



# 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 0296	<b>Date:</b> November 3, 2011 <b>Time In:</b> 12:35 PM <b>Time Out:</b> 1:15PM		
<b>Facility Name:</b> <b>Facility Location:</b>	Spartan Enterprises, Inc.		
	32646 U.S. Highway 19 North Palm Harbor, FL, 34684		
<b>Responsible Official:</b>	Keith McNamara	<b>Phone No:</b>	727-784-4050
<b>Emis. Unit Description:</b>	New, Large Perchloroethylene Dry Cleaner. One Dry-to-dry machine, purchased in December 1994, with a refrigerated condenser. 25 HP, natural gas fired boiler is on-site slj		
<b>Permit Number:</b>	1030296-003-AG	<b>Exp. Date:</b>	6/13/2016
<b>Facility Contact:</b>	Keith McNamara	<b>Phone:</b>	727-784-4050
<b>Compliance Status:</b>	<input checked="" type="checkbox"/> IN <input type="checkbox"/> MNC <input 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.**
- |  |                          |   |                                     |
|--|--------------------------|---|-------------------------------------|
| <u>1. Existing small area source</u><br>Dry-to-dry only, x <140 gal/yr         |                          | <u>2. New small area source</u><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)            |                                     |
| <u>3. Existing large area source</u><br>Dry-to-dry only, 140 > x <2,100 gal/yr |                          | <u>4. New large area source</u><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:** 150 Gallons. Month with highest use was March 2011. 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:  |  |
| a. Documentation of leaks repaired w/in 24 hrs? or;  | <input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> 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? | <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?   | <input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA |
| Problem corrected?   | <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 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	November 3, 2011
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>	Spartan Enterprises, Inc.
<b>ARMS #:</b>	103 0296

### Inspection Comments:

- *Inspection of the facility, I met with Mr. Keith McNamara, the responsible official.*
- *Mr. Terry Kincaide, the facility maintenance technician was not in at this time. Mr. Kincaide performs maintenance and leak check observations of the dry to dry and maintains the calendar record. Mr. McNamara stated he would be doing more of the record keeping as Mr. Kincaide is retiring.*
- *I reviewed the records. The Perc totals and leak check observations were up to date 10/28/2011. The Perc usage totals were reviewed from October 2010 through October 2010. The Perc purchase invoices were in binder. I observed the purchase orders from 2011, each for are for 30 gallons. The most recent was 9/2/11. The facility purchase Perc every other month. The highest 12 month total was for March 2011 was for 150 gallons. This facility stated the business had only been down about 4 % for the year. Mr. McNamara stated they are keeping busy.*
- *The Hazardous waste manifests are kept in a binder. The most recent amounts dispose of was 2 drums on 10/6/2011.*
- *The temperature indicated on the records was 7 °C. This is acceptable temperatures below 7.5 °C.*
- *I used of the Halogen detector to check for leaks. The detector emits a low beeping, as I went around the door, button traps, piping, and area previous leaks had been found. The halogen detector did not alarm. (see photos) There were no perc odors detected during observations of the dry to dry operation.*
- *The Hazardous waste containers were in secondary containment. (see Photos)*
- *The facility collects the separator water and puts into the Galaxy mister evaporator.*
- *I gave Mr. McNamara the two P2 information brochures for Dry Cleaning industry.*
- *The facility was in compliance at the time of this inspection.*

**ADDITIONAL SITE INFORMATION**

<b>Facility Name:</b>	Spartan Enterprises, Inc.
<b>ARMS #:</b>	103 0296

<b>Machine #1:</b>			
Manufacturer	Union	Capacity	lbs
Model#		Serial#	Mfg yr
<b>Machine #2:</b>			
Manufacturer		Capacity	lbs
Model#		Serial#	Mfg yr

**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	Hurst	Hp	25
Model #	4VTD25\50	Serial #	VGI-150-1233
		Mfg yr	2002

Fuel Type:    Natural gas?                          Propane?                        Fuel oil?           

**Comments:**    Boiler is exempt from permitting

