



# PERCHLOROETHYLENE DRY CLEANERS



## COMPLIANCE INSPECTION CHECKLIST

**INSPECTION TYPE:** ANNUAL (INS1, INS2)  COMPLAINT/DISCOVERY (CI)   
 RE-INSPECTION (FUI)  ARMS COMPLAINT NO:

<b>AIRS ID#:</b> 103 0415	<b>Date:</b> 9/26/2011	<b>Time In:</b> 1:00pm	<b>Time Out:</b> 1:30pm
<b>Facility Name:</b>	Causeway Cleaners		
<b>Facility Location:</b>	2666 Bayshore Blvd. Palm Harbor, FL, 34698		
<b>Responsible Official:</b>	Steve Milby	<b>Phone No:</b>	727-733-4206
<b>Emis. Unit Description:</b>	Existing, Small Perchloroethylene Dry Cleaner: One Dry-to-dry machine (1989). 15 HP propane fired boiler on-site.		
<b>Permit Number:</b>	1030415-003-AG	<b>Exp. Date:</b>	1/13/2012
<b>Facility Contact:</b>	Steve Milby	<b>Phone:</b>	727-733-4206
<b>Compliance Status:</b>	<input checked="" type="checkbox"/> IN <input type="checkbox"/> MNC <input type="checkbox"/> SNC		

**PART I: NOTIFICATION** (Check appropriate box)

1. Existing facility notified DARM by 9/1/96	<input type="checkbox"/>
2. New facility notified DARM 30 days prior to startup	<input type="checkbox"/>
3. Facility failed to notify DARM to use general permit	<input type="checkbox"/>

**PART II: CLASSIFICATION**

**Facility indicated on notification form that it is:**  
 No Notification Form  Drop-Off Store  Out of business  Petroleum Solvent Only

**A.**

<u>1. Existing small area source</u> Dry-to-dry only, x <140 gal/yr Transfer only, x <200 gal/yr <input type="checkbox"/> Both types, x <140 gal/yr (Constructed before 12/9/91)	<u>2. New small area source</u> Dry-to-dry only, x <140 gal/yr Transfer only, x <200 gal/yr <input type="checkbox"/> Both types, x <140 gal/yr (Constructed on or after 12/9/91)
<u>3. Existing large area source</u> Dry-to-dry only, 140> x <2,100 gal/yr Transfer only, 200> x <1,800 gal/yr <input type="checkbox"/> Both types, 140> x <1,800 gal/yr (Constructed before 12/9/91)	<u>4. New large area source</u> Dry-to-dry only, 140> x <2,100 gal/yr Transfer only, 200> x <1,800 gal/yr <input type="checkbox"/> Both types, 140> x <1,800 gal/yr (Constructed on or after 12/9/91)

**This is a correct facility classification**  Y  N  Can not determine  
**If no, please check the appropriate classification:**  
 Facility qualified for a general permit as number N/A above.  
 Facility exceeds above limits and is not eligible for a general permit

**B. Highest 12-month consecutive total of perchloroethylene purchased in the preceding 12-month period:** 0 Gallons. Month with highest use was n/a. Did facility exceed limits  Y  N

### PART III: GENERAL CONTROL REQUIREMENTS

Is the responsible official of the dry cleaning facility: (Check appropriate boxes)

- |   |                            |                            |  |
|---|----------------------------|----------------------------|--|
| 1. Storing perchloroethylene in tightly sealed and impervious containers?   | <input type="checkbox"/> Y | <input type="checkbox"/> N | <input checked="" type="checkbox"/> NA |
| 2. Examining the containers for leakage?  | <input type="checkbox"/> Y | <input type="checkbox"/> N | <input checked="" type="checkbox"/> NA |
| 3. Closing and securing machine doors except during loading/unloading?  | <input type="checkbox"/> Y | <input type="checkbox"/> N | <input checked="" type="checkbox"/> NA |
| 4. Draining cartridge filters in their housing or in sealed containers for at least 24 hours prior to disposal?                     | <input type="checkbox"/> Y | <input type="checkbox"/> N | <input checked="" type="checkbox"/> NA |
| 5. Maintaining solvent-to-carbon ratios and steam pressure for carbon adsorber beds according to the manufacturer's specifications? | <input type="checkbox"/> Y | <input type="checkbox"/> N | <input checked="" type="checkbox"/> NA |

### PART IV: PROCESS VENT CONTROLS

#### **In Part II-A:**

If classification (1) has been checked, no controls are required. **Proceed to Part V.**

If classification (2) has been checked, the machine should be equipped with a refrigerated condenser (complete A below)

If classification (3) has been checked, the machine should be equipped with either a refrigerated condenser or a carbon adsorber (complete A and B below). A Carbon adsorber must have been installed prior to September 22, 1993.

If classification (4) has been checked, machine should be equipped with a refrigerated condenser (complete A and B below.)

#### **A. Has the responsible official of all new sources and existing large area sources:** (check appropriate boxes)

- |  |                            |                            |  |
|--|----------------------------|----------------------------|--|
| 1. Equipped all machines with the appropriate vent controls?   | <input type="checkbox"/> Y | <input type="checkbox"/> N | <input checked="" type="checkbox"/> NA |
| 2. Equipped dry-to-dry machines with a closed-loop vapor venting system?   | <input type="checkbox"/> Y | <input type="checkbox"/> N | <input checked="" type="checkbox"/> NA |
| 3. Equipped the condenser with a diverter valve so airflow will be directed away from the condenser upon opening the door?                 | <input type="checkbox"/> Y | <input type="checkbox"/> N | <input checked="" type="checkbox"/> NA |
| 4. Measured and recorded the temperature of the outlet exhaust stream of a refrigerated condenser on a weekly basis?                       | <input type="checkbox"/> Y | <input type="checkbox"/> N | <input checked="" type="checkbox"/> NA |
| 5. Repaired or adjusted the equipment within 24 hours if the exhaust temperature of the condenser exceeded 45 <sup>o</sup> F?              | <input type="checkbox"/> Y | <input type="checkbox"/> N | <input checked="" type="checkbox"/> NA |
| 6. Conducted all temperature monitoring after an appropriate cool down period and after verifying the coolant had been completely charged? | <input type="checkbox"/> Y | <input type="checkbox"/> N | <input checked="" type="checkbox"/> NA |

**B. Has the responsible official of an existing large or new large area source also:**

1. Measured and recorded the exhaust temperature on the outlet side of the condenser located on dry-to-dry, reclaimer, and dryer machines on a weekly basis?  Y  N  NA
2. Measured and recorded the washer exhaust temperature at the condenser inlet and outlet weekly?  
Is the temperature differential equal to or greater than 10°F?  Y  N  NA
3. Measured and recorded the perc concentration weekly at the end of the final drying cycle while the machine is venting to the atmosphere. If machines are equipped with a carbon adsorber?  
Is the perc concentration equal to or less than 10 ppm?  Y  N  NA
4. Assured that the sampling position on adsorber exhaust for measuring perc. concentrations is at least 10 duct diameters downstream of any bend, contraction, or expansion; is at least 10 diameters upstream from any bend contraction, or expansion; and downstream from the adsorber inlet?  Y  N  NA
5. Equipped transfer machines (dryers, reclaimers, and washers) with individual condenser coils?  Y  N  NA
6. Routed airflow to the carbon adsorber (if used) at all times?  Y  N  NA

**PART V: RECORDKEEPING REQUIREMENTS**

**Has the responsible official:**

(Check appropriate boxes)

1. Maintained receipts for perc purchased?  Y  N  NA
2. Maintained rolling monthly averages of perc consumption?  Y  N  NA
3. Maintained leak detection inspection and repair reports for the following:  
a. Documentation of leaks repaired w/in 24 hrs? or;  Y  N  NA  
b. Documentation of parts ordered to repair leak and leak repaired w/in 2 days and parts installed w/in 5 days of receipt?  Y  N  NA
4. Maintained calibration data? (*direct reading instruments only*)  Y  N  NA
5. Maintained exhaust duct monitoring data on perc concentrations?  Y  N  NA
6. Maintained startup/shutdown/malfunction plan?  Y  N  NA
7. Maintained deviation reports?  
Problem corrected?  Y  N  NA
8. Maintained compliance plan, if applicable?  Y  N  NA

**PART VI: LEAK DETECTION AND REPAIRS**

<b>1. Does the responsible official conduct weekly leak detection and repair inspection?</b>	<input type="checkbox"/> Y	<input checked="" type="checkbox"/> N			
<b>2. Which method of detection does the responsible official use?</b>	<input type="checkbox"/> Y	<input checked="" type="checkbox"/> N			
Visual examination (condensed solvent of exterior surfaces)	<input type="checkbox"/> Y	<input checked="" type="checkbox"/> N			
Physical detection (airflow felt through gaskets)	<input type="checkbox"/> Y	<input checked="" type="checkbox"/> N			
Odor (noticeable perc odor)	<input type="checkbox"/> Y	<input checked="" type="checkbox"/> N			
Use of direct-reading instrumentation (FID/PID/calorimetric tubes)	<input type="checkbox"/> Y	<input checked="" type="checkbox"/> N			
<b>If using direct-reading instrumentation, is the equipment:</b>	<input type="checkbox"/> Y	<input type="checkbox"/> N			
a. Capable of detecting perc vapor concentrations in a range of 0-500 ppm	<input type="checkbox"/> Y	<input type="checkbox"/> N			
b. Calibrated against a standard gas prior to and after each use (PID/FID only).	<input type="checkbox"/> Y	<input type="checkbox"/> N			
c. Inspected for leaks and obvious signs of wear on a weekly basis?	<input type="checkbox"/> Y	<input type="checkbox"/> N			
d. Kept in a clean and secure area when not in use.	<input type="checkbox"/> Y	<input type="checkbox"/> N			
e. Verified for accuracy by use of duplicate samples (calorimetric only)?	<input type="checkbox"/> Y	<input type="checkbox"/> N			
<b>3. Has the facility maintained a leak log?</b>	<input type="checkbox"/> Y	<input checked="" type="checkbox"/> N			
<b>4. The following area should be checked for leaks by the operator:</b>	<input type="checkbox"/> Y	<input checked="" type="checkbox"/> N			
Hose connections, fitting couplings, and valves	<input type="checkbox"/> Y	<input checked="" type="checkbox"/> N	Muck cookers	<input type="checkbox"/> Y	<input checked="" type="checkbox"/> N
Door gaskets and seating	<input type="checkbox"/> Y	<input checked="" type="checkbox"/> N	Stills	<input type="checkbox"/> Y	<input checked="" type="checkbox"/> N
Filter gaskets and seating	<input type="checkbox"/> Y	<input checked="" type="checkbox"/> N	Exhaust dampers	<input type="checkbox"/> Y	<input checked="" type="checkbox"/> N
Pumps	<input type="checkbox"/> Y	<input checked="" type="checkbox"/> N	Diverter valves	<input type="checkbox"/> Y	<input checked="" type="checkbox"/> N
Solvent tanks and containers	<input type="checkbox"/> Y	<input checked="" type="checkbox"/> N	Cartridge Filter housing	<input type="checkbox"/> Y	<input checked="" type="checkbox"/> N
Water separators	<input type="checkbox"/> Y	<input checked="" type="checkbox"/> N			

Shea Jackson	September 26, 2011
Inspector's Name (Please Print)	Date of Inspection
	N/A Close File
Inspector's Signature	Date of Next Inspection

## System Inspection and Leak Detection

Are the following dry cleaning system components inspected weekly for perceptible leaks (sight, smell or touch) while the system is in operation (§63.322(k))? (Inspection with a halogenated hydrocarbon detector or PCE gas analyzer also fulfills the requirement for inspection of perceptible leaks.) Y N NA

Are the following dry cleaning system components inspected monthly for vapor leaks using a halogenated hydrocarbon detector or PCE gas analyzer while the system is in operation? (Any inspection conducted according to this paragraph shall satisfy the requirements to conduct an inspection for perceptible leaks under §63.322(k) or (l). Y N NA

- (1) Hose and pipe connections, fittings, couplings, and valves;
- (2) Door gaskets and seatings;
- (3) Filter gaskets and seatings;
- (4) Pumps;
- (5) Solvent tanks and containers;
- (6) Water separators;
- (7) Muck cookers;
- (8) Stills;
- (9) Exhaust dampers;
- (10) Diverter valves; and
- (11) All Filter housings

Is the halogenated hydrocarbon detector or PCE gas analyzer operated according to the manufacturer's instructions? Y N NA

Is the vapor leak inspection conducted by placing the probe inlet at the surface of each component interface where leakage could occur and moving it slowly along the interface periphery? Y N NA

Is the PCE gas analyzer a flame ionization detector, photo ionization detector, or infrared analyzer capable of detecting vapor concentrations of PCE of 25 parts per million by volume? Y N NA

Is the halogenated hydrocarbon detector capable of detecting vapor concentrations of PCE of 25 parts per million by volume and indicating a concentration of 25 parts per million by volume or greater by emitting an audible or visual signal that varies as the concentration changes? Y N NA

## ADDITIONAL SITE INFORMATION

<b>Facility Name:</b>	Causeway Cleaners
<b>ARMS #:</b>	103 0415

### Inspection Comments:

The facility removed the Perchloroethylene and 1989 CEF Rovin Machine Corp dry to dry and replaced with Bowe K-15 Hydrocarbon Machine. Mr. Milby stated he had changed his machine in November 2010. He sent a letter to the AQ office to rescind his permit on September 8, 2011. I observed the new machine. The facility purchased 50 gallons of ECOSOLV to fill. Mr. Milby stated he has not had to purchase more yet. He stated he had noticed did not clean as well, but he was glad he changed as was safer, more economical and less regulated .

**ADDITIONAL SITE INFORMATION**

<b>Facility Name:</b>	Causeway Cleaners
<b>ARMS #:</b>	103 0415

<b>Machine #1:</b>	Old Machine	<i>PERC</i>	
Manufacturer	CEF Rovin Machine Corp	<i>REMOVED</i>	<i>FROM SITE</i>
Model#	Prestige 160	Serial#	Mfg yr
<b>Machine #2:</b>	New Machine	<i>HYDRO</i>	
Manufacturer	Bowe	<i>CARBON</i>	lbs
Model#	K-15	Serial#	Mfg yr

**Notification (unpermitted sources only):**

- 1. Was the facility assisted in filling out the notification by the inspector?  Y  NA
- 2. Did the facility insist on filling out its own notification, and will send it to FDEP?  Y  NA

**Record keeping :**

- 1. Does facility have statement/specs as to the design accuracy of the temperature sensor?  Y  NA  
(Temperature of 45<sup>0</sup>F w/accuracy +/- 2<sup>0</sup>F, or 7.2EC w/accuracy of +/- 1.1<sup>0</sup>C)

**Hazardous Waste:**

- 1. Is all perc. contaminated wastewater either treated or disposed of properly?  Y  N
- 2. If wastewater is evaporated, is it an approved system, and using carbon filtration?  Y  NA
- 3. Does the facility have secondary containment for the dry-dry machine?  Y  N
- 4. Does the facility have secondary containment for any perc. waste containers?  Y  N

**Boiler:**

Manufacturer	Hurst	Hp	25
Model #	V86-150-446	Serial #	Mfg yr 2001

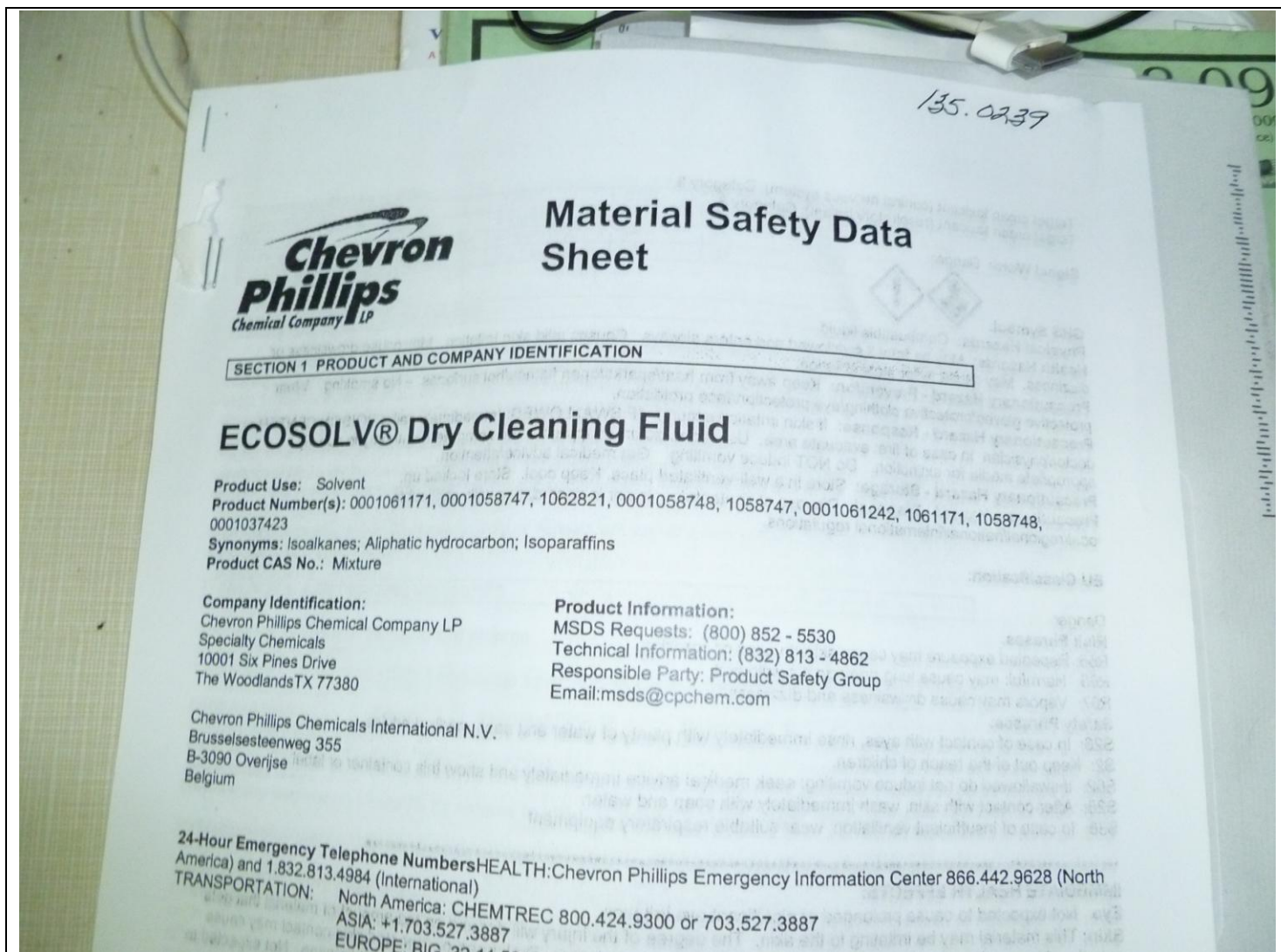
Fuel Type:    Natural gas?                          Propane?                                  Fuel oil?           

**Comments:**

exempt boiler

# Causeway Cleaners

2666 Bayshore Blvd., Palm Harbor



**Project Id:** 79907      **Permit No:** 1030415-003-AG      **Arms Number:** 0415

**Inspector:** Shea Jackson      **Inspection Date / Time:** 9/26/2011 / \_\_\_\_\_

**Source (EU):** Existing, Small Perchloroethylene Dry Cleaner: One Dry-to-dry machine (1989).  
15 HP propane fired boiler on-site.

**Description:** [ECOSOLVE dry cleaning fluid replaced the use of Perchloroethylene ]



**Causeway Cleaners**  
2666 Bayshore Blvd., Palm Harbor



**Project Id:** 79907      **Permit No:** 1030415-003-AG      **Arms Number:** 0415

**Inspector:** Shea Jackson      **Inspection Date / Time:** 9/26/2011 / \_\_\_\_\_

**Source (EU):** Existing, Small Perchloroethylene Dry Cleaner: One Dry-to-dry machine (1989).  
15 HP propane fired boiler on-site.

**Description:** [The facility's previous dry to dry had been removed and replaced with this BOWE K-15]

**Causeway Cleaners**  
2666 Bayshore Blvd., Palm Harbor



**Project Id:** 79907      **Permit No:** 1030415-003-AG      **Arms Number:** 0415

**Inspector:** Shea Jackson      **Inspection Date / Time:** 9/26/2011

**Source (EU):** Existing, Small Perchloroethylene Dry Cleaner: One Dry-to-dry machine (1989).  
15 HP propane fired boiler on-site.

**Description:** [The ECOSOLV is filled from the base into these two vessels at the rear of the machine.]