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**Category:** 45 – Criteria for Plan Revisions for Nonattainment Areas

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

February 2, 1978

Office of  
Air and Waste Management

**SUBJECT:** Implementation of Reasonably Available Control  
Technology (RACT) on Hydrocarbon Stationary Sources

**FROM:** David G. Hawkins, Assistant Administrator for Air and Waste  
Management

**MEMO TO:** Regional Administrator, Regions I - X

As part of the State implementation plan (SIP) revision process, I want to personally emphasize the importance of the development of adequate oxidant plans which incorporate RACT for stationary sources. One important effort in this process is the development of the Control Techniques Guideline documents (CTGs).

I have enclosed for your information a summary of the 11 completed sources. These documents define presumptive RACT for 11 source categories. At a minimum, the SIP revisions due in 1979 must contain RACT for these VOC categories in areas where the attainment of the oxidant standard cannot be demonstrated by 1982. Where economics or other circumstances justify regulatory requirements less stringent than those contained within the CTG's, such justification should be clearly documented in the SIP submittal.

For source categories not yet included in the CTGs, existing local and Federal regulations should be retained and enforced. We will not approve relaxation of existing reasonable hydrocarbon control regulations in oxidant nonattainment areas without a demonstration of attainment as expeditiously as possible. As new CTG's are issued, it will be necessary to review and revise or reaffirm these regulations.

Enclosure

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### REGULATIONS FOR STATIONARY SOURCES

Control techniques guidelines (CTG's) have been prepared for ten VOC source categories. We plan to release sixteen more in 1978. They are written in uncomplicated language and are not highly detailed. Each CTG identifies the presumptive emission limits, operating practices, and/or equipment which are achievable through the application of Reasonably Available Control Technology (RACT). RACT is defined as the lowest emission limit that a particular source is capable of meeting by the application of control technology that is reasonably available considering technological and economic feasibility. It may require technology that has been applied to similar but not necessarily identical source categories. Limitations recommended in the CTG's are based on capabilities and problems which are general to the industry; they may not be applicable to every installation. In many cases, appropriate controls will be more or less stringent. States are urged to examine the impact of imposing these requirements through the public hearing process. Where economics or other circumstances justify regulatory requirements less stringent than those contained within CTG's, such justification is to be clearly documented in the SIP submittal.

The recommended limitations are in the form of allowable VOC emission levels for surface coating operations and bulk gasoline terminals. For cutback asphalt paving operations, the recommended control measure is replacement to the extent possible of solvent cutback asphalt with water-borne emulsions. For the remaining source categories--degreasing, refinery sources, petroleum storage tanks, and bulk plants--limitations as stated in terms of equipment standards with companion operating requirements.

The format of each CTG limit was chosen on the basis of compatibility with the most likely air pollution control techniques. For example, surface coating limits are presented in terms of the maximum allowable solvent content of the coating, the assumption being that all of the solvent will evaporate during application and curing. SIP regulations should allow the use of equivalent control technology in cases. The burden of proving the equivalency of a new control technique will normally lie with the owner or operator. OAQPS will provide guidance in the measurement of VOC emissions.

States are also required to adopt measures to control VOC from the transfer of bulk gasoline to service station storage tanks (Stage I). The necessary hardware is relatively simple and available. It has been used successfully in several areas of the nation to provide 95 percent or better control of gasoline vapors displaced during the loading of these storage tanks. Criteria describing Stage I equipment and operating requirements were prepared by OAQPS and have been distributed to the regional offices.

Additional copies of CTG's and the Stage I design criteria may be obtained from Mrs. Deborah McCarley at 919-541-5374.

SUMMARY OF RECOMMENDED EMISSION LIMITATIONS  
FOR STATIONARY VOC SOURCES

	Recommended Limitation
<u>Surface Coating</u>	
<u>Can Coating</u>	
Sheet basecoat Two-piece can exterior	0.34 Kg/1 of coating (minus water)
<u>Two- &amp; three-piece can</u>	
interior body spray	0.51 Kg/1 of coating (minus water)
<u>Two-piece end exterior</u>	
Side-seam spray	0.66 Kg/1 of coating (minus water)
End sealing compound	0.44 Kg/1 of coating (minus water)
Coil Coating	0.31 Kg/1 of coating (minus water)
Fabric Coating	0.35 Kg/1 of coating (minus water)
Vinyl Coating	0.45 Kg/1 of coating (minus water)
Paper Coating	0.35 Kg/1 of coating (minus water)
<u>Auto &amp; Light Duty Truck Coating</u>	
Prime	0.23 Kg/1 of coating (minus water)
Topcoat	0.34 Kg/1 of coating (minus water)
Repair	0.58 Kg/1 of coating (minus water)
Metal Furniture Coating	0.36 Kg/1 of coating (minus water)
Magnet Wire Coating	0.20 Kg/1 of coating (minus water)
Large Appliance Coating	0.34 Kg/1 of coating (minus water)
<u>Bulk Gasoline Terminal</u>	
Truck Loading	80 mg/1 of gasoline loaded
<u>Bulk Gasoline Plants</u>	
Storage Tank Filling	Vapor balance system
Truck Loading	Vapor balance system

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Service Stations

Storage Tank Filling (Stage I)      Vapor balance system

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Fixed-Roof Storage of Petroleum

Liquids      Internal floating roofs

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Petroleum Refining

Vacuum Systems      Vent noncondensables to boiler/  
heater firebox

Wastewater Separators      Install tight covers over  
separators

Process Unit Turnarounds      Vent gases to a flare or other  
combustion device during  
depressurization

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Cutback Asphalt Paving

Substitute water emulsions for  
solvent cutback asphalt applications

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Degreasing

Combination of control equipment and  
operating requirements to minimize  
solvent evaporation and solvent  
carryout. Requirements differ for  
cold cleansers, open top vapor  
degreasers and conveyORIZED  
degreasers.

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