

**PROPOSED**

Issue Date

**CERTIFIED MAIL  
RETURN RECEIPT REQUESTED**

(xxxx xxxx xxxx xxxx xxxx)

11-xxxE CAB  
File No. 0278

Mr. Michael E. Drace  
General Manager  
U.S. Dry Cleaning Corporation  
1930 Auiki Street  
Honolulu, Hawaii 96819

Dear Mr. Drace:

**Subject: Covered Source Permit (CSP) No. 0278-02-C  
Initial Application No. 0278-05  
U.S. Dry Cleaning Corporation, dba Young Laundry  
125 HP and 300 HP Johnston Boilers  
Large Area Source Dry Cleaning Facility  
Located at: 1930 Auiki Street, Honolulu, Oahu  
Date of Expiration: 5 Years from Issue Date**

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 additional information that you submitted as part of your application received on September 9, 2010 and additional information received on December 14, 2010 and April 11, 2011.

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 - Boilers
Attachment IIB:	Special Conditions - Large Area Source Dry Cleaning Facility
Attachment II - INSIG:	Special Conditions - Insignificant Activities
Attachment III:	Annual Fee Requirements
Attachment IV:	Annual Emissions Reporting Requirements

The forms for submission are as follows:

- Compliance Certification Form
- Annual Emissions Report Form - Boilers
- Monitoring Report Form - Fuel Certification and Boiler Operation
- Monitoring Report Form - Perchloroethylene Consumption/Monitoring Summary
- Monitoring Report Form - Opacity Exceedances

**PROPOSED**

Mr. Michael E. Drace  
Issue Date  
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The following are for use in monitoring visible emissions:

Visible Emissions Form Requirements  
Visible Emissions Form

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 (c) 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,

STUART YAMADA, P.E., CHIEF  
Environmental Management Division

KK:nn  
Enclosures

c: CAB Monitoring Section

**ATTACHMENT I: STANDARD CONDITIONS  
COVERED SOURCE PERMIT NO. 0278-02-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)<sup>2</sup>
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)<sup>2</sup>
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, Section 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:
- Identification of the specific equipment to be taken out of service, as well as its location and permit number;
  - The expected length of time that the air pollution control equipment will be out of service;
  - The nature and quantity of emissions of air pollutants likely to be emitted during the shutdown period;
  - Measures such as the use of off-shift labor and equipment that will be taken to minimize the length of the shutdown period; and
  - 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)<sup>2</sup>

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:
- Identification of each affected emission point and each emission limit exceeded;
  - Magnitude of each excess emission;
  - Time and duration of each excess emission;
  - Identity of the process or control equipment causing the excess emission;
  - 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)<sup>2</sup>

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. Within eighteen (18) months after the permit takes effect, is discontinued for a period of eighteen (18) months or more, or is not 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, HAR §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 ensure 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 a stationary source 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)<sup>2</sup>

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 Director may allow a permit renewal application to be submitted no less than six (6) months prior to the permit expiration date, if the Director determines that there is reasonable justification.

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

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  
919 Ala Moana Boulevard, Room 203  
Honolulu, HI 96814**

**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)

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<sup>1</sup> 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.

<sup>2</sup> 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 - BOILERS  
COVERED SOURCE PERMIT NO. 0278-02-C**

**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 permit encompasses the following equipment:

<u>Unit No.</u>	<u>Description</u>	<u>Model No.</u>	<u>Serial No.</u>
B-1	125 hp Johnston Boiler	PFMA-125-3LHP-150S	10431
B-2	300 hp Johnston Boiler	PFTA-300-4LG-150S	947-01

(Auth.: HAR §11-60.1-3)

2. An identification tag or name plate shall be displayed on the equipment listed above to show model no., serial no., and manufacturer. The identification tag or name plate shall be permanently attached to the equipment in a conspicuous location.

(Auth.: HAR §11-60.1-3, §11-60.1-5)

**Section B. Applicable Federal Regulations**

1. Boiler no. B-2, model no. PFTA-300-4LG-150S, is subject to the provisions of the following federal regulations:
- a. 40 Code of Federal Regulations (CFR) Part 60, Standards of Performance for New Stationary Sources, Subpart A, General Provisions; and
  - b. 40 CFR Part 60, Standards of Performance for New Stationary Sources, Subpart Dc, Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units.

(Auth.: HAR §11-60.1-3, , §11-60.1-161; 40 CFR §60.1, §60.40c)<sup>1</sup>

2. The permittee shall comply with all of the applicable provisions of these standards, including all emission limits, notification, testing, monitoring and reporting 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, §11-60.1-161; 40 CFR §60.1, §60.40c)<sup>1</sup>

**Section C. Operational and Emission Limitations**

1. Only one of the two (2) boilers may be operated at any time. In no event shall the boilers be operated simultaneously.

(Auth.: HAR §11-60.1-3, §11-60.1-90)

2. The boilers shall only be fired on yellow grease supplied by Island Commodities or approved equivalent. Fuel oil no. 2 with a maximum sulfur content not to exceed 0.0015% by weight may be used as a backup fuel.

(Auth.: HAR §11-60.1-3, §11-60.1-38, §11-60.1-90, 40 CFR §60.42c)<sup>1</sup>

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

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

4. 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**

All records, including support information, shall be maintained for at least five (5) years from the date of the monitoring sample, measurement, test, report, or applications. Support information includes all maintenance, inspection, and repair records, and copies of all reports required by this permit. These records shall be true, accurate, and maintained in a permanent form suitable for inspection and be made available to the Department of Health or their representative upon request.

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

1. A log shall be maintained for the permanent recording of boiler operations for the purpose of complying with the operational limit specified in Attachment IIA, Special Condition No. C.1. The following information shall be recorded each time a boiler is started or shut off:
  - a. The unit number (B-1 or B-2) of the boiler operated;
  - b. The date and time the boiler is started; and
  - c. The date and time the boiler is shut off.

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

2. A non-resetting volumetric flow meter shall be installed, operated, and maintained in the fuel lines servicing the two (2) boilers for the permanent recording of the total gallons of fuel fired in each of the boilers. The non-resetting meter shall not allow the manual resetting or other manual adjustments of the meter readings. The installation of any new non-resetting meters shall be designed to accommodate a minimum of five (5) years of equipment

operation, considering any operational limitations, before the meter returns to a zero reading. The following records shall be maintained:

- a. The unit number (B-1 or B-2) of the boiler for which the fuel usage is being recorded;
- b. The date of the meter readings;
- c. Beginning meter readings for each day; and
- d. The type of fuel fired and the total fuel used (gal) for each day;

(Auth.: HAR §-60.1-3, §11-60.1-11, §11-60.1-90, 40 CFR §60.48c(g))<sup>1</sup>

3. Fuel purchase receipts, showing the supplier, fuel type, sulfur content in percent by weight, date of delivery, and amount (gallons) of fuel delivered to the site for the two (2) boilers shall be maintained. Fuel sulfur content may be demonstrated by providing the supplier's fuel certification for the type of fuel purchased and received in accordance with 40 CFR Part 60, Subpart Dc, §60.48c(f)(1).

(Auth.: HAR §-60.1-3, §11-60.1-11, §11-60.1-90, 40 CFR §60.44c, 40 CFR §60.48c)<sup>1</sup>

4. Inspection, Maintenance, and Repair Log

An inspection, maintenance, and repair log shall be maintained for the equipment covered under this permit. Replacement of parts and repairs to the two (2) 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 §-60.1-3, §11-60.1-5, §11-60.1-90)

5. Visible Emissions (VE)

- a. The permittee shall conduct **monthly** VE observations for each boiler by a certified reader in accordance with 40 CFR Part 60, Appendix A, Method 9. Observations shall consist of two (2) consecutive six (6) minute observations shall be taken at fifteen (15) second intervals. Records shall be completed and maintained in accordance with the *Visible Emissions Form Requirements*.

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

### **Section E. Notification and Reporting Requirements**

1. Notification and reporting pertaining to the following events shall be done in accordance with Attachment I, Standard Condition Nos. 14, 17, and 24, respectively:

- a. *Anticipated date of initial startup, actual date of construction commencement, and actual date of startup;*
- 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, or any petroleum storage tank, covered by this permit.*

(Auth.: HAR §11-60.1-8, §11-60.1-15, §11-60.1-16, §11-60.1-90, SIP §11-60-10, SIP §11-60-16; 40CFR §60.49b)<sup>1,2</sup>

2. The permittee shall report (in writing) **within five (5) working days** any deviations from the 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 additional source testing, more frequent monitoring, or the implementation of a corrective action plan.

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

3. Semi-Annual Monitoring Report Forms

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

- a. The calendar dates covered in the reporting period;
- b. The fuel certification records provided by the oil supplier in accordance with Special Condition No. D.4;
- c. A statement signed by the owner or operator certifying that the fuel certification records are representative of all the fuel combusted during the semi-annual period;
- d. The type of fuel fired in the boilers during the respective reporting period. Include the maximum sulfur content in percent by weight of the fuel;
- e. All dates and times the two (2) boilers are operated simultaneously during the semi-annual period; and
- f. Any opacity exceedances as determined by the required VE 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 semi-annual period.

The enclosed **Monitoring Report Forms: Fuel Certification and Boiler Operation and Opacity Exceedances** shall be used.

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

#### 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 enclosed *Compliance Certification Form* pursuant to HAR, Subsection 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 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.

*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 or authorized representative.*

*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. Annual Emissions

As required by *Attachment IV, Annual Emissions Reporting Requirements* and in conjunction with the requirements of *Attachment III, Annual Fee Requirements*, the permittee shall report **annually** the total tons/year emitted of each regulated air pollutant, including any 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: Boilers** or equivalent form shall be used in reporting emissions.

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

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

**Section F. Agency Notification**

1. Any document (including reports) required to be submitted by this permit shall be done in accordance with Attachment I, Standard Condition No. 29.

(Auth.: HAR §11-60.1-4, §11-60.1-90)

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<sup>1</sup> 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.

<sup>2</sup> 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  
LARGE AREA SOURCE DRY CLEANING FACILITY  
COVERED SOURCE PERMIT NO. 0278-02-C**

**Effective Date:**

**Expiration Date:**

In addition to the standard conditions of the noncovered source general permit, the following special conditions shall apply to the permitted facility:

**Section A. Equipment Applicability.**

This permit encompasses each Large Area Source dry cleaning facility that uses perchloroethylene (PERC). The permit covers "existing" and "new" dry-to-dry machine and transfer machine systems (also referred to as dry cleaning systems) that are located at a dry cleaning facility. Issuance of this permit is based on the dry cleaning facility's yearly total PERC consumption being **inclusively between**:

1. 140 to 2,100 gallons for each dry cleaning facility containing **only** dry-to-dry machine(s); or
2. 140 to 1,800 gallons for each dry cleaning facility containing **both** dry-to-dry machine(s) and transfer machine system(s); or
3. 200 to 1,800 gallons for each dry cleaning facility containing **only** transfer machine system(s).

If requested by the dry cleaning facility or upon determination by the Department of Health, issuance of this permit may also be granted to a dry cleaning facility with a lower yearly total PERC consumption than the volumes specified above. Total PERC consumption shall be as determined in accordance with Attachment IIB, Special Condition No. E.4.b.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90, §11-60.1-92, §11-60.1-174;  
40 CFR §63.320)<sup>1</sup>

**Section B. Definitions.**

The permittee shall refer to 40 CFR §63.321 for the current list of definitions that are applicable to this attachment of the covered source permit and 40 CFR Part 63, Subpart M.

1. "Administrator" means the Administrator of the United States Environmental Protection Agency or authorized representative.
2. "Ancillary equipment" means the equipment used with a dry cleaning machine in a dry cleaning system including, but not limited to, emission control devices, pumps, filters, muck cookers, stills, solvent tanks, solvent containers, water separators, exhaust dampers, diverter valves, interconnecting piping, hoses, and ducts.
3. "Area source" means any perchloroethylene dry cleaning facility that does not meet the conditions of "Major Source."
4. "Articles" mean clothing, garments, textiles, fabrics, leather goods, and the like, that are dry cleaned.
5. "Biweekly" means any fourteen-day (14-day) period of time.

6. "Carbon adsorber" means a bed of activated carbon into which an air-perchloroethylene gas-vapor stream is routed and which adsorbs the perchloroethylene on the carbon.
7. "Coin-operated dry cleaning machine" means a dry cleaning machine that is operated by the customer (that is, the customer places articles into the machine, turns the machine on, and removes articles from the machine).
8. "Colorimetric detector tube" means a glass tube (sealed prior to use), containing material impregnated with a chemical that is sensitive to perchloroethylene and is designed to measure the concentration of perchloroethylene in air.
9. "Construction," for purposes of this permit, means the fabrication (onsite), erection, or installation of a dry cleaning system subject to this permit.
10. "Desorption" means regeneration of a carbon adsorber by removal of the perchloroethylene adsorbed on the carbon.
11. "Diverter valve" means a flow control device that prevents room air from passing through a refrigerated condenser when the door of the dry cleaning machine is open.
12. "Dry cleaning" means the process of cleaning articles using perchloroethylene.
13. "Dry cleaning cycle" means the washing and drying of articles in a dry-to-dry machine or transfer machine system.
14. "Dry cleaning facility" means an establishment with one or more dry cleaning systems.
15. "Dry cleaning machine" means a dry-to-dry machine or each machine of a transfer machine system.
16. "Dry cleaning machine drum" means the perforated container inside the dry cleaning machine that holds the articles during dry cleaning.
17. "Dry cleaning system" means a dry-to-dry machine and its ancillary equipment or a transfer machine system and its ancillary equipment.
18. "Dryer" means a machine used to remove perchloroethylene from articles by tumbling them in a heated air stream (see reclaimer).
19. "Dry-to-dry machine" means a one-machine dry cleaning operation in which washing and drying are performed in the same machine.
20. "Equivalent Control Device" means a control device as approved by the Administrator pursuant to 40 CFR §63.325.

21. "Exhaust damper" means a flow control device that prevents the air-perchloroethylene gas-vapor stream from exiting the dry cleaning machine into a carbon adsorber before room air is drawn into the dry cleaning machine.
22. "Existing" means commenced construction or reconstruction before December 9, 1991.
23. "Filter" means a porous device through which perchloroethylene is passed to remove contaminants in suspension. Examples include, but are not limited to, lint filter (button trap), cartridge filter, tubular filter, regenerative filter, prefilter, polishing filter, and spin disc filter.
24. "Heating coil" means the device used to heat the air stream circulated from the dry cleaning machine drum, after perchloroethylene has been condensed from the air stream and before the stream reenters the dry cleaning machine drum.
25. "Major source" means, for the purposes of this permit, a dry cleaning facility that emits or has the potential to emit more than 10 tons per year of perchloroethylene to the atmosphere. In lieu of measuring a facility's potential to emit perchloroethylene emissions or determining a facility's potential to emit perchloroethylene emissions, a dry cleaning facility is a major source if:
  - a. It includes only dry-to-dry machine(s) and has a total yearly perchloroethylene consumption greater than 8,000 liters (2,100 gallons); or
  - b. It includes only transfer machine system(s) or both dry-to-dry machine(s) and transfer machine system(s) and has a total yearly perchloroethylene consumption greater than 6,800 liters (1,800 gallons).
26. "Muck cooker" means a device for heating perchloroethylene-laden waste material to volatilize and recover perchloroethylene.
27. "New" means commenced construction or reconstruction on or after December 9, 1991.
28. "PERC," for purposes of this permit, means perchloroethylene.
29. "Perceptible leaks" mean any perchloroethylene vapor or liquid leaks that are obvious from:
  - a. The odor of perchloroethylene;
  - b. Visual observation, such as pools or droplets of liquid; or
  - c. The detection of gas flow by passing the fingers over the surface of equipment.
30. "Perchloroethylene consumption" means the total gallons of perchloroethylene purchased based upon purchase receipts or other reliable measures.
31. "Reclaimer" means a machine used to remove perchloroethylene from articles by tumbling them in a heated air stream (see dryer).
32. "Reconstruction," for purposes of this permit, means replacement of a washer, dryer, or reclaimer; or replacement of any components of a dry cleaning system to such an extent

that the fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable new source.

33. "Refrigerated condenser" means a vapor recovery system into which an air-perchloroethylene gas-vapor stream is routed and the perchloroethylene is condensed by cooling the gas-vapor stream.
34. "Refrigerated condenser coil" means the coil containing the chilled liquid used to cool and condense the perchloroethylene.
35. "Responsible official" means one of the following:
  - a. For a corporation: A president, secretary, treasurer, or vice president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more dry cleaning facilities;
  - b. For a partnership: A general partner;
  - c. For a sole proprietorship: The owner; or
  - d. For a municipality, State, Federal, or other public agency: Either a principal executive officer or ranking official.
36. "Room enclosure" means a stationary structure that encloses a transfer machine system, and is vented to a carbon adsorber or an equivalent control device during operation of the transfer machine system.
37. "Source," for purposes of this permit, means each dry cleaning system.
38. "Still" means any device used to volatilize and recover perchloroethylene from contaminated perchloroethylene.
39. "Temperature sensor" means a thermometer or thermocouple used to measure temperature.
40. "Total PERC Consumption" means the total gallons of PERC purchased in the prior twelve-months (12 months).
41. "Transfer machine system" means a multiple-machine dry cleaning operation in which washing and drying are performed in different machines. Examples include, but are not limited to:
  - a. A washer and dryer(s);
  - b. A washer and reclaimer(s); or
  - c. A dry-to-dry machine and reclaimer(s).
42. "Washer" means a machine used to clean articles by immersing them in perchloroethylene. This includes a dry-to-dry machine when used with a reclaimer.

43. "Water separator" means any device used to recover perchloroethylene from a water-perchloroethylene mixture.
44. "Year or Yearly" means any consecutive 12-month period of time.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-174; 40 CFR §63.320, §63.321)<sup>1</sup>

**Section C. Applicable Federal Regulations**

1. The dry cleaning facility is subject to the provisions of the following federal regulations:
- a. 40 CFR Part 63 National Emission Standards for Hazardous Air Pollutants for Source Categories, *Subpart A - General Provisions*; and
  - b. 40 CFR Part 63 National Emission Standards for Hazardous Air Pollutants for Source Categories, *Subpart M - National Perchloroethylene Air Emission Standards for Dry Cleaning Facilities*.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-174; 40 CFR §63.1, §63.320)<sup>1</sup>

2. The permittee shall comply with all applicable provisions of these standards including all emission limits, notification, testing, monitoring, and reporting 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, §11-60.1-174; 40 CFR §63.1, §63.320)<sup>1</sup>

**Section D. Operational Requirements.**

The permittee shall refer to and comply with all applicable standards and emission limits of 40 CFR Part 63, Subpart M, including the following:

1. The dry cleaning facility shall close the door of each dry cleaning machine immediately after transferring articles to or from the machine, and shall keep the door closed at all other times.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-174; 40 CFR §63.322)<sup>1</sup>

2. The dry cleaning facility shall operate and maintain each dry cleaning system according to the manufacturers' specifications and recommendations.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-174; 40 CFR §63.322)<sup>1</sup>

3. The dry cleaning facility shall drain all cartridge filters in their housing, or other sealed container, for a minimum of 24 hours, or shall treat such filters in an equivalent manner, before removal from the dry cleaning facility.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-174; 40 CFR §63.322)<sup>1</sup>

4. The dry cleaning facility shall store all PERC and wastes that contain PERC in solvent tanks or solvent containers with no perceptible leaks.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-174; 40 CFR §63.322)<sup>1</sup>

5. The dry cleaning facility shall perform equipment component inspections for perceptible leaks in accordance with Attachment IIB, Special Condition No. E.1.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-174; 40 CFR §63.322)<sup>1</sup>

6. For each "existing" dry cleaning system, the dry cleaning facility shall comply with either of the following:

- a. Route the air-PERC gas-vapor stream contained within each dry cleaning machine through a refrigerated condenser or an equivalent control device; or
- b. Route the air-PERC gas-vapor stream contained within each dry cleaning machine through a carbon adsorber installed on the dry cleaning machine prior to September 22, 1993.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-174; 40 CFR §63.322)<sup>1</sup>

7. For each "new" dry cleaning system, the dry cleaning facility shall comply with the following:

- a. Route the air-PERC gas-vapor stream contained within each dry cleaning machine through a refrigerated condenser or an equivalent control device; and
- b. Eliminate any emission of PERC during the transfer of articles between the washer and dryer(s).

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-174; 40 CFR §63.322)<sup>1</sup>

8. Each refrigerated condenser installed on an "existing" washer, to comply with Attachment IIB, Special Condition No. D.6:

- a. Shall be operated to not vent the air-PERC gas-vapor contained within the washer to the atmosphere until the washer door is opened;
- b. Shall be monitored according to Attachment IIB, Special Condition No. E.3.a; and
- c. Shall not use the same refrigerated condenser coil for the washer that is used by a dry-to-dry machine, dryer, or reclaimer.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-174; 40 CFR §63.322)<sup>1</sup>

9. Each carbon adsorber used for the purposes of complying with Attachment IIB, Special Condition No. D.6:
  - a. Shall not be bypassed to vent or release any air-PERC gas-vapor stream to the atmosphere at any time; and
  - b. Shall be monitored according to Attachment IIB, Special Condition No. E.2.
  
10. Each refrigerated condenser installed on a dry-to-dry machine, dryer, or reclaimer, to comply with Attachment IIB, Special Condition Nos. D.6 or D.7:
  - a. shall be operated to not vent or release the air-PERC gas vapor stream contained within the dry cleaning machine to the atmosphere while the dry cleaning machine drum is rotating;
  - b. shall be monitored according to Attachment IIB, Special Condition No. E.3.b; and
  - c. shall be operated with a diverter valve, which prevents air drawn into the dry cleaning machine when the door of the machine is open from passing through the refrigerated condenser.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-174; 40 CFR §63.322)<sup>1</sup>

11. The dry cleaning facility shall repair all perceptible leaks detected **within 24 hours**. If repair parts must be ordered, either a written or verbal order for those parts shall be initiated **within 2 working days** of detecting such a leak. Such repair parts shall be installed **within 5 working days** of receipt.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-174; 40 CFR §63.322)<sup>1</sup>

### **Section E. Monitoring and Recordkeeping**

The permittee shall refer to and comply with all applicable monitoring, recordkeeping, and testing requirements of 40 CFR Part 63, Subpart M, including the following:

1. The dry cleaning facility shall inspect the following components of each dry-to-dry machine and its ancillary equipment and/or each transfer machine system and its ancillary equipment **once a week** for perceptible leaks *while the dry cleaning system is operating*:
  - a. Hose and pipe connections, fittings, couplings, and valves;
  - b. Door gaskets and seatings;
  - c. Filter gaskets and seatings;
  - d. Pumps;
  - e. Solvent tanks and containers;
  - f. Water separators;
  - g. Muck cookers;
  - h. Stills;
  - i. Exhaust dampers;

- j. Diverter valves; and
- k. Cartridge filter housings.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-174; 40 CFR §63.322 & §63.323)<sup>1</sup>

2. For each carbon adsorber used to comply with Attachment IIB, Special Condition No. D.6, the dry cleaning facility shall measure the concentration of PERC in the exhaust of the carbon adsorber **weekly** with a colorimetric detector tube, while the dry cleaning machine is venting to that carbon adsorber at the end of the last dry cleaning cycle prior to desorption of that carbon adsorber to determine that the PERC concentration in the exhaust *is less than or equal to 100 parts per million by volume*. The dry cleaning facility shall:
  - a. Use a colorimetric detector tube designed to measure a concentration of 100 parts per million by volume of PERC in the air to an accuracy of  $\pm 25$  parts per million by volume;
  - b. Use the colorimetric detector tube according to the manufacturer's instructions; and
  - c. Provide a sampling port for monitoring within the exhaust outlet of the carbon adsorber that is easily accessible and located at least eight (8) stack or duct diameters downstream from any flow disturbance such as a bend, expansion, contraction, or outlet; downstream from no other inlet; and two (2) stack or duct diameters upstream from any flow disturbance such as a bend, expansion, contraction, inlet, or outlet.

If the PERC concentration monitored in the carbon adsorber's exhaust is not less than or equal to 100 parts per million by volume, adjustments or repairs shall be made **within 48 hours** to the dry cleaning system or control device to meet the specified values. If repair parts must be ordered, either a written or verbal order for such parts shall be initiated **within two (2) working days** of detecting such a parameter value. Such repair parts shall be installed **within five (5) working days** after receipt.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-92, §11-60.1-174; 40 CFR §63.323)<sup>1</sup>

3. Each refrigerated condenser installed on the following equipment to comply with Attachment IIB, Special Condition Nos. D.6 or D.7, the dry cleaning facility shall respectively comply with the following:
  - a. For "existing" washers:
    - 1) Calculate the difference between the temperature of the air-PERC gas-vapor stream entering the refrigerated condenser on a washer and the temperature of the air-PERC gas-vapor stream exiting the refrigerated condenser on the washer **weekly** to determine that the difference is *greater than or equal to 11.1 °C (20°F)*.
      - i. Measurements of the inlet and outlet streams shall be made with a temperature sensor. Each temperature sensor shall be used according to the manufacturer's instructions, and designed to measure at least a temperature range from 0 °C (32 °F) to 48.9 °C (120 °F) to an accuracy of  $\pm 1.1$  °C ( $\pm 2$  °F).
      - ii. The difference between the inlet and outlet temperatures shall be calculated weekly from the measured values.

2) If the calculated difference in temperature between the inlet and outlet streams of the refrigerated condenser is not greater than or equal to 11.1 °C (20 °F), adjustments or repairs shall be made **within 48 hours** to the dry cleaning system or control device to meet the specified values. If repair parts must be ordered, either a written or verbal order for such parts shall be initiated **within 2 working days** of detecting such a parameter value. Such repair parts shall be installed **within five (5) working days** after receipt.

b. For "existing" and "new" dry-to-dry machines, dryers, or reclaimers:

1) Measure the temperature of the air-PERC gas vapor stream on the outlet side of the refrigerated condenser on a dry-to-dry machine, dryer, or reclaimer **weekly** with a temperature sensor to determine if it is less than or equal to 7.2 °C (45 °F).

The temperature sensor shall be used according to the manufacturer's instructions and shall be designed to measure a temperature of 7.2 °C (45 °F) to an accuracy of  $\pm 1.1$  °C ( $\pm 2$  °F).

2) If the temperature monitored above is not less than or equal to 7.2 °C (45 °F), adjustments or repairs shall be made **within 48 hours** to the dry cleaning system or control device to meet the specified values. If repair parts must be ordered, either a written or verbal order for such parts shall be initiated **within two (2) working days** of detecting such a parameter value. Such repair parts shall be installed **within five (5) working days** after receipt.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90, §11-60.1-174; 40 CFR §63.322 & §63.323)<sup>1</sup>

4. The dry cleaning facility shall maintain receipts of all PERC purchases and a log of the following information:

a. The volume of PERC (in gallons) purchased each month. If no PERC is purchased during a given month, the dry cleaning facility shall enter zero gallons for that month;

b. The total PERC consumption (in gallons) on a yearly basis. Yearly total PERC consumption shall be calculated on the **first day of every month** as follows:

1) sum the volume of all PERC purchases made in each of the previous twelve (12) months, as recorded in the log.

2) the total sum calculated is the yearly total PERC consumption at the facility.

c. Documentation of the weekly inspection for perceptible leaks of each dry cleaning system required by Attachment IIB, Special Condition No. E.1. As a minimum, each inspection shall record the following:

1) the inspection date;

2) inspectors' name and title;

- 3) name or location of each dry cleaning system component inspected. Identify all components where perceptible leaks are found and the method used for detection (e.g. sight, sound, feel, instrument); and
- 4) dates and description of repairs, and records of written or verbal orders for repair parts, for all perceptible leaks found during the respective inspection.

- d. Documentation of the weekly inspection required by Attachment IIB, Special Condition No. E.2, for each carbon adsorber installed on an "existing" dry cleaning system. As a minimum, each inspection shall record the date of each measurement, inspector's name and title, identification of the carbon adsorber being measured, and the colorimetric detector tube monitoring results. In addition, documentation shall be maintained of all repair work, including the date of repair and records of written or verbal orders for repair parts.
- e. Documentation of the weekly inspection required by Attachment IIB, Special Condition No. E.3, for each refrigerated condenser installed on a dry cleaning system. As a minimum, each inspection shall record the date of each measurement, inspector's name and title, identification of the refrigerated condenser being measured, and the temperature sensor monitoring results. In addition, documentation shall be maintained of all repair work, including the date of repair and records of written or verbal orders for repair parts.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90, §11-60.1-174; 40 CFR §63.324)<sup>1</sup>

5. The dry cleaning facility shall retain on-site for the **life of the equipment**, a copy of the design specifications and the operating manuals for each dry cleaning system and each emission control device located at the dry cleaning facility.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90, §11-60.1-174; 40 CFR §63.324)<sup>1</sup>

6. All records, including support information, shall be maintained for at least three (3) years from the date of the monitoring sample, measurement, test, report, or applications. Support information includes all maintenance, inspection, and repair records, and copies of all reports required by this permit. These records shall be true, accurate, in a permanent form suitable for inspection and made available to the Department of Health or their representative upon request.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-174; 40 CFR §63.324)<sup>1</sup>

#### **Section F. Notification and Reporting Requirements**

The permittee shall refer to and comply with all applicable notification and reporting requirements of 40 CFR Part 63, Subpart M, including the following:

1. Notification and reporting pertaining to the following events for each dry cleaning system shall be done in accordance with Attachment I, Standard Condition Nos. 14, 16, 17, and 24, respectively.

- a. *Anticipated date of initial start-up, actual date of construction commencement, and actual date of start-up;*
- b. *Intent to shut down 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; SIP §11-60-10; SIP §11-60-16)<sup>1,2</sup>

2. In conjunction with the notification for the anticipated date of initial start-up of any "new" dry cleaning system or any reconstructed/significantly modified "existing" dry cleaning system, required by Attachment I, Standard Condition No. 14, the dry cleaning facility shall provide the Department of Health with the following:
  - a. Description of the new equipment, identifying the quantity, and type (e.g., dry-to-dry machine, reclaimer), or description of the work to be performed;
  - b. Type of controls to be installed;
  - c. Any anticipated changes to the yearly total PERC consumption;
  - d. Whether or not the dry cleaning system will be in compliance with each applicable requirement of this noncovered source general permit;
  - e. Other information as may be required by the Department of Health; and
  - f. A ***certified statement by a responsible official*** that all information contained in the notification is accurate and true.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90, §11-60.1-174)

3. The dry cleaning facility shall report **within five (5) calendar days** any deviations from permit requirements, including those attributable to upset conditions, the probable cause of such deviations and any corrective actions or preventive measures taken. Corrective actions may include a requirement for additional testing, or 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. If the total PERC consumption calculated *on the first day of each month*, as specified in Attachment IIB, Special Condition No. E.4.b, exceeds the consumption limitations specified in Attachment IIB, Section A, Equipment Applicability:
  - a. The dry cleaning facility shall provide written notification to the Department of Health **within thirty (30) days of the exceedance determination**. The written notification shall be submitted with a covered source permit application for a "Major Source" Dry Cleaning Facility. If an extension is required, the dry cleaning facility shall provide for

the Department of Health's approval, a written request for extension stating the reasons for delay and the proposed time of submittal; and

- b. The dry cleaning facility shall be in compliance with the appropriate requirements of 40 CFR Part 63, Subpart M, **within 180 days** from the date that the dry cleaning facility determines it has exceeded the amounts specified. In addition, the dry cleaning facility shall send a **registered letter certified by a responsible official** to the Department of Health on or before the compliance date, stating:

- 1) The new yearly total PERC consumption;
- 2) Whether or not the dry cleaning facility is in compliance with each applicable requirement of 40 CFR Part 63, Subpart M, and/or new noncovered source permit; and
- 3) All information contained in the statement is accurate and true.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90, §11-60.1-174; 40 CFR §63.324)<sup>1</sup>

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

- a. The yearly total PERC consumption; and
- b. Monitoring Summary for the Semiannual Reporting Period.
  - 1) Identify the number of incidences a perceptible leak was found and was not corrected within the specified times as required by Attachment IIB, Special Condition No. E.1.
  - 2) Identify the number of incidences the PERC concentration monitored at the carbon adsorber's exhaust for an "existing" dry cleaning system was not less than or equal to 100 parts per million and was not corrected within the specified times required in Attachment IIB, Special Condition No. E.2.
  - 3) Identify the number of incidences a calculated temperature difference between the inlet and outlet streams of a refrigerated condenser of an "existing" washer was not greater than or equal to 11.1 °C (20 °F) and was not corrected within the specified times as required by Attachment IIB, Special Condition No. E.3.a.
  - 4) For "existing" and "new" dry cleaning systems, identify the number of incidences the measured outlet side of the refrigerated condenser was not less than or equal to 7.2 °C(45 °F) and was not corrected within the specified times required in Attachment IIB, Special Condition No. E.3.b.

Any incidences shown, shall include the date and description/magnitude of each noncompliance monitoring result, order and receipt dates of parts if applicable, and the reason(s) why the repairs could not be made within the required time frames. The actual date of repair shall be identified. If no incidences of the above were experienced during the reporting period, the report shall state so. The enclosed Monitoring Report Form: *Perchloroethylene Consumption/ Monitoring Summary* shall be used.

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 enclosed *Compliance Certification Form* pursuant to HAR, Subsection 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 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.

*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 or authorized representative.*

*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)

**Section G. Agency Notification**

Any document (including reports) required to be submitted by this Noncovered Source Permit shall be done in accordance with Attachment I, Standard Condition No. 25.

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<sup>1</sup> 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.

<sup>2</sup> 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 II – INSIG  
SPECIAL CONDITIONS - INSIGNIFICANT ACTIVITIES  
COVERED SOURCE PERMIT NO. 0278-02-C**

**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 attachment encompasses insignificant activities listed in HAR, §11-60.1-82(f) and (g) for which provisions of this permit and HAR, Subchapter 2, General Prohibitions, apply.

(Auth.: HAR §11-60.1-3)

**Section B. Operational Limitations**

1. The permittee shall take measures to operate applicable insignificant activities in accordance with the provisions of HAR, Subchapter 2 for visible emissions, fugitive dust, incineration, process industries, sulfur oxides from fuel combustion, storage of volatile organic compounds, volatile organic compound water separation, pump and compressor requirements, and waste gas disposal.

(Auth.: HAR §11-60.1-3, §11-60.1-82, §11-60.1-90)

2. The Department of Health may at any time require the permittee to further abate emissions if an inspection indicates poor or insufficient controls.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-82, §11-60.1-90)

**Section C. Monitoring and Recordkeeping Requirements**

1. The Department of Health reserves the right to require monitoring, recordkeeping, or testing of any insignificant activity to determine compliance with the applicable requirements.

(Auth.: HAR §11-60.1-3, §11-60.1-90)

2. All records shall be maintained for at least five (5) years from the date of any required monitoring, recordkeeping, testing, or reporting. These records shall be true, accurate, and maintained in a permanent form suitable for inspection and made available to the Department of Health or its authorized representative upon request.

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

**Section D. Notification and Reporting**

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, Subsection 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 include, at a minimum, the following information:

1. The identification of each term or condition of the permit that is the basis of the certification;
2. The compliance status;
3. Whether compliance was continuous or intermittent;
4. The methods used for determining the compliance status of the source currently and over the reporting period;
5. 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
6. Any additional information as required by the Department of Health including information to determine compliance.

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.

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.

In lieu of addressing each emission unit as specified in *Compliance Certification Form*, the permittee may address insignificant activities as a single unit provided compliance is met with all applicable requirements. If compliance is not totally attained, the permittee shall identify the specific insignificant activity and provide the details associated with the noncompliance.

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

**Section E. Agency Notification**

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

(Auth.: HAR §11-60.1-4, §11-60.1-90)

**ATTACHMENT III: ANNUAL FEE REQUIREMENTS  
COVERED SOURCE PERMIT NO. 0278-02-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 be 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  
919 Ala Moana Boulevard, Room 203  
Honolulu, HI 96814**

**ATTACHMENT IV: ANNUAL EMISSIONS REPORTING REQUIREMENTS  
COVERED SOURCE PERMIT NO. 0278-02-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 form(s):

Annual Emissions Report Form – Boilers

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  
919 Ala Moana Boulevard, Room 203  
Honolulu, HI 96814**

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 manufacture, by submitting a written request to the Director and clearly identifying the specific information that is to be accorded confidential treatment.

**COMPLIANCE CERTIFICATION FORM  
COVERED SOURCE PERMIT NO. 0278-02-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.

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**COMPLIANCE CERTIFICATION FORM  
COVERED SOURCE PERMIT NO. 0278-02-C  
(CONTINUED, PAGE 2 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. In the 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 its 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> <input type="checkbox"/> Continuous <input type="checkbox"/> 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> <input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
<u>Permit term/condition</u> All recordkeeping conditions	<u>Equipment(s)</u> All Equipment(s) listed in the permit	<u>Compliance</u> <input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
<u>Permit term/condition</u> All reporting conditions	<u>Equipment(s)</u> All Equipment(s) listed in the permit	<u>Compliance</u> <input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
<u>Permit term/condition</u> All testing conditions	<u>Equipment(s)</u> All Equipment(s) listed in the permit	<u>Compliance</u> <input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
<u>Permit term/condition</u> All INSIG conditions	<u>Equipment(s)</u> All Equipment(s) listed in the permit	<u>Compliance</u> <input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent

**COMPLIANCE CERTIFICATION FORM  
COVERED SOURCE PERMIT NO. 0278-02-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) used to determine the compliance status of the respective permit term/condition.

<u>Permit term/condition</u>	<u>Equipment(s)</u>	<u>Method</u>	<u>Compliance</u>
		<input type="checkbox"/> monitoring <input type="checkbox"/> recordkeeping <input type="checkbox"/> reporting <input type="checkbox"/> testing <input type="checkbox"/> none of the above	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
		<input type="checkbox"/> monitoring <input type="checkbox"/> recordkeeping <input type="checkbox"/> reporting <input type="checkbox"/> testing <input type="checkbox"/> none of the above	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
		<input type="checkbox"/> monitoring <input type="checkbox"/> recordkeeping <input type="checkbox"/> reporting <input type="checkbox"/> testing <input type="checkbox"/> none of the above	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
		<input type="checkbox"/> monitoring <input type="checkbox"/> recordkeeping <input type="checkbox"/> reporting <input type="checkbox"/> testing <input type="checkbox"/> none of the above	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
		<input type="checkbox"/> monitoring <input type="checkbox"/> recordkeeping <input type="checkbox"/> reporting <input type="checkbox"/> testing <input type="checkbox"/> none of the above	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
		<input type="checkbox"/> monitoring <input type="checkbox"/> recordkeeping <input type="checkbox"/> reporting <input type="checkbox"/> testing <input type="checkbox"/> none of the above	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
		<input type="checkbox"/> monitoring <input type="checkbox"/> recordkeeping <input type="checkbox"/> reporting <input type="checkbox"/> testing <input type="checkbox"/> none of the above	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent

**(Make Additional Copies if Needed)**

**COMPLIANCE CERTIFICATION FORM  
COVERED SOURCE PERMIT NO. 0278-02-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) &amp; 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  
BOILERS  
COVERED SOURCE PERMIT NO. 0278-02-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: \_\_\_\_\_

Company Name: \_\_\_\_\_

Facility Name: \_\_\_\_\_

Equipment Location: \_\_\_\_\_

Equipment Description: \_\_\_\_\_

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): \_\_\_\_\_

For the reporting period, provide:

Boiler Unit No.	Type of Fuel Fired	Fuel Usage (gal/yr)	Maximum Sulfur Content (% by Weight)	Identify % Nitrogen, % Ash, & % Lead, if applicable

Types of fuel:

- Residual Oil: Specify Grade, No. 6, 5, or 4;
- Distillate Oil (No. 2);
- Liquefied Petroleum Gas, Butane or Propane;
- If Other, specify.

**MONITORING REPORT FORM  
FUEL CERTIFICATION AND BOILER OPERATION  
COVERED SOURCE PERMIT NO. 0278-02-C  
(PAGE 1 OF 2)**

**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 on a **semi-annual basis**:

(Make Copies for Future Use)

For Period: \_\_\_\_\_ Date: \_\_\_\_\_

Company Name: \_\_\_\_\_

Facility Name: \_\_\_\_\_

Equipment Location: \_\_\_\_\_

Equipment Description: \_\_\_\_\_

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): \_\_\_\_\_

1. Pursuant to 40 CFR Part 60, Subpart Dc §60.48c(e) and (f), please provide the following:

a.

Equipment Description	Type(s) of Fuel Fired	Maximum Weight % Sulfur Content

b. All fuel oil no. 2 supplier certifications which include the name of the supplier(s) and a statement from the supplier(s) that the oil complies with the specifications required by this permit.

**MONITORING REPORT FORM  
FUEL CERTIFICATION AND BOILER OPERATION  
COVERED SOURCE PERMIT NO. 0278-02-C  
(CONTINUED, PAGE 2 OF 2)**

**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 on a **semi-annual basis**:

- c. A statement that all of the records of fuel supplier certifications submitted are representative of all the fuel oil no. 2 combusted during the semi-annual period.

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- 2. Provide all dates and times the two boilers were operated simultaneously during the reporting period:

Date	Start of Simultaneous Operation (Time)	End of Simultaneous Operation (Time)	Total Hours Operated Simultaneously	Reason for operating the two boilers simultaneously

**Please indicate in the table above if the boilers were not operated simultaneously at any time during the reporting period.**

**MONITORING REPORT FORM  
PERCHLOROETHYLENE CONSUMPTION/MONITORING SUMMARY  
COVERED SOURCE PERMIT NO. 0278-02-C  
PAGE 1 of 2**

**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, semiannually.

For Period: \_\_\_\_\_ Date: \_\_\_\_\_

Facility Name: \_\_\_\_\_

Dry Cleaning Facility Location: \_\_\_\_\_

Machine Type (Dry-to-Dry or Transfer)	Serial No.	Date Machine Purchased	Type of Control
1.			
2.			
3.			
4.			
5.			

Responsible Official (Print): \_\_\_\_\_

Title: \_\_\_\_\_

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. 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.

Responsible Official (Signature): \_\_\_\_\_

	Perc Purchases (gallons)			Perc Purchases (gallons)	
	Monthly	Rolling 12-months <sup>1</sup>		Monthly	Rolling 12-months <sup>1</sup>
January			July		
February			August		
March			September		
April			October		
May			November		
June			December		

1. Rolling 12-months = current month + previous 11 months





**VISIBLE EMISSIONS FORM REQUIREMENTS  
STATE OF HAWAII  
COVERED SOURCE PERMIT NO. 0278-02-C**

**Issuance Date:**

**Expiration Date:**

The **Visible Emissions (VE) 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. The VE Form shall be completed as follows:

1. VE observations shall take place during the day only. 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 VE Form using the symbols as shown.
3. For VE observations of stacks, stand at least three (3) stack heights but not more than a quarter mile from the stack.
4. For VE observations of fugitive emissions from crushing and screening plants, stand at least 4.57 meters (15 feet) from the visible emissions source, but not more than a quarter mile from the visible emission source.
5. Two (2) consecutive six (6) minute observations shall be taken at fifteen (15) second intervals for each stack or emission point.
6. The six (6) minute average opacity reading shall be calculated for each observation.
7. 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.
8. 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 VE Forms for recordkeeping. These records shall be true, accurate, 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 VE monitoring requirements for the month the performance test is performed.

# PROPOSED

**VISIBLE EMISSIONS FORM  
COVERED SOURCE PERMIT NO. 0278-02-C**

**Issuance Date:** \_\_\_\_\_ **Expiration Date:** \_\_\_\_\_

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

Company Name: \_\_\_\_\_

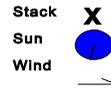
For stacks, describe equipment and fuel: \_\_\_\_\_

For fugitive emissions from crushers and screens, describe:

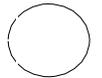
Fugitive emission point: \_\_\_\_\_

Plant Production (tons/hr): \_\_\_\_\_

(During observation)



Draw North Arrow



**Site Conditions:**

Emission point or stack height above ground (ft): \_\_\_\_\_

Emission point or stack distance from observer (ft): \_\_\_\_\_

Emission color (black or white): \_\_\_\_\_

Sky conditions (% cloud cover): \_\_\_\_\_

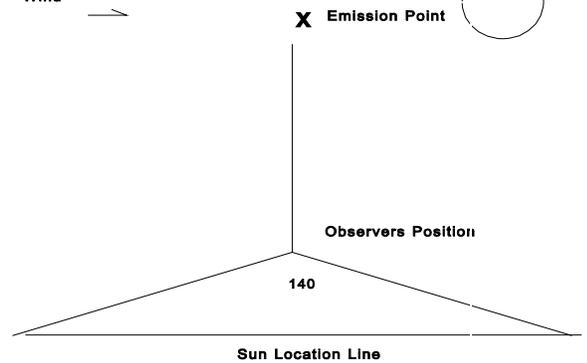
Wind speed (mph): \_\_\_\_\_

Temperature (°F): \_\_\_\_\_

Observer Name: \_\_\_\_\_

Certified? (Yes/No): \_\_\_\_\_

Observation Date and Start Time: \_\_\_\_\_



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

Observation Date and Start Time: \_\_\_\_\_

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