



South Coast Air Quality Management District

Form 400-E-7 Dry-Cleaning Equipment

Mail To:
SCAQMD
P.O. Box 4944
Diamond Bar, CA 91765-0944
Tel: (909) 396-3385
www.aqmd.gov

This form must be accompanied by a completed Application for a Permit to Construct/Operate - Forms 400-A, Form 400-CEQA, and Form 400-PS.

Section A - Operator Information	
Facility Name (Business Name of Operator That Appears On Permit):	Valid AQMD Facility ID (Available On Permit Or Invoice Issued By AQMD):
Address where the equipment will be operated:	

Section B - Equipment Description			
Dry-Cleaning Machine	Manufacturer:	Model:	Date of Manufacture:
Certification	Is this dry-cleaning machine certified by the California Air Resources Board (CARB)?		Yes No
Control	Closed loop with primary and secondary control Primary Control Only (Condenser)	Closed loop with primary and add-on secondary control Other:	
Load	Capacity _____ Pounds	Clothes Cleaned Per Day _____	pounds/day

Section C - Process Description	
Type of Solvent Please attach a copy of the Material Data Safety Sheet for all solvents	Hydrocarbon (Petroleum) Solvent Other: _____
Solvent Usage Operating Schedule	Gallons Of Solvent Consumed* Per Month: _____ Density of Solvent: _____ lbs/gal * Solvent Consumed = Solvent Purchase + Initial Inventory - Final Inventory - Waste Credit (Please Attach Supporting Documents.)
Operating Schedule	Normal: _____ hours/day _____ days/week _____ weeks/yr Maximum: _____ hours/day _____ days/week _____ weeks/yr
Operating Parameters	Max. No. of Loads: _____ per day Min. No. of Loads: _____ per day Drying Cycle Time: _____ minutes/load Cool Down Cycle Time: _____ minutes/load
Type Of Building Where Dry-Cleaner Is Located	Co-Commercial (CC): Share building with commercial occupants, no residents - includes malls Stand-Alone (SA): No other occupants in building Distance to nearest receptor: _____ feet Nearest receptor is: Commercial or Residential Co-Residential (CR): Share building with residential occupants

Section D - Control Equipment Operation	
Carbon Absorber As Secondary Control	No. of loads required before Carbon Absorber is regenerated: _____ Regeneration Time: _____ minutes

Section E - Authorization/Signature		
I hereby certify that all information contained herein and information submitted with this application is true and correct.		
Preparer Info	Signature: _____ Date: _____	Name: _____
	Title: _____ Company Name: _____	Phone #: _____ Fax #: _____
Contact Info	Name: _____	Phone #: _____ Fax #: _____
	Title: _____ Company Name: _____	Email: _____

THIS IS A PUBLIC DOCUMENT

Pursuant to the California Public Records Act, your permit application and any supplemental documentation are public records and may be disclosed to a third party. If you wish to claim certain limited information as exempt from disclosure because it qualifies as a trade secret, as defined in the District's Guidelines for Implementing the California Public Records Act, you must make such claim at the time of submittal to the District.

Check here if you claim that this form or its attachments contain confidential trade secret information.

**Form 400-E-7
Emission Calculations
Hydrocarbon (Petroleum) Solvent Only**

A/N: _____	Facility Name: _____
Equipment Type: Hydrocarbon (Petroleum) Dry Cleaning Machine	
Manufacturer: _____	Model: _____

Data

Capacity		lb/load
HC Consumption		gal/month
Clothes Cleaned/Day		lb/day
Clothes Cleaned/Week		lb/week
Specific Gravity of Petroleum		
Density of HC (Petroleum)		lb/gal
Control Efficiency*		

Operating Schedule

Daily Average		
Daily Max		hours/day
Weekly		days/week
Yearly		week/year

Monthly Uncontrolled Emissions =	HC Consumption x HC (Petroleum) Density		lbs/month
Monthly Controlled Emissions =	Monthly Uncontrolled x (1 - eff)		lbs/month
Daily Uncontrolled Emissions =	(Monthly Uncontrolled/4.33 weeks)/(No. of days per week)		lbs/day
Daily Controlled Emissions =	(Monthly Controlled/4.33 weeks)/(No. of days per week)		lbs/day
Hourly Uncontrolled Emissions =	R1 = Daily Uncontrolled/Max. hours per day		lbs/hr
Hourly Controlled Emissions =	R2 = Daily Controlled/Max. hours per day		lbs/hr
Annual Average =	R2 x (Max. hours/day) x (days/wk) x (wks/year)		lbs/year
30 days Average =	R2 x (Max. hours/day) x (days/wk) x (4.33 wk/mon)/30 days		lbs/day

Emissions Summary

Emissions	Units	Uncontrolled	Controlled
Monthly	lbs/month	64.10	
Daily	lbs/day	2.96	
Hourly R1/R2	lbs/hr	0.74	
Annual	lbs/yr		
30-Day Average	lbs/day		

* Based on the status report on Rule 1421, dated December 3, 2004, staff determined that 34% VOC is emitted from Hydrocarbon machines.

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EVALUATION REPORT FOR PERMIT TO CONSTRUCT/OPERATE

APPLICANT'S NAME: _____

APPLICATION NO: _____

EQUIPMENT LOCATION: _____

EQUIPMENT DESCRIPTION:

DRY CLEANING MACHINE, HYDROCARBON SOLVENT, LINDUS, MODEL NUMBER PM45, CLOSED LOOP, WATER COOLED VAPOR CONDENSER.

EMISSION CALCULATIONS:

See emission calculation on previous page.

RULES EVALUATION:

Rule 212: There are no K-12 schools located within 1,000 ft of this facility, this installation will result in an increase of air contaminants but will produce no increase in health risk at any receptor location. Therefore a public notice is not required.

Rule 401: The equipment is expected to comply with the opacity limits provided in Rule 401.

Rule 402: Nuisance complaints are not expected.

Rule 1102: The equipment is equipped with primary control, and secondary control consisting of a refrigerated condenser. Compliance is expected.

Rule XIII: New Source Review
Compliance is expected as shown below:

1303 (a)(1) – Best Available Control Technology (BACT)
The equipment complies with District BACT Guidelines.

1303 (b)(1) – ROG emissions are exempt from modeling.

1303 (b)(2) – Controlled Emissions of _____ lbs ROG/day are less than 22 lbs ROG/day (4 tons ROG/year), therefore offsets are not required for this equipment.

Regulation XX: This facility is not in the RECLAIM program so this regulation is not applicable to this facility.

Regulation XXX: This is not a Title V facility so this regulation is not applicable to this facility.

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CONCLUSIONS & RECOMMENDATIONS:

The application is expected to comply with all applicable District Rules and Regulations. A Permit to Construct/Operate is recommended subject to the following conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
3. THIS EQUIPMENT SHALL ONLY USE PETROLEUM SOLVENT WITH AN INITIAL BOILING POINT NOT LESS THAN 372 DEGREES FAHRENHEIT AS A DRY CLEANING FLUID.
4. THE TOTAL QUANTITY OF PETROLEUM SOLVENT THAT IS REPLENISHED IN THIS EQUIPMENT SHALL NOT EXCEED _____ GALLONS PER MONTH AVERAGED OVER ANY 12-MONTH PERIOD.
5. EACH WORKING DAY THE OPERATOR SHALL INSPECT AND CLEAN WITH A WET CLOTH THE FOLLOWING EQUIPMENT: THE GASKETS AND THE EDGES OF THE LOADING DOOR, LOADING DOOR LINER, LINT FILTER, AIR FILTER, AND WASTE WATER SEPERATOR. IF ANY OF THE SEALS OR GASKETS SHOW SIGNS OF WEAR (e.g. CUTS OR TEARS) SUCH THAT THEY WILL NOT PROVIDE AN IMPERVOUS SEAL AGAINST LIQUID OR VAPOR LEAKAGE OR AIR LEAKAGE INTO THE MACHINE, THE DRY CLEANING MACHINE SHALL NOT BE OPERATED UNTIL THOSE SEALS OR GASKETS ARE REPLACED.
6. MATERIAL SAFETY DATA SHEETS FOR ALL DRY CLEANING SOLVENTS USED AT THIS FACILITY SHALL BE KEPT CURRENT AND MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.
7. ALL WASTE MATERIALS WHICH HAVE COME INTO CONTACT WITH ANY SOLVENT SHALL BE STORED IN ENCLOSED CONTAINERS AND DISPOSED OF IN ACCORDANCE WITH THE REQUIREMENTS OF THE DEPARTMENT OF HEALTH SERVICES.
8. IN ADDITION TO THE RECORD-KEEPING REQUIREMENTS OF RULE 1102, RECORDS OF SOLVENT USAGE, INSPECTIONS AND REPAIRS SHALL BE MAINTAINED TO PROVE COMPLIANCE WITH CONDITION NUMBERS 4 AND 5. THESE RECORDS SHALL BE RETAINED ON SITE FOR AT LEAST TWO YEARS AND SHALL BE MADE AVAILABLE TO SCAQMD REPRESENTATIVES UPON REQUEST.
9. PETROLEUM SOVENTS USED IN THIS EQUIPMENT AT THIS FACILITY SHALL NOT CONTAIN ANY COMPOUNDS IDENTIFIED AS CARCINOGENIC AIR CONTAMINANTS IN RULE 1401 AS AMENDED ON MARCH 4, 2005.
10. THIS EQUIPMENT SHALL COMPLY WITH RULE 1102.