



# **Perchloroethylene Dry Cleaners**

## **COMPLIANCE HANDBOOK**

**for the**

**Maximum Achievable Control Technology (MACT) Standards**

**December 2002**

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## Perc Dry Cleaning MACT Standard

### *Introduction:*

In 1993, the U.S. Environmental Protection Agency published a regulation (40 Code of Federal Regulations Part 63 Subpart M) that applies to all dry cleaning facilities that use perchloroethylene (perc or PCE). Dry cleaning facilities are responsible for a major portion of PCE emissions into the air. Listed by the U.S. EPA as a hazardous air pollutant, PCE can pose a serious threat to clean air. This handbook has been provided in order to assist dry cleaning facilities in complying with this federal regulation. The compliance handbook summarizes the requirements of the regulation and provides blank forms that can be used to meet the reporting and record keeping requirements of the rule.

### *Compliance:*

All perc dry cleaning facilities in Ohio must submit the following reports: Initial Notification Report, Compliance Report for Control Requirements, and Compliance Report for Pollution Prevention. Blank forms for these reports are available at the back of this handbook (see appendixes A - C). **If your facility has submitted these reports, you do not need to resubmit.** If you are not sure, please contact the Ohio EPA or Local Air Agency office nearest you (see appendix D for an agency listing).

### *Categorization of your source:*

The federal regulation categorizes dry cleaning facilities or “sources” by installation date, type of dry cleaning machine and the amount of perc consumed. Table 1 will assist you in determining whether your source is a new or existing. In order to determine whether your source is a small area, large area or major source, you need to refer to the perc consumption record.

Perc consumption record consists of the total volume of perc you purchased for ALL of the machines at your facility. On the first business day for each month, you are required to calculate the amount of perc consumed (purchased) in the previous month and a rolling total of consumption for the past 12 months. The forms in Appendix E can be used to record this information. For the purposes of recording perc consumption, the following definitions apply:

Monthly Consumption: the sum of all perc purchases made in the prior month, based on receipts.

Annual Consumption : the rolling 12-month summation of all perc purchases, based on receipts.

Based on this record, you can determine the category of your source from Table 2, which lists the total facility-wide perc consumption amounts and respective categories for all perc dry cleaning sources.

Table 1

<i>Category</i>	<i>Description</i>
<b>NEW</b>	Machine installed or rebuilt after December 9, 1991
<b>EXISTING</b>	Machine installed or rebuilt before December 9, 1991

Table 2

<i>Applicability</i>	<i>Small Area Source</i>	<i>Large Area Source</i>	<i>Major Source</i>
	TOTAL facility annual perc consumption:	TOTAL facility annual perc consumption:	TOTAL facility annual perc consumption:
Dry Cleaning Facilities with			
(1) Only dry-to-dry machines	<140 gallons	140 - 2,100 gallons	> 2,100 gallons
(2) Only transfer machines	< 200 gallons	200 - 1,800 gallons	> 1,800 gallons
(3) Both dry-to-dry and transfer machines	< 140 gallons	140 - 1,800 gallons	> 1,800 gallons

Based on the above tables, each perc dry cleaning source is designated as new or existing AND small area, large area, or major. Examples: new small area source, or existing major source. Since regulatory requirements vary by category, it is important to correctly identify your category. Note that a single facility can have both new and existing machines. If there are questions on this table, please contact the Ohio EPA or Local Air Agency office nearest you.

Please note that the regulation forbids the installation of new transfer dry cleaning machines. All new dry cleaning machines must be dry-to-dry. The regulation does NOT require retrofit or replacement of existing operational transfer machines, unless they are rebuilt at a cost which exceeds 50% of the cost of a new dry-to-dry machine.

## SPECIFIC DRY CLEANING CATEGORY REQUIREMENTS

### *AM I AN EXISTING SMALL AREA SOURCE?*

annual perc usage less than 140 gallons of perc  
*or*  
less than 200 gallons of perc if you have only transfer machines  
*and*  
your machine was installed before December 9, 1991  
*then you are an*

**EXISTING SMALL AREA SOURCE**

#### Compliance Requirements:

1. Keep perc purchase receipts for determining consumption amounts.
2. Each month, on the first business day, record the amount of perc purchased in the previous month and the total amount of perc bought in a rolling 12-month period (see appendix E).
3. Keep all perc in closed, non-leaking containers.
4. Drain used cartridge filters in their housing or sealed containers for a minimum of 24 hours.
5. Keep dry cleaning machine doors closed except when loading and unloading.
6. Operate and maintain equipment according to manufacturer's instructions. Keep owner's manuals and design specs onsite.
7. Conduct a bi-weekly leak detection program and keep a written log (see appendix F).  
The leak inspection must include:
  - Hose and pipe connections, fittings, couplings, and valves;
  - Door gasket seating;
  - Filter gaskets and seatings;
  - Pumps;
  - Solvent tanks and containers;
  - Water separators;
  - Muck cookers;
  - Stills;
  - Exhaust dampers;
  - Diverter valves; and
  - Cartridge filter housings.
8. If leaks are found:

- Repair within 24 hours;
  - If repair parts are needed, order them within 2 days;
  - Install parts within five days of receipt; and
  - Keep a written log of repair work/corrective action (see appendix G).
9. Keep all records for a minimum of five years.

***AM I A NEW SMALL AREA SOURCE?***

annual perc usage less than 140 gallons of perc  
*and*  
your machine was installed on or after December 9, 1991  
*then you are a*  
  
NEW SMALL AREA SOURCE

Compliance Requirements:

EVERYTHING UNDER *EXISTING SMALL AREA SOURCE*,

PLUS THE FOLLOWING REQUIREMENTS:

1. Must use a dry-to-dry machine.
2. Must use a refrigerated condenser control device.
3. The refrigerated condenser must not release air-perc vapor to the atmosphere while the drum is rotating. To ensure this, the air-perc vapor should be recirculated back through the machine without venting to the atmosphere (closed loop).
4. The refrigerated condenser must be equipped 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.
5. Once per week, monitor and record the temperature of the exhaust on the outlet side of a refrigerated condenser (see appendix H). The temperature must be equal to or less than 45 °F.
6. If the refrigerated condenser temperature measurement exceeds 45°F:
  - Repair within 24 hours;
  - If repair parts are needed, order them within 2 days;
  - Install parts within five days of receipt; and
  - Keep a written log of repair work/corrective action (see appendix G).

***AM I AN EXISTING LARGE AREA SOURCE?***

annual perc usage  
between 140 - 2,100 gallons  
if you have only dry-to-dry machines  
***or***  
between 200 - 1,800 gallons  
if you have only transfer machines  
***or***  
between 140 - 1,800 gallons  
if you have both dry-to-dry and transfer machines  
***and***  
your machine was installed before December 9, 1991  
***then you are a***

EXISTING LARGE AREA SOURCE

Compliance Requirements:

EVERYTHING UNDER *EXISTING SMALL AREA SOURCE* with the exception that the Existing Large Area Sources must conduct a ***weekly*** (not bi-weekly) leak detection and repair program,

PLUS THE FOLLOWING REQUIREMENTS:

1. Must use a control device: refrigerated condenser OR carbon adsorber (if carbon adsorber was installed before 9/22/93).
2. If using a refrigerated condenser on a dry-to-dry machine, reclaimer, or dryer, you must operate, monitor, keep records, and repair as for *NEW SMALL AREA SOURCE*. Note that transfer systems must use separate refrigerated condensers for controlling the perc air streams from the dryer/reclaimer and the washer.
3. If using a refrigerated condenser on a washer, once a week measure and record the temperature of the washer exhaust on the inlet and outlet side of the refrigerated condenser and log the difference (see appendix H). The temperature difference must be

20 °F or greater. If the temperature difference is less than 20° F, make repairs or adjustments and record your actions.

4. If using a carbon adsorber:
  - Do not bypass at any time.
  - Once per week, measure and record the concentration of perc in the carbon adsorber exhaust using a colorimetric detector tube (see appendix I). The measurement must be taken while the machine is venting to the carbon adsorber at the end of the last dry cleaning cycle prior to desorption. The concentration must be equal to or less than 100 ppm by volume.
5. If the carbon adsorber measurement exceeds 100 ppm:
  - Repair within 24 hours;
  - If repair parts are needed, order them within 2 days;
  - Install parts within five days of receipt; and
  - Keep a written log of repair work/corrective action (see appendix G).

***AM I A NEW LARGE AREA SOURCE?***

annual perc usage  
between 140 - 2,100 gallons  
if you have only dry-to-dry machines  
*or*  
between 140 - 1,800 gallons  
if you have both dry-to-dry and transfer machines  
*and*  
your machine was installed on or after December 9, 1991  
*then you are a*  
  
NEW LARGE AREA SOURCE

Compliance Requirements:

EVERYTHING UNDER *NEW SMALL AREA SOURCE* with the exception that the New Large Area Sources must conduct a *weekly* (not bi-weekly) leak detection and repair program.

***AM I AN EXISTING MAJOR SOURCE?***

annual perc usage  
greater than 2,100 gallons  
if you have only dry-to-dry machines  
*or*  
greater than 1,800 gallons  
if you have both dry-to-dry and transfer machines  
*and*  
your machine was installed before December 9, 1991  
*then you are an*

EXISTING MAJOR SOURCE

Compliance Requirements:

EVERYTHING UNDER *EXISTING LARGE AREA SOURCE*, PLUS THE FOLLOWING REQUIREMENTS:

1. Must contain each transfer machine within a room enclosure that is:
  - Constructed of materials impermeable to perc;
  - Designed and operated to maintain a negative pressure at all openings when machine is operating;
  - Vented through a carbon adsorber or equivalent control device;
  - The carbon adsorber must be dedicated to room enclosure control, not also used to control machine exhaust.

***AM I A NEW MAJOR SOURCE?***

annual perc usage  
greater than 2,100 gallons  
if you have only dry-to-dry machines  
*or*  
greater than 1,800 gallons  
if you have both dry-to-dry and transfer machines  
*and*  
your machine was installed on or after December 9, 1991  
*then you are a*  
  
NEW MAJOR SOURCE

Compliance Requirements:

EVERYTHING UNDER *NEW SMALL AREA SOURCE* with the exception that the New Major Sources must conduct a *weekly* (not bi-weekly) leak detection and repair program,

PLUS THE FOLLOWING REQUIREMENTS:

1. The air-perc vapor from inside the drum must pass through a carbon adsorber or equivalent control device immediately before or as the door of the machine is opened.
2. If using a carbon adsorber of the vented type:
  - Once per week, measure and record the concentration of perc in the carbon adsorber exhaust using a colorimetric detector tube (see appendix I). The measurement must be taken while the machine is venting to the carbon adsorber at the end of the last dry cleaning cycle prior to desorption. The concentration must be equal to or less than 100 ppm.
3. If the vented carbon adsorber measurement exceeds 100 ppm:
  - Repair within 24 hours;
  - If repair parts are needed, order them within 2 days;
  - Install parts within five days of receipt; and

- Keep a written log of repair work/corrective action (see appendix G).
4. If using a carbon adsorber of non-vented type:
  - Once per week, measure and record the concentration of perc in the dry cleaning machine drum (open space above the clothing at the rear of the drum immediately upon opening the door) at the end of the dry cleaning cycle using a colorimetric detector tube. The concentration must be equal to or less than 300 ppm (see appendix J).
5. If the non-vented carbon adsorber measurement exceeds 300 ppm:
  - Repair within 24 hours;
  - If repair parts are needed, order them within 2 days;
  - Install parts within five days of receipt; and
  - Keep a written log of repair work/corrective action (see appendix G).

### ***Links***

The information presented in this handbook relates only to the air pollution aspect of dry cleaning. In order to obtain more information on the various other environmental effects of perc dry cleaning, please refer Ohio EPA's "Environmental Guide for Ohio Dry Cleaners" at <http://www.epa.state.oh.us/dhwm/drymain.htm> Detailed information on pollution prevention may be obtained from <http://www.epa.state.oh.us/opp/dry.html>

### ***Conclusion***

Applying the information provided in this handbook to your facility will ensure compliance with the MACT standard. Furthermore, this could result in substantial cost reductions for you in terms of perc consumption. The forms included in this handbook are for your reference only and they **do not** have to be submitted to Ohio EPA. Please note that this is a **one-time** mailing, and you are advised to copy the forms for future use.

If you need assistance in complying with these rules, please contact Ohio EPA's Small Business Assistance Office (SBAO) at (614) 644-4830.

### ***References***

University of Tennessee for Industrial Services, 1997, *Clearing the Air on Clean Air*, chapter 1.

United States Environmental Protection Agency, 1996, *Plain English Guide for Perc Dry Cleaners*.

## **APPENDIX A**

### **Initial Notification Report Form**

This form is required to be submitted to the Ohio EPA at the following address:

Attn: Robert Hodanbosi, Ohio EPA

Lazarus Government Center, P.O. Box 1049

Columbus OH-43215

A copy of this form also has to be submitted to the Ohio EPA district office or Local Air Agency near you (see Appendix D)

FACILITY ID NUMBER \_\_\_\_\_

**INITIAL NOTIFICATION REPORT**

1. Print or type the following for each separately located dry cleaning plant (facility). The owner of more than one plant must fill out a separate form for each plant.

Owner/Operator \_\_\_\_\_

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

Mailing Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Plant Address (If Different Than Mailing Address)

Street Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Phone Number \_\_\_\_\_

2. Check the box below if:

your dry cleaner is a pick-up store.

your dry cleaning plant has only coin-operated dry cleaning machines that are operated by the customers.

If you checked either box above, you can STOP HERE and return the form to the address given in the accompanying letter.

3. Write in the total volume of perchloroethylene (perc) purchased for ALL of the machines at the dry cleaning plant over the past 12 months:

\_\_\_\_\_ gallons

NOTE: If this is a new plant or if perchloroethylene purchase records have not been kept at the plant, the volume may be estimated for this initial report.

Method of determining gallons (circle one):

actual                      estimated

4. Next to each machine type listed below, write the number of machines of that type located at your plant:

\_\_\_\_\_ Dry-to-Dry

\_\_\_\_\_ Transfer

**FACILITY ID NUMBER** \_\_\_\_\_

5. Provide the following information for EACH MACHINE at your plant. If you have more than 4 machines at your plant, make additional copies of this page.

	<b>Machine 1</b>	<b>Machine 2</b>	<b>Machine 3</b>	<b>Machine 4</b>
Machine Type (Circle One)	Dry-to-Dry or Transfer	Dry-to-Dry or Transfer	Dry-to-Dry or Transfer	Dry-to-Dry or Transfer
Date Machine was Installed				
Control Device (Use WORKSHEET on Pages 5 & 6 to Determine Required Control)				
Date Control Device was Installed or is Planned to be Installed				

6. The following pollution prevention practices must be performed at your plant beginning at startup.
- ! Conduct a weekly leak detection and repair program to inspect all dry cleaning equipment for leaks that are obvious from sight, smell, or touch. NOTE: This program is required every other week if you wrote NO CONTROL REQUIRED in the shaded box in Question 5.
  - ! Repair leaks within 24 hours after they are found, or order repair parts within 2 working days after detecting a leak that needs repair parts. Install the repair parts by 5 working days after they are received.
  - ! Keep a log of the weekly (or biweekly) results of the leak detection and repair program.
  - ! Follow good housekeeping practices, which include keeping all perc and wastes containing perc in covered containers with no leaks, draining cartridge filters in closed containers, and keeping machine doors shut when clothing is not being transferred.
  - ! Operate and maintain all dry cleaning equipment according to manufacturers' instructions.

7. The following records must be kept at your plant:

- ! A log of the results of the leak detection and repair program.

**FACILITY ID NUMBER** \_\_\_\_\_

- ! A log of the amount of perc purchased for the past 12 months, calculated each month.
  - ! The operation and maintenance manuals for all dry cleaning equipment at the plant.
8. If a room enclosure is installed on a transfer machine as stated in Question 4, the following information about the room enclosure must be attached to this report.
- ! Description of the materials that the room enclosure is constructed of to show that it is impermeable to perchloroethylene, and
  - ! Explanation of how the room enclosure is operated to maintain a negative pressure at all times while the transfer machine is operating.
  - ! Explanation of how the room enclosure exhausts into a carbon adsorber.
9. Print or type the name and title of the Responsible Official for the dry cleaning plant:

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Name	Title
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A Responsible Official can be:

- ! The president, vice president, secretary, or treasurer of the company that owns the dry cleaning plant,
- ! An owner of the dry cleaning plant,
- ! The manager of the dry cleaning plant, or
- ! A government official if the dry cleaning plant is owned by the Federal, State, City, or County government.
- ! A ranking military officer if the dry cleaning plant is located at a military base.

**FACILITY ID NUMBER** \_\_\_\_\_

**December 2002**

The Responsible Official must certify below in the presence of a notary public that all of the information presented in this initial report is accurate and true. A notary public can typically be found at any bank.

I CERTIFY THE INFORMATION CONTAINED IN THIS REPORT TO BE ACCURATE AND TRUE TO THE BEST OF MY KNOWLEDGE.

STATE OF \_\_\_\_\_

COUNTY OF \_\_\_\_\_

\_\_\_\_\_  
(Signature of Responsible Official)

Subscribed and sworn to before me, this \_\_\_\_\_ Day of \_\_\_\_\_, 20\_\_\_\_\_.

\_\_\_\_\_  
(Signature of Notary Public)

**NOTARY  
SEAL**

My commission expires \_\_\_\_\_

**FACILITY ID NUMBER** \_\_\_\_\_

**December 2002**

**WORKSHEET**

A. To find out if control is required:

Check all boxes that apply:

- I reported less than 140 gallons in Question 3 (page 1).
- I reported less than 200 gallons in Question 3 (page 1) AND reported only transfer machines in Question 4 (page 1).

If you checked either box above and all your machines were installed before 12/9/91, you can STOP HERE. Write NO CONTROL REQUIRED in the shaded box on page 2 for each machine at your plant that was installed before 12/9/91. For those machines installed on or after 12/9/91, continue with the rest of the worksheet.

YOU ARE FINISHED WITH THE WORKSHEET. GO TO QUESTION 6 (page 2).

If you did not check a box above, go to Part B below

---

B. Control is required. Fill out part B for EACH MACHINE at your plant.

Check the appropriate box:

- Machine was installed BEFORE 12/9/91.

If you checked this box, your required control is a refrigerated condenser or a carbon adsorber that was installed before 9/22/93. Write REFRIGERATED CONDENSER or CARBON ADSORBER in the shaded box below the machine in Question 5. Control must be installed by 9/22/96.

- Machine was installed ON OR AFTER 9/22/93.

If you checked this box, your required control is a dry-to-dry machine with refrigerated condenser.

Write DRY-TO-DRY MACHINE WITH REFRIGERATED CONDENSER in the shaded box below the machine in Question 5. NOTE: NO NEW OR USED TRANSFER MACHINES CAN BE INSTALLED AFTER 9/22/93. Control must be installed when machine is installed.

- Machine was installed ON OR AFTER 12/9/91 AND BEFORE 9/22/93 and is a dry-to-dry machine

**FACILITY ID NUMBER** \_\_\_\_\_

If you checked this box, your required control is a dry-to-dry machine with refrigerated condenser. Write DRY-TO-DRY MACHINE WITH REFRIGERATED CONDENSER in the shaded box below the machine in question 5.

**December 2002**

If the machine you have is NOT a dry-to-dry machine with a refrigerated condenser, the machine must use either a refrigerated condenser or carbon adsorber from 9/22/93 until 9/22/96. On or after 9/22/96, any carbon adsorbers on dry-to-dry machines must be replaced with a refrigerated condenser. If the machine is a transfer machine with a carbon adsorber or a refrigerated condenser, you may keep this installation until 9/22/96. If you plan to keep a dry-to-dry machine with a carbon adsorber or a transfer machine with either a refrigerated condenser or carbon adsorber until 9/22/96, also write this information in the shaded box.

C. To find out if additional control is required:

Check all boxes that apply:

- I reported 1,800 gallons or less in Question 3 (page 1).
- I reported 2,100 gallons or less in Question 3 (page 1) AND I reported only dry-to-dry machines in Question 4 (page 1).

If you checked either box above, you can STOP HERE. No additional controls are required.

YOU ARE FINISHED WITH THE WORKSHEET. RETURN TO QUESTION 5 (page 2) and write in the dates the controls were or will be installed.

If you did not check a box above, go to Part D below.

---

A. If additional control is required, fill out Part D for EACH machine at your plant:

Check a box below, if it applies:

Machine is a dry-to-dry machine that was installed ON or AFTER 12/9/91.

If you checked this box, you are also required to install a supplemental carbon adsorber.

Write SUPPLEMENTAL CARBON ADSORBER in the shaded box below the machine in Question 5.

Machine is a transfer machine.

If you checked this box, you are also required to install a room enclosure. Write ROOM ENCLOSURE in the shaded box below the machine in Question 5.

YOU ARE FINISHED WITH THE WORKSHEET. RETURN TO QUESTION 5 and write in the dates all controls were or will be installed.

## **APPENDIX B**

### **Compliance Report for Control Requirements Form**

This form is required to be submitted to the Ohio EPA at the following address:

Attn: Robert Hodanbosi, Ohio EPA  
Lazarus Government Center, P.O. Box 1049  
Columbus OH-43215

A copy of this form also has to be submitted to the Ohio EPA district office or Local Air Agency near you (see Appendix D)

FACILITY ID NUMBER \_\_\_\_\_

**COMPLIANCE REPORT FOR CONTROL REQUIREMENTS**

1. Print or type the following for each separately located dry cleaning plant (facility). The owner of more than one plant must fill out a separate form for each plant.

Owner/operator \_\_\_\_\_

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

Mailing Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Plant Address (If different than mailing address)

Street Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_

Phone Number \_\_\_\_\_

2. Write in the total volume of perchloroethylene (perc) purchased for the dry cleaning plant over the last 12 months (based on actual purchase receipts):

\_\_\_\_\_ gallons

3. Fill out the table below for each machine at your plant. Use the WORKSHEET in the INITIAL NOTIFICATION REPORT to determine required controls.

---

---

Machine Type (Dry-to-Dry or Transfer)	Date Machine Purchased	Required Control	Date Control Installed
1.	_____	_____	_____
2.	_____	_____	_____
3.	_____	_____	_____
4.	_____	_____	_____
5.	_____	_____	_____
6.	_____	_____	_____

FACILITY ID NUMBER \_\_\_\_\_

4. If you listed a required control in Question 3 (page 1) for any machine at your plant, you must monitor your control.

To find out what type of monitoring is required,

Check all boxes that apply:

- I use a refrigerated condenser on a dry-to-dry machine to meet the required control.

If you checked this box, you are required to perform a weekly monitoring test to show that the temperature on the outlet side of the refrigerated condenser is less than or equal to 45 degrees Fahrenheit.

- I use a refrigerator condenser on a transfer machine to meet the required control.

If you checked this box, you are required to perform a weekly monitoring test to show that the temperature on the outlet side of the refrigerated condenser on the transfer dryer is less than or equal to 45 degrees Fahrenheit AND that the difference between the inlet and the outlet temperature of the refrigerated condenser on the transfer washer is greater than or equal to 20 degrees Fahrenheit.

- I use a carbon adsorber on a dry-to-dry or a transfer machine to meet the required control, OR

- I use a supplemental carbon adsorber on a dry-to-dry machine and the exhaust passes through the carbon adsorber IMMEDIATELY UPON door opening.

If you checked either of the two boxes above, you are required to perform a weekly monitoring test with a colorimetric detector tube to show that the concentration of perc in the exhaust from the carbon adsorber is not over 100 parts per million.

- I use a supplemental carbon adsorber on a dry-to-dry machine and the exhaust passes through the carbon adsorber BEFORE the machine door is opened.

If you checked this box, you are required to perform a weekly monitoring test with a colorimetric detector tube to show that the concentration of perc inside the dry cleaning machine drum at the end of the drying cycle is not over 300 parts per million.

- I use a room enclosure on a transfer machine.

If you checked this box, you are required to vent all air from inside the room enclosure through a carbon adsorber. The room enclosure must be constructed of materials impermeable to perc, must be designed and operated to maintain a negative pressure at all times while the transfer is operating, and must exhaust to a carbon adsorber.

FACILITY ID NUMBER \_\_\_\_\_

5. Print or type the name and title of the Responsible Official for the dry cleaning facility:

Name	Title
------	-------

Examples of Responsible Officials:

- ! The president, vice president, secretary, or treasurer of the company that owns the dry cleaning facility,
- ! An owner of the dry cleaning facility,
- ! The manager of the dry cleaning facility, or
- ! A government official if the dry cleaning facility is owned by the Federal, State, City, or County government,
- ! A ranking military officer if located at a military base.

The Responsible Official must certify below in the presence of a notary public that all of the information presented in this initial report is accurate and true.

I CERTIFY THE INFORMATION CONTAINED IN THIS REPORT TO BE ACCURATE AND TRUE TO THE BEST OF MY KNOWLEDGE AND THAT THIS PLANT IS IN COMPLIANCE WITH ALL APPLICABLE CONTROL DEVICE AND MONITORING REQUIREMENTS LISTED IN THIS REPORT.

STATE OF \_\_\_\_\_

County of \_\_\_\_\_

\_\_\_\_\_  
(Signature of Responsible Official)

Subscribed and sworn to before me, this \_\_\_\_\_ Day of \_\_\_\_\_, 20\_\_\_\_\_.

\_\_\_\_\_  
(Signature of Notary Public)

NOTARY  
SEAL

My commission expires \_\_\_\_\_

## **APPENDIX C**

### **Compliance Report for Pollution Prevention Form**

This form is required to be submitted to the Ohio EPA at the following address:

Attn: Robert Hodanbosi, Ohio EPA

Lazarus Government Center, P.O. Box 1049

Columbus OH-43215

A copy of this form also has to be submitted to the Ohio EPA district office or Local Air Agency near you (see Appendix D)

FACILITY ID NUMBER \_\_\_\_\_

**COMPLIANCE REPORT FOR POLLUTION PREVENTION**

1. Print or type the following for each separately located dry cleaning plant (facility). The owner of more than one plant must fill out a separate form for each plant.

Owner/operator \_\_\_\_\_

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

Mailing Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Plant Address (If different than mailing address)

Street Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Phone Number \_\_\_\_\_

2. Write in the total volume of perchloroethylene (perc) purchased for ALL of the machines at the dry cleaning plant over the past 12 months (based on actual purchase receipts):

\_\_\_\_\_ gallons

3. The following pollution prevention practices must be performed at your plant starting on 12/20/93.

! Conduct a weekly leak detection and repair program to inspect all dry cleaning equipment for leaks that are obvious from sight, smell, or touch. NOTE: This program is required only every other week (biweekly) if you reported NO CONTROLS REQUIRED in the INITIAL NOTIFICATION REPORT.

! Repair leaks within 24 hours after they are found, or order repair parts within 2 working days after detecting a leak that needs repair parts. Install the repair parts by 5 working days after they are received.

! Keep a log of the weekly (or biweekly) results of the leak detection and repair program.

! Following good housekeeping practices, which include keeping all perc and wastes containing perc in covered containers with no leaks, draining cartridge filters in closed containers, and keeping machine doors shut when clothing is not being transferred.

! Operate and maintain all dry cleaning equipment according to manufacturers' instructions.

**FACILITY ID NUMBER** \_\_\_\_\_

4. The following records must be kept at your plant:

- ! A log of the results of the leak detection and repair program.
- ! A log of the amount of perc purchased for the past 12 months, calculated each month.
- ! The operation and maintenance manuals for all dry cleaning equipment at the plant.

5. Print or type the name and title of the Responsible Official for the dry cleaning plant:

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Name	Title
------	-------

A Responsible Official can be:

- ! The president, vice president, secretary, or treasurer of the company that owns the dry cleaning plant,
- ! An owner of the dry cleaning plant,
- ! The manager of the dry cleaning plant, or
- ! A government official if the dry cleaning plant is owned by the Federal, State, City or County government, or
- ! A ranking military officer if the dry cleaning plant is located at a military base.

FACILITY ID NUMBER \_\_\_\_\_

The Responsible Official must certify the statement below in the presence of a notary public.

I CERTIFY THE INFORMATION CONTAINED IN THIS REPORT TO BE ACCURATE AND TRUE TO THE BEST OF MY KNOWLEDGE AND THAT THIS PLANT IS IN COMPLIANCE WITH THE POLLUTION PREVENTION PRACTICES LISTED IN THIS REPORT.

STATE OF \_\_\_\_\_

County of \_\_\_\_\_

\_\_\_\_\_  
(Signature of Responsible Official)

Subscribed and sworn to before me, this \_\_\_\_\_ Day of \_\_\_\_\_, 20\_\_\_\_\_.

\_\_\_\_\_  
(Signature of Notary Public)

NOTARY  
SEAL

My commission expires \_\_\_\_\_

**POST THIS NEXT TO YOUR DRY CLEANING MACHINE**

**GOOD HOUSEKEEPING PRACTICES**

- ! **CONDUCT A WEEKLY LEAK DETECTION AND REPAIR PROGRAM TO INSPECT ALL DRY CLEANING EQUIPMENT FOR LEAKS THAT ARE OBVIOUS FROM SIGHT, SMELL, OR TOUCH. NOTE: THIS PROGRAM IS REQUIRED EVERY OTHER WEEK IF YOU ARE NOT REQUIRED TO INSTALL CONTROL.**
- ! **REPAIR LEAKS WITHIN 24 HOURS AFTER THEY ARE FOUND, OR ORDER REPAIR PARTS WITHIN 2 WORKING DAYS AFTER DETECTING A LEAK THAT NEEDS REPAIR PARTS. INSTALL THE REPAIR PARTS BY 5 WORKING DAYS AFTER THEY ARE RECEIVED.**
- ! **KEEP A LOG OF THE WEEKLY (OR BIWEEKLY) RESULTS OF THE LEAK DETECTION AND REPAIR PROGRAM.**
- ! **FOLLOW GOOD HOUSEKEEPING PRACTICES, WHICH INCLUDE KEEPING ALL PERC AND WASTES CONTAINING PERC IN COVERED CONTAINERS WITH NO LEAKS, DRAINING CARTRIDGE FILTERS IN CLOSED CONTAINERS, AND KEEPING MACHINE DOORS SHUT WHEN CLOTHING IS NOT BEING TRANSFERRED.**
- ! **OPERATE AND MAINTAIN ALL DRY CLEANING EQUIPMENT ACCORDING TO MANUFACTURERS' INSTRUCTIONS.**

**REQUIRED RECORDS**

- ! **A LOG OF THE RESULTS OF THE LEAK DETECTION AND REPAIR PROGRAM.**
- ! **A LOG OF THE AMOUNT OF PERC PURCHASED FOR THE PAST 12 MONTHS, CALCULATED EACH MONTH.**
- ! **THE OPERATION AND MAINTENANCE MANUALS FOR ALL DRY CLEANING EQUIPMENT AT THE PLANT.**

## **APPENDIX D**

### **Air Permit Review Agencies**

**APPENDIX E**  
Perc Purchase Record

## PERC PURCHASE RECORD

MONTH	QUANTITY PURCHASED (GAL)	12 MONTH TOTAL FROM ____ to ____	12 MONTH TOTAL (GAL)	NOTES
DEC 2002		01/02 – 12/02		
JAN 2003		02/02 – 01/03		
FEB 2003		03/02 – 02/03		
MAR 2003		04/02 – 03/03		
APR 2003		05/02 – 04/03		
MAY 2003		06/02 – 05/03		
JUN 2003		07/02 – 06/03		
JUL 2003		08/02 – 07/03		
AUG 2003		09/02 – 08/03		
SEP 2003		10/02 – 09/03		
OCT 2003		11/02 – 10/03		
NOV 2003		12/02 – 11/03		
DEC 2003		01/03 – 12/04		
JAN 2004		02/03 – 01 04		
FEB 2004		03/03 – 02/04		
MAR 2004		04/03 – 03/04		
APR 2004		05/03 – 04/04		
MAY 2004		06/03 – 05/04		
JUN 2004		07/03 – 06/04		
JUL 2004		08/03 – 07/04		
AUG 2004		09/03 – 08/04		
SEP 2004		10/03 – 09/04		
OCT 2004		11/03 – 10/04		
NOV 2004		12/03 – 11/04		

December 2002

**PERC PURCHASE RECORD**

MONTH	QUANTITY PURCHASED (GAL)	12 MONTH TOTAL FROM ____ to ____	12 MONTH TOTAL (GAL)	NOTES
DEC				
JAN				
FEB				
MAR				
APR				
MAY				
JUN				
JUL				
AUG				
SEP				
OCT				
NOV				
DEC				
JAN				
FEB				
MAR				
APR				
MAY				
JUN				
JUL				
AUG				
SEP				
OCT				
NOV				

# **APPENDIX F**

## **Leak Detection Inspection Form**

## LEAK DETECTION LOG

DATE \_\_\_\_\_

MACHINE NO. \_\_\_\_\_

INSPECTOR \_\_\_\_\_

Inspection done by SIGHT, SMELL, FEEL/MONITORING INSTRUMENT  
circle one

Inspect the following items for leaks.

		<u>SIGNS OF LEAKING?</u>	
		YES	NO
1.	Hose and pipe connections, fittings, couplings, valves	YES	NO
2.	Door gasket and seating	YES	NO
3.	Pump	YES	NO
4.	Solvent tank and containers	YES	NO
5.	Water Separator	YES	NO
6.	Muck Cooker	YES	NO
7.	Still	YES	NO
8.	Exhaust Damper	YES	NO
9.	Diverter Valve	YES	NO
10.	Filter gasket and seating	YES	NO
11.	Cartridge filter housings	YES	NO

If YES was answered to any of the above, attach a completed corrective action report.

**MULTIPLE MACHINE LEAK DETECTION  
INSPECTION LOG**

DATE \_\_\_\_\_

INSPECTOR \_\_\_\_\_

Inspection done by SIGHT, SMELL, FEEL/MONITORING INSTRUMENT  
circle one

Inspect the following items for leaks. Circle YES or NO

	SIGNS OF LEAKING?		
	Machine No. _____	Machine No. _____	Machine No. _____
Hoses & pipe connections, Fittings, couplings, valves	YES / NO	YES / NO	YES / NO
Door gaskets & seatings	YES / NO	YES / NO	YES / NO
Pumps	YES / NO	YES / NO	YES / NO
Solvent tanks & containers	YES / NO	YES / NO	YES / NO
Water separators	YES / NO	YES / NO	YES / NO
Muck Cookers	YES / NO	YES / NO	YES / NO
Stills	YES / NO	YES / NO	YES / NO
Exhaust dampers	YES / NO	YES / NO	YES / NO
Diverter valves	YES / NO	YES / NO	YES / NO
Filter gaskets & seatings	YES / NO	YES / NO	YES / NO
Cartridge filter housings	YES / NO	YES / NO	YES / NO

If YES was answered to any of the above, attach a completed corrective action report.

**APPENDIX G**  
**Corrective Action Form**

**CORRECTIVE ACTION FORM**

DATE OF INITIAL INSPECTION \_\_\_\_\_

MACHINE NO. \_\_\_\_\_

INSPECTOR \_\_\_\_\_

DESCRIBE PROBLEM:

ARE PARTS NEEDED      YES              NO

DATE ORDERED \_\_\_\_\_

DATE RECEIVED \_\_\_\_\_

DATE INSTALLED \_\_\_\_\_

DATE PROBLEM CORRECTED \_\_\_\_\_

EXPLAIN:

**APPENDIX H**  
**Refrigerated Condenser**  
**Weekly Temperature Log**





**APPENDIX I**  
**Carbon Adsorber**  
**Weekly Perc Concentration Log**



**APPENDIX J**

**Supplemental Carbon Adsorber  
Weekly Perc Concentration Log**

