



Southwest Clean Air Agency

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September 18, 2015

Ms. Chung Jeek Bang
Carousel Cleaners
13023 NE Highway 99, STE 9
Vancouver, WA 98686

Subject: Notification of Petroleum Dry Cleaner Installation – (SUN-104)

Dear Ms. Bang:

The Southwest Clean Air Agency (SWCAA) received your Small Unit Notification (SUN) on August 26, 2015 for installation and operation of a new dry cleaning machine at 13023 NE Highway 99, STE 9, Vancouver, WA. The new petroleum solvent dry cleaning machine replaced a perchlorethylene dry cleaning machine. For administrative and tracking purposes SWCAA has assigned tracking number SUN-104 to this notification. This notification was filed in accordance with SWCAA 400-072 and applies to the installation of one dry cleaning machine. The new machine was identified as:

- (1) Unisec model MS-402N with a load capacity of 40 pounds. The unit will utilize DF-2000 as a cleaning fluid.

SWCAA has completed a review of your notification and the associated support information and has determined that the notification meets the requirements of SWCAA 400-072(2). Once installed, affected equipment must maintain compliance with the requirements of SWCAA 400-072(4)(d) "**Petroleum Dry Cleaners**". A copy of the relevant SWCAA 400-072 section is attached for your information.

Be advised that emission units installed pursuant to SWCAA 400-072 are subject to source registration and periodic inspection. Registration fees for this equipment will be invoiced consistent with SWCAA 400-100.

If you need further assistance or have any questions regarding these matters, please contact me at (360) 574-3058 extension 130.

Sincerely,

Paul T. Mairose
Chief Engineer



SWCAA 400-072 Emission Standards for Selected Small Source Categories

[Statutory Authority: Chapter 70.94.141 RCW. Original adoption 09-21-056 filed 10/15/09, effective 11/15/09.]

(4) Source categories.

(d) Petroleum dry cleaners.

- (i) **Applicability.** The provisions of this section apply to dry cleaning facilities that use petroleum solvent and have a total manufacturer's rated dryer capacity less than 38 kilograms (84 pounds). The total manufacturers' rated dryer capacity is the sum of the manufacturers' rated dryer capacity for each existing and proposed petroleum solvent dryer at the facility.
- (ii) **Emission limits and standards.**
 - (A) VOC emissions from each dry cleaning facility shall not exceed 1.0 ton per year. Emissions shall be calculated using a mass balance approach assuming that all cleaning fluid utilized at the facility is emitted to the ambient air. Documented quantities of cleaning fluid shipped offsite as waste may be deducted from the calculated emissions.
 - (B) Operations which cause or contribute to odors that unreasonably interfere with any other property owner's use and enjoyment of their property shall use recognized good practice and procedures to reduce these odors to a reasonable minimum.
- (iii) **General requirements.**
 - (A) Each dry cleaning facility shall be operated in a business space zoned for commercial activity, located a minimum of 200 feet from the nearest residential structure.
 - (B) Dry cleaning machines shall only use approved cleaning fluids. The Agency has approved the use of DF-2000 cleaning fluid. Other cleaning fluids may be used upon written approval from the Agency.
 - (C) Solvent or waste containing solvent shall be stored in closed solvent tanks or containers with no perceptible leaks.
 - (D) All cartridge filters shall be drained in their sealed housing or other enclosed container for 24 hours prior to disposal.
 - (E) Perceptible leaks shall be repaired within twenty-four hours unless repair parts must be ordered. If parts must be ordered to repair a leak, the parts shall be ordered within 2 business days of detecting the leak and repair parts shall be installed within 5 business days after receipt.
 - (F) Pollution control devices associated with each piece of dry cleaning equipment shall be operated whenever the equipment served by that control device is in operation. Control devices shall be operated and maintained in accordance with the manufacturer's specifications.
- (iv) **Monitoring and recordkeeping requirements.** The information listed below shall be recorded at the specified intervals, and maintained in a readily accessible form for a minimum of 3 years. Each required record shall include the date and the name of the person making the record entry.
 - (A) Each dry cleaning machine shall be visually inspected at least once per week for perceptible leaks. The results of each inspection shall be recorded in an inspection log and maintained on-site. The inspection shall include, but not be limited to the following:
 - (I) Hose connections, unions, couplings and valves;
 - (II) Machine door gaskets and seating;

- (III) Filter gaskets and seating;
- (IV) Pumps;
- (V) Solvent tanks and containers;
- (VI) Water separators;
- (VII) Distillation units;
- (VIII) Diverter valves; and
- (IX) Filter housings.
- (B) The amount of cleaning fluid (e.g., DF-2000) purchased, used, and disposed of shall be recorded monthly.
- (C) Upset conditions that cause excess emissions shall be recorded for each occurrence; and
- (D) All air quality related complaints, including odor complaints, received by the owner or operator and the results of any subsequent investigation or corrective action shall be recorded for each occurrence.
- (v) **Testing requirements.** None.
- (vi) **Reporting requirements.**
 - (A) All air quality related complaints, including odor complaints, received by the permittee shall be reported to SWCAA within 3 calendar days of receipt.
 - (B) The owner or operator of an affected petroleum dry cleaner shall report the following information to the Agency no later than March 15th for the preceding calendar year:
 - (I) Quantity of cleaning fluid (e.g., DF-2000) consumed; and
 - (II) Air emissions of criteria air pollutants, VOCs, and toxic air pollutants (TAPs).

Summary Information (by SWCAA) for SUN-104

Carousel Cleaners

One new hydrocarbon-based dry cleaning machine was installed in June 2014. The new machine replaced a perchloroethylene-based machine. The new dry cleaning machine does not utilize a boiler or distillation section.

Location:	13023 NE Highway 99, STE 9, Vancouver, WA 98686
Make / Model:	Unisec / MS-402N
Serial Number:	Not provided
Built:	Not provided – installed new in 2014
Installed:	June 2014
Load Capacity:	40 pounds
Tank Capacity:	55.3 gallons (30.2 gallons in Tank 1, 25.1 gallons in Tank 2)
Solvent:	DF-2000 solvent with "Effective Microorganisms" (EM Soap).
Stack Description:	No stack

Note that potential emissions are expected to be well below 1 ton per year due to the relatively low vapor pressure.