ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 51 and 52

[FRL-6212-3; Electronic Docket OAR-2002-0068;

Legacy Docket A-2002-04]

Prevention of Significant Deterioration (PSD) and Non-attainment New Source Review (NSR): Equipment Replacement Provision of the Routine Maintenance, Repair and Replacement Exclusion

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final Rule.

SUMMARY: The EPA is finalizing revisions to the regulations governing the NSR programs mandated by parts C and D of title I of the Clean Air Act (CAA). Today's changes reflect EPA's incorporation of comments from the proposed rule for "Prevention of Significant Deterioration (PSD) and Non-attainment New Source Review (NSR): Routine Maintenance, Repair and Replacement" (67 FR 80290; December 31, 2002). These changes provide a category of equipment replacement activities that are to be considered "routine" and, consequently, exempt from Major NSR requirements under the routine maintenance, repair and replacement (RMRR) exclusion. The changes are intended to provide greater regulatory certainty without sacrificing the current level

of environmental protection and benefit derived from the NSR program. We believe that these changes will facilitate the safe, efficient, and reliable operation of affected facilities.

Under a separate action today, the EPA is soliciting comment on a supplemental proposal that will address how activities can qualify for routine maintenance and repair under the RMRR exclusion. See 68 FR **[XXXXX]**.

EFFECTIVE DATE: This final rule is effective on **[INSERT DATE 60 DAYS AFTER PUBLICATION IN THE FEDERAL REGISTER]**.

ADDRESSES: Docket. Docket No. A-2002-04 (Electronic docket OAR-2002-0068), containing supporting information used to develop the proposed rule and today's final rule, is available for public inspection and copying between 8:00 a.m. and 4:30 p.m., Monday through Friday (except government holidays) at the Air and Radiation Docket and Information Center (6102T), Room B-108, EPA West Building, 1301 Constitution Avenue, NW Washington, D.C. 20460; telephone (202) 566-1742, fax (202) 566-1741. A reasonable fee may be charged for copying docket materials.

Worldwide Web (WWW). In addition to being available in the docket, an electronic copy of this final rule will also be available on the WWW through the Technology Transfer Network (TTN). Following signature, a copy of the rule will be

posted on the TTN's policy and guidance page for newly proposed or promulgated rules: http://www.epa.gov/ttn/oarpg.

FOR FURTHER INFORMATION CONTACT: Mr. Dave Svendsgaard, Information Transfer and Program Integration Division (C339-03), U.S. EPA Office of Air Quality Planning and Standards, Research Triangle Park, North Carolina 27711, telephone 919-541-2380, or electronic mail at svendsgaard.dave@epa.gov, for questions on this rule.

SUPPLEMENTARY INFORMATION

Regulated Entities

Entities potentially affected by this final action include sources in all industry groups. The majority of sources potentially affected are expected to be in the following groups:

Industry Group	SIC[a]	NAICS[b]
Electric Services	491	221111, 221112, 221113, 221119, 221121, 221122
Petroleum Refining	291	324110
Industrial Inorganic Chemicals	281	325181, 325120, 325131, 325182, 211112, 325998, 331311, 325188
Industrial Organic Chemicals	286	325110, 325132, 325192, 325188, 325193, 325120, 325199
Miscellaneous Chemical Products	289	325520, 325920, 325910, 325182, 325510

Natural Gas Liquids	132	211112
Natural Gas Transport	492	486210, 221210
Pulp and Paper Mills	261	322110, 322121, 322122, 322130
Paper Mills	262	322121, 322122
Automobile Manufacturing	371	336111, 336112, 336211, 336992, 336322, 336312, 336330, 336340, 336350, 336399, 336212, 336213
Pharmaceuticals	283	325411, 325412, 325413, 325414

[a] Standard Industrial Classification
[b] North American Industry Classification System.

Entities potentially affected by this final action also include State, local, and tribal governments that are delegated authority to implement these regulations.

Outline

The information presented in this preamble is organized as follows:

I. General Information

A. How can I get copies of this document and other related information?

1. Docket. EPA has established an official public docket for this action under Docket ID No. A-2002-04. The official public docket consists of the documents specifically referenced in this action, any public comments received, and other information related to this action. Although a part of the official docket, the public docket does not include Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. The official public docket is the collection of materials that is available for public viewing at the EPA Docket Center, (Air Docket), U.S. Environmental Protection Agency, 1301 Constitution Ave., NW, Room: B108, Mail Code: 6102T, Washington, DC, 20004. The EPA Docket Center Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Reading Room is (202) 566-1742. A reasonable fee may be charged for copying.

2. Electronic Access. You may access this Federal Register document electronically through the EPA Internet under the

"Federal Register" listings at http://www.epa.gov/fedrgstr/.

An electronic version of the public docket is available through EPA's electronic public docket and comment system, EPA Dockets. You may use EPA Dockets at http://www.epa.gov/edocket/ to submit or view public comments, access the index listing of the contents of the official public docket, and to access those documents in the public docket that are available electronically. Once in the system, select "search," then key in the appropriate docket identification number.

Certain types of information will not be placed in the EPA Dockets. Information claimed as CBI and other information whose disclosure is restricted by statute, which is not included in the official public docket, will not be available for public viewing in EPA's electronic public docket. EPA's policy is that copyrighted material will not be placed in EPA's electronic public docket but will be available only in printed, paper form in the official public docket. To the extent feasible, publicly available docket materials will be made available in EPA's electronic public docket. When a document is selected from the index list in EPA Dockets, the system will identify whether the document is available for viewing in EPA's electronic public docket. Although not all docket materials may be available electronically, you may still access any of the publicly

available docket materials through the docket facility identified in section I.A.1 of this preamble. EPA intends to work towards providing electronic access to all of the publicly available docket materials through EPA's electronic public docket.

For additional information about EPA's electronic public docket visit EPA Dockets online or see 67 FR 38102, May 31, 2002.

B. Where can I obtain additional information?

In addition to being available in the docket, an electronic copy of today's final rule is also available on the WWW through the Technology Transfer Network (TTN). Following signature by the EPA Administrator, a copy of this rule will be posted on the TTN's policy and guidance page for newly proposed or promulgated rules at http://www.epa.gov/ttn/oarpg. The TTN provides information and technology exchange in various areas of air pollution control. If more information regarding the TTN is needed, call the TTN HELP line at (919) 541-5384.

II. Background

A. What is the RMRR exclusion?

Under 40 CFR parts 51 and 52, "major modification" is defined as any physical change in or change in the method of operation of a major stationary source that would result in:

(1) a significant emissions increase of a regulated NSR pollutant or emission of a new pollutant; and (2) a significant net emissions increase of that pollutant from the major stationary source. Owners and operators of major stationary sources are required to obtain major NSR permits prior to beginning actual construction of a modification that meets this definition. The regulations provide that certain activities do not constitute a "physical or change in the method of operation" under the definition of "major modification." One category of such activities is routine maintenance, repair and replacement (RMRR). Until today, the NSR regulations have not specified what types of activities are encompassed by this term.

B. How has the process of using the RMRR exclusion worked?

Since its inception, the RMRR exclusion has been applied on a case-by-case basis. In interpreting this exclusion, we have followed certain criteria. The preamble to the 1992 "WEPCO Rule" (57 FR 32314) and applicability determinations made to date describe our current approach to assessing what activities constitute RMRR. These applicability determinations are available electronically from the Region 7 NSR Policy and Guidance Database (http://www.epa.gov/Region7/programs/artd/air/nsr/nsrpg.htm). Other relevant documents include decisions by EPA's Environmental Appeals Board and court briefs filed on behalf

of EPA. The EAB decisions can be found on EPA's website (http://www.epa.gov/eab/). To summarize these documents, to determine whether proposed work at a facility is routine, the reviewing authority makes a case-by-case determination weighing the nature, extent, purpose, frequency, and the cost of the work as well as other relevant factors to arrive at a common sense finding. See also Wisconsin Electric Power Company (WEPCO) v. Reilly, 893 F.2d 901, 910 (Seventh Cir. 1990). None of these factors, in and of itself, is conclusive. Instead, a reviewing authority should take account of how each of these factors might apply in a particular circumstance to arrive at a conclusion considering the project as a whole. If an owner or operator is uncertain whether he or she is applying the NSR regulations correctly, we encourage the owner or operator to consult the appropriate reviewing authority for assistance.

C. Why is the specification of categories of RMRR activities appropriate?

There has been some debate over the years as to the case-by-case approach and the types of activities that qualify as RMRR under the case-by-case approach. The case-specific approach works well in many respects. For example, it is a flexible tool that accommodates the broad range of industries and the diversity of activities that are

potentially subject to the NSR program.

However, the case-by-case approach has certain drawbacks. Unless an owner or operator seeks an applicability determination from his or her reviewing authority, it can be difficult in certain circumstances for the owner or operator to know with certainty whether a particular activity constitutes RMRR. Applicability determinations can be costly and time consuming for reviewing authorities and industry alike. If a source proceeds without a reviewing authority determination and is later found to have made an incorrect determination on its own, that source faces potentially serious enforcement consequences. Moreover, under the current case-by-case approach, State and local reviewing authorities must devote scarce resources to making complex determinations and consult with other agencies to ensure that any determinations are consistent with determinations made for similar circumstances in other jurisdictions and/or that other reviewing authorities would concur with the conclusion.

On the other hand, if a source foregoes or defers activities that are important to maintaining its plant when the activities in question are in fact within scope of the exclusion, that can have adverse consequences for the source’s reliability, efficiency, and safety. Industry

commenters strongly echoed these concerns, expressing that the expense and delay associated with NSR scrutiny, whether or not the project is ultimately judged to be subject to major NSR, has caused a number of facilities to forego needed and beneficial maintenance, repair, and replacement projects, including ones that would likely have reduced emissions. In our June 2002 report to the President, discussed in detail below, we similarly concluded that the NSR program has impeded or resulted in the cancellation of projects that would have maintained and improved the reliability, efficiency, or safety of existing energy capacity.

Finally, the source may install less efficient or less modern equipment in order to be more certain that it is within the RMRR regulatory bounds, or it may agree to limit its hours of operation or capacity to ensure no increase in emissions. Any of these approaches could make the source less productive than it would be otherwise. In fact, we concluded in our recent report to the President on the impacts of NSR on the energy sector that there have been cases where uncertainty about the interpretation of the exclusion for RMRR resulted in delay or cancellation of activities that would have maintained and improved the reliability, efficiency, and safety of existing energy

capacity. Such discouragement results in lost capacity and lost opportunities to improve energy efficiency and reduce air pollution.

We believe that these problems would be significantly reduced by adding to our current RMRR provision specific categories of activities that will be considered to be RMRR in the future. Such categories would remove disincentives to undertaking RMRR activities and provide more certainty both to source owners and operators who could better plan activities at their facilities, and to reviewing authorities who could better focus resources on activities other than on RMRR determinations.

We believe that today's rule will facilitate projects that enhance efficiency, safety, and reliability, which in turn will improve environmental performance. We anticipate that improved safety and reliability will result in more stable process operations and reduce periods of startup, shutdown, and malfunction and the increased emissions usually associated with them. Accordingly, establishing categories of activities that will qualify as RMRR promotes the central purpose of the CAA, "to protect and enhance the quality of the Nation's air resources so as to promote the public health and welfare and the productive capacity of its population." CAA section 101.

D. Process Used to Develop This Rule

In the 1992 "WEPCO Rule" preamble, we declared our intent to issue guidance on the subject of RMRR. In 1994, as an outgrowth of meetings with the Clean Air Act Advisory Committee, we developed, for discussion purposes only, a preliminary draft that presented possible ways of how RMRR could be defined. We received a substantial volume of comments on this document. We subsequently decided not to include this preliminary draft approach in our 1996 NSR proposed rulemaking. (61 FR 38250)

In 2001, the President's National Energy Policy directed EPA in consultation with the Department of Energy (DOE) and other Federal agencies to review the impact of NSR on investment in new utility and refinery generation capacity, energy efficiency and environmental protection. Our Report to the President illustrated the problems associated with our prior case-by-case approach to identifying RMRR activities and underscored the advantages of establishing an objective bright-line approach for administering the RMRR provision.

We held conference calls with various stakeholders during October 2001 (including representatives from industry, State and local governments, and environmental groups) to discuss new ideas that were raised as to how the RMRR provision might be improved. The proposed RMRR rule

reflected many of the ideas discussed in those meetings. Today's final rule on the equipment replacement provision is based on careful consideration of comments received on the proposed RMRR rule, where we sought comment on all aspects of our proposed approaches. Today's rule represents final action on only one part of what we proposed in December 2002. We have decided, for now, not to finalize rule revisions for routine repair and maintenance activities at this time, and not to take final action on the proposed annual maintenance, repair and replacement allowance approach. Included in today's Federal Register are is a supplemental proposal for routine repair and maintenance activities, and we expect to finalize those rules in early 2004.

E. What We Proposed

The RMRR proposal offered for comment two cost-based approaches for determining what constitutes routine maintenance, repair, and replacement. Under the proposal, facilities could have relied on a facility-wide annual maintenance, repair and replacement cost cap and/or an equipment replacement cost threshold to determine whether major NSR requirements were triggered by performing plant maintenance. The proposal additionally outlined two options based on the capacity and age of a facility. EPA solicited comment on all aspects of the proposed approaches as well as

any other viable option for clarifying the term "routine maintenance, repair, and replacement." We took public comment on the proposed rule until May 2, 2003 – 120 days following publication in the Federal Register.

Under the "annual maintenance, repair and replacement allowance," an annual maintenance cost allowance would be established for each industrial facility based on an industry-specific percentage. For the percentage, we considered using the Internal Revenue Service "Annual Asset Guideline Repair Allowance Percentages" (AAGRAP), which for years has been used as an integral part of an exclusion under the New Source Performance Standard (NSPS) program. A multi-year allowance approach, in addition to the annual approach, was also offered for consideration in the proposal.

Safeguards were proposed to ensure that the types of activities undertaken under the annual allowance are not activities that should be subject to greater scrutiny. These safeguards include: 1) no new unit may be installed; 2) no unit may be replaced in its entirety; and 3) changes may not cause an increase in the short-term emission rate of any regulated NSR pollutant.

Under the "equipment replacement" provision, we proposed to streamline the process for determining if major

NSR permitting requirements apply to replacement of existing equipment with identical new equipment or with functionally equivalent equipment. Thresholds, potentially up to 50 percent of the cost of replacing the process unit, were suggested by the proposal. These cost percentages would be applied each time a piece of equipment was repaired or replaced. As long as the threshold was not exceeded and the basic design parameters remain unchanged, the activity could be considered RMRR under this approach.

Under the proposal, all activities that remained below the annual maintenance allowance, or that fell beneath the equipment replacement threshold, would be considered "routine" without further review. Activities that were unable to be accommodated under the annual maintenance allowance or the equipment replacement threshold could still qualify for the RMRR exemption after a case-by-case review in accordance with current rules.

EPA solicited comments on a number of details, such as the annual maintenance cap, calculating costs, evaluating on a process unit basis, appropriate percentage to apply as a per-activity threshold, and several other items.

III. Equipment Replacement Provision

A. Overview and Justification for Today's Final Action

Today, we are revising certain provisions of the major NSR program by finalizing the equipment replacement

provision (ERP) to specify activities[1] that will qualify as "routine" equipment replacements under the RMRR exclusion. This action affects only those activities that begin actual construction after these provisions become effective in your jurisdiction. We are not taking action on our proposed Annual Maintenance, Repair and Replacement Allowance approach. In a separate section of today's Federal Register, we are taking comment on an alternative option to the Annual Maintenance, Repair and Replacement Allowance approach to address activities that involve only maintenance and repair (and not replacement). After reviewing comments on that proposal, we will decide what final action to take to address maintenance and repair activities.

Although many commenters requested that we further clarify the case-by-case approach for determining whether an activity is RMRR, we are not taking action on this suggestion at this time. We are still considering what, if any, changes should be made to that policy. In the meantime, the case-by-case approach will remain available to use as an alternative and/or supplement to today's ERP.

Under today's rule, an activity (or aggregations of activities) can qualify for the ERP if: (1) it involves

[1] We broadly use the term "activities" to mean all maintenance and non-maintenance projects conducted at a stationary source, some of which may trigger major NSR.

replacement of any existing part(s) of a process unit with part(s) that are identical or that serve the same function as the replaced part(s); (2) the fixed capital cost of the replaced part(s) plus costs of any associated activities (e.g., labor, contract services, major equipment rental, and associated repair and maintenance) does not exceed 20 percent of the replacement value of the process unit; and (3) the replacement(s) does not alter the basic design parameters of the process unit or cause the process unit to exceed any emission limitation(s), or operational limitation(s) if connected to emissions, or work practice requirement(s) that applies to any part of the process unit and that is legally enforceable.

Today's final rule specifies the basic design parameters for EUSGUs and for other types of process units. Specifically, for EUSGUs, we have retained our proposed approach of specifying maximum heat input and fuel consumption specifications as basic design parameters. We are also allowing owners or operators of EUSGUs to use the process unit's electric output or steam flow. Likewise, we are retaining our proposed approach of specifying maximum fuel or material input for other types of process units, but we also allow you to specify an alternative basic design parameter, such as an output-based one.

We are not specifically defining the basis for

determining the replacement value of a new process unit. Instead, the final rules provide you with the flexibility of using any of the following: (1) replacement cost; (2) invested cost, adjusted for inflation; or (3) the insurance value, where the insurance value covers complete replacement of the process unit (rather than, for example, lost revenue replacement). However, once you use one of these bases to determine the cost of constructing the process unit, you must continue to use the same basis to evaluate any additional activities that you undertake on that process unit within that same fiscal year. You may select an alternative method in a subsequent fiscal year.

The final rules also set forth a definition of process unit, specifically delineate the boundary of the process unit for certain specified industries, and define a functionally equivalent replacement. A more detailed discussion of these requirements and our rationale for this action is contained in other parts of this preamble section.

Today's final rules are designed to allow you to engage in activities that facilitate the safe, reliable and efficient operation of your source. We believe that today's final action improves the major NSR program by providing you with additional certainty as to what activities qualify as "routine" equipment replacements under the RMRR exclusion.

By adding certainty to the process, we are removing the disincentives to undertaking routine equipment replacements and promoting proper operational planning to facilitate safe, reliable and efficient operations. When an activity qualifies as routine under the ERP, it will be excluded from major NSR without regard to other considerations. In many cases, we believe that maintaining safe, reliable and efficient operations will have the corresponding environmental benefit of reducing the amount of pollution generated per product produced. The final rules also will reduce the resource burden on reviewing authorities resulting from implementation of the existing, case-by-case process for determining RMRR. In these respects, the final rules are consistent with the central purpose of the CAA, "to protect and enhance the quality of the Nation's air resources so as to promote the public health and welfare and the productive capacity of its population." CAA section 101.

B. <u>What activities qualify as identical replacements and why are such activities RMRR?</u>

We originally proposed to exempt the replacement of existing equipment with identical equipment. An identical replacement is a replacement of a part with another part that is the same model number and size as the original part and differs from the original part in only insignificant

ways such as (but not limited to) serial number or color. For example, you remove an existing Model A feed pump from a distillation column and replace it with another pump. If the replaced pump is also a Model A feed pump, the new pump is an identical replacement.

We continue to believe that most identical replacements are necessary for the safe, efficient and reliable operations of all industrial operations; are not of regulatory concern; will improve air quality (e.g., by decreasing startup, shutdown, and malfunctions); and thus should qualify for the ERP. As we observed at proposal, we believe industrial facilities are constructed with the understanding that certain equipment failures are common and ongoing maintenance programs are routine. Delaying or foregoing maintenance could lead to failure of the production unit and may create or add to safety concerns. When such equipment replacement occurs, the replaced part is inherent to both the original design and purposes of the source, and there is no reason to believe that such activity will cause an emissions increase. Moreover, most of these replacements are conducted at industrial facilities to maintain proper operations and to implement good engineering practices.

Several commenters said the equipment replacement

provision will streamline the major NSR applicability analysis. A number of commenters believed the ERP would be easier to implement than the proposed annual maintenance allowance approach. One commenter said the identical replacement provision will codify existing industrial practices, where replacement has no impact on emissions and would clearly represent RMRR activities.

Many commenters expressed conditional support for the ERP, recommending certain changes that they felt needed to be made to improve the proposal. One commenter supported the ERP in combination with a capacity-based option, on the assumption that repair and maintenance is to be excluded as well as equipment replacement.

One commenter attempted to collect data from turbine customers and found that achieving a level of data collection necessary for the ERP was far from simple, because the cost of maintenance activities is affected by such things as variability in engine model, package technology, and type of maintenance contract. Another commenter gave an example of the benefit that the ERP may provide. Without the ERP, the commenter said the source is limited to some fraction of boiler tubes allowed to be replaced at a given time, whereas with the ERP, replacement of all boiler tubes would, in the commenter's opinion, rightfully be considered routine. Another commenter said

the ERP will remove regulatory burdens for types of equipment replacements that are in their view “routine,” such as replacement of tubes in industrial boilers. They added that, without a clearer understanding of which activities are RMRR, they may be inclined to delay conducting such replacements.

Many other commenters generally opposed any kind of RMRR exclusion, including one based on equipment replacement. Some of these commenters believed the ERP was problematic because it would allow a source to replace an entire process unit over time. Two of the commenters opposed the ERP because they felt it would create disincentives for the implementation of Plantwide Applicability Limits (PAL) and Clean Unit provisions from the recently finalized rule.

One commenter said that from an engineering standpoint, for a power plant, the difference between routine maintenance and a major plant refurbishing project is clear. According to the commenter, routine maintenance is frequent and follows a predictable pattern. The commenter characterized routine maintenance at power plants as: repair of leaking pipes, pumps, valves, and fans; cleaning and lubrication of parts; and inspections. Permanent staff do this work either while the plant is operating or during only

brief periods of downtime. Activities that are not routine require long plant or process unit shutdowns, are done infrequently, and are major capital projects for which special funding is set aside as a result of years of planning and design work.

One commenter said the proposal will allow emissions increases that will be difficult to offset through other regulations. One commenter objected to the ERP for a number of reasons: (1) The provision does not prevent replacement with different equipment; (2) it does not promote efficiency improvements or application of good air pollution controls; and (3) it would allow replacements that would significantly increase emissions. This commenter said replacement of air pollution controls should trigger best available control technology (BACT) or lowest achievable emission rate (LAER) requirements. Two local air pollution control agencies noted that they currently already exempt all replacements with identical equipment from NSR.

As observed at the time of our RMRR proposal, we believe that most identical replacements are necessary for the safe, efficient and reliable operations of virtually all industrial operations; are not of regulatory concern; will improve air quality (e.g., by decreasing startup, shutdown, and malfunctions); and thus should qualify for the ERP under the RMRR exclusion, so we are finalizing the provision for

identical replacement of equipment essentially as we proposed it.

We agree with the commenters who felt most of these activities represent routine replacement and so should be exempted as RMRR. We also agree with the commenters who believe that this provision will streamline the major NSR applicability process and will bring clarity. The provision we are finalizing will allow a source to make a simple determination as to whether a replacement piece of equipment is identical or not. This type of determination will be straightforward and easier for the source to implement than the current case-by-case analysis required to determine if a replacement is routine. We support the air pollution agencies that have already exempted this type of change from NSR, although as discussed below, we have concerns about doing so without appropriate backstops, even for identical equipment replacements.

We disagree with those commenters who believe that this provision will create disincentives for sources to accept a PAL or have emission units designated as Clean Units. A PAL offers a source many incentives related to major NSR: (1) ability to bring on entirely new sources with no Federal preconstruction permit, as long as emissions caps are not exceeded; (2) ability to make modifications to existing

sources without performing a major NSR applicability test; and (3) reduced need to keep records or otherwise track for major NSR purposes any maintenance, repair and replacement activities or modifications at the facilities. A Clean Unit designation offers similar incentives without the ability to bring on new sources. These incentives will still be the driving force for new sources, and we do not believe this final rule will significantly detract from their appeal.

We also believe that there is value in providing a clearer distinction between routine equipment replacement and major plant refurbishing. For pieces of equipment used at industrial facilities, most manufacturers have well-established schedules for the replacement of key parts of the equipment that are part of the regular maintenance necessary to provide for the equipment's safe, efficient and reliable operation. Some of these replacements are larger in terms of cost and less frequent than others, but all are necessary to maintain the safe, efficient and reliable use of the process unit. We believe it is important to allow for these replacements within certain limits as discussed below (see section D, "What cost limit has been placed on the equipment replacement approach?").

We disagree with suggestions from commenters that the time period between activities, standing alone, provides a clear distinction between routine and nonroutine activities.

In fact, we think the major NSR applicability provisions impose constraints on capital planning and maintenance processes at industrial facilities. The effect of the existing provisions, such as the emissions baseline, is to force companies to plan maintenance actions on a relatively short horizon (either 5 or 10 years, depending on the emissions baseline). Failure to address maintenance within this horizon creates potentially significant ramifications such as the need to accept permanent limits on your operations. This can force companies to act sooner than needed or to take steps that have no rational relationship to the circumstances, with the result that maintenance actions are dictated by regulatory constraints rather than by economic efficiency.

Accordingly, today's final rules allow you to categorize identical replacement activities as routine equipment replacements under the RMRR exclusion if the fixed capital cost of such replacement plus the cost of associated activities does not exceed 20 percent of the replacement value of the process unit, and if the replacement does not alter a basic design parameter of the process unit or cause the process unit to exceed any emission limitation, operational limitation (that has the effect of constraining emissions), or work practice requirement (that has the

effect of constraining emissions) that applies to any part of the process unit.

C. What is a functionally equivalent replacement and why are such activities RMRR?

We also originally proposed to exempt the replacement of existing equipment with functionally equivalent equipment. A functionally equivalent replacement occurs when a part is replaced with another part that is identical in function and similar in many respects to the original part, but differs from the original in some way. For example, the replaced part may be a different model number or an equivalent model from a competitive manufacturer. It may also be a part that has been updated or improved since the time of the original part's manufacture, such as replacing worn out pipes in a chemical process plant with pipes that are constructed of different metallurgy.

At the same time, there are numerous activities that occur at facilities that may fall within the bounds of the cost threshold percentage, basic design parameters, and other backstop features of today's rule, but nevertheless cannot qualify as a routine equipment replacement on the grounds that the activity is not functionally equivalent. An example of this would include a plant that changes a boiler from a forced draft to an induced draft fan configuration. Despite the relatively minimal cost of such

an activity and the fact that the boiler continues to operate in fundamentally the same way after the change, the induced draft fan plainly represents a change from the forced draft fan system in numerous operational ways. Consequently, this activity would not qualify for the ERP.

Generally, comments on including replacement with functionally equivalent equipment are similar to those noted above for identical equipment replacement. However, a number of commenters expressed greater concern related to exempting the replacement of equipment with functionally equivalent equipment. The two local programs that exempt the replacement of equipment with identical equipment also allow the replacement of equipment with functionally equivalent equipment without considering such action to be a modification. However, due to local air quality considerations, the local programs establish minimum pollution control requirements that are imposed, if not already in place, for emissions units where equipment is replaced with functionally equivalent equipment. Nothing in today's rule would prevent a State or local program from imposing control requirements necessary to meet State or local air quality goals.

As we observed at proposal, when equipment is wearing out or breaking down, it often is replaced with equipment

that serves the same purpose or function but is different in some respect or improved in some way in comparison to the equipment that is removed. Moreover, the technology employed in certain types of equipment is constantly changing and evolving. When equipment of this sort needs to be replaced, it often is simply not possible to find the old-style technology. Owners or operators may have no choice but to purchase and install equipment reflecting current design innovations. Even if it is possible to find old style equipment, owners or operators have obvious incentives for wanting to use the best equipment that suits the given need when replacements are needed.

We believe such activities should be encouraged and should qualify for the ERP, even though the replacement varies in some respects from the original part. The important factor to consider is whether the replacement is designed to serve the same purpose as the original part.

After reviewing the comments for further consideration, we have decided to promulgate what we proposed in December 2002 with relatively minor changes.

We have decided that, similar to identical replacements, replacements with functionally equivalent equipment should qualify for the ERP, subject to certain safeguards. That is, the fixed capital cost of such replacements plus the cost of associated activities may not

exceed 20 percent of the fixed capital cost of constructing a new process unit, and the replacement may not alter a basic design parameter of the process unit nor require a permit revision related to the emissions.

We acknowledge that a functionally equivalent replacement can result in a modest increase in efficiency and, consequently, productivity. In fact, our goal is to promote such outcomes. However, we believe that the basic design parameter safeguard that we proposed is appropriate to assure that the ERP only categorizes functionally equivalent replacements that do not result in a significant change to the fundamental characteristics of the process unit.

Moreover, upon further consideration, we decided that an additional safeguard is necessary to emphasize the meaning of “functionally equivalent.” The additional safeguard is that an exempted replacement cannot cause a revision of the source’s emission limitation in their permit. More specifically, today’s rule stipulates that activities that cause the process unit to exceed any emission limitation, operational limitation (that has the effect of constraining emissions), or work practice requirement (that has the effect of constraining emissions) that applies to any part of the process unit cannot qualify

for the ERP.

Consistent with our decision regarding identical replacement, we have not included provisions establishing time period limitations for functionally equivalent replacement activities. As discussed in the previous section, we do not want the major NSR program to impose unnecessary constraints on capital planning and maintenance processes at industrial facilities. The effect of these provisions is to force companies to plan on a relatively short horizon (5 or 10 years, depending on the emissions baseline). Failure to address maintenance within this horizon creates potentially significant ramifications such as the need to accept permanent limits on your operations. This can force companies to act sooner than needed or to take steps that have no rational relationship to the circumstances, with the result that maintenance actions are dictated by unnecessary regulatory constraints rather than by economic efficiency. It is good engineering practice to look for ways to continually improve the efficiency, safety, and reliability of a process unit. We do not wish to discourage the continual development of pieces of equipment that will upgrade those characteristics at existing process units, as long as there are appropriate safeguards related to the magnitude of the activity and whether the replacements change the basic design parameters of the

process unit.

D. What cost limit has been placed on the equipment replacement approach?

The next most important concept presented in the proposal is the cost-based limitation on the scope of the ERP. The purpose of this threshold is to distinguish between those equipment replacement activities that should qualify for this provision without further consideration and those activities that should undergo case-specific consideration. This concept is borrowed from, and closely akin to, the long-established reconstruction provision under the NSPS program. For the reasons explained below, we have decided to establish a 20-percent cost threshold under the ERP.

In the proposal, we observed that it may sometimes be difficult to determine where to draw the line between an activity that should be treated as an excluded replacement activity and one that should be viewed as a physical change that might constitute a major modification, when the replacement of equipment with identical or functionally equivalent equipment involves a large portion of an existing process unit. We solicited comment on a range of equipment replacement cost thresholds such as one based on the NSPS program. Under the NSPS program, when the cost of a project

at an existing affected facility exceeds 50 percent of the fixed capital cost that would be required to construct a comparable entirely new unit (that is, the current capital replacement value of the existing affected source), then the source must notify and provide information to the permitting authority. After considering a range of factors, including the cost of the project, the estimated life of the facility after the replacements, the extent to which the replaced equipment causes or contributes to the emissions from the source, and any economic or technical limitations on compliance with the NSPS, the permitting authority determines whether the proposed project is a reconstruction.[2]

We observed that, in some respects, an equipment replacement cost threshold set at the NSPS reconstruction test could be an appropriate approach for distinguishing between routine and non-routine identical and functionally equivalent replacements under the major NSR program. As under the NSPS program, we do not believe it is reasonable to exclude from major NSR those activities that involve the total replacement of an existing entire process unit.

---

[2]In the proposal, it was incorrectly stated that applicability of the NSPS was triggered if a project exceeded 50 percent of the cost of replacing the affected facility. As stated in this notice, if an activity exceeds this cost threshold, that only triggers further evaluation, not the automatic application of the NSPS to the source.

Finally, we noted that there are other considerations pointing in favor of a threshold lower than the 50-percent reconstruction threshold that may be appropriate to bound the ERP. For example, since under NSPS half of the capital replacement value of an existing affected facility effectively constitutes *construction* of a new affected facility, it could be argued that some percentage lower than the 50-percent reconstruction threshold might be suitable in determining whether equipment replacements constitute a *modification* of an existing process unit. We solicited comments on the appropriate level of any percentage.

Many commenters supported the threshold of 50 percent of replacement value as the upper limit on equipment replacement. They felt this number is consistent with existing regulatory requirements and would accord the flexibility originally intended under the CAA for routine maintenance activities, while at the same time assuring that major, nonroutine projects remain subject to major NSR applicability review, and they felt this number is consistent with a common sense interpretation of the regulations.

They also believed a 50-percent cutoff to be consistent with reconstruction definitions used in many NSPS and National Emission Standards for Hazardous Air Pollutants

regulations. Some commenters stated that a 50-percent cutoff for the ERP would be valid for the same reason as for the NSPS reconstruction test; significant changes to a process unit are necessary before retrofit controls should be considered, provided there is no increase in emissions.

Many other commenters opposed the 50-percent replacement value threshold. They believed the capital replacement percentage should be much less than 50 percent. One commenter preferred that the sum of equipment replacement costs for a single process unit over any period of 5 consecutive years should not exceed 50 percent of the replacement value of the process unit. Another commenter said the replacement percentage should not be higher than 25 percent. Another commenter suggested a replacement percentage of 5 to 10 percent to reduce the risk of replacement of an entire process unit over time without installation of BACT. One commenter said a more appropriate percentage for electricity producers is 0.1 to 1.0 percent. Another commenter said the threshold should be 5 percent, 1 percent, or even less, as shown by an NSR enforcement case against the Tennessee Valley Authority (TVA).

Another commenter believed the 50-percent number has no practical effect in protecting public health and the environment, and the commenter is not aware of any projects that have exceeded 50 percent in cost.

While opposed to the ERP in general, one commenter said the cost threshold should be as high a percentage as possible, so as not to promote premature replacement of equipment that is repairable. Another commenter said the 50-percent number from the NSPS is archaic and not environmentally protective. This commenter suggested that the threshold instead be 24 percent. The commenter believed this lower percentage is appropriate because the lifetime of high-cost materials will considerably exceed 5 years.

We agree with those commenters who see a relationship between establishing a threshold under the major NSR program for the ERP and the threshold established for the NSPS program. However, we disagree that the thresholds for the two programs should be the same. The NSPS threshold was intended to identify those projects that, even though they did not qualify as a modification, nevertheless are of such magnitude that they should be given further consideration as projects possibly tantamount to new construction. The 50-percent NSPS threshold is not a bright line in the sense that all projects that exceed 50 percent are automatically considered as reconstruction. Rather, as discussed above, it is a threshold intended to alert permitting authorities to significant projects and allow case-by-case decisions based on a series of regulatory factors.

The ERP replicates the NSPS concept in some ways. It identifies a threshold below which there is no need for further inquiry into whether an activity qualifies for the ERP and above which there is a need for a case-by-case determination. The major difference between the ERP and the NSPS reconstruction test is that the ERP deals with modifications, not reconstructions. This difference weighs in favor of establishing the equipment replacement threshold at a fraction of the reconstruction threshold. It is logical and practical to conclude, as some of the commenters do, that modifications are smaller-scale projects than are reconstructions. As noted above, we have set the ERP cost threshold at 20 percent. This value is less than one-half of the 50-percent reconstruction threshold and, therefore, fits well within this conceptual framework.

Another key factor in choosing an appropriate ERP cost threshold is the decision of the U.S. Court of Appeals for the Seventh Circuit in the Wisconsin Electric Power Company (WEPCO) case. See 893 F.2d 901 (7th Cir. 1990). This decision directly addressed the questions of what level of "like kind" replacement activities qualify as changes under the major NSR program.

In the WEPCO case, the Court considered a project involving 5 coal-fired units at WEPCO's Port Washington plant. Each unit was rated at 80 megawatts of electrical

output capacity. The project involved the replacement of numerous major components. The information submitted by WEPCO showed that the company intended to replace several components that are essential to the operation of the Port Washington plant. In particular, WEPCO would replace the rear steam drums on the boilers at units 2, 3, 4, and 5. According to WEPCO, these steam drums were a type of "header" for the collection and distribution of steam and/or water within the boilers. They measure 60 feet long, 50.5 inches in diameter, and 5.25 inches thick, and WEPCO viewed their replacement as necessary to continue operation of the units in a safe condition. In addition, at each of the emissions units, WEPCO planned to repair or replace several other integral components, including replacement of the air heaters at units 1, 2, 3, and 4. The WEPCO also planned to renovate major mechanical and electrical auxiliary systems and common plant support facilities. The WEPCO intended to perform the work over a 4-year period, utilizing successive 9-month outages at each unit. The cost of the project was estimated in 1988 to be $87.5 million. The Court determined that the changes did constitute a “physical change” under the NSR rules.

In the case of a steam electric utility, the process unit definition provided in today’s rule is nearly identical

to the components in the calculation of a "comparable new facility" that were included in the NSPS evaluation of the WEPCO project. However, one difference is that the cost of pollution control equipment is not considered in evaluating the changes in WEPCO against the process unit definition in today's rule. WEPCO had electrostatic precipitators on each of their 5 process units, so this needs to be factored in. In addition, the WEPCO evaluation dealt with 5 boilers, each with its own turbine-generator set; to be consistent with today's definition of steam electric generating facility, we would likely treat each boiler unit as belonging to a different process unit. However, since all of the boilers underwent similar renovations, for simplicity we can assume that all of the process unit-specific activity costs are equivalent.

Using 1991 dollars, consistent with the timeframe of the Seventh Circuit Court's decision, we determine the value of the 5 process units at the 400-megawatt WEPCO Port Washington facility to not exceed $321 million based 1991 model plant values provided by the International Energy Agency. The 1988 project cost of $87.5 million scaled up to 1991 dollars results in an adjusted project cost of $92.3 million.[3] Thus, the capital cost percentage for the

[3] Using the Chemical Engineering Annual Plant Cost Index (composite), $87.5 million in 1988 dollars is equal in real terms

replacement activities at WEPCO, averaged over its 5 process units, amounts to 29 percent. Alternatively, using the project cost of "at least $70.5 million" as cited in the 1991 decision by the Seventh Circuit, and using the same value for process unit cost, we compute 22 percent. The 20-percent threshold is, therefore, beneath the scope of the projects at issue in the WEPCO case and, therefore, squares well with the holding in that case.

The 20-percent threshold also is supported by available data for the electric utility sector. We have a robust and detailed set of information available on maintenance, repair and replacement activities for the electric utility sector. Information about the electric utility sector assures us that we have established the right ERP threshold for this sector.

We have determined that two comment letters (from the Utility Air Regulatory Group (UARG) and from the American Lung Association (ALA), et al.) were particularly helpful in understanding the issues associated with the electric utility sector. The UARG provided as an attachment to its comment letter a document describing major repair and replacement activities that its members believe must be

---

to (361.3/342.5) multiplied by 87.5 million, or $92.3 million in 1991 dollars. This cost index is found in Chemical Engineering magazine.

undertaken at utility generating stations in order to keep those facilities operational. The UARG noted that capital costs incurred for repair and replacement activities at an individual process unit additionally include activities more minor than those addressed in the document. The UARG grouped repair and replacement activities into project families; within each project family were per-component costs ($/kW) for numerous equipment replacement activities. We have reviewed the list of projects supplied by UARG and have concluded that these types of replacement activities are necessary and helpful in maintaining, facilitating, restoring or improving the safety, reliability, availability, or efficiency of process units. Therefore, these types of individual activities and groups of activities should qualify for the ERP and be excluded from major NSR without case-specific review. We also believe that it is reasonably expected in the electric utility industry for groups of these activities to be implemented at the same time. Such groupings should also be excluded without case-specific review. When we compare the 20-percent ERP cost percentage to the UARG data, we find that individual replacement projects would, in fact, qualify for the ERP and that limited groupings of these projects would qualify. However, larger groupings of these projects – groupings that are not usually seen in the industry – would

not qualify for the ERP. This shows that the 20-percent threshold will be effective in distinguishing between projects (and aggregations of projects) that should not require case-specific review to be excluded from major NSR and those that do.

The ALA commenters provided with their comments the results of their analysis of projects at issue in an NSR enforcement case against Tennessee Valley Authority (TVA). As shown in the ALA comment letter, the Clean Air Task Force and the Natural Resources Defense Council looked at costs for 14 projects on a process unit basis, in year 2001 dollars, from the publicly available record for the case. For all but one of the challenged projects, the ALA commenters calculated a cost of less than 4 percent of process unit replacement cost. The ALA commenters submitted results of this analysis with their opposition to a source-wide, 5-percent maintenance allowance. For the reasons explained above, to the extent the projects addressed by ALA constitute identical or functionally equivalent replacements, we now believe that such projects should be encouraged because they maintain, facilitate, restore or improve the safety, reliability, availability, or efficiency of the process unit. Therefore, we believe such projects should qualify for the ERP in the future.

E. What will be the basis of applying the 20-percent threshold?

In the proposal, we solicited comment on whether implementing the ERP on a per-activity basis or on some other reasoned basis, such as applying the percentage to components that are replaced collectively over a fixed period of time, may be more workable.

One commenter opposed aggregation of costs over any period of time because of the potential for burdensome recordkeeping requirements. The commenter believed that the performance specification safeguard is adequate and no aggregation of costs would then be necessary. The commenter did not believe that EPA's concerns about disaggregating projects to stay within the exemption are warranted because, in the case of an electric utility, it is not realistic to remove a generating unit from service multiple times within a relatively short period of time.

Many commenters stated that the ERP should be implemented on a per-activity (or aggregation of activities) basis. Two of the commenters cited longstanding NSR precedent as the basis of their comments, while two other commenters relied on NSPS precedent. Another commenter thought the per-activity approach would be less confusing than summing activities over a fixed period of time. Other commenters believed the equipment replacement threshold

should in fact be applied on a 5-year rolling average.

We have decided to apply the percentage threshold on a per-activity (or aggregation of activities) basis. This is consistent with how major NSR has been applied in the past and will continue to the apply in the future, with the exception of those sources which establish a PAL. The major NSR program is a preconstruction program that requires applicability to be determined for a given activity at a facility and, as necessary, permitting to occur prior to the time activities are commenced. The major NSR program also requires applicability to be determined, in the first instance, based on an assessment only of the parts of a facility involved in the activity. Prospectively, a per-activity basis works well with this approach. We are not going final with a component-by-component approach.

There would be obvious problems if we chose any of the other approaches suggested in the proposal or suggested by commenters (for example, annual basis or 5-year rolling average). One of the primary concerns with applying the percentage to activities performed over a span of time is that we would be restructuring the major NSR program to operate based on after-the-fact determinations. This raises the difficult question of what happens under this type of approach if you learn after commencement of an activity that

it does not qualify under the ERP. This situation is largely avoided by the per-activity approach that we are establishing in today's rule.

It should be noted that activities that are related must be aggregated under the ERP, in the same way as they would have to be aggregated for other NSR applicability purposes. Also, non-replacement activities that are part of a larger replacement activity should be included when calculating costs for a replacement activity against the capital cost threshold.

F. What basic design parameters are being established to qualify for the equipment replacement provision?

In the proposal, equipment replacements were only eligible for the ERP if they did not change the basic design parameters of the process unit. We proposed that maximum heat input and fuel consumption specifications for EUSGUs and maximum material/fuel input specifications for other types of process units are basic design parameters. We solicited comments on limiting the eligibility of the provision this way and on the basic design parameters we proposed.

Several commenters expressed concerns with either the use of these specific parameters, or the restriction of the regulated community to only this set of design parameters. Other comments centered around an inconsistency in how EPA

has accounted for efficiency in the basic design parameter safeguard. The commenters stated that, while EPA stated in the proposed preamble that efficiency is not a basic design parameter, the basic design parameter safeguard, as proposed, has the potential to bar equipment replacements that achieve significant gains in efficiency.

Commenters from all sides supported EPA's approach to handling activities intended to improve an affected process unit's performance beyond its basic design parameters. In these circumstances, commenters agreed that actions that extend beyond the reasonable definition of RMRR should be subject to the full scope of major NSR. Commenters from the gas transmission industry concurred and amplified this concept, stating that an engine that is "uprated" (i.e, enhanced to allow increased output for the same turbine package) at the time of overhaul should undergo major NSR.

We recognize that the proposed basic design parameters are inconsistent with some industry conventions, and that we should allow for industry-specific flexibility or specify additional source category-specific parameters. For example, for the natural gas transmission compressor stations, commenters explained that brake horsepower is the conventional design capacity parameter. We received similar comments from other industries, including cement and surface

coaters, who objected to limiting their facilities to the proposed basic design parameters. Accordingly, we have decided to provide flexibility to allow for facilities to propose alternative basic design parameters to their reviewing authority which would then be incorporated in a Federally enforceable permit such as a title V operating permit.

In addition to this flexibility, there may be a need for additional flexibility in using the basic design parameters that are spelled out in today's rule. For instance with boilers, maximum steam production rate is often used by the industry, and it may make sense in some cases to set the design parameters based on those values rather than on maximum heat input. Likewise, a crude oil distillation tower may have several capacities that are a function of the type of crude that is to be processed, and so a refiner may need to have a *set* of basic design parameters for their crude towers. These situations can be addressed by the source proposing alternative parameters or sets of parameters to their reviewing authority.

Also, there should be flexibility in how the basic design parameters are demonstrated. In order to establish the heat input value that the process unit has demonstrated it is capable of achieving, an electric generating unit should have the flexibility to reference available credible

information, such as results of historic maximum capability tests, operating design information from the manufacturer, or engineering calculations. Results from tests performed by electric utilities in the context of providing assurances to generation dispatch systems and regional or national power pools may be used to establish the process unit's maximum heat input. A review of such data or other available operational data or design information can reveal the heat input that the process unit is capable of achieving in its "pre-activity" configuration, and this can be compared to a "post-activity" heat input value. Plant operators, where the specified basic design parameters are inappropriate for the process, can propose what the measure of performance will be for these process units, including the use of permit limits on amount of production, to their reviewing authority.

Many pieces of equipment are purchased based on their capacity or output. Consequently, for both utilities and non-utilities, we have modified the proposed basic design parameters to include output-based specifications in today's final rule. Also, for utilities, we added the basic design parameter of maximum design steam flow rating and clarified from the proposal that the correct parameter is maximum *hourly* heat input. Sources may request that their reviewing

authorities specify fuel type (such as coal or oil) when setting basic design parameters at a combustion device that can accommodate multiple fuel types, and, for coal-fired units, they should consider that the fuel consumption rate will vary depending on the quality of the coal for a given heat input. When establishing fuel consumption specifications, the minimum fuel quality based on BTU content should be used for coal-fired units.

Thus, an equipment replacement that improves a process unit's efficiency by enabling the unit to return to its original design parameters can be qualify for the ERP even if current actual emissions increase as a result. For example, if boiler tubes or refractory are replaced on a boiler process unit, and these activities are beneath the capital cost threshold and return the unit to its original design parameters and improve the unit's efficiency, then they are routine and qualify for the ERP.

Several commenters supported maximum design heat input as the basic design parameter for boilers. This parameter could also be expressed in terms of maximum design steam production rate, which is consistent with how the Florida Department of Environmental Quality permits bagasse boilers.

In the rare cases where a facility does not have established design parameters, we believe that a reasonable look back period should be used for establishing the pre-

activity values for basic design parameters, rather than taking the condition of the process unit immediately before the activity. We have therefore established a 5-year look back period, consistent with that for the NSPS hourly emissions increase test, for these situations.

We were urged by some commenters to incorporate a *de minimis* increase level in the basic design parameters that will still define functional equivalence. They argued that this would help when replacing equipment because some effects resulting from the replacement may not be apparent before it is made. We do not believe this approach is necessary if accurate design parameters are established.

In sum, we continue to believe that an identical or functionally equivalent replacement should not qualify for the ERP if the activity causes the process unit to exceed specified basic design parameters. As explained in the proposal, this requirement is needed to ensure that qualified projects are, in fact, identically or functionally equivalent. Without such a limitation, significant improvement of a process unit’s fundamental design could be accomplished under the guise of the ERP. Such an outcome obviously does not square with the idea that identically or functionally equivalent replacements are not “changes” under the major NSR program. Our final rule is different from the

proposal, however, in that it provides greater flexibility in defining basic design parameters for process units. We were persuaded by commenters who expressed concerns that the proposed approaches did not adequately encompass all affected operations and industry sectors.

G. What collection of equipment should be considered in applying the equipment replacement provision and how should it be defined?

In the proposal, we raised the issue of what collection of equipment should be considered in applying the threshold under the ERP. We proposed the term "process unit" as the appropriate collection. A definition of process unit is currently included in 40 CFR 63.41. We have built upon that definition to accommodate the intended coverage of activities under the ERP. The purpose of this term is, to the extent possible, to align implementation of the provision with generally accepted and practical understandings of what constitutes a discrete production process. The general definition was proposed to read as follows:

> Process unit means any collection of structures and/or equipment that processes, assembles, applies, blends, or otherwise uses material inputs to produce or store a completed product. A single facility may contain more than one process unit.

Our primary goal in defining this term was to encompass integrated manufacturing operations that produce a completed product rather than smaller pieces of such operations.

To help illustrate these concepts, we developed and have included in our final rule industry-specific examples of how this definition might be applied. The examples are drawn from five selected industry categories – electric utilities, refineries, cement manufacturers, pulp and paper producers, and incinerators. Some commenters compared the proposal's definition of "process unit" (producing or storing a completed product) to the definition that is used by section 112(g) and that appears in 40 CFR 63.41 (producing or storing an intermediate or final product). One of the commenters supports the more narrow proposed definition. Two commenters said the rule's definition should be consistent with that used by section 112(g), which they believe is broad enough to encompass interrelated operations. While supporting the RMRR proposal's definition, two commenters recommended that EPA provide regulatory flexibility by allowing a facility the option to choose which definition they will use.

One commenter generally supported the proposed definition of "process unit," but this commenter believed that "the delineation of a process unit should be made by

regulated entity rather than explicitly defined in a rule."

Three commenters asserted that pollution control equipment should be included in the process unit definition. One industry commenter said pollution control equipment is often integral to the process and may produce an intermediate product. One environmental commenter believed the proposed rule was unclear as to whether pollution control equipment is part of the process unit.

Several commenters said the proposed definition is too vague or broad. Another commenter added that the proposed definition is inconsistent with title V of the CAA. Another commenter urged EPA to change the definition of process unit to limit the scope of what is allowed in the replacement provision, so that the source of emissions (for example, an entire coal boiler) would not be allowed to be replaced without major NSR. The replacement unit's scope should be limited to an emission unit.

Most commenters were fairly supportive that the general process unit definition is sufficient. However, a number of commenters suggested that we revise or eliminate some of the process unit examples (that is, the industry category-specific definitions), and others were concerned that the proposed definitions do not support the detailed process unit definition for a specific industry because the definitions will never capture all possible elements and

configurations.

We received comments from several industry representatives suggesting changes to our proposed industry-specific definitions, and also to request that we delineate other process unit types explicitly in the rule. Definitions were submitted for sugar mills, chemical manufacturing plants, surface coating operations, flat glass manufacturing, fiberglass manufacturing, and gas compressor stations.

We agree with the commenters who favor using a process unit as the basis for administering the ERP and including a definition of process unit in the final rule. We do not agree with the commenters who suggested that the definition of process unit should be consistent with the definition in 40 CFR 63.41. We have chosen not to be consistent due to concerns with potential ambiguity with the 112(g) definition regarding its inclusion of the term “intermediates.” This term tends to be misinterpreted, which we believe could lead to less regulatory clarity for NSR sources. We thus believe that improving upon the 112(g) definition is therefore necessary in this instance and that the revised definition will provide needed consistency in implementing the ERP.

We disagree with the commenters who wish to include pollution control equipment in the definition. We feel that

periodic replacement of components of emissions control equipment should be encouraged and would rarely lead to actual emissions increases. In instances where replacement of pollution control equipment may lead to emissions increases, you will either undergo NSR for your increases or you may qualify for a Pollution Control Project exclusion. See 67 FR 80186. We do agree, however, that where the control equipment is an integral part of the process it should be included. Therefore, we are excluding associated pollution control equipment from the definition of the "process unit," except for control equipment that serves a dual purpose in the process. Pollution control equipment is often integral to the process and may produce an intermediate product and, thus, should be included as part of the process unit. A low-NOx burner is an example of a dual-purpose component. We are also clarifying in today's rule that administrative buildings (including warehousing) are not to be included in the process unit, but non-emitting units that are part of the processing equipment should be included.

We also have included in our final rule the industry-specific examples of how this definition might be applied. The examples are drawn from five selected industry categories – electric utilities, refineries, cement manufacturers, pulp and paper producers, and incinerators.

Because of the centrality of the "process unit" concept to the usefulness of the ERP, it is our desire to include a version of these examples in the final rule to make sure sources have a benchmark against which they can evaluate with greater confidence whether a particular replacement comes within the ERP. We are not planning to finalize examples provided by other industries at this time, given that we would have to propose them first, as we did for the five industry-specific process unit definitions being finalized today. Provided below, however, are suggestions that we think comport well with the general definition of process unit promulgated today.

Finally, we have made some slight corrections to the process unit definitions that we proposed. In the case of electric utilities, equipment that does not contribute to the production of electricity should be excluded from the definition of process unit. This could include water intake systems, cooling water towers, transformers and other downstream electrical equipment.

H. Consideration of Non-emitting Units as Part of the Process Unit

Many commenters supported excluding non-emitting equipment from the ERP. One commenter stated that triggering the major NSR review process for maintenance

activities is an impediment to continuous improvement projects for certain products and processes, even if actual emissions decrease or only non-emitting units on the process line are affected. Delays or postponements of project maintenance work adversely affect the reliability, safety and productivity of operations and cost control efforts. Another commenter recommended that work at clearly non-emitting units, specifically including foundation regrouting and repair and frametop replacement, should be excluded from this rule. Three commenters believed that non-emitting units cannot result in an increase of emissions and thus do not need to be evaluated under major NSR.

A blanket exclusion for non-emitting units could create problems of interpretation because the term “non-emitting components” is ambiguous when considering certain components. Commenters asserted that identifying and separating out non-emitting components can be a complex undertaking, and may be contrary to the goal of a clear and straightforward option. One commenter provided the following examples: (1) Piping systems (although pipe connectors are a source of fugitive emissions, the pipe normally is not); and (2) structural supports for a process unit (separating out the cost of supports from an investment basis throughout a facility will be difficult).

Another commenter believed it would be difficult to

separate the costs of emitting and non-emitting equipment when determining the cost of the process unit. The commenter also believed it would be difficult to determine allocation of shared equipment in the cost analysis.

We are concerned that, if owners or operators were allowed to strip away all of the non-emitting parts from a process unit definition, it would create significant ambiguity in the rule and could result in significant variation in how the rule is applied to similar sources in different jurisdictions. In addition, we simply do not think it is practical or logical to separate "non-emitting" parts of a process unit from "emitting" parts. We believe that integrated manufacturing operations (that is, process units) typically include both types of equipment. Separating emitting from non-emitting equipment would create an artificial divide that contrasts sharply with physical and operational reality.

As noted above, however, we do believe that a distinction should be made between non-emitting equipment that is part of a process unit and non-emitting equipment that is functionally distinct from the process unit. For example, most production facilities have buildings or space to house administrative offices, such as offices for the plant accounting staff. Such non-emitting facilities should

not be considered part of any process unit under today's rule.

I. What is the accounting basis for the process unit?

In the proposal, the accounting basis for the ERP discussed was the same as for the NSPS reconstruction provision, which is the fixed capital cost that would be required to construct an entirely new unit. We also discussed for the annual maintenance allowance using the invested cost of a unit as the accounting basis. We proposed that it would be appropriate to require that costs be calculated using an approach along the lines set out in the EPA Air Pollution Control Cost Manual (http://www.epa.gov/ttn/catc/dir1/c_allchs.pdf). Finally, we solicited comment on whether the costs associated with the unanticipated shutdown of equipment, due to component failure or catastrophic failures such as explosions or fires, should be included in evaluating costs under the ERP.

Most commenters asked for flexibility on whether a facility should use replacement value, invested cost or insurance valuation as the basis for the calculations. They felt that all were of equal merit and different ones would be available at different facilities so EPA should not prescribe only one type.

Most commenters did not support the sole use of the EPA Air Pollution Control Cost Manual (APCCM) to standardize

calculations for replacement and repair costs for RMRR in general. Most commenters felt that the APCCM is a worthy reference for costing but also that sources should not be limited to only one manual, because a single manual is likely to have shortcomings and not be able to represent every situation.

Many commenters supported an exclusion of costs for unanticipated shutdowns and failures. They noted that strong incentives exist to avoid fires, explosions and other unanticipated equipment failures because of the risk of human injury and production interruptions and because of the expense involved in restoring lost capacity. As a result, they contend that a catastrophic event already penalizes the facility dramatically, but then to impose the case-by-case analysis would only exacerbate their troubles. They explained that failures take place occasionally and can result in a sudden, unplanned partial or total loss of equipment. When such a failure occurs at a natural gas compressor station, the turbine or engine concerned must be replaced immediately to avoid a disruption in gas supply. Other facilities may have similar pressures to maintain their product around the clock. Such replacement fits easily within most elements of the equipment replacement test. However, it might violate the percentage threshold if

it is an old turbine with no exchange value. Commenters asserted that replacing a catastrophically failed turbine or engine is clearly "routine," since companies will always replace such failures.

Other commenters, however, opposed an exclusion for unanticipated shutdowns and failures on the grounds that maintenance activities performed during forced outages are simply maintenance and should be considered as such, particularly given that the proposed RMRR rule approaches and the December 2002 final rules already have given the industry a number of exclusion options.

We are allowing sources to determine the applicability of today's rule on the basis of replacement value, with an option for sources to notify their reviewing authority in writing if they desire to use another option (for example, invested cost or insurance value where the insurance value covers only the complete replacement of the process unit). The equipment replacement cost should be based on the current replacement value of the entire process unit at the time of conducting the activity.

Typically, replacement value is more easily obtained than invested cost. Most manufacturers will have information concerning the replacement value of a process unit, because such costs are commonly used when evaluating various business scenarios relating to manufacturing costs.

Also, use of replacement value is consistent with the NSPS provisions.

In addition to determining the replacement value of a process unit or component, in our final rule we allow for the use of several other accepted methods in different industries for estimating such values. Replacement values are the estimated value of replacing a unit and can be based on a current appraisal. In lieu of replacement cost, you can also use inflation-adjusted original investment, insurance limits if insured for full replacement of the unit, or other cost estimation techniques currently employed by the company, as long as the company follows Generally Acceptable Accounting Principles (GAAP) and if approved by the reviewing authority.

A dollar-per-kilowatt rate for calculating costs may be appropriate for utilities. This model is specific to source and fuel type and is updated periodically. We allow sources to use insurance valuation methods such as the Handy-Whitman Index to determine replacement costs for electric utilities. Other sources to compute costs include the Nelson Refinery Construction Index Factors, Solomon Refinery Study, and licensors of the respective process unit (e.g., Kellogg, UOP).

In order for a cost-based approach to be equitable, all

owners or operators must include the same categories of expenses in both the process unit replacement value and the replacement activities sought to be exempted. Therefore, although the final rule does not mandate any particular approach, we believe it is generally appropriate to calculate costs using an approach similar to the elements of Total Capital Investment as defined in the EPA Air Pollution Control Cost Manual (http://www.epa.gov/ttn/catc/dir1/c_allchs.pdf). While the manual contains basic concepts that could be used to estimate total capital investment at a process unit, it is geared toward cost calculations for add-on control equipment. On the other hand, the underlying concepts are taken from work done by the American Association of Cost Engineers to define the components of cost calculations for all types of processes, not just emission control equipment. In certain cases, other manuals might make more sense depending on their circumstances.

Under the EPA Manual, Total Capital Investment includes the costs required to purchase equipment, the costs of labor and materials for installing the equipment (direct installation costs), costs for site preparation and buildings, and certain other indirect installation costs. However, any costs associated with the installation and maintenance of pollution control equipment should be

excluded from the cost calculation, as per our discussion in the previous section of this preamble. We believe equipment that serves a dual purpose of process equipment and control equipment (combustion equipment used to produce steam and to control Hazardous Air Pollutant emissions, exhaust conditioning in the semiconductor industry, etc.) should be considered process equipment.

Direct installation costs include costs for foundations and supports, erecting and handling the equipment, electrical work, piping, insulation, and painting. Indirect installation costs include such costs as: engineering costs; construction and field expenses (costs for construction supervisory personnel, office personnel, rental of temporary offices, etc.); contractor fees (for construction and engineering firms involved in the activity); startup and performance test costs; and contingencies.

We agree with commenters who oppose an exclusion for unanticipated shutdowns and failures. Whether an activity is planned or unanticipated, major NSR applicability should function the same way. Therefore, we have decided to include replacements resulting from unanticipated outages in the cost of the replacement activity. To the degree they exceed the cost threshold, replacement activities resulting from unanticipated shutdowns or failures should be evaluated

on a case-by-case basis for RMRR. In the case of a catastrophic loss, unless you increase your plant size considerably, it is likely that you would replace your failed equipment with a more efficient and cleaner component, and such replacement would not trigger major NSR because the actual-to-projected-actual applicability test would not result in an emissions increase.

J. Enforcement

Today's rule provides revisions to the major NSR program to specify categories of activities that EPA will consider routine equipment replacement under the RMRR exclusion in the future. Today's rule applies only prospectively to projects that begin actual construction after these provisions become effective in your jurisdiction. As recognized by the U.S. Supreme Court, an agency may not promulgate retroactive rules absent express congressional authority. *See Bowen v. Georgetown Univ. Hosp.*, 488 U.S. 204, 208, 102 L. Ed. 2d 493, 109 S. Ct. 468 (1988). The Clean Air Act contains no such expressed grant of authority and EPA does not intend by its actions today to create any retroactive applicability for today's rule. 42 U.S.C. §§ 7401 *et seq.*

None of today's rule revisions apply to any changes that are the subject of existing enforcement actions that the Agency has brought and none constitute a defense

thereto. Also, today's new procedures do not apply retroactively to existing NSR permits or replacement activities that sources have made in the past. Furthermore, prior applicability determinations on major modifications and the control requirements that currently apply to sources remain valid and enforceable.

As noted above, today we are changing certain exemptions to the major NSR program by taking final action on the ERP. This provision specifies activities that will qualify for the RMRR exclusion for those activities that begin actual construction after today's rules becomes effective in your jurisdiction. If you are subsequently determined not to have met all of the obligations of these new alternatives, you will be subject to any applicable enforcement provisions (including the possibility of citizens' suits) under the applicable sections of the Act. Sanctions for violations of these provisions may include monetary penalties of up to $27,500 per day of violation, as well as the possibility of injunctive relief, which may include the requirement to install air pollution controls.

K. Quantitative Analysis

At proposal, we presented a quantitative analysis of the possible emissions consequences of the range of different approaches to the RMRR exclusion, to evaluate if

our policy conclusions are correct. Our analysis was conducted using the Integrated Planning Model (IPM). This analysis was done for electric utilities because we have a powerful model to perform such an analysis that we do not have for other industries. We stated that the results for electric utilities accurately reflect the trends we would see in other industries.

The IPM analyses of different scenarios showed that the breadth of the RMRR exclusion would have no practical impact on, let alone be the controlling factor in determining, the emissions reductions that will be achieved in the future under the major NSR program. The analyses showed that emissions of SO_2 are essentially the same under all scenarios. This stands to reason because nationwide emissions of SO_2 from the power sector are capped by the title IV Acid Rain Program. For NO_x, these analyses showed modest relative decreases in some cases and modest relative increases in other cases. These predicted changes represent only a modest fraction of nationwide NO_x emissions from the power sector, which hover around 4.3 million tons per year (tpy). At this time, we do not have adequate information to predict with confidence which modeled scenario is most likely to occur if the options under consideration are adopted. What these analyses indicate, however, is that regardless of which scenario is closest to what comes to

pass, none of the proposed provisions related to the RMRR exclusion will have a significant impact on emissions from the power sector.

The DOE also presented further analysis of the possible emissions consequences of the range of different approaches to the RMRR exclusion. Using the National Energy Modeling System (NEMS), a variety of changes in energy efficiency and availability were evaluated, as well as the effect on emissions resulting from these regulatory revisions. This analysis concluded that efficiency improvements resulting from increased maintenance are expected to decrease emissions, whereas availability improvements are expected to increase emissions. In the cases represented in this analysis, the emissions reductions from assumed reductions in heat rates tended to dominate the corresponding effects of the assumed availability increases.

A number of commenters said that the underlying assumptions EPA used in the IPM analysis were flawed and resulted in erroneous conclusions regarding the emission reduction potential of the proposed RMRR rules. Several commenters stated that EPA's IPM analysis incorrectly assumes that no major modifications at any older units would ever trigger the requirement to add new pollution controls. In addition, according to commenters, EPA also erroneously

assumes that this lack of major maintenance and refurbishment will have very little impact on the performance of those power plants, when in reality their emissions would increase significantly. The commenters cite a Clean Air Task Force analysis for power plants, which estimates that EPA's rule revisions will result in at least 7 million more tons of SO_2 and 2.4 million more tons of NO_X annually. Some commenters also questioned the appropriateness of using EPA's analysis for the electric generating sector to draw conclusions about non-utilities.

One commenter said the IPM and DOE NEMS analyses correctly demonstrate that EPA's RMRR proposal will have no appreciable impact on emissions from the power sector. According to the commenter, this conclusion is consistent with EPA's findings in a 1989 report, "1989 EPA Base Case Forecasts," which demonstrated that continuing to allow utilities to undertake activities including ongoing annual operating and maintenance activities and a major refurbishment when the unit reached 30 years of operating life would have no appreciable impact on emissions from the power sector, just as EPA's and DOE's recent analysis confirmed.

One commenter said the proposal lacks any reference to the gains accomplished by major NSR, the ongoing enforcement actions, settlements reached as a result of those actions,

or the potential gains from the investigations now pending. EPA's reliance on improvements in productive capacity as the measure of success fails to consider that productive capacity must be balanced with the interests of health and welfare. The commenter also noted that critical to EPA's burden to consider all the relevant factors leading to its conclusion that the exemptions are necessary and appropriate is at the very least an assessment of the expected effects on emissions, which in turn will determine the public health benefits and costs of the proposed rule. Although data on emission reductions achieved under the existing program are available, EPA has stated that it cannot accurately quantify the effects the proposed rule will have on emissions. Before promulgating a final rule, EPA should provide such a quantitative assessment of the rule.

We disagree with the commenters who believe that emissions would be significantly higher for electric utilities than are estimated under the IPM model runs. These commenters' arguments rely on the assumption that EPA's base case is invalid because, if major NSR rules were left unchanged, eventually all coal-fired utilities would either apply BACT or deteriorate so badly that they would have to shut down. We do not believe this assumption is accurate. Our experience suggests that under the current

NSR program, managers of coal-fired electric generating facilities take whatever actions are necessary to avoid triggering NSR, primarily because of its high retrofit costs and delays. If some maintenance projects could trigger NSR, facilities will limit their maintenance to projects that do not trigger NSR, and will take enforceable restrictions on fuel use or other actions to avoid NSR. This results in some decline in efficiency and capacity, as the EPA's base case modeled, but the units would likely remain viable electric generating units for years without triggering BACT requirements. Thus, we believe our base case represents a far more realistic assessment of what would happen under current major NSR rules than the dramatic BACT reductions presented by these commenters.

Furthermore, in the future, while some of the facilities may be modified and subjected to control, nationwide emissions as estimated in the model runs would still rise to the level of the Acid Rain cap for SO_2. To the degree these modifications come at facilities that are otherwise projected to be controlled because of existing SO_2 and NO_X requirements, there would be no difference in effect between the model runs and alternative scenarios. We agree with the commenter who noted that the recent analysis and the estimated impact on emissions is consistent with the previous EPA report in 1989. Our recent analysis confirms

that efficiency improvements have the potential to result in environmental benefits that offset (or more than offset) emissions increases from improved availability, but that previous major NSR rules discouraged these improvements.

Regarding the applicability of our analysis to non-utility sectors, we continue to believe that our conclusions are valid for all sectors, and further, that the effects from the electric utility industry dominate those from other sectors. We acknowledge that the results for the SO_2 cap for utilities cannot be extended to non-utilities that are not similarly capped. However, our model runs for NO_x reflected the absence of a cap, and are therefore valid for other uncapped sectors. Thus in the case of industrial boilers, which behave similarly to utilities, we would expect to see similar efficiency improvements and availability improvements occurring in tandem, resulting in either modest increases or decreases. Because the overall emissions from this sector are significantly smaller than for utilities, the modeled effects for utilities are expected to dominate the analysis.

Finally, for other industrial sectors, we do not anticipate that emissions increases will result from maintenance activities covered by today’s rule. While some efficiency improvements may result, the overall effect of

these improvements will not be to induce greater demand and greater emissions, as was seen for utilities (i.e., demand depends on independent factors). Indeed, without increased demand, efficiency improvements that lower emissions per unit of output would result in a decrease in emissions.

Therefore, we affirm the overall conclusion of our analysis – that today's rule has no practical effect on the environmental benefits of major NSR in the future. We have presented additional, more detailed supporting information in our final RIA and our response to comments document which can be found in the docket for today's action.

L. Consideration of Other Options

In addition to the cost-based approaches that we proposed, we also asked for comment on age-based and capacity-based approaches, and any other viable option for addressing RMRR.

1. Annual Maintenance, Repair and Replacement Allowance

We are not taking action on the proposed Annual Maintenance, Repair and Replacement Allowance option for the RMRR exclusion, and therefore public comments on this option are not addressed at this time. We will address comments on our proposed Annual Maintenance, Repair and Replacement Allowance if and when we take final action on that proposal.

2. Capacity-Based Option

As mentioned above, we considered the alternative

option of developing an RMRR provision based on the capacity of a process unit. Under such an approach, an owner or operator could undertake any activity that does not increase the capacity of the process unit. Basing RMRR on capacity has appeal for several reasons. The primary objective of RMRR is to keep a unit operating at capacity and/or availability. In addition, the linkage between capacity and environmental impact is more apparent than that between cost and environmental impact. Finally, this type of approach might, in principle, be easier to use before beginning actual construction than some of the cost-based approaches.

Several commenters were concerned with defining the capacity of a process unit. Capacity may be defined based on input or output. Nameplate capacity of a process unit may vary greatly from the capacity at which the process unit may be able to operate. It may be more appropriate in some industries to measure capacity based on input while in others on output. Commenters felt that a capacity-based approach would not be workable at complex manufacturing sources, because “capacity” as a useful shorthand term for the processing capability correlates exactly only with a historical feed or product slate no longer available or made. A number of commenters supported a capacity-based option, generally indicating that a capacity-based option

would be simpler and less burdensome to use than the other proposed approaches.

Another large concern of commenters was that a capacity-based approach could prevent facilities from performing activities that make the facilities more efficient. RMRR provisions need to include some form of the other approaches to account for energy efficiency projects at utilities, which could increase capacity. Some commenters noted that maximum hourly emissions is a more appropriate surrogate for a change in capacity, because it is consistent with existing NSPS procedures and with averaging periods for ambient air quality monitoring and standards.

We agree that an appropriate capacity-based approach would have to be tailored to various types of sources, with capacity based on input for some and on output for others. As an example, in a review of promulgated and proposed Maximum Achievable Control Technology standards, six of eleven standards measured capacity based on process unit output while five standards based capacity on input. In fact, the NSPS exclusion for increases in production rate at 40 CFR 60.14(e) originally was dependent upon the "operating design capacity" of an affected facility. In proposed revisions to the NSPS program published on October 15, 1974, we state (39 FR 36948):

> "The exemption of increases in production rate is no longer dependent upon the "operating design capacity." This term is not easily defined, and for certain industries the "design capacity" bears little relationship to the actual operating capacity of the facility."

We also agree that a capacity-based approach has its limitations, as described by the commenters. We have concluded that the ERP eliminates the need to implement the capacity based approach. We have decided not to finalize a capacity-based approach.

3. Age-Based Option

Under our proposed age-based approach, any process unit under a specified age could undergo any activity that does not increase the capacity of a process unit on a maximum hourly basis without triggering the requirements of the major NSR program. However, the activities could not constitute reconstruction of the process unit; that is, their cost could not exceed 50 percent of the cost of a replacement process unit. The age of the process unit would likely be in the range of 25-50 years. We also proposed that the owner or operator would have to become a Clean Unit as defined at 40 CFR 51.165(c)(3), 51.166(t)(3), and 52.21(x)(3), once the age of a process unit exceeds the age

threshold.

Such an approach would provide an owner or operator a clear understanding of RMRR for an extended period of time. It also may provide the owner or operator greater flexibility than under the current system for a limited period of time. Like the capacity-based approach, this approach would, in principle, allow for a fairly simple preconstruction determination of applicability.

Very few commenters expressed any interest in developing this type of approach. Their concerns centered around defining capacity and establishing the age cut-off (because the useful life of equipment is difficult to establish and may vary greatly). Other concerns raised by commenters were that some of the activities that would be allowed at newer sources do not fit within any ordinary meaning of RMRR and some of the activities that would be forbidden at older facilities would come within that meaning, and also that some sources may consciously, and appropriately, engage in aggressive RMRR as a method of maximizing the life span of its process units, and an age-based approach would discriminate against them.

One commenter stated that EPA should establish a normal lifetime, tailored to each industry, beyond which industry would need to install BACT or shut down. This type of approach would obviously require a substantial amount of

time.

The age of a source alone is not a legitimate reason to require the addition of pollution control equipment. Age has no direct bearing on a unit's environmental impact; some facilities maintain equipment better than others. We have decided not to promulgate an age-based approach. We have several basic concerns with this approach that we have not been able to reconcile. We also believe that the equipment replacement approach largely addresses the commenters' concerns regarding the age-based approach.

Thus, we have decided not to finalize a rule using this approach.

M. Specific List of Excluded Activities

Several commenters supported the development of lists of activities that are considered RMRR; some of these commenters also supported developing lists of activities that do not qualify as RMRR. Commenters suggested various ways in which such lists could fit into the overall RMRR program. We are concerned, however, that such a list would have to be implemented through rulemaking, which would require a considerable amount of time and resources.

A commenter suggested two ways by which we could develop a list of qualifying activities. First, we could review records for ongoing enforcement activity, to identify

activities that we have and have not already alleged to be routine. There is an ample body of knowledge for electric power plants. Second, we could identify where activities would fall with respect to the cost criteria, then adjust the classification of each activity based on the WEPCO criteria to prepare lists of routine and nonroutine activities.

Some commenters felt that industry-specific lists of routine and nonroutine activities would provide the best interim clarification to major NSR until legislative reform is in place. Other commenters opposed the development of lists of activities that are considered RMRR, contending that such lists would become quickly outdated.

Some commenters requested that certain activities be specifically classified as RMRR. These activities included the following:

- The common practice of changing out the engine core in a combustion turbine when it is due for overhaul (to reduce downtime). The removed engine core is overhauled offline, and is then available to be switched in for the next like-kind engine core that reaches the point of overhaul. Unless components are upgraded, the heat input remains the same and so does the emissions rate.
- Any change that does not increase the achievable hourly

emissions (as determined based on the permit and/or original design parameters) of existing equipment, processes, and emissions units.

Another commenter suggested the following list:

- Certain activities, for example, boiler tuning and maintenance, repair and replacement of air pollution equipment or CEMS should be categorically exempted as RMRR.
- Any project that is part of a long-term service agreement (primarily gas turbines) should be categorically exempted from major NSR.
- Any project involving steam turbine overhaul work should be categorically exempted from major NSR.

We believe there are simply too many activities in too many industries to effectively improve major NSR implementation through creation of lists. Moreover, lists would be a "snapshot in time" that would need to be reviewed and periodically updated for each industry sector. EPA has consequently decided to not list activities that have a categorical exclusion for routine equipment replacements.

N. Stand-alone Exclusion for Energy Efficiency Projects

In the proposal, we acknowledged that certain types of projects that improve energy efficiency would not qualify as RMRR. We solicited comment on whether there was the need

for a “stand-alone” exclusion for activities that promote energy efficiency.

Many commenters supported a stand-alone exclusion from major NSR for energy efficiency projects. With the following safeguards, they favored specifically excluding from the definition of “major modification” activities/projects that promote energy efficiency and/or resource conservation when: (1) The project results in lower emissions per unit of production or lower energy utilization per unit of production; (2) the percent decrease in emissions or energy utilization per unit of production is greater than the percent increase in maximum hourly emission rates; (3) project costs do not exceed 50 percent of the replacement value of the process unit; and (4) the project does not result in an increase in allowable emissions.

Other commenters pointed out that efficiency upgrades will frequently create incentives to further utilize a source and subsequently increase mass emissions. One commenter stated that if activities that result in small efficiency gains can qualify as RMRR, older, dirtier electric generating units will be better able to out-compete newer, much cleaner plants (that have higher costs due to emission controls).

One commenter stated that EPA is incorrect in stating that energy efficiency projects are being discouraged by

major NSR, particularly under the new actual-to-projected-actual applicability test. This commenter added that the only projects that are discouraged by major NSR are ones that increase emissions. This commenter felt that the December 2002 final major NSR rules provide a broad range of major NSR exemptions (including revised baseline determinations, Clean Unit designations, pollution control projects, PALS, and combinations of these provisions, as well as an RMRR exemption) under which energy efficiency projects will certainly occur.

We strongly support efforts to improve energy efficiency at existing power plants. These activities reduce the amount of air pollution emitted per unit of electricity generated and also reduce greenhouse gas emissions. We believe that today's ERP supports energy efficiency projects and that the actual-to-projected-actual applicability test contained in the December 2002 NSR final rules also should remove impediments to energy efficiency projects. Together, these rules will obviate the need for a specified RMRR provision for energy efficiency projects. Thus, we are not proceeding with finalizing a provision at this time.

O. Legal Basis

The modification provisions of the NSR program in parts

C and D of title I of the CAA are based on the definition of modification in section 111(a)(4) of the CAA. The term "modification" means "any physical change in, or change in the method of operation of, a stationary source which increases the amount of any air pollutant emitted by such source of which results in the emission of any air pollutant not previously emitted." As we observed in the notice of proposed rulemaking for this rule, that definition contemplates that you will first determine whether a physical or operational change will occur. If so, then you proceed to determine whether the physical or operational change will result in an emissions increase over baseline levels.

Real-world, common-sense usage of the word "change" in "physical change" and "change in the method of operation" shows that "change" is susceptible to multiple meanings. As we have noted previously, "EPA has always recognized that Congress obviously did not intend to make every activity at a source subject to new source requirements." 57 FR 32,314, 32,316 (July 21, 1992). Conceivably, "change" could encompass a range of activities from periodically replacing filters in production machinery, to once in-a-lifetime anticipated replacement of a component, to complete replacement of a production unit.

For example, all cars must periodically have their oil "changed." When considered from one perspective, this activity does represent a "change" because old oil is removed and new oil is added. From another perspective, however, this activity would not be considered a change because it does not alter any significant characteristic of the car.

More to the point, chemical and pharmaceutical manufacturing operations often are designed, operated, and permitted under major NSR as "multi-function" facilities. These facilities have numerous pieces of equipment (such as storage tanks, reactors, distillation columns, cetrifuges, filter dryers, etc.) that can be reconfigured to accommodate a wide variety of products and operating conditions. When switching from product X to product Y, a plant can make substantial "changes" in the types of equipment used, the processing conditions, and the raw materials, reagents, solvents, and other processing materials. In this case, the same basic equipment is used to make a wide variety of end products. But, as long as the facility is operated as designed and permitted under major NSR, we would not consider (and have not considered over the 20+ year life of the NSR program) such changes to be physical or operational "changes" for purposes of administering the NSR program.

Similarly, manufacturing equipment often is built with expendable parts. For example, industrial gas turbines, such as those used to drive compressors on natural gas pipelines, regularly need to have parts replaced as they wear out due to the high temperature and pressure conditions inside the turbine. In fact, these gas turbines are built with the knowledge and expectation that such replacements will be needed. In recognition of this fact, under the New Source Performance Standard for gas turbines, 40 C.F.R. Part 60 Subpart GG, we have concluded that "replacement of stator blades, turbine nozzles, turbine buckets, fuel nozzles, combustion chambers, seals, and shaft packings" are not "changes" for regulatory purposes. Cite to EPA-450/2-77-017a, background support document for GG. Such replacements are akin to getting a new set of brakes on a car – not something that happens often, not an activity that is necessarily inexpensive, but plainly an activity that is an expected part of maintaining and operating the facility and one that does not represent an alteration of the affected process unit.

As the preceding examples suggest, identifying activities that are "changes" for NSR purposes – and thus potentially trigger the need for an NSR permit – requires the exercise of Agency expertise. The application of agency expertise to the interpretation of this statutory term is

the classic situation in which an agency has been accorded deference under *Chevron, U.S.A., Inc. v. NRDC,* 467 U.S. 837 (1984).

Historically, we have asserted the power to interpret the relevant statutory terms. For example, even though both the NSPS and the PSD/NNSR programs incorporate the definition of "modification" from section 111, from the outset EPA has adopted quite disparate readings of the term in our rules. See [*ASARCO* case, *WEPCO* preamble for idea NSR & NSPS are different programs with different terminology]. The NSPS program requires a change to result in an increase in the hourly potential to emit of the facility. 40 C.F.R. 60.14(a) - (b). In contrast, under PSD and NNSR, historically we have required an increase in annual emissions. [cite for old regs]. These disparate tests reflect the Agency's view that the statutory term "modification" must be construed with a view to what makes sense in particular statutory context, and are not obvious on their face.

The exclusions from NSR we adopted in 1980 also reflect the exercise of the *Chevron* discretion. Not only did we adopt the RMRR exclusion at that time, but we also adopted exclusions for increases in the hours of operation, fuel changes, and raw material changes. Only the RMRR exclusion

arguably could be justified as *de minimis*. For example, by doubling hours of operation, a 500 ton-per-year emitting plant could conceivably double its emissions.[4] The extra 500 tpy is far above any level EPA has ever thought justifiable as *de minimis*. E.g., 40 C.F.R. 51.166(b)(23(i) (definition of "significant"). Nor is it likely that these other exclusions could be based on some inherent power to adopt categorical exemptions from the Act's commands. See *Alabama Power Company v. Costle*, 636 F.2d 323, 359 (D.C. Cir. 1980) ("categorical exemptions . . . are not favored"). Accordingly, these other exclusions must be justified as an exercise of *Chevron* discretion.

It is important to note that, in 1977 when Congress incorporated by reference into the NSR program the pre-existing NSPS statutory definition of modification, EPA had already adopted and had been administering regulations and policy under the NSPS program related to the meaning of the term "modification." Our rules and policy provided that certain significant activities did not constitute physical or operational changes under the NSPS program prior to 1977 (or, for that matter, under the NSPS program as administered today). In addition to the gas turbine example provided

[4] As discussed below, our regulations provided a comparable exclusion from NSPS at the time of the 1977 Amendments that established the NSR program.

above, perhaps the best indication that EPA did not consider the terms "modification" or "change" to cover everything other than *de minimis* activities is the exclusion for production rate increases under the NSPS program. 40 C.F.R. Section 60.14(e)(2).

Under this provision, projects valued at tens of millions of dollars can be implemented – with no limitations on the nature of the project – without triggering applicable NSPSs. For example, up to 10 percent of the asset value of affected operations at a kraft pulp mill can be invested in a project without triggering the applicable NSPS, 40 C.F.R. Part 60 Subpart BB. The affected facilities at a kraft pulp mill typically are valued in excess of $100 million. Cite. Therefore, an owner or operator can implement projects costing tens of millions of dollars without triggering the applicable NSPS. This holds true regardless of the nature of the project – it can be a "like-kind" replacement of the kind addressed by today's rule or it can result in a substantial change in the nature of the operation. Thus, under the NSPS program that existed when Congress enacted NSR, projects of substantial cost that result in substantial change in affected facilities were not considered "changes." The same is true under the NSPS program as it stands today.

We recognize that the Agency previously has not

specifically asserted that our interpretation of "change" and the exemptions from new source review are based on an exercise of *Chevron* discretion. In some instances, such as in a decision of the EAB [cite TVA], in briefs in various enforcement-related cases, and (as noted below) in briefs in the *WEPCO* litigation, we have previously interpreted "change" such that all changes, even trivial ones, are encompassed by the Act, and thus we generally interpreted the exclusion as being limited to *de minimis* circumstances. However, EPA does have the authority to interpret these key terms through rulemaking. Upon further consideration of the history of our actions, the statute, and its legislative history, EPA believes that a different view is permissible, and, for policy reasons discussed above, more appropriate. Therefore, we adopt this view prospectively.[5]

The argument that our authority to exclude certain

[5] We have taken positions in numerous court filings concerning the proper interpretation and usage of key statutory terms, such as "physical change" and "any physical change." These positions were based on reasonable statutory interpretations of which the regulated community had fair notice, and continue to be the law governing prior activities at covered facilities. We now, however, are using our *Chevron* authority to define key terms for future activities at covered facilities because the terms have multiple meanings and we now believe the new definitions are most appropriate for the Clean Air Act regulatory regime going forward. Accordingly, we only intend to apply our new definitions, and supporting rationale, to activities at covered facilities that occur after the effective date of this regulation.

activities from being modifications under new source review can only be based on a *de minimis* rationale sometimes relies on the word "any" used to modify "physical change" and "change in the method of operation," pointing to the word "any" in the definition of "modification" as a signal from Congress that the term "change" must be interpreted as encompassing the broadest possible sense of the term. Such an interpretation is not compelled by the language and legislative history of the statute, as demonstrated by the manner in which we have interpreted the word "change" under both the NSPS and the NSR programs.[6]

Nothing in the appellate caselaw directly disposes of this issue in a manner that prevents a new interpretation today. Two cases, *Alabama Power* and *Wisconsin Electric Power Co. v. Reilly*, 893 F.2d 901 (7th Cir. 1990) (*"WEPCO"*), are relied on by some commenters to assert that EPA must interpret "modification" and "change"expansively and base all exclusions on a *de minimis* rationale. However, in *Alabama Power*, the issue before the court was the emissions increase portion of the definition of "modification." The

[6] We note that the word "any" is simply a modifier that does not change the meaning of the word it modifies. For example, using the term "any" to modify the word "car" does not somehow change or expand the meaning of the word "car." "Any" simply means that, once you have decided what a car is, then all objects meeting the definition are encompassed.

court would have allowed *de minimis* increases in emissions to be exempt from requirements applying to "modifications" under new source review but not emissions increases equal to the thresholds set by statue for new construction. 636 F.2d at 399 - 400. The court did not have before it the issue of what is a "change" and did not decide this issue.

In *WEPCO*, both parties advanced the view that the statute was clear on its face. EPA advanced the view that the term "modification" is necessarily broad, and that only *de minimis* departures are appropriate. WEPCO asserted that the plain meaning of the term "physical change" allowed for the five large scale rehabilitation projects it contemplated at its Port Washington plant. The *WEPCO* court held that the rehabilitation projects at issue were too large to reasonably conclude that they should not be treated as physical changes. The court's holding that the statute did not require the interpretation advanced by *WEPCO* does not deny EPA the discretion to decide to adopt a different, reasonable interpretation of the term "modification."

While the Court in WEPCO decided that the projects in that case were physical changes, the decision in *WEPCO* does not answer the question of where to draw the line between activities that should and should not be considered "changes." Nevertheless, contrary to the suggestions of

several commenters, the projects at issue in *WEPCO* would have cost more than the 20% of replacement cost threshold selected today and, barring other applicable exclusions, would have been subject to case-by-case review in the PSD program. See section III.D, above, in today's notice.

Some commenters argued that, to further the purposes of the statute, any interpretation must result in the eventual elimination of so-called "grandfathered" facilities. We recognize the need to reduce emissions from many existing plants – regardless of whether they are "grandfathered" (because they have never gone through NSR) or whether they have previously gone through NSR but can further reduce their emissions. EPA and States have issued regulations under a variety of statutory provisions to accomplish this goal in the past, and we will continue to do so in the future. We do not believe, however, the modification provisions of the Act should be interpreted to ensure that all major facilities eventually trigger NSR. In fact, such an interpretation cannot be squared with the plain language of the Act.

An existing source – whether grandfathered or not – triggers NSR only if it makes a physical or operational change that results in an emissions increase. Thus, a facility can conceivably continue to operate indefinitely

without triggering NSR – making as many physical or operational changes as it desires – as long as the changes do not result in emissions increases. This outcome is an unavoidable consequence of the plain statutory language and is at odds with the notion that Congress intended that every major source would eventually trigger NSR. Moreover, there is nothing in the legislative history of the 1977 Amendments, which created the NSR program, to suggest that Congress intended to force all then-existing sources to go through NSR. To the extent that some members of Congress expressed that view during the debate over the 1990 amendments, such statements are not probative of what Congress meant in 1977 (cite).

In deciding to incorporate by reference the statutory definition of "modification" section 111, Congress's intent cannot have been to preclude us from adopting an interpretation of "modification" or "change" that differs from one that sweeps in all activities at a source. Under the NSPS program, this interpretation did not apply at the time of the 1977 amendments. When the NSPS definition of "modification" was adopted as part of the NSR program in 1977, the *Congressional Record* explained that this provision, "[i]mplements conference agreement to cover "modification" as well as "construction" by defining "construction" in part C to *conform to usage in other parts*

of the Act." 123 Cong. Rec. 36331 (Nov. 1, 1977)(emphasis added). Although we do not assert that the NSPS interpretation is the only one we could have adopted for PSD/NNSR purposes (we followed quite a different interpretation from 1980-2002), at the very least it delineates a zone of discretion within which EPA may operate.

Our interpretation today of physical or operational change in a flexible way furthers the purposes of the statute. Congress made it clear that the CAA in general, and the NSR program in particular, should be administered in a manner that protects the environment and promotes the productive capacity of the nation. CAA Section 101(b)(1). The *Chevron* Court noted, "Congress sought to accommodate the conflict between the economic interest in permitting capital improvements to continue and the environmental interest in improving air quality" when it established the NSR program. *Chevron*, 467 U.S. at 851. Generally, we believe that these goals are best accomplished by providing state and local governments with as much flexibility as possible to make decisions as to what emissions reductions are needed in their jurisdictions to attain and maintain good air quality. *See* CAA Section 101(a)(3).

It is now clear that many power plants and industrial facilities must substantially reduce their emissions in order to allow States to meet the stringent federal air quality standards that the Supreme Court upheld in 2002. Under the Clean Air Act, Congress designed a number of regulatory programs that will collectively achieve the necessary reductions. Although the NSR program will effectively limit emissions from new and modified sources, it was not designed to achieve emission reductions from every existing source.

IV. Administrative Requirements for This Rule

A. Executive Order 12866 - Regulatory Planning and Review

Under Executive Order 12866 [58 Federal Register 51,735 (October 4, 1993)], we must determine whether the regulatory action is "significant" and therefore subject to review by the Office of Management and Budget (OMB) and the requirements of the Executive Order. The Executive Order defines "significant regulatory action" as one that is likely to result in a rule that may:

(1) Have an annual effect on the economy of $100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or tribal governments or communities;

(2) Create a serious inconsistency or otherwise

interfere with an action taken or planned by another agency;

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

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

Pursuant to the terms of Executive Order 12866, OMB has notified us that it considers this an "economically significant regulatory action" within the meaning of the Executive Order. We have submitted this action to OMB for review. Changes made in response to OMB suggestions or recommendations will be documented in the public record. All written comments from OMB to EPA and any written EPA response to any of those comments are included in the docket listed at the beginning of this notice under **ADDRESSES**. In addition, consistent with Executive Order 12866, we consulted extensively with the State, local and tribal agencies that will be affected by this rule. We have also sought involvement from industry and public interest groups.

B. Executive Order 13132 - Federalism

Executive Order 13132, entitled "Federalism" (64 FR 43255, August 10, 1999), requires us 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" are defined in the Executive Order to include regulations 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."

This final rule does not have federalism implications. Nevertheless, in developing this rule, we consulted with affected parties and interested stakeholders, including State and local authorities, to enable them to provide timely input in the development of this rule. A summary of stakeholder involvement appears above in section II.D. of this notice. This rule will not have substantial direct effects on the States, on the relationship between the national government and the State and local programs, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132. While this rule will result in some expenditures by the States, we expect those expenditures to be limited to $580,160 for the estimated 112 affected reviewing authorities. This figure includes the small increase in burden imposed upon reviewing authorities in order for them to revise the State's State Implementation

Plan (SIP). However, this revision provides sources permitted by the States greater certainty in application of the program, which should in turn reduce the overall burden of the program on State and local authorities. Thus, the requirements of Executive Order 13132 do not apply to this rule.

C. Executive Order 13175 - Consultation and Coordination with Indian Tribal Governments

Executive Order 13175, entitled "Consultation and Coordination with Indian Tribal Governments" (65 FR 67249, November 6, 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." We believe that this rule does not have tribal implications as specified in Executive Order 13175. Thus, Executive Order 13175 does not apply.

The purpose of today's final rule is to add greater flexibility to the existing major NSR regulations. These changes will benefit reviewing authorities and the regulated community, including any major source owned by a tribal government or located in or near tribal land, by providing increased certainty as to when the requirements of the NSR program apply. Taken as a whole, today's rule should result in no added burden or compliance costs and should not

substantially change the level of environmental performance achieved under the previous rules and guidance.

We anticipate that initially these changes will result in a small increase in the burden imposed upon reviewing authorities in order for them to be included in the State's SIP. Nevertheless, these options and revisions will ultimately provide greater operational flexibility to sources permitted by the States, which will in turn reduce the overall burden on the program on State and local authorities by reducing the number of required permit modifications. In comparison, no tribal government currently has an approved Tribal Implementation Plan (TIP) under the CAA to implement the NSR program. The Federal government is currently the NSR reviewing authority in Indian country. Thus, tribal governments should not experience added burden, nor should their laws be affected with respect to implementation of this rule. Additionally, although major stationary sources affected by today's rule could be located in or near Indian country and/or be owned or operated by tribal governments, such affected sources would not incur additional costs or compliance burdens as a result of this rule. Instead, the only effect on such sources should be the benefit of the added certainty and flexibility provided by the rule.

The EPA recognizes the importance of including tribal

outreach as part of the rulemaking process. In addition to affording tribes an opportunity to comment on this rule through the proposal, on which two tribes did submit comments, we have also alerted tribes of this action through our website and quarterly newsletter. To this point we have not specifically consulted with tribal officials on this rule, but we are committed to work with any tribal government to resolve any issues that we may have overlooked in today's rules and that may have an adverse impact in Indian country.

D. Executive Order 13045 - Protection of Children from Environmental Health Risks and Safety Risks

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

This rule is not subject to Executive Order 13045, because we do not have reason to believe the environmental health or safety risks addressed by this action present a disproportionate risk to children. We believe that, based on our analysis of electric utilities, this rule as a whole will result in equal or better environmental protection than currently provided by the existing regulations, and do so in a more streamlined and effective manner.

E. Paperwork Reduction Act

F. Regulatory Flexibility Act (RFA), as Amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), 5 U.S.C. 601 et seq.

We determined it is not necessary to prepare a regulatory flexibility analysis in connection with this final rule. We have also determined that this rule will not have a significant economic impact on a substantial number of small entities. For purposes of assessing the impacts of today's rule on small entities, small entity is defined as: (1) any small business employing fewer than 500 employees; (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; and (3) a small organization that is any not-for-profit enterprise which is independently owned and operated and is not dominant in its field.

After considering the economic impacts of today's rule on small entities, I certify that this action will not have a significant economic impact on a substantial number of small entities. In determining whether a rule has a significant economic impact on a substantial number of small entities, the impact of concern is any significant adverse economic impact on small entities, since the primary purpose of the regulatory flexibility analyses is to identify and address regulatory alternatives "which minimize any significant economic impact of this rule on small entities." 5 U.S.C. Sections 603 and 604. Thus, an agency may certify that a rule will not have a significant economic impact on a substantial number of small entities if the rule relieves regulatory burden, or otherwise has a positive economic effect on all of the small entities subject to the rule. Today's rule will not have a significant economic impact on a substantial number of small entities because it will decrease the regulatory burden of the existing regulations and have a positive effect on all small entities subject to the rule. This rule improves operational flexibility for owners and operators of major stationary sources and clarifies applicable requirements for determining if a change qualifies as a major modification. We have therefore concluded that today's rule will relieve regulatory burden

for all small entities.

G. Unfunded Mandates Reform Act of 1995

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 UMRA, we 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 one year. Before promulgating an EPA rule for which a written statement is needed, section 205 of the UMRA generally requires us 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 us 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 why that alternative was not adopted.

Before we establish any regulatory requirements that may significantly or uniquely affect small governments,

including tribal governments, we 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 our regulatory proposals with significant Federal intergovernmental mandates, and informing, educating, and advising small governments on compliance with the regulatory requirements.

We believe these rule changes will actually reduce the regulatory burden associated with the major NSR program by improving the operational flexibility of owners and operators and clarifying the requirements. Because the program changes provided in the rule are not expected to result in any increases in the expenditure by State, local, and tribal governments, or the private sector, we have not prepared a budgetary impact statement or specifically addressed the selection of the least costly, most cost-effective, or least burdensome alternative. Because small governments will not be significantly or uniquely affected by this rule, we are not required to develop a plan with regard to small governments. Therefore, this rule is not subject to the requirements of section 203 of the UMRA.

H. National Technology Transfer and Advancement Act of 1995

Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (NTTAA), Public Law No. 104-113, section 12(d) (15 U.S.C. 272 note) directs us to use voluntary consensus standards (VCS) in our regulatory activities unless to do so would be inconsistent with applicable law or otherwise impractical. VCS 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 us to provide Congress, through OMB, explanations when the Agency decides not to use available and applicable VCS.

Although this rule does involve the use of technical standards, it does not preclude the State, local, and tribal reviewing agencies from using VCS. Today's rule is an improvement of the existing NSR permitting program. As such, it only ensures that promulgated technical standards are considered and appropriate controls are installed, prior to the construction of major sources of air emissions. Therefore, we are not considering the use of any VCS in today's rule.

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

This rule is not 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 it is not likely to have a significant adverse effect on the supply, distribution or use of energy.

Today's rule improves the ability of sources to maintain the reliability of production facilities, and effectively utilize and improve existing capacity.

J. Executive Order 12988 - Civil Justice Reform

This final rule does not have any preemptive or retroactive effect. This action meets applicable standards in sections 3(a) and 3(b)(2) of Executive Order 12988, Civil Justice Reform, to minimize litigation, eliminate ambiguity, and reduce burden.

V. Effective Date for Today's Requirements

Today's rule revises the Federal PSD program located at 40 CFR Part 52.21 to include the new equipment replacement provision of the RMRR exclusion. The part 52 regulations governing Federal permitting programs include the Federal PSD rule at 40 CFR Part 52.21 as well as the various sections of subparts C through DDD of part 52 that incorporate the Federal permitting program by reference for those jurisdictions where EPA applies part 52.21 as a Federal Implementation Plan because such jurisdictions lack

an approved SIP to implement the PSD program. Because today's final rule adds additional paragraphs to the part 52.21 rules, we will be revising the references in subparts C through DDD to appropriately reflect the program that applies. This final action will be taken in a separate Federal Register notice and will not change the effective date of today's final changes.

VI. Statutory Authority

The statutory authority for this action is provided by sections 101, 111, 114, 116, and 301 of the CAA as amended (42 U.S.C. 7401, 7411, 7414, 7416, and 7601). This rulemaking is also subject to section 307(d) of the CAA (42 U.S.C. 7407(d)).

LIST OF SUBJECTS

40 CFR Parts 51 and 52

Environmental protection, Administrative practices and procedures, Air pollution control, Intergovernmental relations.

_____

Dated:

_____

Marianne L. Horinko,

Acting Administrator.