

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Office of Air Quality Planning and Standards
Research Triangle Park, North Carolina 27711

JUL 5 1985

# MEMORANDUM

SUBJECT: Revised Draft Policy on Permit Modifications and Extensions

FROM:

Darryl D. Tyler, Director.

Control Programs Development Division (MD-15)

T0:

Directors, Air Division

Regions I-X

The attached draft policy for handling changes to sources which have PSD permits and extensions of these permits is a revision of the November 19, 1984, draft policy distributed to the Regions for comment. This revised policy incorporates your comments on that draft.

There are two major revisions to the November 19, 1984, package:

- (1) the section dealing with extensions for phased construction projects has been altered to provide a better explanation of the manner in which extensions for dependent and independent multi-phased projects are handled and the rationale for a distinction between the two types of projects; and
- (2) a new section devoted exclusively to permits for steam generators subject to 40 CFR Part 60 (NSPS) when the permit involves a rolling 30-day average emission limit for  $S0_2$ .

There have been other changes to clarify the text and respond to the comments we received, but those changes are relatively minor compared to the two revisions discussed above.

In particular, if you feel that the section dealing with the rolling 30-day average NSPS for SO<sub>2</sub> should be treated as a separate policy, please indicate this in your comments. We do not want to hold up the entire policy in order to resolve this recent addition. We also intend to hold a discussion on this topic at the Mid Pines NSR Workshop; please be prepared to take this opportunity to discuss your concerns. We would like to receive all your comments on this latest draft by July 19. Unless substantial adverse comment is received, we will begin review of this package for formal EPA policy adoption.

It should be noted that Section VII of the policy, Protection of Short-term Ambient Standards, includes new requirements for an agency which has issued PSD permits that do not specify short-term SO<sub>2</sub> emissions limits to adequately protect ambient air increments and standards. In such cases.



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- (2) a new section devoted exclusively to permits/for steam generators subject to 40 CFR Part 60 (NSPS) when the permit involves a rolling 30-day average emission limit for SO<sub>2</sub>.

There have been other changes to clarify the text and respond to the comments we received, but those changes are relatively minor compared to the two revisions discussed above.

In particular, if you feel that the section dealing with the rolling 30-day average NSPS for SO2 should be treated as a separate policy, please indicate this in your comments. We do not want to hold up the entire policy in order to resolve this recent addition. We also intend to hold a discussion on this topic at the Mid Pines NSR Workshop; please be prepared to take this opportunity to discuss your concerns. We would like to receive all your comments on this latest draft by July 19. Unless substantial adverse comment is received, we will begin review of this package for formal EPA policy adoption.

It should be noted that Section VII of the policy, Protection of Short-term Ambient Standards, includes new requirements for an agency which has issued PSD permits that do not specify short-term SO<sub>2</sub> emissions limits to adequately protect ambient air increments and standards. In such cases, the proposed policy requires the agency to revise the permit by adding limits which will provide such protection. For all other cases, the policy presumes that the applicant is the party requesting a change.

If you have any questions, please contact Gary McCutchen, (FTS 629-5591). Thanks again for your assistance in developing this important policy, particularly the efforts of Roger Pfaff, Region IV.

# Attachment

cc: B. Bankoff

- G. Emison
- B. Pedersen
- E. Reich
- P. Wyckoff

PSD Permit Modifications: Policy Statement on Changes to a Source, a Permit Application, or an Issued Permit and on Extensions to Construction Schedules

AGENCY: Environmental Protection Agency

ACTION: Proposed policy statement

SUMMARY: For several years both the Environmental Protection Agency (EPA) and various States have issued permits for the prevention of significant deterioration (PSD) of air quality to proposed new and modified major stationary sources. Some of the permits require revisions to reflect changes in construction or operating plans, including construction schedules. In other cases, changes in plans have been proposed by applicants prior to permit issuance, or after EPA has determined the source, as originally proposed, is exempt from PSD review. No formal policy has been issued which addresses how such changes are to be handled. Consequently, a source owner proposing changes to a source has no guidelines to determine what requirements must be meet.

Since no provisions are contained in the Act for modifying PSD permits already issued, all the requirements of Part C and a repeat of the permitting process appear to be necessary for changes in sources not reflected in the originally issued permit in order to prevent obvious circumvention. That is, a new permit must be obtained if a proposed change would involve: (1) a major modification; (2) a difference in construction or design from what was originally planned, when an increase in emissions or ambient impact would result; (3) a fundamental alteration of an emissions unit or source; or (4) a difference in applicability, such as a source no longer being exempt from PSD review. Today's policy proposes to provide a new and less cumbersome route by which changes can be accommodated while ensuring the equivalent environmental protection required under the Act. In doing so, it extends the Alabama Power concept of de minimis to include changes which

are so small in terms of impacts that such changes could be excluded from the full rigors of permit review.

The policy statement provides guidance for (1) re-examining EPA-granted permit exemptions, (2) revising any EPA-issued PSD permit or PSD application, including those administered by States which have since obtained jurisdiction for PSD, and (3) the development of State and local agency permit revision regulations or policies. EPA encourages States to adopt similar policy statements concerning source changes and the processing of State-issued permits which need revision or extension and solicits comment as to whether such procedures should be required by 40 CFR Part 51.

Today's policy statement proposes to distinguish between sources which have begun operation and those which have not in determining the type of procedures used when a proposed change will require permit revisions. A permit revision for a source already operating generally can be treated like any other emissions increase or decrease at a major source using established procedures. For a source not yet operating, EPA proposes to group the range of possible changes to a PSD permit into three categories, based on their potential significance to the program: (1) those which can be expedited without detailed review (administrative changes); (2) those which can be processed as permit revisions after appropriate analysis (minor and significant changes); and (3) those which should be treated through issuance of a new PSD permit (fundamental changes). The required analysis for permit revisions typically would involve reconsideration of the basic decisions involved in the issuance of the original permit for the units that would be affected by the proposed change. Separate sections on the criteria for extending the 18-month commencement of construction deadline applicable to all PSD permits and on handling permit revisions resulting from the use of a 30-day rolling average SO2 new source performance standard (NSPS) are also provided.

DATES: This policy statement is effective as interim guidance upon
publication. The period for initial comment on the proposal closes on
[date 30 days from the date this notice appears in the FEDERAL REGISTER].
A public hearing on the proposal will be held on, 1985, at
10:00 a.m., in,, Denver, Colorado 80295.
ADDRESSES: Comments should be sent in triplicate if possible to: Central
Docket Section (LE-131), U.S. Environmental Protection Agency, 401 M St, S.W.,
Washington, D.C. 10460. Attn: Docket No. A-83-40.
DOCKET: EPA has established docket number A-83-40 for this action. This
docket is an organized and complete file of all significant information
submitted to or otherwise considered by EPA. The docket is available
for public inspection and copying between 8:00 a.m. and 4:00 p.m.,
Monday through Friday, at EPA's Central Docket Section. A reasonable
fee may be charged for copying.

FURTHER INQUIRIES: For further information, contact Gary McCutchen, ... New Source Review Section (MD-15), Environmental Protection Agency, Research Triangle Park, North Carolina 27711.

# SUPPLEMENTAL INFORMATION:

# I. BACKGROUND

A policy is needed to maintain the basic integrity of the PSD permitting process required by the Clean Air Act when requests are received to revise, add to, or delete conditions on issued permits or information contained in a complete application. A rigorous preconstruction review for PSD would ultimately not be effective if sources could readily obtain subsequent relaxations to their permit conditions under a lax policy for permit revisions. For example, the Act clearly intends state-of-the-art application of best available control technology (BACT) by PSD sources, but a lax policy for

subsequent proposed changes could undercut the environmental protection offered by the original BACT determinations.

When EPA revised its PSD regulations in August 1980, the Agency deferred the development of guidance governing its PSD "permit modification" process, i.e., the procedures by which proposed changes to a source, application or permit would be handled. Since then, the Regions and States have handled requests for such changes on a case-by-case basis. These involve a broad variety of redeterminations of exemptions from permit requirements and permit changes, both minor and important, arising from sources which are already operating as well as those on which construction has not yet commenced. This has naturally led to a variety of decisions across the country and, hence, creates confusion and inefficiency in the permitting process for EPA, industry, and the States. A nationwide policy is necessary to assist all parties in dealing with PSD source changes and the need for PSD permit revisions in a consistent manner. In addition, such a policy will serve to establish a firm policy framework which resolves questions of legal risk when a judgment is made that new permits are not required.

Current policy requires that a new permit be obtained if a proposed change constitutes: (1) a major modification; (2) a difference in construction or design from what was originally planned, when an increase in emissions or ambient impact would result; (3) a fundamental alteration of an emissions unit or source; or (4) a difference in applicability, such as a source no longer being exempt from PSD review. Today's policy proposes to provide a new and less cumbersome route by which changes can be accommodated while ensuring equivalent environmental protection. In doing so, it extends the Alabama Power concept of deminimis to include changes which are so small in terms of impacts that such changes could be excluded from the full rigors of processing.

Due to the similarity between major and minor "source modification" and "permit modification," it is important to establish a terminology which will not be confused with existing PSD terms and which can be used consistently and precisely to describe the situations and actions regarding this policy. Therefore, the term "permit modification" will not be used. Instead, the following terms are used to describe this policy.

A "change" refers to the proposed or actual alteration of an application, permit, or source, or some combination of the three. An application for a proposed change initiates Agency action if the application is complete.

When the proposed change has actually been made, the altered source, permit, or application is referred to as "changed" or "revised." Changes are classified according to the effect they would have on the reviewing agency's assessment of the source. In order of increasing importance, changes are considered:

- 1. Administrative. An administrative change involves no increase in reither emissions or impacts and no fundamental change in either the source or one of the emission units at that source. Application or permit revisions may be necessary, but additional review or analysis would not normally be required; examples are typographical and company name changes. One exception is the extension of commence construction dates, which may require a limited additional review consisting of BACT reanalysis and public participation.
- 2. <u>Minor</u>. Minor changes require revisions to permit applications or issued permits and a certain amount of additional review and analysis, but do not constitute either a fundamental or significant change. Emissions or impacts increase as a result of minor changes, but not above the significance level.
- 3. <u>Significant</u>. Significant changes are changes where one or more pollutant emission increases exceed the applicable significance level(s) but which do not constitute a fundamental change. Major modification

review level is triggered unless the affected source is not yet operating; significant changes at preoperating sources are considered application or permit revisions.

4. <u>Fundamental</u>. A fundamental change is so basic in nature (size or type of source or emissions unit), regardless of the net emissions or impact differences, that the changed source or emissions unit is considered a new source or emissions unit and thus triggers a totally new permit review. A fundamental change could even result in an emissions decrease but still require the owner or operator to obtain a new permit. Examples include proposing a kiln in place of a dryer and proposing a 500 TPY unit in place of a 100 TPY unit.

The effect of a change depends in part on the status of a project.

Project status milestones are:

- 1. Exempted from PSD review
- 2. Preconstruction PSD permit application submitted \_\_\_\_\_
- 3. Preconstruction PSD permit issued, but source is not operational (also, the applicability of new PSD rules is affected by whether construction of the source has commenced)
  - 4. Preconstruction PSD permit issued and source in operation

The results of various combinations of changes and source status are summarized in Table 1. A procedure for determining which result is applicable to a specific source is diagramed in Figure 1. Note that both Table 1 and Figure 1 can only summarize this policy; more detailed information appears in the text.

# II. AGENCY JURISDICTION

Today's policy covers all PSD applicability decisions and all PSD permits originally issued by EPA. This includes those PSD applicability decisions and permits which are still under Agency jurisdiction, as well

as the applicability decisions and permits issued by EPA which subsequently come under State jurisdiction as a part of PSD program delegation or SIP approval.

The Agency intends that today's guidance also be used as a model for States developing their own permit revision processes for PSD, nonattainment area (Part D of the Clean Air Act) and other new source review purposes.

EPA believes that regulations governing proposed changes to sources, permits or applications are needed as a legal alternative to having to issue a new permit for all except certain administrative changes. EPA solicits comment on the need for separate 40 CFR Part 51 regulations requiring State adoption of a similar policy to ensure the credibility of State PSD programs, as well as the need to extend this policy to include nonattainment area major sources and major modifications. As a minimum, EPA believes that state-of-the-art best achievable control technology (BACT) should be guaranteed by any State reevaluation of PSD applications and permits.

#### III. CLASSIFICATION AND REVIEW OF CHANGES

There are two primary factors to consider in determining the scope of review to be imposed upon a source in response to a proposed change. The first of these involves the significance of the proposed change; the more significant the change, the more involved the review will be. Four levels of change have been identified (administrative, minor, significant, and fundamental), leading to the same number of (but not always corresponding) levels of review stringency: amendment, revision, major modification and new permit. A second factor, stage of source development (whether the source has been issued a permit, whether the source is operating and, in certain cases, whether construction has commenced), is critical in determining what action is required and whether any of the original increment allocation (for particulate matter and sulfur dioxide) is preserved. For reasons

explained below, various changes by a source that is not yet operating can reasonably be treated in a more stringent manner than would the same activity by a source already in operation.

(A) Stage of Source Development

EPA proposes to classify some PSD-related source changes differently depending on whether the change is for a source that has already begun the operation authorized in its PSD permit. This difference in treatment between sources not yet operating and those already doing so is based on several factors: (1) a project in its earlier phases is much more flexible than one already operating; (2) the company's commitment to the project prior to operation is less clear and its position regarding further changes at a plant which is not yet in operation differs from that of most existing sources; and (3) the test of whether a source can operate and produce a product under the original construction plans eliminates a great many possibilities of obvious circumvention of the regulations. Treating and operating source as essentially having completed the permitting process eliminates the burden of uncertainty on the company of constantly having to evaluate proposed projects in light of changes made years ago. Today's policy acknowledges these factors by typically imposing a less rigorous process for proposed changes at operating PSD sources. EPA solicits comment on the reasonableness of this approach and on whether other events such as commencement or completion of construction should have some greater standing in a final policy. It should be noted that commencement of construction already confers an exempt ("grandfather") status to a source not only in CFR Parts 51, 52, and 60, but also in this proposed policy when determining whether newly-issued rules are applicable (see below).

1. <u>Pre-operational Sources</u>. An application for a change to an application or permit for a source not yet in operation would generally

prompt reanalysis of the proposed project as if the original application had been submitted in that form. However, some changes would be considered sufficiently unimportant that they could be treated as application or permit amendments; these are termed administrative changes. Other changes would be important enough to prompt the need for a revised or new application or permit, and could require additional review actions. These various levels of change are discussed in detail in the next section.

For application and permit changes requested prior to operation, EPA is proposing that the changes be handled as part of the initially permitted project, rather than as new projects. The Agency is concerned that changes that are individually small would be accumulated such that a cumulative significant change would not be given the full review that such a change should receive. Thus, even a de minimis increase in a pollutant can be subject to PSD review if that pollutant would be significant when added to previous increases. (Ahis isofurther explained below under (B)2. Revisions.) In order for EPA to treat such a change as a new project, and not as part of the already permitted project, the applicant would be required to make a demonstration that the two projects are physically independent and were considered to be separate projects for planning purposes. If the reviewing agency concurs that the new project is a separate project, the change can then be treated as such. These criteria are identical to those used for judging separation of projects already constructed (see below). The only difference is that EPA initially presumes that a change at the site of a nonoperating source is not a new project.

2. <u>PSD Sources Already in Operation</u>. Applications for changes which would affect sources which have already been issued PSD permits and been placed in operation have generally been treated the same as applications to change any existing major stationary source. That is, if the change is

significant, it constitutes a major modification, as defined at 40 CFR Part 52.21, and a complete PSD review is required; if the change is not significant, it does not constitute a major modification and no PSD review applies. Under today's policy, changes will instead be processed in the manner described in the next section.

The only exception to the approach described below arises from the need to avoid circumvention of the regulations: if the proposed change should reasonably have been part of the initial project rather than a separate project, it should be evaluated as part of a new total source impact rather than as a separate action. At times, such proposed changes take the form of "separate" sources or even projects involving more than one source. However, if the reviewing agency judges that such sources or projects are part of the same project covered in a previous PSD application, the changes should be treated identically to changes for sources which have not yet begun operation. This must be determined by the reviewing agency on a case-by-case basis, taking into account whether the proposal represents changes at the source which are physically independent of the original project, and whether the applicant can provide documentation to show that planning of the second project occurred after the planning for the first project. Thus, if a PSD-permitted boiler has been constructed, and the owner then applies for a de minimis increase in SO2 emissions from the boiler, which in the judyment of the review agency should have been a part of the original permit application, the requested change cannot be treated as a new application (and therefore be exempt from review because it is de minimis). It will instead be subject to each PSD review element within the permit revision process as described below. Conversely, if the applicant applies for a new processing unit to be used in a completely separate

production area of a chemical plant, this application can be treated as a new project and exempted from review, if de minimis.

- (B) Levels of Review
- amendment. Changes to a permit or application are classified as amendments if they are administrative in nature and result in no increase in either the emissions or the air quality impact of a PSD source. In addition, neither the nature nor the size of the source or emissions unit can be altered to the extent that the change would be considered fundamental. Amendments may be quickly processed without any major reevaluation of the decisions originally made in permitting the source. Examples of the type of change which would often be treated as an amendment include company name or operator changes, requirements for more frequent monitoring or reporting by the permittee, correction of typographical errors, emission decreases (although such decreases, to be used in netting or trading, must be carefully documented) and minor wording clanifications. It should be noted that a source fundamental change (see below) may also result in no increase in emissions or impact, but cannot be treated as an amendment.

The lack of emissions and impact increases for an amendment results in little or no review. Proposed amendments (which are nearly always administrative changes) to applications and permits do not require any reanalysis of the basic review originally submitted and need not be subject to public participation requirements as a general rule. However, the Agency emphasizes that there may be instances where changes which are normally administrative may be sufficiently important that the reviewing authority determines that review or public participation is necessary, e.g., a change of ownership of a proposed source to a company which has been involved in highly controversial projects or has received public attention as a result of the manner in which other air pollution sources owned by this company were operated.

One administrative change which always receives some level of review is the extension of commence construction dates. Such changes constitute amendments but must be reviewed to ensure state-of-the-art BACT; in addition, it is usually appropriate to seek public comment on the proposed extension, since other potential new sources may be affected. A more detailed discussion of this type of change appears in Section VI below.

2. Revision. The term revision encompasses the review level required for the large majority of minor and significant changes at all preoperational sources and at existing (operating) major stationary sources which do not qualify as "major modifications," as defined by the PSD regulations, or as fundamental changes. Revisions include, in the case of operating sources, most changes involving construction or changes in the method of operation of a source, including control equipment, that do not produce a net significant emissions increase; a net significant emissions increase resulting from a paysical shange or change in the method of operation at an operating source usually constitutes a major modification as defined in the rules and is processed as such. It should be noted that there is a distinction between (a) modifications (as defined in the PSD rules) which are not subject to NSR, and (b) changes (whether requested or necessary) to a permit or permit application. A change which does not result in a significant net increase in emissions is not considered a "major modification" and is not subject to PSD: however, the change may require (or the owner may request) a revision of the source permit (or application). In such cases, the reviewing agency may consider some level of reanalysis and review necessary before revising the permit or accepting an application revision. For example, a source may want to change a solvent used in one of its processes, with no increase in emissions, but the permit specifies the solvent to be used. Before revising the permit to allow use of the new solvent, the reviewing agency may decide

to repeat public comment if the new solvent is more odorous or toxic than the current solvent, repeat the impact analysis if the new solvent is more reactive or toxic than the current solvent, or revise some other component of the existing analysis.

Despite the possibility of a revised analysis, nonsignificant emission increases do not constitute the type and degree of review to which major modifications are subject. In many cases, it is anticipated that little or no revised analyses will be required of nonsignificant emissions increases. On the other hand, changes to permit (or application) parameters which the review agency considered important enough to include on the permit (or rely upon in the application) should certainly be subject to review before those parameters are revised.

The term revision also encompasses the level of review of most candidate application and permit changes which are proposed at sources which are monoperational with mespectato construction approved in their PSD permit.

The only exceptions are those changes which are administrative, or which are so great that they require a totally new PSD review (fundamental changes).

Once a change is classified as requiring the revision level of review, it is screened to determine which elements of PSD review now apply and to what extent. A revision will first require a screening analysis to determine whether existing analyses addressing the PSD requirements are still accurate or whether there is a need for revised analyses. Major components of the new source review include BACT, ambient impact analysis, monitoring requirements, additional impacts analysis, Class I area protection, and public participation. A full description and explanation of these review components is contained in the August 7, 1980 FEDERAL REGISTER (45 FR 52676). Depending upon what change is proposed, this screening may be very simple, as in the case of a very small increase in the size of an emissions unit, or very involved, as

in the case of the addition or replacement of a new unit at a preoperational source.

The proposed change must be examined not only to see if any existing analyses should be revised, but also to see if any new analyses should be performed. The criteria for requiring additional review elements will be whether the original new source or major modification application underwent all of the review which would have applied had the application been submitted in its revised form originally. In addition, any new requirements added to the PSD regulations since the time that the original permit was issued also could apply, unless construction had commenced so as to qualify for an exemption (as discussed below). If there is no circumvention of the permit requirements, the revision review would focus on only that portion of the source immediately involved in the proposed change, rather than all of those units previously reviewed.

emitting 15 tons per year of SO<sub>2</sub> to an application for a source which originally provided for 100 tons per year of particulate matter and 35 tons per year of SO<sub>2</sub>. This would constitute a minor change. Since the change is combined with the original application, both the new unit and the already permitted units must undergo each PSD review element for SO<sub>2</sub>. This is because the original permitted level of SO<sub>2</sub> was <u>de minimis</u>, thereby exempting SO<sub>2</sub> from review, but the total new level of SO<sub>2</sub> is significant (35 TPY and 15 TPY together exceed the 40 TPY threshold). However, the original application date is used in allocating increment for the original 35 TPY SO<sub>2</sub> emissions level unless circumvention of the SO<sub>2</sub> review had been intended.

As another example, suppose a permit for a new PSD source allows 60 tons per year of  $SO_2$  emissions and the source was not required to gather preconstruction monitoring data because it created a de minimis ambient

impact. The source owner wishes to lower the stack which emits  $SO_2$ , making total  $SO_2$  impact significant. The source owner would therefore be required to conduct a new modeling analysis and gather representative preconstruction monitoring data before the change could be approved.

In processing a revision, whether for a minor change or a significant change, the reviewing authority must follow the same public participation procedures noted in 40 CFR 52.21(q) for the processing of preconstruction PSD permits. EPA believes that the reconsideration of the conditions and review of an existing permit undergoing revision should receive no less an opportunity for public involvement than did the original permit application. This includes public notification by newspaper advertisement in the area of the source. The notice would contain information regarding the agency's preliminary determination, the expected ambient impact of the proposed change, the 30-day opportunity for written comment, and an opportunity for a public hearing.

A proposed change qualifying as a revision, rather than as a new permit, receives certain benefits. As mentioned previously, a revision can be exempted from any new PSD requirements that were added between the time of the original permit issuance and the submission of the proposed change if the source had commenced construction prior to the adoption of the new PSD requirement. "Commence construction" is defined in terms of the owner or operator having all the necessary preconstruction approvals or permits and either having (1) begun, or caused to begin, a continuous program of actual on-site construction of the source, to be completed within a reasonable time, or (2) entered into binding agreements or contractual obligations, which cannot be cancelled or modified without substantial loss to the owner or operator, to undertake a program of actual construction of the source to be completed within a reasonable

time. The purpose of subjecting revisions to new requirements for sources not having commenced construction is to remove the potential benefit a source might obtain by submitting a questionable application to reserve increment or avoid new PSD provisions.

Another major advantage a source gains by qualifying for a revision, rather than having to obtain a new permit, is that the source retains the increment rights afforded by the original application or permit. Neither new permits nor fundamental changes to an original proposal (which by definition change the very character or nature of a source) preserve the original increment allocation, because that allocation was for a specific type and size of source at a specific location. An allocation is not automatically conferred to, for example, a cement plant which is proposed in lieu of a permitted power plant.

If a revision being considered by EPA would cause additional increment to be consumed beyond that originally allocated, today's policy would allow the additional increment consumption only when increment is available after prior complete applications have been processed and only at the concurrence of the State in which the source would locate or is located. If new increment consumption beyond the significance amounts identified in the 1978 preamble (excluding Class I areas where any new impacts must be authorized by the Federal Land Manager) would result at any point, such increment consumption must also be authorized by the State in which the source would locate or is located.

An especially significant issue arises from situations in which there is competition for the available air resource: other permit applications and changes are pending such that the ambient ceiling imposed by the NAAQS or increment would prevent the granting of all of the applications. In such circumstances, EPA would take a first come/first served approach

to allocating the growth rights, subject to State approval. This means that the original emissions growth rights would be preserved but that the remaining growth rights would be awarded to intervening applicants filing applications prior to the filing of the proposed change. When EPA is implementing this policy, it will recognize the rights of complete PSD applications filed with States which have the responsibility under their own PSD program for future permit applicants. Any State taking jurisdiction of EPA-issued permits may develop alternatives to first come/first served allocation of air resources to which EPA would generally defer; of course, no such alternative system can allow an increment violation to result.

3. Major Modification. Operating units which propose changes that constitute a "major modification," within the meaning of the NSR regulations

- constitute a "major modification," within the meaning of the NSR regulations are subject to those requirements. Generally, this review is equivalent to the requirements for a new source (see below), but the review is conducted only for the modification, not for the entire existing source. The term "major modification" is defined as "any physical change in or change in the method of operation ... that would result in a net significant emissions increase..." Physical changes are, in general, readily identifiable, but changes in the method of operation are often more subtle. The latter includes such activities as removal or significant alteration of pollution control equipment. For a source not yet operating, however, proposals which would normally be considered major modifications would generally under this policy be treated as an application or permit revision (see above).
- 4. New Permit. Some changes are sufficiently important such that a separate new application or permit is required, rather than a revision to the existing application or permit. These are of two types. First, a change to an application or a permitted source which affects the fundamental nature of the source triggers the need for a new permit. A general guide

to whether the fundamental nature of a source is being changed is whether the proposed changes would result in either a different 2-digit SIC Code for the source or a large increase in size. However, the reviewing authority must use good judgment and make this decision on a case-by-case basis.

A new application or permit is required for fundamental changes because the proposed change would be of such major importance to source operation that the basic permitting process should be repeated, with no increment rights reserved. For example, a change from a dryer to a kiln may affect a review such that different emissions control or product recovery operations would be found to be feasible for the kiln where they were not for the dryer under the original analysis.

Since it is often inappropriate to apply SIC codes to portions of sources, this procedure cannot easily be used when the proposed action would affect only a part of an existing source. The reviewing authority should therefore decide on a case-by-case basis whether the fundamental nature of the permitted portion of the source is being changed. SIC codes could be used as a guide to do this. For example, if a new boiler is planned or permitted at a kraft pulp mill, and the applicant wishes to construct a lime kiln instead of a boiler, it is clear that the fundamental nature of the unit (the boiler) is being changed, even though the source (the kraft pulp mill) is not; the lime kiln would require a new permit.

Fundamental changes in the size of a permitted emissions unit or source are those changes which increase the fixed capital cost of the emissions unit or source by greater than 50 percent. This could often require more than a 50 percent increase in source or emissions unit size, since cost per production unit usually decreases as the size of the unit increases.

A decision to review a change as a new permit application would generally entail the same data development as would the original permit

application, although the review would focus on the proposed changes. In many instances, data from the original permit application could be used to expedite the new permit review process. Additional data would often be required for the new or changed units and all units affected by them. If the new or changed units affect the original BACT, air quality, and modeling analyses, these analyses would need to be revised accordingly.

As noted above, one area where the processing of certain significant and all fundamental changes may differ greatly from that of many significant and all minor changes concerns the awarding of new increment rights: sources or emissions units involved in application and permit revisions (which assumes no fundamental change) retain their original increment rights during the revision process. In contrast, a change that is processed as a new permit must compete for available air resources behind any complete applications filed before the complete application for the change is filed. It is important to note that, while the permit as previously issued entitles the original project design to be built, the permit does not award equivalent increment rights to the source for any substantial shift in configuration, type, or size of units that it might wish to construct.

If there has been much growth in an area or if the area is heavily industrialized, air quality may have deteriorated so as to be near the ceiling imposed by the increments or NAAQS. In such a case, a new source permit may not be issuable. Consequently, either the one-year deadline for processing a complete application will be controlling (EPA must disapprove a permit if insufficient increment is available within a one-year timetable) or, if the original permit has already been issued, the 18-month deadline for commencing construction (assuming no extension) will force the source attempting to change its PSD permit to finish its original construction plans or to withdraw its proposed change and not construct at all.

Figure 1 outlines the process that a reviewing agency can follow in classifying an application for a change. EPA also offers Table 1 in order to convey summarized guidance on which of the above described levels of review should be applied to various types of permit changes. Table 1 lists a wide range of ways in which a source might be changed and indicates the Agency's proposed conclusions on which forms of review would apply. It should be noted that both Figure 1 and Table 1 are presented for purposes of illustration; other types of changes may occur and, in addition, special circums tances may arise which prompt the review authority to address a change differently. The Agency solicits comments regarding other types of events which should be included on the list or on the way that the listed items are classified.

### IV. CIRCUMVENTION

A determination by a review agency that a proposed change constitutes circumvention results automatically in a requirement that a new permit application be filed. The applicant would be unable to preserve any of the increment allocated to the original permit. Although circumvention has been discussed in more detail elsewhere, the concept of circumvention within the framework of changes to a source presents additional complexities.

An example of circumvention would be the proposed addition of a 15-tons-per-year SO<sub>2</sub> emissions unit to a permit for a source originally proposed to emit 150 TPY particulate matter and 35 TPY SO<sub>2</sub>. The reviewing agency then discovers that a 50 TPY SO<sub>2</sub> unit had been planned for that source from the beginning, but that the applicant had attempted to avoid SO<sub>2</sub> PSD review (including BACT) by applying in two stages. In such a case, the original permit is valid only for the source exactly as specified. If the applicant wants to change the source, a new permit application must be filed. None of the original increment allocation is preserved; the "complete application"

date for the source would be the date the proposed change application was considered complete. This policy is intended to discourage the submission of deliberately incomplete or misleading applications through loss of any increment allocation that resulted from such actions. However, EPA would still intend, even in cases of circumvention, that any portion of the original application and review which are still applicable be retained, and that subsequent actions concentrate on the changes to the source that result in a need for additional review.

# V. INCREMENT ALLOCATION AND PRESERVATION

Currently, EPA allocates increment on a first-come, first-served basis, using the date a complete application was submitted to determine an applicant's place in line. The allocated increment is assigned to the specific source (or emissions unit) and location described in the permit and application; it cannot be used by the applicant for another source, even if the second source is planned at the same location, nor can it be used for the same type of source at a different location.

For example, assume a permit has been issued for a cement plant at Location A, with an anticipated Class II (plant boundary) 24-hour total suspended particulate (TSP) impact of 40 micrograms per cubic meter (ug/m³) and a nearby Class I 24-hour TSP impact of 2 ug/m³. The increments reserved for the cement plant are the 2 and 40 ug/m³ Class I and II impacts. If the owner decides instead to construct an asphalt plant at Location A, the increments assigned to the cement plant are not "preserved" for use by the asphalt plant. The owner must submit a new application for the asphalt plant, receive a new date of submittal of a complete application, and try again for an increment allocation. (In fact, without today's policy even minor changes to the cement plant could result in loss of the allotted

increment, since the increment use is assigned to the source and location exactly as specified in the permit and application.)

Similarly, if the cement plant owner decides that location B would be a better place to construct than location A, the increment allocated to the cement plant at location A is not preserved for use at location B. The owner must submit a new application for location B and this new date of submittal of a complete application is used to establish the first-come, first-served increment allocation.

In addition, current policy does not provide any increment allocation for proposed sources which at first are exempt from PSD review but become subject to PSD review at a later date due to a proposed change. For example, assume a listed Source A (major at 100 TPY) is estimated to emit 85 TPY of SO<sub>2</sub>. The owner submits an application to the reviewing agency, is told that the source is exempt from PSD review, and proceeds to obtain all the necessary State and local agency penmits and commence construction. At a recession was a second this point, the owner discovers that SO2 emissions from this source will be 115 TPY SO<sub>2</sub> rather than 85 TPY. Assuming that there is no indication of attempted circumvention, the source under current policy must still reapply and, even though already under construction, the new application date is used to allocate increment. If another application for a large SO2 source had been submitted between the first and second Source A applications, Source A may be denied a permit despite the construction costs already committed to the project. Today's policy, in contrast, provides in certain cases for the "preservation" of increment that had previously been allocated to a source if (1) the proposed change is not fundamental, and (2) there was no intent to circumvent new source review provisions.

Preservation of increment refers to the retention by a review agency of the original complete application filing date in determining allocation

of increment on a first-come, first-served basis. In other words, this policy specifies that for administrative, minor, and significant changes, the original complete application submittal date is used to allocate increment. However, the preserved increment is based on no more than the original emission rates and ambient impacts. If the revised emission rates or ambient impacts increase, only the "original" portions of the total new rates and impacts are preserved; the increases are allocated on the basis of the date a complete application for the proposed change was submitted. If the revision results in emission rates or impacts less than the original levels, the remaining portions of the original rates or impacts are no longer preserved; this is because this policy is not intended to provide trading or netting credits to a proposed source. The only intent is to reserve a qualifying source's place in line for increment allocation.

As an example, assume Source B submitted an original complete application for 275 TBY SO<sub>2</sub> on January 20, 1986. On August 15, 1986, before a permit has been issued, Source B files a complete application for a change which would increase SO<sub>2</sub> emissions by 55 TPY, to a total 330 TPY SO<sub>2</sub>. On a first-come, first-served basis, increment from Source B is allocated using the following dates:

January 20, 1986 - 275 TPY SO<sub>2</sub>
August 15, 1986 - 55 TPY SO<sub>2</sub>

Note that the source's place in line for the original increment is based on the original application date, but that subsequent increases in emissions are allocated based on the date the application for the increase was filed. Source B, under today's policy, would not be competing for all 330 TPY SO<sub>2</sub> emissions on the basis of an August 15, 1986, increment allocation date as would have been the case under current policy. Instead, Source B competes

for only the 55 TPY  $SO_2$  additional increment on the basis of the later August 15, 1986, application filing date.

Sources which had previously been exempted from PSD review present a particularly difficult situation. These nonmajor sources consume increment but, unlike major sources, are not allocated increment. Today's policy, however, allows increment allocation preservation for sources which, as a result of a proposed administrative, minor, or significant (but not a fundamental) change, would become major as long as no circumvention was intended. Such sources would have increment allocated for the original emissions rates on the basis of the original (exemption) complete application date and the additional emissions rates on the basis of the proposed change complete application date. Thus, the original source, even though exempted from PSD review, is eligible for some degree of increment preservation. This policy is intended to apply to sources which have not yet completed construction. The PSD rules provide that exempted ("minor") is ourses not be a series. subject to PSD do not become subject to PSD until their emissions exceed the threshold limits and they then propose a major modification (with one exception: a modification to a minor source which would in itself qualify as a major source will result in PSD review), but this does not address proposed changes to a source prior to completion of that source.

Since increment preservation using first come, first served, relies to a great extent on the date of submission of the original application, this is a particularly important date to document. Owners and operators who feel that a source is exempt from PSD review are nevertheless encouraged to promptly submit complete applications for the State permit or for the record, even if they have already been informed verbally that a source is exempt, because the submission date establishes increment allocation priorities. Without a clearly documented original complete application date, this policy

would be difficult to apply. In cases where the date a complete original application was filed cannot be determined, EPA will use the date construction is commenced.

### VI. EXTENSION OF 18-MONTH COMMENCEMENT OF CONSTRUCTION DEADLINE

One permit revision topic that deserves special attention is extension of the 18-month commencement of construction deadline. The subject regulation, 40 CFR 52.21(r)(2), states that "Approval to construct becomes invalid if construction is not commenced within 18 months after receipt of such approval, if construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable time. The Administrator may extend the 18-month period upon a satisfactory showing that an extension is justified. This provision does not apply to the time period between construction of the approved phases of a phased construction project; each phase must commence construction within 18 months of the projected and approved commencement date."

It is important to note that the Clean Air Act and 40 CFR Part 51 regulations do not expressly include the 18-month deadline. Therefore, those States that have taken over the PSD program through SIP development are not required to have the particular 18-month deadline in question. However, those States to whom the PSD program has been delegated are required to implement the 18-month deadline, since a delegate State is implementing the Federal regulations.

Often it is difficult to determine in the preconstruction phase how all aspects of the construction plan will develop. Many of the permits issued in the earlier part of the PSD program are maturing as projects. Consequently, the EPA has received several industry requests for various adjustments to their permits and construction schedules. These requests are usually based upon changes in the economy, weather, or consumer consumption

in areas such as energy. EPA is responding to this need by interpreting the regulation and proposing the policy articulated here for reviewing extension requests. Effective implementation of these provisions is especially important in view of the prospects for economic growth.

The showing which a source must make in order to receive a permit extension has been a longstanding problem. Various approaches have been advocated, ranging from a stringent standard, such as impossibility in the legal sense, to such lesser showings as economic impracticality. Each of those approaches presented varying degrees of subjectivity and certain difficulties of factual analysis. Today's policy avoids those difficulties by providing extensions to virtually all good faith applications for extensions to which the affected States do not object. A good faith effort must include a certification that the company currently plans to commence construction by a specific date that usually should fall within the requested extension period, but may extend further into the future if it is still within what the review agency considers a reasonable period of time. The intent of this is to discourage situations where a source may not plan to actually commence construction for a number of years but continues to tie up increment and consequently prevent growth which could occur immediately.

Previous decisions often allowed a source making the threshold showing of justification of an extension to proceed without further analysis.

There are persuasive reasons for reopening certain portions of the permit review, such as BACT, when a permit is extended. As described below, today's policy expressly provides for this further analysis. Providing extensions more readily but requiring more substantive review of those extensions presents a reasonable compromise that simplifies the policy while assuring important environmental protection.

The Clean Air Act requires review of new sources to be timely. This is especially important for key elements of review such as BACT determinations and ambient impact assessments. Consequently, there must be limitations on the period granted in which a source can construct without an updated review. In particular, BACT is an independent requirement under the Act and the Act contemplates that the BACT be current for the period in which the source's construction is actually commenced. Similarly, ambient air quality can change considerably, rendering inadequate an assessment performed at an earlier time. This policy generally outlines a method which addresses concerns about the consistency of extension requirements across the country. while complying with the Act's requirement that certain PSD determinations be timely. It is emphasized that timely requests for extensions or other modifications are the responsibility of the source. A permit will automatically cease to exist if a request for extension is not received before its expination date. In the case of a later request, a new permit application must be filed.

Today's policy proposes that candidate permit extensions must meet the following tests for substance and processing in order to be issued:

A. <u>BACT Review</u>. EPA believes that in many cases the original BACT determination would still qualify as BACT if it were reviewed. This is especially the case since consideration during a BACT reevaluation is given to the costs that would be incurred in changing plans and equipment purchases if a different technology were employed. These costs and time delays may be prohibitive if construction had already commenced and the source was not designed to accommodate new state-of-the-art control technology, but EPA notes that there will also be cases in which alteration of construction plans is feasible. This could well be true of long-term, multi-unit projects for which major improvements in BACT have occurred and the expanded construction

time frame has proven conducive to such project alterations. However, EPA will require a BACT reevaluation on all extension requests to the extent of reviewing EPA's BACT/LAER Clearinghouse. The original BACT determination can be assumed to remain appropriate, even if construction has not commenced, if no significant state-of-the-art advancement in BACT is noted from EPA's BACT/LAER Clearinghouse data or from the subsequent public comment period, and not more than five years has elapsed from the time of the original BACT determination.

B. Additional PSD Review Requirements. Other aspects of PSD review such as increment rights and air quality impacts will be assumed to remain valid unless adverse comments are received from affected State(s), Federal Land Managers, or other interested parties during the public comment period. since subsequent growth in the area should have considered the impacts of the permitted source. Adverse comments, if not reasonably addressed by the applicant, willstypicallystniggenstheshed for a conference among EPAs, the session session applicant, the affected State(s), and other interested parties such as Federal Land Managers. The conference may be combined with the public participation requirements for extensions. The State is responsible for ensuring that interim source growth in the area of the permitted source has not caused sufficient degradation of air quality to the extent that operation of the source requesting the extension would cause or contribute to increment or NAAQS exceedances; neither extensions of issued permits nor issuance of additional permits is allowed when they would cause or contribute to such exceedances. If the State inadvertently fails in this regard, it is responsible for remedying any subsequent violations by obtaining sufficient emissions reductions in the area. The State is also responsible for indicating whether an extension consumes all remaining increment, thereby prohibiting issuance of permits to other possible sources in the area. A source will

not be subject to any other aspects of PSD review beyond those mentioned above.

- C. <u>Duration of Extension</u>. EPA's regulations do not state the maximum length of extension which can be granted. In practice, EPA's Regional Offices have used 18 months as the norm and, in certain instances, have allowed longer extensions. Due to concerns of growth rights and public participation, EPA will presumptively limit extensions to durations of 18 months, or less, with renewal possible. This allows industry the possibility of multiple extensions if necessary but ensures that the impacted State(s) and public have control of their air resource and growth rights and that state-of-the-art BACT will be employed.
- D. <u>Public Comment</u>. The Clean Air Act particularly emphasizes the importance of public comment on matters affecting air resource consumption.

  Therefore, EPA will require the same public participation procedures for extension requests as noted above for permit modifications, including a minimum 30-day public comment period.
  - E. Extension of Later Units of Phased Multi-Unit Projects. Phased multi-unit projects are considered either dependent or independent by EPA. In a footnote in the preamble to the 1978 final PSD regulations (43 FR 26388). EPA defined the difference between these types of phased projects:

"The dependence of facilities within a source will be determined on an individual basis. Two or more facilities will generally be considered dependent if the construction of one would necessitate the construction of the other facility(ies) at the same site in order to complete a given project or provide a given type (not level of) service. A kraft pulp mill is an example of a source with dependent facilities, whereas a three-boiler power plant is a typical example of a source with major independent facilities."

The purpose of this approach was to differentiate between those phased projects which would be "grandfathered" (i.e., not subjected to new PSD rules) and those which would not. Dependent phased projects were considered fully

committed as soon as construction began, so all of the dependent facilities were accorded the same status; if construction on the first phase of a dependent phased project commenced by an applicable grandfather date, then all of the dependent facilities were considered grandfathered even if construction of those phases of the project had not yet commenced. Conversely, each phase of an independent phased construction project had to individually commence construction by the grandfather date to be grandfathered. This approach to phased projects was upheld in Alabama Power Co. v. Costle.

The 1978 preamble also states that EPA does not generally intend to limit the time for construction of phased projects, but does intend to require commencement of construction of the first phase within 18 months of permit approval and of subsequent phases within 18 months of the date approved in the permit. Breaks in construction, as with single-phase projects, cannot exceed 18 months. These requirements appear in 40 CFR Part 52.21(c)(2), where extensions of the time period between constructions of different phases of phased construction projects are not allowed.

The Utilities Air Regulatory Group (UARG) has petitioned EPA to delete the portion of the regulation limiting extensions of permitted construction intervals between phases at phased construction projects. Since the regulation could be interpreted as allowing for extension of the construction commencement deadline only for the first phase of independent, multi-unit projects, and since most utility construction projects are phased independent multi-unit projects, UARG is concerned that the regulations prohibit extensions for later phases of these utility independent multi-phase projects.

In response, EPA provides the following clarifications. First, it is EPA policy that both dependent and independent phased projects may obtain a single comprehensive PSD permit for all phases of the project. A single permit offers an applicant the advantages of reduced paperwork and assurance

that the entire project (rather than only a portion of it) is permitted.

Since comprehensive permits apply to projects which are often large and complex, such permits should specify at least two items that are not needed in permits for single-phase projects. These items are:

- (i) Which BACT determinations will be reassessed prior to commencement of construction, and
- (ii) The date by which later phases (but not necessarily the initial phase) of the project must commence construction.

BACT review (and redeterminations of BACT as appropriate) is required by

40 CFR 52.21(j)(4) at the latest reasonable time which occurs no later than

18 months prior to commencement of construction of each independent phase

of a project, so inclusion in a permit of the BACT determinations which will

be reassessed is not a requirement for being able to conduct such a reassessment.

However, the inclusion of this information in the permit provides the

owner/operator, the inspector, and the public advance notice of the intent

of the review agency to conduct such a reassessment.

The commence construction dates in the permit cannot be extended using the mechanism embodied in 40 CFR 52.21(r)(2), but this does not mean that such dates are unchangeable. In fact, those dates can be changed, but not by the granting of extensions. Since these dates are a part of the permit, changes to the dates require a permit change, which will usually be considered an administrative change (albeit one which normally should include BACT review and public participation). The "projected and approved commencement date" referred to in 40 CFR 52.21(r)(2) is the date which appears in the permit, a date which can be changed by revising the permit. The procedure for changing commence construction dates which are embodied in a permit is the same procedure used for any other permit change, as outlined in today's policy. The initial phase commence construction date is extendable using

the 40 CFR Part 52.21(4)(2) procedure unless that date is also embodied in the permit. When embodied in a permit, even the initial phase commence construction date can be changed only through a permit change.

The above policy concerning the initial phase commence construction date may appear to conflict with 40 CFR 52.21(r)(2); it does not. The intent of 40 CFR 52.21(r)(2) is to establish an automatic 18-month expiration date for permits, with provisions for extending the expiration date on a case-by-case basis. For phased projects with a single comprehensive permit, EPA presumed that commencement dates for each phase of the project, except the initial phase commencement date, would be incorporated into the permit. Therefore, initial phase commencement date changes would be handled with a 40 CFR 52.21(r)(2) extension, and subsequent phase commencement dates would be handled through permit changes. This acknowedges and preserves the validity and legality of the conditions specified in a permit.

project, the initial phase commencement date is longer than 18 months but still within a reasonable period of time (e.g., 2 years and 6 months), the review agency may specify the initial phase commencement date in the permit, keeping in mind that the source is granted 18 months beyond this date to actually commence construction. Alternatively, the review agency may specify the permit expiration date in the permit. The expiration date simply includes the initial 18-month grace period; it is determined by adding 18 months to the commence construction date and avoids the confusion that could result when dealing with the commence construction date alone. The specified date in the permit takes precedent over the "automatic" 18-month expiration based on the permit issuance date, but in doing so renders the permit ineligible for the 18-month extension process described in 40 CFR 52.21(r)(2); a permit change is required to change a commencement (or expiration) date that appears

in a permit. There is an exception to this: if the date specified in the permit for the initial phase of a project is simply the expiration date of the permit (the commence construction date plus the 18-month grace period), then that date is assumed to be in the permit for information purposes, does not make the source ineligible for 40 CFR 52.21(4)(21) extensions, and does not need to be changed to grant extensions of the expiration date.

For some projects, the commence construction dates for each phase may have been included in the application or other materials, but may not appear in the permit. In such cases, the commencement dates for each phase are those dates which the review agency used in evaluating the impact the source would have. Nearly always these will be the dates submitted by the applicant in the application, and these commencement dates are changed by following today's policy on changing applications and permits. As a part of any such change, review agencies should not only revise the dates in the application, but also include the extended commencement or expiration dates in a revised permit.

Independent phased multi-unit projects have the option of having separate permits for each phase; dependent phased projects do not have this option, because all phases of a dependent project must be completed for that project to operate as intended. Separate permits for each phase of an independent phased project are treated for processing purposes as if each permit was for a separate facility, with independent commencement dates, BACT determinations, enforcement actions, etc. Separate permits may increase paperwork, but in return provide an applicant with the option of proceeding with planning on a project one phase at a time.

The concept of "separate" permits versus a single comprehensive permit is more a matter of the manner in which the phases are treated than the physical manner in which the permit is issued. A single comprehensive

permit, for example, could consist of a number of permits for various emission units and phases of the project, with possibly a general permit to address conditions common to all the project facilities. Conversely, "separate" permits for an independent phased project may physically consist of a "single" permit which nevertheless treats each phase separately. Of course, EPA would presume that single and multiple permits were what they appeared to be unless there actually existed some clear basis for treating a single permit as a set of separate permits, and vice versa.

The reason for distinguishing between dependent and independent phased projects lies in the applicability determinations when new or revised PSD rules become effective after construction commences on the initial phase, but before construction commences on the last phase. All phases of dependent phased projects are grandfathered [not subject to the new or revised PSD rules if construction on the project (usually the first phase) had commenced expriorate therefactive date of the rule change and no invalidity lapses in construction had occurred]. In contrast, each phase of an independent phased construction project must individually commence construction by the prescribed grandfather date(s); any phases which had commenced construction would not be subject to the new rules.

Since the concern expressed by UARG appears to be addressed toward multi-unit power plants which may have been permitted as dependent, rather than independent, multiphased projects, today's policy offers independent phased project applicants an opportunity to convert (or otherwise obtain acknowledgement from the review agency of such change in project classification) a dependent multiphased project permit for that project into independent multiphased project permits with full preservation of the increment allocated by the original permit, as long as no increment or NAAQS exceedances would result. This conversion (but not any simultaneous or subsequent requests

for other actions, such as extensions) would be carried out without additional PSD review requirements, such as review of BACT, although such conversion does not abrogate any other authority either EPA or other review agencies have to reasssess permit analyses. In particular, this conversion would not allow circumvention of the BACT review prior to construction of each independent phase which is required in 40 CFR 52.21(j)(4).

UARG also expressed concern regarding the time taken by review agencies to decide whether to grant construction date extensions, citing a case where an applicant felt forced to initiate construction simply to protect the validity of the permit because no response to the request for an extension had been received. Although the new policy described above of providing extensions to virtually all good faith applications should resolve this problem, EPA shares the concern of UARG that such "forced construction" be prevented. Therefore, today's policy will also incorporate the following approach in handling such requests the concern of uarguments and the concern of uarguments.

- (1) A source has an obligation to provide sufficient time for an agency to review requests for extension of a commencement of construction date. Therefore, such requests (including adequate documentation) should be submitted to the review agency at least six months prior to the date on which the permit would become invalid (the scheduled commencement of construction date plus 18 months).
- (2) EPA will make every effort to respond to such requests within three months of the date the request for an extension is submitted.
- (3) If a request was submitted in accordance with paragraph (1) above, and EPA has not responded within the three-month time period indicated in paragraph (2) above, then the permit invalidation date will be considered extended automatically in such a manner that an applicant will always have at least three months between the date on which EPA does respond and the

new permit invalidation date. The three months provides the applicant time to either commence construction or take other action. This policy does not apply if the applicant does not meet the obligation expressed in paragraph (1); in such cases, there is no automatic extension of the invalidation date.

For example, assume a permit was issued for a large project with an anticipated commencement of construction date of 2/1/86. The date the permit would become invalid (unless construction had commenced) is 18 months after this date: 8/1/87. On 1/30/86, the source applies for an 18-month extension, meeting the six-months-in-advance source obligation. If EPA agrees to the extension, then the extension is for 18 months from either the invalidation date (8/1/87) or the date EPA responded, whichever is later. If EPA disapproves any extension, the invalidation date is either 8/1/87 or three months from the date of EPA's response, whichever is later.

It has been the practice of many review agencies to presume that any emissions limit comprises a "not-to-be-exceeded" continuous emissions limit, whether that limit is included in the permit (e.g., "SO2 emissions shall not exceed 876 pounds per hour"), referenced in the permit specifically (e.g., "this source is subject to Regulation 6, Section IV.A.2.b.(ii), for fossil fuel-fired steam generators"), or referenced generally (e.g., "In addition to the specific conditions contained herein, source is subject to all applicable rules and regulations..."). That this assumption is widely held is evident in the number of cases where the review agency (and applicant) uses an emissions limit to determine 3-hour and 24-hour ambient air impacts, but does not specify the averaging time for the emissions limit. The New Source Performance Standards (NSPS) have reinforced this assumption of a continuous emissions limit through the prescribed reference test methods.

which generally average three or more samples taken over periods of time ranging from one to three hours. Thus, use of NSPS limits or NSPS test methods has been considered sufficient indication of the intent of the review agency to establish not-to-be-exceeded continuous emissions limits.

A divergence between the NSPS emissions rate averaging time for fossil fuel-fired steam generating units and the PSD emissions rate averaging time requirements for these same units is affecting this assumed interrelationship.

Protection of the PSD SO<sub>2</sub> increments requires emission limits with averaging times no longer than the averaging times for the increment. Thus, compliance with a 3-hour SO<sub>2</sub> increment requires an emissions limit averaging time of 3 hours or less. For example, assume that a continuous emissions limit is established for a source at a level that would result in a 3-hour ambient impact almost identical to the ambient impact increment allowed; the emission limit prevents "peak" emission rates that could result in exceedances

of the increment. An emissions limit with a 6-hour averaging time would not necessarily provide this protection; a 3-hour "peak" could be offset by a 3-hour "low" to meet the 6-hour average emission limit, but the ambient impact during the 3-hour "peak" would exceed the 3-hour increment.

On October 21, 1983 (48 FR 48960), EPA proposed new SO<sub>2</sub> compliance, emissions measurement, and reporting requirements for sources subject to New Source Performance Standards (NSPS) under 40 CFR 60 Subpart D (fossil fuel-fired steam generators larger than 250 million btu per hour heat input). This proposal would require SO<sub>2</sub> compliance testing against the existing numerical NSPS limits of 1.2 and 0.8 pounds SO<sub>2</sub> per million btu for coal and oil, respectively, but requires compliance demonstrations on a continuous basis through the use of continuous emission monitors (CEM) or fuel sulfur analysis (FSA). Sulfur dioxide emissions would be calculated on a rolling 30-day average basis instead of a short-term (approximately 3-hour) stack

test. Although a rolling 30-day average NSPS (Subpart Da) had been promulgated on June 11, 1979, for new electric utility boilers (44 FR 33580), the October 21, 1983, action would apply after the fact to nearly 500 operating Subpart D units for which the initial permits relied to some degree on the presumption that compliance with the NSPS would be achieved on a continuous short-term (3-hour and 24-hour) basis rather than on a continuous 30-day rolling average basis. Many reviewing agencies have determined air quality impacts by modeling the NSPS limit (1.2 or 0.8 pound SO<sub>2</sub> per million btu) as the maximum short-term emission rate for most Subpart D and many Subpart Da sources, but did not specify such short-term analyses or continuous compliance procedures in their permit conditions.

An emission level which averages 1.2 pound SO<sub>2</sub> per million btu over a period of 30 days can on a short-term basis be higher than that limit as long as the 30-day emissions average at or below 1.2 pounds SO<sub>2</sub> per million btu.

For example, 10 days at 1.3 pounds SO<sub>2</sub> per million btu and 20 days of 1.0 pounds per million btu will average 1.1 pounds SO<sub>2</sub> per million btu and meet the 30-day average NSPS, but will exceed 1.2 pounds SO<sub>2</sub> per million btu for 10 of the 30 days. This is not intended to imply that a rolling 30-day average makes possible extremely large variations in emissions rates; it does not. The 10 days of 1.3 pounds SO<sub>2</sub> per million btu, for example, had to also be compensated for by the 20 days preceeding this higher 10-day rate, since this is a rolling average. However, policy is required to avoid confusion by both sources and review agencies regarding what short-term and long-term emission limits must be met by sources affected by these NSPS revisions.

Since the most important role of PSD permits is to prevent significant deterioration, EPA's policy regarding permits affected by this and other NSPS revisions is based on the effect of these actions on the ambient air. The NSPS action was based on both technical and cost considerations, but the

revisions of permits for any PSD sources, whether related to NSPS revisions or not, are based on PSD goals and air quality considerations.

# A. Subpart D Sources

EPA's policy regarding PSD permits for Subpart D sources affected by the October 21, 1983, NSPS proposed revision is this:

- (1) If there are any  $SO_2$  emission limits (e.g., pounds  $SO_2$  per hour, pounds  $SO_2$  per megawatt, etc.) in the permit, these limitations represent BACT and must be met by the source unless and until such limits are altered by a permit change using the procedures specified in today's policy. Any permit emission limit is considered a limit which must be complied with continuously unless specified otherwise.
- (2) PSD permit emission averaging times are considered short-term averages, even for the Subpart D NSPS limits, as long as it can reasonably be presumed that at the time of permit issuance the emissions limits were considered short-term-emission limits (e.g., by use of such limits modeling 3-hour or 24-hour ambient impacts). That limit remains a short-term limit (regardless of the regulatory revisions to the NSPS) unless and until the permit is changed to specifically indicate otherwise. In fact, a short-term emission limit may not always be included as part of the permit (although good permit processing practices encourage the inclusion of <u>all</u> applicable conditions and limitations); the limits used in demonstration of short-term ambient air impacts comprise corresponding short-term emissions limits.
- (3) If the only  $SO_2$  emission limits associated with the permit are specifically stated to be long-term (longer than the 3-hour and 24-hour averaging times) and no short-term  $SO_2$  ambient air impacts were determined, the PSD permit is incomplete, the 3-hour and 24-hour increments and NAAQS must be protected, and an analysis is needed to provide such assurance. In this case, the review agency (without waiting for a request from the

source) must reassess short-term impacts for all sources on the basis of maximum anticipated short-term emissions. If the legal authority exists for a review agency to initiate revision of an incomplete PSD permit, the agency should do so, specifying short-term limits. If a request for a permit revision must be initiated by the applicant, the agency should not only include short-term limits at the first opportunity, but also encourage the source to apply for a revision. At the least, any new levels of increment and NAAQS consumption resulting from a lack of enforceable short-term emission limits must be taken into account in future PSD permit analyses. If increment or NAAQS exceedances are predicted by the new analysis, the review agency must act to prevent such exceedances. The review agency must also establish a policy providing short-term limits on PSD permits to protect short-term increments and NAAQS.

With the possible exception of those sources falling under paragraph (3) above, owners and operators of sources with PSD permits wishing to take advantage of the relief from sulfur variability offered by the rolling 30-day average NSPS must apply for a PSD permit change and obtain a revised permit if exceedance of the NSPS or BACT emission level on a short-term (including never-to-be-exceeded and 3- or 24-hour) basis is anticipated. To be granted, these permit change requests must meet two criteria:

- (1) The source must demonstrate that any BACT level of compliance embodied in the permit (including BACT limits with shorter averaging times as well as more stringent limits) is either (a) no longer feasible on either a technological or economic basis, or (b) will still be ensured by the use of the longer term average.
- (2) The source must demonstrate that neither the NAAQS nor the increments for SO<sub>2</sub> would be exceeded (as demonstrated by dispersion modeling) by any revised short-term emission limits contained in either permits or the SIP.

During the processing of such requests, the review agency must take the opportunity to provide specific emission limits or other permit conditions which protect all applicable NAAQS and PSD increments. Although it is EPA's policy that the emissions limits used to determine compliance with short-term increments and NAAQS are enforceable even if such limits are not specified in the permit itself, EPA strongly encourages the inclusion of all applicable emissions limits, operating parameters, fuel specifications. averaging times, compliance methods, and other requirements in the permit. Such action will both decrease uncertainty regarding the limitations a source must meet and reinforce the legal basis of such limitations. The limitations, to be fully effective, must specify averaging times corresponding to one or more short time periods consistent with the limiting PSD increment or NAAQS (e.g., pounds SO2 per hour). A limitation such as pounds SO2 per million btu neat input is an excellent control technology limitation, but either the heat input (boiler load) or the emissions per unit of time must also be limited to provide ambient air impact protection.

#### B. Subpart Da Sources

On June 11, 1979 (44 FR 33580), EPA promulgated new requirements for electric utility boilers (Subpart Da sources). These new requirements, actually in effect since September 18, 1978 (43 FR 52154), specified a rolling 30-day average NSPS for SO<sub>2</sub> for new Subpart Da sources. PSD permits issued subsequent to these dates, although intended to protect short-term as well as long-term increments and standards, may specify in the permit only the rolling 30-day average NSPS as an SO<sub>2</sub> emission limitation. This situation differs from that of Subpart D sources in that the NSPS for Subpart Da sources was not applied retroactively to sources already permitted; the Subpart Da permits were issued by review agencies with full knowledge that the SO<sub>2</sub> NSPS was a long-term (rolling 30-day average) limitation. EPA

"never-to-be-exceeded" short-term emission limitation as was assumed for the Subpart D sources.

As a result, EPA's policy regarding PSD permits for Subpart Da sources is this:

- (1) If the PSD permit contains (or incorporates by reference) short-term SO<sub>2</sub> emissions limits, those limits must also (in addition to the Subpart Da NSPS) be met by the source and presumably represent BACT. The emission limit averaging times, even if not specifically stated (e.g., pounds per hour), are considered short-term averages as long as it can reasonably be presumed that they were considered as such (e.g., by use of such limit in modeling 3-hour or 24-hour ambient impacts). These emissions limits then comprise enforceable short-term limits which adequately protect the 3-hour and 24-hour increments and NAAOS.
- snort-term SO<sub>2</sub> emission limits adequate to protect short-term increments and NAAQS, the review agency responsible for PSD permits must take the following actions within six months of the date of publication of this policy in the FEDERAL REGISTER.
- (a) Reassess short-term impacts for all such sources on the basis of maximum anticipated short-term emissions and take these new increment consumption levels into account in future PSD permit analyses.
- (b) If increment exceedances are predicted by the new analysis, develop a revision to the SIP to prevent such exceedances.
- (c) Develop and implement a policy or regulation requiring short-term limits in PSD permits that adequately protect short-term increments.

A report to EPA on the actions taken and the sources and areas affected by these actions must be submitted by the responsible review agency within 8 months of publication of this policy in the FEDERAL REGISTER.

# C. Maximum Anticipated Short-Term Emissions

Normally, ambient air impacts during permit processing are based on maximum allowable emissions since the source is not yet operating. Then, when the source begins operating, impacts are based on actual representative emissions. In these Subpart D and Da NSPS cases, however, not only is the source likely to already be in operation (which calls for use of actual emissions), but also there may not be any specified short-term emission limitation (so that no allowable emission limits are specified). Since these sources have been issued PSD permits (if the PSD permit has not yet been issued, there is still opportunity to include in the permit short-term emission limits, thus avoiding this problem), information on fuel-sulfur variability should be available. For example, the 24-hour average fuel to a samples or 24-hour CEM averages required by the NSPS for calculating rolling 30-day averages can be used directly to determine the variation in 24-hour SO<sub>2</sub> emission levels that can occur with the specific fuel being used by a specific source. Standard statistical techniques can determine the 3 sigma upper bound on the values and this 3 sigma value can be used as the maximum anticipated 24-hour emissions level.

In addition, the range of anticipated 3-hour emission levels can be derived from the 24-hour averages, a series of 30-day averages, and the annual average. From this range of 3-hour values, an equivalent 3 sigma maximum anticipated 3-hour emission level can be derived.

It should be noted that these short-term "maximum anticipated" emission levels are not enforceable (unless incorporated--specifically or by reference--into the applicable regulation or permit). They are instead a statistical

on the characteristics of the fuel that source is using. As such, they constitute an estimate of actual short-term emissions that can be used to assess short-term ambient air impacts in lieu of specific limitations.

# D. Compliance with Short-Term Emission Limitations

In an effort to balance the cost of gathering data and the need for data to determine compliance with short-term emissions limits, EPA in today's policy is placing most of the emphasis on 24-hour average emissions data.

There are two reasons for this:

- (1) The NSPS for Subpart D and Da sources require that collection of data be based on 24-hour time periods. The average of 30 of these 24-hour average emissions rates is the enforceable limit, but the emissions rates are available and the monitoring equipment in place as a result of the NSPS requirement. At most, today's policy will require only that data be collected and reported as individual 24-hour averages in addition to the rolling.
- (2) For many of these sources, the fuel is handled in such quantities that even if data on emissions are available almost immediately, little or nothing could be done. For example, a low sulfur coal-fired boiler bunker may hold an 8 (or more) hour supply of coal; even if a CEM is in use (rather than fuel sampling), the knowledge that a 3-hour average limit has just been exceeded does little good; there is another 5 (or more) hour supply of coal in the bunker which has to be burned before any corrective steps (such as blending in a lower sulfur coal) take effect. Fuel sampling analysis (FSA) increases even further the time required to respond because it takes longer to obtain the sampling results.

From the above, it follows that the best approach to compliance with a 3-hour average emissions limit is to project, based on sampling data

representing either the sulfur content of the fuel or sulfur dioxide emissions, the maximum anticipated 3-hour average emissions rate. As long as the projected rate is less than the allowable short-term emissions limit, the source would be considered in compliance with the 3-hour emmission limit, with one exception: if 3-hour average emission rate data are available (e.g., from a CEM or stack testing) and show exceedance of the 3-hour average allowable limit, then the 3-hour data can provide the basis for a noncompliance determination.

Thus, today's policy is that for PSD emissions limit compliance purposes, Subpart D and Da sources need gather only 24-hour average emissions data, using a method (CEM or FSA) specified by the appropriate NSPS. The 24-hour averages must, however, be reported individually rather than as rolling 30-day averages, and a statistical analysis must be conducted initially, then annually (unless waived in writing by the review agency) and whenever the fuel sulfur content (in terms of prounds of SO2 per million btu) may have changed as evidenced by (1) use of fuel from a different source, or (2) evidence of a change in the average sulfur content of the fuel or sulfur dioxide emissions rate of the source.

Sources subject to the rolling 30-day average SO<sub>2</sub> NSPS must submit their initial report to EPA by (6 months from the date this policy is proposed in the FEDERAL REGISTER). The initial report shall include sufficient 24-hour average emissions rate data to demonstrate (1) compliance with any 24-hour emission limitation, and (2) that 24-hour SO<sub>2</sub> increment exceedances are not being caused or contributed to by the source. In addition, the report shall include a statistical analysis (or specific sampling data) showing the maximum anticipated 3-hour average SO<sub>2</sub> emissions rate expected to occur. Subsequent reports of 24-hour average SO<sub>2</sub> emission rates are to be submitted with the NSPS emissions data.

#### VIII. AMBIENT IMPACT EQUIVALENTS

Proposed changes to permits can affect the ambient air impacts of a source without changing the level of emissions from the source. For example, a shorter stack could increase ground level ambient impacts; so could relocation of a planned emissions unit closer to the source's restricted access boundary. Proposed changes of this type must also be taken into account, and today's policy proposes doing so by establishing the concept of equivalent ambient impacts.

When a change is proposed which would result in changes in the source's ambient impacts, today's policy proposes the following (unless some other aspect of the change requires more extensive documentation or review):

- (1) Decreases in ambient air impacts are processed as administrative changes.
- (2) Increases in ambient air impacts are subjected to appropriate dispersions modeling to determine the equivalent emissions increase from the prechange source or emissions unit which would produce the same impact as the proposed change. The equivalent emissions level is used to determine whether the proposed change is minor or significant.

In many cases, ambient impacts, once modeled, are proportional to emissions increases and decreases; if, for example, emissions double, the ambient impact doubles. For such cases, the equivalent emissions increase can be determined by ratio:

$$E = E_O (I_n/I_O) - E_O$$

where: E = "equivalent" emissions rate change, grams per second  $E_0$  = original (prechange) emissions rate, grams per second  $I_n$  = postchange ambient impact, micrograms per cubic meter  $I_0$  = prechange ambient impact, micrograms per cubic meter

 $I_{\rm n}$  and  $I_{\rm O}$ , must be based on the same averaging time and must represent the maximum ambient air impact increase resulting from the proposed change.

If there is no proportional relationship between emissions and ambient impacts, dispersion modeling using different emissions rates may be necessary to determine equivalents. Any such complex cases should be handled by appropriate modeling experts.

#### IX. CONCLUSION

We believe that today's proposed policy statement addresses the classification and processing of the types of change requests most often referred to EPA for consultation. Because of the wide range of activity subject to proposed source changes, the Agency especially solicits comment from those with experience in this area regarding whether additional issues or topics should be included. Similarly, EPA seeks comment regarding the potential effectiveness of the general approach developed for processing proposed changes.

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