

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 51

[FRL-6448-4]  
RIN 2060-AI45

Air Quality: Revision to Definition of Volatile Organic  
Compounds - Exclusion of t-Butyl Acetate

**AGENCY:** Environmental Protection Agency (EPA).

**ACTION:** Proposed rule.

**SUMMARY:** This action proposes to revise EPA's definition of volatile organic compounds (VOC) for purposes of Federal regulations related to attaining the national ambient air quality standards (NAAQS) for ozone under title I of the Clean Air Act (Act). This proposed revision would add t-butyl acetate (also known as tertiary butyl acetate or informally as TBAC or TBAc) to the list of compounds excluded from the definition of VOC on the basis that this compound has negligible contribution to tropospheric ozone formation. As a result, if you are subject to certain Federal regulations limiting emissions of VOCs, your emissions of TBAC may not be regulated for some purposes.

**DATES:** If you submit comments on this proposal, EPA must receive them by [INSERT DATE 60 DAYS AFTER PUBLICATION IN THE FEDERAL REGISTER]. The EPA must receive requests for a

hearing by [INSERT DATE 10 DAYS AFTER PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** If you submit comments, please submit them in duplicate (if possible) to: Air and Radiation Docket and Information Center (6102), Attention: Docket No. A-99-02, U.S. Environmental Protection Agency, 401 M Street, SW, Washington, DC 20460. Please strictly limit comments to the subject matter of this proposal, the scope of which is discussed below.

*Public Hearing:* If you contact EPA requesting a public hearing, it will be held at Research Triangle Park, NC. If you wish to request a public hearing, wish to attend the hearing or wish to present oral testimony, you should notify Mr. William Johnson, Air Quality Strategies and Standards Division (MD-15), U.S. Environmental Protection Agency, Research Triangle Park, NC 27711, telephone (919) 541-5245. The EPA will publish notice of a hearing, if a hearing is requested, in the Federal Register. Any hearing will be strictly limited to the subject matter of the proposal, the scope of which is discussed below.

The EPA has established a public docket for this action, A-99-02, which is available for public inspection and copying between 8:00 a.m. and 5:30 p.m., Monday through Friday, at EPA's Air and Radiation Docket and Information

Center, (6102), 401 M Street, SW, Washington, DC 20460. A reasonable fee may be charged for copying.

**FOR FURTHER INFORMATION CONTACT:** William Johnson, Office of Air Quality Planning and Standards, Air Quality Management Division (MD-15), Research Triangle Park, NC 27711, phone (919) 541-5245. You may call Mr. Johnson to see if a hearing will be held and the date and location of any hearing.

**SUPPLEMENTARY INFORMATION:**

**SECTOR IDENTIFICATION:**

*Regulated entities.* You may be an entity potentially regulated by this action if you use or emit VOCs or are a State which has programs to control VOC emissions.

Category	NAICS Codes	SIC Codes	Examples of Potentially Regulated Entities
Industry	325510	2851	Industries that manufacture paints, varnishes, lacquers, enamels and allied products
Industry	4226	2869	Industries that manufacture industrial organic chemicals
State Government			States which have regulations to control volatile organic compounds

This table is not intended to be exhaustive, but rather provides a guide for readers regarding entities likely to be regulated by this action. This table lists the types of

entities that EPA is now aware could potentially be regulated by this action. Other types of entities not listed in the table could also be regulated. If you have questions regarding the applicability of this action to a particular entity, consult the person listed in the preceding "FOR FURTHER INFORMATION CONTACT" section.

#### **I. How Does This Rule Fit Into Existing Regulations?**

EPA is proposing to exclude tertiary butyl acetate (TBAC or TBAc) from the definition of volatile organic compounds (VOCs). If you use or produce TBAc and are subject to EPA regulations limiting the use of VOCs in your product, limiting the VOC emissions from your facility, or otherwise controlling your use of VOCs, then you would not count TBAc as a VOC in determining whether you meet your regulatory obligations. This proposal may also affect whether TBAc is considered a VOC for State regulatory purposes, depending on whether the State relies on EPA's definition of VOC. The EPA is basing its proposal on information in a petition submitted by Lyondell Chemical Company, which plans to manufacture TBAc.<sup>1</sup> This proposal also addresses policies that may govern whether EPA will

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The petition was submitted on January 17, 1997, by ARCO Chemical Company. Lyondell is the successor to ARCO for this petition, and EPA will refer to the petitioner as Lyondell throughout this notice.

exclude other chemicals from the definition of VOC.

Tropospheric ozone, commonly known as smog, occurs when VOCs and nitrogen oxides (NOx) react in the atmosphere. Because of the harmful health effects of ozone, EPA and State governments limit the amount of VOCs and NOx that can be released into the atmosphere. Volatile organic compounds are those compounds of carbon (excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate) which form ozone through atmospheric photochemical reactions. Compounds of carbon (also known as organic compounds) have different levels of reactivity -- that is, they do not react at the same speed or do not form ozone to the same extent. It has been EPA's policy that organic compounds with a negligible level of reactivity need not be regulated to reduce ozone. The EPA lists these compounds in its regulations (at 40 CFR 51.100(s)) and excludes them from the definition of VOCs. The chemicals on this list are often called "negligibly reactive" organic compounds.

## **II. Why Does Lyondell Think TBAC Is Not a VOC?**

On January 17, 1997, Lyondell submitted a petition to EPA which requested that EPA add TBAC to the list of compounds which are designated negligibly reactive in the definition of VOC at 40 CFR 51.100(s). The petitioner

subsequently submitted supplemental materials to EPA in support of its petition. These materials are contained in docket A-99-02. The petitioner based the request on a comparison of the reactivity of TBAC to that of ethane, the latter having already been listed, since 1977, as negligibly reactive. In the past, EPA has determined that ethane and several compounds with lower reactivity than ethane are negligibly reactive and therefore exempted them from the definition of VOC. Reactivity data presented by Lyondell in support of the petition included both  $k_{OH}$  values and incremental reactivity values. The  $k_{OH}$  values are values of the rate constant for the VOC + OH (hydroxyl radical) reaction. The incremental reactivity values, which support the petition and reflect TBAC's potential for producing ozone in the atmosphere, were produced and reported by Dr. William Carter of the University of California at Riverside.

Lyondell's primary case for TBAC being less reactive than ethane is based on the use of incremental reactivity data set forth in a report titled "Investigation of the Atmospheric Ozone Formation Potential of T-Butyl Acetate" by Carter, *et. al.* In that study, Carter compared the incremental ozone formed per-gram of TBAC under urban atmosphere conditions to that formed, under the same conditions, per-gram of ethane. The study repeated these

comparisons for 39 conditions scenarios, that is, sets of ambient conditions intended to represent 39 American urban areas across the United States. Carter concluded that, on average, TBAC formed 0.4 times as much ozone as an equal weight of ethane under the conditions assumed in the study.

There is another way to compare the reactivities of organic compounds with that of ethane. That approach is to compare the compound with ethane on a per-mole basis rather than on a per-gram basis. Using the per-mole basis, the incremental ozone formed under certain conditions per-mole of TBAC would be compared to the ozone formed by a mole of ethane under the same conditions. This approach compares the reactivity of an equal number of molecules of each compound rather than comparing equal weights of the two compounds. On a per-mole basis, the average reactivity of TBAC for the 39-cities set of conditions is about 1.5 times that of ethane. The difference in reactivity results between the two approaches is due to the fact that a molecule of TBAC is almost four times heavier than a molecule of ethane.

### **III. How Does EPA Determine Whether an Organic Compound is Negligibly Reactive?**

When EPA determines that a chemical is less reactive than ethane, EPA considers the chemical negligibly reactive and can exclude it from the definition of VOC. Reactivities can be compared on either a per-gram (or weight) basis or on a per-mole basis. Based on the information discussed above, TBAC is less reactive than ethane on a per-gram basis, but more reactive on a per-mole basis. Thus, in this situation, which basis EPA uses to make the reactivity comparison will determine whether TBAC should be exempted.

All of the compounds which EPA listed as negligibly reactive before 1994 are less reactive than ethane on both a per-gram basis and a per-mole basis. In those decisions, EPA did not explicitly state whether it was using a per-gram or per-mole test. However, as a matter of practice, EPA evaluated these compounds in a manner consistent with using a per-mole basis because it based the comparisons on  $k_{OH}$  values which were expressed on a molecule basis.

The Agency first addressed the use of the per-gram basis in the case of acetone, which the Agency determined was less reactive than ethane on a per-gram basis, but more reactive on a per-mole basis. In the proposal to classify acetone as negligibly reactive, the Agency stated that it

had "elected to adopt the grams ozone per-gram VOC basis, since grams (or tons), rather than moles, is the mass unit used in regulations dealing with VOC emissions" (59 FR 49878, September 30, 1994). There were no adverse comments on this proposed decision to use the per-gram basis, and the Agency stated in the final rule that "[t]he EPA has chosen to use the weight basis rather than a mole basis for comparing results since emissions are regulated on a weight basis" (60 FR 31635, June 16, 1995). This is the only case in which EPA has classified a compound as negligibly reactive solely on the per-gram basis.

The EPA addressed this same issue in a report to Congress concerning VOC emissions from consumer and commercial products ("Study of Volatile Organic Compound Emissions from Consumer and Commercial Products: Report to Congress," March 1995). One chapter of this report discussed the Agency's approach for evaluating VOC reactivity and stated that under the protocol "presently favored -- but not officially endorsed -- " if a compound's "reactivity is found to be equal to or lower than that of ethane on a per-gram-of-VOC basis, . . . it is concluded that [it] can only have negligible O<sub>3</sub> potential..." (p. 3-5). A footnote to this discussion stated that "[c]omparison of VOC species reactivities to that of ethane can be made on either a per-gram-of-VOC basis or a per-mole-of-VOC basis"

and added that EPA has "unofficially adopted the per-gram basis."

The EPA has determined that comparing reactivities on a per-mole basis is more appropriate than comparing them on a per-gram basis. The EPA reexamined the scientific basis for the inclusion of ethane in the original list of negligibly reactive compounds published in 1977 (42 FR 35314). The Agency made the original determination to include ethane, in part, based on the results of a series of smog chamber experiments conducted by EPA in the early 1970s. In those experiments individual organic compounds at the concentration of 4 parts per million (ppm) by volume (or moles) were subjected to simulated ambient urban (Los Angeles) conditions, and resultant maximum ozone build-up in the chamber was measured. Those compounds which resulted in ozone concentration lower than that of the oxidant air quality standard, i.e., 0.08 ppm, were taken to be "negligibly reactive." Ethane was one of the compounds EPA studied, and was the most reactive of those EPA identified as negligibly reactive in that study. Based on those findings and judgments, EPA designated ethane as negligibly reactive and ethane became the benchmark VOC species separating reactive from negligibly reactive compounds. Because EPA chose ethane as the "benchmark" species based on

an equimolar comparison, comparisons with ethane for reactivity classification purposes are most appropriately made using equimolar concentrations, that is, on a per-mole basis.

Additionally, EPA has concluded that the argument previously used to justify the per-gram basis, i.e., that the per-gram basis is more practical since VOC emissions are regulated on a weight basis, is not the best approach when comparisons are made for reactivity classification purposes. Scientifically, chemical reactions are generally described on a molar basis, so the scientific convention is to compare chemicals on a molar basis. Relying on the number of moles of VOCs is consistent with the way EPA conducts photochemical modeling. For that, EPA takes VOC emissions measured by weight and converts them into moles to determine the impact on ozone formation. It is true that when EPA and States regulate, they generally do not regulate VOCs on a molar basis. Under the current state of information, doing so would impose great administrative burdens and costs on the Agency and on regulated industries. In many circumstances, regulating on a molar basis would pose significant practical compliance and enforcement problems. In contrast, it is practical for EPA to use the molar basis to make decisions on petitions to exempt a compound on an individual basis from the definition of VOCs. The EPA

believes that it should use the most scientific approach that is currently feasible for exemption decisions. For that reason, EPA believes the per-mole test is better than the per-gram test for determining whether a compound is less reactive than ethane and should be exempted from the definition of VOC. Use of the per-mole test is also consistent with the basis used to select ethane as a benchmark species.

Because of the determination that the per-mole basis is the proper scientific basis to use in comparing reactivities to ethane for decisions concerning negligible reactivity, EPA intends to employ the per-mole basis for all future negligible reactivity determinations made on VOC exemption petitions received after the date of publication of today's notice. The EPA will assess these future petitions using only the per-mole basis for comparison with ethane; EPA will not use the per-gram basis for evaluating future VOC exemption petitions.

The EPA has commenced a multi-year review of its policy to determine whether it needs revision. In the course of that review, EPA will investigate whether it is desirable,

possible, and legally permissible to consider a compound's role in other air pollution problems (such as particulate matter, regional haze, toxicity, and stratospheric ozone depletion) when EPA determines whether a compound should be excluded from the definition of VOCs. The issue of an integrated approach to considering environmental problems was discussed by the Subcommittee for Ozone, Particulate Matter and Regional Haze, a Federal Advisory Committee Act (FACA) committee, which advised EPA on the implementation of the revised ozone and particulate matter ambient air quality standards. This FACA committee recommended an integrated approach to controlling ozone, fine particulates and regional haze. As part of that review, EPA will solicit comments from the public on these policy issues. If EPA revises its reactivity policy substantially, the current list of negligibly reactive compounds in the definition of VOC could be considerably altered to conform to the new policy.

#### **IV. What Is EPA's Basis for Proposing That TBAC Is Negligibly Reactive and Excluding It From the Definition of VOC?**

If EPA were to apply the per-mole test to TBAC, it would deny Lyondell's petition. Lyondell has argued that

the appropriate test is the per-gram test, and that even if EPA decides the per-mole test is more appropriate, it would be unfair to apply the per-mole test without warning to petitions for which a company has significantly relied on EPA's prior statements. Because the per-mole test is a change from previous EPA regulatory statements, EPA believes that equitable considerations warrant use of the per-gram test in certain circumstances as described below.

Therefore, if certain conditions are met, EPA will apply the per-gram test for currently pending petitions to exempt organic compounds from the definition of VOCs.

In deciding whether EPA will use the per-gram test for any particular pending petition (see Table 1)<sup>2</sup>, EPA will consider the extent to which the petitioner actually relied on EPA's past statements regarding the per-gram test. In addition, EPA will also consider the extent to which the application of the per-mole test (rather than the per-gram

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Table 1 gives a list of the pending petitions requesting exclusion from the definition of VOC. Preliminary review indicates that several of the compounds in Table 1 may be less reactive than ethane on a per-gram basis, but not on a per-mole basis. The EPA will determine whether to use the per-gram or per-mole test for each of these compounds based on a consideration of the petitioner's reliance on past EPA statements regarding the per-gram test and on the extent to which applying the per-mole test would further the purpose of the Clean Air Act. Any petitioner listed in Table 1 that can demonstrate substantial actual reliance on EPA's past statements should submit that information to EPA.

test) would further the purposes of the Clean Air Act. This balances fairness to the regulated industry with adequate protection of the environment. Based on these considerations, EPA is proposing to use the per-gram test for TBAC and to exclude it from the definition of VOC.<sup>3</sup>

For TBAC, Lyondell has demonstrated substantial actual reliance on EPA's past statements adopting the per-gram test. Lyondell's reliance goes beyond the mere filing of its petition (which would not, by itself, demonstrate sufficient reliance to use the per-gram test). When Lyondell prepared and submitted its petition, these were the only explicit, policy statements the Agency had made regarding the gram versus mole issue. The petitioner has said: "In reliance on these statements, the Company invested substantial resources to identify and evaluate solvents that would meet the ethane standard on a gram basis. Company experts reviewed hundreds of potentially useful compounds to determine, based on their physical and chemical properties, which were most likely to have very low photochemical reactivity. After identifying TBAC as a promising candidate, the Company funded reactivity and other environmental studies on TBAC." (See written communication

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Based on the considerations listed above, EPA currently intends to keep acetone in the list of chemicals that are negligibly reactive VOCs.

from Daniel Pourreau (Lyondell) to William Johnson (EPA) dated February 11, 1999). The petitioner has also claimed that: "In addition to these efforts, the Company has invested significant resources in research and development to evaluate whether TBAC can be used to replace more reactive solvents in a wide range of products. These efforts have included internal studies, studies with outside laboratories, marketing and development work with a number of product manufacturers." (See written communication from Daniel Pourreau (Lyondell) to William Johnson (EPA) dated February 11, 1999). Petitioner's reliance on EPA's prior statements is significant enough that it weighs in favor of using the per-gram test.

Another consideration for pending petitions is the extent to which application of the per-mole test would further the purpose of the Act. The specific purpose at issue here is the reduction of ozone. If the reactivity of TBAC on a per-mole basis were markedly higher than that of ethane, that might warrant the application of the per-mole test despite Lyondell's reliance on EPA's earlier statements. Due to scientific and practical concerns, we generally do not distinguish among VOCs on the basis of reactivity in rulemakings under the Act. In rulemakings relating to the definition of VOC, our current practice is to take reactivity into account only to decide whether a

compound's reactivity is low enough to justify exempting the compound as negligibly reactive. However, in the very narrow circumstance that is presented here, where we are weighing the petitioner's reliance against the statutory interest in applying the per-mole test, we think it is appropriate to consider the extent to which TBAC's reactivity exceeds that of ethane. Because TBAC's reactivity is on the order of two times that of ethane on a per-mole basis, the extent to which the purpose of the Act would be furthered by denying the petition for an exemption does not outweigh Lyondell's reliance on EPA's previous statements.<sup>4</sup>

Therefore, EPA proposes to grant Lyondell's petition and exclude TBAC from the definition of VOC because TBAC is less reactive than ethane on a per-gram basis.

**V. Are There Environmental Benefits to Excluding TBAC From the Definition of VOC?**

In addition to the reactivity data comparing TBAC and ethane, the petitioner also submitted other information in support of its petition. The petitioner argued that the VOC

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Given the other information that has been submitted on TBAC, we do not believe that excluding TBAC from the definition of VOC would undermine other purposes of the Act. In certain circumstances, it might be appropriate to consider the volume of the compound's emissions. We do not believe we have sufficient information to consider that factor for TBAC, but we request comment on this issue.

exemption of TBAC would benefit the environment because TBAC would be used as a replacement solvent for toluene and xylene. The petitioner claims that hazardous air pollutant (HAP) emissions would be reduced because toluene and xylene are both solvents that are listed in section 112 of the Act as HAPs, and TBAC is not listed. The petitioner also submitted health effects data on TBAC to support its claim that TBAC is less hazardous than xylene and toluene. Additionally, the petitioner claimed that there is potential for TBAC to replace to some degree other HAPs, including methanol, e-glycol ethers, methyl ethyl ketone, n-hexane, methyl isobutyl ketone, and trichloroethylene.

The possible use of TBAC in lieu of HAPs may, indeed, be a collateral benefit of the exemption of TBAC from the definition of VOC. However, this is not a basis for EPA's proposal. At this time, EPA does not believe that it is in a position to predict the market for TBAC or to evaluate Lyondell's claims in that regard. It should be noted that another company has notified EPA that it disagrees with Lyondell's market claims and related substitution benefits. [See letter (with attachments) from Ernest Rosenberg (Occidental International Corp.) to Rob Brenner (EPA) dated May 14, 1999].

Table 1

**List of Compounds for which EPA has Received Petitions Prior to Today's Notice Requesting VOC Exempt Status and for which EPA has Published no Final Action**

1. **Chlorobromomethane** - ICF Kaiser (SAI Division).
2. **1-Bromopropane** (also known as **n-propyl bromide**) - Enviro Tech International. Petition also submitted by Albemarle Corp.
3. **Methyl Bromide** - Chemical Manufacturers Association.
4. **n-Alkanes (C<sub>12</sub> - C<sub>18</sub>)** - The Aluminum Association.
5. **Technical white oils** - The Printing Industries of America and Pennzoil Products Company.
6. **t-butyl acetate** - Lyondell Chemical Company.
7. **Benzotrifluoride** - Occidental Chemical Company.
8. **Carbonyl Sulfide (COS)** - E.I. du Pont de Nemours and Company. Petition also submitted by Texas Mid-Continent Oil & Gas Association.
9. **trans-1,2-dichloroethylene** - 3M Corporation.
10. **Dimethyl succinate and dimethyl glutarate** - Dibasic Esters Group, affiliated with the Synthetic Organic Chemical Manufacturers Association, Inc.
11. **Carbon Disulfide** - Texas Mid-Continent Oil & Gas Association.
12. **Acetonitrile** - BP Chemicals and GNI Chemicals Corporation.
13. **Toluene Diisocyanate (TDI)** - Chemical Manufacturers Association [The Diisocyanate Panel of CMA reported the following members: ARCO Chemical Company, BASF Corporation, Bayer Corporation, The Dow Chemical Company, and ICI Americas, Inc.].
14. **HFC-227ea (1,1,1,2,3,3,3-heptafluoropropane)** - Great Lakes Chemical Corporation.

15. **Methylene Diphenyl Diisocyanate (MDI)** - Chemical Manufacturers Association [The Diisocyanate Panel of CMA reported the following members: BASF Corporation, Bayer Corporation, The Dow Chemical Company, ICI Americas, Inc., and Lyondell Chemical Company].
16. **1,1,1,2,2,3,3-heptafluoro-3-methoxy-propane (n-C<sub>3</sub>F<sub>7</sub>OCH<sub>3</sub>)**  
- 3M Corporation.
17. **Propylene Carbonate** - Huntsman Corporation.

#### **VI. What is Today's Proposal?**

Today's proposed action is based on EPA's review of the material in Docket No. A-99-02. The EPA hereby proposes to amend its definition of VOC at 40 CFR 51.100(s) to exclude TBAC as a VOC. If this action is finalized, you would not count TBAC as a VOC for purposes of EPA regulations related to attaining the ozone NAAQS, including regulations limiting your use of VOCs or your emissions of VOCs; but you would record and report the use and emissions of TBAC as an "Exempt VOC." Your recordkeeping and reporting of TBAC would conform to those requirements that would apply to you for non-exempt VOCs used in the same manner or in the same application as TBAC. You should check with your State to determine whether you should count TBAC as a VOC for State regulations. However, if this action is made final, your State should not include TBAC in its VOC emissions inventories for determining reasonable further progress under the Act (e.g., section 182(b)(1)) or take credit for

controlling this compound in its ozone control strategy. However, we urge your State to include TBAC and other VOC exempt compounds in inventories used for ozone modeling to assure that such emissions are not having a significant effect on ambient ozone levels.

## **VII. Administrative Requirements**

### **A. Docket**

The docket is an organized and complete file for all information submitted or otherwise considered by EPA in the development of this proposed rulemaking. The principal purposes of the docket are: (1) To allow interested parties to identify and locate documents so that they can effectively participate in the rulemaking process; and, (2) to serve as the record in case of judicial review (except for interagency review materials) (section 307(d)(7)(A)).

### **B. Executive Order 12866**

Under Executive Order 12866 (58 FR 51735, October 4, 1993), the Agency must determine whether a regulatory action is "significant" and therefore subject to Office of Management and Budget (OMB) review and the requirements of this Executive Order. The Order defines "significant regulatory action" as one that is likely to result in a rule that may:

- (1) Have an annual effect on the economy of \$100

million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or tribal governments or communities;

(2) create a serious inconsistency or otherwise interfere with an action taken or planned by another agency;

(3) materially alter the budgetary impact of entitlements, grants, user fees, or loan programs, or the rights and obligation of recipients thereof; or

(4) raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in the Executive Order.

It has been determined that this rule is not a "significant regulatory action" under the terms of Executive Order 12866 and is therefore not subject to OMB review.

#### C. Unfunded Mandates Act

Title II of the Unfunded Mandates Reform Act of 1995 (UMRA), PL. 104-4, establishes requirements for Federal agencies to assess the effects of their regulatory actions on State, local, and tribal governments and the private sector. Under section 202 of the UMRA, EPA generally must prepare a written statement, including a cost-benefit analysis, for proposed and final rules with "Federal mandates" that may result in expenditures by State, local,

and tribal governments, in the aggregate, or by the private sector, of \$100 million or more in any 1 year. Before promulgation of an EPA rule for which a written statement is needed, section 205 of the UMRA generally requires EPA to identify and consider a reasonable number of regulatory alternatives and adopt the least costly, most cost effective, or least burdensome alternative that achieves the objective of the rule, unless EPA publishes with the final rule an explanation of why that alternative was not adopted. Before EPA establishes any regulatory requirements that may significantly or uniquely affect small governments including tribal governments, it must have developed under section 203 of the UMRA a small government plan which informs, educates and advises small governments on compliance with the regulatory requirements. Finally, section 204 provides that for any proposed rule that imposes a mandate on a State, local or tribal government of \$100 million or more in any 1 year, the Agency must provide an opportunity for such governmental entities to provide input in development of the proposed rule.

Since today's rulemaking is deregulatory in nature and does not impose any mandate on governmental entities or the private sector, EPA has determined that sections 202, 203, 204 and 205 of the UMRA do not apply to this action.

D. Regulatory Flexibility Act

The Regulatory Flexibility Act (RFA) generally requires an agency to conduct a regulatory flexibility analysis of any rule subject to notice and comment rulemaking requirements unless the agency certifies that the rule will not have a significant economic impact on a substantial number of small entities. Small entities include small businesses, small not-for-profit enterprises, and small governmental jurisdictions. This proposed rule would not have a significant impact on a substantial number of small entities because it imposes no adverse economic impacts on any small entities. Therefore, I certify that this action will not have a significant economic impact on a substantial number of small entities.

E. Paperwork Reduction Act

This proposed rule does not contain any information collection requirements subject to OMB review under the Paperwork Reduction Act, 44 U.S.C. 3501 et seq.

F. Executive Order 12875: Enhancing the Intergovernmental Partnership

Under Executive Order 12875, EPA may not issue a regulation that is not required by statute and that creates a mandate upon a State, local or tribal government, unless the Federal government provides the funds necessary to pay the direct compliance costs incurred by those governments, or EPA consults with those governments. If EPA complies by

consulting, Executive Order 12875 requires EPA to provide the OMB a description of the extent of EPA's prior consultation with representatives of affected State, local and tribal governments, the nature of their concerns, copies of any written communications from the governments, and a statement supporting the need to issue the regulation. In addition, Executive Order 12875 requires EPA to develop an effective process permitting elected officials and other representatives of State, local and tribal governments "to provide meaningful and timely input in development of regulatory proposals containing significant unfunded mandates."

Today's rule does not create a mandate on State, local or tribal governments. The rule is deregulatory in nature and does not impose any enforceable duties on these entities. Accordingly, the requirements of section 1(a) of Executive Order 12875 do not apply to this rule.

G. Executive Order 13045: Children's Health Protection

Executive Order 13045: "Protection of Children from Environmental Health Risks and Safety Risks" (62 FR 19885, April 23, 1997) applies to any rule that: (1) is determined to be "economically significant" as defined under Executive Order 12866, and (2) concerns an environmental health or safety risk that EPA has reason to believe may have a disproportionate effect on children. If the regulatory

action meets both criteria, the Agency must evaluate the environmental health or safety effects of the planned rule on children, and explain why the planned regulation is preferable to other potentially effective and reasonably feasible alternatives considered by the Agency.

While this proposed rule is not subject to the Executive Order because it is not economically significant as defined in Executive Order 12866, EPA has reason to believe that ozone has a disproportionate effect on active children who play outdoors. (See 62 FR 38856, 38859 (July 18, 1997).) The EPA has not identified any specific studies on whether or to what extent t-butyl acetate directly affects children's health. The EPA has placed the available data regarding the health effects of t-butyl acetate in docket no. A-99-02. The EPA invites the public to submit or identify peer-reviewed studies and data, of which EPA may not be aware, that assess results of early life exposure to t-butyl acetate.

H. Executive Order 13084: Consultation and Coordination with Indian Tribal Governments

Under Executive Order 13084, EPA may not issue a regulation that is not required by statute, that significantly or uniquely affects the communities of Indian tribal governments, and that imposes substantial direct compliance costs on those communities, unless the Federal

government provides the funds necessary to pay the direct compliance costs incurred by the tribal governments, or EPA consults with those governments. If EPA complies by consulting, Executive Order 13084 requires EPA to provide to the OMB, in a separately identified section of the preamble to the rule, a description of the extent of EPA's prior consultation with representatives of affected tribal governments, a summary of the nature of their concerns, and a statement supporting the need to issue the regulation. In addition, Executive Order 13084 requires EPA to develop an effective process permitting elected officials and other representatives of Indian tribal governments "to provide meaningful and timely input in the development of regulatory policies on matters that significantly or uniquely affect their communities."

Today's proposed rule does not impose substantial direct compliance costs on the communities of Indian tribal governments. This proposed rule is deregulatory in nature and does not impose any direct compliance costs. Accordingly, the requirements of section 3(b) of Executive Order 13084 do not apply to this rule.

#### I. National Technology Transfer and Advancement Act

Section 12(d) of the National Technology Transfer and Advancement Act of 1995 ("NTTAA"), Pub. L. No. 104-113, § 12(d), (15 U.S.C. 272 note) directs EPA to use voluntary

consensus standards in its regulatory activities unless to do so would be inconsistent with applicable law or otherwise impractical. Voluntary consensus standards are technical standards (e.g., materials specifications, test methods, sampling procedures, and business practices) that are developed or adopted by voluntary consensus standards bodies. The NTTAA directs EPA to provide Congress, through OMB, explanations when the Agency decides not to use available and applicable voluntary consensus standards.

This proposed rulemaking does not involve technical standards. Therefore, EPA is not considering the use of any voluntary consensus standards.

**List of Subjects in 40 CFR Part 51**

Environmental protection, 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.

Dated: September 24, 1999.

Carol M. Browner  
Administrator.

For reasons set forth in the preamble, part 51 of chapter I of title 40 of the Code of Federal Regulations is proposed to be 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, 7411, 7412, 7413, 7414, 7470-7479, 7501-7508, 7601, and 7602.

2. Section 51.100 is proposed to be amended at the end of paragraph (s)(1) introductory text by removing the words

"and perfluorocarbon compounds which fall into these classes:" and adding a semi-colon and the words "; t-butyl acetate and perfluorocarbon compounds which fall into these classes:", as follows:

§51.100 Definitions.

\* \* \* \* \*

(s) \* \* \*

(1) \* \* \* ; t-butyl acetate and perfluorocarbon compounds which fall into these classes:

\* \* \* \* \*