Parts I, II & II(a) - WEEKLY Leak Inspection and Self-monitoring Checklists for Perc Dry Cleaning Equipment



Once each week, assess the status of the applicable dry cleaning system components specified in Parts I, II and II(a). Complete checklist Parts I and II for every perc dry cleaning machine and associated ancillary equipment in the facility. Complete Part II(a) only for dry cleaning machines with external door fans. Completed forms must be kept on-site for at least five (5) years.

DEC ID fo	r Dry Cleanin	g Facility: 🔲 🗕 []
Facility Name:				
Facility type (check one):	□ Stand-alone	□ Mixed-use o	commercial	□ Mixed-use residential
Machine Manufacto	urer and Mod	el Number:		
Machine Serial Nur	mber:			
Machine Type:		n external door fan n external door fan	□ 4th ger	n. without external door fan
Capacity (lbs.)		Year Mfg	Date Instal	led/
Trained Operator N	lame(s):			

Part I - Weekly Leak Inspection Checklist:

All hose and pipe connections, fittings, couplings and valves; door gaskets and seatings; plumps; solvent (including spent solvent) tanks and containers; water separators; stills; and all filter housings of each dry cleaning system must be inspected weekly for perceptible liquid and vapor leaks and for proper operation while the system is operating. Machines must be inspected for vapor leaks using a halogenated-hydrocarbon detector or other approved instrument. Any perceptible leak, or malfunction, that has been detected by the operator must be noted below in Part I and repaired immediately, if possible. If the leak cannot be repaired at the time of detection, the leaking component must be physically marked or tagged in a manner that is readily observable and repaired within 24 hours of detection, unless repair parts are unavailable. Should repair parts be unavailable, repair must be completed by the end of the 15th working day unless a leak-repair extension is granted by the department. Any detected leak or malfunction (answer of "Yes" below) requires completion of the Corrective Action Log (Part VIII, Form 232-8P).

Date:	Inspected by (Initials):	Any perceptible liquid or vapor leaks from the machine components?
//		Yes No
		Yes No
/		Yes No
//		Yes No
		Yes No
		Yes No
	_	Yes No

Date:	Inspected by (Initials):	Any perceptible liquid or vapor leaks from the machine components?
		Yes No
/		Yes No
		Yes No
		Yes No
		Yes No
/		Yes No
/		Yes No
		Yes No
		Yes No
		Yes No

Parts I, II & II(a) - WEEKLY Leak Inspection and Self-monitoring Checklists for Perc Dry Cleaning Equipment



Part II - Weekly Self-monitoring Checklist for Refrigerated Condensers:

Refrigerated condensers on perc dry cleaning machines must be inspected once each week to ensure proper operation. Record on this checklist either the high and low pressure readings during the middle of the drying cycle's heated phase OR the final cool-down temperature. Any measured pressure reading outside the range specified by the manufacturer OR measured final cool-down temperature greater than 45°F (answer of "Yes" below) requires completion of the Corrective Action Log (Part VIII, Form 232-8P).

, .	·			es during the middle le's heated phase		_	
			Manufacturer's specified High Pressure range (bar):	Manufacturer's specified Low Pressure range (bar):	OPTIONAL INSPECTION METHOD:	Any pre readings the range by t manufa	outside specified he cturer?
Date:	Inspected by (Initials):	Refrigerant:	High Pressure Reading (bar):	Low Pressure Reading (bar):	Final cool-down temperature (fahrenheit):	Is the fin down tem greater tha	al cool- perature
//						Yes	No
//						Yes	No
//						Yes	No
						Yes	No
//						Yes	No
//						Yes	No
//						Yes	No
//						Yes	No
//						Yes	No
//						Yes	No
//						Yes	No
//						Yes	No
//						Yes	No
//						Yes	No
//						Yes	No
//						Yes	No
//						Yes	No
//						Yes	No
//						Yes	No
//						Yes	No
//						Yes	No
						Yes	No
						Yes	No
						Yes	No
						Yes	No
						Yes	No
						Yes	No

Parts I, II & II(a) - WEEKLY Leak Inspection and Self-monitoring Checklists for Perc Dry Cleaning Equipment



Part II(a) - Weekly Self-monitoring Checklist for External Door Fans:

All perc dry cleaning machines with an external door fan must be tested weekly to measure the velocity of the air passing through the loading door and the perc concentration exiting from the carbon adsorber prior to venting outside the building. Carbon adsorber vents must be tested using a colorimetric detector tube sampling pump, photo-ionization detector, or halogenated-hydrocarbon detector (beeper) at the completion of the drying cycle and upon machine door opening. Colorimetric tube sampling must be conducted with tubes that have not reached their expiration date (typically about one year from date of purchase) and tube purchase receipts must be retained on-site for 5 years. The measured maximum perc concentration must not exceed 20 ppm or cause beeper alarm. A minimum inward air velocity of 100 feet per minute (fpm) must be maintained through the loading door opening. Any measured air velocity less than 100 fpm, measured maximum perc concentration greater than 20 ppm, or beeper alarm (answer of "Yes" below) requires completion of the Corrective Action Log (Part VIII, Form 232-8P).

Det	Tested by	Measured air velocity	Measured air velocity less	Measured maximum perc concentration	Measured maximum perc concentration greater than
Date:	(initials)	(fpm):	than 100 fpm? Yes No	ppm, "n/a" for beeper	20 ppm or beeper alarm? Yes No
//					
/			Yes No		Yes No
//			Yes No		Yes No
			Yes No		Yes No
//			Yes No		Yes No
/			Yes No		Yes No
			Yes No		Yes No
			Yes No		Yes No
//			Yes No		Yes No
//			Yes No		Yes No
//			Yes No		Yes No
//			Yes No		Yes No
//			Yes No		Yes No
//			Yes No		Yes No
//			Yes No		Yes No
			Yes No		Yes No
			Yes No		Yes No
1 1			Yes No		Yes No
1 1			Yes No		Yes No
/ /			Yes No		Yes No
/ /			Yes No		Yes No
/ /			Yes No		Yes No
/ /			Yes No		Yes No
/ /			Yes No		Yes No
/ /			Yes No		Yes No
/ /			Yes No		Yes No
			Yes No		Yes No

Part III - WEEKLY Preparedness and Prevention Checklist for Perc Dry Cleaning Equipment



All perc dry cleaning facilities must comply with the following requirements and have the specified equipment, listed below, on-site. Complete this Part III checklist once each week for each perc dry cleaning machine and associated ancillary equipment. Any answer of "No" below requires completion of the Corrective Action Log (Part VIII, Form 232-8P).

Machine Manufacturer and Model Number:	
Machine Serial Number:	

Date:	Inspected by (Initials):	Is adequate spill control equipment available?	Are vapor-proof containers available for storing spill-contaminated material?	Is fire control equipment available?	Is there sufficient aisle space around dry cleaning equipment?	Is there a reasonable supply of commonly replaced spare parts?	Are all parts of dry cleaning system kept closed except when access is required?
/		Yes No	Yes No	Yes No	Yes No	Yes No	Yes No
		Yes No	Yes No	Yes No	Yes No	Yes No	Yes No
		Yes No	Yes No	Yes No	Yes No	Yes No	Yes No
		Yes No	Yes No	Yes No	Yes No	Yes No	Yes No
		Yes No	Yes No	Yes No	Yes No	Yes No	Yes No
		Yes No	Yes No	Yes No	Yes No	Yes No	Yes No
		Yes No	Yes No	Yes No	Yes No	Yes No	Yes No
//		Yes No	Yes No	Yes No	Yes No	Yes No	Yes No
//		Yes No	Yes No	Yes No	Yes No	Yes No	Yes No
//		Yes No	Yes No	Yes No	Yes No	Yes No	Yes No
//		Yes No	Yes No	Yes No	Yes No	Yes No	Yes No
//		Yes No	Yes No	Yes No	Yes No	Yes No	Yes No
//		Yes No	Yes No	Yes No	Yes No	Yes No	Yes No
//		Yes No	Yes No	Yes No	Yes No	Yes No	Yes No
//		Yes No	Yes No	Yes No	Yes No	Yes No	Yes No
//		Yes No	Yes No	Yes No	Yes No	Yes No	Yes No
//		Yes No	Yes No	Yes No	Yes No	Yes No	Yes No
//		Yes No	Yes No	Yes No	Yes No	Yes No	Yes No
		Yes No	Yes No	Yes No	Yes No	Yes No	Yes No
/		Yes No	Yes No	Yes No	Yes No	Yes No	Yes No
		Yes No	Yes No	Yes No	Yes No	Yes No	Yes No
		Yes No	Yes No	Yes No	Yes No	Yes No	Yes No
		Yes No	Yes No	Yes No	Yes No	Yes No	Yes No
		Yes No	Yes No	Yes No	Yes No	Yes No	Yes No
		Yes No	Yes No	Yes No	Yes No	Yes No	Yes No
		Yes No	Yes No	Yes No	Yes No	Yes No	Yes No
		Yes No	Yes No	Yes No	Yes No	Yes No	Yes No

Part IV – WEEKLY Maintenance Log for the Integral Carbon Adsorber on Perc Dry Cleaning Machines

Machine Manufacturer and Model Number:



Trained operators must strip or desorb (regenerate) the integral carbon adsorber on every fourth generation dry cleaning machine at least weekly and in accordance with manufacturer's instructions. The date of regeneration, and the number of loads between carbon regenerations, must be recorded on the log below. Separate logs must be maintained for every perc dry cleaning machine. Information reported on this form is not required on the Corrective Action Log (Part VIII, Form 232-8P).

IVIACITII C IVI	andiacturer and model main	oci.		
	erial Number:			
Date of Carbon Regeneration:	Number of loads between Carbon regenerations:		Date of Carbon Regeneration:	Number of loads between Carbon regenerations:
//				
/				
/			//	
//			//	
//			//	
//			//	
/				
/			//	
/				
/			//	
/			//	
//			//	
/			//	
/			//	
/			//	
//			//	
//			//	
//			//	
/			//	
/			//	
/			//	
//			//	
//			//	
			//	
//				
		$\rightarrow \uparrow$		

Part V – MONTHLY Owner Drum Testing Checklist for Perc Dry Cleaning Machines



Owner drum testing must be conducted at least once each month for all fourth generation machines not equipped with an external door fan at co-located residential and commercial non-major facilities. Testing is not required at any non-major stand-alone facility. Testing must be conducted with a colorimetric detector tube sampling pump, or photoionization detector, at the immediate completion of the drying cycle (when the machine drum stops rotating) and prior to the activation of any fugitive emissions control system. Colorimetric tube sampling must be conducted with tubes that have not reached their expiration date (typically about one year from date of purchase) and tube purchase receipts must be retained on-site for 5 years. Any fugitive emissions control system, normally activated upon door opening, must be deactivated prior to this test. Machines must be filled to at least 80 percent of capacity during testing. Any measured drum concentration from a machine at a non-major facility that was installed on or after 5/15/1997 must not exceed 300 ppm. Measured drum concentrations from older machines at non-major facilities must not exceed 500 ppm. Major facilities have weekly testing requirements and different drum standard applicability dates although there are presently no major perc dry cleaning facilities in New York State. Any drum measurement in excess of the 300 or 500 ppm applicable standard (answer of "Yes" below) requires completion of the Corrective Action Log (Part VIII, Form 232-8P).

Machine Manufacturer and Model Number:	
Machine Serial Number:	

	Tested		Applicable drum		Measure	ed drum
	by	Drum test	concentration	Measured drum	concentrati	on greater
Date:	(initials):	load (lbs):	standard (ppm):	concentration (ppm):	than sta	ndard?
					Yes	No
					Yes	No
					Yes	No
/					Yes	No
//					Yes	No
//					Yes	No
//					Yes	No
					Yes	No
//					Yes	No
//					Yes	No
/					Yes	No
//					Yes	No
/					Yes	No
/					Yes	No
/					Yes	No
/					Yes	No
/					Yes	No
					Yes	No
					Yes	No
					Yes	No
					Yes	No
					Yes	No
					Yes	No

Part VI – OCCASIONAL Maintenance Log for Perc Dry Cleaning Equipment



Trained operators must maintain the following log and record the date of equipment maintenance for the listed air cleaning components and exhaust systems of each perc dry cleaning machine and ancillary equipment. Record the Date of completion for the activity code(s), circle all Activity Code(s) completed on the specified date and describe any required supplemental information in parentheses under Notes. Information reported on this form is not required on the Corrective Action Log (Part VIII, Form 232-8P).

	Machine Manufacturer and Model Number:
	Machine Serial Number:
<u>Code</u>	Description of Activity and required supplemental information (under Notes)
Α	REPLACEMENT of carbon in carbon adsorber (specify dry weight (lbs) of carbon);
В	MAINTENANCE of drying sensors as recommended by manufacturer;
С	REPLACEMENT of carbon cartridges in Wastewater Treatment Unit;
D	REPLACEMENT of button trap filter, lint filter(s) and/or any carbon adsorber pre-filter (specify filter(s));
E	REPAIR or REPLACEMENT of exhaust fan (specify the exhaust fan);
F	REMOVED and CLEANED refrigerated condenser coils;
G	ADDED refrigerant gas to refrigerated condenser.

Date:	Activity Codes:	Notes:
//	ABCDEFG	
//	ABCDEFG	
	ABCDEFG	
//	ABCDEFG	
/	ABCDEFG	
//	ABCDEFG	
//	ABCDEFG	
	ABCDEFG	
	ABCDEFG	
	ABCDEFG	
/	ABCDEFG	
//	ABCDEFG	
//	ABCDEFG	
//	ABCDEFG	
/	ABCDEFG	
	ABCDEFG	
	ABCDEFG	
	ABCDEFG	
//	ABCDEFG	
//	ABCDEFG	
	ABCDEFG	

Part VII - SIX MONTH Operation & Maintenance Checklist for Perc Dry Cleaning Equipment



Complete the following checklist once every six months for each perc dry cleaning machine and associated ancillary equipment in the facility. Any answer of "No" below requires completion of the Corrective Action Log (Part VIII, Form 232-8P).

Machine Manufacturer and Model Number:		
Machine Serial Number:		
Trained Operator's Initials: Date:		
Operation & Maintenance: General;		
Are all hose and pipe connections, fittings, couplings and valves; door gaskets and seatings; filter gaskets and seatings; pumps; solvent (including spent solvent) tanks and containers; water separators; stills; and all filter housings of each dry cleaning system maintained according to the recommended manufacturer's specifications?	Yes No	
Are all parts of the dry cleaning system, including solvent containers, kept closed at all times except when access is required for proper operation and maintenance?	Yes No	
Are perc process tanks refilled using a closed-loop delivery system?	Yes No	
Button and lint traps;		
Are button and lint traps cleaned on the manufacturer's suggested intervals and at least once each working day?	Yes No	
Is lint placed in tightly sealed and properly labeled containers?	Yes No	
Are the button and lint traps cleaned when the local or general exhaust ventilation system is operating to minimize operator exposure to perc emissions?	Yes No	
Integral Carbon adsorbers on 4 th generation machines;		
Is the temperature of the exhaust gases that are recirculated through the carbon adsorber at the operating temperature specified by the manufacturer?	Yes No N/A	
Cartridge and adsorptive filters (N/A if filter transferred to a separate device to reduce v	/olume or perc);	
Are cartridge filters drained in the filter housing for at least 24 hours before disposal?	Yes No N/A	
Are adsorptive cartridge filter drained in the filter housing for at least 48 hours before disposal?	Yes No N/A	
Stills;		
Does the still operate without venting any emissions into the facility?	Yes No	
Is the still operated at less than or equal to 75 percent of capacity or other alternative value recommended by the manufacturer?	Yes No	
Is the still cooled to 100°F (38°C) or less before being emptied or cleaned?	Yes No	
Date the still was last cleaned?		
Wastewater Treatment Units (skip section if facility has no wastewater treatment unit);		
Is the wastewater treated by physical separation (water separator) and double-carbon filtration prior to evaporation and/or allowed disposal or discharge?	Yes No	
Are the carbon cartridges from the wastewater treatment unit replaced in accordance with the manufacturer's specification?	Yes No	
Is the evaporator operated to ensure that no liquid perc or visible emulsion is allowed to vaporize?	Voc. No. N/A	

Part VIII - Corrective Action Log for Perc Dry Cleaning Equipment



Any deficiency reported in Parts I, II, II(a), III, V or VII of the Checklists for Perc Dry Cleaning Equipment requires completion of this log to describe the corrective action taken to address each noted deficiency. Each perc machine should have a separate Part VIII log for recording the Date corrective action was taken, applicable Checklist Part and a description of the Corrective Action Taken.

Machine	Manufacture	er and Model Number:
Machine	e Serial Numb	er:
	Checklist	
Date:	Part:	Corrective Action Taken:
/ /	7 5	
1 1		
//		
	Т	
	<u> </u>	
//		
	<u> </u>	
//		
//		
1 1		
	1	
/ /		
	1	