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**Category:** 0 – RACT

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D. C. 20460

May 29, 1981

OFFICE OF ENFORCEMENT

MEMORANDUM

**SUBJECT:** Summary of DSSE Reports on VOC Enforceability Issues

**FROM:** Director,  
Division of Stationary Source Enforcement

**TO:** Directors, Enforcement Division, Regions I-X  
Directors, Surveillance & Analysis Divisions,  
Regions I-X  
Directors, Air & Hazardous Materials Divisions,  
Regions I-X

In the past three years, DSSE has undertaken a total of 20 contractor efforts concerned with a variety of issues with respect to enforceability of the new Volatile Organic Compound (VOC) RACT requirements. Attached is a bibliography of all reports for your reference as well as State and local agencies within your Region.

Should you have any questions about this listing, contact Robert King (FTS 755-2582) of my staff.

Edward E. Reich

Attachment

## Attachment

### DSSE's VOC BIBLIOGRAPHY

1. Environmental Protection Agency (1979). Executive Summary: Implications of RACT for the Cutback Asphalt Industry. Report No. EPA 340/1-79-110 (July 1979).

The objective of this report is to summarize the enforcement implications of adopting RACT by the cutback asphalt industry, as developed by EPA, to control the emissions of volatile organic compounds (VOC) generated from cutback asphalt use in highway construction. (Executive Summary).

2. Environmental Protection Agency (1980). RACT for the Use of Cutback Asphalts in Road Construction and Maintenance: Enforcement Implications and Equipment Changes. Report No. EPA-340/1-80-015. (December 1980).

This report describes the use patterns of cutback and emulsified asphalts in road construction and maintenance operations in certain states. State selection was based on preliminary discussions with representatives from the state highway departments, private industry, and EPA. RACT guidelines for the use of cutback asphalts in SIPs was also reviewed.

3. PEDCO Environmental, Inc. (1979). Overview Survey of Status of Refineries in the US with RACT Requirements. Report to: USEPA, Division of Stationary Source Enforcement, Contract No. 68-01-4147 Task Order Nos. 65 and 74.

As an aid to regional enforcement, this report evaluates the compliance status of refineries with RACT provisions. The evaluation includes trends in the refining industry toward methods of approach for (and anticipated problems with) the enforcement of RACT.

4. PEDCO Environmental, Inc. (1979). Survey of Petroleum Refineries in the US with RACT Requirements-Appendix B. Report to US EPA, Division of Stationary Source Enforcement, Contract No. 68-01-4147 Task Order Nos. 65 and 74.

This report (Appendix B) presents, in Table form, the sources subject to RACT control. These sources include: refinery process units, storage tanks, vacuum-producing systems, and wastewater separators. This is a companion report to the "overview" report.

5. Research Triangle Institute (1981). Control Alternatives: Group I Surface Coating Regulations. Report to US EPA, Division of Stationary Source Enforcement. Contract No. 68-01-4141 Task Order 40. (March 1981).

In this study, trends in approaches to control surface coating operation alternatives are analyzed to identify potential problems in determining compliance and to identify additional guidance that should be developed to aid enforcement personnel determine compliance.

6. RTI (1980). Demography: Plants Subject to Phase I Surface Coating Regulation. Report to US EPA, Division of Stationary Source Enforcement, Contract No. 68-01-4141 Task Order 40.

Surface coating plants that are subject to the regulation include: cans, coils, paper, fabrics, automobiles/light-duty trucks, metal, furniture, magnet wire, and large appliances. This report includes the plant names and complete addresses in a categorized format.

7. Environmental Protection Agency (1980). Development of VOC Compliance Monitoring and Enforcement Strategies: The Wholesale Gasoline Marketing Chain-Volume I. Report No. EPA-340/1-80-013. (July 1980).

This report draws on the enforcement practices of agencies with several years of experience in implementing VOC rules for the gasoline marketing chain to suggest a framework for the use of State/local agencies in developing appropriate compliance strategies geared to local conditions. Volume I presents the results of the study that agencies should consider in deploying their enforcement resources. Compliance Strategies for State/Local Agencies-VOC Gasoline (II).

8. Environmental Protection Agency (1980). Development of VOC Compliance Monitoring and Enforcement Strategies: The Wholesale Gasoline Marketing Chain-Volume II. Report No. EPA-340/1-80-013a (July 1980).

This segment of the study (Volume II) provides technical detail on the components of the gasoline marketing chain, the emission sources and control techniques, and the status of State emission regulations applicable to the chain. This is a partner report to Volume I.

9. PEDCO Environmental, Inc. (1980). Enforcement Aspects of RACT Applied to Surface Coating of Miscellaneous Metal Parts and Products. Report to US EPA, Division of Stationary Source Enforcement, Contract No. 68-01-4147, Task Order 121.

Because the classification of miscellaneous metal parts and products includes a vast spectrum of industries with many dissimilarities, it is important that VOC control regulations affecting these industries be thoroughly understood. The purpose of this report was to evaluate potential enforcement problems relative to (1) application of alternative control strategies (2) compliance status determinations and (3) exemptions.

10. Environmental Protection Agency (1981). RACT Enforceability Aspects for

Pneumatic Tire Manufacturing. Report No. EPA-340/1-80-017 (January 1981).

This report is aimed at aiding State/local agencies by providing the following information: (1) an inventory of operating pneumatic rubber tire and tread rubber plants (2) the industry's ability to install and implement control measures (3) a summary of the industry's manufacturing processes, control equipment, and capture methodology (4) plans by State air quality control agencies for regulation and enforcement.

11. PEDCO Environmental, Inc. (1980). Enforceability Aspects of RACT for the Rotogravure and Flexography Portion of the Graphics Arts Industry. Report to US EPA, Division of Stationary Source Enforcement, Contract No. 68-01-4147 Task Order 123.

This report characterizes the rotogravure and flexography segments of the graphic arts industry, ascertains potential problems with proposed RACT strategies, and discusses solution to those problems. A summary of affected facilities within the industry via problem identification and appropriate recommendations is provided.

12. Environmental Protection Agency (1980). RACT Compliance Guidance for Carbon Adsorbers on Perchloroethylene Drycleaners. Report No. EPA-340/1-80-007 (May 1980).

This report provides a compilation of manufacturers' recommendations of combinations of adsorbers and perc drycleaning equipment that should comply with RACT regulations. Properly-sized carbon adsorption systems have been shown to meet the 100-ppm emission limit easily. This report deals primarily with carbon adsorbers as the retrofit control.

13. TRC Environmental Consultants, Inc. (1980). National Vegetable Oil Processing Plant Inventory. Report to USEPA, Contract No. 68-01-4145.

The primary goal of this report was to develop an accurate inventory of vegetable oil processing plants in the U.S. and to provide an estimate of the magnitude of air pollution emissions from a typical plant. This report has been provided to assist regions and States in future planning by providing an inventory of existing plants, and to provide a summary of present knowledge regarding VOC and TSP emissions from this source category.

14. Environmental Protection Agency (1980). Summary of Available Portable VOC Detection Instruments. Report No. EPA 340/1-80-010 (March 1980).

A survey of instrument manufacturers was conducted to obtain information of the cost, weight, and performance characteristics of various equipment. This report summarizes four categories of portable instruments, classified by principle of operation, which includes: ionization detectors, infrared detectors, combustibles analyzers, and miscellaneous instruments.

15. Environmental Protection Agency (1980). Inspection Manual for Control of VOC Emission from Gasoline Marketing Operations. Report No. EPA-

340/1-80-012 (January 1980).

The objective of this manual is to provide self-contained inspection guidelines for the following aspects of gasoline distribution operations: (1) Tank Truck Gasoline Loading Terminals (2) Bulk Gasoline Plants (3) Gasoline Tank Trucks (4) Fixed Roof Storage Tanks. A discussion of recommended control measures for each of the four source categories is also provided.

16. Environmental Protection Agency (1980). Petroleum Refinery Enforcement Manual. Report No. EPA-340/1-80-008 (March 1980).

The changing status of regulations applicable to refineries and the complexity of refining processes create a need for a refinery enforcement manual. This manual has been developed to meet that need and is prepared in such a way that information on changes in regulations or technology can be easily incorporated. It presents ample background information on the petroleum refining industry to aid enforcement personnel in inspections so compliance determinations can be made.

17. Engineering Science (1980). Techniques to Detect Failure in Carbon Adsorption Systems. Report to US EPA, Division of Stationary Source Enforcement, Contract No. 68-01-4146 Task Order 70.

Enforcement of the Control Technology Guideline (CTG) will result in the installation of many volatile organic (VOC) compound control devices, particularly carbon adsorption which is the most widely-used technique and shows a return on investment. The purpose of this study was to determine if simple techniques are available for the system to operate properly and to ensure design efficiencies are being maintained.

18. SRI International (1981). Bridging the Gap: The Development of Capacity Building Strategies for Controlling Emissions of VOCs. Report to US EPA, Division of Stationary Source Enforcement, SRI Project No. 5828 (March 1981).

This report presents the results of SRI's study to identify needs for assistance in developing State/local agency capacity to enforce new regulations controlling VOC emissions from stationary sources. The fundamental problem addressed was how a State/local enforcement official could translate the voluminous source-specific data and standards for VOC rulemaking into a VOC enforcement program.

19. SRI International (1980). Is there a Forest Among the Trees?: An Implementation and Enforcement Perspective on New VOC Regulations. Report to US EPA, Division of Stationary Source Enforcement, Contract No. 68-01-4137 Task Order 18.

The primary goal of this study was to identify the types of resources that State and local agency officials will need to implement and enforce effective volatile organic compound control (VOC) programs. Identification and analysis of existing information on approaches to VOC control through State Implementation Plans (SIP) were reviewed thoroughly.

20. Pacific Environmental Services, Inc. (1981). Reliability of Vapor Control Systems for Gasoline Terminals. Report to US EPA, Division of Stationary Source Enforcement, Contract No. 68-01-4140 Task Order 67. Draft Final

This report has assembled available information on the reliability of various types of vapor control systems to determine a systematic approach that relates reliability to design, maintenance and environmental factors.