PERCHLOROETHYLENE DRY CLEANERS

COMPLIANCE INSPECTION CHECKLIST

Environmental Compliance

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

AIRS ID#: 103 0336	**Date: August 17, 2010 Time In: 11:00AM Time Out: 11:30AM**		
Facility Name:	Bayou Cleaners		
Facility Location:	1073 South Pinellas Avenue		
	Tarpon Springs, FL, 34689		
Responsible Official:	Soo Hwan Kim	**Phone No:**	727-942-1734
Emis. Unit Description:	Existing, Small Perchloroethylene Dry Cleaner: One Dry-to-dry machine(1991). An electric water heater is used		
Permit Number:	1030336-003-AG	**Exp. Date:**	6/7/2011
Facility Contact:	Soo Hwan Kim	**Phone:**	727-942-1734
Compliance Status:	☒ **IN** ☐ **MNC** ☐ **SNC**		

PART I: NOTIFICATION (Check appropriate box)

1. **Existing** facility notified DARM by 9/1/96 ☒
2. **New** facility notified DARM 30 days prior to startup ☐
3. 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.

1. **Existing small** area source
Dry-to-dry only, **x <140** gal/yr
Transfer only, x <200 gal/yr ☒
Both types, x <140 gal/yr
(Constructed **before 12/9/91**)

2. **New small** area source
Dry-to-dry only, **x <140** gal/yr
Transfer only, x <200 gal/yr ☐
Both types, x <140 gal/yr
(Constructed on or **after 12/9/91**)

3. **Existing large** area source
Dry-to-dry only, **140> x <2,100** gal/yr
Transfer only, 200> x <1,800 gal/yr ☐
Both types, 140> x <1,800 gal/yr
(Constructed **before 12/9/91**)

4. **New large** area source
Dry-to-dry only, **140> x <2,100** gal/yr
Transfer only, 200> x <1,800 gal/yr ☐
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 **1** 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: 56.7 Gallons. Month with highest use was Jan 2010 . 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?	☒ Y	☐ N	☐ NA
2. Examining the containers for leakage?	☒ Y	☐ N	☐ NA
3. Closing and securing machine doors except during loading/unloading?	☒ Y	☐ N	
4. Draining cartridge filters in their housing or in sealed containers for at least 24 hours prior to disposal?	☒ Y	☐ N	☐ NA
5. Maintaining solvent-to-carbon ratios and steam pressure for carbon adsorber beds according to the manufacturer's specifications?	☐ Y	☐ N	☒ 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?	☐ Y	☐ N	☒ NA
2. Equipped dry-to-dry machines with a closed-loop vapor venting system?	☐ Y	☐ N	☒ NA
3. Equipped the condenser with a diverter valve so airflow will be directed away from the condenser upon opening the door?	☐ Y	☐ N	☒ NA
4. Measured and recorded the temperature of the outlet exhaust stream of a refrigerated condenser on a weekly basis?	☐ Y	☐ N	☒ NA
5. Repaired or adjusted the equipment within 24 hours if the exhaust temperature of the condenser exceeded 45^0 F?	☐ Y	☐ N	☒ NA
6. Conducted all temperature monitoring after an appropriate cool down period and after verifying the coolant had been completely charged?	☐ Y	☐ N	☒ 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 tem[illegible]re at the condenser inlet and outlet weekly?	☐Y	☐N	☐NA
Is the temperature differential equal to o[illegible]° F?	☐Y	☐N	☐NA
3. Measured and recorded th[illegible] concentration [illegible] weekly at the end of the final drying cycle while the [illegible]e is venting [illegible]rber, [illegible] machines are equipped with a carbon ad[illegible]er?	☐Y	☐N	☐NA
Is the pe[illegible]n e[illegible] or less tha[illegible] ppm?	☐Y	☐N	☐NA
4. Assured that the s[illegible] po[illegible]on adsorber exhaust for measuring perc. concentrations is at [illegible]duct dia[illegible]ers downstream of any bend, contraction, or expansion; is at least [illegible]iameters upstream from any bend contraction, or expansion; and downstream from r[illegible]er 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?	☐Y	☐N	☒NA
	Problem corrected?	☐Y	☐N	☒NA
8.	Maintained compliance plan, if applicable?	☐Y	☐N	☒NA

PART VI: LEAK DETECTION AND REPAIRS

1.	**Does the responsible official conduct weekly leak detection and repair inspection?**	☒Y	☐N
2.	**Which method of detection does the responsible official use?**	☒Y	☐N
	Visual examination (condensed solvent of exterior surfaces)	☒Y	☐N
	Physical detection (airflow felt through gaskets)	☒Y	☐N
	Odor (noticeable perc odor)	☒Y	☐N
	Use of direct-reading instrumentation (FID/PID/calorimetric tubes)	☐Y	☒N
	If using direct-reading instrumentation, is the equipment:	☐Y	☐N
	a. Capable of detecting perc vapor concentrations in a range of 0-500 ppm	☐Y	☐N
	b. Calibrated against a standard gas prior to and after each use (PID/FID only).	☐Y	☐N
	c. Inspected for leaks and obvious signs of wear on a weekly basis?	☐Y	☐N
	d. Kept in a clean and secure area when not in use.	☐Y	☐N
	e. Verified for accuracy by use of duplicate samples (calorimetric only)?	☐Y	☐N
3.	**Has the facility maintained a leak log?**	☒Y	☐N
4.	**The following area should be checked for leaks by the operator:**	☒Y	☐N

Hose connections, fitting couplings, and valves	☒Y	☐N	Muck cookers	☐Y ☒N
Door gaskets and seating	☒Y	☐N	Stills	☐Y ☐N
Filter gaskets and seating	☒Y	☐N	Exhaust dampers	☒Y ☐N
Pumps	☒Y	☐N	Diverter valves	☐Y ☒N
Solvent tanks and containers	☒Y	☐N	Cartridge Filter housing	☒Y ☐N
Water separators	☒Y	☐N		

Shea Jackson	August 17, 2010
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

Facility Name:	Bayou Cleaners
ARMS #:	103 0336

Inspection Comments:

- *During the inspection of the facility, I met with Ms. Soo Hwan Kim, the responsible official and owner of the dry to dry operations.*
- *I observed the calendar monthly records for the 2009 and 2010 year in folder with purchase orders and hazardous waste invoices back to 2007.*
- *Ms. Kim had recorded 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 8/13/2010. The weekly temperatures recorded ranged between of 42– 45F.*
- *The 12 month consecutive total for January 2010 was 57.9 gallons; the current monthly total was 19.6 gallons. Ms. Kim stated the dry to dry equipment was being repaired for an electrical problem and they were only dry cleaning ~2 times a week. She stated they still do not use the dry to dry machine, that often, and typically use detergent for laundry.*
- *The facility most recent purchase 19.3 gallons of perc on 1 /7 /2008.*
- *The facility uses a Nova Systems Bolo Halogen detector that is capable of readings up to 25 PPM readings.*
- *I observed the Spencer Sprint 200 machine. The equipment appears to have, infrequent usage. The dryer and associated equipment was not in operation at this time. The dryer equipment and containers appear well maintained and 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 Ms. Kim the inspection summary, and a copy of the P2R2 information booklet, and she signed the annual certification form.*
- *The facility is in compliance at this time.*

ADDITIONAL SITE INFORMATION

Facility Name:	Bayou Cleaners
ARMS #:	103 0336

Machine #1:				
Manufacturer	Spencer	Capacity	lbs	
Model#	Sprint 200	Serial#	Mfg yr	
Machine #2:				
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 45^0F w/accuracy +/– 2^0F, or 7.2EC w/accuracy of +/– 1.1^0C)

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