

ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY  
Air Quality Division  
1110 West Washington Street • Phoenix, AZ 85007 • Phone: (602) 771-2338

# GENERAL AIR QUALITY CONTROL PERMIT

for

## DRY CLEANING FACILITIES

(As required by Title 49, Chapter 3, Article 2, Section 49-426, Arizona Revised Statutes)

*This air quality control permit does not relieve applicant of responsibility for meeting all air pollution regulations*



THIS GENERAL PERMIT ISSUED SUBJECT TO THE FOLLOWING Conditions contained in Attachments  
"A", "B", "C", "D", and "E"

ADEQ GENERAL PERMIT NUMBER 103 PERMIT CLASS II EXPIRATION DATE July 17, 2011

PERMIT ISSUED THIS DRAFT DAY OF \_\_\_\_\_, 2006

\_\_\_\_\_  
SIGNATURE

Nancy C. Wrona, Director, Air Quality Division  
\_\_\_\_\_  
TITLE

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## ATTACHMENT "A": GENERAL CONDITIONS

### I. GENERAL PERMIT EXPIRATION AND RENEWAL

[A.R.S. § 49-426(F), A.A.C. R18-2-306(A)(1), -505, -510]

- A. This General Permit is valid for a period of five years from the date of issuance of the General Permit. The Director shall review and may renew this General Permit every five years from its date of issuance. All ATOs issued under this permit shall coincide with the term of this General Permit, regardless of when the individual authorization began during this five year period. The Director may require a Permittee authorized to operate under this General Permit to apply for and obtain an individual permit at any time if the source is not in compliance with the terms and conditions of this General Permit.
- B. At the time that the public notice is required, pursuant to issuance of the proposed General Permit renewal, the Director shall notify in writing all Permittees who have been granted, or who have applications pending for, ATOs under this General Permit. The written notice shall describe the source's duty to reapply and may include requests for information required under the proposed General Permit.

### II. COMPLIANCE WITH PERMIT CONDITIONS

[A.A.C. R18-2-306(A)(1)]

- A. The Permittee shall comply with all conditions of this General Permit including all applicable requirements of Arizona air quality statutes and the air quality rules. Any permit noncompliance constitutes a violation of the Arizona Revised Statutes and is grounds for enforcement action, for general permit coverage termination or revocation, or for denial of a renewal application. In addition, non-compliance with any federally enforceable requirement constitutes a violation of the Clean Air Act.
- B. It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this General Permit.

### III. GENERAL PERMIT REOPENINGS, REVOCATION AND REISSUANCE, OR TERMINATION FOR CAUSE

[A.A.C. R18-2-321 and -510]

- A. The Director may reopen and reissue, or terminate this General Permit at any time if:
  - 1. The Director has determined that the emissions from the sources in the facility class cause or contribute to ambient air quality standard violations which are not adequately addressed by the requirements in this General Permit, or
  - 2. The Director has determined that the terms and conditions of this General Permit no longer meet the requirements of A.R.S. §§ 49-426 and 427.
- B. The Director shall provide written notice to all sources operating under this General Permit prior to reissuance or termination of this General Permit. Such notice shall include an explanation of the basis for the proposed action. Within 180 days of receipt of the notice of the expiration, termination or cancellation of this General Permit, sources notified shall submit an application to the Director for the appropriate permit.

- C. The Director may require a source authorized to operate under this General Permit to apply for and obtain an individual source permit at any time if:
1. The source is not in compliance with the terms and conditions of this General Permit;
  2. The Director has determined that the emissions from the source or facility class are significant contributors to ambient air quality standard violations which are not adequately addressed by the requirements in this General Permit;
  3. The Director has information which indicates that the effects on human health **or** the environment from the sources covered under this General Permit are unacceptable;
  4. The Director has reasonable cause to believe that the ATO was obtained by fraud or misrepresentation; or
  5. The person applying for an ATO failed to disclose a material fact required by the permit application or the regulations applicable to the ATO of which the applicant had or should have had knowledge at the time the application was submitted.
- D. If the Director revokes a source's authority to operate under this General Permit, the Director shall notify the Permittee by certified mail, return receipt requested. The notice shall include a statement detailing the grounds for the revocation of authority and a statement that the Permittee is entitled to a hearing. A source previously authorized to operate under this General Permit may operate under the terms of this General Permit until the earlier of the date it submits a complete application for an individual permit, at which time it may operate under that application, or 180 days after receipt of the notice of revocation of authority to operate under this General Permit.

**IV. POSTING OF GENERAL PERMIT**

[A.A.C. R18-2-315]

- A. Any person who has been granted coverage under this General Permit shall post such General Permit, or a certificate of General Permit coverage, on location where the equipment is installed in such a manner as to be clearly visible and accessible.
- B. All equipment covered by this General Permit shall be clearly marked with a serial number or other equipment number that is listed on the ATO for that piece of equipment.
- C. A copy of the complete General Permit and associated ATOs shall be kept on the site.

**V. FEE PAYMENT**

[A.A.C. R18-2-326, 306(A)(9), 511]

The Permittee shall pay fees to the Director pursuant to A.R.S. §49-426(E) and A.A.C. R18-2-511.

**VI. ANNUAL EMISSIONS INVENTORY QUESTIONNAIRE**

[A.A.C. R18-2-327]

- A. The Permittee shall complete and submit to the Director an annual emissions inventory questionnaire. The questionnaire is due by March 31 or ninety days after the Director

makes the inventory form available each year, whichever occurs later, and shall include emission information for the previous calendar year.

- B. The questionnaire shall be on a form provided by the Director and shall include the information required by A.A.C. R18-2-327.

## **VII. COMPLIANCE CERTIFICATION**

[A.A.C. R18-2-309.2.a, -309.2.c-d, and -309.5.d]

- A. The Permittee shall submit annual compliance certification to the Director, describing the compliance status of the source with respect to each General Permit condition. The Permittee shall list on the compliance certification all items of equipment issued ATOs, on site at the time of the certification. The certification shall be submitted no later than Jan 31<sup>st</sup>, and shall report the compliance status of the source during the period between January 1<sup>st</sup> and December 31<sup>st</sup> of the previous year. The initial compliance certification shall reflect the compliance status of the source beginning the date of permit issuance.
- B. The compliance certifications shall include the following:
  - 1. Identification of each term or condition of the permit that is the basis of the certification;
  - 2. The Identification of the methods or other means used by the Permittee for determining the compliance status with each term and condition during the certification period;
  - 3. The status of compliance with the terms and conditions of the permit for the period covered by the certification, including whether compliance during the period was continuous or intermittent. The certification shall be based on the methods or means designated in Condition VII.B.2 above. The certifications shall identify each deviation and take it into account for consideration in the compliance certification;
  - 4. All instances of deviations from permit requirements reported pursuant to Condition XII.B of this Attachment; and
  - 5. Other facts the Director may require determining the compliance status of the source.
- C. A progress report on all outstanding compliance schedules shall be submitted every six months beginning with six months after permit issuance.

## **VIII. CERTIFICATION OF TRUTH, ACCURACY AND COMPLETENESS**

[A.A.C. R18-2- 309(3)]

Any document required to be submitted by this General Permit, including reports, shall contain a certification by a responsible official of truth, accuracy, and completeness. This certification and any other certification required under this part shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

**IX. INSPECTION AND ENTRY**

[A.A.C. R18-2-309(4)]

Upon presentation of credentials and other documents as may be required by law, the Permittee shall allow the Director, or an authorized representative (including an authorized contractor acting as a representative of the Director), to perform the following:

- A. Enter upon the Permittee's premises where a regulated facility or activity is located or emissions related activity is conducted, or where records are required to be kept under the conditions of this General Permit;
- B. Have access to and copy, at reasonable times, any records that are required to be kept under conditions of this General Permit;
- C. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this General Permit;
- D. Sample or monitor at reasonable times, for the purpose of assuring General Permit compliance or as otherwise authorized by the Act, any substances or parameters at any location; and
- E. Record any inspection by use of written, electronic, magnetic and photographic media.

**X. PERMIT REVISION PURSUANT TO FEDERAL HAZARDOUS AIR POLLUTANT STANDARD**

[A.A.C. R18-2-304(C)]

If a source which has been issued ATOs become subject to a standard promulgated by the Administrator pursuant to Section 112(d) of the Act, then the Permittee shall, within twelve months of the date on which the standard is promulgated, reapply for coverage under the General Permit and demonstrate how the source will comply with the standard.

**XI. REPORTING OF EXCESS EMISSIONS, PERMIT DEVIATIONS, AND EMERGENCIES**

- A. Excess Emissions Reporting [A.A.C. R18-2-310(C)]

1. Excess emissions shall be reported as follows:

a. The Permittee of any source issued an ATO shall report to the Director any emissions in excess of the limits established by this General Permit. Such report shall be in two parts as specified below:

- (1) Notification by telephone or facsimile within 24 hours of the time when the Permittee first learned of the occurrence of excess emissions including all available information from Condition XI.A.1.b Section.
- (2) Detailed written notification within 72 hours of the notification pursuant to Condition XI.1 of this Section.

b. The report shall contain the following information:

- (1) Identity of each stack or other emission point where the excess emissions emanated.
- (2) Magnitude of the excess emissions expressed in the units of the applicable emission limitation and the operating data and calculations used in determining the magnitude of the excess emissions.
- (3) Date, time and duration or expected duration of the excess emissions.
- (4) Identity of the equipment from which the excess emissions emanated.
- (5) Nature and cause of such emissions.
- (6) If the excess emissions were the result of a malfunction, steps taken to remedy the malfunction and to prevent the recurrence of such malfunctions.
- (7) Steps taken to limit the excess emissions. If the excess emissions resulted from start-up or malfunction of equipment, the report shall contain a list of the steps taken to comply with the permit procedures.

2. In the case of continuous or recurring excess emissions, the notification requirements of this Section shall be satisfied if the source provides the required notification after excess emissions are first detected and includes in such notification an estimate of the time the excess emissions will continue. Excess emissions occurring after the estimated time period or changes in the nature of the emissions as originally reported shall require additional notification pursuant to Condition A.1.a.(2) of this Section.
3. It shall be the burden of the Permittee of the source to demonstrate, through submission of the data and information required by this Section, that all reasonable and practicable measures within the Permittee's control were implemented to prevent the occurrence of excess emissions.

**B. Permit Deviations Reporting**

[A.A.C. R18-2-306(A)(5)(b)]

The Permittee shall promptly report deviations from permit requirements, including those attributable to upset conditions as defined in the permit, the probable cause of such deviations, and any corrective actions or preventive measures taken. Prompt reporting shall mean that the report was submitted to the Director by certified mail, facsimile, or hand delivery within two working days of the time when emission limitations were exceeded due to an emergency or within two working days of the time when the owner or operator first learned of the occurrence of a deviation from a permit

C. Emergency Provision Reporting

[A.A.C. R18-2-306(E)]

An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

1. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions of Condition XI.C.2 of this section are met.
2. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:
  - a. An emergency occurred and that the Permittee can identify the cause(s) of the emergency;
  - b. The permitted facility was at the time being properly operated;
  - c. During the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in this General Permit; and
  - d. The Permittee shall submit notice of the emergency to the Director by certified mail, facsimile or hand delivery within 2 working days of the time when emission limitations were exceeded due to an emergency. This notice shall contain a description of the emergency, any steps taken to mitigate emissions, and corrective action taken.
3. In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
4. This provision is in addition to any emergency or upset provision contained in any applicable requirement.

D. Submission of Compliance Schedules

[A.R.S. §49-425(1)(5)]

For any excess emission or permit deviation that cannot be corrected within 72 hours, the Permittee is required to submit a compliance schedule to the Director within 21 days of such occurrence. The compliance schedule shall include a schedule of remedial measures, including an enforceable sequence of actions with milestones, leading to compliance with the permit terms or conditions that have been violated.

**XII. RECORD KEEPING REQUIREMENTS**

[A.A.C. R18-2-306(A)(4)]

- A. The Permittee shall keep records of all required monitoring information including, but not limited to, the following:

1. The date, place as defined in the permit, and time of sampling or measurements;
  2. The date(s) analyses were performed;
  3. The name of the company or entity that performed the analyses;
  4. A description of the analytical techniques or methods used;
  5. The results of such analyses; and
  6. The operating conditions as existing at the time of sampling or measurement.
- B. The Permittee shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.
- C. All required records shall be maintained either in an unchangeable electronic format or in a handwritten logbook utilizing indelible ink.

### **XIII. REPORTING REQUIREMENTS**

[A.A.C. R18-2-306(A)(5)]

The Permittee shall submit the following reports:

- A. Compliance certifications in accordance with Section VII of Attachment "A".
- B. Excess emissions, permit deviations, and emergency reports in accordance with Section XI of Attachment "A".
- C. Other reports required in the applicable Attachments.

### **XIV. DUTY TO PROVIDE INFORMATION**

[A.A.C. R18-2-304(G), 306(A)(8)(e)]

- A. The Permittee shall furnish to the Director, within a reasonable time, any information that the Director may request in writing to determine whether cause exists for revoking the General Permit coverage, or to determine compliance with this General Permit. Upon request, the Permittee shall also furnish to the Director copies of records that the Permittee is required to keep under the General Permit. For information claimed confidential, the Permittee shall furnish an additional copy of such records directly to the Administrator along with a claim of confidentiality.
- B. If the Permittee has failed to submit any relevant facts or if the Permittee has submitted incorrect information in a General Permit coverage application, the Permittee shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information.

**XV. FACILITY CHANGE ALLOWED WITHOUT OBTAINING AN ATO OR INDIVIDUAL PERMIT**

[A.A.C. R18-2-317.02]

- A. Except for a physical change or change in the method of operation at a Class II source requiring a permit revision under R18-2-317.01, or a change subject to logging or notice requirements in Conditions XV.B or C, a change at a Class II source shall not be subject to revision, notice, or logging requirements under this Chapter.
- B. The following changes may be made if the source keeps on site records of the changes according to Condition XV.I:
1. Implementing an alternative operating scenario, including raw material changes;
  2. Changing process equipment, operating procedures, or making any other physical change if the permit requires the change to be logged;
  3. Engaging in any new insignificant activity listed in R18-2-101(57)(a) through (i) but not listed in the permit;
  4. Replacing an item of air pollution control equipment listed in the permit with an identical (same model, different serial number) item. The Director may require verification of efficiency of the new equipment by performance tests; and
  5. A change that results in a decrease in actual emissions if the source wants to claim credit for the decrease in determining whether the source has a net emissions increase for any purpose. The logged information shall include a description of the change that will produce the decrease in actual emissions. A decrease that has not been logged is creditable only if the decrease is quantifiable, enforceable, and otherwise qualifies as a creditable decrease.
- C. The following changes may be made if the source provides written notice to the Department in advance of the change as provided below:
1. Replacing an item of air pollution control equipment listed in the permit with one that is not identical but that is substantially similar and has the same or better pollutant removal efficiency: 7 days. The Director may require verification of efficiency of the new equipment by performance tests;
  2. A physical change or change in the method of operation that increases actual emissions more than 10% of the major source threshold for any conventional pollutant but does not require a permit revision: 7 days;
  3. Replacing an item of air pollution control equipment listed in the permit with one that is not substantially similar but that has the same or better efficiency: 30 days. The Director may require verification of efficiency of the new equipment by performance tests;
  4. A change that would trigger an applicable requirement that already exists in the permit: 30 days unless otherwise required by the applicable requirement;

5. A change that amounts to reconstruction of the source or an affected facility: 7 days. For purposes of this section, reconstruction of a source or an affected facility shall be presumed if the fixed capital cost of the new components exceeds 50% of the fixed capital cost of a comparable entirely new source or affected facility and the changes to the components have occurred over the 12 consecutive months beginning with commencement of construction; and
  6. A change that will result in the emissions of a new regulated air pollutant above an applicable regulatory threshold but that does not trigger a new applicable requirement for that source category: 30 days. For purposes of this requirement, an applicable regulatory threshold for a conventional air pollutant shall be 10% of the applicable major source threshold for that pollutant.
- D. For each change under Condition XV.C, the written notice shall be by certified mail or hand delivery and shall be received by the Director the minimum amount of time in advance of the change. Notifications of changes associated with emergency conditions, such as malfunctions necessitating the replacement of equipment, may be provided with less than required notice, but must be provided as far in advance of the change, or if advance notification is not practicable, as soon after the change as possible. The written notice shall include:
1. When the proposed change will occur,
  2. A description of the change,
  3. Any change in emissions of regulated air pollutants, and
  4. Any permit term or condition that is no longer applicable as a result of the change.
- E. The permit shield described in R18-2-325 shall not apply to any change made under this Section, other than implementation of an alternate operating scenario under Condition XV.B.1.
- F. Notwithstanding any other part of this Section, the Director may require a permit to be revised for any change that, when considered together with any other changes submitted by the same source under this Section over the term of the permit, constitutes a change under A.A.C. R18-317.01(A).
- G. If a source change is described under both Conditions XV.B and C, the source shall comply with Condition XV.C. If a source change is described under both Condition XV.C and A.A.C. R18-2-317.01(B), the source shall comply with A.A.C. R18-2-317.01(B).
- H. A copy of all logs required under Condition XV.B shall be filed with the Director within 30 days after each anniversary of the permit issue date. If no changes were made at the source requiring logging, a statement to that effect shall be filed instead.
- I. Logging Requirement

1. Each log entry required by a change under A.A.C. R18-2-317.02(B) shall include at least the following information:
  - a. A description of the change, including:
    - (1) A description of any process change.
    - (2) A description of any equipment change, including both old and new equipment descriptions, model numbers and serial numbers, or any other unique equipment number.
    - (3) A description of any process material change.
  - b. The date and time that the change occurred.
  - c. The provision of A.A.C. R18-2-317.02(B) that authorizes the change to be made with logging.
  - d. The date the entry was made and the first and last name of the person making the entry.
2. Logs shall be kept for 5 years from the date created. Logging shall be performed in indelible ink in a bound log book with sequentially numbered pages, or in any other form, including electronic format, approved by the Director.

## **XVI. PERFORMANCE TESTING REQUIREMENTS**

[A.A.C. R18-2-312]

### **A. Operational Conditions During Performance Testing**

Performance tests shall be conducted during operation at the full load of each unit under representative operational conditions unless other conditions are required by the applicable test method or in this permit. With prior written approval from the Director, testing may be performed at a lower rate. Operations during start-up, shutdown, and malfunction (as defined in A.A.C. R18-2-101) shall not constitute representative operational conditions unless otherwise specified in the applicable standard.

### **B. Performance Test Plan**

At least 14 calendar days prior to performing a test, the owner or operator shall submit a test plan to the Director, in accordance with the Arizona Testing Manual. This test plan must include the following:

1. Test duration;
2. Test location(s);
3. Test method(s); and
4. Source operation and other parameters that may affect the test result.

C. Stack Sampling Facilities

The Permittee shall provide or cause to be provided, performance testing facilities as follows:

1. Sampling ports adequate for test methods applicable to the facility,
2. Safe sampling platform(s),
3. Safe access to sampling platform(s), and
4. Utilities for sampling and testing equipment.

D. Interpretation of Final Results

Each performance test shall consist of three separate runs using the required test method. Each run shall be conducted in accordance with the applicable standard and test method. For the purpose of determining compliance with an applicable standard, the arithmetic means of results of the three runs shall apply. If a sample is accidentally lost or conditions occur which are not under the Permittee's control and which may invalidate the run, compliance may, upon the Director's approval, be determined using the arithmetic mean of the other two runs. If the Director, or the Director's designee is present, performance tests may only be stopped with the Director's or such designee's approval. If the Director or the Director's designee is not present, the performance tests may only be stopped for good cause. Good cause includes forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions or other conditions beyond the Permittee's control. Termination of any test without good cause after the first run is commenced shall constitute a failure of the test. Supporting documentation which demonstrates good cause must be submitted.

E. Report of Final Results

A written report of the results of all tests shall be submitted to the Director within 30 days after the test is performed. The report shall be submitted in accordance with the Arizona Testing Manual and A.A.C. R18-2-312.B.

**XVII. PROPERTY RIGHTS**

[A.A.C. R18-2-306(A)(8)(d)]

This General Permit does not convey any property rights of any sort, or any exclusive privilege.

**XVIII. SEVERABILITY CLAUSE**

[A.A.C. R18-2-306(A)(7)]

The provisions of this General Permit are severable. In the event of a challenge to any portion of this General Permit, or if any portion of this permit is held invalid, the remaining permit conditions remain valid and in force.

**XIX. PERMIT SHIELD**

[A.A.C. R18-2-325 and -508]

As of the date authority to operate for a source is granted, compliance with the conditions of this General Permit shall be deemed compliance with any applicable requirements in effect on the date of General Permit issuance, provided that such applicable requirements are included and

expressly identified in this permit. The permit shield shall not apply to any changes made pursuant to Sections XV of this Attachment.

**XX. ACCIDENTAL RELEASE PROGRAM**

[40 CFR 68]

If this source becomes subject to the provisions of 40 CFR Part 68, then the Permittee shall comply with these provisions according to the time line specified in 40 CFR Part 68.



## **ATTACHMENT "B": SPECIFIC REQUIREMENTS**

### **I. RELATIONSHIP OF PERMIT TO APPLICABLE STATE IMPLEMENTATION PLAN**

[ARS § 49-404.c and -426]

This general permit is issued pursuant to the provisions of the Arizona Revised Statutes (ARS) and constitutes an Installation Permit for the purpose of the applicable State Implementation Plan.

### **II. FACILITY WIDE REQUIREMENTS**

- A. The Permittee shall not operate any dry cleaning equipment in a manner that causes the facility to become a major source as defined in Condition III.C.4. [A.A.C. R18-2-306.A.2]
- B. The Permittee shall not conduct any dry cleaning operating using chlorinated synthetic solvents without minimizing organic solvent emissions by good modern practices including but not limited to the use of an adequately sized and properly maintained activated carbon absorber or other equally effective control device. [A.A.C. R18-2-725.A]
- C. The Permittee shall not operate any dry cleaning establishment using petroleum solvents other than non-photochemically reactive solvents without reducing solvent emissions by at least 90%. [A.A.C. R18-2-725.B]
- D. For purposes of this Section, a photochemically reactive solvent shall be any solvent with an aggregate of more than 20% of its total volume composed of the chemical compounds classified in Conditions II.D.1 through 3, or which exceeds any of the following percentage composition limitations, referred to the total volume of solvent:  
[A.A.C. R18-2-725.B]
  - 1. A combination of the following types of compounds having an olefinic or cyclo-olefinic type of unsaturation -- hydrocarbons, alcohols, aldehydes, esters, ethers, or ketones: 5%.
  - 2. A combination of aromatic compounds with 8 or more carbon atoms to the molecule except ethylbenzene: 8%.
  - 3. A combination of ethylbenzene, ketones having branched hydrocarbon structures, trichlorethylene or toluene: 20%.
- E. Where a stack, vent or other outlet is at such a level that fumes, gas mist, odor, smoke, vapor or any combination thereof constituting air pollution is discharged to adjoining property, the Director may require the installation of abatement equipment or the alteration of such stack, vent, or other outlet by the owner or operator thereof to a degree that will adequately dilute, reduce or eliminate the discharge of air pollution to the adjoining property. [A.A.C. R18-2-725.C]

### **III. SOURCE CLASSIFICATION**

#### **A. Definitions**

1. Existing Sources [40 CFR 63.321]

An existing source is each dry cleaning facility that commenced construction or reconstruction before December 9, 1991.

2. New Sources [40 CFR 63.321]

A new source is each dry cleaning facility that commenced construction or reconstruction on or after December 9, 1991.

**B. Annual Perchloroethylene (PCE) Consumption Calculation** [40 CFR 63.323(d)]

The Permittee shall calculate the annual PCE consumption in order to determine source classification. PCE consumption during any period is defined as the PCE purchased during that period. To calculate the yearly PCE consumption, the Permittee shall perform the following calculation on the first day of every month:

1. Sum and record the volume of all PCE purchases made in the previous month. If no PCE purchase was made in a given month, then the PCE consumption for that month is zero gallons.
2. Sum and record the total PCE purchases made in each of the previous 12 months in terms of gallons.

**C. Classification** [40 CFR 63.320]

Depending on the annual PCE consumption, calculated as per Condition III.B of this Attachment, and the date of construction or reconstruction, dry cleaning facilities are categorized as small area sources, large area sources, new area sources, and major sources.

The following is a description of each category:

1. Small Area Source: [40 CFR 63.320(d)]

a. The following facility types are considered small area sources if the annual PCE consumption rate is less than 140 gallons per year:

- i. Each existing dry-to-dry system and its ancillary equipment located in a dry cleaning facility that includes only dry-to-dry machines.
- ii. Each existing transfer machine system and its ancillary equipment, located in a dry cleaning facility that includes both transfer machine systems and dry-to-dry machines.
- iii. Each new transfer machine system and its ancillary equipment installed between December 9, 1991 and September 22, 1993, located in a dry cleaning facility that includes both transfer machine systems and dry-to-dry machines.
- iv. Each existing dry-to-dry system and its ancillary equipment, located in a dry cleaning facility that includes both transfer machine systems and dry-to-dry machines.

- b. The following facility types are considered small area sources if the annual PCE consumption rate is less than 200 gallons per year:  
[40 CFR 63.320(e)]

- i. Each existing transfer machine system and its ancillary equipment located in a dry cleaning facility that includes only transfer machine systems.
- ii. Each new transfer machine system and its ancillary equipment installed between December 9, 1991 and September 22, 1993, located in a dry cleaning facility that includes only transfer machine systems.

2. Large Area Source:

The following facility types are considered large area sources:

- a. Each existing dry cleaning system that includes only dry-to-dry machine systems consuming 140 or more gallons but less than 2,100 gallons per year of PCE.
- b. Each existing dry cleaning system that includes only transfer machine systems consuming 200 or more gallons but less than 1,800 gallons per year of PCE.
- c. Each existing dry cleaning system that includes a combination of dry-to-dry and transfer machine systems consuming 140 or more gallons but less than 1,800 gallons per year of PCE.
- d. Each new transfer machine system and its ancillary equipment that commenced construction or reconstruction on or after December 9, 1991, and before September 22, 1993, consuming 200 or more gallons but less than 1,800 gallons per year of PCE.

3. New Area Source:

The following facility types are considered new area sources:

- a. Each new dry-to-dry machine system and its ancillary equipment consuming less than 1,800 gallons per year of PCE.
- b. Each new transfer machine system and its ancillary equipment installed after September 22, 1993, consuming less than 1,800 gallons per year of PCE.

4. Major sources:

[40 CFR 63.320(g)]

A dry cleaning facility is a major source if the facility emits or has the potential to emit more than 10 tons per year of PCE to the atmosphere. In lieu of measuring a facility's potential to emit PCE emissions or determining a facility potential to emit PCE emissions, a dry cleaning facility is a major source if:

- a. It includes only dry-to-dry machines and has a total yearly PCE consumption greater than 2,100 gallons; or

- b. It includes only transfer machine systems or both dry-to-dry machines and transfer machine systems and has a total yearly PCE consumption greater than 1,800 gallons.

**D. Change in source classification**

- 1. If the total yearly PCE consumption of a dry cleaning facility, determined according to Condition III.B and classified according to Condition III.C of Attachment "B", increases such that the source classification changes, the Permittee shall comply with the applicable requirements for such new classification within 180 days following the determination. [40 CFR 63.320(f)]
- 2. Within 30 days after the facility is required to comply with new requirements caused by a change in source classification, the Permittee shall submit a written report to the Department certifying the following: [40 CFR 63.324(c)]
  - a. The new yearly PCE solvent consumption, calculated according to Condition III.B of Attachment "B";
  - b. The new source classification to which the facility belongs as determined from Condition III.C;
  - c. Whether or not the facility is in compliance with the portions of this permit which apply to the facility including both the previous applicable requirements and all new applicable provisions of this permit; and
  - d. That all information is true, accurate, and complete.

**E. Permit Shield**

Compliance with this Part shall be deemed compliance with 40 CFR 63.320(f), 63.323(d), and 63.324(c). [A.A.C. R18-2-325]

**IV. GENERAL RECORD KEEPING REQUIREMENTS**

[CFR 40 §63.324]

- A. The Permittee shall keep receipts of PCE purchases and a log of the following information and maintain such information on site for a period of 5 years: [40 CFR 63.324(d)(1-4) and A.A.C. R182-2306.A.3.c]
  - 1. The volume of PCE purchased each month by the dry cleaning facility as recorded from PCE purchases; if no PCE is purchased during a given month then the owner or operator would enter zero gallons into the log;
  - 2. The calculation and result of the yearly PCE consumption determined on the first day of each month as specified in Condition III.B of Attachment "B";
  - 3. The dates when the dry cleaning system components are inspected for leaks, as specified in Condition II.B.1 and 2 of Attachment "C", Conditions II.C.1 and 2 of Attachment "D", and Conditions II.C.1, 2, and 3 of Attachment "E", and the name or location of dry cleaning system components where leaks are detected;

4. The dates of repair and records of written or verbal orders for repair parts to demonstrate compliance with Condition II.B.3 of Attachment “C, Conditions II.C.3 and 6 of Attachment “D”, and Conditions II.C.4 and 7 of Attachment “E”.

B. The Permittee shall retain onsite 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. [40 CFR 63.324(e)]

C. Permit Shield

Compliance with this Section shall be deemed compliance with 40 CFR 63.24(d)(1-4). [A.A.C. R18-2-325]

## V. BOILER REQUIREMENTS [A.A.C. R-18-2-724]

A. **Applicability** [A.A.C. R-18-2-724.A and B]

1. This Section applies to fuel burning equipment in aggregate on any premises rated at greater than 500,000 British Thermal Units (BTU) per hour (0.146 megawatts), and in which fuel is burned for the primary purpose of producing steam, hot water, hot air or other liquids, gases or solids and in the course of doing so the products of combustion do not come into direct contact with process materials.

2. For the purposes of this Section, the heat input shall be the aggregate heat content of all fuels whose products of combustion pass through a stack or other outlet. The total heat input of all operating fuel-burning units on a plant or premises shall be used for determining the maximum allowable amount of particulate matter which may be emitted.

### B. Operational Limitations

1. *The Permittee shall not operate any boiler that has a heat input rating of 10 million BTU per hour or more.* [A.A.C. R-18-2-306.01 and -331.A.3.a]  
[Material Permit Conditions are indicated with underline and italics]

2. Fuel Limitation

The Permittee shall burn only low sulfur diesel, propane, butane, natural gas, or liquefied petroleum gas in any boiler as specified on the ATO. [A.A.C. R-18-2-306.A.2]

### C. Particulate Matter and Opacity

1. Emission Limitations and Standards

a. The Permittee shall not cause, allow or permit the emission of particulate matter, caused by combustion of fuel, from any fuel-burning operation in excess of the amounts calculated by the following equation: [A.A.C. R-18-2-724.C]

The maximum allowable emissions shall be determined by the following equations:

$$E = 1.02Q^{0.769} \text{ where:}$$

E = the maximum allowable particulate emissions rate in pounds-mass per hour.

Q = the heat input in million Btu per hour.

- b. The Permittee shall not cause, allow or permit to be emitted into the atmosphere from any boiler stack, plume or effluent which exceeds 15 percent opacity. The Permittee shall report all 6-minute periods during which the visible emissions exceed 15 percent opacity, as required under Section XII of Attachment "A". [A.A.C. R-18-2-724.J]

2. Permit Shield

Compliance with this Part shall be deemed compliance with A.A.C. R18-2-724.C and J. [A.A.C. R18-2-325]

**D. Sulfur Dioxide**

1. Emission Limitations and Standards

The Permittee shall not emit or cause to emit more than 1.0 pound of sulfur dioxide per million Btu. [A.A.C. R18-2-724.E]

2. Monitoring, Recordkeeping, and Reporting

When firing low sulfur diesel fuel, the Permittee shall keep records of fuel supplier certifications to demonstrate that low sulfur diesel is being fired. [A.A.C. R18-2-306.A.3.c]

3. Permit Shield

Compliance with this Part shall be deemed compliance with A.A.C. R18-2-724.E. [A.A.C. R18-2-325]

## ATTACHMENT "C" SMALL AREA SOURCES

### I. APPLICABILITY

[40 CFR 63.320(d) and (e)]

This Attachment is applicable to each Small Area Source as defined in Condition III.C.1 of Attachment "B".

### II. DRY CLEANING SYSTEM

[40 CFR 63.322]

#### A. Operating Limitations

1. The Permittee shall operate and maintain the system according to the manufacturer's specifications and recommendations. [40 CFR 63.322(d)]
2. The Permittee shall keep machine door of each dry cleaning machine closed immediately after transferring articles to or from the machine, and shall keep the door closed at all other times. [40 CFR 63.322(c)]
3. The Permittee 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. [40 CFR 63.322(i)]
4. The Permittee shall store all PCE and wastes that contain PCE in solvent tanks or solvent containers with no perceptible leaks. The exception to this requirement is that containers for separator water may be uncovered, as necessary, for proper operation of the machine and still. [40 CFR 63.322(j)]
5. The Permittee shall eliminate any emission of PCE during the transfer of articles between the washer and the dryers or reclaimers. [40 CFR 63.322(o)(3)]
6. The Permittee shall eliminate any emission of PCE from any dry cleaning system that is installed (including relocation of a used machine) after December 21, 2005, and that is located in a building with a residence. [40 CFR 63.322(o)(4)]
7. The Permittee shall eliminate any emission of PCE from any dry cleaning system that is located in a building with a residence after December 21, 2020. [40 CFR 63.322(o)(5)(i)]

#### B. Monitoring, Record Keeping, and Reporting

1. The Permittee shall inspect the following components bi-weekly for perceptible leaks while the dry cleaning system is operating. Inspection with a halogenated hydrocarbon detector or PCE gas analyzer also fulfills the requirement for inspection for perceptible leaks. The following components shall be inspected: [40 CFR 63.322(k) and (l)]
  - 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. All filter housings

2. The Permittee shall inspect the components listed in Condition II.B.1 for vapor leaks monthly while the component is in operation. [40 CFR 63.322(o)(1)]

a. The Permittee shall conduct the inspections using a halogenated hydrocarbon detector or PCE gas analyzer that is operated according to the manufacturer's instructions. The Permittee shall place the probe inlet at the surface of each component interface where leakage could occur and move it slowly along the interface periphery.

b. Any inspection conducted according to this Condition shall satisfy the requirements to conduct an inspection for perceptible leaks under Condition II.B.1.

3. The Permittee shall repair all leaks detected under Condition II.B.1 and 2 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 after receipt.

[40 CFR 63.322(m)]

### **C. Permit Shield**

Compliance with this Part shall be deemed compliance with 40 CFR 63.322(c), 63.322(d), 63.322(i), 63.322(j), 63.322(k), 63.322(l), 63.322(m) and 63.322(o)(5)(i).

[A.A.C. R18-2-325]

## ATTACHMENT "D" LARGE AREA SOURCES

### I. APPLICABILITY

This Attachment is applicable to each Large Area Source as defined in Condition III.C.2 of Attachment "B".

### II. DRY CLEANING SYSTEM

#### A. Operating Limitations

1. The Permittee shall operate and maintain the system according to the manufacturer's specifications and recommendations. [40 CFR 63.322(d)]
2. The Permittee shall keep machine door of each dry cleaning machine closed immediately after transferring articles to or from the machine, and shall keep the door closed at all other times. [40 CFR 63.322(c)]
3. The Permittee 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. [40 CFR 63.322(i)]
4. The Permittee shall store all PCE and wastes that contain PCE in solvent tanks or solvent containers with no perceptible leaks. The exception to this requirement is that containers for separator water may be uncovered, as necessary, for proper operation of the machine and still. [40 CFR 63.322(j)]
5. The Permittee shall eliminate any emission of PCE during the transfer of articles between the washer and the dryers or reclaimers. [40 CFR 63.322(o)(3)]
6. The Permittee shall eliminate any emission of PCE from any dry cleaning system that is installed (including relocation of a used machine) after December 21, 2005, and that is located in a building with a residence. [40 CFR 63.322(o)(4)]
7. The Permittee shall eliminate any emission of PCE from any dry cleaning system that is located in a building with a residence after December 21, 2020. [40 CFR 63.322(o)(5)(i)]

#### B. Air Pollution Control Requirements

1. The Permittee shall comply with either Condition II.B.1 or B.2 below: [40 CFR 63.322(a)]
  - a. *Route the air-PCE gas-vapor stream contained within each dry cleaning machine through a refrigerated condenser or an equivalent control device.* [40 CFR 63.322(a)(1), A.A.C. R18-2-331.A.3.d and e]  
[Material Permit Conditions are indicated with underline and italics]

- b. *Route the air-PCE gas-vapor stream contained within each dry cleaning machine through a carbon adsorber if installed on the dry cleaning machine prior to September 22, 1993.*

[40 CFR 63.322(a)(2), A.A.C. R18-2-331.A.3.d and e]

[Material Permit Conditions are indicated with underline and italics]

2. Each refrigerated condenser used for the purpose of complying with Condition II.B.1.a of Attachment "D" and installed on a dry-to-dry machine, dryer, or reclaimer: [40 CFR 63.322(e)]
- a. Shall be operated to not vent or release the air-PCE 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 Condition II.C.4.a.
  - c. Shall prevent air drawn into the dry cleaning machine when the door of the machine is open from passing through the refrigerated condenser.
3. Each refrigerated condenser used for the purpose of complying with Condition II.B.1.a of Attachment "D" and installed on a washer: [40 CFR 63.322(f)]
- a. Shall be operated to not vent or release the air-PCE gas-vapor stream contained within the washer to the atmosphere until the washer door is opened;
  - b. Shall not use the same refrigerated condenser coil for the washer that is used by a dry-dry machine, dryer, or reclaimer.
4. Each carbon adsorber used for the purpose of complying with Condition II.B.1.b of Attachment "D" shall: [40 CFR 63.322(g)]
- a. Not be bypassed to vent or release the air-PCE gas-vapor stream to the atmosphere at any time; and
  - b. Be monitored according to Condition II.C.5.

### **C. Monitoring, Record Keeping, and Reporting**

1. The Permittee shall inspect the following components weekly for perceptible leaks while the dry cleaning system is operating. Inspection with a halogenated hydrocarbon detector or PCE gas analyzer also fulfills the requirement for inspection for perceptible leaks. The following components shall be inspected: [40 CFR 63.322(k)]
- 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. All filter housings

2. The Permittee shall inspect the components listed in Condition II.C.1 for vapor leaks monthly while the component is in operation. [40 CFR 63.322(o)(1)]

a. The Permittee shall conduct the inspections using a halogenated hydrocarbon detector or PCE gas analyzer that is operated according to the manufacturer's instructions. The Permittee shall place the probe inlet at the surface of each component interface where leakage could occur and move it slowly along the interface periphery.

b. Any inspection conducted according to this Condition shall satisfy the requirements to conduct an inspection for perceptible leaks under II.C.1.

3. The Permittee shall repair all leaks detected under Conditions II.C.1 and 2 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 after receipt. [40 CFR 63.322(m)]

4. When a refrigerated condenser is used to comply with Condition II.B.1 of Attachment "D": [40 CFR 63.323(a)]

a. The Permittee shall monitor either of the following parameters on a weekly basis:

i. The refrigeration system high pressure and low pressure during the drying phase to determine if they are in the range specified in the manufacturer's operating instructions; or

ii. *The temperature of the air-PCE gas-vapor stream on the outlet side of the refrigerated condenser on a dry-to-dry machine, dryer, or reclaimer with a temperature sensor to determine if it is equal to or less than 7.2 °C (45 °F) before the end of the cool-down or drying cycle while the gas-vapor stream is flowing through the condenser. 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 ±1.1 °C (±2 °F).*

[A.A.C. R18-2-331.A.3.c]

[Material Permit Conditions are indicated with underline and italics]

b. The Permittee shall calculate the difference between the temperature of the air-PCE gas-vapor stream entering the refrigerated condenser on a washer and the temperature of the air-PCE 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) with an accuracy of ± 1.1 °C (± 2 °F).
- ii. The difference between the inlet and outlet temperatures shall be calculated weekly from the measured values.

[A.A.C. R18-2-331.A.3.c]

[Material Permit Conditions are indicated with underline and italics]

5. When a carbon adsorber is used to comply with Condition II.B.2 of Attachment "D", the Permittee shall measure the concentration of PCE in the exhaust of the carbon adsorber weekly with a colorimetric detector tube or PCE gas analyzer. The measurement shall be taken 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 or removal of the activated carbon to determine that the PCE concentration in the exhaust is equal to or less than 100 parts per million by volume. The Permittee shall:

[40 CFR 63.323(b) and A.A.C. R18-2-331.A.3.c]

[Material Permit Conditions are indicated with underline and italics]

- a. Use a colorimetric detector tube or PCE gas analyzer designed to measure a concentration of 100 parts per million by volume of PCE in air to an accuracy of ±25 parts per million by volume;
- b. Use the colorimetric detector tube or PCE gas analyzer 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 8 stack or duct diameters downstream from any flow disturbance such as a bend, expansion, contraction, or outlet; downstream from no other inlet; and 2 stack or duct diameters upstream from any flow disturbance.

6. If parameter values monitored under Conditions II.C.4 or C.5 of this Section do not meet the values specified in Conditions II.C.4 or C.5, adjustments or repairs shall be made to the dry cleaning system or control device to meet those values. 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 parameter value. Such repair parts shall be installed within 5 working days after receipt.

[40 CFR 63.322(n)]

7. The Permittee shall maintain a log of the following information and maintain such information on site for a period of 5 years:

[40 CFR 63.324(d)(5-6)]

- a. If a refrigerated condenser is used, the date and monitoring results (temperature sensor or pressure gauge) as specified in Condition II.C.4 of Attachment "D";
- b. If a carbon adsorber is used, the date and monitoring results, as specified in Condition II.C.5 of Attachment "D".

**C. Permit Shield**

Compliance with this Part shall be deemed compliance with 40 CFR 63.322(a), 63.322(c), 63.322(d), 63.322(e), 63.322(f), 63.322(g)(1), 63.322(i), 63.322(j), 63.322(k), 63.322(m), 63.322(n), 63.322(o)(1), 63.322(o)(3), 63.322(o)(4), 63.322(o)(5)(i), 63.323(a), 63.323(b), and 63.324(d)(4-6). [A.A.C. R18-2-325]

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## ATTACHMENT "E" NEW AREA SOURCES

### I. APPLICABILITY

This Attachment is applicable to each new area source as defined in Condition III.C.3 of Attachment "B".

### II. DRY CLEANING SYSTEM

#### A. Operating Limitations

1. The Permittee shall operate and maintain the system according to the manufacturer's specifications and recommendations. [40 CFR 63.322(d)]
2. The Permittee shall keep machine door of each dry cleaning machine closed immediately after transferring articles to or from the machine, and shall keep the door closed at all other times. [40 CFR 63.322(c)]
3. The Permittee 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. [40 CFR 63.322(i)]
4. The Permittee shall store all PCE and wastes that contain PCE in solvent tanks or solvent containers with no perceptible leaks. The exception to this requirement is that containers for separator water may be uncovered, as necessary, for proper operation of the machine and still. [40 CFR 63.322(j)]
5. The Permittee shall eliminate any emission of PCE during the transfer of articles between the washer and the dryers or reclaimers. [40 CFR 63.322(o)(3)]
6. The Permittee shall eliminate any emission of PCE from any dry cleaning system that is installed (including relocation of a used machine) after December 21, 2005, and that is located in a building with a residence. [40 CFR 63.322(o)(4)]
7. The Permittee of each dry cleaning system installed after December 21, 2005, shall route the air-PCE gas-vapor stream contained within each dry cleaning machine through a refrigerated condenser and pass the air-PCE gas-vapor steam from inside the dry cleaning machine drum through a non-vented carbon adsorber or equivalent control device immediately before the door of the dry cleaning machine is opened. The carbon adsorber must be desorbed in accordance with manufacturer's instructions. [40 CFR 63.322(o)(2)]
8. The Permittee shall eliminate any emission of PCE from any dry cleaning system that is located in a building with a residence after December 21, 2020. [40 CFR 63.322(o)(5)(i)]
9. The Permittee of a dry cleaning system that commences construction or reconstruction on or after December 21, 2005, but before July 13, 2006, shall meet the following requirements: [40 CFR 63.320(b)(2)(ii) and 63.322(o)(5)(i) and (ii)(A)]

- a. Eliminate any emission of PCE from any dry cleaning system that is located in a building with a residence beginning on July 27, 2009;
- b. Operate the dry cleaning system inside a vapor barrier enclosure. The exhaust system for the enclosure shall be operated at all times that the dry cleaning system is in operation and during maintenance. The entry door to the enclosure may be open only when a person is entering or exiting the enclosure.

## **B. Air Pollution Control Requirements**

1. The Permittee shall comply with either Condition II.B.1 or B.2 below: [40 CFR 63.322(b)]
  - a. Route the air-PCE gas-vapor stream contained within each dry cleaning machine through a refrigerated condenser or an equivalent control device; [A.A.C. R18-2-331.A.3.d and e]  
[Material Permit Conditions are indicated with underline and italics]
  - b. Eliminate any emission of PCE during the transfer of articles between the washer and dryers; [A.A.C. R18-2-331.A.3.d and e]  
[Material Permit Conditions are indicated with underline and italics]
2. Each refrigerated condenser used for the purpose of complying with Condition II.B.1 of Attachment "E" and installed on a dry-to-dry machine, dryer, or reclaimer: [40 CFR 63.322(e)]
  - a. Shall be operated to not vent or release the air-PCE gas-vapor stream contained within the dry cleaning machine to the atmosphere while the dry cleaning machine drum is rotating;
  - b. Shall prevent air drawn into the dry cleaning machine when the door of the machine is open from passing through the refrigerated condenser.
3. The Permittee of a dry cleaning system that commences construction or reconstruction on or after December 21, 2005, but before July 13, 2006, shall route the air-PCE gas-vapor stream contained within each dry cleaning machine through a refrigerated condenser and pass the air-PCE gas-vapor stream from inside the dry cleaning drum through a carbon adsorber or equivalent control device immediately before the door of the dry cleaning machine is opened. The carbon adsorber must be desorbed in accordance with manufacturer's instructions. [40 CFR 63.320(b)(2)(ii) and 63.322(o)(5)(ii)(B)]  
[A.A.C. R18-2-331.A.3.d and e]  
[Material Permit Conditions are indicated with underline and italics]

## **C. Monitoring, Record Keeping, and Reporting**

1. The Permittee shall inspect the following components weekly for perceptible leaks while the dry cleaning system is operating. Inspection with a halogenated hydrocarbon detector or PCE gas analyzer also fulfills the requirement for inspection for perceptible leaks. The following components shall be inspected: [40 CFR 63.322(k) and 63.322(o)(5)(ii)(C)]

- 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. All filter housings
2. The Permittee shall inspect the components listed in Condition II.C.1 for vapor leaks monthly while the component is in operation. [40 CFR 63.322(o)(1)]
- a. The Permittee shall conduct the inspections using a halogenated hydrocarbon detector or PCE gas analyzer that is operated according to the manufacturer's instructions. The Permittee shall place the probe inlet at the surface of each component interface where leakage could occur and move it slowly along the interface periphery.
  - b. Any inspection conducted according to this Condition shall satisfy the requirements to conduct an inspection for perceptible leaks under II.C.1.
3. The Permittee of a dry cleaning system that commences construction or reconstruction on or after December 21, 2005, but before July 13, 2006, shall inspect the components listed in Condition II.C.1 weekly for vapor leaks while the component is in operation. The inspections shall be conducted using a halogenated hydrocarbon detector or PCE gas analyzer that is operated according to the manufacturer's instructions. The Permittee shall place the probe inlet at the surface of each component interface where leakage could occur and move it slowly along the interface periphery. [40 CFR 63.22(o)(5)(ii)(C)]
4. The Permittee shall repair all leaks detected under Condition II.C.1, 2, or 3 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 after receipt. [40 CFR 63.322(m)]
5. When a refrigerated condenser is used to comply with Condition II.B.1 of Attachment "E": [40 CFR 63.323(a)]
- a. The Permittee shall monitor either of the following parameters on a weekly basis:
    - i. The refrigeration system high pressure and low pressure during the drying phase to determine if they are in the range specified in the manufacturer's operating instructions; or

- ii. The temperature of the air-PCE gas-vapor stream on the outlet side of the refrigerated condenser on a dry-to-dry machine, dryer, or reclaimer with a temperature sensor to determine if it is equal to or less than 7.2 °C (45 °F) before the end of the cool-down or drying cycle while the gas-vapor stream is flowing through the condenser. 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 ±1.1 °C (±2 °F).

[A.A.C. R18-2-331.A.3.c]

[Material Permit Conditions are indicated with underline and italics]

- b. The Permittee shall calculate the difference between the temperature of the air-PCE gas-vapor stream entering the refrigerated condenser on a washer and the temperature of the air-PCE 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) with an accuracy of ±1.1 °C (±2 °F).

- ii. The difference between the inlet and outlet temperatures shall be calculated weekly from the measured values.

[A.A.C. R18-2-331.A.3.c]

[Material Permit Conditions are indicated with underline and italics]

- 6. When a carbon adsorber is used to comply with Condition II.B.2 of Attachment "E", the Permittee shall measure the concentration of PCE in the exhaust of the carbon adsorber weekly with a colorimetric detector tube or PCE gas analyzer. The measurement shall be taken 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 or removal of the activated carbon to determine that the PCE concentration in the exhaust is equal to or less than 100 parts per million by volume. The Permittee shall:

[40 CFR 63.323(b) and A.A.C. R18-2-331.A.3.c]

[Material Permit Conditions are indicated with underline and italics]

- a. Use a colorimetric detector tube or PCE gas analyzer designed to measure a concentration of 100 parts per million by volume of PCE in air to an accuracy of ±25 parts per million by volume;
- b. Use the colorimetric detector tube or PCE gas analyzer 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 8 stack or duct diameters downstream from any flow disturbance such as a bend, expansion, contraction, or outlet; downstream from no other inlet; and 2 stack or duct diameters upstream from any flow disturbance.

7. If parameter values monitored under Conditions II.C.5 or C.6 of this Section do not meet the values specified in Conditions II.C.5 or C.6, adjustments or repairs shall be made to the dry cleaning system or control device to meet those values. 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 parameter value. Such repair parts shall be installed within 5 working days after receipt. [40 CFR 63.322(n)]
8. The Permittee shall maintain a log of the following information and maintain such information on site for a period of 5 years: [40 CFR 63.324(d)(5-6)]
- a. If a refrigerated condenser is used, the date and monitoring results (temperature sensor or pressure gauge) as specified in Condition II.C.5 of Attachment "E";
  - b. If a carbon adsorber is used, the date and monitoring results, as specified in Condition II.C.6 of Attachment "E".

**C. Permit Shield**

Compliance with this Part shall be deemed compliance with 40 CFR 63.322(a), 63.322(c), 63.322(d), 63.322(e), 63.322(f), 63.322(g)(1), 63.322(i), 63.322(j), 63.322(k), 63.322(m), 63.322(n), 63.322(o)(1), 63.322(o)(3), 63.322(o)(4), 63.322(o)(5), 63.323(a), 63.323(b), and 63.324(d)(4-6). [A.A.C. R18-2-325]