



# 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 0451	<b>Date:</b> 12/12/12	<b>Time In:</b> 12:15PM	<b>Time Out:</b> 12:50PM
<b>Facility Name:</b>	Phu Enterprises		
<b>Facility Location:</b>	1850 Main Street Dunedin, FL, 34698		
<b>Responsible Official:</b>	Cuong Van Phu	<b>Phone No:</b>	727-734-3353
<b>Emis. Unit Description:</b>	New, Large Perchloroethylene Dry Cleaner: Consists of 2 1999 Realstar 473 Dry-To-Dry Machines with Refrigerated Condensers. A 15 hp natural gas fired boiler is on-site.		
<b>Permit Number:</b>	1030451-005-AG	<b>Exp. Date:</b>	9/26/2012
<b>Facility Contact:</b>	Cuong Van Phu	<b>Phone:</b>	727-734-3353
<b>Compliance Status:</b>	<input type="checkbox"/> IN <input type="checkbox"/> MNC <input checked="" type="checkbox"/> SNC		

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

- Existing facility notified DARM by 9/1/96
- New facility notified DARM 30 days prior to startup
- Facility failed to notify DARM to use general permit

### PART II: CLASSIFICATION

Facility indicated on notification form that it is:

- No Notification Form  Drop-Off Store  Out of business  Petroleum Solvent Only

- A.**
- |  |                          |   |                                     |
|--|--------------------------|---|-------------------------------------|
| <b>1. Existing small area source</b><br>Dry-to-dry only, x <140 gal/yr         |                          | <b>2. New small area source</b><br>Dry-to-dry only, x <140 gal/yr         |                                     |
| Transfer only, x <200 gal/yr   | <input type="checkbox"/> | Transfer only, x <200 gal/yr  | <input type="checkbox"/>            |
| Both types, x <140 gal/yr<br>(Constructed before 12/9/91)                      |                          | Both types, x <140 gal/yr<br>(Constructed on or after 12/9/91)            |                                     |
| <b>3. Existing large area source</b><br>Dry-to-dry only, 140 > x <2,100 gal/yr |                          | <b>4. New large area source</b><br>Dry-to-dry only, 140 > x <2,100 gal/yr |                                     |
| Transfer only, 200 > x <1,800 gal/yr   | <input type="checkbox"/> | Transfer only, 200 > x <1,800 gal/yr                                      | <input checked="" type="checkbox"/> |
| Both types, 140 > x <1,800 gal/yr<br>(Constructed before 12/9/91)              |                          | Both types, 140 > x <1,800 gal/yr<br>(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 4 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: 188.2 Gallons. Month with highest use was October 2012. 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 checked="" type="checkbox"/> Y | <input type="checkbox"/> N | <input type="checkbox"/> NA            |
| 2. Examining the containers for leakage?  | <input checked="" type="checkbox"/> Y | <input type="checkbox"/> N | <input type="checkbox"/> NA            |
| 3. Closing and securing machine doors except during loading/unloading?  | <input checked="" type="checkbox"/> Y | <input type="checkbox"/> N |  |
| 4. Draining cartridge filters in their housing or in sealed containers for at least 24 hours prior to disposal?                     | <input checked="" type="checkbox"/> Y | <input type="checkbox"/> N | <input 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 checked="" type="checkbox"/> Y | <input type="checkbox"/> N | <input type="checkbox"/> NA |
| 2. Equipped dry-to-dry machines with a closed-loop vapor venting system?   | <input checked="" type="checkbox"/> Y | <input type="checkbox"/> N | <input 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 checked="" type="checkbox"/> Y | <input type="checkbox"/> N | <input type="checkbox"/> NA |
| 4. Measured and recorded the temperature of the outlet exhaust stream of a refrigerated condenser on a weekly basis?                       | <input checked="" type="checkbox"/> Y | <input type="checkbox"/> N | <input type="checkbox"/> NA |
| 5. Repaired or adjusted the equipment within 24 hours if the exhaust temperature of the condenser exceeded 45° F?                          | <input checked="" type="checkbox"/> Y | <input type="checkbox"/> N | <input type="checkbox"/> NA |
| 6. Conducted all temperature monitoring after an appropriate cool down period and after verifying the coolant had been completely charged? | <input checked="" type="checkbox"/> Y | <input type="checkbox"/> N | <input 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?   | <input checked="" type="checkbox"/> Y <input type="checkbox"/> N   |
| 2. Measured and recorded the washer exhaust temperature at the condenser inlet and outlet weekly?<br>Is the temperature differential equal to or greater than 10°F?  | <input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA<br><input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> 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?<br>Is the perc concentration or less than 10 ppm?   | <input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA<br><input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> 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? | <input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA  |
| 5. Equipped transfer machines (dryers, reclaimers, and washers) with individual condenser coils?   | <input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA  |
| 6. Routed airflow to the carbon adsorber (if used) at all times?   | <input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA  |

**PART V: RECORDKEEPING REQUIREMENTS**

**Has the responsible official:**

(Check appropriate boxes)

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

**PART VI: LEAK DETECTION AND REPAIRS**

<b>1. Does the responsible official conduct weekly leak detection and repair inspection?</b>	<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N			
<b>2. Which method of detection does the responsible official use?</b>	<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N			
Visual examination (condensed solvent of exterior surfaces)	<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N			
Physical detection (airflow felt through gaskets)	<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N			
Odor (noticeable perc odor)	<input checked="" type="checkbox"/> Y	<input 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 checked="" type="checkbox"/> Y	<input type="checkbox"/> N			
<b>4. The following area should be checked for leaks by the operator:</b>	<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N			
Hose connections, fitting couplings, and valves	<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N	Muck cookers	<input type="checkbox"/> Y	<input checked="" type="checkbox"/> N
Door gaskets and seating	<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N	Stills	<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N
Filter gaskets and seating	<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N	Exhaust dampers	<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N
Pumps	<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N	Diverter valves	<input type="checkbox"/> Y	<input checked="" type="checkbox"/> N
Solvent tanks and containers	<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N	Cartridge Filter housing	<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N
Water separators	<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N			

Shea Jackson	December 12, 2012
Inspector's Name (Please Print)	Date of Inspection
	Within one year of this inspection
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>	Phu Enterprises
<b>ARMS #:</b>	103 0451

### File review Comments:

- 12/7/12- Permit expired 9/26/12 as discovered by SES.
- 12/7/12- call to facility AR not at site, and clerk could not speak English.
- 12/7/12- Attempt call cell phone , changed number, Sent Email to AR, Cuong Phu email to inform facility in violation operating without permit.
- 12/10/12- phone call to facility no answer.
- 12/11/2012- phone call to facility number no answer. Additional phone call to authorized representative's long distance cell phone number, and it was no longer Mr. Cuong Phu's number.

### Inspection Comments: 12/12/12-

- Performed an inspection of facility and found business to be in operation. (See photos)
- The facility authorized representative, Mr Cuong Phu was not on site.
- I spoke to Facility contact John Phu on site; he called the facility authorized representative, Cuong Phu from his cell phone, and passed the phone to me.
- I informed Mr. Cuong Phu his permit had expired ~ 3 months ago on 9/26/12. He stated he had received the email I sent on 12/7/12, but he did not have the correct permit number for completing the air permit registration. He stated he had tried to call me, but could not get through. His son John Phu brought me a certificate, which was for the waste cleanup for Dry cleaning site. I told him that is different agency, and was not the Air Operations permit.
- During records review in the facility office, we located the GPV registration form, Mr. Cuong Phu had started filling out, but had omitted permit number.
- I gave the permit number to John Phu and he entered the Air Permit number on the hard copy of the registration form. (See photo).
- I reviewed the records for the dry cleaning machines. The leak and temperature checks were up to date 12/7/12.
- The temperature readings average 4EC which is below the 7.2 EC required by operation limitation.
- The most recent purchase order was for October 2012 and 38.6 gallons was divided into the two machines, and brought the totals to 95.6 and 92.6 gallons for the highest 12 month consecutive totals for 2012.
- MCF picked up Hazardous waste 3 – 15 gallon containers on 9/19/12.
- Mr. John Phu performed halogen leak detection, no leaks were observed, and no Perc odors were detected during inspection of Dry Cleaning machines which were both in operation.
- I advised Mr Choung Phu he needed to submit as soon as possible to avoid further penalties. I informed him the facility is in non compliance pending the registration of general permit, as they are operating without permit.

**ADDITIONAL SITE INFORMATION**

<b>Facility Name:</b>	Phu Enterprises
<b>ARMS #:</b>	103 0451

<b>Machine #1:</b>				
Manufacturer	Real Star	Capacity	50	lbs
Model#	Ultra plus	Serial#		Mfg yr 1999
<b>Machine #2:</b>				
Manufacturer	Real Star	Capacity	50	lbs
Model#		Serial#		Mfg yr 1999

**Notification (unpermitted sources only):**

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

**Record keeping :**

- 1. Does facility have statement/specs as to the design accuracy of the temperature sensor?  Y  N  
(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  N
- 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	Fulton	Hp	15
Model #		Serial #	Mfg yr 2009

Fuel Type:    Natural gas?                          Propane?                                  Fuel oil?           

**Comments:**    Boiler installed for 2009 exempt from Permitting

## ENFORCEMENT SUMMARY

<b>Facility Name:</b>	Phu Enterprises
<b>ARMS #:</b>	103 0451

Viol#	Violation Description	Frequency	From	To
per00	Failure to notify and obtain a permit		9/26/12	12/12/12
per01	No purchase records	Monthly		
per02	No perc. purchase rolling totals	Monthly		
per03	No leak log	<input type="checkbox"/> Weekly <input type="checkbox"/> Bi-weekly		
per04	No temp. log	Weekly		
per05	No SSM plan			
per06	Temp. sensor accuracy verification			
per07	No leak checks	<input type="checkbox"/> Weekly <input type="checkbox"/> Bi-weekly		
per08	No temp. checks	Weekly		
per09	Perceptible leaks			
per10	No carbon absorber			
per11	No carbon absorber test	Weekly		
per12	No leak tight containers			
per13	No separator pre-filter			
per14	Leaks not repaired within 24hrs.			
per15	Repair refrig. cond./carbon abs. within 2 days			

Viol#	Comments
Per00	Facility allowed permit to expire 9/26/12.