

State of California
AIR RESOURCES BOARD

Resolution 80-63

October 22, 1980

WHEREAS, the Air Resources Board ("Board") and the Environmental Protection Agency have established health-based ambient air quality standards for oxidant and ozone, respectively, and these standards are frequently exceeded in several of the State's air basins;

WHEREAS, Health and Safety Code Sections 39003, 39500, 39602, and 41500 authorize the Board to coordinate, encourage, and review efforts to attain and maintain state and national ambient air quality standards;

WHEREAS, Health and Safety Code Sections 39600 and 39605 authorize the Board to do such acts as may be necessary to execute the powers and duties granted to and imposed upon the Board, to assist the air pollution control districts;

WHEREAS, the suggested control measure for the control of emissions of perchloroethylene (perc) from the dry cleaning industry was developed by the Bay Area Air Quality Management District staff with the concurrence of the Board staff, and has been approved under the Suggested Control Measure Development Process, by a technical review group consisting of representatives of EPA, ARB, BAAQMD, SCAQMD and several other air pollution control districts;

WHEREAS, the California Environmental Quality Act and Board regulations require that the Board not take any action which would have adverse environmental impacts unless the Board responds to all significant environmental issues raised and takes all feasible measures to mitigate such impacts;

WHEREAS, the Board has held a duly noticed public meeting on this matter, and has heard and considered the comments presented by representatives of the ARB, districts, affected industries, and other interested persons and agencies; and

WHEREAS, the Board finds:

That the emissions of perchloroethylene, a photochemically reactive organic compound, from the dry cleaning industry contribute to violations of the state and national ambient air quality standards for oxidant and ozone in several of the State's air basins;

That perc emissions from certain dry cleaning operations can be reduced by up to 90 percent of the present uncontrolled emission rate by the means set forth in the suggested control measure;

That these emission reductions, together with other operational requirements of the suggested control measure, can reduce the present (overall) uncontrolled emission rate from this source by up to 50 percent or more;

That the direct customer cost of air pollution controls for perc are estimated to add 1 percent or less to the overall cost of dry cleaning, and in the worst case, i.e., for very small dry cleaners, the incremental cost increase is expected to be 2-3 percent or less;

That the emission reductions required by the measure are technologically feasible, economically reasonable, and cost-effective;

That a performance-based, i.e. mileage type, emission control approach can offer specific advantages and disadvantages as compared to an explicit emission approach;

That a performance-based approach is potentially capable of accomplishing equivalent emission reductions to an explicit emission limitation approach, and is potentially compatible with an explicit emission control approach;

That there are no significant adverse effects on air quality or the environment likely to result from adoption and implementation of the suggested control measure;

That the suggested control measure addresses dry cleaning emissions of perchloroethylene only as a photochemically reactive organic compound; the Air Resources Board at this time is reviewing evidence concerning perchloroethylene as a potentially toxic, hazardous, or carcinogenic pollutant to determine if there is a need for additional emissions reductions; and

That in view of EPA's proposal to designate perchloroethylene for additional state regulation of existing sources pursuant to Section 111 of the Clean Air Act (44 Federal Register 39678, June 11, 1980) all districts which propose to amend or adopt a rule to control perchloroethylene emissions from dry cleaning operations are advised to consider and to include in the rule any provisions necessary and appropriate for compliance with Section 111 of the Clean Air Act and EPA regulations contained in Title 40 Code of Federal Register Part 60.

NOW, THEREFORE BE IT RESOLVED, that the Board endorses the suggested control measure for the control of perchloroethylene emissions from the dry cleaning industry approved by the suggested control measure technical review group as set forth in Attachment A to this Resolution, subject to consideration in light of all appropriate evidence by the technical review group of amendments to the suggested control measure relating to the following issues:

1. Deletion of the exemption for coin-operated facilities;
2. Addition of a provision requiring proper disposal of hazardous wastes containing perchloroethylene;
3. Evaluation of size cutoffs, including consideration of performance-based emission standards and base year.

BE IT FURTHER RESOLVED, that the Executive Officer is delegated the authority to endorse the actions of the technical review group on the above issues or to bring them before the Board for further consideration.

BE IT FURTHER RESOLVED, that following endorsement of any amendments to the suggested control measure approved by the technical review group, the Executive Officer is directed to forward the suggested control measure to districts which need reductions in photochemically reactive organic compound emissions to achieve and maintain state or national ambient air quality standards, with a recommendation that these districts consider adoption of the suggested control measure or a rule of equivalent effectiveness.

I certify that the above is
a true and correct copy of
Resolution 80-63, as adopted
by the Air Resources Board


Sally Rump, Board Secretary

Suggested Control Measure for the
Control of Volatile Organic Compound Emissions
From Perchloroethylene Dry Cleaning Operations

- I. Effective 60 days after adoption a person shall not operate any dry cleaning equipment which uses perchloroethylene unless all of the following requirements are satisfied:
 - A. Any solvent liquid or solvent vapor leaks shall be repaired immediately.
 - B. The residue from a solvent still shall not contain more than 0.6 kg. of solvent per kg. of wet waste.
 - C. The used filtration cartridges shall be put in the filter housing and drained there for at least 24 hours before being discarded or for at least 12 hours provided that they are dried in a closed container which is vented to a control device approved by the APCO.
 - D. The used diatomaceous earth filters shall be cooked or treated so that the residue contains no more than 0.25 kg. of solvent per kg. of wet waste.
 - E. Any other filtration or distillation system can be used if it can be demonstrated to the satisfaction of the APCO that it reduces waste losses below 0.01 kg. per kg. of clothes.
 - F. The waste containing perchloroethylene shall be stored in sealed containers.

- II. Emission Control Requirements: A person shall not operate any dry cleaning equipment which uses perchloroethylene unless one of the following requirements is satisfied:
- A. All exhaust gases from drying tumblers and cabinets are vented through a carbon adsorber or other control device which reduces the total emissions of organic compounds to the atmosphere during the entire cycle by at least 90 percent by weight; or
 - B. All of the exhaust gases from drying tumblers and cabinets are vented through a carbon adsorber or other control device which reduces the total emissions of organic compounds to the atmosphere during the entire drying cycle to 100 ppm before dilution.

The effective date for this Section II shall be as follows:

- 1 year after adoption - for any plant which consumes more than 4000 liters (1060 gallons) of perchloroethylene per year.
- 2 years after adoption - for any plant which consumes more than 2000 liters (530 gallons) of perchloroethylene per year.
- 3 years after adoption - for any plant which consumes more than 1200 liters (320 gallons) of perchloroethylene per year.

III. COMPLIANCE SCHEDULE

Compliance Schedule for Section III: A person subject to the requirements of Section II shall comply with the following increments of progress:

- A. Submit a control plan on or before 6 months after the date of adoption.
- B. Submit a complete application for any required authority to construct at least 6 months before the effective date for that plant.
- C. Complete construction or installation of the required emission control equipment on or before the effective date for that plant.

IV. EXEMPTIONS

- A. Coin Operated Facilities: The provisions of Section II shall not apply to coin operated cleaning plants.
- B. Other Solvents: This Rule does not apply to dry cleaning plants which do not use perchloroethylene.
- C. Small Users: The provisions of Section II shall not apply to dry cleaning plants which consume less than 1200 liters (320 gallons) of perchloroethylene per year.
- D. Space and Steam Limitations: The provisions of Section II shall not apply to dry cleaners which satisfy one of the following conditions:

Memorandum

To : Huey D. Johnson
Resources Agency
1416 - 9th Street, 13th Floor
Sacramento, CA 95814

Date : November 17, 1980
Subject: Filing of Notice
of Decision of the
Air Resources Board

From : **Air Resources Board**

Pursuant to Title 17, Section 60007(b), and in compliance with Air Resources Board certification under section 21080.5 of the Public Resources Code, the Air Resources Board hereby forwards for posting the attached notice of decision and response to environmental comments raised during the comment period.

Sally Rump
Sally Rump
BOARD SECRETARY

attachments:


Resolution 80-67

Memorandum

: Sally Rump
Board Secretary

Date : November 4, 1980

Subject: SCM to Control Perc Emissions
from Drycleaning Industry -
Response to Environmental
Issues

From : **Air Resources Board**

The response to significant environmental issues adopted by the Board on the above-matter October 22, 1980, was predicated on certain changes being made to the suggested control measure as outlined in the Board's resolution (bottom of p.2). In the event these changes are not in fact made, the aforementioned response to significant environmental issues may no longer be valid and may require amendment.



David Nawi
General Counsel

State of California
AIR RESOURCES BOARD

Response to Significant Environmental Issues

Item: PUBLIC MEETING TO CONSIDER SUGGESTED CONTROL MEASURE FOR THE CONTROL OF VOLATILE ORGANIC EMISSIONS FROM PERCHLOROETHYLENE DRY CLEANING

Public Hearing Date: September 25 and October 22, 1980

Response Date: October 22, 1980

Comment: The suggested control measure may increase the amount of solid toxic waste material produced by dry cleaners and require additional regulation of toxic and solid waste disposal sites.

Response: The suggested control measure is expected to increase perchloroethylene (perc) solvent recapture in dry cleaning operations, and correspondingly to decrease the amount of perc used and the amount of perc waste created. The measure requires that perchloroethylene waste be stored in closed containers. It also requires that the concentration of perc in wastes be reduced prior to disposal. The measure, therefore, will not result in significant adverse environmental effects associated with toxic or hazardous wastes. Additionally, such wastes must be disposed of in accordance with state law and regulations of the Department of Health Services (DHS). DHS establishes minimum standards for the operation and maintenance of hazardous waste disposal sites. The ARB and local air pollution control districts will coordinate implementation and enforcement of this measure with DHS.

Comment: The suggested control measure is expected to increase slightly the amount of wastewater containing perchloroethylene.

Response: The installation of carbon adsorption equipment will require the use of steam to regenerate the carbon bed. The steam condensate from this equipment will be contaminated with a small quantity of perchloroethylene. The relatively low solubility of perchloroethylene in water together with the relatively small amount of water needed for regeneration is not expected to result in substantial release of perchloroethylene into the environment, as compared to the relatively much greater reduction of perchloroethylene release into the environment which will be achieved by installation of the carbon adsorption equipment.

CERTIFIED: _____

Sally Rump
Sally Rump
Board Secretary

DATE: _____

Nov. 10, 1980