Dry Cleaning: Best Practices for Shops in Residential Areas

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Dry cleaning can release dangerous chemicals into the air.

Dry cleaning shops that still use PERC (perchloroethylene) must take steps to contain PERC vapors and prevent vapors from escaping into neighboring homes and businesses. Employers must also protect workers from PERC exposures. This booklet describes regulations and best practices to help dry cleaning businesses use equipment and chemicals safely.

PERC vapors can cause health problems. At high levels, workers may have dizziness, headaches, sleepiness and nausea. Even at low levels, workers and other building occupants who are exposed for a long time may be at risk for serious health effects.

Elevated PERC levels have been found in residential buildings with dry cleaning shops in New York City. Dry cleaners must follow federal, state and local regulations, and keep PERC vapors low in their shops and out of neighboring spaces. Follow the best practices in this booklet to protect workers and building occupants.

WHAT THE LAW REQUIRES: REGULATION ON PERC

Businesses must:

Failure to comply with all regulations or failure to control PERC vapors can result in fines and shutting down dry cleaning equipment.

- Use only 4th generation dry cleaning machines in residential buildings (visit www.dec.ny.gov/chemical/8943.html for more information).
 Older machines are not allowed in residential buildings
- NOT buy or install new PERC-based dry cleaning machines
- Follow all use, inspection and maintenance rules set by New York State Department of Environmental Conservation (NYS DEC) and New York City Department of Environmental Protection (NYC DEP)
- Keep PERC vapors out of nearby homes
- By 2020, NOT use PERC dry cleaning equipment in residential buildings

REDUCING PERC VAPORS

(The following actions are **required** except where indicated by a green leaf. Green leaves indicate best practices that may further reduce PERC vapors.)

1. Use the vapor barrier enclosure properly.

- The vapor barrier enclosure must be made of hard, solid materials and kept in good condition so doors open and close easily. The walls, floors and ceiling must be free of holes, gaps, cracks and openings where PERC can escape.
- Keep enclosure doors closed when the dry cleaning machine is running.
- Turn on the ventilation system when the dry cleaning machine is running and the machine doors are opened. Exhaust air **must** be vented outside.
- Place the exhaust vent away from windows and inlets so vapors cannot re-enter the building.
- 🔊 Keep ventilation ducts clean. Check regularly for blockage.
- Install exhaust outlets (with caps or angled) to prevent birds and debris from getting into ducts.
- Limit unnecessary entry to the enclosure unit and keep workers out when machines are running.

Placement of Exhaust Vents DO NOT place exhaust outlets near apartment windows



2. Use 4th generation dry cleaning equipment.

- All dry cleaning machines must be 4th generation in compliance with NYS DEC Regulation, Part 232. (Visit www.dec.ny.gov/chemical/8943.html for more information.)
- Follow the manufacturer's operating instructions.
- Do **not** shorten drying cycles to speed up loads.

3. Check dry cleaning equipment once a week.

- A **certified** dry cleaning operator must inspect the machine, and check seals and gaskets for leaks.
- A certified dry cleaning technician must make immediate repairs.
- Use DEC Form 232-2 Weekly Leak Inspection Form to record inspection results and repairs. The inspection forms must be kept as a log. Visit www.dec.ny.gov/docs/air_pdf/2322weeklycheck.pdf
- While making repairs, the technician must turn on the ventilation system and keep the enclosure doors shut.
- Be sure all other DEC forms and inspection requirements are met.
- Use the checklist at the end of this booklet.

4. Use and store chemicals safely.

- Make sure all PERC containers have clear and visible labels.
- Keep all PERC containers tightly sealed and stored in a secure area.
- v Store PERC containers inside the vapor barrier enclosure.
 - Never use PERC as a spot remover.
 - Use spot-removing chemicals in well-ventilated areas and store them in tightly sealed containers.

5. Handle hazardous waste properly.

- Place all PERC waste materials in tightly sealed and labeled containers.
- Store them inside the vapor barrier enclosure.



- Hire a certified hazardous waste disposal company to pick them up.
- Keep a Hazardous Waste Manifest Log (Visit www.deq.state.mi.us/documents/deq-ead-tas-wmd-maniflog.pdf) to record information about stored waste and disposal processes.

6. Bring fresh air into the dry cleaning shop.

• Provide adequate, fresh air ventilation in work and customer areas.

7. Maintain the facility.

- Keep walls, floors and ceilings in good condition.
- Seal gaps, including at riser pipe/ceiling junctions and at pipe/wall junctions, to keep odors and PERC vapors out of nearby residences.



8. Ensure that workers are trained and certified.

- Employees who operate dry cleaning machines must have proper NYS DEC training and certification. (Visit www.dec.ny.gov/chemical/8940.html)
- Training certificates **must** be available and displayed in a prominent place.

9. Resources

For more information on dry cleaning regulations, call 311 or visit:

New York State Department of Environmental Conservation at www.dec.ny.gov/chemical/8567.html

New York City Department of Environmental Protection at www.nyc.gov/html/dep/html/businesses/dryclean.shtml

US Environmental Protection Agency at www.epa.gov/compliance/ resources/publications/assistance/sectors/dryclean.pdf

Use Best Practices and follow all regulations to keep PERC vapors low, and to protect workers and building occupants.

Checklist

Vapor Barrier Enclosure and Ventilation

	Yes	No
Are the vapor barrier doors kept closed while the machine is operating?		
Are the vapor barrier doors easy to close?		
Do the doors form a tight seal when they are closed?		
Is the vapor barrier ventilation system on during operation?		
Is the vapor barrier ventilation system functioning properly?		
Are the vapor barrier ducts free of any debris and/or blockage?		
Is the vapor barrier exhaust duct opening situated away from windows?		
Is the vapor barrier enclosure maintained under negative pressure?		
Are walls, floors and ceiling constructed of hard, non-porous materials?		
Are walls, floors and ceiling free of damage, holes and/or gaps?		

Dry Cleaning Equipment

	Yes	No
Are NYC DEP and NYS DEC permits up-to-date and displayed in a conspicuous manner?		
Is the dry cleaning machine a fourth generation unit?		
Is the machine retrofitted with all appropriate upgrades in compliance with DEC Regulation Part 232?		
Does a certified technician check the machine regularly?		
Is the vapor barrier ventilation system on while repairs are done?		
Are the vapor barrier doors kept closed while repairs are done?		
Are weekly leak inspections conducted?		
Is the machine operated using the appropriate cycle duration times?		

Record-Keeping

	Yes	No
Are Weekly Leak Inspection Logs up-to-date and maintained in an organized manner?		
Are Hazardous Waste Manifest Logs up-to-date and maintained in an organized manner?		

Chemical Use and Storage/Hazardous Waste Storage

	Yes	No
Are PERC containers stored in tightly sealed containers and kept inside the vapor barrier enclosure or in a safe area that will prevent the containers from being disturbed or damaged?		
Are spot removing (non-PERC) chemicals used in well ventilated areas? (Do not use PERC for spot removing.)		
Are spot removing chemicals stored in tightly sealed containers when not in use?		
Are all hazardous waste materials placed in tightly sealed hazardous waste containers and stored inside the vapor barrier room or in a safe area that will prevent the containers from being disturbed or damaged?		

Facility Maintenance

	Yes	No
Is there enough fresh air ventilation in the employee areas and customer areas?		
Are walls, floors and ceilings throughout the facility in good repair and free of holes, gaps and cracks?		
Are gaps at riser pipe/ceiling junctions, riser pipe/floor junctions and riser pipe/wall junctions sealed?		

Employee Training and Certification

	Yes	No
Are all employees who operate the dry cleaning machine Certified Dry Cleaning Machine Operators?		
Are all certifications up-to-date, and are certificates available and displayed in a conspicuous manner?		



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