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 0352	**Date: October 27, 2011**	**Time In: 1:15PM**	**Time Out: 1:45PM**
Facility Name:	Coastal Cleaners, Inc.		
Facility Location:	2166 Main Street		
	Dunedin, FL, 34698		
Responsible Official:	Dea Jin Lim	**Phone No:**	727-734-7983
Emis. Unit Description:	New, Small Perchloroethylene Dry Cleaner: One Union Air Model L84002000 (8/1/05), Dry-to-dry machine with Refrigerated Condenser. A 15 hp natural gas fired boiler is on-site.		
Permit Number:	1030352-004-AG	**Exp. Date:**	11/24/2015
Facility Contact:	Dea Jin Lim	**Phone:**	727-734-7983
Compliance Status:	☒ **IN** ☐ **MNC** ☐ **SNC** **Permanent Shutdown**		

PART I: NOTIFICATION (Check appropriate box) **CLOSE AG PERMIT FILE**

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 **10/19/2011 Discontinued Perc usage**

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 **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: 83.9 Gallons. Month with highest use was September 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?	☐ Y	☐ N	☒ NA
2. Examining the containers for leakage?	☐ Y	☐ N	☒ NA
3. Closing and securing machine doors except during loading/unloading?	☐ Y	☐ N	☒ NA
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 temp[illegible]re at the condenser inlet and outlet weekly?	☐Y	☐N	☐NA
Is the temperature differential equal to o[illegible]e[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 27,2011
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

Facility Name:	Coastal Cleaners, Inc.
ARMS #:	103 0352

Inspection Comments:

- Inspection of the facility was performed to determine the status of the facility change from use of Perchloroethylene to Ecosolve, Aliphatic Hydrocarbon solvent.
- I met with the responsible official and facility contact Mr. Dea Lim. He had completed the Union Air dry to dry machine and Perchloroethylene removal from his facility.
- I observed the hazardous waste invoices for the Perc disposal. The records had been maintained into October 2011, until the removal of the Union Air L8400.
- His new machine is a Union Nova 40SS and does not use Perc. I observe the machine was installed and uses ecosolve for cleaning. (See Photos)
- Mr. Dea Lim will send a rescind permit letter in to the A.Q. Department to complete the closure of the Air General Permit file.

ADDITIONAL SITE INFORMATION

Facility Name:	Coastal Cleaners, Inc.
ARMS #:	103 0352

Machine #1:			
Manufacturer	Union Air L84002000	Capacity	lbs
Model#	**Removed from facility**	Serial#	Mfg yr
Machine #2:			
Manufacturer	Union Nova 40SS	Capacity	lbs
Model#	**New Hydrocarbon machine**	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? (Temperature of 45^0F w/accuracy +/– 2^0F, or 7.2EC w/accuracy of +/– 1.1^0C)	☐Y	☒N

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	☒NA

Boiler:

Manufacturer	Fulton			Hp 15	
Model #	FB -015A	Serial #	104510	Mfg yr	2007

Fuel Type: Natural gas? ☒ Propane? ☐ Fuel oil? ☐

Comments: Exempt boiler

Coastal Cleaners, Inc.

2166 Main Street, Dunedin

Project Id: 80691 **Permit No:** 1030352-004-AG **Arms Number:** 0352

Inspector: Shea Jackson **Inspection Date / Time:** 10/27/2011

Source (EU): New, Small Perchloroethylene Dry Cleaner: One Union Air Model L84002000 (8/1/05), Dry-to-dry machine with Refrigerated Condenser. A 15 hp natural gas fired boiler is on-site.

Description: [This new Hydrocarbon machine Union model Nova 40SS replaced the Perc Union Air Model L84002000 dry to dry machine]

Coastal Cleaners, Inc.

2166 Main Street, Dunedin

Project Id: 80691 **Permit No:** 1030352-004-AG **Arms Number:** 0352

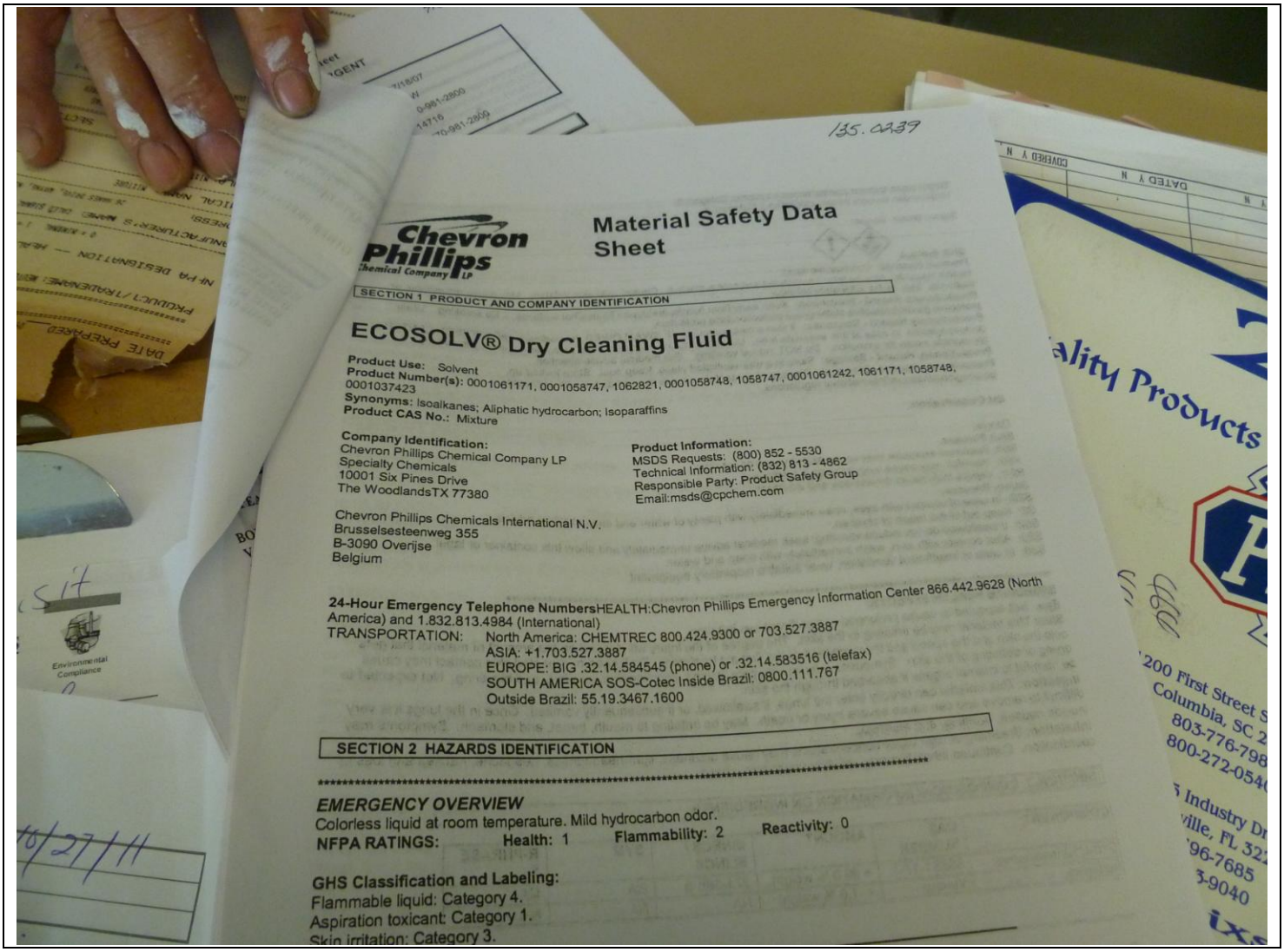
Inspector: Shea Jackson **Inspection Date / Time:** 10/27/2011

Source (EU): New, Small Perchloroethylene Dry Cleaner: One Union Air Model L84002000 (8/1/05), Dry-to-dry machine with Refrigerated Condenser. A 15 hp natural gas fired boiler is on-site.

Description: [The new machine was hooked up to use Hydro carbon and not Perc.]

Coastal Cleaners, Inc.

2166 Main Street, Dunedin



Project Id: 80691 **Permit No:** 1030352-004-AG **Arms Number:** 0352

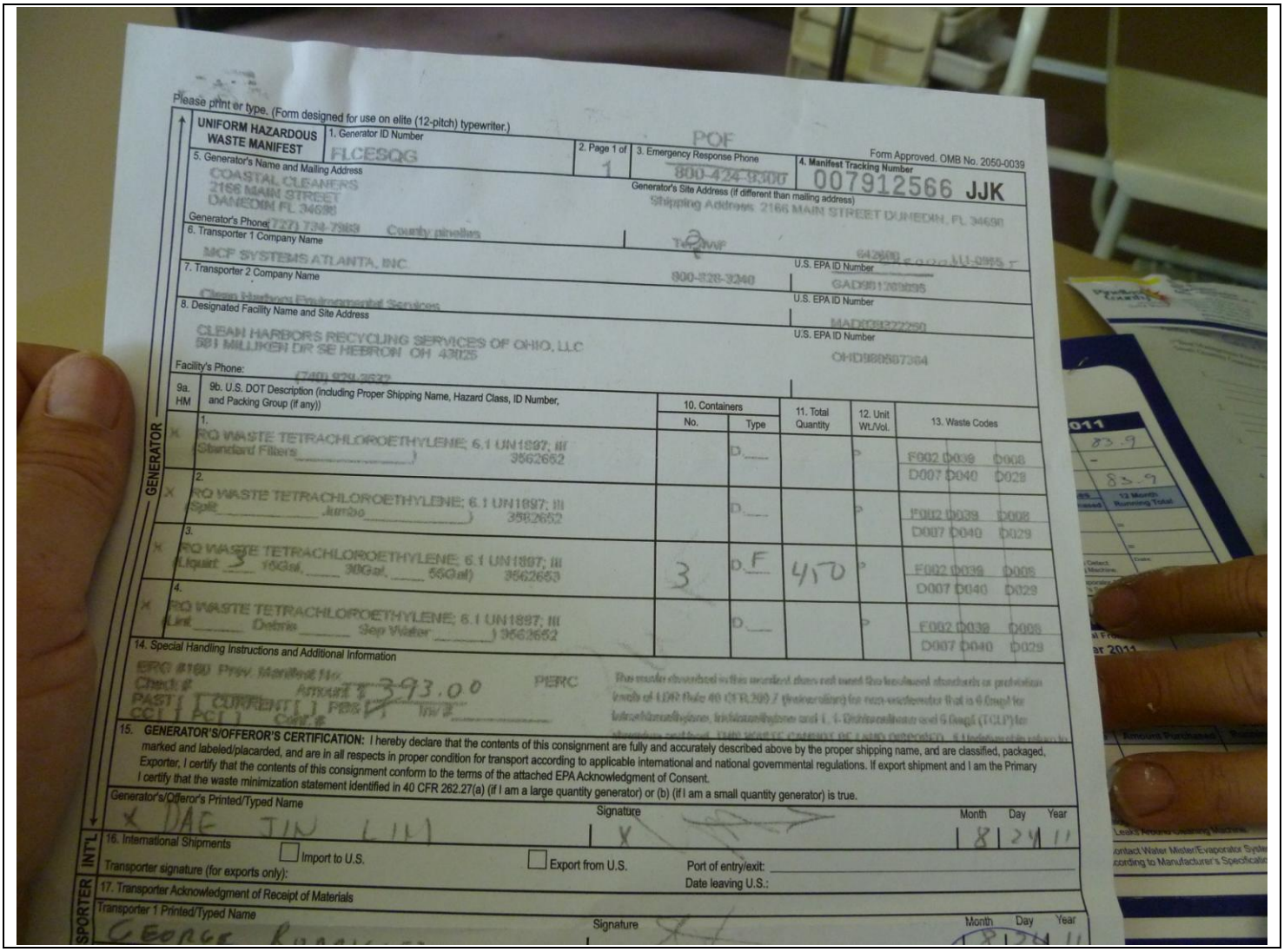
Inspector: Shea Jackson **Inspection Date / Time:** 10/27/2011

Source (EU): **Removal of** New New, Small Perchloroethylene Dry Cleaner: One Union Air Model L84002000 (8/1/05), Dry-to-dry machine with Refrigerated Condenser. A 15 hp natural gas fired boiler is on-site.

Description: [The new machine is using Ecosolve, alphatic hydrocarbon instead of Perc]

Coastal Cleaners, Inc.

2166 Main Street, Dunedin



Project Id: 80691 **Permit No:** 1030352-004-AG **Arms Number:** 0352

Inspector: Shea Jackson **Inspection Date / Time:** 10/27/2011

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Description: [Removal of perchloroethylene and waste in preparation of the Perc machine removal had been completed]