



# 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 0336	<b>Date:</b> 8/4/2011 <b>Time In:</b> 1:55pm <b>Time Out:</b> 2:30pm
<b>Facility Name:</b>	Bayou Cleaners
<b>Facility Location:</b>	1073 South Pinellas Avenue Tarpon Springs, FL, 34689
<b>Responsible Official:</b>	Soo Hwan Kim <b>Phone No:</b> 727-942-1734
<b>Emis. Unit Description:</b>	Existing, Small Perchloroethylene Dry Cleaner: One Dry-to-dry machine( Spencer, Sprint 200 - 1991). An electric water heater is used
<b>Permit Number:</b>	1030336-004-AG <b>Exp. Date:</b> 5/19/2016
<b>Facility Contact:</b>	Soo Hwan Kim <b>Phone:</b> 727-942-1734
<b>Compliance Status:</b>	<input checked="" type="checkbox"/> IN <input type="checkbox"/> MNC <input type="checkbox"/> SNC

<b>PART I: NOTIFICATION</b> (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"/>

<b>PART II: CLASSIFICATION</b>	
<b>Facility indicated on notification form that it is:</b>	
<input type="checkbox"/> No Notification Form	<input type="checkbox"/> Drop-Off Store
<input type="checkbox"/> Out of business	<input type="checkbox"/> Petroleum Solvent Only
<b>A.</b>	
<b>1. Existing small area source</b> Dry-to-dry only, x <140 gal/yr Transfer only, x <200 gal/yr <input checked="" type="checkbox"/> Both types, x <140 gal/yr (Constructed before 12/9/91)	<b>2. New small area source</b> 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)
<b>3. Existing large area source</b> 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)	<b>4. New large area source</b> 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)
<b>This is a correct facility classification</b> <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> Can not determine	
<b>If no, please check the appropriate classification:</b>	
<input checked="" type="checkbox"/> Facility qualified for a general permit as number <u>1</u> above.	
<input type="checkbox"/> Facility exceeds above limits and is not eligible for a general permit	
<b>B. Highest 12-month consecutive total of perchloroethylene purchased in the preceding 12-month period:</b> <u>24.6</u> Gallons. Month with highest use was <u>Jan 2011</u> . Did facility exceed limits <input type="checkbox"/> Y <input checked="" type="checkbox"/> 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 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
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 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 condenser 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
2. Maintained rolling monthly averages of perc consumption?  Y  N
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
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 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 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	August 4, 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>	Bayou Cleaners
<b>ARMS #:</b>	103 0336

### Inspection Comments:

- *During the inspection of the facility, I met with Mr. Soo Hwan Kim, the responsible official and owner of the dry to dry operations.*
- *I observed the calendar monthly records for the 2010 and 2011 year in folder with purchase orders and hazardous waste invoices back to 2007.*
- *Mr. Kim had records the perchloroethylene usage totals and bi weekly leak detection observations. The monitoring and recording of the checks continue to be made on a bi weekly base as required for existing small facilities. The records for leak checks were up to date as of 8/1/2011. The weekly temperatures recorded ranged between of 42- 45F.*
- *The 12 month consecutive total for January 2011 was 24.6 gallons; the current monthly total was 19.3 gallons. Mr. Kim stated they dry clean ~2-3 times a week, and continues to use detergent and water for laundry.*
- *The facility most recent purchase 15 gallons of perc on 1 /11 /2011.*
- *The facility uses a Nova Systems Bolo Halogen detector that is capable of readings up to 25 PPM readings. (See Photo)*
- *I observed the Spencer Sprint 200 machine. The equipment appears to be clean and not much usage. The dryer and associated equipment was not in operation at this time. The dryer equipment and containers are well maintained and door closed.*
- *There were no perchloroethylene odors detected during the inspection of the facility.*
- *The perchloroethylene hazardous waste and containers were closed and located in the secondary containment area.*
- *The most recent Hazardous waste invoice was dated as 1/7/2010 for disposal.*
- *The boiler is a small electric unit, exempt from permitting.*
- *I gave Mr. Kim the inspection summary, and he signed the annual certification form.*
- *The facility is in compliance at this time.*

**ADDITIONAL SITE INFORMATION**

<b>Facility Name:</b>	Bayou Cleaners
<b>ARMS #:</b>	103 0336

<b>Machine #1:</b>			
Manufacturer	Spencer	Capacity	lbs
Model#	Sprint 200	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	Pacific Steam	Hp	
Model #		Serial #	Mfg yr 1993

Fuel Type:    Natural gas?                          Propane?                        Fuel oil?           

**Comments:**    Facility uses and electric water heater Exempt emission unit

# Bayou Cleaners

1073 South Pinellas Avenue, Tarpon Springs



**Project Id:** 75834      **Permit No:** 1030336-004-AG      **Arms Number:** 0336

**Inspector:** Shea Jackson      **Inspection Date / Time:** 8/4/2011 / \_\_\_\_\_

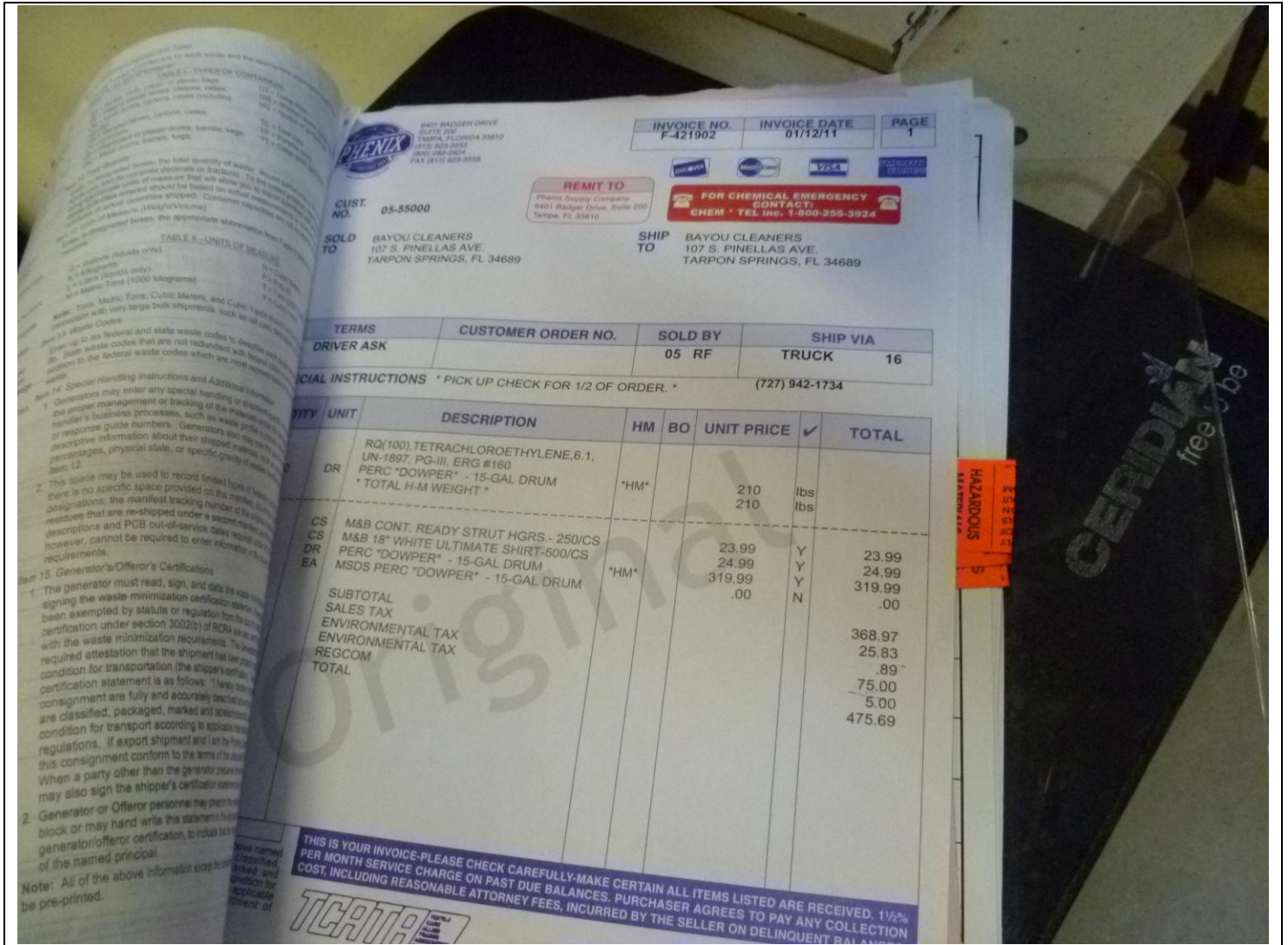
**Source (EU):** Existing, Small Perchloroethylene Dry Cleaner: One Dry-to-dry machine(  
Spencer, Sprint 200 - 1991). An electric water heater is used

**Description:** [The facility Halogen detector did not detect any leaks. The dry to dry was not in operation at this time]



# Bayou Cleaners

1073 South Pinellas Avenue, Tarpon Springs



**Project Id:** 75834    **Permit No:** 1030336-004-AG    **Arms Number:** 0336

**Inspector:** Shea Jackson    **Inspection Date / Time:** 8/4/2011 / \_\_\_\_\_

**Source (EU):** Existing, Small Perchloroethylene Dry Cleaner: One Dry-to-dry machine( Spencer, Sprint 200 - 1991). An electric water heater is used

**Description:** [The facility purchase of Perc is typically once a year. The last PO was for 1/12/11]

# Bayou Cleaners

1073 South Pinellas Avenue, Tarpon Springs

INSPECTED	LEAKING?				DATE		DATE PARTS		DATE PARTS	
							ORDERED		RECEIVED	
HOSES	N	Y	N	Y	N	Y	N	Y	N	Y
DOORS	N	Y	N	Y	N	Y	N	Y	N	Y
PUMP	N	Y	N	Y	N	Y	N	Y	N	Y
SOLVENT TANKS	N	Y	N	Y	N	Y	N	Y	N	Y
WATER SEPARATOR	N	Y	N	Y	N	Y	N	Y	N	Y
STILL/MUCK COOKER	N	Y	N	Y	N	Y	N	Y	N	Y
HALOGEN LEAK DETECTOR	N	Y	N	Y	N	Y	N	Y	N	Y
DIVERTER VALVE/EXHAUST DAMP	N	Y	N	Y	N	Y	N	Y	N	Y
GASKET/DOOR LINT/BUTTON TRAP	N	Y	N	Y	N	Y	N	Y	N	Y
CARTRIDGE FILTER/SPIN DISC	N	Y	N	Y	N	Y	N	Y	N	Y
WASTE CONTAINERS	N	Y	N	Y	N	Y	N	Y	N	Y

		12 Month Running Total	19.6	
		Subtract PERC purchased JANUARY 2010	-	0
		SUBTOTAL		
Purchase Date of Perc.	Purchase Amount in gal. JANUARY 2011	12 Month Running Total		
1/12	+	15.	24.6	
	+			

PERC. FROM PHENIX.  
Has Drum is 15 GAL 4

**Project Id:** 75834      **Permit No:** 1030336-004-AG      **Arms Number:** 0336

**Inspector:** Shea Jackson      **Inspection Date / Time:** 8/4/2011 / \_\_\_\_\_

**Source (EU):** Existing, Small Perchloroethylene Dry Cleaner: One Dry-to-dry machine( Spencer, Sprint 200 - 1991). An electric water heater is used

**Description:** [The facility records show very low Perc usage. The highest 12 month totals for the year ws 24.6 gallons]