Source Permit is issued subject to the conditions/requirements set forth in the following Attachments:

Attachment I:	Standard Conditions
Attachment IIA:	Special Conditions - Cogeneration Unit
Attachment IIB:	Special Conditions - Boilers
Attachment IIC:	Special Conditions - Miscellaneous Equipment
Attachment III:	Annual Fee Requirements
Attachment IV:	Annual Emission Reporting Requirements

Mr. Thomas M. Kovar
Issuance Date
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The following forms are enclosed for your use and submittal as required:

- Compliance Certification Form
- Annual Emissions Report Form: Fuel Consumption
- Annual Emissions Report Form: Refinery Equipment - Process Rate
- Monitoring Report Form: Fuel Certification
- Monitoring Report Form: Visible Emissions
- Visible Emissions Observation Form Requirements with the following enclosures:
 - a. Visible Emissions Observation Form
 - b. Ringelmann Chart
- Excess Emission and Monitoring System Performance Summary Report

This permit, (a) shall not in any manner affect the title of the premises upon which the equipment is to be located; (b) does not release the permittee from any liability for any loss due to personal injury or property damage caused by, resulting from or arising out of the design, installation, maintenance, or operation of the equipment, and in no manner implies or suggests that the Department of Health, or its officers, agents, or employees, assumes any liability, directly or indirectly, for any loss due to personal injury or property damage caused by, resulting from or arising out of the design, installation, maintenance, or operation of the equipment.

Sincerely,

THOMAS E. ARIZUMI, P.E., CHIEF
Environmental Management Division

DL:se
Enclosures

c: CAB Monitoring Section

PROPOSED

ATTACHMENT I: STANDARD CONDITIONS COVERED SOURCE PERMIT NO. 0088-02-C

Issuance Date:

Expiration Date:

This permit is granted in accordance with the Hawaii Administrative Rules (HAR), Title 11, Chapter 60.1, Air Pollution Control, and is subject to the following standard conditions:

1. Unless specifically identified, the terms and conditions contained in this permit are consistent with the applicable requirement, including form, on which each term or condition is based.

(Auth.: HAR §11-60.1-90)
2. This permit, or a copy thereof, shall be maintained at or near the source and shall be made available for inspection upon request. The permit shall not be willfully defaced, altered, forged, counterfeited, or falsified.

(Auth.: HAR §11-60.1-6; SIP §11-60-11)²
3. This permit is not transferable whether by operation of law or otherwise, from person to person, from place to place, or from one piece of equipment to another without the approval of the Department of Health, except as provided in HAR, Section 11-60.1-91.

(Auth.: HAR §11-60.1-7; SIP §11-60-9)²
4. A request for transfer from person to person shall be made on forms furnished by the Department of Health.

(Auth.: HAR §11-60.1-7)
5. In the event of any changes in control or ownership of the facilities to be constructed or modified, this permit shall be binding on all subsequent owners and operators. The permittee shall notify the succeeding owner and operator of the existence of this permit and its conditions by letter, copies of which will be forwarded to the Department of Health and the U.S. Environmental Protection Agency (EPA), Region 9.

(Auth.: HAR §11-60.1-5, §11-60.1-7, §11-60.1-94)
6. The facility covered by this permit shall be constructed and operated in accordance with the application, and any information submitted as part of the application, for the Covered Source Permit. There shall be no deviation unless additional or revised plans are submitted to and approved by the Department of Health, and the permit is amended to allow such deviation.

(Auth.: HAR §11-60.1-2, §11-60.1-4, §11-60.1-82, §11-60.1-84, §11-60.1-90)

7. This permit (a) does not release the permittee from compliance with other applicable statutes of the State of Hawaii, or with applicable local laws, regulations, or ordinances, and (b) shall not constitute, nor be construed to be an approval of the design of the covered source.

(Auth.: HAR §11-60.1-5, §11-60.1-82)

8. The permittee shall comply with all the terms and conditions of this permit. Any permit noncompliance constitutes a violation of HAR, Chapter 11-60.1 and the Clean Air Act and is grounds for enforcement action; for permit termination, suspension, reopening, or amendment; or for denial of a permit renewal application.

(Auth.: HAR §11-60.1-3, §11-60.1-10, §11-60.1-19, §11-60.1-90)

9. If any term or condition of this permit becomes invalid as a result of a challenge to a portion of this permit, the other terms and conditions of this permit shall not be affected and shall remain valid.

(Auth.: HAR §11-60.1-90)

10. The permittee shall not use as a defense in an enforcement action that it would have been necessary to halt or reduce the permitted activity to maintain compliance with the terms and conditions of this permit.

(Auth.: HAR §11-60.1-90)

11. This permit may be terminated, suspended, reopened, or amended for cause pursuant to HAR, Sections 11-60.1-10 and 11-60.1-98, and Hawaii Revised Statutes (HRS), Chapter 342B-27, after affording the permittee an opportunity for a hearing in accordance with HRS, Chapter 91.

(Auth.: HAR §11-60.1-3, §11-60.1-10, §11-60.1-90, §11-60.1-98)

12. The filing of a request by the permittee for the termination, suspension, reopening, or amendment of this permit, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

(Auth.: HAR §11-60.1-90)

13. This permit does not convey any property rights of any sort, or any exclusive privilege.

(Auth.: HAR §11-60.1-90)

14. The permittee shall notify the Department of Health and U.S. EPA Region 9 in writing of the following dates:
- a. The **anticipated date of initial start-up** for each emission unit of a new source or significant modification not more than sixty (60) days or less than thirty (30) days prior to such date;
 - b. The **actual date of construction commencement** within fifteen (15) days after such date; and
 - c. The **actual date of start-up** within fifteen (15) days after such date.

(Auth.: HAR §11-60.1-90)

15. The permittee shall furnish, in a timely manner, any information or records requested in writing by the Department of Health to determine whether cause exists for terminating, suspending, reopening, or amending this permit, or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Department of Health copies of records required to be kept by the permittee. For information claimed to be confidential, the Director of Health may require the permittee to furnish such records not only to the Department of Health but also directly to the U.S. EPA Region 9 along with a claim of confidentiality.

(Auth.: HAR §11-60.1-14, §11-60.1-90)

16. The permittee shall notify the Department of Health in writing, of the **intent to shut down air pollution control equipment for necessary scheduled maintenance** at least twenty-four (24) hours prior to the planned shutdown. The submittal of this notice shall not be a defense to an enforcement action. The notice shall include the following:
- a. Identification of the specific equipment to be taken out of service, as well as its location and permit number;
 - b. The expected length of time that the air pollution control equipment will be out of service;
 - c. The nature and quantity of emissions of air pollutants likely to be emitted during the shutdown period;
 - d. Measures such as the use of off-shift labor and equipment that will be taken to minimize the length of the shutdown period; and
 - e. The reasons why it would be impossible or impractical to shut down the source operation during the maintenance period.

(Auth.: HAR §11-60.1-15; SIP §11-60-16)²

17. **Except for emergencies which result in noncompliance with any technology-based emission limitation in accordance with HAR, Section 11-60.1-16.5, in the event any emission unit, air pollution control equipment, or related equipment malfunctions or breaks down in such a manner as to cause the emission of air pollutants in violation of HAR, Chapter 11-60.1 or this permit, the permittee shall immediately notify the Department of Health of the malfunction or breakdown, unless the protection of personnel or public health or safety demands immediate attention to the malfunction or breakdown and makes such notification infeasible. In the latter case, the notice shall be provided as soon as practicable. Within five (5) working days of this initial notification, the permittee shall also submit, in writing, the following information:**
- a. Identification of each affected emission point and each emission limit exceeded;
 - b. Magnitude of each excess emission;
 - c. Time and duration of each excess emission;
 - d. Identity of the process or control equipment causing each excess emission;
 - e. Cause and nature of each excess emission;
 - f. Description of the steps taken to remedy the situation, prevent a recurrence, limit the excessive emissions, and assure that the malfunction or breakdown does not interfere with the attainment and maintenance of the National Ambient Air Quality Standards and state ambient air quality standards;
 - g. Documentation that the equipment or process was at all times maintained and operated in a manner consistent with good practice for minimizing emissions; and
 - h. A statement that the excess emissions are not part of a recurring pattern indicative of inadequate design, operation, or maintenance.

The submittal of these notices shall not be a defense to an enforcement action.

(Auth.: HAR §11-60.1-16; SIP §11-60-16)²

18. The permittee may request confidential treatment of any records in accordance with HAR Section 11-60.1-14.

(Auth.: HAR §11-60.1-14, §11-60.1-90)

19. This permit shall become invalid with respect to the authorized construction if construction is not commenced as follows:
- a. Construction shall be commenced within eighteen (18) months after the permit takes effect, shall not be discontinued for a period of eighteen (18) months or more, and shall be completed within a reasonable time.

- b. For phased construction projects, each phase shall commence construction within eighteen (18) months of the projected and approved commencement dates in the permit. This provision shall be applicable only if the projected and approved commencement dates of each construction phase are defined in Attachment II, Special Conditions of this permit.

(Auth.: HAR §11-60.1-9, §11-60.1-90)

20. The Department of Health may extend the time periods specified in Standard Condition No. 19 upon a satisfactory showing that an extension is justified. Requests for an extension shall be submitted in writing to the Department of Health.

(Auth.: HAR §11-60.1-9, §11-60.1-90)

21. The permittee shall submit fees in accordance with HAR, Chapter 11-60.1, Subchapter 6.

(Auth.: HAR §11-60.1-90)

22. All certifications shall be in accordance with HAR, Section 11-60.1-4.

(Auth.: HAR §11-60.1-4, §11-60.1-90)

23. The permittee shall allow the Director of Health, the Regional Administrator for the U.S. EPA and/or an authorized representative, upon presentation of credentials or other documents required by law:

- a. To enter the premises where a source is located or emission-related activity is conducted, or where records must be kept under the conditions of this permit and inspect at reasonable times all facilities, equipment, including monitoring and air pollution control equipment, practices, operations, or records covered under the terms and conditions of this permit and request copies of records or copy records required by this permit; and
- b. To sample or monitor at reasonable times substances or parameters to assure compliance with this permit or applicable requirements of HAR, Chapter 11-60.1.

(Auth.: HAR §11-60.1-11, §11-60.1-90)

24. Within thirty (30) days of **permanent discontinuance of the construction, modification, relocation, or operation of the facility covered by this permit**, the discontinuance shall be reported in writing to the Department of Health by a responsible official of the source.

(Auth.: HAR §11-60.1-8; SIP §11-60-10)²

25. Each permit renewal application shall be submitted to the Department of Health and the U.S. EPA Region 9 no less than twelve (12) months and no more than eighteen (18) months prior to the permit expiration date. The Department of Health may allow a permit renewal application to be submitted no less than six (6) months prior to the permit expiration date, if the Department of Health determines that there is reasonable justification.

(Auth.: HAR §11-60.1-101, 40 CFR §70.5 (a)(1)(iii))¹

26. The terms and conditions included in this permit, including any provision designed to limit a source's potential to emit, are federally enforceable unless such terms, conditions, or requirements are specifically designated as not federally enforceable.

(Auth.: HAR §11-60.1-93)

27. The compliance plan and compliance certification submittal requirements shall be in accordance with HAR, Sections 11-60.1-85 and 11-60.1-86. As specified in HAR, Section 11-60.1-86, the compliance certification shall be submitted to the Department of Health and the U.S. EPA Region 9 once per year, or more frequently as set by any applicable requirement.

(Auth.: HAR §11-60.1-90)

28. **Any document (including reports) required to be submitted by this permit shall be certified as being true, accurate, and complete by a responsible official in accordance with HAR, Sections 11-60.1-1 and 11-60.1-4, and shall be mailed to the following address:**

**Clean Air Branch
Environmental Management Division
Hawaii Department of Health
P.O. Box 3378
Honolulu, HI 96801-3378**

Upon request and as required by this permit, all correspondence to the State of Hawaii Department of Health associated with this Covered Source Permit shall have duplicate copies forwarded to:

**Chief
Permits Office, (Attention: Air-3)
Air Division
U.S. Environmental Protection Agency
Region 9
75 Hawthorne Street
San Francisco, CA 94105**

(Auth.: HAR §11-60.1-4, §11-60.1-90)

29. To determine compliance with submittal deadlines for time-sensitive documents, the postmark date of the document shall be used. If the document was hand-delivered, the date received (“stamped”) at the Clean Air Branch shall be used to determine the submittal date.

(Auth.: HAR §11-60.1-5, §11-60.1-90)

¹ The citations to the Code of Federal Regulations (CFR) identified under a particular condition, indicate that the permit condition complies with the specified provision(s) of the CFR. Due to the integration of the preconstruction and operating permit requirements, permit conditions may incorporate more stringent requirements than those set forth in the CFR.

² The citations to the State Implementation Plan (SIP) identified under a particular condition, indicate that the permit condition complies with the specified provision(s) of the SIP.

**ATTACHMENT IIA: SPECIAL CONDITIONS
COVERED SOURCE PERMIT NO. 0088-02-C
COGENERATION UNIT**

Issuance Date:

Expiration Date:

In addition to the standard conditions of the Covered Source Permit, the following special conditions shall apply to the permitted facility.

Section A. Equipment Description

1. This portion of the Covered Source Permit encompasses the following equipment and associated appurtenances:

One (1) Cogeneration Unit consisting of the following:

- a. One (1) 46 MMBtu/hr combustion turbine, Solar Centaur 40, model no. 40-4701, serial no. 5157C;
- b. One (1) heat recovery steam generator (HRSG) with one (1) 49 MMBtu/hr duct burner, John Zink Company; and
- c. For NO_x control, the combustion turbine is equipped with water injection and low NO_x burners.

(Auth.: HAR §11-60.1-3)

2. The permittee shall permanently attach an identification tag or nameplate on each piece of equipment which identifies the model number, serial number or I.D. number and manufacturer. The identification tag or nameplate shall be attached to the equipment in a conspicuous location.

(Auth.: HAR §11-60.1-5, §11-60.1-90)

Section B. Applicable Federal Regulations

1. The combustion turbine/HRSG is subject to the provisions of the following federal regulations:

40 CFR Part 60, Standards of Performance for New Stationary Sources (NSPS),

- a. Subpart A, General Provisions;
- b. Subpart J, Standards of Performance for Petroleum Refineries; and
- c. Subpart KKKK, Standards of Performance for Stationary Combustion Turbines.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161; 40 CFR §60.1, §60.100, §60.4305)¹

2. The combustion turbine is subject to the provisions of the following federal regulations:

40 CFR Part 63, National Emission Standards for Hazardous Air Pollutants for Source Categories (MACT),

- a. Subpart A, General Provisions; and
- b. Subpart YYYY, National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-174; 40 CFR §63.1, §63.6085)¹

3. The permittee shall comply with all applicable requirements of the standards listed above, including all emission limits, notification, reporting, monitoring, testing and recordkeeping requirements. The major requirements of these standards are detailed in the special conditions of this permit.

(Auth.: HAR §11-60.1-3, §11-60.1-90)

Section C. Operational and Emission Limitations

1. Allowable Fuels

- a. The combustion turbine shall be fired only on naphtha with a sulfur content not to exceed 0.03% by weight or refinery fuel gas (RFG) with a hydrogen sulfide (H₂S) content not to exceed 230 mg/dscm (160 ppmv);
- b. The HRSG duct burner shall be fired only on refinery fuel gas (RFG) with a hydrogen sulfide (H₂S) content not to exceed 230 mg/dscm (160 ppmv).

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-38, §11-60.1-90, §11-60.1-161; 40 CFR §60.4330, §60.4365)¹

2. Maximum Emission Limits

The permittee shall not discharge or cause the discharge into the atmosphere from the combustion turbine emissions in excess of the following emission limits while fired on naphtha or RFG:

Maximum Emission Limits

Pollutant	Fired on Naphtha		Fired on RFG	
	HRSG Duct Burner on	HRSG Duct Burner off	HRSG Duct Burner on	HRSG Duct Burner off
NO _x (as NO ₂)	12.79 lb/hr	10.15 lb/hr 60 ppmvd @ 15% O ₂	13.70 lb/hr	11.06 lb/hr 67 ppmvd @ 15% O ₂
CO	11.6 lb/hr 60 ppmvd @ 15% O ₂	11.6 lb/hr 60 ppmvd @ 15% O ₂	7.66 lb/hr	5.02 lb/hr 50 ppmvd @ 15% O ₂
Formaldehyde		91 ppbvd @ 15% O ₂		91 ppbvd @ 15% O ₂

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90, §11-60.1-161; §11-60.1-174, 40 CFR §60.4325, §60.6100)¹

3. Air Pollution Controls

The permittee shall continuously operate and maintain the following air pollution controls to meet the emission limits as specified in Special Condition No. C.2. of this Attachment. The following controls shall be fully operational upon startup, except as noted:

- a. Water injection in the combustion turbine shall be at a minimum rate of 0.5 pound of water per 1.0 pound of fuel or greater. The water injection system shall be fully operational immediately after the combustion turbine is brought up to 1.0 MW load, and shall continue to operate until the combustion turbine drops below 1.0 MW load.
- b. Low NO_x burner system in the combustion turbine.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90, §11-60.1-161, 40 CFR §60.4335)¹

4. Visible Emissions (V.E.)

For any six (6) minute averaging period, the combustion turbine/HRSG shall not exhibit visible emissions of twenty (20) percent opacity or greater, except as follows. During start-up, shutdown, or equipment breakdown, the combustion turbine may exhibit visible emissions greater than twenty (20) percent opacity but not exceeding sixty (60) percent opacity for a period aggregating not more than six (6) minutes in any sixty (60) minutes.

(Auth.: HAR §11-60.1-3, §11-60.1-32, §11-60.1-90; SIP §11-60-24)²

- 5. Provided that no new applicable requirement is triggered by such action, the permittee may perform a complete overhaul of the combustion turbine, subject to the written notification to and prior approval of the Department of Health. The permittee must demonstrate that a modification or reconstruction under NSPS or a PSD review would not be triggered. Complete overhaul for the combustion turbine shall be performed as necessary based on performance indicators for the unit, or as needed based on

consultation with the manufacturer. Overhaul entails the removal of the combustion turbine from service, and the replacement of the combustion turbine with an identical unit consisting of the same make and model number as the original permitted unit. Each replacement unit shall comply with all applicable requirements of the original permitted unit.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90)

6. The combustion turbine/HRSG shall be properly maintained and kept in good operating condition at all times. The permittee shall follow a regular maintenance schedule, as recommended by the manufacturer or as needed, to ensure proper operation of the combustion turbine/HRSG.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90)

Section D. Monitoring and Recordkeeping Requirements

1. Fuel Consumption Monitoring

The permittee shall install, operate and maintain non-resetting fuel meters for the continuous measurement and recording of the amount of naphtha and RFG fired in the combustion turbine and the amount of RFG fired in the HRSG duct burner. Records shall be kept on an annual basis for the purpose of annual emissions reporting.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-114)

2. Naphtha Sulfur Content Monitoring

The sulfur content of the naphtha shall be sampled according to the frequency described in Sections 2.2.3, 2.2.4.1, 2.2.4.2, and 2.2.4.3 of Appendix D of 40 CFR Part 75 (i.e., flow proportional sampling, daily sampling, sampling from the unit's storage tank after each addition of fuel to the tank, or sampling each delivery prior to combining it with the naphtha already in the intended storage tank.

The sulfur content of the naphtha shall be tested in accordance with American Society for Testing and Materials (ASTM) method D129, or alternatively methods D1266, D1552, D2622, D4294, or D5453. Records of the naphtha sulfur content shall be kept.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, §11-60.1-161; 40 CFR §60.4360, §60.4370, §60.4415)¹

3. Continuous Monitoring System for Water to Fuel Ratio

The permittee shall install, operate and maintain a continuous monitoring system to monitor and record the fuel consumption and the ratio of water to fuel being fired in the combustion turbine. The water to fuel monitor/recorder shall be accurate to within ± 5 percent. The continuous monitoring system shall be used to determine compliance with Special Condition No. C.3.a. of this Attachment.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161; 40 CFR §60.4335)¹

4. Continuous Emissions Monitoring System (CEMS) for NO_x

The permittee shall install, operate and maintain a continuous emission monitoring system (CEMS) to measure and record the NO_x and CO₂ or O₂ concentrations in the flue gas exhausted from the combustion turbine's exhaust stack. If a CO₂ CEMS is used, 40 CFR 60, Appendix A, Method 20, Equations 20.2 and 20.5 shall be used. The system shall meet EPA performance specifications (40 CFR §60.13 and 40 CFR 60, Appendix B and Appendix F).

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90, §11-60.1-161; 40 CFR §60.4335)¹

5. Continuous Emissions Monitoring System (CEMS) for H₂S.

- a. The permittee shall install, operate and maintain a continuous emissions monitoring system (CEMS) for continuously monitoring and recording the concentration (dry basis) of H₂S in the RFG before being burned in the combustion turbine/HRSG.
- b. The CEMS shall meet the following requirements:
 - i. The span value for the CEMS is 425 mg/dscm (300 ppmv) H₂S.
 - ii. All fuel gas combustion devices, including the combustion turbine with duct burner, having a common source of fuel gas may be monitored at one location, if monitoring at this location accurately represents the concentration of H₂S in the RFG being burned.
 - iii. Performance evaluations for the H₂S CEMS shall be in accordance with 40 CFR §60.13. The H₂S CEMS shall meet 40 CFR Part 60, Appendix B, Performance Specification 7, Specifications and Test Procedures for Hydrogen Sulfide Continuous Emissions Monitoring Systems in Stationary Sources; and Appendix F, Quality Assurance Procedures. 40 CFR Part 60, Appendix A, Method 11 shall be used in conducting any relative accuracy test audit (RATA).
 - iv. Cylinder Gas Audits (CGS) shall be conducted in accordance with 40 CFR Part 60, Appendix F, Section 5.1.2

- v. Calibration Drift (CD) assessments shall be performed on a daily basis pursuant to 40 CFR Part 60, Appendix F, Section 4.1.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161; 40 CFR §60.105)¹

6. Continuous Opacity Monitoring System (COMS)

The Department of Health may at any time require the permittee to install, operate, and maintain a continuous opacity monitoring system (COMS) for the continuous measurement and recording of the opacity of stack emissions, if it is determined that the visible emissions are in excess of the applicable standard. The system shall meet EPA monitoring performance standards (40 CFR §60.13 and 40 CFR 60, Appendix B, Performance Specifications).

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90)

7. Visible Emissions (V.E.)

- a. The permittee shall conduct **monthly** (*calendar month*) V.E. observations for each equipment subject to opacity limitations in accordance with 40 CFR Part 60, Appendix A, Method 9 or by use of a Ringelmann Chart as provided. For each period, two (2) observations shall be taken at fifteen (15) second intervals for six (6) consecutive minutes for each equipment. Records shall be completed and maintained in accordance with the *Visible Emissions Form Requirements*.
- b. The permittee shall conduct **annually** (*calendar year*) V.E. observations for each equipment subject to opacity limits by a certified reader in accordance with 40 CFR Part 60, Appendix A, Method 9. For each period, two (2) observations shall be taken at fifteen (15) second intervals for six (6) consecutive minutes for each equipment. Records shall be completed and maintained in accordance with the *Visible Emissions Form Requirements*.
- c. Upon written request and justification, the Department of Health may waive the requirements for the **annual** V.E. observations. The waiver request is to be submitted prior to the required test and must include documentation justifying such action. Documentation should include, but is not limited to, the results of the prior tests indicating compliance by a wide margin, documentation of continuing compliance, and further that operations of the source have not changed since the previous **annual** V.E. observations. The annual V.E. observations shall not be waived for more than two consecutive years.

(Auth.: HAR §11-60.1-3, §11-60.1-32, §11-60.1-90, SIP §11-60-24)²

8. Inspection, Maintenance and Repair Log

An inspection, maintenance and repair log shall be maintained for the combustion turbine/HRSG. Replacement of parts and repairs to the combustion turbine/HRSG shall be documented. At a minimum, the following records shall be maintained:

- a. The date of the inspection/repair;
- b. A description of the findings or any maintenance or repair work performed; and
- c. The name and title of the inspector.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90)

9. All records, including support information, shall be maintained at the facility for at least five (5) years from the date of the monitoring samples, measurements, tests, reports, or application. Support information includes all calibration and maintenance records and copies of all reports required by the permit. These records shall be in a permanent form suitable for inspection and made available to the Department of Health or their representatives upon request.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90)

Section E. Notification and Reporting Requirements

1. Excess Emissions Reporting

- a. The permittee shall submit an excess emissions and monitoring systems performance report pursuant to 40 CFR §60.7(c) to the Department of Health and the U.S. EPA Region 9 every **semiannual calendar period**. The report shall include the following information:
 - i. The magnitude of excess emissions computed in accordance with 40 CFR §60.13(h), any conversion factors used, and the date and time of commencement and completion of each time period of excess emissions.
 - ii. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the combustion turbine/HRSG. The nature and cause of any malfunction (if known), and the corrective action taken or preventive measures adopted, shall also be reported.
 - iii. The date and time identifying each period during which the continuous emissions monitoring system was inoperative except for zero and span checks. The nature of each system repair or adjustment shall be described.

- iv. The report shall so state if no excess emissions have occurred. Also, the report shall so state if the continuous emissions monitoring system operated properly during the period and was not subject to any repairs or adjustments except zero and span checks.
- b. All reports shall be postmarked by the 30th day following the end of each **semiannual calendar period**. The enclosed **Excess Emissions and Monitoring System Performance Summary Report** form or an equivalent form shall also be submitted in addition to the excess emissions and monitoring systems performance report.
- c. Excess emissions shall be defined as follows:
 - i. Any operating period in which the 4-hour rolling average NO_x emission rate, as measured by the NO_x continuous emissions monitoring system, exceed the emission limits set forth in Special Condition No. C.2. of this Attachment; or
 - ii. Any operating period in which the 4-hour rolling average water-to-fuel ratio, as measured by the continuous monitoring system, falls below the water-to-fuel ratio determined to demonstrate compliance with the emission limits set forth in Special Condition No. C.2. of this Attachment; or
 - iii. Any rolling 3-hour period during which the average concentration of H₂S in RFG, as measured by the H₂S continuous emissions monitoring system, exceeds 230 mg/dscm (160 ppmv); or
 - iv. Any opacity measurements, as measured by the continuous opacity monitoring system (COMS)(if required to be installed), exceeding the opacity limits and corresponding averaging times set forth in Special Condition No. C.4. of this Attachment.
- d. Excess emissions indicated by the continuous monitoring systems shall be considered violations of the applicable emission limit for the purposes of this permit.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, §11-60.1-161; 40 CFR §60.7, §60.105, §60.4380)¹

2. Semiannual Reporting

The permittee shall submit **semiannually** written reports to the Department of Health for monitoring purposes. The reports shall be submitted **within sixty (60) days** after the end of each semiannual calendar period (January 1 to June 30 and July 1 to December 31) and shall include the following:

- a. Any opacity exceedances as determined by the required V.E. monitoring. Each exceedance reported shall include the date, six (6) minute average opacity reading, possible reason for exceedance, duration of exceedance, and corrective actions taken. If there were no exceedances, the permittee shall submit in writing a statement indicating that for each equipment there were no exceedances for that semiannual period.

The enclosed **Monitoring Report Form: Visible Emissions** or an equivalent form shall be used;

- b. The sulfur content of the naphtha. The enclosed **Monitoring Form: Fuel Certification** or an equivalent form shall be used;
- c. Any deviations from permit requirements shall be clearly identified.

(Auth.: HAR §11-60.1-3, §11-60.1-32, §11-60.1-90, SIP §11-60-24)²

3. Annual Emissions Reporting

As required by Attachment IV and in conjunction with the requirements of Attachment III, Annual Fee Requirements, the permittee shall submit **on an annual basis** the total tons per year emitted of each regulated air pollutant, including hazardous air pollutants. The reporting of annual emissions is due within **sixty (60) days following the end of each calendar year**. The enclosed **Annual Emissions Report Form: - Fuel Consumption** or an equivalent form shall be used in reporting fuel usage.

Upon written request of the permittee, the deadline for reporting annual emissions may be extended if the Department of Health determines that reasonable justification exists for the extension.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90, §11-60.1-114)

4. Additional notification and reporting requirements shall be conducted in accordance with the standard conditions found in Attachment I, Standard Condition Nos. 14, 16, 17 and 24, respectively. These notifications shall include, but not be limited to:

- a. Anticipated date of initial startup, actual date of construction commencement, and actual date of startup of the combustion turbine/HRSG;
- b. Intent to shutdown air pollution control equipment for necessary scheduled maintenance;
- c. Emissions of air pollutants in violation of HAR, Chapter 11-60.1 or this permit (excluding technology-based emission exceedances due to emergencies); and

- d. Permanent discontinuance of construction, modification, relocation or operation of the facility covered by this permit.

(Auth.: HAR §11-60.1-8, §11-60.1-15, §11-60.1-16, §11-60.1-90)

5. Deviations

The permittee shall report (in writing) **within five (5) working days** any deviations from permit requirements, including those attributable to upset conditions, the probable cause of such deviations and any corrective actions or preventative measures taken. Corrective actions may include a requirement for more frequent monitoring, or could trigger implementation of a corrective action plan.

(Auth.: HAR §11-60.1-3, §11-60.1-15, §11-60.1-16, §11-60.1-90)

6. Compliance Certification

During the permit term, the permittee shall submit at least **annually** to the Department of Health and U.S. EPA Region 9, the attached **Compliance Certification Form**, pursuant to HAR §11-60.1-86. The permittee shall indicate whether or not compliance is being met with each term or condition of this permit. The compliance certification shall be submitted **within ninety (90) days after** the end of each calendar year, and shall be signed and dated by a responsible official. The compliance certification shall include at a minimum, the following information:

- a. The identification of each term or condition of the permit that is the basis of the certification;
- b. The compliance status;
- c. Whether compliance was continuous or intermittent;
- d. The methods used for determining the compliance status of the source currently and over the reporting period;
- e. Any additional information indicating the source's compliance status with any applicable enhanced monitoring and compliance certification including the requirements of Section 114(a)(3) of the Clean Air Act or any applicable monitoring and analysis provisions of Section 504(b) of the Clean Air Act; and
- f. Any additional information as required by the Department of Health including information to determine compliance.

Upon written request of the permittee, the deadline for submitting the compliance certification may be extended, if the Department of Health determines that reasonable justification exists for the extension.

(Auth.: HAR §11-60.1-4, §11-60.1-86, §11-60.1-90)

7. Combustion Turbine Overhaul
- a. The permittee shall submit overhaul notifications to the Department of Health for approval at least **thirty (30) days** or such lesser time as designated and approved by the Department of Health, *prior to turbine overhaul*. The notification shall at a minimum include:
- i. List the combustion turbine to be overhauled. Identify turbine number, make, model, size, serial number, estimated hours of service, and reason for overhaul;
 - ii. Planned dates the combustion turbine will be placed out of service and the replacement unit in service;
 - iii. List the replacement combustion turbine for the overhauled unit. Identify make, model, size, and serial number; and
 - iv. Any additional information as requested by the Department of Health.
- b. Within **fifteen (15) days** of the complete turbine overhaul, the permittee shall notify the Department of Health in writing of the actual completion date, and any problems incurred during the overhaul.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90)

Section F. Testing Requirements

1. **Within sixty (60) days after** achieving the maximum production rate of the combustion turbine, **but not later than one-hundred eighty (180) days after** initial startup of the combustion turbine and annually thereafter, the permittee shall conduct or cause to be conducted performance tests on the combustion turbine while fired on naphtha and also RFG. Performance tests shall be conducted for nitrogen oxides (NO_x), carbon monoxide (CO), volatile organic compounds (VOC), and formaldehyde. All performance tests shall be conducted at the maximum operating capacity of the combustion turbine with the HRSG duct burner on and off, or at other operating loads as may be specified by the Department of Health.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, §11-60.1-161, §11-60.1-174; 40 CFR §60.8, §60.4400, §63.7, §63.6110, §63.6115, §63.6120)¹

2. The source performance tests shall be conducted and the results reported in accordance with the tests methods set forth in 40 CFR Part 60, Appendix A, 40 CFR Part 63, Appendix A, 40 CFR §60.8 and 40 CFR §63.7. The following test methods or U.S. EPA-approved equivalent methods, or alternative methods with prior written approval from the Department of Health, shall be used:

- a. Performance tests for the emissions of NO_x shall be conducted using EPA Method 1 to 4 and 7E or 20;
- b. Performance tests for the emissions of CO shall be conducted using EPA Methods 1 to 4 and 10;
- c. Performance tests for the emissions of VOC shall be conducted using EPA Methods 1 to 4 and 25; and
- d. Performance tests for the emissions of formaldehyde shall be conducted using EPA Method 320 or ASTM D6348-03.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, §11-60.1-161; §11-60.1-174, 40 CFR §60.8, §60.4400, §63.7, §63.6110, §63.6120)¹

3. Each source performance test shall consist of three (3) separate runs using the applicable test method. For the purpose of determining compliance with an applicable regulation, the arithmetic mean of the results from the three (3) runs shall apply.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, §11-60.1-161; §11-60.1-174, 40 CFR §60.8; 40 CFR §63.7)¹

4. The permittee shall provide sampling and testing facilities at its own expense. The tests shall be conducted at the operating capacities identified in Special Condition No. F.1 of this Attachment. The Department of Health may monitor any of the required source performance tests.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90)

5. Any deviations from these conditions, test methods, or procedures may be cause for rejection of the test results unless such deviations are approved by the Department of Health before the tests.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90)

6. **At least thirty (30) days prior to performing a test**, the permittee shall submit a written *source performance test plan* to the Department of Health and the U.S. EPA Region 9 that describes the test date(s), test duration, test locations, test methods, source operation, fuel consumption, and other parameters that may affect test results. Such a plan shall conform to U.S. EPA guidelines including quality assurance procedures. A source performance test plan or quality assurance plan that does not have the approval of the Department of Health may be grounds to invalidate any test and require a retest.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, §11-60.1-161; §11-60.1-174, 40 CFR §60.8; 40 CFR §63.7)¹

7. **Within sixty (60) days** after completion of the source performance test, the permittee shall submit to the Department of Health and the U.S. EPA Region 9, the test report which shall include the operating conditions of the combustion turbine/HRSG at the time of the test, the analysis of the fuel, the summarized test results, comparative results with the permit emission limits, and other pertinent field and laboratory data.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, §11-60.1-161; §11-60.1-174, 40 CFR §60.8; 40 CFR §63.7)¹

8. Upon written request and justification by the permittee, the Department of Health may waive the requirement for a specific annual source performance test. The waiver request is to be submitted prior to the required test and must include documentation justifying such action. Documentation should include, but is not limited to, the results of the prior tests indicating compliance by a wide margin, documentation of continuing compliance, and further that operations of the source have not changed since the previous source performance test.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, §11-60.1-174, 40 CFR §63.7)¹

9. Upon the Department of Health's request, or if a significant change or performance deficiency occurs with the CEMS, performance tests for the H₂S levels in the RFG shall be conducted and results reported in accordance with the instructions and test methods set forth in 40 CFR §60.106, and Appendix A, Method 11.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, §11-60.1-161; 40 CFR §60.106)¹

Section G. Agency Notifications

Any document (including reports) required to be submitted by this Covered Source permit shall be in accordance with Attachment I, Standard Condition No. 28.

(Auth.: HAR §11-60.1-4, §11-60.1-90)

¹ The citations to the Code of Federal Regulations (CFR) identified under a particular condition, indicate that the permit condition complies with the specified provision(s) of the CFR. Due to the integration of the preconstruction and operating permit requirements, permit conditions may incorporate more stringent requirements than those set forth in the CFR.

² The citations to the State Implementation Plan (SIP) identified under a particular condition, indicate that the permit condition complies with the specified provision(s) of the SIP.

**ATTACHMENT IIB: SPECIAL CONDITIONS
COVERED SOURCE PERMIT NO. 0088-02-C
BOILERS**

Issuance Date:

Expiration Date:

In addition to the standard conditions of the Covered Source Permit, the following special conditions shall apply to the permitted facility:

Section A. Equipment Description

1. This portion of the Covered Source Permit encompasses the following equipment and associated appurtenances:

Two (2) 99 MMBtu/hr boilers, Foster Wheeler, model no. AG-5060, serial nos. 7414, National Board No. 585 and 7415, National Board No. 586.

(Auth.: HAR §11-60.1-3)

2. The permittee shall permanently attach an identification tag or nameplate on the boilers which identifies the model number, serial number or I.D. number and manufacturer. The identification tag or nameplate shall be attached to the equipment in a conspicuous location.

(Auth.: HAR §11-60.1-5, §11-60.1-90)

Section B. Applicable Federal Regulations

1. The boilers are subject to the provisions of the following federal regulations:
 - a. 40 CFR Part 60, Standards of Performance for New Stationary Sources (NSPS),
 - i. Subpart A, General Provisions;
 - ii. Subpart J, Standards of Performance for Petroleum Refineries; and
 - iii. Subpart Dc, Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units.
 - b. 40 CFR Part 63, National Emission Standards for Hazardous Air Pollutants for Source Categories (MACT),
 - i. Subpart A, General Provisions; and
 - ii. Subpart DDDDD, National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial and Institutional Boilers and Process Heaters.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161; 40 CFR §60.1, §60.40c, §60.100, §63.1, §63.7480)¹

2. The permittee shall comply with all applicable requirements of the standards listed above, including all emission limits, notification, reporting, monitoring, testing and recordkeeping requirements. The major requirements of these standards are detailed in the special conditions of this permit.

(Auth.: HAR §11-60.1-3, §11-60.1-90)

Section C. Operational and Emissions Limitations

1. The existing three (3) boilers, Unit Nos. F-5201, F5202 and F5203, shall not be operated concurrently with the two (2) 99 MMBtu/hr boilers. The existing three (3) boilers, Unit Nos. F-5201, F-5202 and F-5203, shall be permanently shutdown within a one (1) year period after the startup of the two (2) 99 MMBtu/hr boilers.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90)

2. Allowable Fuels

The boilers shall be fired only on low sulfur fuel oil (LSFO) with a maximum sulfur content not to exceed 0.5% by weight (30-day rolling average) or refinery fuel gas (RFG) with a hydrogen sulfide (H₂S) content not to exceed 230 mg/dscm (160 ppmv). The LSFO sulfur limit shall apply at all times, including periods of startup, shutdown, and malfunction.

(Auth.: HAR §11-60.1-3, §11-60.1-38, §11-60.1-90, §11-60.1-161, 40 CFR §60.42c, §60.104)¹

3. Maximum Emission Limits

The permittee shall not discharge or cause the discharge into the atmosphere from the boilers any gases that contain carbon monoxide, particulate matter/PM₁₀, and hydrogen chloride emissions in excess of the limits specified below while fired on LSFO or RFG. The particulate matter/PM₁₀ limit shall apply at all times, except during periods of startup, shutdown, and malfunction.

Maximum Emission Limits for each Boiler

Pollutant	Fired on LSFO	Fired on RFG
CO	0.08 lb/MMBtu 400 ppmvd @ 3% O ₂	0.073 lb/MMBtu 400 ppmvd @ 3% O ₂
PM/PM ₁₀	0.03 lb/MMBtu	0.03 lb/MMBtu
Hydrogen Chloride	0.0005 lb/MMBtu	0.0005 lb/MMBtu

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, §11-60.1-174, 40 CFR §60.43c, §63.7500)¹

4. Visible Emissions (V.E.)

- a. The permittee shall not cause the discharge into the atmosphere emissions from the boilers exhibiting an opacity of twenty (20) percent or greater (6-minute average), except for one 6-minute period per hour of not more than twenty-seven (27) percent opacity. The opacity limit shall apply at all times, except during periods of startup, shutdown, and malfunction.
- b. The permittee shall not cause the discharge into the atmosphere emissions from the boilers exhibiting an opacity of ten (10) percent or greater (1-hour block average).

(Auth.: HAR §11-60.1-3, §11-60.1-32, §11-60.1-90, §11-60.1-161, §11-60.1-174, 40 CFR §60.43c, §63.7530, SIP §11-60-24)^{1,2}

5. The boilers shall be properly maintained and kept in good operating condition at all times. The permittee shall follow a regular maintenance schedule, as recommended by the manufacturer or as needed, to ensure proper operation of the boilers.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90)

Section D. Monitoring and Recordkeeping Requirements

1. Fuel Consumption

The permittee shall install, operate, and maintain non-resetting fuel meters for the continuous measurement and recording of the amount of LSFO and RFG fired in each boiler. Daily, monthly and annual records of the fuel consumption of each fuel for each boiler shall be maintained.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-114, 40 CFR §60.48c)¹

2. LSFO Sulfur Content Monitoring

Oil samples may be collected from the fuel tank for each boiler immediately after the fuel tank is filled and before any oil is combusted. The permittee shall analyze the oil sample to determine the sulfur content of the oil. If a partially empty fuel tank is refilled, a new sample and analysis of the fuel in the tank would be required upon filling. Results of the fuel analysis taken after each new shipment of oil is received shall be used as the daily value when calculating the 30-day rolling average until the next shipment is received. If the fuel analysis shows that the sulfur content in the fuel tank is greater than 0.5 weight

percent sulfur, the permittee shall ensure that the sulfur content of subsequent oil shipments is low enough to cause the 30-day rolling average sulfur content to be 0.5 weight percent sulfur or less.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.46c)¹

3. Continuous Opacity Monitoring System (COMS)

- a. The permittee shall install, calibrate, operate, and maintain a continuous opacity monitoring system (COMS) for the measurement and recording of the opacity of stack emissions from each boiler.
- b. The systems shall meet the U.S. EPA monitoring performance standards of 40 CFR Part 60, Sections 60.13 and 63.8, and 40 CFR Part 60, Appendix B, Performance Specification 1. The span value of the opacity COMS shall be between 60 and 80 percent.
- c. All 6-minute average opacity readings shall be recorded in percent.

Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, §11-60.1-174, 40 CFR §60.13, §60.47c, §63.8, §63.7525)¹

4. Continuous Emissions Monitoring System (CEMS) for H₂S.

- a. The permittee shall install, operate and maintain a continuous emissions monitoring system (CEMS) for continuously monitoring and recording the concentration (dry basis) of H₂S in the RFG before being burned in the boilers.
- b. The CEMS shall meet the following requirements:
 - i. The span value for the CEMS is 425 mg/dscm (300 ppmv) H₂S.
 - ii. All fuel gas combustion devices, including the boilers, having a common source of fuel gas may be monitored at one location, if monitoring at this location accurately represents the concentration of H₂S in the RFG being burned.
 - iii. Performance evaluations for the H₂S CEMS shall be in accordance with 40 CFR §60.13. The H₂S CEMS shall meet 40 CFR Part 6, Appendix B, Performance Specification 7, Specifications and Test Procedures for Hydrogen Sulfide Continuous Emissions Monitoring Systems in Stationary Sources; and Appendix F, Quality Assurance Procedures. 40 CFR Part 60, Appendix A, Method 11, shall be used in conducting any relative accuracy test audit (RATA).
 - iv. Cylinder Gas Audits (CGS) shall be conducted in accordance with 40 CFR Part 60, Appendix F, Section 5.1.2

- v. Calibration Drift (CD) assessments shall be performed on a daily basis pursuant to 40 CFR Part 60, Appendix F, Section 4.1.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.105)¹

5. Inspection, Maintenance and Repair Log

An inspection, maintenance and repair log shall be maintained for the boilers. Replacement of parts and repairs to the boilers shall be documented. At a minimum, the following records shall be maintained:

- a. The date of the inspection/repair;
- b. A description of the findings or any maintenance or repair work performed; and
- c. The name and title of the inspector.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90)

6. All records, including support information, shall be maintained at the facility for at least five (5) years from the date of the monitoring samples, measurements, tests, reports, or application. Support information includes all calibration and maintenance records and copies of all reports required by the permit. These records shall be in a permanent form suitable for inspection and made available to the Department of Health or their representatives upon request.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90)

Section E. Notification and Reporting Requirements

1. Excess Emissions Reporting

- a. The permittee shall submit an excess emissions and monitoring systems performance report pursuant to 40 CFR §60.7(c) to the Department of Health and the U.S. EPA Region 9 every **semiannual calendar period**. The report shall include the following information:
 - i. The magnitude of excess emissions computed in accordance with 40 CFR §60.13(h), any conversion factors used, and the date and time of commencement and completion of each time period of excess emissions, and corrective actions taken.
 - ii. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the boiler(s). The nature and cause of any malfunction (if known), and the corrective actions taken or preventative measures adopted, shall also be reported.

- iii. The date and time identifying each period during which the continuous emissions monitoring system was inoperative except for zero and span checks. The nature of each system repair or adjustment shall be described.
 - iv. The report shall so state if no excess emissions have occurred. Also, the report shall so state if the continuous emissions monitoring system operated properly during the period and was not subject to any repairs or adjustments except for zero and span checks.
- b. All reports shall be postmarked by the 30th day following the end of the **semiannual calendar period**. The enclosed **Excess Emissions and Monitoring System Performance Summary Report** form or an equivalent form shall also be submitted in addition to the excess emissions and monitoring systems performance report.
- c. Excess emissions shall be defined as follows:
- i. Any opacity measurements, as measured by the continuous opacity monitoring system (COMS), exceeding the opacity limits and corresponding averaging times set forth in Special Condition No. C.4 of this Attachment, or
 - ii. Any rolling 3-hr period during which the average concentration of H₂S in RFG, as measured by the continuous emissions monitoring system, exceeds 230 mg/dscm (160 ppmv).
- d. Excess emissions indicated by the continuous monitoring systems shall be considered violations of the applicable emission limit for the purposes of this permit.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, §11-60.1-161; 40 CFR §60.7, §60.48c, §60.105)

2. Semiannual Reporting

The permittee shall submit **semiannually** written reports to the Department of Health for monitoring purposes. The reports shall be submitted **within sixty (60) days** after the end of each semiannual calendar period (January 1 to June 30 and July 1 to December 31) and shall include the following:

- a. LSFO sulfur content
 - i. Calendar dates covered in the reporting period;
 - ii. Each 30-day average sulfur content (weight percent), calculated during the reporting period, ending with the last 30-day period, reasons for

noncompliance with the emission standards, and a description of corrective actions taken;

- iii. The enclosed **Monitoring Report Form: Fuel Certification** or an equivalent form shall be used;
- b. Any deviations from permit requirements shall be clearly identified.

(Auth.: HAR §11-60.1-3, §11-60.1-32, §11-60.1-90, §11-60.1-161; 40 CFR §60.48c)¹

3. Annual Emissions Reporting

As required by Attachment IV and in conjunction with the requirements of Attachment III, Annual Fee Requirements, the permittee shall submit **on an annual basis** the total tons per year emitted of each regulated air pollutant, including hazardous air pollutants. The reporting of annual emissions is due within **sixty (60) days following the end of each calendar year**. The enclosed **Annual Emissions Report Form: Fuel Consumption** or an equivalent form shall be used in reporting fuel usage.

Upon written request of the permittee, the deadline for reporting annual emissions may be extended if the Department of Health determines that reasonable justification exists for the extension.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90, §11-60.1-114)

4. Notification and reporting requirements shall be conducted in accordance with the standard conditions found in Attachment I, Standard Condition Nos. 14, 17 and 24, respectively. These notifications shall include, but not be limited to:

- a. Date of construction commencement, anticipated date of initial startup, and actual date of startup. The notification shall include:
 - i. The design heat input capacity of the boilers and identification of fuels to be combusted in the boilers;
 - ii. The anticipated annual capacity factor based on all fuels fired and based on each individual fuel fired.
- b. Emissions of air pollutants in violation of HAR, Chapter 11-60.1 or this permit (excluding technology-based emission exceedances due to emergencies); and
- c. Permanent discontinuance of construction, modification, relocation or operation of the facility covered by this permit.

(Auth.: HAR §11-60.1-8, §11-60.1-15, §11-60.1-16, §11-60.1-90; §11-60.1-161, 40 CFR §60.48c)¹

5. Deviations

The permittee shall report (in writing) **within five (5) working days** any deviations from permit requirements, including those attributable to upset conditions, the probable cause of such deviations and any corrective actions or preventative measures taken. Corrective actions may include a requirement for more frequent monitoring, or could trigger implementation of a corrective action plan.

(Auth.: HAR §11-60.1-3, §11-60.1-15, §11-60.1-16, §11-60.1-90)

6. Compliance Certification

During the permit term, the permittee shall submit at least **annually** to the Department of Health and U.S. EPA Region 9, the attached **Compliance Certification Form**, pursuant to HAR §11-60.1-86. The permittee shall indicate whether or not compliance is being met with each term or condition of this permit. The compliance certification shall be submitted **within ninety (90) days after** the end of each calendar year, and shall be signed and dated by a responsible official. The compliance certification shall include at a minimum, the following information:

- a. The identification of each term or condition of the permit that is the basis of the certification;
- b. The compliance status;
- c. Whether compliance was continuous or intermittent;
- d. The methods used for determining the compliance status of the source currently and over the reporting period;
- e. Any additional information indicating the source's compliance status with any applicable enhanced monitoring and compliance certification including the requirements of Section 114(a)(3) of the Clean Air Act or any applicable monitoring and analysis provisions of Section 504(b) of the Clean Air Act; and
- f. Any additional information as required by the Department of Health including information to determine compliance.

Upon written request of the permittee, the deadline for submitting the compliance certification may be extended, if the Department of Health determines that reasonable justification exists for the extension.

(Auth.: HAR §11-60.1-4, §11-60.1-86, §11-60.1-90)

7. The permittee shall notify the Department of Health in writing of the permanent shutdown of the existing three (3) boilers, Unit Nos. F-5201, F-5202 and F-5203, **within five (5) days** of the shutdown.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90)

Section F. Testing Requirements

1. **Within sixty (60) days** after achieving the maximum production rate of the boilers **but not later than one-hundred eighty (180) day after** the initial start-up of the boilers and annually thereafter, the permittee shall conduct or cause to be conducted performance tests on the boilers. The performance tests shall be conducted for sulfur content, particulate matter/PM₁₀, carbon monoxide, hydrogen chloride, and opacity while firing on LSFO and RFG. All performance tests shall be conducted at the maximum operating capacity of the boilers, or at other operating loads as may be specified by the Department of Health.

(Auth.: HAR §11-60.1-11, §11-60.1-90, §11-60.1-161; §11-60.1-174, 40 CFR §60.8, §60.44c, §60.45c, §63.7, §63.7520)¹

2. The source performance tests shall be conducted and the results reported in accordance with the tests methods set forth in 40 CFR Part 60, Appendix A, 40 CFR Part 63, Appendix A, 40 CFR §60.8 and 40 CFR §63.7. The following test methods or U.S. EPA-approved equivalent methods, or alternative methods with prior written approval from the Department of Health, shall be used:
 - a. The permittee shall demonstrate compliance with the LSFO sulfur limits based on shipment fuel sampling. The initial performance test shall consist of sampling and analyzing the oil in the initial tank of oil to be fired in the boilers to demonstrate that the oil contains 0.5 weight percent sulfur or less. Thereafter, the permittee shall sample the oil in the fuel tank after each new shipment of oil is received, as described in Special Condition No. D.2. of this Attachment.

The sulfur content of the LSFO shall be tested in accordance with the most current American Society for Testing and Materials (ASTM) methods. ASTM Method D4294-03 is a suitable alternative to Method D129-00 for determining the sulfur content;

- b. Performance tests for the emissions of particulate matter/PM₁₀ shall be conducted using EPA Methods 1 to 4, 5 or 17, and 19;
- c. Performance tests for the emissions of CO shall be conducted using EPA Methods 1 to 4 and 10, 10A, or 10B;
- d. The permittee shall demonstrate compliance with the hydrogen chloride emission limit specified in Special Condition No. C.3 of this Attachment through fuel analyses according to 40 CFR §63.7521 and follow the procedures of 40 CFR §63.7530(d)(1) through (d)(5). The chlorine concentration shall be measured using the testing procedures specified in SW-846-9520 or ASTM Method E776-87;

- e. Performance tests for determining the opacity of stack emissions shall be conducted using the procedures of 40 CFR Part 60, Appendix A, Method 9.

(Auth.: HAR §11-60.1-11, §11-60.1-90, §11-60.1-161; §11-60.1-174, 40 CFR §60.8, §60.44c, §60.45c, §63.7, §63.7510, §63.7515, §63.7520, §63.7521, §63.7530)¹

3. Each source performance test shall consist of three (3) separate runs using the applicable test method. For the purpose of determining compliance with the applicable regulation, the arithmetic mean of the results from the three (3) runs shall apply.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, §11-60.1-161, §11-60.1-174, 40 CFR §60.8, 40 CFR §63.7)¹

4. The permittee shall provide sampling and testing facilities at its own expense. The tests shall be conducted at the operating capacities identified in Special Condition No. F.1 of this Attachment. The Department of Health may monitor any of the required source performance tests.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90)

5. Any deviations from these conditions, test methods, or procedures may be cause for rejection of the test results unless such deviations are approved by the Department of Health before the tests.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90)

6. **At least thirty (30) days prior to performing a test**, the permittee shall submit a written source performance test plan to the Department of Health and the U.S. EPA Region 9 that describes the test date(s), test duration, test locations, test methods, source operation, fuel consumption, and other parameters that may affect test results. Such a plan shall conform to U.S. EPA guidelines including quality assurance procedures. A source performance test plan or quality assurance plan that does not have the approval of the Department of Health may be grounds to invalidate any test and require a retest.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, §11-60.1-161, §11-60.1-174, 40 CFR §60.8, 40 CFR §63.7)¹

7. **Within sixty (60) days after completion of the source performance test**, the permittee shall submit to the Department of Health and the U.S. EPA Region 9, the test report which shall include the operating conditions of the boilers at the time of the test, the analysis of the fuel, the summarized test results, comparative results with the permit emission limits, and other pertinent field and laboratory data.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, §11-60.1-161, §11-60.1-174, 40 CFR §60.8, 40 CFR §63.7)¹

8. Upon written request and justification by the permittee, the Department of Health may waive the requirement for a specific annual source performance test. The waiver request is to be submitted prior to the required test and must include documentation justifying such action. Documentation should include, but is not limited to, the results of the prior tests indicating compliance by a wide margin, documentation of continuing compliance, and further that operations of the source have not changed since the previous source performance test.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, §11-60.1-174, 40 CFR §63.7)¹

9. For the source performance testing of PM/PM₁₀ and hydrogen chloride, the requirements of 40 CFR §63.7515 shall apply:

- a. Performance testing may be waived for two (2) consecutive years if for at least three (3) consecutive years compliance with the emission limit can be shown. The performance testing must be conducted during the third year and no more than thirty-six (36) months after the previous performance test.
- b. If the emission limits are continually met, the performance tests may be conducted every third year, but each performance test must be conducted no more than thirty-six (36) months after the previous performance test.
- c. If a performance test shows noncompliance with an emission limit, the performance test must be conducted annually for that pollutant until all performance tests over a three (3) year period show compliance.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, §11-60.1-174, 40 CFR §63.7515)¹

Section G. Agency Notifications

Any document (including reports) required to be submitted by this Covered Source permit shall be in accordance with Attachment I, Standard Condition No. 28.

(Auth.: HAR §11-60.1-4, §11-60.1-90)

¹ The citations to the Code of Federal Regulations (CFR) identified under a particular condition, indicate that the permit condition complies with the specified provision(s) of the CFR. Due to the integration of the preconstruction and operating permit requirements, permit conditions may incorporate more stringent requirements than those set forth in the CFR.

² The citations to the State Implementation Plan (SIP) identified under a particular condition, indicate that the permit condition complies with the specified provision(s) of the SIP.

**ATTACHMENT IIC: SPECIAL CONDITIONS
COVERED SOURCE PERMIT NO. 0088-02-C
MISCELLANEOUS EQUIPMENT**

Issuance Date:

Expiration Date:

In addition to the standard conditions of the Covered Source Permit, the following special conditions shall apply to the permitted facility:

Section A. Equipment Description

This portion of the Covered Source Permit encompasses the requirements for miscellaneous equipment associated with the cogeneration unit and boilers.

(Auth.: HAR §11-60.1-3)

Section B. Applicable Federal Regulations

1. All valves, pumps, pressure relief devices, sampling connection systems, open-ended valves or lines, and flanges or other connectors *in VOC service* as defined in §60.481 of 40 CFR Part 60, Subpart VV, are subject to the provisions of the following federal regulations:

40 CFR Part 60, Standards of Performance for New Stationary Sources (NSPS),

- a. Subpart A, General Provisions; and
- b. Subpart GGG, Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.1, §60.590)¹

2. All individual drain systems, as defined in §60.691 of 40 CFR Part 60, Subpart QQQ, and for which construction, modification, or reconstruction is commenced after May 4, 1987, are subject to the provisions of the following federal regulations:

40 CFR Part 60, Standards of Performance for New Stationary Source (NSPS),

- a. Subpart A, General Provisions; and
- b. Subpart QQQ, Standards of Performance for VOC Emissions from Petroleum Refinery Wastewater Systems.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.1, §60.690)¹

3. All pumps, compressors, pressure relief devices, sampling connection systems, open-ended valves or lines, valves, or instrumentation systems *in organic hazardous air pollutant service*, as defined in §63.641 of 40 CFR Part 63, Subpart CC, are subject to the provisions of the following federal regulations:

40 CFR Part 63, National Emission Standards for Hazardous Air Pollutants for Source Categories (MACT),

- a. Subpart A, General Provisions; and
- b. Subpart CC, National Emission Standards for Hazardous Air Pollutants from Petroleum Refineries.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-174, 40 CFR §63.1, §63.640)¹

4. The permittee shall comply with all applicable requirements of the standards listed above, including all emission limits, notification, reporting, monitoring, testing and recordkeeping requirements. The major requirements of these standards are detailed in the special conditions of this permit.

(Auth.: HAR §11-60.1-3, §11-60.1-90)

Section C. Operational and Emission Limitations

1. All pumps and compressors handling volatile organic compounds having a Reid Vapor Pressure (RVP) of 1.5 pounds per square inch (psi) or greater which can be fitted with mechanical seals shall have mechanical seals or other equipment of equal efficiency for purposes of air pollution control as may be approved by the Department of Health. Pumps and compressors not capable of being fitted with mechanical seals, such as reciprocating pumps, shall be fitted with the best sealing system available for air pollution control given the particular design of pump or compressor as may be approved by the Department of Health.

(Auth.: HAR §11-60.1-3, §11-60.1-41, §11-60.1-90)

2. The permittee shall not cause or allow the emissions of gas streams containing volatile organic compounds from a vapor blowdown system unless these gases are burned by smokeless flares, or abated by an equally effective control device as approved by the Department of Health.

(Auth.: HAR §11-60.1-3, §11-60.1-42, §11-60.1-90)

3. Compressor
 - a. Each compressor shall be equipped and operated with a seal system that includes a barrier fluid system and that prevents leakage of VOC to the atmosphere, except as provided in 40 CFR §60.482-1(c), 40 CFR §60.482-3(h) and 40 CFR §60.482-3(i).

- b. Each compressor seal system as required in Special Condition No. C.3.a. of this Attachment shall be as follows:
 - i. Operated with the barrier fluid at a pressure that is greater than the compressor stuffing box pressure; or
 - ii. Equipped with a barrier fluid system that is connected by a closed vent system to a control device that complies with the requirements of 40 CFR §60.482-10.
 - iii. Equipped with a system that purges the barrier fluid into a process stream with zero VOC emissions to the atmosphere.
- c. The barrier fluid system shall be in heavy liquid service or shall not be in VOC service.
- d. A compressor is exempt from the requirements of Special Condition No. C.3.a. and C.3.b. of this Attachment if it is equipped with a closed vent system capable of capturing and transporting any leakage from the seal to a control device that complies with the requirements of 40 CFR §60.482-10, except as provided in Special Condition No. C.3.e. of this Attachment.
- e. Any compressor that is designated for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by methods specified in 40 CFR §60.485(c) and is tested for compliance initially upon designation, annually, and at other times requested by the Department of Health is exempt from the requirements of Special Condition Nos. C.3.a. through C.3.d., D.3.a. and D.3.b. of this Attachment.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.592)¹

4. Pressure Relief Devices in Gas/Vapor Service

- a. Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as determined by the methods specified in 40 CFR §60.485(c).
- b. *After each pressure release*, the pressure relief device shall be returned to a condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, **as soon as practicable**, but no later than 5 calendar days *after the pressure release*, except as provided in Special Condition No. C.8. of this Attachment.
- c. Any pressure relief device is exempt from the requirements of Special Condition No. C.4.a. and C.4.b. of this Attachment if it is equipped with a closed vent system capable of capturing and transporting leakage through the pressure relief

device to a control device that complies with the requirements of 40 CFR §60.482-10.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.592)¹

5. Open Ended Valves/Lines

- a. Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in 40 CFR §60.482-1(c). The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line.
- b. Each open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed.
- c. When a double block-and-bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with Special Condition No. C.5.a. of this Attachment at all other times.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.592, §63.648)¹

6. Sampling Connection Systems

- a. Each sampling connection system shall be equipped with a closed-purged, closed-loop, or closed-vent system, except as provided in 40 CFR §60.482-1(c).
- b. Each closed-purged, closed-loop, or closed-vent system shall comply with the following requirements:
 - i. Return the purged process fluid directly to the process line; or
 - ii. Collect and recycle the purged process fluid to a process; or
 - iii. Be designed and operated to capture and transport all the purged process fluid to a control device that complies with the requirements of 40 CFR §60.482-10.
 - iv. In situ sampling systems and sampling systems without purges are exempt from the requirements of Special Condition No. C.6.a. and C.6.b. of this Attachment.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.592, §63.648)¹

7. Individual Drain Systems

- a. Sewer drains shall be equipped with water seal controls.

- b. Junction boxes shall be equipped with a cover and may have an open vent pipe at least 3 feet (90 cm) in length and shall not exceed 4 inches (10.2 cm) in diameter.
- c. Junction box covers shall have a tight seal around the edge and shall be kept in place at all times, except during inspection and maintenance.
- d. Sewer lines shall not be open to the atmosphere and shall be covered or enclosed in a manner so as to have no visual gaps or cracks in joints, seals, or other emission interfaces.
- e. Refinery wastewater routed through new process drains and a new first common downstream junction box either as part of a new individual drain system or an existing individual drain system, shall not be routed through a downstream catch basin.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.692-2)¹

8. Delay of Repair

- a. Delay of repair of equipment for which leaks have been detected will be allowed if the repair is technically infeasible without a process unit shutdown. Repair of this equipment shall occur before the end of the next process unit shutdown.
- b. Delay of repair of equipment will be allowed for equipment which is isolated from the process and which does not remain in VOC service.
- c. Delay of repair for valves will be allowed if:
 - i. The permittee demonstrates that emissions of purged material resulting from the immediate repair are greater than the fugitive emissions likely to result from the delay of repair, and
 - ii. When repair procedures are effected, the purged material is collected and destroyed or recovered in a control device complying with the requirements of 40 CFR §60.482-10.
- d. Delay of repair for pumps will be allowed if:
 - i. Repair requires the use of a dual mechanical seal system that includes a barrier fluid system, and
 - ii. Repair is completed as soon as practicable, but not later than 6 months after the leak was detected.
- e. Delay of repair beyond a process unit shutdown will be allowed for a valve, if valve assembly replacement is necessary during the process unit shutdown, valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted. Delay of repair

beyond the next process unit shutdown will not be allowed unless the next process unit shutdown occurs sooner than 6 months after the first process unit shutdown.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.592, §63.648)¹

Section D. Monitoring and Recordkeeping Requirements

1. All records, including support information, shall be maintained at the facility for at least five (5) years from the date of the monitoring samples, measurements, tests, reports, or application. Support information includes all calibration and maintenance records and copies of all reports required by the permit. These records shall be in a permanent form suitable for inspection and made available to the Department of Health or their representatives upon request.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90)

2. Pumps in Light Liquid Service
 - a. Each pump in light liquid service shall be monitored **monthly** to detect leaks in accordance with the requirements set forth in 40 CFR §60.485(b), except as provided in 40 CFR §60.482-1(c) and 40 CFR §60.482-2(d), (e) and (f).
 - b. Each pump in light liquid service shall be checked by visual inspection **each calendar week** for indications of liquids dripping from the pump seal.
 - c. If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.
 - d. If there are indications of liquids dripping from the pump seal, a leak is detected.
 - e. When a leak is detected, it shall be repaired **as soon as practicable, but not later than fifteen (15) calendar days** after it is detected, except as provided in Special Condition No. C.8. of this Attachment. A first attempt at repair shall be made **no later than five (5) calendar days** after each leak is detected.
 - f. Each pump equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of Special Condition No. D.2.a. of this Attachment provided the requirements of 40 CFR §60.482-2(d)(1) through (6) are met.
 - g. Any pump that is designated for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the

requirements of Special Condition Nos. D.2.a., D.2. b., D.2.e., and D.2.f. of this Attachment if the pump:

- i. Has no externally actuated shaft penetrating the pump housing;
 - ii. Is demonstrated to be operating with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background as measured by the methods specified in 40 CFR §60.485(c); and
 - iii. Is tested for compliance with Special Condition No. 2.g.ii. of this Attachment initially upon designation, annually, and at other times requested by the Department of Health.
- h. If any pump is equipped with a closed vent system capable of capturing and transporting any leakage from the seal or seals to a control device that complies with the requirements of 40 CFR §60.482-10, it is exempt from the requirements of Special Condition Nos. D.2.a. through D.2.g. of this Attachment.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.592, §63.648)¹

3. Compressors

- a. Each compressor barrier fluid system shall be equipped with a sensor that will detect failure of the seal system, barrier fluid system, or both. Each sensor shall be checked **daily** or shall be equipped with an audible alarm. If the sensor indicates failure of the seal system, the barrier system, or both, a leak is detected.
- b. When a leak is detected, it shall be repaired **as soon as practicable, but not later than fifteen (15) calendar days** after it is detected, except as provided in Special Condition No. C.8. of this Attachment. A first attempt at repair shall be made **no later than five (5) calendar days** after each leak is detected.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.592)¹

4. Pressure Relief Devices in Gas/Vapor Service

No later than five (5) calendar days after a pressure release, the pressure relief device subject to the requirements of 40 CFR Part 60, Subpart GGG shall be monitored to confirm the conditions of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, by the methods specified in 40 CFR §60.485(c).

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.592)¹

5. Valves in Light Liquid Service and in Gas/Vapor Service
- a. Each valve in light liquid service shall be monitored **monthly** to detect leaks in accordance with the requirements set forth in 40 CFR §60.485(b).
 - b. If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.
 - c. Any valve for which a leak is *not detected for 2 successive months* may be monitored the **first month of every quarter**, beginning with the next quarter, *until a leak is detected. If a leak is detected, the valve shall be monitored monthly until a leak is not detected for 2 successive months.*
 - d. *When a leak is detected, it shall be repaired as soon as practicable, but not later than fifteen (15) calendar days after it is detected, except as provided in Special Condition No. C.8. of this Attachment. A first attempt at repair shall be made no later than five (5) calendar days after each leak is detected.*
 - e. First attempts at repair include, but are not limited to, the following best practices where practicable:
 - i. Tightening of bonnet bolts;
 - ii. Replacement of bonnet bolts;
 - iii. Tightening of packing gland nuts; and
 - iv. Injection of lubricant into lubricated packing.
 - f. Any valve that is designated, as described in 40 CFR §60.486(e)(2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of Special Condition No. D.5.a. of this Attachment if the valve:
 - i. Has no external actuating mechanism in contact with the process fluid;
 - ii. Is operated with emissions less than 500 ppm above background as determined by the method specified in 40 CFR §60.485(c); and
 - iii. Is tested for compliance with the Special Condition No. D.5.f.ii. of this Attachment initially upon designation, annually, and at other times requested by the Department of Health.
 - g. Any valve that is designated, as described in 40 CFR §60.486(f)(1), as unsafe-to-monitor valve and satisfies the criteria outlined in 40 CFR §60.482-7(g) is exempt from the requirements of Special Condition No. D.5.a. of this Attachment.

- h. Any valve that is designated, as described in 40 CFR §60.486(f)(2), as difficult-to-monitor valve and satisfies the criteria outlined in 40 CFR §60.482-7(h) is exempt from the requirements of Special Condition No. D.5.a. of this Attachment.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.592, §63.648)¹

6. Pumps and Valves in Heavy Liquid Service, Pressure Relief Devices in Light Liquid or Heavy Liquid Service, and Flanges and other Connectors

- a. Pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and flanges and other connectors shall be monitored **within five (5) days** by the method specified in 40 CFR §60.485(b) *if evidence of a potential leak is found by visual, audible, olfactory, or any other detection method.*
- b. If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.
- c. *When a leak is detected*, it shall be repaired **as soon as practicable, but not later than fifteen (15) calendar days after it is detected**, except as provided in Special Condition No. C.8. of this Attachment. The first attempt at repair shall be made **no later than five (5) calendar days after each leak is detected**.
- d. First attempts at repair include, but are not limited to, the best practices described in Special Condition No. D.5.e. of this Attachment.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.592, §63.648)¹

7. *When each leak is detected*, a weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.592, §63.648)¹

8. The identification on a valve may be removed after it has been monitored for two (2) successive months as specified in Special Condition No. D.5.c. of this Attachment and no leak has been detected during those 2 months. The identification on equipment except a valve may be removed after it has been repaired.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.592, §63.648)¹

9. *When each leak is detected*, the following information shall be recorded in a log and shall be kept for 5 years in a readily accessible location:

- a. The instrument and operator identification numbers and the equipment identification number;
- b. The date the leak was detected and the dates of each attempt to repair the leak;
- c. Repair methods applied in each attempt to repair the leak;

- d. "Above 10,000" if the maximum instrument reading measured by the methods specified in 40 CFR §60.485(a) after each repair attempt is equal to or greater than 10,000 ppm;
- e. "Repair delayed" and the reason for the delay if a leak is not repaired within fifteen (15) calendar days after discovery of the leak;
- f. The signature of the permittee whose decision it was that repair could not be effected without a process shutdown;
- g. The expected date of successful repair of the leak if a leak is not repaired within fifteen (15) days;
- h. Dates of process unit shutdown that occur while the equipment is unrepaired; and
- i. The date of successful repair of the leak.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.592, §63.648)¹

10. The following information pertaining to all equipment subject to the requirements of 40 CFR Part 60, Subpart GGG, or 40 CFR Part 63, Subpart CC, shall be recorded in a log that is kept in a readily accessible location:
- a. A list of identification numbers for all equipment;
 - b. A list of identification numbers for equipment that is designated for no detectable emissions which is signed by the permittee;
 - c. A list of equipment identification numbers for pressure relief devices required to comply with the requirements of Special Condition No. C.4. of this Attachment;
 - d. The dates of each compliance test used to determine no detectable emissions; and
 - i. The background level measured during each compliance test; and
 - ii. The maximum instrument reading measured at the equipment during each compliance test;
 - e. A list of identification numbers for equipment in vacuum service.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.592, §63.648)¹

11. The following information pertaining to all valves subject to the requirements of 40 CFR Part 60, Subpart GGG, or 40 CFR Part 63, Subpart CC, shall be recorded in a log that is kept in a readily accessible location:

- a. A list of identification numbers for valves that are designated as unsafe-to-monitor, an explanation for each valve stating why the valve is unsafe-to-monitor, and the plan for monitoring each valve; and
- b. A list of identification numbers for valves that are designated as difficult-to-monitor, an explanation for each valve stating why the valve is difficult-to-monitor, and the schedule for monitoring each valve.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.592, §63.648)¹

12. The following information shall be recorded in a log that is kept in a readily accessible location:
 - a. Design criterion based on design considerations and operating experience indicating the failure of the seal system, barrier fluid system, or both of each affected pump or compressor.
 - b. Any changes to this criterion and the reasons for the changes.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.592, §63.648)¹

13. Each drain in active service shall be checked by visual inspection or physical inspection **initially and monthly** thereafter for indications of low water levels or other conditions that would reduce the effectiveness of the water seal controls.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.692-2)¹

14. Except for out of service drains where a tightly sealed cap or plug is installed, each drain out of active service shall be checked by visual or physical inspection **initially and weekly** thereafter for indications of low water levels or other problems that could result in VOC emissions. Drains having tightly sealed caps or plugs shall be inspected initially and semiannually to ensure caps or plugs are in place and properly installed.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.692-2)¹

15. *Whenever low water levels or missing or improperly installed caps or plugs are identified*, water shall be added or first efforts at repair shall be made **as soon as practicable**, but not later than twenty-hour (24) hours after detection unless it is determined to be technically impossible without a complete or partial refinery or process unit shutdown. In such instances, repair shall occur before the end of the next refinery or process unit shutdown.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.692-2, §60.692-6)¹

16. Junction boxes shall be visually inspected **initially and semiannually** thereafter to ensure that the cover is in place and to ensure that the cover has a tight seal around the edge.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.692-2)¹
17. *If a broken seal or gap is identified*, first effort at repair shall be made **as soon as practicable, but not later than fifteen (15) calendar days** after the broken seal or gap is identified unless it is determined to be technically impossible without a complete or partial refinery or process unit shutdown. In such instances, repair shall occur before the end of the next refinery or process unit shutdown.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.692-2, §60.692-6)¹
18. The portion of each unburied sewer line shall be visually inspected **initially and semiannually** for indication of cracks, gaps, or other problems that could result in VOC emissions.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.692-2)¹
19. *Wherever cracks, gaps, or other problems are detected*, repairs shall be made **as soon as practicable, but not later than fifteen (15) calendar days** after identification unless it is determined to be technically impossible without a complete or partial refinery or process unit shutdown. In such instances, repair shall occur before the end of the next refinery or process unit shutdown.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.692-2, §60.692-6)¹
20. Before using any individual drain system installed in compliance with 40 CFR §60.692-2, the permittee shall inspect such equipment for indications of potential emissions, defects, or other problems that may cause the requirements of 40 CFR Part 60, Subpart QQQ not to be met. Points of inspection include, but are not limited to, seals, flanges, joints, gaskets, hatches, caps, and plugs.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.696)¹
21. For each individual drain systems subject to the requirements of 40 CFR §60.692-2, the location, date, and corrective action shall be recorded for each drain when the water seal is dry or otherwise breached, when a drain cap or plug is missing or improperly installed, or other problem is identified that could result in VOC emissions during the initial and periodic visual or physical inspection.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.697)¹

22. For junction boxes subject to the requirements of 40 CFR §60.692-2, the location, date, and corrective action shall be recorded for each inspection when a broken seal, gap, or other problem is identified that could result in VOC emissions.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.697)¹

23. For each sewer line subject to the requirements of 40 CFR §60.692-2, the location, date, and corrective action shall be recorded for inspections when a problem is identified that could result in VOC emissions.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.697)¹

Section E. Notification and Reporting Requirements

1. Annual Emissions

As required by Attachment IV and in conjunction with the requirements of Attachment III, Annual Fee Requirements, the permittee shall submit **on an annual basis** the total tons per year emitted of each regulated air pollutant, including hazardous air pollutants. The reporting of annual emissions is due within **sixty (60) days following the end of each calendar year**. The enclosed **Annual Emissions Report Form: Refinery Equipment - Process Rate** or equivalent form, shall be used in reporting fugitive emissions.

Upon written request of the permittee, the deadline for reporting annual emissions may be extended if the Department of Health determines that reasonable justification exists for the extension.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90, §11-60.1-114)

2. Additional notification and reporting requirements shall be conducted in accordance with the standard conditions found in Attachment I, Standard Condition Nos. 14, 16, 17 and 25, respectively. These notifications shall include, but not be limited to:

- a. Anticipated date of initial startup, actual date of construction commencement, and actual date of startup;
- b. Intent to shutdown air pollution control equipment for necessary scheduled maintenance;
- c. Emissions of air pollutants in violation of HAR, Chapter 11-60.1 or this permit (excluding technology-based emission exceedances due to emergencies); and
- d. Permanent discontinuance of construction, modification, relocation or operation of the facility covered by this permit.

(Auth.: HAR §11-60.1-8, §11-60.1-15, §11-60.1-16, §11-60.1-90)

3. The permittee shall report (in writing) **within five (5) working days** any deviations from permit requirements including those attributable to upset conditions, the probable cause of such deviations and any corrective actions or preventative measures taken. Corrective actions may include a requirement for more frequent monitoring, or could trigger implementation of a corrective action plan.

(Auth.: HAR §11-60.1-3, §11-60.1-15, §11-60.1-16, §11-60.1-90)

4. Compliance Certification

During the permit term, the permittee shall submit at least **annually** to the Department of Health and U.S. EPA Region 9, the attached **Compliance Certification Form**, pursuant to HAR §11-60.1-86. The permittee shall indicate whether or not compliance is being met with each term or condition of this permit. The compliance certification shall be submitted **within ninety (90) days after** the end of each calendar year, and shall be signed and dated by a responsible official. The compliance certification shall include at a minimum, the following information:

- a. The identification of each term or condition of the permit that is the basis of the certification;
- b. The compliance status;
- c. Whether compliance was continuous or intermittent;
- d. The methods used for determining the compliance status of the source currently and over the reporting period;
- e. Any additional information indicating the source's compliance status with any applicable enhanced monitoring and compliance certification including the requirements of Section 114(a)(3) of the Clean Air Act or any applicable monitoring and analysis provisions of Section 504(b) of the Clean Air Act; and
- f. Any additional information as required by the Department of Health including information to determine compliance.

Upon written request of the permittee, the deadline for submitting the compliance certification may be extended, if the Department of Health determines that reasonable justification exists for the extension.

(Auth.: HAR §11-60.1-4, §11-60.1-86, §11-60.1-90)

5. The permittee shall submit for valves, pumps and compressors subject to the requirements of 40 CFR Part 60, Subpart GGG, or 40 CFR Part 63, Subpart CC, **semiannual** reports to the Department of Health beginning six months after the initial start-up date. The reports shall be submitted within **sixty (60) days after the end of each semiannual calendar period (January 1 to June 30 and July 1 to December 31)**. The **initial** semiannual report shall include the following information:

- a. Process unit identification;
- b. Number of valves subject to the requirements of Special Condition No. D.5. of this Attachment, excluding those valves designated for no detectable emissions under the provisions of Special Condition No. D.5.f. of this Attachment;
- c. Number of pumps subject to the requirements of Special Condition No. D.2. of this Attachment, excluding those pumps designated for no detectable emissions under the provisions of Special Condition No. D.2.g. of this Attachment and those pumps complying with Special Condition No. D.2.h. of this Attachment; and
- d. Number of compressors subject to the requirements of Special Condition No. C.3. of this Attachment, excluding those compressors designated for no detectable emissions under the provisions of Special Condition No. C.3.e. of this Attachment and those compressors complying with Special Condition No. C.3.d. of this Attachment.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.592, §63.648)¹

6. All semiannual reports, required in Special Condition No. E.5. of this Attachment, shall include the following information:
 - a. Process unit identification;
 - b. For each month during the semiannual reporting period,
 - i. Number of valves for which leaks were detected,
 - ii. Number of valves for which leaks were not repaired,
 - iii. Number of pumps for which leaks were detected,
 - iv. Number of pumps for which leaks were not repaired,
 - v. Number of compressors for which leaks were detected,
 - vi. Number of compressors for which leaks were not repaired, and
 - vii. The facts that explain each delay of repair and, where appropriate, why a process unit shutdown was technically infeasible.
 - c. Dates of process unit shutdowns which occurred within the semiannual reporting period; and
 - d. Revisions to items reported in the initial semiannual report if changes have occurred since the initial report or subsequent revisions to the initial report.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.592, §63.648)¹

7. The permittee shall submit to the Department of Health within **sixty (60) days** after initial startup a certification that the equipment necessary to comply with 40 CFR Part 60, Subpart QQQ has been installed and that the required initial inspections or tests of

process drains, sewer lines and junction boxes have been carried out in accordance with 40 CFR Part 60, Subpart QQQ. Thereafter, the permittee shall submit **semiannually** a certification that all of the required inspections have been carried out in accordance with 40 CFR Part 60, Subpart QQQ.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.698)¹

8. A report that summarizes all inspections when a water seal was dry or otherwise breached, when a drain cap or plug was missing or improperly installed, or when cracks, gaps, or other problems were identified that could result in VOC emissions, including information about the repairs or corrective action taken, shall be submitted **initially and semiannually** thereafter to the Department of Health.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.698)¹

9. If compliance with the provisions of 40 CFR Part 60, Subpart QQQ is delayed pursuant to 40 CFR §60.692-7, the notification required under 40 CFR §60.7(a)(4) shall include the estimated date of the next scheduled refinery or process unit shutdown after the date of notification and the reason why compliance with the standard is technically impossible without a refinery or process unit shutdown.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.698)¹

Section F. Agency Notifications

Any document (including reports) required to be submitted by this Covered Source permit shall be in accordance with Attachment I, Standard Condition No. 28.

(Auth.: HAR §11-60.1-4, §11-60.1-90)

1 The citations to the Code of Federal Regulations (CFR) identified under a particular condition, indicate that the permit condition complies with the specified provision(s) of the CFR. Due to the integration of the preconstruction and operating permit requirements, permit conditions may incorporate more stringent requirements than those set forth in the CFR.

2 The citations to the State Implementation Plan (SIP) identified under a particular condition, indicate that the permit condition complies with the specified provision(s) of the SIP.

**ATTACHMENT III: ANNUAL FEE REQUIREMENTS
COVERED SOURCE PERMIT NO. 0088-02-C**

Issuance Date:

Expiration Date:

The following requirements for the submittal of annual fees are established pursuant to Hawaii Administrative Rules (HAR), Title 11, Chapter 60.1, Air Pollution Control. Should HAR, Chapter 60.1 be revised such that the following requirements are in conflict with the provisions of HAR, Chapter 60.1, the permittee shall comply with the provisions of HAR, Chapter 60.1:

1. Annual fees shall be paid in full:
 - a. **Within sixty (60) days** after the end of each calendar year; and
 - b. **Within thirty (30) days** after the permanent discontinuance of the covered source.
2. The annual fees shall be determined and submitted in accordance with Hawaii Administrative Rules, Chapter 11-60.1, Subchapter 6.
3. The annual emissions data for which the annual fees are based shall accompany the submittal of any annual fees and submitted on forms furnished by the Department of Health.
4. The annual fees and the emission data shall be mailed to:

**Clean Air Branch
Environmental Management Division
Hawaii Department of Health
P.O. Box 3378
Honolulu, HI 96801-3378**

**ATTACHMENT IV: ANNUAL EMISSIONS REPORTING REQUIREMENTS
COVERED SOURCE PERMIT NO. 0088-02-C**

Issuance Date:

Expiration Date:

In accordance with the Hawaii Administrative Rules, Title 11, Chapter 60.1, Air Pollution Control, the permittee shall report to the Department of Health the nature and amounts of emissions:

1. Complete the attached forms:

Annual Emissions Report Form: Fuel Consumption

Annual Emissions Report Form: Refinery Equipment - Process Rate

2. The reporting period shall be from January 1 to December 31 of each year. All reports shall be submitted to the Department of Health within **sixty (60) days** after the end of each calendar year and shall be mailed to the following address:

**Clean Air Branch
Environmental Management Division
Hawaii Department of Health
P.O. Box 3378
Honolulu, HI 96801-3378**

3. The permittee shall retain the information submitted, including all emission calculations. These records shall be in a permanent form suitable for inspection, retained for a minimum of five (5) years, and made available to the Department of Health upon request.
4. Any information submitted to the Department of Health without a request for confidentiality shall be considered public record.
5. In accordance with HAR, Section 11-60.1-14, the permittee may request confidential treatment of specific information including information concerning secret processes or methods of manufacturing, by submitting a written request to the Department of Health and clearly identifying the specific information that is to be accorded confidential treatment.

**COMPLIANCE CERTIFICATION FORM
COVERED SOURCE PERMIT NO. 0088-02-C
PAGE 1 OF ____**

[Issuance Date]

[Expiration Date]

In accordance with the Hawaii Administrative Rules, Title 11, Chapter 60.1, Air Pollution Control, the permittee shall report to the Department of Health the following certification at least annually, or more frequently as requested by the Department:

(Make Copies of the Compliance Certification Form for Future Use)

For Period: _____ Date: _____

Company/Facility Name: _____

Responsible Official (Print): _____

Title: _____

Responsible Official (Signature): _____

I certify that I have knowledge of the facts herein set forth, that the same are true, accurate and complete to the best of my knowledge and belief, and that all information not identified by me as confidential in nature shall be treated by Department of Health as public record. I further state that I will assume responsibility for the construction, modification, or operation of the source in accordance with the Hawaii Administrative Rules, Title 11, Chapter 60.1, Air Pollution Control, and any permit issued thereof.

**COMPLIANCE CERTIFICATION FORM
COVERED SOURCE PERMIT NO. 0088-02-C
(CONTINUED, PAGE ___ OF ___)**

[Issuance Date]

[Expiration Date]

The purpose of this form is to evaluate whether or not the facility was in compliance with the permit terms and conditions during the covered period. If there were any deviations to the permit terms and conditions during the covered period, the deviation(s) shall be certified as *intermittent compliance* for the particular permit term(s) or condition(s). Deviations include failure to monitor, record, report, or collect the minimum data required by the permit to show compliance. Absence of any deviation, the particular permit term(s) or condition(s) may be certified as *continuous compliance*.

Instructions:

Please certify Sections A, B, and C below for continuous or intermittent compliance. Sections A and B are to be certified as a group of permit conditions. Section C shall be certified individually for each operational and emissions limit condition as listed in the Special Conditions section of the permit (list all applicable equipment for each condition). Any deviations shall also be listed individually and described in Section D. The facility may substitute their own generated form in verbatim for Sections C and D.

A. Attachment I, Standard Conditions

<u>Permit term/condition</u> All standard conditions	<u>Equipment(s)</u> All Equipment(s) listed in the permit	<u>Compliance</u> Continuous Intermittent
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B. Special Conditions - Monitoring, Recordkeeping, Reporting, Testing, and INSIG

<u>Permit term/condition</u> All monitoring conditions	<u>Equipment(s)</u> All Equipment(s) listed in the permit	<u>Compliance</u> Continuous Intermittent
<u>Permit term/condition</u> All recordkeeping conditions	<u>Equipment(s)</u> All Equipment(s) listed in the permit	<u>Compliance</u> Continuous Intermittent
<u>Permit term/condition</u> All reporting conditions	<u>Equipment(s)</u> All Equipment(s) listed in the permit	<u>Compliance</u> Continuous Intermittent
<u>Permit term/condition</u> All testing conditions	<u>Equipment(s)</u> All Equipment(s) listed in the permit	<u>Compliance</u> Continuous Intermittent
<u>Permit term/condition</u> All INSIG conditions	<u>Equipment(s)</u> All Equipment(s) listed in the permit	<u>Compliance</u> Continuous Intermittent

**COMPLIANCE CERTIFICATION FORM
COVERED SOURCE PERMIT NO. 0088-02-C
(CONTINUED, PAGE ___ OF ___)**

[Issuance Date]

[Expiration Date]

C. Special Conditions - Operational and Emissions Limitations

Each permit term/condition shall be identified in chronological order using attachment and section numbers (e.g. Attachment II, B.1, Attachment IIA, Special Condition No. B.1.f, etc.). Each equipment shall be identified using the description stated in Section A of the Special Conditions (e.g. unit no., model no., serial no., etc.). Check all methods (as required by permit) to show compliance for the respective permit term/condition.

Permit term/condition	Equipment(s)	Method	Compliance
		monitoring recordkeeping reporting testing none of the above	Continuous Intermittent
		monitoring recordkeeping reporting testing none of the above	Continuous Intermittent
		monitoring recordkeeping reporting testing none of the above	Continuous Intermittent
		monitoring recordkeeping reporting testing none of the above	Continuous Intermittent
		monitoring recordkeeping reporting testing none of the above	Continuous Intermittent
		monitoring recordkeeping reporting testing none of the above	Continuous Intermittent
		monitoring recordkeeping reporting testing none of the above	Continuous Intermittent

(Make Additional Copies if Needed)

**COMPLIANCE CERTIFICATION FORM
COVERED SOURCE PERMIT NO. 0088-02-C
(CONTINUED, PAGE ___ OF ___)**

[Issuance Date]

[Expiration Date]

D. Deviations

<u>Permit Term/ Condition</u>	<u>Equipment(s) / Brief Summary of Deviation</u>	<u>Deviation Period time (am/pm) & date (mo/day/yr)</u>	<u>Date of Written Deviation Report to DOH (mo/day/yr)</u>
		Beginning: Ending:	

(Make Additional Copies if Needed)

**ANNUAL EMISSIONS REPORT FORM
FUEL CONSUMPTION
COVERED SOURCE PERMIT NO. 0088-02-C**

[Issuance Date]

[Expiration Date]

In accordance with the Hawaii Administrative Rules, Title 11, Chapter 60.1, Air Pollution Control, the permittee shall report to the Department of Health the nature and amounts of emissions:

(Make Copies for Future Use)

For Period: _____ Date: _____

Facility Name: _____

Equipment Location: _____

Equipment Description: _____

Equipment Capacity/Rating (specify units): _____
(Units such as Horsepower, kilowatt, tons/hour, Btu/hr, etc.)

Serial/ID No.: _____

I certify that I have knowledge of the facts herein set forth, that the same are true, accurate and complete to the best of my knowledge and belief, and that all information not identified by me as confidential in nature shall be treated by the Department of Health as public record.

Responsible Official (PRINT): _____
TITLE: _____

Responsible Official (Signature): _____

Equipment	Type of Fuel Fired	Annual Fuel Use (gallons/yr or ft ³ /yr)	Sulfur Content (% by weight)	H ₂ S Content (ppm)
Combustion Turbine	Naphtha			N/A
Combustion Turbine	RFG		N/A	
Duct Burner	RFG		N/A	
Boiler No. 1	LSFO			N/A
Boiler No. 1	RFG		N/A	
Boiler No. 2	LSFO			N/A
Boiler No. 2	RFG		N/A	

**ANNUAL EMISSIONS REPORT FORM
REFINERY EQUIPMENT – PROCESS RATE
COVERED SOURCE PERMIT NO. 0088-02-C**

[Issuance Date]

[Expiration Date]

In accordance with the Hawaii Administrative Rules, Title 11, Chapter 60.1, Air Pollution Control, the permittee shall report to the Department of Health the nature and amounts of emissions:

(Make Copies for Future Use)

For Period: _____ Date: _____

Facility Name: _____

Equipment Location: _____

Equipment Description: _____

Equipment Capacity/Rating (specify units): _____
(Units such as Horsepower, kilowatt, tons/hour, Btu/hr, etc.)

Serial/ID No.: _____

I certify that I have knowledge of the facts herein set forth, that the same are true, accurate and complete to the best of my knowledge and belief, and that all information not identified by me as confidential in nature shall be treated by the Department of Health as public record.

Responsible Official (PRINT): _____

TITLE: _____

Responsible Official (Signature): _____

EMISSION SOURCE¹	ANNUAL PROCESS RATE²	NOTES

¹ Specify emission source. For example, list FCCU, cooling tower, oil/water separator, valves, flanges, compressor seals, etc.

² Specify annual process rate. For example, list bbls refinery feed/yr, gallons cooling water/yr, gallons wastewater/yr, etc.

**MONITORING REPORT FORM
FUEL CERTIFICATION
COVERED SOURCE PERMIT NO. 0088-02-C**

[Issuance Date]

[Expiration Date]

In accordance with the Hawaii Administrative Rules, Title 11, Chapter 60.1, Air Pollution Control, the permittee shall report to the Department of Health the following information semi-annually:

(Make Copies for Future Use)

For Period: _____ Date: _____

Facility Name: _____

Equipment Location: _____

Equipment Description: _____

Equipment Capacity/Rating (specify units): _____
(Units such as Horsepower, kilowatt, tons/hour, Btu/hr, etc.)

Serial/ID No.: _____

I certify that I have knowledge of the facts herein set forth, that the same are true, accurate and complete to the best of my knowledge and belief, and that all information not identified by me as confidential in nature shall be treated by the Department of Health as public record.

Responsible Official (PRINT): _____

TITLE: _____

Responsible Official (Signature): _____

Equipment	Fuel	Sulfur Content (% by weight) ¹	Reason(s) for Noncompliance	Description of Corrective Actions Taken
Combustion Turbine	Naphtha			
Boilers	LSFO	(30-day average)		

¹ Report the highest sulfur content during the reporting period.

**EXCESS EMISSION AND MONITORING SYSTEM PERFORMANCE
SUMMARY REPORT
COVERED SOURCE PERMIT NO. 0088-02-C
(PAGE 1 OF 2)**

[Issuance Date] **[Expiration Date]**

(Make Copies for Future Use)

Facility Name: _____
 Equipment Location: _____
 Equipment Description: _____

Pollutant Monitored:

From: Date _____ Time _____
 To: Date _____ Time _____
 Emission Limit: _____

Date of Last CEMS Certification/Audit _____
Total Source Operating Time _____

EMISSION DATA SUMMARY

1. Duration (Hours/Periods) of Excess Emissions in Reporting Period due to:
 - a. Start-Up/Shutdown..... _____
 - b. Cleaning/Soot Blowing..... _____
 - c. Control Equipment Failure..... _____
 - d. Process Problems..... _____
 - e. Other Known Causes..... _____
 - f. Unknown Causes..... _____
 - g. Fuel Problems..... _____

Number of incidents of excess emissions..... _____
2. Total Duration of Excess Emissions..... _____
3. Total Duration of Excess Emissions
 (% of Total Source Operating Time)..... _____

CEMS PERFORMANCE SUMMARY

1. CEMS Downtime (Hours/Periods) in Reporting Period Due to:
 - a. Monitor Equipment Malfunctions..... _____
 - b. Non-Monitor Equipment Malfunctions..... _____
 - c. Quality Assurance Calibration..... _____
 - d. Other Known Causes..... _____
 - e. Unknown Causes..... _____

Number of incidents of monitor downtime..... _____
2. Total CEMS Downtime..... _____
3. Total CEMS Downtime
 (% of Total Source Operating Time)..... _____

**EXCESS EMISSION AND MONITORING SYSTEM PERFORMANCE
SUMMARY REPORT
COVERED SOURCE PERMIT NO. 0088-02-C
(CONTINUED, PAGE 2 OF 2)**

CERTIFICATION by Responsible Official

I certify that I have knowledge of the facts herein set forth, that the same are true, accurate and complete to the best of my knowledge and belief, and that all information not identified by me as confidential in nature shall be treated by the Department of Health as public record.

NAME (Print/Type): _____

Title: _____

(Signature): _____

**VISIBLE EMISSIONS FORM REQUIREMENTS
STATE OF HAWAII
COVERED SOURCE PERMIT NO. 0088-02-C**

[Issuance Date]

[Expiration Date]

The **Visible Emissions (V.E.) Form** shall be completed **monthly** (*each calendar month*) for each equipment subject to opacity limits in accordance with 40 CFR Part 60, Appendix A, Method 9 or use of a Ringelmann Chart as provided. At least **annually** (*calendar year*), V.E. observation shall be conducted for each equipment subject to opacity limits by a certified reader in accordance with Method 9. The V.E. Form shall be completed as follows:

1. Visible emissions observations shall take place during the day only and shall be compared to the Ringelmann Chart provided. The opacity shall be noted in five (5) percent increments (e.g., 25%).
2. Orient the sun within a 140 degree sector to your back. Provide a source layout sketch on the V.E. Form using the symbols as shown.
3. Stand at least three (3) stack heights, but not more than a quarter mile from the stack.
4. Two (2) consecutive six (6) minute observations shall be taken at fifteen (15) second intervals for each stack or emission point.
5. The six (6) minute average opacity reading shall be calculated for each observation.
6. If possible, the observations shall be performed as follows:
 - a. Read from where the line of sight is at right angles to the wind direction.
 - b. The line of sight shall not include more than one (1) plume at a time.
 - c. Read at the point in the plume with the greatest opacity (without condensed water vapor), ideally while the plume is no wider than the stack diameter.
 - d. Read the plume at fifteen (15) second intervals only. Do not read continuously.
 - e. The equipment shall be operating at the maximum permitted capacity.
7. If the equipment was shut-down for that period, briefly explain the reason for shut-down in the comment column.

The permittee shall retain the completed V.E. Forms for recordkeeping. These records shall be in a permanent form suitable for inspection, retained for a minimum of five years, and made available to the Department of Health, or their representative upon request.

Any required initial and annual performance test performed in accordance with Method 9 by a certified reader shall satisfy the respective equipment's V.E. monitoring requirements for the month the performance test is performed.

**VISIBLE EMISSIONS FORM
COVERED SOURCE PERMIT NO. 0088-02-C**

[Issuance Date]

[Expiration Date]

(Make Copies for Future Use for Each Stack or Emission Point)

Permit No.: _____

Company Name: _____

Equipment and Fuel: _____

Site Conditions:

Stack height above ground (ft): _____

Stack distance from observer (ft): _____

Emission color (black or white): _____

Sky conditions (% cloud cover): _____

Wind speed (mph): _____

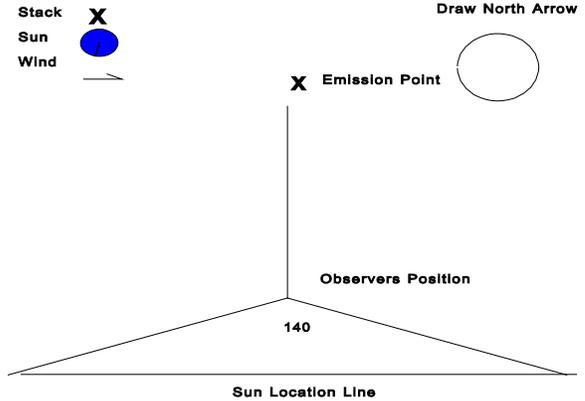
Temperature (°F): _____

Observer Name: _____

Certified? (Yes/No): _____

Observation Date and Start Time: _____

Method of Observation (Ringelmann Chart or Method 9): _____



SECONDS	0	15	30	45	COMMENTS
MINUTES					
1					
2					
3					
4					
5					
6					
Six (6) Minute Average Opacity Reading (%):					

Observation Date and Start Time: _____

Method of Observation (Ringelmann Chart or Method 9): _____

SECONDS	0	15	30	45	COMMENTS
MINUTES					
1					
2					
3					
4					
5					
6					
Six (6) Minute Average Opacity Reading (%):					

PROPOSED