Environmental Protection Agency

40 CFR Parts 51, 52, 70, and 71
Prevention of Significant Deterioration, Non attainment New Source Review, and Title V: Treatment of Certain Ethanol Production Facilities Under the “Major Emitting Facility” Definition; Final Rule
ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 51, 52, 70, and 71

[84 FR 35367, July 30, 2019]

Prevention of Significant Deterioration, Nonattainment New Source Review, and Title V: Treatment of Certain Ethanol Production Facilities Under the “Major Emitting Facility” Definition

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: This final rule finalizes proposed changes made to the definition of “major emitting facility” in the Prevention of Significant Deterioration (PSD), Nonattainment New Source Review (NSR) and Title V regulations. Two of the regulatory changes proposed addressed the major source threshold for PSD sources. The remaining proposed regulatory changes finalized in this action address when fugitive emissions are counted for purposes of determining whether a source is a major source under the PSD, nonattainment NSR or Title V programs. The proposal solicited comment on whether wet and dry corn milling facilities that produce ethanol for fuel should continue to be considered a part of the chemical process plants source category, and whether other types of facilities that produce ethanol fuel should be considered for exclusion from the definition of chemical process plants. Based on comments received and evaluated, we have included additional changes to this final rule that exclude other facilities that produce ethanol by natural fermentation and are classified in North American Industry Classification System (NAICS) code 325193 or 321240 from the definition of “chemical process plants.”

DATES: This final rule is effective on July 2, 2007.

ADDRESSES: Docket. The EPA has established a docket for this action under Docket ID No. [EPA–HQ–OAR–2006–0089; FRL–8301–4]. All documents in the docket are listed on the http://www.regulations.gov Web site. Although listed in the index, some information is not publicly available, e.g., Confidential Business Information or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the Internet and will be publicly available only in hard copy form. Publicly available docket materials are available either electronically through http://www.regulations.gov or in hard copy at the Air and Radiation Docket and Information Center, EPA/DC, EPA West Building, Room 3334, 1301 Constitution Ave., NW., Washington, DC. The Air and Radiation Docket and Information Center telephone number is (202) 566–1742. The Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The Public Reading Room is located in the EPA Headquarters Library, Room Number 3334 in the EPA West Building, located at 1301 Constitution Ave., NW., Washington, DC. The telephone number for the Public Reading Room is (202) 566–1744.

Visitors are required to show photographic identification, pass a metal detector, and sign the EPA visitor log. All visitor materials will be processed through an X-ray machine as well. Visitors will be provided a badge that must be visible at all times.

FOR FURTHER INFORMATION CONTACT: Ms. Joanna Swanson, Air Quality Policy Division, (C339–03), Environmental Protection Agency, Research Triangle Park, NC 27711, telephone number: (919) 541–5282; fax number: (919) 541–5509, e-mail address: swanson.joanna@epa.gov.

SUPPLEMENTARY INFORMATION: The title of this final rule has been changed from the proposed rule title to better reflect the final rule. The proposed rule was entitled “Prevention of Significant Deterioration, Nonattainment New Source Review, and Title V: Treatment of Corn Milling Facilities Under the “Major Emitting Facility” Definition.” The information presented in this preamble is organized as follows:

I. General Information

A. Does this action apply to me?

Entities affected by this final rule are facilities that produce ethanol by a natural fermentation process that are classified under NAICS codes 325193 and 312140; and State/local/Tribal governments. Categories and entities potentially affected by this action are expected to include:

<table>
<thead>
<tr>
<th>Industry group</th>
<th>SIC#</th>
<th>NAICS#</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wet Corn Milling</td>
<td>2046</td>
<td>311221</td>
</tr>
<tr>
<td>Industrial Organic Chemicals (Ethyl Alcohol)</td>
<td>2869</td>
<td>325193</td>
</tr>
<tr>
<td>Sugar Cane Mills</td>
<td>2061</td>
<td>311311</td>
</tr>
<tr>
<td>Sugar Beet Manufacturing</td>
<td>2063</td>
<td>311313</td>
</tr>
<tr>
<td>Distilleries</td>
<td>2085</td>
<td>312140</td>
</tr>
<tr>
<td>State/local/Tribal government</td>
<td>9511</td>
<td>924110</td>
</tr>
</tbody>
</table>

A. Does this action apply to me?

B. Where can I obtain additional information?

In addition to being available in the docket, an electronic copy of this preamble and final amendments will also be available on the World Wide Web. Following signature by the EPA Administrator, a copy of this notice will be posted on the EPA’s NSR Web site, under Regulations & Standards, at http://www.epa.gov/nsr.

II. Background

These regulatory changes affect the applicability provisions of two separate permitting programs: the major NSR

VI. Effective Date of This Rule and Requirements for State or Tribal Implementation Plans and Title V

VII. Statutory and Executive Order Reviews

A. Executive Order 12866—Regulatory Planning and Review

B. Paperwork Reduction Act

C. Regulatory Flexibility Analysis

D. Unfunded Mandates Reform Act

E. Executive Order 13132—Federalism

F. Executive Order 13175—Consultation and Coordination with Indian Tribal Governments

G. Executive Order 13045—Protection of Children from Environmental Health Risks and Safety Risks

H. Executive Order 13211—Actions Concerning Regulations that Significantly Affect Energy Supply, Distribution or Use

I. National Technology Transfer and Advancement Act

J. Executive Order 12898—Federal Actions to Address Environmental Justice in Minority Populations and Low-income Populations

K. Congressional Review Act

VIII. Judicial Review
program and the title V programs. The NSR program legislated by Congress in parts C and D of Title I of the Clean Air Act (CAA) is a preconstruction review and permitting program applicable to major stationary sources (major sources) that construct or undertake major modifications. In areas not meeting health-based national ambient air quality standards (NAAQS) and in ozone transport regions (OTR), the program is implemented under the requirements of part D of Title I of the CAA for “nonattainment” NSR. We call this program the major nonattainment NSR program. In areas meeting NAAQS (“attainment” areas) or for which there is insufficient information to determine whether they meet the NAAQS (“unclassifiable” areas), the NSR requirements for the PSD of air quality under part C of title I of the CAA apply. We call this program the Prevention of Significant Deterioration (PSD) program. Collectively, we refer to both programs as the major NSR program. The NSR regulations are contained in 40 CFR parts 51.165, 51.166, 52.21, 52.24, and appendix S of part 51.

Title V of the CAA required EPA to promulgate regulations governing the establishment of operating permit programs. The current regulations are codified at 40 CFR parts 70 and 71. The CAA, as implemented by our regulations, defines the applicability of these different programs based, in part, on whether a stationary source is “major.” For purposes of implementing the PSD program, Congress defined the term “major emitting facility” in section 169(l) of the CAA. This definition contains a specific list of source categories for which an individual source will be considered a major source if it has the potential to emit 100 tons per year (tpy) of any pollutant for which the local area is in attainment with the NAAQS. This is referred to as the 100 tpy threshold. For any source not otherwise listed, a 250 tpy threshold applies. For purposes of implementing the nonattainment major NSR program, we do not apply different applicability thresholds based on the type of source category. All sources are subject to a 100 tpy threshold or less depending on the severity of the nonattainment problem. All major sources, as the term is defined for title V purposes, are required to obtain title V operating permits. Sources required to obtain title V permits include those sources subject to PSD and nonattainment NSR. Therefore, title V relies in part on the definition of “major emitting facility” for the PSD program.

In addition to determining which applicability threshold applies to a given source, the determination of whether a source is “major” is also partly dependent on whether the stationary source must count both fugitive and stack emissions in determining whether it exceeds the threshold. Section 302(j) provides that (j) Except as otherwise expressly provided, the terms “major stationary source” and “major emitting facility” mean any stationary facility or source of air pollutants which directly emits, or has the potential to emit, one hundred tons per year or more of any air pollutant (including any major emitting facility or source of fugitive emission of any pollutant, as determined by rule by the Administrator).

In 1980, we established a list of source categories that must consider fugitive emissions in source applicability determinations. We used the section 169(1) list of categories in developing our 302(j) list of categories.

This final rule involves changes to the “major stationary source” and “major source” definitions in the NSR and title V programs as this definition relates specifically to the manufacturing of ethanol through natural fermentation processes. These changes affect both the applicability threshold and whether this industry must count fugitive emissions in determining its major source status.

On March 9, 2006 (71 FR 12240), we proposed to reinterpret the component term “chemical process plants” within the statutory definition of “major emitting facility” in section 169(l) of the CAA to exclude wet and dry corn milling facilities which produce ethanol fuel (Option 1). We requested comment on another option in which we would continue to include wet and dry corn milling facilities which produce ethanol fuel within the definition of “chemical process plants.” (Option 2). We also proposed similarly to reinterpret the regulatory term “chemical process plants” on the list of source categories for which fugitive emissions must be included in determining whether the source is a “major stationary source.”

To implement these proposed changes, we proposed to revise the definition of “major stationary source” under 40 CFR parts 51 and 52, and the definition of “major source” under 40 CFR parts 70 and 71. (See 71 FR 12240, March 9, 2006). Finally, we also requested information on other types of ethanol production facilities and comment on whether other types of facilities including those that produce potable ethanol or ethanol fuel should be considered for exclusion from the “chemical process plants” definitions.

III. Summary of the Final Rule

This rule finalizes Option 1 and reinterpret the component term “chemical process plants” within the statutory definition of “major emitting facility” and regulatory definitions of “major stationary source” and “major source” to exclude wet and dry corn milling facilities that produce ethanol for fuel or ethanol for food. Moreover, based on comments we received, we are extending the extension to all facilities that produce ethanol through a natural fermentation process that involves the use of such things as corn, sugar beets, sugar cane or cellulosic biomass as a feedstock regardless of whether the ethanol is produced for human consumption, fuel or for an industrial purpose. This includes denatured alcohol, nonpotable ethanol, nonpotable grain alcohol, potable ethanol, and grain alcohol beverages. We are also reinterpreting the term “chemical process plants” on the list of source categories that must count fugitives emissions in determining whether a source is a major source to be consistent with the way we now interpret that term for purposes of determining the major source threshold.

As proposed, we are changing the PSD and nonattainment NSR regulations that we are amending with this action to include amendments to 40 CFR 51.165, 51.166, 52.21, and appendix S of part 51. Since the time we defined the “chemical process plants” under the regulatory definition of “major emitting facility” to exclude ethanol manufacturing facilities that produce ethanol by natural fermentation processes. In addition, we have changed our approach to defining the sources within the exclusion as explained below. As explained in the preamble to the proposed rule (71 FR at 12243), in 1981, when we originally interpreted the “chemical process plants” term by guidance, we did so in reference to SIC 28. Since the time we defined the chemical process plants under the regulatory definition, the Federal Government replaced the SIC code manual with the NAICS. Under the NAICS, as compared to the SIC system, there are over 350 more industries classified. Federal Government agencies have adopted the NAICS to collect
statistics from industry establishments more relevant to this economy. The NAICS gives special attention to emerging industries (such as ethanol production) and similar production processes are grouped together. The SIC system, which was last revised in 1987 does not include many of the industries included in the NAICS.

Ethanol fuel and industrial ethanol fall within NAICS 325193 (Ethyl Alcohol Manufacturing) which includes denatured alcohol, nonpotable ethanol, and nonpotable grain alcohol. The NAICS 321240 (Distilleries) includes potable ethyl alcohol and grain alcohol beverages. Even though NAICS 325193 (ethyl alcohol manufacturing) has been classified under NAICS’ Chemical Manufacturing subsector, unlike under the SIC classification of 2869 (Industrial Organic Chemicals, Not Elsewhere Classified), ethyl alcohol manufacturing is within its own narrowly defined category.

The Agency has considered whether, and in what way, we might transition from use of the SIC to the NAICS for purposes of determining the scope of a stationary source in general and for other purposes such as source category determinations. We have not reached any universal conclusions. Notably, however, some commenters expressed concern that by refining the “chemical process plants” definition such that we no longer rely solely on SIC code 28, we would be embroiling the Agency in the “fine grain” analysis we sought to avoid under our initial guidance, negating the objectivity of the current approach. In view of this comment, we think it useful to consider the NAICS codes as a potential tool to address the commenters’ concerns. At proposal, we did not use SIC codes to define the facilities that are subject to these changes. We have decided to use NAICS codes to define these facilities in the final rule because the narrow classification of the NAICS codes for ethyl alcohol manufacturing (NAICS code 325193) and distilleries (NAICS code 312140) under the SIC system is useful and eliminates the problem of having to do a “fine grain” analysis.

Accordingly, in response to commenters, our final rule references the NAICS codes 325193 and 312140 to exclude facilities using a natural fermentation process to produce ethanol from the definition of “chemical process plants.” We believe that by defining the “chemical process plants” in this way, we retain the objectivity and ease of implementation inherent in our original guidance.

The remaining regulatory changes address when fugitive emissions are counted for purposes of determining whether a source is a major source under the PSD, nonattainment NSR, or title V programs. Our final rule treats the term “chemical process plants” in those regulations in the same manner as we treat it for purposes of determining the major source threshold.

IV. Policy Rationale for Action

In our proposed rule, we expressed several reasons to support our proposal to change the definition of “chemical process plants.” First, we cited concerns related to the disparate treatment of ethanol fuel production verses production of ethanol intended for human consumption by applying two different major source thresholds. Because the two manufacturing processes are substantially similar, we believed that the process should be treated identically for purposes of the PSD and title V regulations regardless of the intended product. We also cited concerns that continuing to regulate the ethanol fuel under the 100 tpy major source threshold, regardless of the production method could stymie the growth of the industry, and hamper our nation’s efforts toward energy independence. Some commenters agreed with our general approach. Other commenters asserted that a mere similarity in processes did not justify our proposed redefinition of the “chemical process plant” category. Other commenters questioned whether permitting agencies treated the two types of ethanol production differently for regulatory purposes.

After reviewing the comments, we re-examined whether our policy concerns remain valid, and affirm our conclusion that a change in the “chemical process plant” category definition is warranted. Although we received conflicting information as to how permitting authorities regulate ethanol intended for human consumption, especially at plants that also produce ethanol for fuel, we maintain the fundamental premise for our proposal that ethanol, regardless of intended use, is produced through substantially similar processes, and that similar processes should be regulated in a similar way. Although there may be jurisdictional differences in the way these industries are regulated, we believe this further supports the need to clarify the definition of “chemical process plants” relative to the ethanol production industry as a whole and does not negate the fundamental basis on which we proposed the rule.

We continue to believe that supporting efforts toward energy independence is an important national goal, and that this consideration is appropriate in deciding how to balance our nation’s economic growth with environmental protection. The Energy Policy Act of 2005 (Pub. L. 109–58) established a renewable fuel standard (RFS) that requires an increasing use of renewable fuels in our nation. It is clear that continued growth of the ethanol industry will play a vital role in achieving our nation’s energy and environmental objectives. While we are uncertain what impact this regulatory action may have on furthering our progress toward the goal of energy independence, we believe that including ethanol fuel in the “chemical process plants” presented potential obstacles for growth in the industry. These obstacles primarily include the time it takes to obtain a preconstruction permit, and, in some cases, the potential costs that may be incurred as a result of having to apply additional emissions controls. As we discuss, in section V, we conclude that this rule is not likely to result in significant net environmental harm. Nonetheless, even if our consideration of potential environmental consequences understates potential negative environmental consequences, we believe that the potential for other environmental benefits and the desire to support our nation’s energy policy objectives outweigh any potential negative environmental consequences that could potentially result from this rule.

We maintain, as we did in the proposal preamble, that we have the obligation to define “chemical process plants” to exclude wet and dry corn milling facilities. As stated above, we based our proposed rule on the premise that ethanol production should be treated similarly regardless of whether it is produced using either the wet or dry corn process, and regardless of whether the end product is used as fuel or for human consumption because the process steps involved are essentially the same. As noted in the proposal, the only difference is the final step where a small amount of denaturant (such as gasoline) is added to render the ethanol unfit for human consumption. This rationale also supports expansion of the exclusion to all facilities that produce ethanol through a natural fermentation process. We received numerous comments supporting this finding. Although some commenters pointed to differences in the production process, we are not persuaded that the differences justify disparate regulatory treatment. We also received comments justifying the expansion of our regulatory exclusion to other feedstock and end product uses. We discuss our
responses to these comments in more detail in section V of this preamble. We did, however, receive a few comments stating that our regulatory approach is fundamentally flawed, because regardless of the similarity of process, ethanol fuel and perhaps ethanol production in general should be regulated under the 100 tpy threshold.

Some commenters assert that we are not entitled to deference because such facilities fall within the plain meaning of the term “chemical processing plant.” Others assert that section 169(1) shows Congress’ intent to focus on a facility’s finished product and economic sector in which an industry competes. We do not believe that the term “chemical process plant” is subject to a “plain meaning interpretation.” There is not a universally accepted definition of chemical process, and accepted definitions differ depending on whether you view the term from a purely scientific sense or from an engineering sense, or for economic purposes. The scope of the chemical industry is in part shaped by custom rather than by logic and excludes industries that nevertheless engage in chemical processes, e.g., petroleum refineries are a separate category on the section 169(1) list. One definition offered by the commenter is so broad it would encompass nearly every manufacturing activity regardless of source category, and would render other categories on the source category list redundant. The specific chemical process relevant here, natural fermentation, is common to many industries. For example, natural fermentation is used by non-ethanol producing food manufacturers which Congress chose not to subject to the 100 tpy. We find no “plain meaning” definition of “chemical process plant” that can be applied in light of these facts. Accordingly, we do not believe that whether or not an industry engages in a “chemical process” and specifically whether it engages in “natural fermentation” can be used as the decisive factor in determining whether Congress intended the industry to be included within the “chemical process plants” category.

We also disagree that section 169 clearly shows Congress’s intent on what factors we must consider in making source category determinations. As discussed below, we have used a variety of considerations in making source category determinations. We generally have not conducted economic analysis in making these decisions, nor have we based our decision solely on the end product produced or strictly followed an SIC approach for all categories.

V. Significant Comments Received on the Proposal

Significant comments received on, and our responses to, the proposed amendments to the “major emitting facility” definition are presented in the following paragraphs.

A. What comments did we receive on our proposed changes to the “major emitting facility” definition?

The Federal Register proposal preamble notes that most ethanol is produced in the U.S. from sugar or starch-based feedstock using two basic processes: The dry mill process and the wet mill process. The preamble stated that wet milling operations are specifically addressed under SIC Code 2046 (“Wet Corn Milling”) under Major Group 20 (“Food and Kindred Products”). Wet corn milling units engaged in producing food products are subject to the 250 tpy threshold under PSD. The proposal provided that (1) Both wet and dry corn milling processes can produce ethyl alcohol for human consumption, (2) the processes are identical to those which produce ethyl alcohol for fuel (with some exceptions), and (3) industry stakeholders believe that the thresholds should be the same. Based on these reasons, we proposed to redefine “chemical process plants” under the definition of “major emitting facility” found in section 169(l) of the CAA to exclude wet and dry corn milling facilities that produce ethanol for fuel (Option 1).

Several commenters on the proposal argued that there was insufficient explanation as to why we proposed the change for only one type of facility (i.e., corn milling facilities). Some of these commenters provided that we should extend the proposed exclusion to cellulosic biomass, sugar beets, and/or sugar cane facilities that produce ethanol fuel. A few commenters supported equal treatment of corn milling facilities regardless of the ethanol end product (i.e., for human consumption, ethanol fuel, industrial ethanol). The Corn Refiners Association (CRA) suggested that we expand the exclusion to all fermentation processes that result in products other than ethanol (in addition to ethanol) that replace petroleum feedstocks or are used to make food products (e.g., citric acid made from corn, propylene glycol

made from corn), however, expanding to products other than ethanol is not within the scope of this rulemaking as it was not discussed at proposal.

This final rule finalizes the exclusion for wet and dry corn milling ethanol production facilities and expands that exclusion to include ethanol production facilities that produce ethanol by natural fermentation included in NAICS codes 325193 and 312140 (includes denatured alcohol, nonpotable ethanol, nonpotable grain alcohol, potable ethyl alcohol, and grain alcohol beverages).2

The following subparagraphs present greater detail on the comments received on the proposed “major emitting facility” definition and whether the “chemical process plants” exclusion for corn milling ethanol fuel production facilities should be expanded to facilities that produce ethanol fuel from cellulosic biomass, sugar beets, and sugar cane; and facilities that produce industrial ethanol from corn, cellulosic biomass, sugar beets, and sugar cane.

1. Proposed Treatment of Corn Milling Facilities Under the “Major Emitting Facility” Definition

Comments: One commenter asserted that the EPA, when applying section 169(1), needs to discern whether a facility’s primary activity is a type listed as a 100 tpy “major” source in section 169(1)—in this case, whether a facility’s primary activity is a chemical production process. Another indicated that our established policy requires that EPA look at the primary product produced and that we have not explained our change in policy.

Response: While this rule represents a change in our definition of “chemical process plants”, it does not represent a change in our general approach to determining the scope of source categories. In our proposed rule, we pointed to our August 7, 1980 rulemaking wherein we indicated that we would use the 2-digit “Major Group” listings as defined by the SIC manual of 1972 (as amended in 1977) for purposes of determining the scope of the source. In subsequent guidance, we clarified that we did not necessarily intend to follow the 1980 preamble approach for defining the scope of the source when determining the applicable major source threshold once the source is defined.3

---


3 See e.g. Memo. Edwin B. Erickson, Regional Administrator, to George Clemmon Freeman, Counsel for Reserve Coal Proportion Company, July 06.
Importantly, contrary to some commenters’ assertions, EPA explicitly rejected the use of the “primary activity test” as the decisive means of defining source categories listed under section 169(1). As the proposal preamble explains, the SIC manual was not designed for regulatory application, but was developed primarily for the collection of economic statistics and for the consistent comparison of economic data between various sectors of the U.S. economy. The use of SIC codes by the EPA is not required by the CAA, nor was it referenced in any legislative history related to section 169(1) of the CAA. While it may be appropriate for economic statistical purposes to place certain types of sources in the same or in different categories, EPA never intended the SIC code to be the decisive factor for determining whether a given stationary source should be regulated as a listed source category.

As one commenter properly pointed out, we use the SIC code manual only as the starting point for determining which pollutant-emitting activities should be considered as part of the same source category, but rely on case-by-case assessments to determine whether a particular stationary source belongs in a given source category. (Docket No. EPA–OAR–HQ–97–0086).4 Using this case-by-case approach, we applied different rationales for determining if a particular stationary source falls in a given source category. For example, we relied on the existing NSPS definition of municipal waste combustor in determining whether a source falls within a listed category. Id. We have also generally stated that we believe that Congress intended that we consider the source’s pollutant-emitting activity in determining whether a source is within a listed source category rather than the source’s finished product. In some cases, the listed source category does not directly correspond to a specific SIC code, and we considered the type of feedstock, the process steps, and end products produced to determine whether a given stationary source was part of the source category.5

For the chemical process plant category, EPA took a much more straightforward approach. Instead of specifically considering the pollutant emitting activity, the feedstocks, process steps, end products, or application of existing NSPS definition to making case-by-case determinations, EPA chose to specifically define the category based on SIC 28. We based this decision on a desire to promote consistency with source scope determinations, and for ease of implementation and objectivity.6 Notably, however, in that same memorandum we stated that we have the ability to amend the definition of chemical process plant to add to or delete from the scope of the source category, especially in light of the inconsistent treatment of the alcohol fuel and beverage alcohol processes, but declined to do so at that time. With this action, we are acting in light of that continuing discretion and the facts before us now.

Comment: Several commenters assert that EPA places too much reliance on Congress’s use of the report submitted by Research Corporation of New England (“Research Corp. report”) and the fact that ethanol production was not specifically addressed in the report. Commenters assert that Congress’s silence can not be taken as an intent to exclude ethanol from the “chemical process plants” definition. One commenter believes, that the mere fact that chemical processes occur and that toxic chemicals are added is enough to conclude that Congress would intend to regulate the industry as a chemical process plant. A commenter also stated that Congress used broad terms like “chemical processing plants” precisely to capture new ways of making products and to avoid having to change the statute in the future to capture these activities.

Response: As noted in the proposal preamble and repeated here, section 111 of the CAA requires the Administrator of EPA to establish Federal standards of performance for new stationary sources which may significantly contribute to air pollution and was intended by Congress to complement the other air quality management approaches authorized by the 1970 CAA. After enactment of section 111, EPA hired Research Corporation of New England (Research Corp.) to study stationary sources of air pollution in order to establish priorities for developing and promulgating NSPS.

Because of limited resources, EPA could not feasibly set NSPS requirements for all categories of stationary sources simultaneously. Therefore, the goal of the Research Corp. study was to identify sources for which NSPS controls would have the greatest impact on reducing the quantity of atmospheric emissions. Research Corp. examined approximately 190 different types of stationary sources that potentially could be determined to be major emitting facilities, and provided information on the types of air pollutants that those sources emitted. The Research Corp. study was used by EPA in setting priorities for the order in which it would promulgate NSPS requirements for categories of stationary sources.

The Research Corp. study was also relied on by Congress in identifying the 28 categories of stationary sources specifically listed in the definition of the term “major emitting facility” in section 169(1) of the CAA. 122 Cong. Rec. 24,520–23 (1976). As explained by Senator McClure in the Congressional Record, the EPA Administrator examined the data from the draft Research Corp. study and determined that 19 of the stationary source categories examined should initially be classified as major emitting facilities. Senator McClure further explained that the Senate Committee added nine more categories of stationary sources to the 19 selected by EPA for a total of 28 source categories. 122 Cong. Rec. at 24,521.2

As discussed in the proposal preamble, in discussing the specific sources identified in section 169(1), Senator McClure stated:

Mr. President, I ask unanimous consent that an extract from that report of the Research Corp. of New England, listing the 190 types of sources, from which the EPA took 19, and the committee took 28, be printed in the Record at this point as an illustration of what the committee examined and the kinds of sources the committee intended to include and exclude, recognizing that it is neither exclusive nor invariable. There is administrative discretion to add to the list, to change the list. But the committee spoke very clearly on its intent on that question.

122 Cong. Rec. at 24,521 (1976).

As a result of Senator McClure’s action, the table from the draft Research Corp. report containing the list of 190

---


996; and Memo. Request for PSD Applicability Determination, Golden Aluminum Company, San Antonio, TX, from William B. Hathaway, Director Air, Toxics and Pesticides Division to Steve Spraw, Deputy Executive Director, Texas Air Control Board, July 28, 1989.
types of sources was printed in the Congressional Record. The approximately 190 source categories identified in Research Corporation’s report were further classified into ten general groups for purposes of the study—stationary combustion sources, chemical processing industries, food and agricultural industries, mineral products industries, metallurgical industries, and miscellaneous sources (evaporation losses, petroleum industry, wood products industry, and assembly plants).

For the chemical process industry grouping, the Research Corp. study considered 24 different source categories and their associated pollutants. Notably, within the chemical process industry listings in the 1977 final report and in the 1976 draft report (as incorporated into the Congressional Record) there is no listing which refers to ethanol production, ethanol fuel production, or corn milling operations.

Given this history, we agree with commenters that Congress’ silence on the matter can not be taken as an intent to exclude ethanol, nor however, do we believe that the silence can be taken as an intent to include ethanol within the chemical process plant definition. It is precisely because Congress did not express an intent, and because the Congressional record shows that Congress recognized that the list was neither “exclusive or inclusive” that we believe we have discretion to determine whether or not the ethanol industry belongs in the chemical process plants source category.

We are not persuaded that the mere fact that chemical reactions occur or that toxic chemicals are added would have compelled Congress to include the industry within the category. These factors are too broad and too common in a multitude of industries to be effective criteria for categorizing sources.

Comment: We received many comments supporting our position that basic steps of both processes are similar for both wet and dry corn milling. One commenter explained that a plant may produce beverage, industrial, and ethanol fuel at the same plant using the same equipment.

Conversely, one commenter provided that the production of ethanol for fuel involves processes that are different in character than production of ethanol for human consumption, involving more steps and additional distillation that is necessary, among other things, to produce 100% ethanol (200 proof) needed for use as a fuel. This commenter explained that the closer the distillation process gets to producing 100% ethanol, the more energy/fuel is consumed, the more steps required, and the more pollutants emitted from the chemical processing plant.

One commenter explained that while the two processes are theoretically the same, ethanol fuel is produced on a much larger scale, and competes with other fuel markets. They provided that alcohol for human consumption does not contain as much alcohol as ethanol fuel after the distillation process (40–50% compared to 90–100% ethanol), and is subject to different regulations (e.g., health, food safety). The commenters also asserted that the use of a molecular sieve in ethanol fuel production distinguishes this production from human alcohol consumption.

Finally, one commenter asked EPA to explain in greater detail its conclusion that the two processes are the same.

One commenter stated that ethanol fuel production facilities are more like refineries than an alcohol for consumption facility. They argued that ethanol fuel production facilities should be regulated similarly to a chemical process plant as that is what they are producing.

Response: In the U.S., ethanol (ethyl alcohol) is currently being produced either synthetically or through the fermentation of sugars derived from agricultural feedstocks. For ethanol produced synthetically, either ethylene or hydrogen (H2) and carbon monoxide (CO) are used as the feedstock. As of 2002, only two facilities in the U.S. were producing synthetic ethanol.7 The majority of ethanol produced in the U.S. is produced from sugar or starch-based feedstock (e.g., corn, millet, beverage waste) using two basic processes: the dry mill process and the wet mill process. The key difference between these two processes is the initial treatment of the grain. In the wet mill process, the grain is soaked and then ground to remove germ, fiber, and gluten from the starch prior to cooking. In the dry mill process, the grain or feedstock is not separated into its constituent parts prior to cooking. Both wet and dry milling operations produce ethanol as well as other coproducts.

“Co-products from the dry mill process, separated from the ethanol in the distillation step, include distiller’s dried grain (DDC) and solubles (S), which are often combined and referred to as DDGS. DDGS is used as an animal feed. In the wet mill process, co-products are separated from the ethanol production process in the initial grinding or milling step. Co-products from the wet milling process include fiber and gluten, which are used for animal feed and corn oil.”8

Most new ethanol production capacity comes from dry mill processing facilities. Wet milling operations, on the other hand, can produce ethanol, including ethanol for fuel, but are typically primarily engaged in producing starch, syrup, oil, sugar, and by-products, such as gluten feed and meal. For ethanol which will be used as fuel, toxic solvents (typically gasoline) are added to the ethanol to render it unfit for human consumption (denatured). This additional step is required to develop ethanol fuel regardless of whether the dry or wet mill process was employed to develop the initially potable ethanol.

We recognize that though the corn milling ethanol production processes for ethanol fuel and ethanol for human consumption are theoretically the same, ethanol fuel is produced on a much larger scale, and competes with other fuel markets. We also acknowledge that alcohol for human consumption does not typically contain as much alcohol as ethanol fuel (or some other denatured ethanol products (e.g., denatured ethanol products made for industrial use) after the distillation process (40–95% for distilled spirits), and is subject to different regulations (e.g., health, food safety). This does not negate the fact that the natural fermentation and distillation processes (though the number of distillation steps and length of fermentation may vary) up until the time the denaturant is added for ethanol fuel (or other denatured ethanol products) are similar. We are not persuaded that these differences are significant or that they warrant different treatment under PSD. Given that the basic goal of PSD is to ensure that economic growth will occur in harmony with the preservation of existing clean air resources, that other regulations in place ensure equivalent or near equivalent BACT level of control will continue, and that a State’s minor NSR program will apply when major NSR/PSD does not apply, we believe that the basic goal of PSD will be maintained.

2. Expansion to Other Ethanol Production Processes

Comments: Supports Expansion to Other Feedstock. Two commenters requested that the proposed preferred

---


option (Option 1) be expanded to include facilities that produce ethanol fuel from molasses.

One commenter noted that there are facilities other than corn milling which are capable of producing ethanol, notably molasses processing plants, and they should also be excluded from the definition of “major source” under the PSD, NSR, and title V programs. They provided that processes for both the production of ethanol from sugarcane molasses and from corn are similar, and because the processes are similar, the air emissions from the production of either product would also be similar.

One commenter stated that EPA’s proposed rulemaking specifically requested public comments with respect to how future technological developments in the ethanol industry may be affected by the proposed rulemaking. They explained that while the current ethanol industry is dominated by the wet and dry corn milling process, the future of the ethanol industry could involve additional grain feedstocks such as wheat, barley, or rice as well as cellulosic feedstock’s such as wood waste, switchgrass, and municipal solid waste. This commenter provided that they believed since EPA’s proposal is rather narrowly focused on wet and dry corn milling newer ethanol production technologies currently under development could fall into the same regulatory quanity EPA is trying to correct through their proposal. They recommended that EPA’s final rulemaking be expanded to also cover the other ethanol production technologies that may be developed in the future. They suggested that the EPA modify the currently proposed rule language to adopt language more consistent with the various NSPS rules (such as the synthetic organic chemical manufacturing industry (SOCMI) wastewater NSPS Subpart YYY standard) and exclude any process that uses “natural fermentation” to produce ethanol from the definition of a “chemical processing plant” under section 169.

One commenter stated that they believed that it is appropriate to treat all other types of facilities which produce ethanol from cellulosic biomass feed stocks similarly to how corn milling facilities are being proposed to be treated under Option 1.

One State commenter provided that other environmental rules have made distinctions with regard to applicability between the above fermentation/biological processes and synthetic ethanol production:

1. NSPS subparts NNN and RRR—excludes ethanol by fermentation. The commenter stated that EPA has previously determined that ethanol-manufacturing facilities may be exempt from NSPS subparts RRR and NNN on a case-by-case basis. The commenter explained that in this instance, the ethanol facilities in question use a biological process to ferment the converted starches in corn into ethanol. These NSPS subparts did not envision unit operations for biological processes.

2. Categorical waste water effluent limits for Organic Chemicals, Plastics and Synthetic Fibers, part 414—excludes ethanol by fermentation. The provisions of this part do not apply to any process wastewater discharges from the manufacture of organic chemical compounds solely by extraction from plant and animal raw materials or by fermentation processes.

The commenter argued that EPA’s proposal of Option 1 would be consistent with the above programs and that the exclusion should not be limited to “corn” wet and dry milling to make ethanol fuel. They supported their position by stating that several plants currently use milo along with corn to make ethanol fuel, and that the future of ethanol appears to be in the use of biomass, i.e., cellulosic material. They explained that the only difference would be that the feedstock is a biomass material other than corn; and that fermentation and distillation processes would be essentially unchanged. They asserted that if the rule is not expanded to exclude cellulosic material, there could be a negative impact on the growth of cellulosic ethanol. This commenter argued that this could have an unintended complication as the energy balance favors ethanol from cellulosic feed stock over ethanol by corn.

One commenter stated that it should not matter what biomass or carbohydrate feedstock is used in the ethanol production process as the natural fermentation and distillation steps would be the same as they are for corn milling ethanol production. One commentator provided that chemical feed stocks made from renewable sources should all be excluded as many of the products subject to the definition of chemical process plant were originally synthetically produced when SIC codes were established (e.g. citric acid and propylene glycol made from corn).

Opposes Expansion to Other Feedstock

One commenter opposed any suggestion to exclude "'other types of facilities which produce ethanol fuel, such as those using cellulosic biomass feedstocks, e.g., solid waste, agricultural wastes, wood, and grasses * * * from the chemical process plants definition due to having production processes similar to those found at wet and dry milling facilities in cases where potable ethanol or ethanol fuel is being produced.” or for any other reason. They provided that while they believed that the use of ethanol (especially cellulosic ethanol) as a transportation fuel has significant potential environmental benefits, the high cost of natural gas had recently caused a shift from the use of natural gas to coal for process heat which they believed would lead to an erosion of the carbon benefits of displacing petroleum-based fuels.

Response: In the proposal preamble, we solicited comment on whether other types of facilities that produce ethanol fuel, such as those using cellulosic feedstocks, e.g., solid waste, agricultural wastes, wood, and grasses, should also be considered for exclusion from the chemical process plants definition due to having similar processes to those found at wet and dry milling facilities in cases where potable ethanol or ethanol fuels is being produced. We requested information, including process flow diagrams, on the processes that would be used to develop ethanol using other feedstock. Process diagrams were provided that indicated that although the processes to produce sugars from these feedstocks differ, similar fermentation and distillation processes in the production of ethanol fuel from cellulosic material would be employed. Commenters also provided process diagrams illustrating similar processes in the production of ethanol from molasses (which is used as a feedstock in the production of rum). As with cellulosic feedstocks, the breakdown of these feedstocks to produce sugars may differ, but the ethanol fermentation and distillation processes were similar. In molasses (using both sugar beets and sugar cane feedstock) ethanol production, the molasses is diluted with water, acidified to precipitate minerals and then decanted to produce the mash. Yeast and nutrients are added to the mash and fermentation converts the sugars in the molasses to alcohol. There, fermented mash is then distilled to separate and concentrate the ethanol. The ethanol is dehydrated and, if being used to produce fuel alcohol, denatured. There are currently no U.S plant producing ethanol from sugar feedstocks (sugar beets, sugar cane) therefore there is little data available on their feasibility as an ethanol feedstock, however, Brazil and
several other countries are producing ethanol from these feedstocks. In cellulosic ethanol production, acid is introduced to the feedstock at high temperatures to release hemicellulose sugars (depending on the type of cellulose used). If acids are toxic, they are removed prior to saccarification (breakdown of starches) and fermentation steps. Enzymatic hydrolysis to produce sugars from cellulose is another alternative being researched in pilot and demonstration commercial plants. The result is a “beer” with 4 to 5 percent alcohol content by weight. The distillation step is employed to produce ethanol at about 92 to 93 percent alcohol which must be processed by a vapor-molecular sieve (to further dehydrate the ethanol) to create fuel (the last step involving the adding of a denaturant). It is important to note that the use of a molecular sieve is not unique to cellulosic biomass ethanol production facilities as it is something that is used at many corn milling ethanol production facilities. Molecular sieves have become a popular means to dehydrate ethanol as they are low cost, environmentally friendly, and require less energy. Facilities that use molecular sieves replace azeotropic distillation systems that use cyclohexane or benzene (HAP), which were expensive, costly to operate, and energy intensive.9 There is currently no commercial cellulosic ethanol production plant operating in the U.S., however, there are several existing pilot plants, and several commercial plants are in the planning stages.

Based on the process diagrams and information received from commenters that indicate that the fermentation and distillation processes are similar (included as part of the technical record), even though the pre-steps and after-steps may differ, we are expanding the exclusion of the definition of “major emitting facilities” to include ethanol production facilities that produce ethanol through natural fermentation processes included in NAIACS codes 325193 or 312140.

We are not excluding other chemicals (e.g., citric acid and propylene glycol made from corn) made from renewable sources with this final rule. The scope of this rule is ethanol production and processes and there was no solicitation, or sufficient basis provided, to support expansion of exclusion to other chemicals.

B. Why are ethanol production facilities regulated differently under different programs and standards?

Several commenters provided input on the historic regulatory treatment of wet and dry corn milling facilities which produce ethanol fuel. Some of the commenters stated that EPA’s proposal to exclude wet and dry corn milling facilities from the definition of “chemical process plants” was consistent with historic regulatory treatment, while others argued that it was inconsistent with historic regulatory treatment.

Comments: The following comments were received on the historic and current regulatory treatment of wet and dry corn milling facilities that produce ethanol fuel.

• One commenter requested clarification of rule applicability, with regards to ethanol production, of numerous NSPS and MACT standards.

• Two industry commenters suggested that the rule include changes to the relevant NSPS under 40 CFR part 60 since alcohol production facilities are potentially subject to several standards of performance for new stationary sources, including 40 CFR part 60, subparts Kb (volatile organic liquids storage vessels), VV (equipment leaks of volatile organic compounds (VOC) in the SOCMI), NNN (SOCMI distillation operations), and RRR (VOC emissions from SOCMI reactor processes).

• Two State commenters provided examples where wet and dry corn milling facilities which produce ethanol fuel are treated as chemical process plants [40 CFR part 60, subparts YYY, NNN, RRR (in Minnesota); 40 CFR part 63, subpart FFFF Miscellaneous Organic NESHAP (the MON Rule); AP–42 (Chapter 9.9.7 for Corn Wet Milling)].

• Two environmental consultants, two industry commenters, and one State noted that EPA rulemakings and associated interpretive guidance have either established exemptions (or allow sources to seek exemptions on a case-by-case basis) for chemicals produced through fermentation (with corn milling ethanol production) from various SOCMI industry regulations, including the NSPS subparts RRR (SOCMI process reactors) and YYY (SOCMI wastewater units).

• Two industry commenters stated that categorical wastewater effluent limits for Organic Chemicals, Plastics, and Synthetic Fibers found in 40 CFR part 414 (promulgated under the Clean Water Act) excludes ethanol manufacturing by fermentation.

• Two industry commenters were concerned that the 27th listed source category in the NSR and title V programs also regulates ethanol plants as a result of the NSPSs captured under this source category.

• One environmental commenter stated that EPA has treated “ethanol blending facilities”—facilities that mix ethanol into gasoline—as refineries. 40 CFR 80.2(u). (“Ethanol blending plant means any refinery at which gasoline is produced solely through the addition of ethanol to gasoline, and at which the quality or quantity of gasoline is not altered in any other manner.”) (emphasis added). Additionally, the commenter argued that EPA has referenced the distinction between “chemical grade” ethanol that is used in transportation fuel and other kinds of ethanol. See 40 CFR 79.55(e)(1)–(2).

Response: The applicability of differing rules is standard-specific and determinations were made under individual rulemakings and will not be changed under this rulemaking. There is no directive for the applicability to be the same across CAA programs and standards and applicability determinations need to be determined on a case-by-case, or standard-by-standard, basis.

For example, ethanol is listed as a SOCMI chemical for which 40 CFR part 60, subpart YYY (SOCMI wastewater units) applies, however, the supplemental proposed rule (63 FR 67988; September 12, 1994) excludes certain processes from the definition of chemical process unit (CPU) because they were not considered SOCMI processes, but are sometimes associated with SOCMI processes. Organic chemicals extracted from natural sources or totally produced from biological synthesis such as pinene and beverage alcohol were specifically excluded from the CPU definition. Under 40 CFR part 60, subpart YYY, the determination for excluding biological processes was based on the designation for the process unit in contrast to the plant site. Under the 40 CFR part 63, subpart FFFF (the Miscellaneous Organic National Emission Standards for Hazardous Air Pollutants (NESHAP) (the MON)) standards, the applicable miscellaneous organic chemical process unit for which standards apply includes all equipment that collectively function to produce a product or material described in the standard (including denatured alcohol). The pollutant to be controlled (e.g., HAP, VOC, particulate matter (PM)) processes to be controlled, available control technologies, timing of standard development, and program and standard directives drive the applicability of individual standards.
As for the commenters’ concern that the 27th listed source category in the NSR and title V programs regulates ethanol plants as a result of the NSPSs captured under this source category, this concern would not be valid as all of the NSPSs listed by the commenters (40 CFR part 60, subparts Kb, VV, NNN, and RRR) were proposed and promulgated after August 7, 1980. The 27th listed source category referenced by the commenters includes “[a]ny other stationary source category which, as of August 7, 1980, is being regulated under section 111 or 112 of the CAA.”

C. Do we need to make an express section 302(j) finding?

As noted in the proposal preamble, when we promulgated the list of source categories relative to the definition of “major emitting facility” in the NSR regulations on August 7, 1980 (45 FR 52676), we adopted this same list to identify source categories for which fugitive emissions were to be counted in determinations to list a facility or source as a major source. We promulgated the 28 source categories as a result of the decision in Alabama Power v. Costle, 626 F. 2d. 323 (D.C. Cir. 1979). In Alabama Power, the court held that “fugitive emissions are to be included in determining whether a source or modification is major only if and when EPA issues an appropriate legislative rule.” The proposed rule Option 1 was to change the definition of chemical process plants with the definition of major stationary source and major source and would correspondingly also change our interpretation of that term relative to the 302(j) source category list. At proposal we stated that since we were not changing the list of source categories in the regulations, a section 302(j) finding was unnecessary. Some commenters on the rule disagreed with EPA’s position, and stated that EPA needs to make an express section 302(j) finding in order to redefine when fugitive emissions are counted. Comments: Several commenters opposed EPA’s proposal to de-list corn-based ethanol fuel production from the list of facilities identified by EPA, pursuant to CAA section 302(j). One commenter stated that the EPA can not avoid making the necessary determinations to list a facility or source pursuant to section 302(j) by merely listing categories and later determining which sources and facilities to include in the category. The commenter asserts that, in 1980, the EPA determined that “chemical process plants,” as defined in the 1977 portion of the rulemaking includes ethanol production plants, are a type of source category for which fugitive emissions should be counted. The commenter stated that EPA made this determination, based on its finding that these sources could degrade air quality significantly, and that the costs of listing this category were not unreasonable compared to the benefits. The commenter provided that the CAA does not allow EPA to identify generic categories that include unspecified sources. The commenter argued that EPA’s proposal violates the CAA and EPA’s own prior interpretation of the CAA.

Another commenter stated that the EPA must specifically evaluate whether eliminating this requirement is appropriate based on criteria that relate to the intent of the PSD program and the air quality impact of such emissions. The commenter explained that the EPA has adopted criteria for the very purpose of determining whether to consider fugitive emissions—those criteria require EPA to examine (1) Whether sources in the category could degrade air quality; and (2) whether the cost of controlling fugitives are unreasonable compared to the expected benefits. The commenter argued that it would be arbitrary and irrational for EPA to affirmatively change its treatment of these sources without subjecting that decision to a meaningful substantive evaluation. The commenter asserts that because the initial classification imputed a need to address fugitive emissions from these plants, and because nothing in EPA’s proposal functions to counter that expectation, the commenter believes that it was not rational for EPA to exclude ethanol fuel plants from the fugitive emissions requirements without conducting an appropriate assessment.

Response: As we stated in the proposal, we are not changing the list of categories that we developed by rule under section 302(j). We are merely reinterpreting what is included within the definition of one of those categories. When EPA added chemical processing plants to the section 302(j) list in 1980, it did so based on a very general finding that sources within the category could degrade air quality and did not make any specific determination as to the appropriateness of counting fugitive emissions from any particular source types that may fall within the category. Thus, we do not think that interpreting the category to exclude a narrow set of facilities triggers the section 302(j) rulemaking requirement that applies when categories are added to the list.

Nonetheless, even if this action triggers the section 302(j) rulemaking requirement, we believe this rulemaking constitutes a sufficient section 302(j) rule that is consistent with the way we interpreted that requirement in 1980 and re-affirmed in 1984. (45 FR 52676, 52690 (Aug. 7, 1980) and 49 FR 43202 (Oct. 28, 1984)). Specifically, we determined that our action to list a category under section 302(j) may be based on a policy decision after considering certain criteria, that we do not need extensive technical analysis to support our determination, and that the purpose of rulemaking is to afford the public an opportunity to comment on the Administrator’s decision.

In 1979, when we initially proposed to use the section 169(1) source category list, our stated rationale for the proposal was only that we decided to focus first on the listed sources because of our experience in quantifying the “fugitive emissions” from these sources. (44 FR 51924, 51931 (Sept. 5, 1979)). Similar to comments received on this proposed rule, we received comments then that our rulemaking then was inadequate, and that we should have conducted technical analysis to support our proposed rule. We rejected commenters’ assertions. We also stated that the purpose of the rulemaking was to afford the public the opportunity to comment on the Administrator’s decision, and to allow commenters to present factual or policy arguments that it would not be appropriate to include fugitive emissions in threshold calculations. Id.

In our 1980 final rule, we stated that our decision to use the section 169(1) source category list was “a matter of policy.” We reiterated our position that we had greater experience in quantifying fugitive emissions from sources on the section 169(1) source category list; and, we observed that those sources have traditionally been considered the major polluters in the country. Despite the limited nature of the technical support for our proposal, we concluded that we conducted an adequate section 302(j) rulemaking since the affected sources were afforded an opportunity to comment on our policy decision. (45 FR at 52690–92). In 1984, after re-examining our interpretation of the section 302(j) requirements, we affirmed that the rulemaking requirements of section 302(j) were intended to afford the public an opportunity to comment on the Administrator’s decision to list a category, and that we were not required to undertake extensive technical analysis to support our determination. That 1984 preamble discussion addressed two criteria relevant to the Administrator’s decision to require sources to include fugitive emissions in threshold applicability determinations. We note that commenters...
mischaracterized the manner in which the two criteria operate. The final rule stated that

[a] determination by EPA that the sources in a category pose a threat of significant air quality degradation in effect establishes a presumption that the sources should be subject to PSD and nonattainment review * * *. Commenters then may seek to rebut this presumption by producing a record that unreasonable social or economic costs relative to the anticipated benefits would occur if PSD or nonattainment review were applied to a particular category of sources * * *

(49 FR at 43203–08).

Importantly, we discussed these criteria in light of our overall belief that listing a category involved the Agency’s exercise of policy discretion for which we carry a very low analytical burden in deciding to list a source category. Under this interpretation section 302(j) functions as a useful “safety valve,” while at the same time minimizing the expenditure of Agency resources. 49 FR 43202, 43208 (October 26, 1984).

Notably, the 1984 final rule preamble did not address how or whether that requirement applies to EPA’s decision to interpret a category already on the list to exclude a narrow set of sources. Consistent with the “safety valve” purpose served by a section 302(j) rulemaking, we believe that it is not necessary to require a negative finding with respect to the same criteria before we interpret a category on the list to exclude certain types of sources. In sum, having made a policy decision based on a limited technical finding, we do not believe that our technical burden now in acting to refine a category on the list, should be greater than the technical analyzes we undertook in listing the categories in the first instance.

Notably, as we stated, when EPA added “chemical processing plants” to the section 302(j) list in 1980, it did so based on a very general finding that sources within the category could be considered major polluters. We did not make any specific determination as to the appropriateness of counting fugitive emissions from any particular type of stationary sources within that category. At the time we conducted the section 302(j) rulemaking, few ethanol facilities existed and inclusion of ethanol manufacturers was not specifically analyzed in our section 302(j) rule. When we examined the issue more closely in 1981, we made a policy decision without conducting technical analysis, to include ethanol fuel manufacturing within the chemical processing plant category. We based this decision on a desire to maintain consistency with use of SIC 28 and ease of implementation. Thus, before now, we considered this industry to be a source within the listed category. However, we find that the category should not include these sources or others who engage in natural fermentation process to produce ethanol. We believe that it is not necessary to require a negative finding with respect to the criteria that apply to list a category under section 302(j) before we interpret a category on the list to exclude certain types of sources. We believe that the economic and policy rational for the exclusion of certain ethanol production facilities from the chemical processing plant category for purposes of defining major emitting facility that we present elsewhere in the preamble to the proposed rule and in this preamble also provides ample support for a section 302(j) determination not to count fugitive emissions from such facilities.

This decision is precisely the kind of “flexibility to provide industry-by-industry consideration and appropriate tailoring of coverage” envisioned by the Alabama Power Court (Alabama Power Co. v. Costle, 636 F. 2d 323, 369 (D.C. Cir. 1979). Having been afforded the opportunity to comment on the Administrator’s decision, commentators failed to present compelling factual or policy arguments based on specific information which show that our policy decision is inappropriate. Accordingly, we have satisfied the section 302(j) rulemaking requirement.

D. What are the enforcement implications of these final amendments?

Comments: One commenter asserted that the new rule would represent a drastic about-face in Federal environmental policy, and could trigger revoking of consent decrees, refunds of fines, and removal of pollution control equipment. The commenter explained that in the last four years, Department of Justice (DOJ) and EPA attorneys have consistently argued, in at least nineteen separate Federal court complaints, that ethanol plants, including those with product lines of both fuel and beverage ethanol, are chemical manufacturing facilities under section 169(1) of the CAA. 42 U.S.C. 7479 (1).

Specifically, this commenter indicated that the Federal government has argued in some of these complaints that ethanol production plants are facilities for synthetic organic chemical manufacturing and are affected facilities under part 60, subpart VV, 40 CFR 60.480, and are subject to the leak detection and monitoring requirements on 40 CFR 60.482–1 through 60–489, which govern the synthetic organic chemical manufacturing industry.

The commenter stated that the EPA formally charged that ethanol fuel facilities were chemical plants in 2002, when the EPA and the State of Minnesota filed complaints against all 12 Minnesota ethanol plants. Those complaints stated that the plants were major emitting sources under section 169 (1) of the CAA, 42 U.S.C. 7479 (1). Those cases were settled when these plants agreed to install thermal oxidizers and other additional pollution control equipment on their plants to bring their emissions per criteria pollutant to below 100 tpy. The companies were also fined from $18–42,000 a piece. A companion complaint was also filed, and settled, against Ace Ethanol in Wisconsin.

The commenter expressed that the DOJ stated in a December, 2005 press release that 83% of the ethanol industry is under consent decrees. The decrees were all imposed to enforce the PSD provisions of the CAA under the legal theory that the ethanol plants were synthetic organic chemical manufacturing plants. All of these consent decrees required the plants to keep their emissions of each criteria pollutant below 100 tpy. Some decrees also required compliance with the leak detection and monitoring requirements found at 40 CFR 60.482–1 through 60–489, which govern the synthetic organic chemical manufacturing industry.

In sum, the commenter stated that DOJ and EPA have consistently stated in court documents on nineteen separate occasions over the last 4 and one-half years that ethanol plants are chemical manufacturing plants. The commenter further stated that the DOJ and EPA have committed countless thousands of hours of staff and attorney time, laboring to advance this position. The commenter argued that the proposed preferred Option 1 could produce a situation where some or all of these companies, especially those who have been charged within the last several months (Cargill, MGP, Golden Triangle, AGP, and others) could claim that the consent decree terms, such as the 100 tpy limit per pollutant, no longer apply to their plants. Any plant who has not had their consent decree discharged could immediately apply to have the decree dissolved since the decrees’ emissions limits no longer apply to ethanol plants. Additionally, the commenter asserts that these companies could ask the EPA to pay them back the millions in fines that they agreed to pay.
oxidizers when their current permits expire.

One commenter representing State and local governments opposed the EPA’s preferred option (Option 1). They argued that if new facilities are allowed to construct without controls options, then EPA may face future lawsuits from existing facilities, insisting on a level playing field, for removal or relaxation of their control strategies. The commenter expressed that the EPA should uphold their previous decisions to enforce installation of pollution control technologies at all ethanol facilities.

Response: This rule should have no effect on the existing consent decrees and the obligations of the sources to implement the consent decrees. The consent decrees are binding legal documents. The provisions of the consent decrees, by their terms, do not allow a source to alter its consent decree obligations as specified therein. Any civil penalties that had been due and owing to the United States have been paid into the United States Treasury. Even if the United States were so inclined, refunds of civil penalties from the United States Treasury would be unprecedented.

The conditions for termination of the consent decrees are specified expressly in each consent decree. Such consent decrees can only be terminated after the source completes its consent decree obligation and demonstrates compliance with the consent decree terms to the satisfaction of the United States. One of those terms is that a source obtains a Federally-enforceable operating permit incorporating the terms of the consent decree.

Our rationale for this final rule is explained in detail elsewhere in the preamble to the final rule. That we took actions to enforce the requirements in place before this rule does not undermine the basis for this rule. Existing facilities located in attainment areas would be required to maintain their existing permit limits and other permit requirements unless and until revised through a permitting procedure which, to be consistent with CAA section 110(a)(2)(C) and 40 CFR 51.160, must be shown not to cause or contribute to a violation of the NAAQS. We believe that raising the threshold from 100 tpy to 250 tpy in attainment areas will likely encourage facility expansions and construction of larger, more economically efficient plants, which in turn, will emit less emissions per gallon of ethanol produced. The 100 tpy threshold on the other hand would encourage the construction of more numerous, less economically efficient smaller facilities. In addition, as noted below, the environmental and health impacts of this rule are limited.

E. Are there any environmental and health concerns associated with this final rule?

Several comments were received concerning the potential negative impacts to the environment based on our proposed change. Some of the significant comments and concerns are provided in the following paragraphs. Comment: Several commenters expressed that increasing the PSD threshold for ethanol production facilities from 100 tpy to 250 tpy could lead to emissions increases that would not occur in absence of this rulemaking.

Response:

1. Introduction

We acknowledge that there may be some emissions increases as a result of this rulemaking. Over the past 25 years, domestic ethanol fuel production has steadily increased due to changing environmental regulation, Federal and State tax incentives, and market demand, including an increasing number of State ethanol mandates, the phase out of MBTE, and elevated crude oil prices. In order to meet current and future demand, new facilities may be constructed or existing facilities may need to be expanded. However, we do not expect many new facilities to be constructed (other than those already planned) in the short-term (e.g., over the next 5 years). As noted later, we predict that the revision of the major source threshold applicable to the ethanol fuel industry will allow for the construction of larger, more economically efficient plants which, in turn, will emit less emissions per gallon of ethanol produced. Comments submitted on the proposal concurred with that prediction. (See Docket Nos. EPA–HQ–OAR–2006–0086, 0089, 0090, 0091, 0092, 0093, 0094, 0095, 0096, 0097, 0098, 0099, 0100, 0101, 0102, 0103, 0104, 0105, 0106, 0107, 0108, 0109, 0110, 0111, 0112, 0113, 0114, 0115, 0116).

There are an estimated 114 facilities that currently exist in the U.S. that produce ethanol by natural fermentation as of March, 2007. Of these, an estimated 7 of the facilities are planning expansions. Eighty additional ethanol production facilities are currently under construction. Existing ethanol production capacity is estimated at 5,600 million gallons year (mgy). New construction and expansions will add an estimated 6,400 mggy to existing capacity. The estimated total capacity (inclusive of expansions and new constructions) will be about 12,000 mggy (12 billion gallons year (bgy)) once expansions and new constructions are completed.10

Commenters expressed concern that this rule would result in emissions increases because (1) The rule increases the PSD major source threshold from 100 tpy to 250 tpy for the subject ethanol production facilities (new or existing facilities) in attainment areas; and (2) that, for new sources, fugitive emissions will no longer be included in calculations to determine whether a source is a major PSD source in attainment areas or to determine nonattainment NSR applicability.

Section 2 of this response section discusses our consideration of the potential for emissions increases due to the increased threshold, section 3 discusses our consideration of the potential for emissions increases due to facilities no longer needing to count fugitives when determining whether they are a major source, and section 4 presents our overall conclusions.

2. Increase in Major Source Threshold

Emissions data. One industry commenter provided estimates indicating that a controlled 110 mg/mg ethanol production facility could be assumed to emit 100 tpy and that a controlled 250 mg/mg ethanol production facility could be assumed to emit 250 tpy.11 The commenter reported that emissions from both of these facilities are based on conservative potential to emit estimates, presenting worst-case operating scenario emissions and that actual plants generally emit less than their potential to emit estimates. As noted later, we believe future economies of scale will potentially drive the expansion and construction of facilities with capacities equal to or greater than 250 mg/mg with actual emissions being less than 250 tpy. Thus, under this scenario, production of ethanol would result in less emissions per gallon produced than today.

Volatile organic compounds (VOC) emissions occur from the cooling system baghouses, dryers, CO2 fermentation scrubbers, equipment leaks, transfer, and storage vessels.

Estimates provided include estimates for emissions of nitrogen oxides that result from fuel combustion in the thermal oxidizers and dryers. The

potential to emit estimates assume that 100% of the NO\textsubscript{x} emissions are emitted in the form of NO\textsubscript{2} to depict a worst-case scenario.

Carbon monoxide (CO) emissions are also attributed to fuel combustion at the thermal oxidizers and dryers. As such, CO emissions were also included in their potential to emit estimates.

Emissions of particulate matter less than 10 microns (PM\textsubscript{10}) result from grain unloading and loading, grain handling and milling, natural gas combustion and process operations such as dryers and cooling towers, as well as from truck traffic and haul roads. As noted, particulate emissions are generated by grain receiving, milling and distillers dried grains and solubles (DDGS) loading. Most of these emissions are controlled by baghouses.

Haul road emissions are generally dependent on the amount of vehicle miles traveled on the roads (more miles traveled equate to higher emissions). Grain fugitives are assumed to be controlled by a choked flow system, which reportedly is the typical control for fugitive particulate emissions.

Carbon monoxide and VOC emissions are typically the largest source of emissions from these facilities and are the likely pollutants that would trigger major PSD/NSR review.\textsuperscript{12} Based on this, we have focused our analysis on increases in CO and/or VOC emissions that could potentially occur as a result of increased production and this rulemaking. We acknowledge that emissions increases in NO\textsubscript{x} and PM\textsubscript{10} could also occur concurrent with CO and/or VOC emissions increases, but these pollutants are not as relevant to the major source determinations for ethanol plants. Additionally, we note that since ozone generation is dependent on the mixing of VOCs and oxidized nitrogen in the presence of sunlight, control of VOCs in NO\textsubscript{x}-limited environments may not be the best solution for reducing ground-level ozone emissions in those environments. Addressing other pollutants may result in greater environmental benefits.

**Attainment areas.** There are an estimated 171 denatured ethanol production facilities located or are planned to be located in attainment areas. If we assume that a 110 mgy ethanol production facility can be controlled under a 100 tpy threshold (for VOC and CO) including fugitives, it then can be assumed that facilities that have capacities less than or equal to 110 mgy are either controlled as synthetic minors or are uncontrolled facilities that have emissions that fall below the 100 tpy emissions threshold (for VOC and CO). Additionally, given that a 250 mgy ethanol production facility can be controlled under a 250 tpy threshold (for VOC and CO), including fugitives, then it can be assumed that facilities that have capacities greater than 250 mgy are currently regulated as major sources.

Several commenters have provided that there are many ethanol production facilities that take on BACT controls in order to be permitted as “synthetic minor” sources or are subject to controls or PTE restrictions that may be similar to BACT controls because of other existing regulations (e.g., NSPSs, NESHAP, State regulations). (See Docket Nos. EPA–HQ–OAR–2006–0089–0086, 0057, 0074). We do not have sufficient information to discern the number of facilities that are synthetic minor. However, those facilities which must comply with NSPS, NESHAP or State regulations will continue to be subject to those regulations as these requirements are unaffected by this rule change. In addition, we do know that there are approximately 6 facilities located in attainment areas that have low production capacities (less than 6 mgy). The emissions from these facilities would likely fall below both a 100 tpy and 250 tpy threshold and ethanol production is likely a secondary process at the facility (e.g., ESE Alcohol, Inc. in Leoti, KS has an ethanol production capacity of 1.5 mgy from seed corn; Lake of the Isles Ethanol, MN has an ethanol production capacity of 2.6 mgy from cheese whey). For the purposes of this analysis, we assume that these small production capacity facilities will not be affected by this rulemaking.

Based on this rulemaking, existing facilities located in attainment areas would be required to maintain their existing permit limits and other permit requirements unless and until revised through a permitting procedure which, to be consistent with CAA section 110(a)(2)(C) and 40 CFR 51.160, must be shown not to cause or contribute to a violation of the NAAQS. In addition, any expansion would also have to comply with any applicable NSPS, NESHAP, or State regulation.

Most of the existing ethanol production facilities in attainment areas have current production capacities less than 110 mgy and would, therefore, likely be either synthetic minor or actual minor source facilities, with a few facilities likely being permitted as major PDS sources. Given a worst-case scenario, the maximum these facilities could emit as a result of a change or modification and solely by the threshold being increased to 250 tpy is 249 tpy (up to the major source threshold).

New facilities located in attainment areas would be subject to a 250 tpy major source applicability threshold when determining major source applicability. Therefore, these new facilities would be allowed to emit up to 249 tpy (and produce up to 250 mgy) VOC and/or CO as minor sources as a result of major source threshold being increased from 100 tpy to 250 tpy.

Although other factors may influence the construction of new ethanol production facilities in the future, we do not expect any additional facilities to be constructed over the next 5 years as a result of this rule.

Over the past 25 years, domestic ethanol fuel production has steadily increased due to changing environmental regulation, Federal and State tax incentives, and market demand, including an increasing number of State ethanol mandates, the phase out of MBTE, and elevated crude oil prices. We assume, and commenters have supported that, under a 250 tpy threshold, there is incentive to construct more efficient facilities with larger capacities. (EPA–HQ–OAR–2006–0089–0086). Therefore, in the future, economies of scale will potentially drive the expansion and construction of facilities with capacities equal to or greater than 250 mgy with actual emissions being less than 250 tpy. Thus, under this scenario, production of ethanol would result in less emissions per gallon of ethanol produced today.

**Nonattainment areas.** There are an estimated 23 ethanol production facilities located in or planned to be located in ozone nonattainment areas (12% of all facilities).\textsuperscript{13} In nonattainment areas, existing ethanol production facilities will continue to be subject to the 100 tpy threshold; therefore, there will not be emissions increases as a direct result of this rulemaking associated with increasing the major source threshold in attainment areas for these existing sources.

3. Impact of Not Counting Fugitives in Emissions Applicability Calculations

**Emissions data.** For fugitive emissions, we used the potential to emit emissions estimates provided by a commenter when considering the potential VOC and CO fugitive...
emissions from the 110 mgy and 250 mgy model plants. Based on these estimates, an estimated 16% of plant VOC and/or CO emissions from the 110 mgy production plant are fugitives, and 13% of plant VOC and CO emissions from the 250 mgy production plant are fugitives.

**Attainment areas.** Existing facilities subject to a PSD permit will need to continue to include their fugitive emissions, as permitted, in attainment areas. This is because existing permit limits and other permit requirements remain in effect and enforceable unless and until revised through a permitting procedure which, at a minimum, to be consistent with CAA section 110(a)(2)(C) and 40 CFR 51.160, must be shown not to cause or contribute to a violation of the NAAQS and to comply with all applicable requirements. When determining whether an emissions increase is significant, these sources would still be required to count their fugitives.

New facilities located in attainment areas would be subject to a 250 tpy major source applicability threshold and would no longer need to count fugitives when determining major source applicability. Therefore, these new facilities would be allowed to emit up to an additional 33 tpy (and produce up to 250 mgy) VOC and/or CO (assuming VOC and/or CO fugitives account for 13% of facility wide VOC and/or CO emissions) as minor sources as a result of this rulemaking.

As we noted previously, we do not expect many new facilities to be constructed over the next 5 years. However, provided that there is construction of more facilities over the next years, such a facility would be able to emit 33 tpy more VOC and/or CO emissions (assuming 13% of 250 tpy are fugitive emissions no longer required to be included in the major source applicability calculations) than it would have prior to this rulemaking.

**Nonattainment areas.** As noted in the introduction, there are concerns that emissions may increase in nonattainment areas because fugitive emissions will no longer be required to be included in calculations to determine nonattainment NSR applicability. As noted previously, in nonattainment areas, both existing and new ethanol production facilities will continue to be subject to the 100 tpy threshold. Conservatively, approximately 23 of the 194 facilities (approximately 12 percent) are located in ozone nonattainment areas.

Of the estimated facilities located in ozone nonattainment areas, 4 of the facilities have reported capacities below 6 mgy. These types of facilities produce ethanol from waste beverages, waste beer, and/or cheese whey and more than likely produce ethanol secondary to other processes at the facility (e.g., the Golden Cheese Company of California has a reported ethanol production capacity of 5 mgy). As with the small production capacity facilities mentioned previously that are located in attainment areas, we do not believe that these facilities will be affected by this rulemaking.

Existing facilities subject to a nonattainment NSR permit will need to continue to include their fugitive emissions, as permitted, in nonattainment areas. This is because existing permit limits and other permit requirements remain in effect and enforceable unless and until revised through a permitting procedure which, to be consistent with CAA section 110(a)(2)(C) and 40 CFR 51.160, must be shown not to cause or contribute to a violation of the NAAQS and to comply with all applicable requirements. When determining whether an emissions increase is significant, these sources would still be required to count their fugitives.

We believe that very few ethanol production facility constructions in nonattainment areas will occur in the near future and that future facilities (as with existing facilities) will likely be located near an applicable feedstock (such as corn). Currently, and in the foreseeable future, corn is the primary feedstock used in ethanol production in this country and the bulk of the corn grown in this country is located in attainment areas, and transportation costs may influence decision makers to locate such plants close to the feedstock. In the future, where cellulosic materials will be used as a feedstock for ethanol production on a commercial scale, agricultural and other waste may be used. We believe that this rulemaking, which increases

the PSD major source threshold to 250 tpy, will provide decision makers with additional incentives to locate these facilities in attainment areas.

However, if a new facility did locate in a nonattainment area to meet future demand for ethanol, it is assumed that it would be a 110 mgy facility that would have the potential to emit an additional 16 tpy of VOC and/or CO fugitive emissions.

It is important to note that most, if not all, ethanol fuel plants employ an active leak detection and repair (LDAR) program to minimize VOC emissions from tanks, valves, pumps and piping. (Docket No. EPA–HQ–OAR–2006–0089–0074). Fugitive particulate emissions from vehicular traffic are often controlled by a combination of paving and cleaning plant roads and other dust suppression methods. (Docket No. EPA–HQ–OAR–2006–0089–0074). Based on the assumption that there will be few, if any, facilities that will expand or be constructed in nonattainment areas in the future, and in light of the fugitive control measures that are employed at these facilities, we do not believe that this rulemaking will result in significant emissions increases in nonattainment areas.

4. Our Overall Conclusion

As stated previously, we believe that a larger, more economically efficient plant that is able to produce more ethanol fuel could result in significantly more fuel production without a corresponding increase in energy use or pollutant emissions, thereby resulting in a net reduction of environmental impacts as compared to the greater number of smaller, less efficient ethanol fuel production facilities that would be needed to achieve the same level of production. Given the likelihood of larger capacity facilities being better able to reduce emissions per gallon of ethanol produced than a greater number of smaller facilities, it is more logical to increase the capacity at a larger facility than locating additional smaller capacity facilities in an area. Similarly, it is more logical to allow the construction of larger capacity facilities in an area than locating numerous smaller capacity facilities in an area.

In conclusion, the effect of this rule is limited given that other emissions requirements continue to apply and will be unaffected by this rulemaking. As we have noted in our discussion, VOC and/or CO emissions (and other increases in emissions for NOx and PM10) will likely occur. However, other Federal regulations that apply will continue to apply to ethanol production facilities including numerous NSPS (e.g., 40 CFR
such as NO\textsubscript{x}, SO\textsubscript{2}, and PM, as well as increases in toxic pollutants, such as mercury that are not expressly regulated by the PSD program. They also argued that the use of coal will result in increases in CO\textsubscript{2} emissions from ethanol plants which will threaten to undermine any global warming benefits of using ethanol instead of petroleum-derived fuels.

Response: We disagree with the assertion that existing ethanol production facilities that currently use natural gas as a fuel supply will likely convert to coal as a result of raising the major source threshold to 250 tpy. One commenter reported, and we agree, that the capital costs of such a conversion would be costly and facilities would more likely opt for increasing their production capacity. (Docket No. EPA–HQ–OAR–2006–0089–0086).

The Renewable Fuels Association reports that, to their knowledge, no gas-fired mill has made a conversion to coal [EPA–HQ–OAR–2006–0089–0086]. It is acknowledged, however, that new plants may decide to use coal in lieu of natural gas because of the increased major source emissions threshold and because of it being a cheaper fuel source and that this could result in increases in emissions of pollutants not expressly regulated by the PSD program.

However, even if there is an increased use of coal, these facilities will be subject to the same PSD major source limit requirements as facilities that use natural gas, and will continue to be subject to other regulations (State and Federal). We also acknowledge that the use of coal could result in increases in CO\textsubscript{2} emissions from ethanol plants.

Comment: Several commenters provided specific examples of situations where implementation of our proposed Option could cause or contribute to the negative impact on an area.

One commenter expressed that the proposed Option 1 would result in a negative impact on growth due to the projected increment consumption. They said that although some States could deal with this locally by making their regulations stricter than the Federal regulations, others are restricted because they have rules that limit them from having laws in their States that are stricter than the Federal rules.

A commenter representing State and local governments provided that even current minor sources—under the existing 100 tpy threshold, including fugitive emissions—are known to contribute significantly to potential violations of the NAAQS. They stated that permit data from STAPPA and ALAPCO members show that emissions from some ethanol fuel production facilities contribute to an area exceeding the 24-hour \text{PM}_{10} standard and, in some cases, are close to violating the 24-hour \text{PM}_{10} increment.

Response: Generally, although we acknowledge that there may be negative impacts to particular regions or areas due to this rulemaking, we do not think there would be many instances where this is the case. Provided that there are local and regional instances with the potential for unacceptable negative impacts from this rule, a State or local government regulations/minor NSR program can be implemented to mitigate such impacts. In fact, a State is not required to adopt the rule’s change in threshold and can maintain the 100 tpy threshold or other lower threshold in order to best serve its air quality/ economic needs. If a State’s regulations provide that its major source PSD thresholds cannot be more stringent than those prescribed by the Federal programs, its State minor NSR program should be able to address specific local concerns such as some of those suggested by the commenters.

We also acknowledge that there are local and Regional concerns that this rule is contrary to the purposes of the PSD program. It is true that one purpose of the PSD program is to ensure that new sources do not cause or contribute to an area that is in attainment becoming a nonattainment area. However, we believe that, in part, this directive will continue to be addressed by a State’s minor NSR permit program and various Federal, State and Local air quality requirements. Federal regulations that apply and will continue to apply to ethanol production facilities include numerous NSPS (e.g., 40 CFR part 60, subparts Db, Dc (boilers and steam generating units); DD (grain handling and storage facilities); VV (leaks from VOC equipment); K, Ka, and Kb (storage vessels), and NESHAP (e.g., 40 CFR part 63, subparts FFFF (miscellaneous organics. New Source Performance Standards require the application of maximum achievable control technology to control HAP. We also acknowledge that there are numerous other Federal, State and Local government regulations/minor NSR programs, its State minor NSR program should be able to address specific local concerns such as some of those suggested by the commenters.

Commenters: A couple of States argued that there is a need for a Federally-approved VOC performance test specifically for ethanol production. Reasons given include that (1) VOC testing at ethanol plants would be straightforward, (2) facilities would be assured of equitable treatment between them, (3) States would be able to more easily and consistently determine compliance with Federal PSD rules, and (4) administering the Clean Air permitting programs for ethanol plants would be easier if there were a Federally-approved method to measure volatile organic compound emissions from ethanol plants.

Response: The EPA believes that the existing Reference Methods found at 40 CFR part 60 are applicable for...
estimating the total mass emissions of VOCs, as defined in 40 CFR 51.100(s), from each process commonly used at wet and dry corn mills that produce ethanol. Over the past 5 years, VOC emissions from ethanol facilities under consent decrees with the United States have been successfully tested using a combination of EPA Reference Method 25 or 25A, and Reference Method 18.

In addition to the currently available Reference Methods, EPA works with industry groups to develop their own test methods as an alternative to using existing EPA Reference Methods, provided that the alternative methods produce accurate results. One example of an alternative method by an industry is the method developed by the Corn Refiners Association for measuring VOC emissions from the wet corn milling industry. This method was developed by the wet corn milling industry specifically to measure VOC mass emissions from processes within their facilities. It is a systematic approach for developing a specific list of target organic compounds and determining the appropriate sampling procedure to collect those target compounds during subsequent VOC emissions testing. This method is currently available on EPA’s Emission Measurement Center Web page [http://www.epa.gov/ttn/emc/prelim/otm11.pdf]. The EPA plans to begin a rulemaking in the near term regarding the above-noted new method. If promulgated, this method will be codified in 40 CFR part 51, appendix M, as a Federally-approved method for measuring VOC emissions from wet corn milling plants.

G. Are there backsliding issues related to this rulemaking?

Comments: Several commenters expressed concern that the States would not be able to adopt the proposed changes without violating the antbacksliding provisions under sections 193 of the CAA. The commenter alleges that the PSD program and “synthetic minor” limits are control requirements. Another commenter stated that states will have to comply with the anti-backsliding provisions of section 116 before adopting these changes. Finally, the same commenter noted that EPA’s justification for the final rule appears inconsistent because we did not discuss the impacts of the proposed rule on state efforts to attain and maintain compliance with the NAAQS, as States will be required to do to adopt the changes under State law.

Response: Section 193 applies to nonattainment areas only. It provides that “no control requirement in effect, or required to be adopted by an order, settlement agreement, or plan in effect before the date of the enactment of the CAA of 1990 may be changed unless the change insures equivalent or greater emission reductions of such air pollutant.” We have previously stated our position that section 193 is ambiguous as to whether it applies to the NSR program, and that although we have chosen a conservative approach in our review of NSR SIP changes, our past option to review changes for consistency with section 193 is not conclusive of its scope. See 70 FR 39420, 69 FR 31056, 31063.

Recently, the U.S. Court of Appeals for the D.C. Circuit ruled on our interpretation of a similar, but not identical term “controls” as used in section 172(e), and found that “NSR is a control.” South Coast Air Quality Mgmt. Dist. v. EPA, 472 F.3d 882, 901 (D.C. Cir. 2006). We respectfully disagree with the court’s finding on this issue and have filed a petition for rehearing of the decision. We also believe that the Court’s interpretation of the term “controls” in section 172(e) is not necessarily decisive of how we should interpret the similar but different term “control requirement” in section 193, although we recognize we will need to take into account the D.C. Circuit’s decision following the outcome of our rehearing request.

Nonetheless, this action does not in and of itself modify any requirements applicable to nonattainment areas. We believe the appropriate time to determine the applicability of and compliance with section 193 is when a control requirement in a nonattainment area is changed. For States that undertake a SIP revision, we will address the applicability of section 193 in our future actions to approve the SIP revisions. To the extent States can implement this approach consistent with their existing SIPs, the SIP requirements are not changing, and section 193 does not apply.

Similarly, we disagree with commenters that state that existing sources would simply be able to lift existing permit limits upon promulgation of this rule. These existing permit limits and other permit requirements remain in effect and enforceable unless and until revised through a permitting procedure which, to be consistent with CAA section 110(a)(2)(C) and 40 CFR 51.160, must be shown not to cause or contribute to a violation of the NAAQS and to comply with all applicable requirements.19

As explained previously, section 116 of the CAA allows States to enforce their own emissions limitation and standards if such requirements are not less stringent than the approved SIP and Federal regulations under sections 111 and 112 of the CAA. However, nothing in section 116 prevents a State from revising its SIP to make its requirements less stringent, provided the new requirements are not less stringent than Federal regulations under sections 111 and 112 and meet all other applicable requirements. Nothing in this rule authorizes States to adopt changes that are less stringent than what is required under sections 111 and 112, and therefore section 116 does not limit a State’s ability to revise its SIP to adopt these changes.

Finally, in response to comments, we have analyzed the impact of this rule and discussed our findings in section IV.E. of this preamble.

VI. Effective Date of This Rule and Requirements for State or Tribal Implementation Plans and Title V

These changes will take effect in the Federal PSD and part 71 permit programs on July 2, 2007. This means that we will apply these rules in any area without a SIP-approved PSD program or title V program, for which we are the permitting authority, or for which we have delegated our authority to issues permits to a State, local, or tribal permitting authority.

We are establishing these requirements as minimum program elements of the PSD, nonattainment NSR, and title V programs. Notwithstanding this requirement, it may not be necessary for a State, local or tribal authority to revise its SIP or title V program to begin to implement these changes. Some State, local or tribal authorities may be able to adopt these changes through a change in interpretation of the term “chemical process plant” without the need to revise the SIP or the title V program.

For any State, local or tribal agency that can implement the changes without revising its approved NSR or title V program, the changes will become effective when the permitting authority publicly announces that it has accepted these changes by interpretation. Although we find that no SIP or title V program revisions may be necessary in certain areas that are able to adopt these changes by interpretation, we encourage such State, local and tribal authorities in such areas to make such SIP or title V permits physical modifications of existing minor sources would govern.

19 Where a stationary source is adding a emissions unit or modifying an existing emissions unit, the State’s SIP-approved minor NSR program that permits physical modifications of existing minor sources would govern.
program changes in the future to enhance the clarity of the existing rules.

For areas that revise their SIPs or title V programs to adopt these changes, the changes are not effective in such area until we approve the SIP revision or title V program as meeting all applicable requirements. Revisions to title V programs to reflect the changes in this rule should be submitted to EPA for approval within 3 years. State, local, or tribal authorities may adopt or maintain NSR program elements that have the effect of making their regulations more stringent than these rules.

VII. Statutory and Executive Order Reviews

A. Executive Order 12866—Regulatory Planning and Review

Under Executive Order (EO) 12866 (58 FR 51735, October 4, 1993), the Agency must determine whether the regulatory action is “significant” and therefore subject to Office of Management and Budget (OMB) review and the requirements of the Executive Order. Pursuant to the terms of Executive Order 12866, it has been determined that this rule is a “significant regulatory action” because it raises policy issues arising from the President’s priorities. Also, this rule is not “economically significant.”

Accordingly, the EPA submitted this action to OMB for review under Executive Order 12866 and any changes made in response to OMB’s recommendations have been documented in the docket for this action.

B. Paperwork Reduction Act

This action does not impose any new information collection burden as the burden imposed by this rule has already been taken into account in previously-approved information collection requirement actions under both the NSR and title V programs. The OMB has previously approved the information collection requirements contained in the existing 40 CFR parts 51 and 52 regulations under the provisions of the Paperwork Reduction Act, 44 U.S.C. 3501 et seq., and has assigned OMB control number 2060–0003, EPA ICR number 1230.17. The OMB has also previously approved the information collection requirements contained in the existing 40 CFR parts 70 and 71 regulations under the provisions of the Paperwork Reduction Act, 44 U.S.C. 3501 et seq., and has assigned OMB control number 2060–0243 (EPA ICR number 1587.06) to the part 70 rule and OMB control number 2060–0336 (ICR Number 1713.05) to the part 71 rule respectively. A copy of the OMB-approved Information Collection Requests (ICR’s), EPA ICR numbers 1230.17, 1587.06, and 1713.05, may be obtained from Susan Auby, Collection Strategies Division; U.S. Environmental Protection Agency (2822T); 1200 Pennsylvania Avenue, NW., Washington, DC 20460 or by calling (202) 566–1672.

It is necessary that certain records and reports be collected by a State or local agency (or the EPA Administrator in non-delegated areas), for example, to: (1) Confirm the compliance status of stationary sources, including identifying any stationary sources subject/not subject to the rule, and (2) ensuring that the stationary source control requirements are being achieved. The information is then used by the EPA or State enforcement personnel to ensure that the subject sources are applying the appropriate control technology and that the control requirements are being properly operated and maintained on a continuous basis. Based on the reported information, the EPA or local tribal agency can decide which plants, records, or processes should be inspected. Such information collection requirements for sources and States are currently reflected in the approved ICR’s referenced above for the NSR and title V programs.

Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, disclose, or provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information; processing and maintaining information; disclosing and providing information; adjusting the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for EPA’s regulations in 40 CFR are listed in 40 CFR part 9.

C. Regulatory Flexibility Analysis

The Regulatory Flexibility Analysis (RFA) generally requires an agency to prepare a regulatory flexibility analysis of any rule subject to notice and comment rulemaking requirements under the Administrative Procedure Act or any other statute 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 organizations, and small governmental jurisdictions.

For purposes of assessing the impacts of this action on small entities, a small entity is defined as: (1) A small business that is a small industrial entity as defined in the U.S. Small Business Administration (SBA) size standards (see 13 CFR 121.201); (2) a small governmental jurisdiction that is a government of a city, county, town, school district, or special district with a population of less than 50,000; or (3) a small organization that is any not-for-profit enterprise that is independently owned and operated and is not dominant in its field. There are an estimated 114 ethanol production facilities in the U.S. and an estimated 70 more under construction with several more being planned. Most of these facilities use corn as the primary feedstock. It is estimated that farmer-owned cooperatives make up nearly half of the ethanol plants in the U.S. with an additional percentage of facilities under construction that are locally-controlled. (http://ethanol.org/production.html). After considering the economic impacts of these final amendments on small entities, I certify that this action will not have a significant economic impact on a substantial number of small entities. Note that the EPA does not know the number of ethanol plants that are (or will be) considered small entities; however, we believe this final rule will not have a significant economic impact on any ethanol plants because its overall impact will be to lessen the requirements that apply to such plants. Additionally, the expansion to additional feedstocks in the production of ethanol reduces the potential economic disparity among ethanol plants regardless of the carbohydrate feedstock used. Additionally, it is important to note that there are currently no commercial scale (other than commercial demonstration plants under construction for cellulosic biomass ethanol production) facilities using sugar beet, sugar cane, or cellulosic biomass feedstocks in the U.S.

D. Unfunded Mandates Reform Act

Title II of the Unfunded Mandates Reform Act of 1995 (UMRA), Public Law 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,
the 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 to State, local, and tribal governments, in the aggregate, or to the private sector, of $100 million or more in any 1 year. Before promulgating 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 objectives of the rule. The provisions of section 205 do not apply when they are inconsistent with applicable law. Moreover, section 205 allows EPA to adopt an alternative other than the least costly, most cost-effective or least burdensome alternative if the Administrator publishes with the final rule an explanation as to 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 agency plan.

The plan must provide for notifying potentially affected small governments, enabling officials of affected small governments to have meaningful and timely input in the development of EPA regulatory proposals with significant Federal intergovernmental mandates, and informing, educating, and advising small governments on compliance with the regulatory requirements. This rule contains no Federal mandates (under the regulatory provisions of Title II of the UMRA) for State, local, or tribal governments or the private sector.

The EPA has determined that this rule does not contain a Federal mandate that may result in expenditures of $100 million or more for State, local, and tribal governments, or the private sector in any one year. Thus, the least costly, most cost-effective or least burdensome alternative that achieves the objectives of the rule.

The provisions of section 205 do not apply when they are inconsistent with applicable law. Moreover, section 205 allows EPA to adopt an alternative other than the least costly, most cost-effective or least burdensome alternative if the Administrator publishes with the final rule an explanation as to 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 agency plan.

The plan must provide for notifying potentially affected small governments, enabling officials of affected small governments to have meaningful and timely input in the development of EPA regulatory proposals with significant Federal intergovernmental mandates, and informing, educating, and advising small governments on compliance with the regulatory requirements. This rule contains no Federal mandates (under the regulatory provisions of Title II of the UMRA) for State, local, or tribal governments or the private sector.

The EPA has determined that this rule does not contain a Federal mandate that may result in expenditures of $100 million or more for State, local, and tribal governments, or the private sector in any one year. Thus, this rule is not subject to the requirements of sections 202 and 205 of the UMRA.

E. Executive Order 13132—Federalism

Executive Order 13132, entitled “Federalism” (64 FR 43255, August 10, 1999), requires EPA to develop an accountable process to ensure “meaningful and timely input by State and local officials in the development of regulatory policies that have federalism implications.” “Policies that have federalism implications” is defined in the Executive Order to include regulatory policies that have “substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.”

Under section 6(b) of Executive Order 13132, EPA may not issue a regulation that has federalism implications, that imposes substantial direct compliance costs, and that is not required by statute, unless the Federal government provides the funds necessary to pay the direct compliance costs incurred by State and local governments, or EPA consults with State and local officials early in the process of developing the proposed regulation. Under section 6(c) of Executive Order 13132, EPA may not issue a regulation that has federalism implications and that preempts State law, unless the Agency consults with State and local officials early in the process of developing the proposed regulation.

EPA has concluded that this final rule will not have federalism implications. It will not impose substantial direct compliance costs on State or local governments, nor will it preempt State law. Thus, the requirements of sections 6(b) and 6(c) of the Executive Order do not apply to this rule.

In the spirit of Executive Order 13132, and consistent with EPA policy to promote communications between EPA and State and local governments, the Agency specifically solicited comment on the proposed rule from State and local officials.

F. Executive Order 13175—Consultation and Coordination With Indian Tribal Governments

Executive Order 13175, entitled “Consultation and Coordination With Indian Tribal Governments” (65 FR 13175, November 9, 2000), requires EPA to develop an accountable process to ensure “meaningful and timely input by tribal officials in the development of regulatory policies that have tribal implications.” This final rule does not have tribal implications, as specified in Executive Order 13175, as there are no tribal authorities currently issuing PSD, major nonattainment NSR, title V permits, or synthetic minor limits to ethanol plants which process carbohydrate feedstocks. Thus, Executive Order 13175 does not apply to this rule.

Although Executive Order 13175 does not apply to this final rule, EPA specifically solicited comment on the proposed rule from tribal officials.

G. Executive Order 13045—Protection of Children From Environmental Health Risks and Safety Risks

Executive Order 13045, entitled “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.

EPA interprets Executive Order 13045 as applying only to those regulatory actions that concern health or safety risks, such that the analysis required under section 5–501 of the Executive Order has the potential to influence the regulation. This final rule is not subject to Executive Order 13045 because it is not “economically significant” as defined in Executive Order 12866 and because the Agency does not have reason to believe the environmental health or safety risks addressed by this action present a disproportionate risk to children.

H. Executive Order 13211—Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use

These final amendments do not constitute a “significant energy action” as defined in Executive Order 13211, “Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use” (66 FR 28355, May 22, 2001), because they will not likely have a significant adverse effect on the supply, distribution, or use of energy.

I. National Technology Transfer and Advancement Act

As noted in the proposed rule, section 12(d) of the National Technology Transfer and Advancement Act of 1995 (NTTAA), Public Law 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 (for example, 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.
These final rule amendments do not involve technical standards. Therefore, EPA did not consider the use of any voluntary consensus standards.

J. Executive Order 12898—Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations

Executive Order 12898 (59 FR 7629 (Feb. 16, 1994)) establishes Federal executive policy on environmental justice. Its main provision directs Federal agencies, to the greatest extent practicable and permitted by law, to make environmental justice part of their mission by identifying and addressing, as appropriate, any disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority populations and low-income populations in the United States.

The EPA has determined that this final rule will not have disproportionately high and adverse human health or environmental effects on minority or low-income populations. The reason for EPA’s determination is because the final rule does not affect the level of protection provided to human health or the environment as it does not change a permitting authority’s obligation to maintain the NAAQS, even though changes are being made to the obligation to maintain the NAAQS, even though changes are being made to the

List of Subjects
40 CFR Parts 51 and 52

Environmental protection, Administrative practice and procedure, Air pollution control, Intergovernmental relations, Nitrogen dioxide, Ozone, Particulate matter, Reporting and recordkeeping requirements, Sulfur oxides.

40 CFR Parts 70 and 71

Environmental protection, Administrative practice and procedure, Air pollution control, Intergovernmental relations, Reporting and recordkeeping requirements.


Stephen L. Johnson,
Administrator.

For reasons stated in the preamble, title 40, chapter I of the Code of Federal Regulations is amended as follows:

PART 51—[AMENDED]

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


Subpart I—[Amended]

2. Section 51.165 is amended by revising paragraphs (a)(1)(iv)(C)(xx) and (a)(4)(xx) to read as follows:

§ 51.165 Permit requirements.

(a) * * * * *

(1) * * * *

(iv) * * * *

(C) * * *

(20) Chemical process plants—The term chemical processing plant shall not include ethanol production facilities that produce ethanol by natural fermentation included in NAICS codes 325193 or 321240; *

* * * * *

(iii) * * *

(f) Chemical process plants—The term chemical processing plant shall not include ethanol production facilities that produce ethanol by natural fermentation included in NAICS codes 325193 or 321240; *

(i) * * *

(1) * * *

(ii) * * *

(t) Chemical process plants—The term chemical processing plant shall not include ethanol production facilities that produce ethanol by natural fermentation included in NAICS codes 325193 or 321240; *

Appendix S to Part 51—[Amended]

4. Appendix S to Part 51 is amended by revising paragraphs II.A.4.(iii)(f), and II.F.(20) to read as follows:

Appendix S to Part 51—Emission Offset Interpretative Ruling

* * * * *
incinerators capable of charging more than 250 tons of refuse per day, hydrofluoric, sulfuric, and nitric acid plants, petroleum refineries, lime plants, phosphate rock processing plants, coke oven batteries, sulfur recovery plants, carbon black plants (furnace process), primary lead smelters, fuel conversion plants, sintering plants, secondary metal production plants, chemical process plants (which does not include ethanol production facilities that produce ethanol by natural fermentation included in NAICS codes 325193 or 321240); * * * * *

(f) Chemical process plants—The term chemical processing plant shall not include ethanol production facilities that produce ethanol by natural fermentation included in NAICS codes 325193 or 321240; * * * * *

PART 52—[AMENDED]

§ 52.21 Prevention of significant deterioration of air quality.

(iii) * * * * 

(b) * * * 

(1) * * * 

(a) Any of the following stationary sources of air pollutants which emits, or has the potential to emit, 100 tons per year or more of any regulated NSR pollutant: Fossil fuel-fired steam electric plants of more than 250 million British thermal units per hour heat input, coal cleaning plants (with thermal dryers), kraft pulp mills, portland cement plants, primary zinc smelters, iron and steel mills plants, primary aluminum ore reduction plants (with thermal dryers), primary copper smelters, municipal

PART 70—[AMENDED]

§ 70.2 Definitions.

Major source * * *

(2) * * *

(xx) Chemical process plants—The term chemical processing plant shall not include ethanol production facilities that produce ethanol by natural fermentation included in NAICS codes 325193 or 321240; * * * * *

PART 71—[AMENDED]

§ 71.2 Definitions.

Major source * * *

(2) * * *

(xx) Chemical process plants—The term chemical processing plant shall not include ethanol production facilities that produce ethanol by natural fermentation included in NAICS codes 325193 or 321240; * * * * *