

health standard. The rule does this by causing control efforts to focus on compounds which are actual ozone precursors, rather than giving credit for control of a compound which has negligible photochemical reactivity.

Perc will continue to be regulated as a hazardous air pollutant under section 112 of the Clean Air Act. EPA has already issued regulations limiting emissions of perc from dry cleaning and halogenated solvent cleaning and as a feedstock in the organic chemical manufacturing industry.

DATES: This rule is effective March 8, 1996.

ADDRESSES: Pursuant to section 307(d)(1)(B), (J), and (U) of the Act, 42 U.S.C. section 7607(d)(1)(B), (J), and (U), this action is subject to the procedural requirements of section 307(d). Therefore, EPA has established a public docket for this action, A-92-09, which is available for public inspection and copying between 8:00 a.m. and 4:00 p.m., Monday through Friday, at the U.S. Environmental Protection Agency, Air and Radiation Docket and Information Center (6102), 401 M Street, S.W., Washington, D.C. 20460. A reasonable fee may be charged for copying.

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SUPPLEMENTARY INFORMATION :

I. Background. On July 8, 1977, EPA published a recommended policy on control of VOC (42 FR 3513) which discussed the photochemical reactivity of organic compounds and their role in the formation of tropospheric ozone. This policy statement identified several compounds that are considered to be of negligible photochemical reactivity and which are not required to be controlled in order to prevent the formation of tropospheric ozone. The policy was subsequently amended on June 4, 1979 (44 FR 32042), May 16, 1980 (45 FR 32424), July 22, 1980 (45 FR 48941), January 18, 1989 (54 FR 1988), and March 18, 1991 (56 FR 11418) to add compounds to those already recognized by EPA as having negligible photochemical reactivity.

On October 24, 1983, EPA proposed to add perc to the list of negligibly-reactive compounds which would be exempt from regulation under SIP's to attain the NAAQS for ozone. This proposal was based upon a laboratory

testing program that investigated perc's role in the tropospheric ozone problem. The study concluded that perc contributes less to the ambient ozone problem than equal concentrations of ethane (one of the negligibly-reactive organic compounds previously exempted from ozone SIP controls). The details of this investigation are contained in the EPA report, "Photochemical Reactivity of Perchloroethylene," EPA-600/3-83-001, January 1983. A copy has been placed in the docket (A-92-09) for today's action.

In the October 24, 1983 proposal, comments were solicited on the proposed action. The EPA received 20 comments on the proposal. None of the commenters questioned the technical judgment that perc is negligibly reactive and has an insignificant impact on ozone formation. However, there was quite a divergence of opinion as to the action EPA should take in response to the new findings on the reactivity of perc, many of which related to concerns about perc as a toxic air pollutant. Because of these concerns, EPA determined at that time to take no final action on the proposal.

Subsequently, the Act as amended listed perc as a hazardous air pollutant (HAP) under section 112(b).

Pursuant to section 112(d), EPA has issued national emission standards for hazardous air pollutants (NESHAP) for two major perc source categories: perc dry cleaning, September 22, 1993 (58 FR 49354), and halogenated solvent cleaning, December 2, 1994 (59 FR 61801). Additional releases which may result from perc production or use as a feedstock are addressed by the NESHAP for the hazardous organics (chemicals) industry promulgated April 22, 1994 (59 FR 19402). These two applications, together with the use of perc as feedstock in chemical production, account for 90% of current perc production. Pursuant to section 112(e) of the amended Act, the EPA will be issuing hazardous pollutant emissions standards for various other categories including several other perc sources through November 15, 2000.

On January 28, 1992, the Halogenated Solvents Industry Alliance (HSIA) petitioned EPA to exempt perc from regulation as an ozone precursor under the Act. This request was based on HSIA's contention that perc is negligibly photochemically reactive and does not contribute to tropospheric ozone formation. The HSIA identified, as the technical basis for its contention that perc is negligibly reactive, the October 24, 1983 proposal (48 FR 49097) by EPA to amend

its "Recommended Policy on Control of Organic Compounds" to exempt perc from regulation on the basis of its negligible photochemical reactivity.

On February 3, 1992 (57 FR 3941), pursuant to a proposed rule issued March 18, 1991 (56 FR 11418), EPA promulgated a general definition of VOC (40 CFR 51.100(s)) as part of EPA's regulations governing the development of SIP's. That action also incorporated the VOC definition into various SIP-related rules, including EPA's new source review rules and the FIP rules for the Chicago area. This 1992 regulatory definition superseded the July 8, 1977 policy statement as well as the subsequent revisions to that policy. In accordance with the policy on which it was based, the regulatory definition excludes a number of organic compounds from the definition of VOC on the basis that they are negligibly photochemically reactive and therefore contribute negligibly to tropospheric ozone formation. This list of negligibly-reactive compounds contained the compounds originally identified in the 1977 policy statement plus other compounds that have been recognized by EPA subsequent to the 1977 policy statement as having negligible photochemical reactivity. Further, EPA has

revised this definition twice through rulemaking (59 FR 50693 and 60 FR 31633). Perc was not included in the list of negligibly photochemically reactive compounds in this definition.

On October 26, 1992, EPA proposed to revise its definition of VOC (40 CFR 51.100(s)) by adding perc to the list of compounds that are regarded as negligibly photochemically reactive. Final action based on that October 26, 1992 proposal is being taken today.

II. Comments on Proposal and EPA Responses . In accordance with section 307(d) of the Act, as amended in 1990, today's action is accompanied by a response to each of the significant comments, criticisms, and new data submitted in written or oral presentations during the comment period. Eight commenters (a labor union, an environmental organization, a municipal government, two trade associations, and three manufacturing companies) submitted written comments in response to EPA's October 26, 1992 proposal. Most of the comments support the proposed action. Copies of these comments are located in the docket (A-92-09) for this action. Significant comments and EPA's responses are summarized below. Finally, in the proposal for today's action, EPA

indicated that interested persons could request that EPA hold a public hearing on the proposed action (see section 307(d)(5)(ii) of the Act). The EPA did not receive any such requests for a public hearing and, therefore, did not hold one.

Comment: Two commenters suggested that the proposal should be delayed or withdrawn until it has been established that the public health is adequately protected by controls on emissions of perc from all sources. This concern is brought about, in part, by the fact that perc is listed as a HAP in section 112 of the Act. These commenters refer to the toxicity hazard of the compound and to the possibility that it may be a human carcinogen. One of these commenters stated that there are sources of perc, other than dry cleaning, for which EPA has not yet proposed NESHAP which would define the maximum available control technology level of control for the source. Such sources include degreasing, use in paints and architectural coatings, adhesives, use for maskants in the aerospace industry, and miscellaneous uses in the manufacture of aerosol spray paints and cleaners, pharmaceuticals, textiles, printing inks, and dielectric fluids for power transformers. These sources

will not be controlled as VOC sources if perc is excluded from the definition of VOC. (Note - The NESHAP for halogenated solvent cleaning had not yet been promulgated when this comment was submitted.)

Response: The EPA's purpose in promulgation of the general definition of VOC (40 CFR 51.100(s)) is for use in the preparation of SIP's designed to achieve and maintain the NAAQS for ozone. That definition of VOC lists several compounds which are considered to have negligible photochemical reactivity and, therefore, are exempt from the VOC definition. Based on the criteria used to judge the reactivity of compounds for this list, EPA has determined that perc should be added to the list of compounds as not contributing substantially to the formation of ground level ozone. Further, EPA believes that based on perc's non-reactivity it is inappropriate to allow states to continue to take credit for perc reductions in ozone non-attainment planning.

Compounds that are defined as being HAP are required to be controlled under section 112 of the Act which calls for EPA to develop a NESHAP for sources of the listed compounds. Perc is listed as a HAP in section 112 of the Act. The EPA believes that the control of HAP, including

perc, under section 112 of the Act is the proper approach to controlling these emissions. EPA shares the concerns regarding perc's toxicity. Acute and chronic inhalation exposure to perc results in central nervous system effects. Further, EPA's science advisory board (SAB) has advised the Agency that perc should be classified as a carcinogen; the SAB found that the scientific evidence of carcinogenicity falls on the continuum between "B2" probable and a "C" possible. For these reasons EPA believes that regulation under section 112 of the Clean Air Act is appropriate. As noted previously, EPA already has taken steps to regulate the great majority of perc emissions and plans to issue further regulations for the remaining major sources which release perc to the atmosphere. Further, EPA has the authority to regulate additional source categories -- if EPA identifies any such sources. EPA today reaffirms its intention to ensure that adequate public health protection from perc emissions is provided through these programs.

Today's action improves our ability to provide public health protection from the effects of ground level ozone. The rule does this by causing control efforts to focus on compounds which are actual ozone precursors,

rather than giving credit for control of a compound which has negligible photochemical reactivity. And since the Agency already has made substantial progress in issuing necessary NESHAPs, EPA does not agree that the proposal to add perc to the negligibly reactive list in the definition of VOC should be delayed until all evaluations of perc emissions under section 112 of the Act are complete. Further, representatives of trade associations for manufacturers and end-users of perchloroethylene have stated that they believe that perchloroethylene consumption in consumer products and related products (and therefore associated emissions) will not increase dramatically as a result of this action. We have received commitments from industry associations to survey or otherwise track how consumption of perchloroethylene in these kinds of products changes. Should EPA become aware of significant increases in perchloroethylene emissions or in public exposure from such sources, EPA will then consider appropriate regulatory action.

Comment: One commenter noted that exempting perc as a VOC would mean that the control techniques guideline (CTG) for perc dry cleaning ("Control of Volatile Organics Emissions from Perchloroethylene Dry Cleaning

Systems"; EPA 450/2-78-050, December 1978) would no longer apply. In addition, the proposed NESHAP for the dry cleaning industry (56 FR 64382, December 9, 1991) would exempt many small sources that the CTG covers. Therefore, the public will have greater exposure to a suspected carcinogen than if perc continues to be controlled as a VOC for purposes of meeting reasonably available control technology. (Note - Since these comments were received, the dry cleaning NESHAP has been promulgated.)

Response: EPA is confident that the recently promulgated NESHAP increases public health protection above levels achieved by the formerly applicable CTG. It is true that the NESHAP for dry cleaning exempts small-sized dry cleaners from additional control requirements for process emissions, albeit fewer small sources than initially proposed. The decision to limit requirements on these smallest sources was made based on deliberations considering the extreme impacts of the control costs on these very small sources. All sources must now comply with pollution prevention requirements such as leak detection and repair. EPA further notes that the control requirements for most sources are considerably more

stringent under the recent NESHAP than under the CTG. The NESHAP results in nationwide decreases in perc emissions of 32,400 Mg (35,700 T) each year beyond controls existing due to the CTG or other State rules.

Comment: One commenter cited as unfair the section of the proposed rule change that would prohibit the use of perc emission reduction credits (ERC) which were achieved prior to the proposed revision as VOC offsets or in netting transactions. The commenter asserted that such a prohibition would have a negative financial impact on companies that spent money in good faith to reduce perc emissions and to bank emissions credits prior to the rule change. A second commenter suggested that treating perc as a VOC may interfere with attainment of the ozone NAAQS. This second commenter attached a January 8, 1992 letter from the San Diego Air Pollution Control District to EPA which took a critical view of having to issue ERC for substantial reductions in emissions of perc. This letter said:

Under the existing VOC definition, these ERC's may now be used to offset emission increases from the new sources of VOC whose photochemical reactivity is not negligible, resulting in a net increase in ozone precursors. The use of perchloroethylene ERC's as offsets exacerbates

the District's severe ozone nonattainment problem since the emission increase in reactive compounds would not be truly offset.

Response: The EPA is deferring its decision concerning whether credits for perc, which were banked prior to today's action, may be used in future netting, offsetting or trading transactions with reactive VOC. Because of the potential impact that banked emissions could have on attainment demonstrations and reasonable further progress showings, EPA needs to conduct further discussions with States on this issue.

Comment: One commenter supported the withdrawal of the appropriate CTG's simultaneously with any final rulemaking.

Response: There are two CTG's which refer to perc, the solvent metal cleaning CTG and the perc dry cleaning CTG ("Control of Volatile Organic Emissions from Solvent Metal Cleaning," EPA-450/2-77-022, November 1977, and "Control of Volatile Organic Emissions from Perchloroethylene Dry Cleaning Systems," EPA-450/2-78-050, December 1978). The solvent metal cleaning CTG discusses a number of other solvents in addition to perc, and the technology discussed in this CTG would often apply to any of several solvents that are used for

degreasing. The perc dry cleaning CTG is aimed specifically at controlling perc.

Today's action in promulgating this final rule means that, for purposes of ozone control, the perc dry cleaning CTG no longer has the legal status of a CTG. The solvent metal cleaning CTG is no longer considered to be a CTG for controlling perc emissions. However, the solvent metal cleaning CTG is still applicable as a CTG in regards to all other solvents which are VOC. Although these two documents are no longer regarded as CTG's as related to perc, they remain effective as technical guidance documents; States may still use the documents as sources of technical information when developing rules to control toxic materials.

III. Final Action . Today's final action is based upon the material in Docket No. A-92-09 and EPA's review and consideration of all comments received during the public comment period. As provided in EPA's October 26, 1992 proposal and as modified in response to comments described above, EPA hereby amends its definition of VOC at 40 CFR 51.100(s) to exclude perchloroethylene (also known as tetrachloroethylene) as a VOC for ozone SIP purposes. The revised definition will also apply in the

Chicago ozone nonattainment area pursuant to the 40 CFR 52.741(a)(3) definition of volatile organic material or volatile organic compounds. States are not obligated to exclude from control as a VOC those compounds that EPA has found to be negligibly reactive. However, after the effective date of this final action, EPA will not enforce measures controlling perc as part of a federally-approved ozone SIP. In addition, after the effective date of this final action, States may not take credit for controlling perc in their ozone control strategies.

Pursuant to 5 U.S.C. 605(b), I hereby certify that this action will not have a significant economic impact on a substantial number of small entities because it relaxes current regulatory requirements rather than imposing new ones. The EPA has determined that this rule is not "significant" under the terms of Executive Order 12866 and is, therefore, not subject to Office of Management and Budget (OMB) review. This action does not contain any information collection requirements subject to OMB review under the Paperwork Reduction Act of 1980 (44 U.S.C. 3501 et seq.).

Under sections 202, 203, and 205 of the Unfunded

Mandates Reform Act of 1995 ("Unfunded Mandates Act"), signed into law on March 22, 1995, EPA must undertake various actions in association with proposed or final rules that include a Federal mandate that may result in estimated costs of \$100 million or more to the private sector, or to State, local and/or tribal government(s) in the aggregate. Since today's action is deregulatory in nature and does not impose any mandate upon any source, the cost of such mandates will not result in estimated annual costs of \$100 million or more.

Assuming this rulemaking is subject to section 317 of the Act, the Administrator concludes, weighing the Agency's limited resources and other duties, that it is not practicable to conduct an extensive economic impact assessment of today's action since this rule will relax current regulatory requirements. Accordingly, the Administrator simply notes that any costs of complying with today's action, any inflationary or recessionary effects of the regulation, and any impact on the competitive standing of small businesses, on consumer costs, or on

energy use, will be less than or at least not more than the impact that existed before today's action.

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List of Subjects in 40 CFR Part 51

Administrative practice and procedure, Air pollution control, Carbon monoxide, Intergovernmental relations, Lead, Nitrogen dioxide, Ozone, Particulate matter, Reporting and recordkeeping requirements, Sulfur oxides, Volatile organic compounds.

Date

Carol M. Browner
Administrator

Billing Code: 6560-50-P

For reasons set forth in the preamble, part 51 of Chapter I of title 40 of the Code of Federal Regulations is amended as follows:

Part 51-REQUIREMENTS FOR PREPARATION, ADOPTION, AND SUBMITTAL OF IMPLEMENTATION PLANS

1. The authority citation for Part 51 continues to read as follows:

Authority: 42 U.S.C. 7401 - 7671q.

2. Section 51.100 is amended by revising paragraph (s)(1) introductory text to read as follows:

§51.100 Definitions.

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(s) * * *

(1) This includes any such organic compound other than the following, which have been determined to have negligible photochemical reactivity: methane; ethane; methylene chloride (dichloromethane); 1,1,1-trichloroethane (methyl chloroform); 1,1,2-trichloro-1,2,2-trifluoroethane (CFC-113); trichlorofluoromethane (CFC-11); dichlorodifluoromethane (CFC-12); chlorodifluoromethane (HCFC-22); trifluoromethane (HFC-23); 1,2-dichloro 1,1,2,2-tetrafluoroethane (CFC-114); chloropentafluoroethane (CFC-115); 1,1,1-trifluoro 2,2-

dichloroethane (HCFC-123); 1,1,1,2-tetrafluoroethane (HFC-134a); 1,1-dichloro 1-fluoroethane (HCFC-141b); 1-chloro 1,1-difluoroethane (HCFC-142b); 2-chloro-1,1,1,2-tetrafluoroethane (HCFC-124); pentafluoroethane (HFC-125); 1,1,2,2-tetrafluoroethane (HFC-134); 1,1,1-trifluoroethane (HFC-143a); 1,1-difluoroethane (HFC-152a); parachlorobenzotrifluoride (PCBTF); cyclic, branched, or linear completely methylated siloxanes; acetone; perchloroethylene (tetrachloroethylene) and perfluorocarbon compounds which fall into these classes:

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BILLING CODE 6560-50-P