

United States Environmental Protection Agency  
Office of Air Quality Planning and Standards  
Research Triangle Park, North Carolina 27711

April 30, 1987

MEMORANDUM

SUBJECT: Ambient Air

FROM: G. T. Helms, Chief /s/  
Control Programs Operations Branch (MD-15)

TO: Steve Rothblatt, Chief  
Air Branch, Region V

My staff and I have discussed the five ambient air cases which you submitted for our review on January 16, 1987. The following comments are our interpretation of the ambient air policy. However, this memorandum is not a discussion of the technical issues involved in the placement of receptors for modeling.

Our comments on each of the cases follow:

Case 1 (Dakota County, MN): This case involves two noncontiguous pieces of fenced property owned by the same source, divided by a public road. We agree that the road is clearly ambient air and that both fenced pieces of plant property are not.

Case 2 (Warrick County, IN): This case involves two large sources on both sides of the Ohio River. We agree that receptors should be located over the river since this is a public waterway, not controlled by the sources. We also agree that the river does indeed form a sufficient natural boundary/barrier and that fencing is not necessary, since the policy requires a fence or other physical barrier. However, some conditions must be met. The riverbank must be clearly posted and regularly patrolled by plant security. It must be very clear that the area is not public. Any areas where there is any question--i.e., grassy areas, etc.--

should be fenced and marked, even if there is a very remote possibility that the public would attempt to use this property.

However, we also feel that current policy requires that receptors should be placed in ALCOA and SIGECO property for modeling the contribution of each source's emissions to the other's ambient air. Thus, ALCOA's property--regardless of whether it is fenced--is still "ambient air" in relation to SIGECO's emissions and vice-versa.

Case 3 (Wayne County, MI): This case involves the air over the Detroit River, the Rouge River and the Short-cut Canal. We agree that the air over all three of these is ambient air, since none of the companies owns them or controls public access to them. Note, however, that one source's property--regardless of whether it is fenced--is the "ambient air" relative to another source's emissions.

Case 4 (Cuyahoga County, OH): This case involves LTV Steel's iron and steel mill located on both sides of the Cuyahoga River.

We do not feel that LTV Steel "controls" the river traffic in that area sufficiently to exclude the public from the river, whether it be recreational or industrial traffic. The fact that there is little or no recreational traffic in that area is not sufficient to say that all river traffic there is LTV traffic. The public also includes other industrial users of the river that are not associated with LTV.

It is difficult to tell from the map whether the railroad line is a through line or not. If the railroad yard serves only the plant then it would not be ambient but the railroad entrance to the plant would have to be clearly marked and patrolled. However, if the line is a through line then that would be ambient air. We would need additional information to make a final determination.

The unfenced river boundaries should meet the same criteria as in Case 2 above.

Case 5 (involves the placement of receptors on another source's fenced property): As mentioned above in Case 2, we feel

that present policy does require that receptors be placed over another source's property to measure the contribution of the outside source to its neighbor's ambient air. To reiterate, Plant A's property is considered "ambient air" in relation to Plant B's emissions.

I hope that these comments are helpful to you and your staff. This memorandum was also reviewed by the Office of General Counsel.

cc: S. Schneeberg

P. Wyckoff

R. Rhoads

D. Stonefield

Air Branch Chiefs, Region I-X

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Washington, D.C. 20460

JUN 13 1989

MEMORANDUM

SUBJECT: Guidance on Limiting Potential to Emit in New Source Permitting

FROM: Terrell E. Hunt  
Associate Enforcement Counsel  
Air Enforcement Division  
Office of Enforcement and Compliance Monitoring

John S. Seitz, Director  
Stationary Source Compliance Division  
Office of Air Quality Planning and Standards

TO: Addressees

This memorandum transmits the final guidance on conditions in construction permits which can legally limit a source's potential to emit to minor or de minimis levels. We received many helpful comments on the January 24, 1989 draft of this guidance, and have incorporated the comments into the final document wherever possible. A summary of the major changes which have been made to the guidance in response to these comments is provided below.

Several commenters noted that the draft guidance used the term "federally enforceable" to mean both federally enforceable as defined in the new source regulations (40 C.F.R. Sections 52.21(b) (17), 51.165(a) (1) (xiv), 51.166(b) (17)), and enforceable as a practical matter. We have tried to distinguish the places where each term should be used, explained the relationship between the two terms, and indicated that in order to properly restrict potential to emit, limitations must be both federally enforceable as defined in the regulations and practically enforceable.

Some commenters requested that the section on averaging times for production limits be more specific as to when it is appropriate to use limitations which exceed a one month time basis. We have tried to explain why it is not possible to develop generic criteria for making this distinction, and to indicate situations where exceptions to the policy that production and operation limitations not exceed one month may be warranted.

There were some requests for a section on enforcement. We have included a new Section VI which addresses this topic. We also received many good suggestions on the example permit limitations. The section on examples has been substantially reworked to reflect your comments.

Finally, we learned through the comments that in two specific circumstances, short term emission limits are the most useful and reasonable way to restrict and verify limits on potential to emit. These circumstances are: 1) when control equipment is installed but control equipment operating parameters are difficult to measure during enforcement inspections; and 2) in surface coating operations with numerous and unpredictable use of coatings containing varying VOC content, where add-on control equipment is not employed. Therefore, we have made a narrow exception to the flat prohibition on use of emission limits to restrict potential to emit for these specific circumstances, and only when certain additional conditions have been met.

Again, we appreciate the thoughtful comments we have received on this guidance. Please insert this document into your Clean Air Act Compliance/Enforcement Policy Compendium as Item Number H.3. If you have any questions, please contact Judith Katz in the Air Enforcement Division at FTS 382-2843, or Sally Farrell in the Stationary Source Compliance Division at FTS 382-2875.

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DOJ

LIMITING POTENTIAL TO EMIT IN NEW SOURCE PERMITTING

JUNE 13, 1989

AIR ENFORCEMENT DIVISION  
OFFICE OF ENFORCEMENT AND COMPLIANCE MONITORING

STATIONARY SOURCE COMPLIANCE DIVISION  
OFFICE OF AIR QUALITY PLANNING AND STANDARDS

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## Limiting Potential to Emit in New Source Permitting

### I. Introduction

Whether a new source or modification is major and subject to new source review under Parts C and D of the Clean Air Act is dependent on whether that source or modification has or will have the potential to emit major or significant amounts of a regulated pollutant. Therefore, the definition of "potential to emit" under the new source regulations is extremely important in determining the applicability of new source review to a particular source. The federal regulations define "potential to emit" as:

the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of fuel combusted, stored or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is federally enforceable.

40 C.F.R Sections 52.21(b) (4), 51.165(a) (1) (iii), 51.166(b) (4).

Permit limitations are very significant in determining whether a source is subject to major new source review. This is because they are the easiest and most common way for a source to obtain restrictions on its potential to emit. A permit does not

have to be a major source permit to legally restrict potential emissions. A minor source construction permit issued pursuant to a state program approved by EPA as meeting the requirements of 40 C.F.R. Section 51.160 is federally enforceable. In fact, any permit limitation can legally restrict potential to emit if it meets two criteria: 1) it is federally enforceable as defined by 40 C.F.R. Sections 52.21(b) (17), 51.165(a) (1) (xiv), 51.166(b) (17), i.e., contained in a permit issued pursuant to an EPA-approved permitting program or a permit directly issued by EPA, or has been submitted to EPA as a revision to a State Implementation Plan and approved as such by EPA; and 2) it is enforceable as a practical matter. The second criterion is an implied requirement of the first criterion. A permit requirement may purport to be federally enforceable, but, in reality cannot be federally enforceable if it cannot be enforced as a practical matter.

Non-permit limitations can also legally restrict potential to emit. These limitations include New Source Performance Standards codified at 40 C.F.R. Part 60 and National Emission Standards for Hazardous Air Pollutants codified at 40 C.F.R. Part 61.

The appropriate means of restricting potential to emit through permit conditions has been an issue in recent enforcement cases. Through these cases and through guidance issued by EPA, the Agency has addressed three questions: what types of permit

limitations can legally limit potential to emit; whether long averaging times for production limitations are enforceable as a practical matter; and whether sources may limit potential to emit to minor source levels as a means of circumventing the preconstruction review requirements of major source review.

## II. The Louisiana-Pacific Case

In United States v. Louisiana-Pacific Corporation, 682 F. Supp. 1122 (D. Colo. Oct. 30, 1987) and 682 F. Supp. 1141 (D. Colo. March 22, 1988), Judge Alfred Arraj discussed the type of permit restrictions which can be used to limit a source's potential to emit. The Judge concluded that:

... not all federally enforceable restrictions are properly considered in the calculation of a source's potential to emit. While restrictions on hours of operation and on the amount of materials combusted or produced are properly included, blanket restrictions on actual emissions are not.

682 F. Supp. at 1133.

The Court held that Louisiana-Pacific's permit conditions which limited carbon monoxide emissions to 78 tons per year and volatile organic compounds to 101.5 tons per year should not be considered in determining "potential to emit" because these blanket emission limits did not reflect the type of permit conditions which restricted operations or production such as limits on hours of operation, fuel consumption, or final product.

The Louisiana-Pacific court was guided in its reasoning by the D.C. Circuit's holding in Alabama Power v. Costle, 636 F. 2d 323 (D.C. Circuit 1979). Before Alabama Power, EPA regulations required potential to emit to be calculated according to a source's maximum uncontrolled emissions. In Alabama Power, the D. C. Circuit remanded those regulations to EPA with instructions that the Agency include the effect of in-place control equipment in defining potential to emit. EPA went beyond the minimum dictates of the D.C. Circuit in promulgating revised regulations in 1980 to include, in addition to control equipment, any federally enforceable physical or operational limitation. The Louisiana-Pacific court found that blanket limits on emissions did not fit within the concept of proper restrictions on potential to emit as set forth by Alabama Power.

Moreover, Judge Arraj found that:

...a fundamental distinction can be drawn between the federally enforceable limitations which are expressly included in the definition of potential to emit and (emission) limitations.... Restrictions on hours of operation or on the amount of material which may be combusted or produced ... are, relatively speaking, much easier to "federally enforce." Compliance with such conditions could be easily verified through the testimony of officers, all manner of internal correspondence and accounting, purchasing and production records. In contrast, compliance with blanket restrictions on actual emissions would be virtually impossible to verify or enforce.

Id. Thus, Judge Arraj found that blanket emission limits were not enforceable as a practical matter.

Finally, the Court reasoned that allowing blanket emission limitation to restrict potential to emit would violate the intent of Congress in establishing the Prevention of Significant Deterioration (PSD) program.

### III. Types of Limitations that will Restrict Potential to Emit

As an initial matter in this discussion, a few important terms should be defined. Emission limits are restrictions over a given period of time on the amount of a pollutant which may be emitted from a source into the outside air. Production limits are restrictions on the amount of final product which can be manufactured or otherwise produced at a source. Operational limits are all other restrictions on the manner in which a source is run, including hours of operation, amount of raw material consumed, fuel combusted, or conditions which specify that the source must install and maintain add-on controls that operate at a specified emission rate or efficiency. All production and operational limits except for hours of operation are limits on a source's capacity utilization. Potential emissions are defined as the product of a source's emission rate at maximum operating capacity, capacity utilization, and hours of operation.

To appropriately limit potential to emit consistent with the opinion in Louisiana-Pacific, all permits issued pursuant to 40 C.F.R. Sections 51.160, 51.166, 52.21 and 51.165 must contain a

production or operational limitation in addition to the emission limitation in cases where the emission limitation does not reflect the maximum emissions of the source operating at full design capacity without pollution control equipment. Restrictions on production or operation that will limit potential to emit include limitations on quantities of raw materials consumed, fuel combusted, hours of operation, or conditions which specify that the source must install and maintain controls that reduce emissions to a specified emission rate or to a specified efficiency level. Production and operational limits must be stated as conditions that can be enforced independently of one another. For example, restrictions on fuel which relates to both type and amount of fuel combusted should state each as an independent condition in the permit. This is necessary for purposes of practical enforcement so that, if one of the conditions is found to be difficult to monitor for any reason, the other may still be enforced.

When permits contain production or operational limits, they should also have recordkeeping requirements that allow a permitting agency to verify a source's compliance with its limits. For example, permits with limits on hours of operation or amount of final product should require an operating log to be kept in which the hours of operation and the amount of final product produced are recorded. These logs should be available

for inspection should staff of a permitting agency wish to check a source's compliance with the terms of its permit.

When permits require add-on controls operated at a specified efficiency level, permit writers should include, so that the operating efficiency condition is enforceable as a practical matter, those operating parameters and assumptions which the permitting agency depended upon to determine that the control equipment would have a given efficiency.

An emission limitation alone would limit potential to emit only when it reflects the absolute maximum that the source could emit without controls or other operational restrictions. When a permit contains no limits on capacity utilization or hours of operation, the potential to emit calculation should assume operation at maximum design or achievable capacity (whichever is higher) and continuous operation (8760 hours per year).

The particular circumstances of some individual sources make it difficult to state operating parameters for control equipment limits in a manner that is easily enforceable as a practical matter. Therefore, there are two exceptions to the absolute prohibition on using blanket emission limits to restrict potential to emit. If the permitting agency determines that setting operating parameters for control equipment is infeasible in a particular situation, a federally enforceable permit

containing short term emission limits (e.g. lbs per hour) would be sufficient to limit potential to emit, provided that such limits reflect the operation of the control equipment, and the permit includes requirements to install, maintain, and operate a continuous emission monitoring (CEM) system and to retain CEM data, and specifies that CEM data may be used to determine compliance with the emission limit.

Likewise, for volatile organic compound (VOC) surface coating operations where no add-on control is employed but emissions are restricted through limiting VOC contents and quantities of coatings used, emission limits may be used to restrict potential to emit under the following limited circumstances. If the permitting agency determines for a particular surface coating operation that operating and production parameters (e.g. gallons of coating, quantities produced) are not readily limited due to the wide variety of coatings and products and due to the unpredictable nature of the operation, emission limits coupled with a requirement to calculate daily emissions may be used to restrict potential to emit. The source must be required to keep the records necessary for this calculation, including daily quantities and the VOC content of each coating used. Emission limits may be used in this limited circumstance to restrict potential to emit since, in this case, emission limits are more easily enforceable than operating or production limits.



#### IV. Time Periods For Limiting Production and Operation

As discussed above, a limitation specifically recognized by the regulations as reducing potential to emit is a limitation on production or operation. However, for these limitations to be enforceable as a practical matter, the time over which they extend should be as short term as possible and should generally not exceed one month. This policy was explained in a March 13, 1987 memorandum from John Seitz to Bruce Miller, Region IV. The requirement for a monthly limit prevents the enforcing agency from having to wait for long periods of time to establish a continuing violation before initiating an enforcement action.

EPA recognizes that in some rare situations, it is not reasonable to hold a source to a one month limit. In these cases, a limit spanning a longer time is appropriate if it is a rolling limit. However, the limit should not exceed an annual limit rolled on a monthly basis. EPA cannot now set out all inclusive categories of sources where a production limit longer than a month will be acceptable because every situation that may arise in the future cannot now be anticipated. However, permits where longer rolling limits are used to restrict production should be issued only to sources with substantial and unpredictable annual variation in production, such as emergency

boilers. Rolling limits could be used as well for sources which shut down or curtail operation during part of a year on a regular seasonal cycle, but the permitting authority should first explore the possibility of imposing a month-by-month limit. For example, if a pulp drier is periodically shut down from December to April, the permit could contain a zero hours of operation limit for each of those months, and then the appropriate hourly operation limit for each of the remaining months. Under no circumstances would a production or operation limit expressed on a calendar year annual basis be considered capable of legally restricting potential to emit.

#### V. Sham Operational Limits

In the past year, several sources have obtained purportedly federally enforceable permits with operating restrictions limiting their potential to emit to minor or de minimis levels for the purpose of allowing them to commence construction prior to receipt of a major source permit. In such cases where EPA can demonstrate an intent to operate the source at major source levels, EPA considers the minor source construction permit void ab initio and will take appropriate enforcement action to prevent the source from constructing or operating without a major source permit.

The following example illustrates the kind of situation addressed in this section: An existing major stationary source proposes to add a 12.5 megawatt electric utility steam generating unit, and applies for a federally enforceable minor source permit which restricts operation at the unit to 240 hours per year. Because the project is designed as a baseload facility, EPA does not believe that the source intends to operate the facility for only 240 hours a year. Further investigation would probably uncover documentation of the source's intent to operate at higher levels than those for which it is permitted.

This situation raises the question of whether a source can lawfully bypass the preconstruction or premodification review requirements of Prevention of Significant Deterioration (PSD) and nonattainment New Source Review by committing to permit conditions which restrict production to a level at which the source does not intend to operate for any extensive time. If, after constructing and commencing operation, the source obtains a relaxation of its original permit conditions prior to exceeding them, does this constitute a violation of the preconstruction review requirements? This section discusses why it is improper to construct a source with a minor source permit when there is intent to operate as a major source, and provides guidelines for identifying these "sham" permits.

A. Permits with conditions that do not reflect a source's planned mode of operation are void ab initio and cannot act to shield the source from the requirement to undergo preconstruction review.

1. Sham permits are not allowed by 40 CFR Section 52.21(r) (4) Section

52.21(r) (4) states:

At such time that a particular source or modification becomes a major stationary source or major modification solely by virtue of a relaxation in any enforceable limitation which was established after August 7, 1980 on the capacity of the source or modification otherwise to emit a pollutant, such as a restriction on hours of operation, then (PSD) shall apply to the source or modification as though construction had not yet commenced on the source or modification.

When a source that is minor because of operating restrictions in a construction permit later applies for a relaxation of that construction permit which would make the source major, Section 52.21(r) (4) prescribes the methodology for determining best available control technology (BACT). However, it does not foreclose EPA's ability, in addition to the retroactive application of BACT and other requirements of the PSD program, to pursue enforcement where the Agency believes that the initial minor source permit was a sham. EPA will limit its activity to requiring application of 40 CFR 52.21(r) (4) only for the cases where a source legitimately changes a project after finding that the operating restrictions which were taken in good faith cannot be complied with. Whether a source has acted in good faith is a factual question which is answered by available evidence in the particular case.

2. Sham permits are not allowed by the definition of potential to emit:

40 C.F.R. Sections 52.21(b) (4), 51.165(a) (1) (iii), 51.166(b) (4).

The definition of potential to emit enables sources to obtain federally enforceable permits with operational restrictions as a means of limiting emissions to minor source levels. However, implicit in the application of these limitations is the understanding that they comport with the true design and intended operation of the project.

3. Sham permits are not allowed by the Clean Air Act

Parts C and D of the Clean Air Act exhibit Congress's clear intent that new major sources of air pollution be subject to preconstruction review. The purposes for these programs cannot be served without this essential element. Therefore, attempts to expedite construction by securing minor source status through the receipt of operational restrictions from which the source intends to free itself shortly after operation are to be treated as circumvention of the preconstruction review requirements.

B. Guidelines for determining when minor source construction permits are shams.

EPA's determination that a purportedly federally enforceable construction permit is a sham is made based on an evaluation of specific facts and evidence in each individual case. The following are criteria which should be scrutinized when making such a determination:

1. Filing a PSD or nonattainment NSR permit application

If a major source or major modification permit application is filed simultaneously with or at approximately the same time as the minor source construction permit, this is strong evidence of an intent to circumvent the requirements of preconstruction review. Even a major source application filed after the minor source application, but either before operation has commenced or after less than a year of operation should be looked at closely.

2. Applications for funding

Applications for commercial loans or, for public utilities, bond issues, should be scrutinized to see if the source has guaranteed a certain level of operation which is higher than that in its construction permit. If the project would not be funded or if it would not be economically viable if operated on an extended basis

(at least a year) at the permitted level of production, this should be considered as evidence of circumvention.

3. Reports on consumer demand and projected production levels.

Stockholder reports, reports to the Securities and Exchange Commission, utility board reports, or business permit applications should be reviewed for projected operation or production levels. If reported levels are necessary to meet projected consumer demand but are higher than permitted levels, this is additional evidence of circumvention.

4. Statements of authorized representatives of the source regarding plans for operation.

Statements by representatives of the source to EPA or to state or local permitting agencies about the source's plans for operation can be evidence to show intent to circumvent preconstruction review requirements.

Note that if a determination is made that a permit is a "sham" for one pollutant and, therefore, the source is a major source or major modification, the permit may possibly still contain valid limits on potential to emit for other pollutants.

In such cases, the entire source must still go through new source review, during which, for PSD review, all pollutants for which there is a net significant increase must be analyzed for BACT. In nonattainment new source review, new sources must have LAER determinations only for pollutants for which they are major. Major modifications, however, must have LAER determinations for all nonattainment pollutants emitted in significant amounts. If the valid limits in a partially void minor source construction permit keep certain pollutants below significance levels, then those pollutants would not have to be analyzed for BACT or LAER. However, if a source or modification is determined to be major for PSD or NSR because part of its minor permit is deemed void, it would have to undergo BACT or LAER analysis for all significant pollutants.

## VI. Enforcement Procedures

This guidance has discussed permit conditions which will legally restrict potential to emit, shielding a source from the requirement to comply with major new source permitting regulation. Failure by a permitting agency to adhere to these guidelines may result in a permit that does not legally restrict potential to emit, thereby subjecting a source to major new source review. If that source has not gone through preconstruction review, it is a significant violator of the Clean Air Act and is subject to enforcement for constructing or



modifying without a major new source permit.

The enforcement options available to EPA in these situations include administrative action under Sections 167 or 113 (a) (5) of the Act or federal judicial action under Sections 113 (b) (2), 113 (b) (5), 113(c), or 167. Which enforcement option is selected depends on the facts of the particular situation. (See July 15, 1988 guidance on EPA Procedures for Addressing Deficient New Source Permits.)

## VII. Examples

The following examples are provided to illustrate the type of permit restrictions which would and would not legally limit potential to emit to less than major source thresholds. These examples are provided for purposes of clarifying the potential to emit and averaging time guidance only. They are not intended to reflect all the permit conditions necessary for a valid permit. Specific test methods, compliance monitoring and recordkeeping and reporting requirements are necessary to make permit limitations enforceable as a practical matter. The use of examples where averaging times are the longest times allowed under EPA policies is not intended to necessarily condone the selection of the longest averaging times; averaging times should in practice be as short as possible.

1. The minor source construction permit for a boiler contains the following restrictions:  
250,000 gal fuel/month; 0.8% S fuel; 8000 hours/year.

These conditions are federally enforceable production and operation limits, but do not limit potential to emit because one of them does not meet EPA policies on enforceability as a practical matter. The averaging time for hours of operation, one of the operational limits necessary to restrict emissions to less than 250 tpy, exceeds a monthly or rolling yearly limit. If, instead of 8000 hours/year, the hourly restriction were stated as 666 hours/month, the permit would serve to keep the source a minor source, assuming the permit contains appropriate recordkeeping provisions.

2. A waferboard plant which has the physical capacity to emit over 300 tpy of carbon monoxide in the absence of using specific combustion techniques has the following permit restriction as the sole emission limitation: 249 tpy.

This does not limit potential to emit since an operational or production restriction is necessary for the source to be restricted to 249 tpy. The permit must contain a restriction on hours of operation or capacity utilization which, when multiplied by the maximum emission rate for the CO sources at the plant, results in emissions of 249 tpy. Additionally, while the

emission limit alone cannot restrict potential to emit, the emission limit is unenforceable as a practical matter since it is limited on an annual basis. The permit should contain a short term emission limit (in addition to the annual emission limit), consistent with the compliance period or parameter in the applicable test method for determining compliance.

3. A small scale rock crushing plant that cannot emit more than 240 tpy under maximum operation without controls (including plant-wide particulate emissions from transfer and storage operations) has the following permit restriction as the sole emission limitation: 240 tpy particulate matter.

Since no operational limitations are necessary for the source to emit below 250 tpy, no operational restrictions need be in the permit to limit potential to emit. However, although this is not a major source, the state agency should express the emission limit in this permit as a lb/hour measure or gr/dscf so that it will be enforceable as a practical matter.

4. A plant consisting solely of a small rock crusher has the following permit restrictions: 0.05 lb gr PM/dscf; fabric filter must be employed and maintained at 99% efficiency.

Assuming that maintaining the fabric filter at 99% efficiency will result in emissions of less than 250 tpy, this permit would limit

potential to emit if it also contained either 1) parameters that allowed the permitting agency to verify the fabric filter's operating efficiency or 2) a requirement to install and operate continuous opacity monitors (COMs) and a specification that COM data may be used to verify compliance with emission limits. Note that if this second alternative were adopted, it would not be necessary to require that the fabric filter be maintained at 99% efficiency.

To determine potential to emit, the efficiency rate of the fabric filter would be multiplied by the maximum uncontrolled emission rate, the maximum number of operating hours and maximum throughput capacity since there are no other operating or production limits. However, the efficiency rate of the fabric filter would not be enforceable as a practical matter unless there were an enforceable means to monitor ESP performance on a short term basis. The two alternatives mentioned above would satisfy this requirement.

5. A surface coating operation has the capability of utilizing 15,000 gal coating/month, with the following permit restrictions: 3.0 lb VOC/gal coating minus water; 20.5 tons VOC/month; monthly VOC emissions to be determined from records of the daily volumes of coatings used times the manufacturers specified VOC content.

This does not limit potential to emit since the source has the physical capacity to exceed 250 tpy of VOC, and the permit does not contain a production or an operational limitation. A monthly limit on gallons of coating used which when multiplied by 3.0 lb/gal equates to less than the 250 tpy threshold (13,500 gallons/month), with appropriate recordkeeping, would generally be necessary to limit potential to emit. If, however, the permitting agency determines, due to the wide variety of coatings employed and products produced, that restrictions on operation or production are not practically enforceable, then the above emission limits could restrict potential to emit if there are requirements that the source calculate emissions daily, and keep the appropriate records.

If the source was alternatively to meet the 20.5 ton/month limit by employing add-on controls, the permit would need to contain an operational limit, such as the requirement to install and operate an incinerator at 99% efficiency. A requirement to monitor incinerator efficiency (either directly or indirectly via temperature monitoring for example), and appropriate recordkeeping requirements to verify compliance with each of the permit conditions would also be necessary to make the permit conditions enforceable as a practical matter. Note, however, that in the case where add-on controls are employed, the source may be able to meet a shorter term emission limit than the ton per month figure.

## VIII. Conclusion

We hope this guidance will help EPA Regions identify sources which have the potential to emit major amounts of an air pollutant which will subject those sources to the requirements of preconstruction new source review. Every source which is subject to these requirements but has not obtained a major new source permit should be seriously considered for enforcement action.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

MAR 13 1992

OFFICE OF  
AIR AND RADIATIONMEMORANDUM

SUBJECT: Policy Determination on Limiting Potential to Emit for Koch Refining Company's Clean Fuels Project

FROM: John B. Rasnic, Director  
Stationary Source Compliance Division  
Office of Air Quality Planning and Standards

TO: David Kee, Director  
Air and Radiation Division  
Region V

This is in response to your memorandum dated January 24, 1992. As stated in your memorandum, the Koch Refining Company in Rosemount, Minnesota, has submitted a permit application for their Clean Fuels Project (CFP) to the Minnesota Pollution Control Agency. In addition, Koch is attempting to correct deficiencies in its refinery expansion. In order to limit potential emissions from these projects, Koch would like to have policy determinations made for several issues regarding the June 13, 1989, memorandum "Guidance on Limiting the Potential to Emit in New Source Permitting" signed by Terrell Hunt and John Seitz.

Koch specifically requests whether the following conditions could be used to limit their potential to emit to below major modification thresholds: bubble all process heater emissions for the existing heaters, take a federally enforceable emission limit on the heaters, use an averaging period of 365 consecutive days which are rolled daily for the heaters, bubble all VOC emissions for its storage tanks in the refinery tank farm, and take a federally enforceable emission limit for storage tanks.

With regard to the bubble for the 59 heaters, your memorandum states that due to fuel use variability dictated by the refinery and individual heater operating conditions, Koch wishes to bubble the emissions from the heaters. The permits will require continuous flow monitors on individual heaters, and historical records have shown usage variability in the distribution system. The individual fuel monitors will allow for the overall emissions calculation to be made. As indicated to us in your memorandum, historical records show that individual limits reflecting the individual operating need for each of the heaters would be difficult to develop. Thus, a bubble for the 59 heaters may be reasonable. However, the bubble need only be granted to the

extent that it facilitate enforceability of the limits applied. Also, the decision whether to grant a bubble should consider the bubble's impact on our ability to evaluate whether any future physical or operational changes at the heaters should be subject to NSR.

Taking an emission cap to limit potential to emit is restricted by the June 13, 1989 guidance. The guidance states that "the particular circumstances of some individual sources make it difficult to state operating parameters for control equipment limits in a manner that is easily enforceable as a practical matter. The guidance lays out two examples that would be exceptions to the prohibition on using emission limits to restrict potential to emit. As is expressed in your memorandum, the particular circumstances of Koch refinery make it difficult to state operating parameters in a manner that is easily enforceable as a practical matter. In fact, what is described as the "VOC exception" in the 1989 guidance applies in principle to sulfur dioxide (SO<sub>2</sub>) emissions for the process heaters burning refinery gas. For these heaters, no add-on control equipment is used, but rather several parameters are used to determine a mass emission rate.

However, in accordance with the 1989 potential to emit policy, when an emission limit is taken to restrict potential to emit, some type of continuous monitoring of compliance with that emission limit is required. In the case Of SO<sub>2</sub> emissions, the application of continuous emission monitors (CEMS) should be explored. The use of a CEM equivalent may also be acceptable given that it provides a continuous assessment of emissions that is at least as reliable as a CEM. The appropriate means for monitoring or calculating emissions must be determined on a case by case basis by the permitting authority. Use of an emission limit to restrict potential to emit SO<sub>2</sub> at the refinery heaters, which are served by a common fuel line, is acceptable provided that emissions can be and are required to be readily and periodically determined or calculated. The continuous monitoring method described in your memorandum includes analyzing the sulfur content of the oil in the tank on a daily basis and measuring the oil used with continuous flow monitors as well as monitoring fuel usage at each heater as well as meeting a specified H<sub>2</sub>S content.

With respect to an acceptable averaging time for limiting potential to emit, the section in the June 1989 guidance entitled "Time Periods for Limiting Production and Operation" allows for averaging periods of 365 consecutive days which are rolled daily. This allows for short term enforceability of production or operation limits while allowing for long term data to be considered. When a long term average is used, we believe that it is reasonable to require permit conditions which provide for interim limits that ensure compliance and enforceability during the



first year. The method used to provide interim limits and the need to do so should be determined on a case by case basis, considering how close the allowable emissions would be to the applicability threshold, and how closely the enforcing agency believes monitoring is warranted for the particular source. Determinations whether to allow an annual rolling average versus a shorter term limit must also be made on a case by case basis. Various factors may weigh in favor of allowing a long term rolling average.

From discussions with your staff, we understand that Koch Refinery has historic unpredictable variations in their emissions. Use of a 365 day rolling average in this case may therefore be warranted. However, other facts not presented to us may weigh in favor of a shorter limit. Yet, your indication that Koch Refinery may be willing to use emission data for the year prior to start-up of the heaters, to provide interim enforceable limits for the first year of their potential to emit limitation, weighs in favor of allowing a 365 day rolling average. This approach allows the limits to become enforceable on the first day of operations.

With regard to setting an overall limit for the storage tanks in the refinery tank farm, although throughput to individual tanks in the tank farm is closely monitored for business purposes, it is argued that throughput limitations for particular tanks are infeasible as they would defeat the purpose of the tank as a temporary holding vessel. The tank farm consists of over 150 tanks. These tanks would also hold a variety of products. The annual throughput for a particular product will depend on the market demand and refinery capacity. Given the need for variability in the operation of these tanks, an overall limit for the tank farm, as opposed to individual limits for tanks, appears warranted. Discussions with your staff and Minnesota Pollution Control Agency have indicated that even with a bubble over the tanks in the tank farm, modifications affecting emissions in the tank farm could be detected.

With respect to Koch's request to use an emission limit rather than production or operation limits for the tank farm, as stated for the heaters, some type of continuous monitoring is required. Since a CEM is not feasible for monitoring VOC emissions, the permit must require a continuous assessment of emissions that is at least as reliable as a CEM. The appropriate means for continually assessing emissions must be determined on a case by case basis by the permitting authority. Your memorandum states that CEMs would not be used to directly determine compliance with a VOC emission limit because none are available for this application. Compliance would instead be determined daily based on product density and volatility, product throughput per tank, and control efficiency per tank. We believe that if the source is willing to monitor and

determine compliance daily, then the source could be allowed to use an emission cap to limit potential to emit. Otherwise, the maximum usage of the tank (both in volume and volatility) must be assumed in determining potential to emit.

Our response is based on the facts presented in your memorandum of January 24, 1992. This response does not reflect EPA's position with regard to deficiencies from the 1985 expansion. This response does not constitute or imply a final decision with regard to enforcement or the legality of the 1985 expansion.

If you have any questions concerning our response, please contact Clara Poffenberger at FTS 678-8709.

cc: Gary McCutchen, NSR Section, AQMD (MD-15)  
William L. MacDowell, Region V  
Ron VanMersbergen, Region V  
Rachel Rinehart, Region V  
Karen Schapiro, AED  
Julie Domike, AED  
Jeffrey Renton, OGC

1/25/95

MEMORANDUM

SUBJECT: Options for Limiting the Potential to Emit (PTE) of a Stationary Source Under Section 112 and Title V of the Clean Air Act (Act)

FROM: John S. Seitz, Director  
Office of Air Quality Planning and Standards (MD-10)

Robert I. Van Heuvelen, Director  
Office of Regulatory Enforcement (2241)

TO: Director, Air, Pesticides and Toxics  
Management Division, Regions I and IV  
Director, Air and Waste Management Division,  
Region II  
Director, Air, Radiation and Toxics Division,  
Region III  
Director, Air and Radiation Division,  
Region V  
Director, Air, Pesticides and Toxics Division,  
Region VI  
Director, Air and Toxics Division,  
Regions VII, VIII, IX, and X

Many stationary source requirements of the Act apply only to "major" sources. Major sources are those sources whose emissions of air pollutants exceed threshold emissions levels specified in the Act. For instance, section 112 requirements such as MACT and section 112(g) and title V operating permit requirements largely apply only to sources with emissions that exceed specified levels and are thus major. To determine whether a source is major, the Act focuses not only on a source's actual emissions, but also on its potential emissions. Thus, a source that has maintained actual emissions at levels below the major source threshold could still be subject to major source requirements if it has the potential to emit major amounts of air pollutants. However, in situations where unrestricted operation of a source would result in a potential to emit above major-source levels, such sources may legally avoid program requirements by taking federally-

enforceable permit conditions which limit emissions to levels below the applicable major source threshold. Federally-enforceable permit conditions, if violated, are subject to enforcement by the Environmental Protection Agency (EPA) or by citizens in addition to the State or Local agency.

As the deadlines for complying with MACT standards and title V operating permits approach, industry and State and local air pollution agencies have become increasingly focused on the need to adopt and implement federally-enforceable mechanisms to limit emissions from sources that desire to limit potential emissions to below major source levels. In fact, there are numerous options available which can be tailored by the States to provide such sources with simple and effective ways to qualify as minor sources. Because there appears to be some confusion and questions regarding how potential to emit limits may be established, EPA has decided to: (1) outline the available approaches to establishing potential to emit limitations, (2) describe developments related to the implementation of these various approaches, and (3) implement a transition policy that will allow certain sources to be treated as minor for a period of time sufficient for these sources to obtain a federally-enforceable limit.

Federal enforceability is an essential element of establishing limitations on a source's potential to emit. Federal enforceability ensures the conditions placed on emissions to limit a source's potential to emit are enforceable by EPA and citizens as a legal and practical matter, thereby providing the public with credible assurances that otherwise major sources are not avoiding applicable requirements of the Act. In order to ensure compliance with the Act, any approaches developed to allow sources to avoid the major source requirements must be supported by the Federal authorities granted to citizens and EPA. In addition, Federal enforceability provides source owners and operators with assurances that limitations they have obtained from a State or local agency will be recognized by EPA.

The concept of federal enforceability incorporates two separate fundamental elements that must be present in all limitations on a source's potential to emit. First, EPA must have a direct right to enforce restrictions and limitations imposed on a source to limit its exposure to Act programs. This requirement is based both on EPA's general interest in having the power to enforce "all relevant features of SIP's that are necessary for attainment and maintenance of NAAQS and PSD increments" (see 54 FR 27275, citing 48 FR 38748, August 25, 1983) as well as the specific goal of using national enforcement to ensure that the requirements of the Act are uniformly

implemented throughout the nation (see 54 FR 27277). Second, limitations must be enforceable as a practical matter.

It is important to recognize that there are shared responsibilities on the part of EPA, State, and local agencies, and on source owners to create and implement approaches to creating acceptable limitations on potential emissions. The lead responsibility for developing limitations on potential emissions rests primarily with source owners and State and local agencies. At the same time, EPA must work together with interested parties, including industry and States to ensure that clear guidance is established and that timely Federal input, including Federal approval actions, is provided where appropriate. The guidance in this memorandum is aimed towards continuing and improving this partnership.

#### Available Approaches for Creating Federally-enforceable Limitations on the Potential to Emit

There is no single "one size fits all" mechanism that would be appropriate for creating federally-enforceable limitations on potential emissions for all sources in all situations. The spectrum of available mechanisms should, however, ensure that State and local agencies can create federally-enforceable limitations without undue administrative burden to sources or the agency. With this in mind, EPA views the following types of programs, if submitted to and approved by EPA, as available to agencies seeking to establish federally-enforceable potential to emit limits:<sup>1</sup>

1. Federally-enforceable State operating permit programs (FESOPs) (non-title V). For complex sources with numerous and varying emission points, case-by-case permitting is generally needed for the establishment of limitations on the source's potential to emit. Such case-by-case permitting is often accomplished through a non-title V federally-enforceable State operating permit program. This type of permit program, and its basic elements, are described in guidance published in the Federal Register on June 28, 1989 (54 FR 27274). In short, the program must: (a) be approved into the SIP, (b) impose legal obligations to conform to the permit limitations, (c) provide for limits that are enforceable as a practical matter, (d) be issued in a process that provides for review and an opportunity for

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<sup>1</sup>This is not an exhaustive list of considerations affecting potential to emit. Other federally-enforceable limits can be used, for example, source-specific SIP revisions. For brevity, we have included those which have the widest applicability.

comment by the public and by EPA, and (e) ensure that there is no relaxation of otherwise applicable Federal requirements. The EPA believes that these type of programs can be used for both criteria pollutants and hazardous air pollutants, as described in the memorandum, "Approaches to Creating Federally-Enforceable Emissions Limits," November 3, 1993. This memorandum (referred to below as the November 1993 memorandum) is included for your information as Attachment 1. There are a number of important clarifications with respect to hazardous air pollutants subsequent to the November 1993 memorandum which are discussed below (see section entitled "Limitations on Hazardous Air Pollutants").

2. Limitations established by rules. For less complex plant sites, and for source categories involving relatively few operations that are relatively similar in nature, case-by-case permitting may not be the most administratively efficient approach to establishing federally-enforceable restrictions. One approach that has been used is to establish a general rule which creates federally-enforceable restrictions at one time for many sources (these rules have been referred to as "exclusionary" rules and by some permitting agencies as "prohibitory" rules). A specific suggested approach for volatile organic compounds (VOC) limits by rule was described in EPA's memorandum dated October 15, 1993 entitled "Guidance for State Rules for Optional Federally-Enforceable Emissions Limits Based Upon Volatile Organic Compound (VOC) Use." An example of such an exclusionary rule is a model rule developed for use in California. (The California model rule is attached, along with a discussion of its applicability to other situations--see Attachment 2). Exclusionary rules are included in a State's SIP and generally become effective upon approval by EPA.

3. General permits. A concept similar to the exclusionary rule is the establishment of a general permit for a given source type. A general permit is a single permit that establishes terms and conditions that must be complied with by all sources subject to that permit. The establishment of a general permit provides for conditions limiting potential to emit in a one-time permitting process, and thus avoids the need to issue separate permits for each source within the covered source type or category. Although this concept is generally thought of as an element of a title V permit program, there is no reason that a State or local agency could not submit a general permit program as a SIP submittal aimed at creating potential to emit limits for groups of sources. Additionally, general permits can be issued under the auspices of a SIP-approved FESOP. The advantage of a general permit, when compared to an exclusionary rule, is that upon approval by EPA of the State's permit program, a

general permit could be written for one or more additional source types without triggering the need for the formal SIP revision process.

4. Construction permits. Another type of case-by-case permit is a construction permit. These permits generally cover new and modified sources, and States have developed such permit programs as an element of their SIP's. As described in the November 1993 memorandum, these State major and minor new source review (NSR) construction permits can provide for federally-enforceable limitations on a source's potential to emit. Further discussion of the use of minor source NSR programs is contained in EPA's letter to Jason Grumet, NESCAUM, dated November 2, 1994, which is contained in Attachment 3. As noted in this letter, the usefulness of minor NSR programs for the creation of potential to emit limitations can vary from State to State, and is somewhat dependent on the scope of a State's program.

5. Title V permits. Operating permits issued under the Federal title V operating permits program can, in some cases, provide a convenient and readily available mechanism to create federally-enforceable limits. Although the applicability date for part 70 permit programs is generally the driving force for most of the current concerns with respect to potential to emit, there are other programs, such as the section 112 air toxics program, for which title V permits may themselves be a useful mechanism for creating potential to emit limits. For example, many sources will be considered to be major by virtue of combustion emissions of nitrogen oxides or sulfur dioxide, and will be required to obtain part 70 permits. Such permits could be used to establish federally-enforceable limitations that could ensure that the source is not considered a major source of hazardous air pollutants.

#### Practicable Enforceability

If limitations--whether imposed by SIP rules or through individual or general permits--are incomplete or vague or unsupported by appropriate compliance records, enforcement by the States, citizens and EPA would not be effective. Consequently, in all cases, limitations and restrictions must be of sufficient quality and quantity to ensure accountability (see 54 FR 27283).

The EPA has issued several guidance documents explaining the requirements of practicable enforceability (e.g., "Guidance on Limiting Potential to Emit in New Source Permitting," June 13, 1989; memorandum from John Rasnic entitled "Policy Determination on Limiting Potential to Emit for Koch Refining Company's Clean Fuels Project," March 13, 1992). In general, practicable

enforceability for a source-specific permit means that the permit's provisions must specify: (1) A technically-accurate limitation and the portions of the source subject to the limitation; (2) the time period for the limitation (hourly, daily, monthly, and annual limits such as rolling annual limits); and (3) the method to determine compliance including appropriate monitoring, recordkeeping, and reporting. For rules and general permits that apply to categories of sources, practicable enforceability additionally requires that the provisions: (1) identify the types or categories of sources that are covered by the rule; (2) where coverage is optional, provide for notice to the permitting authority of the source's election to be covered by the rule; and (3) specify the enforcement consequences relevant to the rule. More specific guidance on these enforceability principles as they apply to rules and general permits is provided in Attachment 4.

#### Limitations on Hazardous Air Pollutants (HAP)

There are a number of important points to recognize with respect to the ability of existing State and local programs to create limitations for the 189 HAP listed in (or pursuant to) section 112(b) of the Act, consistent with the definitions of "potential to emit" and "federally-enforceable" in 40 CFR 63.2 (promulgated March 16, 1994, 59 FR 12408 in the part 63 General Provisions). The EPA believes that most State and local programs should have broad capabilities to handle the great majority of situations for which a potential to emit limitation on HAP is needed.

First, it is useful to note that the definition of potential to emit for the Federal air toxics program (see the subpart A "general provisions," section 63.2) considers, for purposes of controlling HAP emissions, federally-enforceable limitations on criteria pollutant emissions if "the effect such limitations would have on "[hazardous air pollutant] . . . emissions" is federally-enforceable (emphasis added). There are many examples of such criteria pollutant emission limits that are present in federally-enforceable State and local permits and rules. Examples would include a limitation constraining an operation to one (time limit specified) shift per day or limitations that effectively limit operations to 2000 hours per year. Other examples would include limitations on the amount of material used, for example a permit limitation constraining an operation to using no more than 100 gallons of paint per month. Additionally, federally-enforceable permit terms that, for example, required an incinerator to be operated and maintained at no less than 1600 degrees would have an obvious "effect" on the HAP present in the inlet stream.



Another federally-enforceable way criteria pollutant limitations affect HAP can be described as a "nested" HAP limit within a permit containing conditions limiting criteria pollutants. For example, the particular VOC's within a given operation may include toluene and xylene, which are also HAP. If the VOC-limiting permit has established limitations on the amount of toluene and xylene used as the means to reduce VOC, those limitations would have an obvious "effect" on HAP as well.

In cases as described above, the "effect" of criteria pollutant limits will be straightforward. In other cases, information may be needed on the nature of the HAP stream present. For example, a limit on VOC that ensured total VOC's of 20 tons per year may not ensure that each HAP present is less than 10 tons per year without further investigation. While the EPA intends to develop further technical guidance on situations for which additional permit terms and conditions may be needed to ensure that the "effect" is enforceable as a practical matter, the EPA intends to rely on State and local agencies to employ care in drafting enforceable requirements which recognize obvious environmental and health concerns.

There are, of course, a few important pollutants which are HAP but are not criteria pollutants. Example of these would include methylene chloride and other pollutants which are considered nonreactive and therefore exempt from coverage as VOC's. Especially in cases where such pollutants are the only pollutants present, criteria pollutant emission limitations may not be sufficient to limit HAP. For such cases, the State or local agency will need to seek program approval under section 112(1) of the Act.

Section 112(1) provides a clear mechanism for approval of State and local air toxics programs for purposes of establishing HAP-specific PTE limits. The EPA intends, where appropriate, that in approving permitting programs into the SIP, to add appropriate language citing approval pursuant to section 112(1) as well. An example illustrating section 112(1) approval is the approval of the State of Ohio's program for limiting potential to emit (see 59 FR 53587, October 25, 1994). In this notice, EPA granted approval under section 112(1) for hazardous air pollutants aspects of a State program for limiting potential to emit. Such language can be added to any federally-enforceable State operating permit program, exclusionary rule, or NSR program update SIP approval notice so long as the State or local program has the authority to regulate HAP and meets other section 112(1) approval criteria. Transition issues related to such section 112(1) approvals are discussed below.

### Determination of Maximum Capacity

While EPA and States have been calculating potential to emit for a number of years, EPA believes that it is important at this time to provide some clarification on what is meant in the definition of potential to emit by the "maximum capacity of a stationary source to emit under its physical and operational design." Clearly, there are sources for which inherent physical limitations for the operation restrict the potential emissions of individual emission units. Where such inherent limitations can be documented by a source and confirmed by the permitting agency, EPA believes that States have the authority to make such judgements and factor them into estimates of a stationary source's potential to emit.

The EPA believes that the most straightforward examples of such inherent limitations is for single-emission unit type operations. For example, EPA does not believe that the "maximum capacity" language requires that owner of a paint spray booth at a small auto body shop must assume that (even if the source could be in operation year-round) spray equipment is operated 8760 hours per year in cases where there are inherent physical limitations on the number of cars that can be painted within any given period of time. For larger sources involving multiple emissions units and complex operations, EPA believes it can be more problematic to identify the inherent limitations that may exist.

The EPA intends, within its resource constraints, to issue technical assistance in this area by providing information on the type of operational limits that may be considered acceptable to limit the potential to emit for certain individual small source categories.

### Transition Guidance for Section 112 and Title V Applicability

Most, if not all, States have recognized the need to develop options for limiting the potential emissions of sources and are moving forward with one or more of the strategies described in the preceding sections in conjunction with the submission and implementation of their part 70 permit programs. However, EPA is aware of the concern of States and sources that title V or section 112 implementation will move ahead of the development and implementation of these options, leaving sources with actual emissions clearly below the major source thresholds potentially subject to part 70 and other major source requirements. Gaps could theoretically occur during the time period it takes for a State program to be designed and administratively adopted by the State, approved into the SIP by EPA, and implemented as needed to

cover individual sources.

The EPA is committed to aiding all States in developing and implementing adequate, streamlined, and cost-effective vehicles for creating federally-enforceable limits on a source's potential emissions by the time that section 112 or title V requirements become effective. To help bridge any gaps, EPA will expedite its reviews of State exclusionary rules and operating permit rules by, among other things, coordinating the approval of these rules with the approval of the State's part 70 program and by using expeditious approval approaches such as "direct final" Federal Register notices to ensure that approval of these programs does not lag behind approval of the part 70 program.

In addition, in such approval notices EPA will affirm any limits established under the State's program since its adoption by the State but prior to Federal approval if such limits were established in accordance with the procedures and requirements of the approved program. An example of language affirming such limits was recently used in approving an Illinois SIP revision (see 57 FR 59931, included as Attachment 5).

The EPA remains concerned that even with expedited approvals and other strategies, sources may face gaps in the ability to acquire federally-enforceable potential to emit limits due to delays in State adoption or EPA approval of programs or in their implementation. In order to ensure that such gaps do not create adverse consequences for States or for sources, EPA is announcing a transition policy for a period up to two years from the date of this memorandum. The EPA intends to make this transition policy available at the discretion of the State or local agency to the extent there are sources which the State believes can benefit from such a transition policy. The transition period will extend from now until the gaps in program implementation are filled, but no later than January 1997. Today's guidance, which EPA intends to codify through a notice and comment rulemaking, provides States discretion to use the following options for satisfying potential to emit requirements during this transition period.

1. Sources maintaining emissions below 50 percent of all applicable major source requirements. For sources that typically and consistently maintain emissions significantly below major source levels, relatively few benefits would be gained by making such sources subject to major source requirements under the Act. For this reason, many States are developing exclusionary rules and general permits to create simple, streamlined means to ensure that these sources are not considered major sources. To ease the burden on States' implementation of title V, and to ensure that delays in EPA's approval of these types of programs will not

cause an administrative burden on the States, EPA is providing a 2-year transition period for sources that maintain their actual emissions, for every consecutive 12-month period (beginning with the 12 months immediately preceding the date of this memorandum), at levels that do not exceed 50 percent of any and all of the major stationary source thresholds applicable to that source. A source that exceeds the 50 percent threshold, without complying with major source requirements of the Act (or without otherwise limiting its potential to emit), could be subject to enforcement. For this 2-year period, such sources would not be treated as major sources and would not be required to obtain a permit that limits their potential to emit. To qualify under this transition policy, sources must maintain adequate records on site to demonstrate that emissions are maintained below these thresholds for the entire as major sources and would not be required to obtain a permit that limits their potential to emit that would be considered to be adequate during this transition period. Consistent with the California approach, EPA believes it is appropriate for the amount of recordkeeping to vary according to the level of emissions (see paragraphs 1.2 and 4.2 of the attached rule).

2. Larger sources with State limits. For the 2-year transition period, restrictions contained in State permits issued to sources above the 50 percent threshold would be treated by EPA as acceptable limits on potential to emit, provided: (a) the permit is enforceable as a practical matter; (b) the source owner submits a written certification to EPA that it will comply with the limits as a restriction on its potential to emit; and (c) the source owner, in the certification, accepts Federal and citizen enforcement of the limits (this is appropriate given that the limits are being taken to avoid otherwise applicable Federal requirements). Such limits will be valid for purposes of limiting potential to emit from the date the certification is received by EPA until the end of the transition period. States interested in making use of this portion of the transition policy should work with their Regional Office to develop an appropriate certification process.

3. Limits for noncriteria HAP. For noncriteria HAP for which no existing federally-approved program is available for the creation of federally-enforceable limits, the 2-year transition period provides for sufficient time to gain approval pursuant to section 112(l). For the 2-year transition period, State restrictions on such noncriteria pollutants issued to sources with emissions above the 50 percent threshold would be treated by EPA as limiting a source's potential to emit, provided that: (a) the restrictions are enforceable as a practical matter; (b) the source owner submits a written certification to EPA that

it will comply with the limits as a restriction on its potential to emit; and (c) the source owner, in the certification, accepts Federal and citizen enforcement of the limits. Such limits will be valid for purposes of limiting potential to emit from the date the certification is received by EPA until the end of the transition period.

The Regional Offices should send this memorandum, including the attachments, to States within their jurisdiction. Questions concerning specific issues and cases should be directed to the appropriate Regional Office. Regional Office staff may contact Timothy Smith of the Integrated Implementation Group at 919-541-4718, or Clara Poffenberger with the Air Enforcement Division at 202-564-8709.

Attachments

cc: Air Branch Chief, Region I-X  
Regional Counsels

**Attachment 1**

**November 3, 1993 memorandum**

November 3, 1993

MEMORANDUM

SUBJECT: Approaches to Creating Federally-Enforceable Emissions Limits

FROM: John S. Seitz, Director  
Office of Air Quality Planning and Standards (MD-10)

TO: Director, Air, Pesticides and Toxics  
Management Division, Regions I and IV  
Director, Air and Waste Management Division,  
Region II  
Director, Air, Radiation and Toxics Division,  
Region III  
Director, Air and Radiation Division,  
Region V  
Director, Air, Pesticides and Toxics Division,  
Region VI  
Director, Air and Toxics Division,  
Regions VII, VIII, IX, and X

The new operating permits program under title V of the Clean Air Act (Act), combined with the additional and lower thresholds for "major" sources also provided by the 1990 Amendments to the Act, has led to greatly increased interest by State and local air pollution control agencies, as well as sources, in obtaining federally-enforceable limits on source potential to emit air pollutants. Such limits entitle sources to be considered "minor" for the purposes of title V permitting and various other requirements of the Act. Numerous parties have identified this as a high priority concern potentially involving thousands of sources in each of the larger States.

The issue of creating federally-enforceable emissions limits has broad implications throughout air programs. Although many of the issues mentioned above have arisen in the context of the title V permits program, the same issues exist for other programs, including those under section 112 of the Act. As discussed below, traditional approaches to creating federally-enforceable emissions limits may be unnecessarily burdensome and time-consuming for certain types and sizes of sources. In

addition, they have been of limited usefulness with respect to creating such limits for emissions of hazardous air pollutants (HAP's).

The purpose of this memorandum is to respond to these needs by announcing the availability of two further approaches to creating federally-enforceable emissions limits: the extension of existing criteria pollutant program mechanisms for HAP program purposes, and the creation of certain classes of standardized emissions limits by rule. We believe that these options are responsive to emerging air program implementation issues and provide a reasonable balance between the need for administrative streamlining and the need for emissions limits that are technically sound and enforceable.

### Background

Various regulatory options already exist for the creation of federally-enforceable limits on potential to emit. These were summarized in a September 18, 1992 memorandum from John Calcagni, Director, Air Quality Management Division. That memorandum identified the five regulatory mechanisms generally seen as available. These are: State major and minor new source review (NSR) permits [if the NSR program has been approved into the State implementation plan (SIP) and meets certain procedural requirements]; operating permits based on programs approved into the SIP pursuant to the criteria in the June 28, 1989 Federal Register (54 FR 27274); and title V permits (including general permits). Also available are SIP limits for individual sources and limits for HAP's created through a State program approved pursuant to section 112(1) of the Act.

Regional Office and State air program officials realize that these five options are generally workable, but feel that the programs emerging from the 1990 Amendments present certain further needs that are not well met. They note that NSR is not always available, title V permitting can be more rigorous than appropriate for those sources that are in fact quite small, and that general permits have limitations in their usefulness. The use of State operating permits approved into the SIP pursuant to the June 28, 1989 Federal Register is generally considered to be a promising option for some of these transactions; however, these programs do not regulate toxics directly.

### State Operating Permits for Both Criteria Pollutants and HAP's

As indicated above, State operating permits issued by programs approved into the SIP pursuant to the process provided in the June 28, 1989 Federal Register are recognized as federally

enforceable. This is a useful option, but has historically been viewed as limited in its ability to directly create emissions limits for HAP's because of the SIP focus on criteria pollutants.

Since that option was created, however, section 112 of the Act has been rewritten, creating significant new regulatory requirements and conferring additional responsibilities and authorities upon the Environmental Protection Agency (EPA) and the States. Section 112 now mandates a wide range of activities: source-specific preconstruction reviews, areawide approaches to controlling risk, provisions for permitting pursuant to the title V permitting program, and State program provisions in section 112(l) that are similar to aspects of the SIP program. A result of these changes is that implementation of toxics programs will entail the use of many of the same administrative mechanisms as have been in use for the criteria pollutant programs.

Upon further analysis of these new program mandates and corresponding authorities, EPA concludes that section 112 of the Act, including section 112(l), authorizes it to recognize these same State operating permits programs for the creation of federally-enforceable emissions limits in support of the implementation of section 112. Congress recognized, and longstanding State practice confirms, that operating permits are core-implementing mechanisms for air quality program requirements. This was EPA's basis for concluding that section 110 of the Act authorizes the recognition and approval into the SIP of operating permits pursuant to the June 28, 1989 promulgation, even though section 110 did not expressly provide for such a program. Similarly, broad provision of section 112(l) for "a program for the implementation and enforcement . . . of emission standards and other requirements for air pollutants subject to this section" provides a sound basis for EPA recognition of State operating permits for implementation and enforcement of section 112 requirements in the same manner as these permitting processes were recognized pursuant to section 110.

In implementing this authority to approve State operating permits programs pursuant to section 112, it should be noted that the specific criteria for what constitutes a federally-enforceable permit are also the same as for the existing SIP programs. The June 28, 1989 Federal Register essentially addressed in a generic sense the core criteria for creating federally-enforceable emissions limits in operating permits: appropriate procedural mechanisms, including public notice and opportunity for comment, statutory authority for EPA approval of the State program, and enforceability as a practical matter. The EPA did this in the context of SIP development, not because these criteria are specific to the SIP, but because section 110 of the



Act was seen as our only certain statutory basis for this prior to the 1990 Amendments. Based on the discussion above, States can extend or develop State operating permits programs for toxics pursuant to the criteria set forth in the June 28, 1989 Federal Register. The EPA is also evaluating analogous opportunities to enhance State NSR programs to address toxics and will address this in future guidance.

This is a significant opportunity to limit directly the emissions of HAP's. It also offers the advantage of the administrative efficiencies that arise from using existing administrative mechanisms, as opposed to creating additional ones.

States are encouraged to consult with EPA Regional Offices to discuss the details of adapting their current programs to carry out these additional functions. The EPA will consider State permitting programs meeting the criteria in the June 28, 1989 Federal Register as being approvable for HAP program functions as well. States may submit their programs for implementing this process with their part 70 program submittals, or at such other time as they choose. The EPA has various options for administratively recognizing these State program submittals. The EPA plans initially to review these State programs as SIP review actions, but with official recognition pursuant to authorities in both sections 110 and 112. Once rulemaking pursuant to section 112(1) of the Act is completed, EPA expects to use the process developed in that rule for approving State programs for HAP's. The section 112(1) process may be especially useful prior to EPA approval and implementation of the State title V programs. The reader may wish to refer to the process for certain section 112(1) approvals proposed on May 19, 1993 (58 FR 29296) (see section 63.91).

The General Provisions (40 CFR part 63) establish the applicability framework for the implementation of section 112. In the final rule, EPA will indicate that State operating permits programs which meet the procedural requirements of the June 28, 1989 Federal Register can be used to develop federally-enforceable emissions limits for HAP's, thereby limiting a source's potential to emit. In addition, after we gain implementation experience, EPA will be evaluating the usefulness of further rulemaking to define more specific criteria by which this process may be used in the implementation of programs under section 112 of the Act. Any such rulemaking could similarly be incorporated into the General Provisions in part 63.

State-Standardized Processes Created by Rule to Establish Source-Specific, Federally-Enforceable Emissions Limits

State air program officials have highlighted specific types of sources that are of particular administrative concern because of their nature and number. These include sources whose emissions are primarily volatile organic compounds (VOC) arising from use of solvents or coatings, such as automobile body shops. Another example is fuel-burning sources that have low actual emissions because of limited hours of operation, but with the potential to emit sulfur dioxide in amounts sufficient to cause them to be classified as major sources.

The EPA recognizes that emissions limitations for some processes can be created through standardized protocols. For example, limitations on potential to emit could be established for certain VOC sources on the basis of limits on solvent use, backed up by recordkeeping and by periodic reporting. Similarly, limitations on sulfur dioxide emissions could be based on specified sulfur content of fuel and the source's obligation to limit usage to certain maximum amounts. Limits on hours of operation may be acceptable for certain others sources, such as standby boilers. In all cases, of course, the technical requirements would need to be supported by sufficient compliance procedures, especially monitoring and reporting, to be considered enforceable.

The EPA concludes that such protocols could be relied on to create federally-enforceable limitations on potential to emit if adopted through rulemaking and approved by EPA. Although such an approach is appropriate for only a limited number of source categories, these categories include large numbers of sources, such as dry cleaners, auto body shops, gas stations, printers, and surface coaters. If such standardized control protocols are sufficiently reliable and replicable, EPA and the public need not be involved in their application to individual sources, as long as the protocols themselves have been subject to notice and opportunity to comment and have been approved by EPA into the SIP.

To further illustrate this concept and to provide implementation support to the States, EPA has recently released guidance on one important way of using this process. This document, entitled "Guidance for State Rules for Optional Federally-Enforceable Emissions Limits Based on Volatile Organic Compound Use," was issued by D. Kent Berry, Acting Director, Air Quality Management Division, on October 15, 1993. It describes approvable processes by which States can create federally-enforceable emissions limits for VOC for large numbers of sources in a variety of source categories.

States have flexibility in their choice of administrative process for implementation. In some cases, it may be adequate

for a State to apply these limits to individual sources through a registration process rather than a permit. A source could simply submit a certification to the State committing to comply with the terms of an approved protocol. Violations of these certifications would constitute SIP violations, in the case of protocols approved into the SIP, and be subject to the same enforcement mechanisms as apply in the case of any other SIP violation. Such violations would, of course, also subject the source to enforcement for failure to comply with the requirements that apply to major sources, such as the requirement to obtain a title V permit or comply with various requirements of section 112 of the Act.

Some States have also indicated an interest in more expansive approaches to implementing this concept, such as making presumptive determinations of control equipment efficiency with respect to particular types of sources and pollutants. While such approaches are more complicated and present greater numbers of concerns in the EPA review process, they offer real potential if properly crafted. The EPA will evaluate State proposals and approve them if they are technically sound and enforceable as a practical matter.

States may elect to use this approach to create federally-enforceable emissions limits for sources of HAP's as well. Based on the same authorities in section 112 of the Act, as cited above in the case of operating permits, EPA can officially recognize such State program submittals. As with the operating permits option discussed in the preceding section, EPA plans initially to review these activities as SIP revisions, but with approval pursuant to both sections 110 and 112 of the Act, and approve them through the section 112(1) process when that rule is final.

#### Implementation Guidance

As indicated above, the creation of federally-enforceable limits on a source's potential to emit involves the identification of the procedural mechanisms for these efforts, including the statutory basis for their approval by EPA, and the technical criteria necessary for their implementation. Today's guidance primarily addresses the procedural mechanisms available and the statutory basis for EPA approval.

The EPA will be providing further information with respect to the implementation of these concepts. As described above, the first portion of this guidance, addressing limits on VOC emissions, was issued on October 15, 1993. My office is currently working with Regional Offices and certain States in order to assist in the development of program options under consideration by those States. We will provide technical and

regulatory support to other State programs and will make the results of these efforts publicly available through the Office of Air Quality Planning and Standards (OAQPS) Technology Transfer Network bulletin board.

We will provide further support through the release of a document entitled "Enforceability Requirements for Limiting Potential to Emit Through SIP Rules and General Permits," which is currently undergoing final review within EPA. In addition, EPA will be highlighting options for use of existing technical guidance with respect to creating sound and enforceable emissions limits. An important example of such guidance is the EPA "Blue Book," which has been in use by States for the past 5 years as part of their VOC control programs.

States are encouraged to discuss program needs with their EPA Regional Offices. The OAQPS will work with them in addressing approvals. As indicated, additional technical guidance for implementing these approaches is underway and will be made publicly available soon. For further information, please call Kirt Cox at (919) 541-5399.

cc: Air Branch Chief, Regions I-X  
Regional Counsel, Regions I-X  
OAQPS Division Directors  
A. Eckert  
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## **Attachment 2**

### **California Example Rule**

#### Background

State agencies and local agencies (such as the Air Pollution Control Districts in California) can adopt rules which place emissions limitations on a category of sources through a combination of limitations and compliance requirements. These rules, if practicably enforceable, adopted with adequate public process and approved into the SIP, can validly limit potential to emit. Moreover, because State or local rules can cover many sources with a single regulatory action, they are well-suited to cover large populations of smaller sources. Many States are finding that a combination of SIP rules or general permits for smaller sources combined with individual permits for larger sources provides the simplest means of ensuring that minor source emissions are adequately limited.

#### Discussion of California Rule

The EPA, the California Air Pollution Control Officers Association and the California Air Resources Board recently completed development of a model rule for use by the California Air Pollution Control Districts. Because the rule contains several innovations, including covering all source categories, and should prove to be an inexpensive and efficient means of limiting the potential emissions of thousands of sources in California, the EPA believes that parts of the rule may be helpful for other States to review and consider.

The proposed rule is designed to place smaller sources under annual emissions limits which restrict their "potential to emit" and thus their exposure to "major source" requirements of the Clean Air Act. The rule ensures compliance with the annual limit through a series of recordkeeping and reporting requirements. These requirements are tapered to reduce burdens as source size decreases. The rule creates three levels of responsibility. The first tier requires both recordkeeping and reporting. The second tier requires only recordkeeping with no reporting. For instance, sources that emit only attainment pollutants which limit their emissions to below 25 tons per year have no reporting requirement. For sources under 5 tons per year (or 2 tons per year for a single hazardous air pollutant), there is no specified recordkeeping or reporting requirements although these sources must still maintain sufficient records to demonstrate their compliance with the rule.

To the extent possible, the recordkeeping requirements are itemized by source category and are designed to take advantage of

records that sources are already likely to maintain. Through these measures, the rule should assure the public that the sources subject to the rule are properly maintaining their emissions below major source levels, while maximizing source flexibility and minimizing paperwork.

There are other safeguards built into the rule and in California's overall regulatory scheme which add to the EPA's confidence that the proposal can work. The rule applies only to sources that agree to limit their emissions to 50 percent or less of the major source threshold. Sources with emissions above this level must either comply with all applicable "major source" requirements or secure a source-specific, federally-enforceable Air Pollution Control District permit that properly limits emissions to levels below major source thresholds. Some sources may be able to qualify for an "alternative operation limit" which places simple operating limits on a source's combustion of fuel, sale of gasoline or use of a solvent. Because of the ease with which compliance can be tracked with operational limits, the rule allows sources using these limits to go up to 80 percent of the major source threshold. Either way, EPA believes that the rule creates a sufficient compliance buffer.

Moreover, California has an extensive permit and inspection infrastructure that increases EPA's confidence that the rule will prove adequate for limiting emissions. California law requires that, upon annual renewal, each permit be reviewed to determine that the permit conditions are adequate to assure compliance with district rules and other applicable requirements. In addition, most California Air Pollution Control Districts have an extensive inspection program which means that compliance with the rule will be spot checked by inspectors visiting the source.

Finally, the rule is designed to provide smaller sources with a federally-enforceable means of limiting their potential emissions. The rule excludes sources that already have a federally enforceable operating permit, and it cannot be used to avoid complying with an permit required by the Air Pollution Control Districts.

Aside from these general observations, EPA did have a number of comments regarding specific language included in the rule. The three most significant comments are set forth below. However, States interested in using this rule as a model should be aware that it was specifically designed to fit with California State law and existing SIP provisions and that States may wish to consider making other changes to reflect their individual needs and requirements.

Section 2.7: In a PM-10 nonattainment area, PM-10 precursors may need to be included when determining whether a source is major as required by section 189(e) of the Clean Air Act. Districts adopting this model rule should consider whether the definition of "Major Source" in section 2.7 should be augmented to include sources of PM-10 precursors.

Section 4.2(D): The rule allows sources using air pollution control equipment to demonstrate compliance through the maintenance of general records on the unit and its operations. EPA has always been concerned with this provision since many pollution control units are only effective if specific operating procedures are followed. These specifics are best set and tracked in a source-specific, federally enforceable permit. For this reason, section 1.3 sunsets the applicability of the draft rule, after January 1, 1999, to pollution control equipment. For the coverage to continue beyond that date, a district must extend the provision. The EPA will disapprove the extension if the experience with the rule demonstrates that more specific conditions are needed to ensure that pollution control devices are being used properly and continuously.

Section 4.2(E): In general, EPA does not favor the use of generic or catch-all recordkeeping requirements for compliance purposes. There is a fear that the records necessary to show compliance for individual source categories will not be specified by the generic provision and thus will not be maintained. For this reason, EPA urges the Board and the Districts to evaluate regularly whether specific recordkeeping requirements should be developed for additional categories. As we noted during our negotiations, EPA will evaluate this question after the rule is in effect for three years and the EPA may seek -- through a SIP call or through other mechanisms -- to require additional recordkeeping requirements if there are implementation problems with this generic category. The districts may wish to add to the rule a provision which would authorize them to add recordkeeping requirements for additional source categories without a further SIP revision.

**State of California  
Proposed Rule to Limit  
Potential to Emit  
January 11, 1995**

**1.0 APPLICABILITY**

1.1 General Applicability: This rule shall apply to any stationary source which would, if it did not comply with the limitations set forth in this rule, have the potential to emit air contaminants equal to or in excess of the threshold for a major source of regulated air pollutants or a major source of hazardous air pollutants (HAPs) and which meets one of the following conditions:

- A. In every 12-month period, the actual emissions of the stationary source are less than or equal to the emission limitations specified in section 3.1 below; or
- B. In every 12-month period, at least 90 percent of the emissions from the stationary source are associated with an operation limited by any one of the alternative operational limits specified in section 6.1 below.

1.2 Stationary Source with De Minimis Emissions: The recordkeeping and reporting provisions in sections 4.0, 5.0 and 6.0 below shall not apply to a stationary source with de minimis emissions or operations as specified in either subsection A or B below:

- A. In every 12-month period, the stationary source emits less than or equal to the following quantities of emissions:
  - 1. 5 tons per year of a regulated air pollutant (excluding HAPs),
  - 2. 2 tons per year of a single HAP,
  - 3. 5 tons per year of any combination of HAPs, and
  - 4. 20 percent of any lesser threshold for a single HAP that the United States Environmental Protection Agency (U.S. EPA) may establish by rule.
- B. In every 12-month period, at least 90 percent of the stationary source's emissions are associated with an operation for which the throughput is less than or



equal to one of the quantities specified in subsections 1 through 9 below:

1. 1,400 gallons of any combination of solvent-containing materials but no more than 550 gallons of any one solvent-containing material, provided that the materials do not contain the following: methyl chloroform (1,1,1-trichloroethane), methylene chloride (dichloromethane), tetrachloroethylene (perchloroethylene), or trichloroethylene;
2. 750 gallons of any combination of solvent-containing materials where the materials contain the following: methyl chloroform (1,1,1-trichloroethane), methylene chloride (dichloromethane), tetrachloroethylene (perchloroethylene), or trichloroethylene, but not more than 300 gallons of any one solvent-containing material;
3. \_\_\_\_ gallons of solvent-containing (or volatile organic compound containing) material used at a paint spray unit(s);<sup>2</sup>
4. 4,400,000 gallons of gasoline dispensed from equipment with Phase I and II vapor recovery systems;
5. 470,000 gallons of gasoline dispensed from equipment without Phase I and II vapor recovery systems;
6. 1,400 gallons of gasoline combusted;
7. 16,600 gallons of diesel fuel combusted;
8. 500,000 gallons of distillate oil combusted, or
9. 71,400,000 cubic feet of natural gas combusted.

Within 30 days of a written request by the District or the U.S. EPA, the owner or operator of a stationary source not maintaining records pursuant to sections 4.0 or 6.0 shall demonstrate that the stationary source's emissions or throughput are not in excess of the applicable quantities set forth in subsection A or B above.

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<sup>2</sup>To be determined based on district SIP rules

1.3 Provision for Air Pollution Control Equipment: The owner or operator of a stationary source may take into account the operation of air pollution control equipment on the capacity of the source to emit an air contaminant if the equipment is required by Federal, State, or District rules and regulations or permit terms and conditions. The owner or operator of the stationary source shall maintain and operate such air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. This provision shall not apply after January 1, 1999 unless such operational limitation is federally enforceable or unless the District Board specifically extends this provision and it is submitted to the U.S. EPA. Such extension shall be valid unless, and until, the U.S. EPA disapproves the extension of this provision.

1.4 Exemption, Stationary Source Subject to Rule \_\_\_\_ (District Title V rule): This rule shall not apply to the following stationary sources:

A. Any stationary source whose actual emissions, throughput, or operation, at any time after the effective of this rule, is greater than the quantities specified in sections 3.1 or 6.1 below and which meets both of the following conditions:

1. The owner or operator has notified the District at least 30 days prior to any exceedance that s/he will submit an application for a Part 70 permit, or otherwise obtain federally-enforceable permit limits, and
2. A complete Part 70 permit application is received by the District, or the permit action to otherwise obtain federally-enforceable limits is completed, within 12 months of the date of notification.

However, the stationary source may be immediately subject to applicable federal requirements, including but not limited to, a maximum achievable control technology (MACT) standard.

B. Any stationary source that has applied for a Part 70 permit in a timely manner and in conformance with Rule \_\_\_\_ (the District's Title V rule), and is awaiting final action by the District and U.S. EPA.

C. Any stationary source required to obtain an operating permit under Rule \_\_\_\_ (the District's Title V rule) for any reason other than being a major source.

D. Any stationary source with a valid Part 70 permit.

Notwithstanding subsections B and D above, nothing in this section shall prevent any stationary source which has had a Part 70 permit from qualifying to comply with this rule in the future in lieu of maintaining an application for a Part 70 permit or upon rescission of a Part 70 permit if the owner or operator demonstrates that the stationary source is in compliance with the emissions limitations in section 3.1 below or an applicable alternative operational limit in section 6.1 below.

- 1.5 Exemption, Stationary Source with a Limitation on Potential to Emit: this rule shall not apply to any stationary source which has a valid operating permit with federally-enforceable conditions or other federally-enforceable limits limiting its potential to emit to below the applicable threshold(s) for a major source as defined in sections 2.7 and 2.8 below.
- 1.6 Within three years of the effective date of Rule \_\_\_\_ (District Title V rule), the District shall maintain and make available to the public upon request, for each stationary source subject to this rule, information identifying the provisions of this rule applicable to the source.
- 1.7 This rule shall not relieve any stationary source from complying with requirements pertaining to any otherwise applicable preconstruction permit, or to replace a condition or term of any preconstruction permit, or any provision of a preconstruction permitting program.<sup>3</sup> This does not preclude issuance of any preconstruction permit with conditions or terms necessary to ensure compliance with this rule.

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<sup>3</sup>For example, PSD, NSR, and ATC

## 2.0 DEFINITIONS

All terms shall retain the definitions provided under 40 CFR Part 70.2 [alternatively, the District Title V rule] unless otherwise defined herein.

- 2.1 12-month period: A period of twelve consecutive months determined on a rolling basis with a new 12-month period beginning on the first day of each calendar month.
- 2.2 Actual Emissions: The emissions of a regulated air pollutant from a stationary source for every 12-month period. Valid continuous emission monitoring data or source test data shall be preferentially used to determine actual emissions. In the absence of valid continuous emissions monitoring data or source test data, the basis for determining actual emissions shall be: throughputs of process materials; throughputs of materials stored; usage of materials; data provided in manufacturer's product specifications, material volatile organic compound (VOC) content reports or laboratory analyses; other information required by this rule and applicable District, State and Federal regulations; or information requested in writing by the District. All calculations of actual emissions shall use U.S. EPA, California Air Resources Board (CARB) or District approved methods, including emission factors and assumptions.
- 2.3 Alternative Operational Limit: A limit on a measurable parameter, such as hours of operation, throughput of materials, use of materials, or quantity of product, as specified in Section 6.0, Alternative Operational Limit and Requirements.
- 2.4 Emission Unit: Any article, machine, equipment, operation, contrivance or related groupings of such that may produce and/or emit any regulated air pollutant or hazardous air pollutant.
- 2.5 Federal Clean Air Act: The federal Clean Air Act (CAA) as amended in 1990 (42 U.S.C. section 7401 et seq.) and its implementing regulations.
- 2.6 Hazardous Air Pollutant: Any air pollutant listed pursuant to section 112(b) of the federal Clean Air Act.
- 2.7 Major Source of Regulated Air Pollutants (excluding HAPs): A stationary source that emits or has the potential to emit a regulated air pollutant (excluding HAPs) in quantities equal

to or exceeding the lesser of any of the following thresholds:

- A. 100 tons per year (tpy) of any regulated air pollutant;
- B. 50 tpy of volatile organic compounds or oxides of nitrogen for a federal ozone nonattainment area classified as serious, 25 tpy for an area classified as severe, or 10 tpy for an area classified as extreme; and
- C. 70 tpy of PM<sub>10</sub> for a federal PM<sub>10</sub> nonattainment area classified as serious.

Fugitive emissions of these pollutants shall be considered in calculating total emissions for stationary sources in accordance with 40 CFR Part 70.2 "Definitions- Major source(2)."

- 2.8 Major Source of Hazardous Air Pollutants: A stationary source that emits or has the potential to emit 10 tons per year or more of a single HAP listed in section 112(b) of the CAA, 25 tons per year or more of any combination of HAPs, or such lesser quantity as the U.S. EPA may establish by rule. Fugitive emissions of HAPs shall be considered in calculating emissions for all stationary sources. The definition of a major source of radionuclides shall be specified by rule by the U.S. EPA .
- 2.9 Part 70 Permit: An operating permit issued to a stationary source pursuant to an interim, partial or final Title V program approved by the U.S. EPA.
- 2.10 Potential to Emit: The maximum capacity of a stationary source to emit a regulated air pollutant based on its physical and operational design. Any physical or operational limitation on the capacity of the stationary source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design only if the limitation is federally enforceable.
- 2.11 Process Statement: An annual report on permitted emission units from an owner or operator of a stationary source certifying under penalty of perjury the following: throughputs of process materials; throughputs of materials stored; usage of materials; fuel usage; any available continuous emissions monitoring data; hours of operation;

and any other information required by this rule or requested in writing by the District.

2.12 Regulated Air Pollutant: The following air pollutants are regulated:

- A. Oxides of nitrogen and volatile organic compounds;
- B. Any pollutant for which a national ambient air quality standard has been promulgated;
- C. Any Class I or Class II ozone depleting substance subject to a standard promulgated under Title VI of the federal Clean Air Act;
- D. Any pollutant that is subject to any standard promulgated under section 111 of the federal Clean Air Act; and
- E. Any pollutant subject to a standard or requirement promulgated pursuant to section 112 of the federal Clean Air Act, including:
  1. Any pollutant listed pursuant to section 112(r) (Prevention of Accidental Releases) shall be considered a regulated air pollutant upon promulgation of the list.
  2. Any HAP subject to a standard or other requirement promulgated by the U.S. EPA pursuant to section 112(d) or adopted by the District pursuant to 112(g) and (j) shall be considered a regulated air pollutant for all sources or categories of sources: 1) upon promulgation of the standard or requirement, or 2) 18 months after the standard or requirement was scheduled to be promulgated pursuant to section 112(e)(3).
  3. Any HAP subject to a District case-by-case emissions limitation determination for a new or modified source, prior to the U.S. EPA promulgation or scheduled promulgation of an emissions limitation shall be considered a regulated air pollutant when the determination is made pursuant to section 112(g)(2). In case-by-case emissions limitation determinations, the HAP shall be considered a regulated air pollutant only for the individual source for which the emissions limitation determination was made.

### 3.0 EMISSION LIMITATIONS

- 3.1 Unless the owner or operator has chosen to operate the stationary source under an alternative operational limit specified in section 6.1 below, no stationary source subject to this rule shall emit in every 12-month period more than the following quantities of emissions:
- A. 50 percent of the major source thresholds for regulated air pollutants (excluding HAPs),
  - B. 5 tons per year of a single HAP,
  - C. 12.5 tons per year of any combination of HAPs, and
  - D. 50 percent of any lesser threshold for a single HAP as the U.S. EPA may establish by rule.
- 3.2 The APCO shall evaluate a stationary source's compliance with the emission limitations in section 3.1 above as part of the District's annual permit renewal process required by Health & Safety Code section 42301(e). In performing the evaluation, the APCO shall consider any annual process statement submitted pursuant to Section 5.0, Reporting Requirements. In the absence of valid continuous emission monitoring data or source test data, actual emissions shall be calculated using emissions factors approved by the U.S. EPA, CARB, or the APCO.
- 3.3 Unless the owner or operator has chosen to operate the stationary source under an alternative operational limit specified in section 6.1 below, the owner or operator of a stationary source subject to this rule shall obtain any necessary permits prior to commencing any physical or operational change or activity which will result in actual emissions that exceed the limits specified in section 3.1 above.

### 4.0 RECORDKEEPING REQUIREMENTS

Immediately after adoption of this rule, the owner or operator of a stationary source subject to this rule shall comply with any applicable recordkeeping requirements in this section. However, for a stationary source operating under an alternative operational limit, the owner or operator shall instead comply with the applicable recordkeeping and reporting requirements specified in Section 6.0, Alternative Operational Limit and Requirements. The recordkeeping requirements of this rule shall not

replace any recordkeeping requirement contained in an operating permit or in a District, State, or Federal rule or regulation.

- 4.1. A stationary source previously covered by the provisions in section 1.2 above shall comply with the applicable provisions of section 4.0 above and sections 5.0 and 6.0 below if the stationary source exceeds the quantities specified in section 1.2.A above.
- 4.2 The owner or operator of a stationary source subject to this rule shall keep and maintain records for each permitted emission unit or groups of permitted emission units<sup>4</sup> sufficient to determine actual emissions. Such information shall be summarized in a monthly log, maintained on site for five years, and be made available to District, CARB, or U.S. EPA staff upon request.

A. Coating/Solvent Emission Unit

The owner or operator of a stationary source subject to this rule that contains a coating/solvent emission unit or uses a coating, solvent, ink or adhesive shall keep and maintain the following records:

1. A current list of all coatings, solvents, inks and adhesives in use. This list shall include: information on the manufacturer, brand, product name or code, VOC content in grams per liter or pounds per gallon, HAPS content in grams per liter or pounds per gallon, or manufacturer's product specifications, material VOC content reports or laboratory analyses providing this information;
2. A description of any equipment used during and after coating/solvent application, including type, make and model; maximum design process rate or throughput; control device(s) type and description (if any); and a description of the coating/solvent application/drying method(s) employed;
3. A monthly log of the consumption of each solvent (including solvents used in clean-up and surface preparation), coating, ink and adhesive used; and

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<sup>4</sup>In some cases it may be appropriate to keep records on groups of emission units which are connected in series. Examples are internal combustion engines in the oil fields with a common fuel line, or a series of paint spray booths with a common feed.



4. All purchase orders, invoices, and other documents to support information in the monthly log.

B. Organic Liquid Storage Unit

The owner or operator of a stationary source subject to this rule that contains a permitted organic liquid storage unit shall keep and maintain the following records:

1. A monthly log identifying the liquid stored and monthly throughput; and
2. Information on the tank design and specifications including control equipment.

C. Combustion Emission Unit

The owner or operator of a stationary source subject to this rule that contains a combustion emission unit shall keep and maintain the following records:

1. Information on equipment type, make and model, maximum design process rate or maximum power input/output, minimum operating temperature (for thermal oxidizers) and capacity, control device(s) type and description (if any) and all source test information; and
2. A monthly log of hours of operation, fuel type, fuel usage, fuel heating value (for non-fossil fuels; in terms of BTU/lb or BTU/gal), percent sulfur for fuel oil and coal, and percent nitrogen for coal.

D. Emission Control Unit

The owner or operator of a stationary source subject to this rule that contains an emission control unit shall keep and maintain the following records:

1. Information on equipment type and description, make and model, and emission units served by the control unit;
2. Information on equipment design including where applicable: pollutant(s) controlled; control effectiveness; maximum design or rated capacity; inlet and outlet temperatures, and concentrations for each pollutant controlled; catalyst data

(type, material, life, volume, space velocity, ammonia injection rate and temperature); baghouse data (design, cleaning method, fabric material, flow rate, air/cloth ratio); electrostatic precipitator data (number of fields, cleaning method, and power input); scrubber data (type, design, sorbent type, pressure drop); other design data as appropriate; all source test information; and

3. A monthly log of hours of operation including notation of any control equipment breakdowns, upsets, repairs, maintenance and any other deviations from design parameters.

E. General Emission Unit

The owner or operator of a stationary source subject to this rule that contains an emission unit not included in subsections A, B or C above shall keep and maintain the following records:

1. Information on the process and equipment including the following: equipment type, description, make and model; maximum design process rate or throughput; control device(s) type and description (if any);
2. Any additional information requested in writing by the APCO;
3. A monthly log of operating hours, each raw material used and its amount, each product produced and its production rate; and
4. Purchase orders, invoices, and other documents to support information in the monthly log.

**5.0 REPORTING REQUIREMENTS**

- 5.1 At the time of annual renewal of a permit to operate under Rule \_\_\_\_\_ (the District's general permitting rule), each owner or operator of a stationary source subject to this rule shall submit to the District a process statement. The statement shall be signed by the owner or operator and certify that the information provided is accurate and true.

- 5.2 For the purpose of determining compliance with this rule, this requirement shall not apply to stationary sources which emit in every 12-month period less than or equal to the following quantities:
- A. For any regulated air pollutant (excluding HAPs),
    - 1. 25 tons per year including a regulated air pollutant for which the District has a federal area designation of attainment, unclassified, transitional, or moderate nonattainment,
    - 2. 15 tons per year for a regulated air pollutant for which the District has a federal area designation of serious nonattainment,
    - 3. 6.25 tons per year for a regulated air pollutant for which the District has a federal area designation of severe nonattainment,
  - B. 2.5 tons per year of a single HAP,
  - C. 6.25 tons per year of any combination of HAPs, and
  - D. 25 percent of any lesser threshold for a single HAP as the U.S. EPA may establish by rule.
- 5.3 A stationary source previously covered by provisions in section 5.2 above shall comply with the provisions of section 5.1 above if the stationary source exceeds the quantities specified in section 5.2.
- 5.4 Any additional information requested by the APCO under section 5.1 above shall be submitted to the APCO within 30 days of the date of request.

## 6.0 ALTERNATIVE OPERATIONAL LIMIT AND REQUIREMENTS

[The District may propose additional alternative operational limits]

The owner or operator may operate the permitted emission units at a stationary source subject to this rule under any one alternative operational limit, provided that at least 90 percent of the stationary source's emissions in every 12-month period are associated with the operation(s) limited by the alternative operational limit.

6.1 Upon choosing to operate a stationary source subject to this rule under any one alternative operational limit, the owner or operator shall operate the stationary source in compliance with the alternative operational limit and comply with the specified recordkeeping and reporting requirements.

- A. The owner or operator shall report within 24 hours to the APCO any exceedance of the alternative operational limit.
- B. The owner or operator shall maintain all purchase orders, invoices, and other documents to support information required to be maintained in a monthly log. Records required under this section shall be maintained on site for five years and be made available to District or U.S. EPA staff upon request.
- C. Gasoline Dispensing Facility Equipment with Phase I and II Vapor Recovery Systems

The owner or operator shall operate the gasoline dispensing equipment in compliance with the following requirements:

- 1. No more than 7,000,000 gallons of gasoline shall be dispensed in every 12-month period.
  - 2. A monthly log of gallons of gasoline dispensed in the preceding month with a monthly calculation of the total gallons dispensed in the previous 12 months shall be kept on site.
  - 3. A copy of the monthly log shall be submitted to the APCO at the time of annual permit renewal. The owner or operator shall certify that the log is accurate and true.
- D. Degreasing or Solvent-Using Unit

The owner or operator shall operate the degreasing or solvent-using unit(s) in compliance with the following requirements:

1. a. If the solvents do not include methyl chloroform (1,1,1-trichloroethane), methylene chloride (dichloromethane), tetrachloroethylene (perchloroethylene), or trichloroethylene, no more than 5,400 gallons of any combination of solvent-containing materials and no more than 2,200 gallons of any one solvent-containing material shall be used in every 12-month period,.
  - b. If the solvents include methyl chloroform (1,1,1-trichloroethane), methylene chloride (dichloromethane), tetrachloroethylene (perchloroethylene), or trichloroethylene, no more than 2,900 gallons of any combination of solvent-containing materials and no more than 1,200 gallons of any one solvent-containing material shall be used in every 12-month period.
2. A monthly log of amount and type of solvent used in the preceding month with a monthly calculation of the total gallons used in the previous 12 months shall be kept on site.
  3. A copy of the monthly log shall be submitted to the APCO at the time of annual permit renewal. The owner or operator shall certify that the log is accurate and true.

E. Paint Spraying Unit<sup>5</sup>

The owner or operator shall operate the paint spraying unit(s) in compliance with the following requirements:

1. The total usage rate of all VOC-containing materials, including but not limited to, coatings, thinners, reducers, and cleanup solution shall not exceed \_\_\_\_\_ gallons in every 12-month period.
2. A monthly log of the gallons of VOC-containing materials used in the preceding month with a

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<sup>5</sup>To be determined based on District SIP rules

monthly calculation of the total gallons used in the previous 12 months shall be kept on site.

3. A copy of the monthly log shall be submitted to the APCO at the time of annual permit renewal. The owner or operator shall certify that the log is accurate and true.

F. Diesel-Fueled Emergency Standby Engine(s) with Output Less Than 1,000 Brake Horsepower

[Depending on the District's federal ozone attainment status, the District will adopt either subsection 1.a, 1.b, or 1.c below.]

The owner or operator shall operate the emergency standby engine(s) in compliance with the following requirements:

1. a. For a federal ozone area designation of attainment, unclassified, transitional, or moderate nonattainment, the emergency standby engine(s) shall not operate more than 5,200 hours in every 12-month period and shall not use more than 265,000 gallons of diesel fuel in every 12-month period.
- b. For a federal ozone nonattainment area classified as serious, the emergency standby engine(s) shall not operate more than 2,600 hours in every 12-month period and shall not use more than 133,000 gallons of diesel fuel in every 12-month period.
- c. For a federal ozone nonattainment area classified as severe, the emergency standby engine(s) shall not operate more than 1,300 hours in 12-month period and shall not use more than 66,000 gallons of diesel fuel in every 12-month period.
2. A monthly log of hours of operation, gallons of fuel used, and a monthly calculation of the total hours operated and gallons of fuel used in the previous 12 months shall be kept on site.
3. A copy of the monthly log shall be submitted to the APCO at the time of annual permit renewal. The owner or operator shall certify that the log is accurate and true.

6.2 The owner or operator of a stationary source subject to this rule shall obtain any necessary permits prior to commencing any physical or operational change or activity which will result in an exceedance of an applicable operational limit specified in section 6.1 above.

7.0 **VIOLATIONS**

7.1 Failure to comply with any of the applicable provisions of this rule shall constitute a violation of this rule. Each day during which a violation of this rule occurs is a separate offense.

7.2 A stationary source subject to this rule shall be subject to applicable federal requirements for a major source, including Rule \_\_\_\_ (District Title V rule) when the conditions specified in either subsections A or B below, occur:

- A. Commencing on the first day following every 12-month period in which the stationary source exceeds a limit specified in section 3.1 above and any applicable alternative operational limit specified in section 6.1, above, or
- B. Commencing on the first day following every 12-month period in which the owner or operator can not demonstrate that the stationary source is in compliance with the limits in section 3.1 above or any applicable alternative operational limit specified in section 6.1 above.

**Attachment 3**

**November 2, 1994 Letter Describing Use of Minor NSR Programs**

Mr. Jason Grumet  
Executive Director, Northeast States  
for Coordinated Air Use Management  
129 Portland Street  
Boston, Massachusetts 02114

Dear Mr. Grumet:

This is in response to Mr. Michael Bradley's March 22, 1994 letter to Mary Nichols seeking clarification of the Federal enforceability of State's existing minor new source review (NSR) programs. It is my understanding that some of the NESCAUM States are interested in using their existing minor NSR programs to limit a source's potential to emit so as to allow sources to legally avoid being considered a major source for title V purposes.

In my November 3, 1993 memorandum entitled "Approaches to Creating Federally-Enforceable Emission Limits," I described approaches that States could use to limit a source's potential to emit for title V purposes. While a number of approaches are acceptable, the Environmental Protection Agency (EPA) has promoted the use of State operating permits programs approved under sections 110 and 112(1), pursuant to the criteria set forth in the June 28, 1989 Federal Register. Among other things, these criteria include an opportunity for public and EPA review and require that permit conditions be practically enforceable. Several States have followed EPA's recommendation and have either adopted these requirements or are in the process of doing so.

The Agency recognizes the use of other approaches as well. In response to your question, EPA's position is that minor NSR permits issued under programs that have already been approved into the State implementation plan (SIP) are federally enforceable. Thus, EPA allows the use of federally-enforceable minor NSR permits to limit a source's potential to emit provided that the scope of a State's program allows for this and that the minor NSR permits are in fact enforceable as a practical matter.

Because minor NSR programs are essentially preconstruction review programs for new sources and modifications to existing sources, minor NSR programs can generally be used to limit a



source's potential emissions when such limits are taken in conjunction with a preconstruction permit action. In addition, please note that the term "modification" generally encompasses both physical changes and changes in the method of operation at an existing source (see Clean Air Act section 111(a)(4)). Thus, the scope of some, though not all, minor NSR programs is broad enough to be used to also limit a source's potential to emit for nonconstruction-related events. This occurs where the modification component of State programs extends to both physical changes and changes in the method of operation. In these cases, where a voluntary reduction in the method of operation (e.g., limit in hours of operation or production rate) by itself is considered a modification for minor NSR permitting, a source may reduce its hours of operation or production rate and make such a change federally enforceable through limits in its minor NSR permit.

Some States' minor NSR programs are written so as to preclude a source from limiting its potential to emit absent an increase in emissions. There may be other limitations on the scope of these programs as well. Since there is considerable variation among State minor NSR programs, a review of any individual State program would be necessary to determine its ability to limit a source's potential to emit. It may be beneficial for States to contact the appropriate EPA Regional Office if there are questions about the scope of the SIP-approved minor NSR program.

Minor NSR programs have generally been used in the past to limit a source's potential to emit for criteria pollutants. There is a growing need for sources to limit their potential to emit for toxic pollutants as well. The EPA is currently considering ways in which a State may limit the potential to emit of toxic pollutants, including possible uses of existing minor NSR programs. I plan to keep you and others aware of our efforts in this regard.

You should also be aware that a recent court ruling has called into question the Federal enforceability of a State minor NSR permit that does not meet the public participation requirements of current EPA regulations despite SIP approval of the State's program [see United States v. Marine Shale Processors, No. 90-1240 (E.D. La.) (bench ruling), June 15, 1994]. In that case involving extensive alleged violations of the permit terms, the court held that EPA could not enforce the terms of the minor NSR permit. The court subsequently ruled that the company could not rely on the permit to limit its potential to emit, and thus was liable for having failed to obtain a major

NSR permit. The outcome of this case suggests that States should proceed cautiously in relying on minor NSR programs to limit potential to emit where the program does not actually provide public participation.

In summary, EPA has provided guidance on approaches that are available to limit a source's potential to emit. The Agency recommends approaches that meet the criteria set forth in the June 28, 1989 Federal Register. Many States are taking action to adopt such programs. With respect to minor NSR permits, EPA believes that permits conditions issued in accordance with existing State minor NSR programs that have been approved into the SIP, and which are enforceable as a practical matter, are federally enforceable and can be used to limit potential to emit. Caution is advised, however, with respect to permits that do not meet procedural requirements. These programs are primarily preconstruction review programs although in many cases they can also limit a source's potential to emit in conjunction with operational changes.

As you have noted, title V issues are complicated and resource intensive. In order for the title V program to be successfully implemented, it is important that States and EPA work cooperatively in developing operating permits programs. Your comments and recommendations on program development issues are welcome.

We appreciate this opportunity to be of service and trust that this information will be helpful to you.

Sincerely,

John S. Seitz  
Director  
Office of Air Quality Planning  
and Standards

cc: Air Division Director, Regions I-X

**Attachment 4**

**January 25, 1995 Guidance on Practicable Enforceability**

SUBJECT: Guidance on Enforceability Requirements for Limiting Potential to Emit through SIP and §112 Rules and General Permits

FROM: Kathie A. Stein, Director  
Air Enforcement Division

TO: Director, Air, Pesticides and Toxics  
Management Division, Regions I and IV  
Director, Air and Waste Management Division,  
Region II  
Director, Air, Radiation and Toxics Division,  
Region III  
Director, Air and Radiation Division,  
Region V  
Director, Air, Pesticides and Toxics Division,  
Region VI  
Director, Air and Toxics Division,  
Regions VII, VIII, IX, and X

Attached is a guidance document developed over the past year by the former Stationary Source Compliance Division in coordination with the Air Enforcement Division, Office of Air Quality Planning and Standards, OAR's Office of Policy Analysis and Review, and the Office of General Counsel, as well as with significant input from several Regions.

A number of permitting authorities have begun discussions with or have submitted programs for review by EPA that would provide alternative mechanisms for limiting potential to emit. Several authorities have submitted SIP rules and at least one State has been developing a State general permit approach. We believe that this guidance is important to assist the EPA Regions as well as States in approving and developing such approaches.

For additional information regarding this guidance, please contact me or Clara Poffenberger of my staff at (202) 564-8709.

cc: John Rasnic, Director  
Manufacturing, Energy, and Transportation Division  
Office of Compliance

Air Branch Chiefs, Regions I - X

## **Enforceability Requirements for Limiting Potential to Emit Through SIP and §112 Rules and General Permits**

### Introduction

As several EPA guidances describe, there are several mechanisms available for sources to limit potential to emit. EPA guidances have also described the importance of practical enforceability of the means used to limit potential to emit. This guidance is intended to provide additional guidance on practical enforceability for such limits. We provide references for guidances on practical enforceability for permits and rules in general and provide guidance in this document for application of the same principles to "limitations established by rule or general permit," as described in the guidance document issued January 25, 1995, entitled "Options for Limiting Potential to Emit (PTE) of a Stationary Source under section 112 and Title V of the Clean Air Act (Act)." The description is as follows:

Limitations established by rules. For less complex plant sites, and for source categories involving relatively few operations that are similar in nature, case-by-case permitting may not be the most administratively efficient approach to establishing federally enforceable restrictions. One approach that has been used is to establish a general rule which creates federally enforceable restrictions at one time for many sources (these rules have been referred to as "prohibitory" or "exclusionary" rules<sup>1</sup>). The concept of exclusionary rules is described in detail in the November 3, 1993 memorandum ["Approaches to Creating Federally Enforceable Emissions Limits," from John S. Seitz]. A specific suggested approach for VOC limits by rule was described in EPA's memorandum dated October 15, 1993 entitled "Guidance for State Rules for Optional Federally-Enforceable Emissions Limits Based Upon Volatile Organic Compound (VOC) Use." An example of such an exclusionary rule is a model rule developed for use in California. (The California model rule is attached, along with a discussion of its applicability to other situations--see Attachment 2). Exclusionary rules are included in a State's SIP or 112 program and generally become effective upon approval by the EPA.

General permits. A concept similar to the exclusionary rule is the establishment of a general permit for a given source type. A general permit is a single permit that establishes terms and conditions that must be complied with by all sources subject to that permit. The establishment of a general permit could provide for emission limitations in a one-time permitting process, and thus avoid the need to issue separate permits for each source. Although this concept is generally thought of as an element of Title V permit programs, there is no reason that a State or local agency could not submit a general permit program as a SIP submittal aimed at creating synthetic minor sources. Additionally, FESOP [Federally Enforceable State Operating Permit, usually referring to Title I State Operating Permit Programs approved under the criteria established by EPA in the June 28, 1989 Federal Register notice, 54 FR 27274] programs can include general permits as an element of the FESOP program being approved into the SIP. The advantage of a SIP general permit, when compared to an exclusionary rule,

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<sup>1</sup> The EPA prefers the term "exclusionary rule" in that this phrase is a less ambiguous description of the overall purpose of these rules.

is that upon approval by the EPA of the State's general permit program, a general permit could be written for an additional source type without triggering the need for the formal SIP revision process. (January 25, 1995, Seitz and Van Heuvelen memorandum, page 4.)

### SIP or § 112 Rules

Source-category standards approved in the SIP or under 112, if enforceable as a practical matter, can be used as federally enforceable limits on potential to emit. Such provisions require public participation and EPA review. Once a specific source qualifies under the applicability requirements of the source-category rule, additional public participation is not required to make the limits federally enforceable as a matter of legal sufficiency since the rule itself underwent public participation and EPA review. The rule must still be enforceable as a practical matter in order to be considered federally enforceable. A source that violates this type of rule limiting potential to emit below major source thresholds or is later determined not to qualify for coverage under the rule, could be subject to enforcement action for violation of the rule and for constructing or operating without a proper permit (a part 70 permit, a New Source Review permit, or operating without meeting §112 requirements, or any combination thereof).

### General Permits

The Title V regulations set out provisions for general permits covering numerous similar sources. The primary purpose of general permits is to provide a permitting alternative where the normal permitting process would be overly burdensome, such as for area sources under section 112. General permits may be issued to cover any category of numerous similar sources, including major sources, provided that such sources meet certain criteria laid out in 40 CFR part 70. Sources may be issued general permits strictly for the purpose of avoiding classification as a major source. In other words, general permits may be used to limit the potential to emit for numerous similar sources. However, general permits must also meet both legal and practical federal enforceability requirements.

With respect to legal sufficiency, the operating permit regulations provide that once the general permit has been issued after opportunity for public participation and EPA and affected State review, the permitting authority may grant or deny a source's request to be covered by a general permit without further public participation or EPA or affected State review. The action of granting or denying the source's request is not subject to judicial review. A general permit does not carry a

permit shield. A source may be subject to enforcement action for operating without a part 70 permit if the source is later determined not to qualify for coverage under the general permit. Sources covered by general permits must comply with all part 70 requirements.

#### State SIP or 112(1) General Permits

Another mechanism available to limit potential to emit is a general permit program approved into the SIP or under section 112(1), the hazardous air pollutant program authority. This mechanism allows permitting authorities to issue and revise general permits consistent with SIP or 112(1) program requirements without going through the SIP or 112(1) approval process for each general permit or revision of a general permit. The program is also separate from title V, like title I state operating permits, and issuance and revisions of the permits are not required to comply with title V procedures.

Once a program is approved, issuing and revising general permits should be significantly less burdensome and time-consuming for State legislative and rulemaking authorities. The EPA review should also be less burdensome and time-consuming. After a program is approved, permitting authorities have the flexibility to submit and issue general permits as needed rather than submitting them all at once as part of a SIP submittal. Given the reduced procedural burden, permitting authorities should be able to issue general permits to small groups or categories or sources rather than attempt to cover broad categories with a generic rule. We anticipate that specific permit requirements for general permits may be readily developed with the assistance of interested industry groups.

The State general permit approach may allow sources to meet the federal enforceability requirements more easily than other approaches. However, to use this approach, States must have a federally enforceable program that provides the State the authority to issue such permits; to accomplish this, EPA must approve the program into the SIP or pursuant to section 112(1) of the Clean Air Act.

#### Enforceability Principles

In 1989, in response to challenges from the Chemical Manufacturers Association and other industry groups, EPA reiterated its position that controls and limitations used to limit a source's potential to emit must be federally enforceable. See 54 FR 27274 (June 28, 1989). Federally enforceable limits can be established by Clean Air Act programs such as NSPS, NESHAPs, MACTs, and SIP requirements. However, source-specific

limits are generally set forth in permits. Generally, to be considered federally enforceable, the permitting program must be approved by EPA into the SIP and include provisions for public participation. In addition, permit terms and conditions must be practicably enforceable to be considered federally enforceable. EPA provided specific guidance on federally enforceable permit conditions in a June 13, 1989 policy memo "Limiting Potential to Emit in New Source Permitting" from John Seitz and in the June 28, 1989 Federal Register notice (54 FR 27274). Additional guidance can also be found in United States v. Louisiana Pacific, 682 F. Supp. 1122 (D. Colo. 1987), 682 F. Supp. 1141 (D. Colo. 1988), which led to these guidance statements and a number of other memoranda covering practicable enforceability as it relates to rolling averages, short-term averages, and emission caps. See "Use of Long Term Rolling Averages to Limit Potential to Emit," from John B. Rasnic to David Kee, February 24, 1992; "Limiting Potential to Emit" from Mamie Miller to George Czerniak, August 5, 1992; "Policy Determination on Limiting Potential to Emit for Koch Refining Company's Clean Fuels Project", from John B. Rasnic to David Kee, March 13, 1992; and "3M Tape Manufacturing Division Plant, St. Paul, Minnesota" from John B. Rasnic to David Kee, July 14, 1992.

In 1987, EPA laid out enforceability criteria that SIP rules must meet. See "Review of State Implementation Plans and Revisions for Enforceability and Legal Sufficiency" from Michael Alushin, Alan Eckert, and John Seitz, September 3, 1987 (1987 SIP memo). The criteria include clear statements as to applicability, specificity as to the standard that must be met, explicit statements of the compliance time frames (e.g. hourly, daily, monthly, or 12-month averages, etc.), that the time frame and method of compliance employed must be sufficient to protect the standard involved, recordkeeping requirements must be specified, and equivalency provisions must meet certain requirements.

Based on these precedents, this guidance describes six enforceability criteria which a rule or a general permit must meet to make limits enforceable as a practical matter. In general, practical enforceability for a source-specific permit term means that the provision must specify (1) a technically accurate limitation and the portions of the source subject to the limitation; (2) the time period for the limitation (hourly, daily, monthly, annually); and (3) the method to determine compliance including appropriate monitoring, recordkeeping and reporting. For rules and general permits that apply to categories of sources, practical enforceability additionally requires that the provision (4) identify the categories of sources that are covered by the rule; (5) where coverage is optional, provide for notice to the permitting authority of the



source's election to be covered by the rule; and (6) recognize the enforcement consequences relevant to the rule.

This guidance will address requirements (4) and (5) first as they are concepts that are unique to rules and general permits.

#### A. Specific Applicability

Rules and general permits designed to limit potential to emit must be specific as to the emission units or sources covered by the rule or permit. In other words, the rule or permit must clearly identify the category(ies) of sources that qualify for the rule's coverage. The rule must apply to categories of sources that are defined specifically or narrowly enough so that specific limits and compliance monitoring techniques can be identified and achieved by all sources in the categories defined.

A rule or general permit that covers a homogeneous group of sources should allow standards to be set that limit potential to emit and provide the specific monitoring requirements. (Monitoring is more fully addressed in section D.) The State can allow for generic control efficiencies where technically sound and appropriate, depending on the extent of the application and ability to monitor compliance with resultant emission limits. Similarly, specific and narrow applicability may allow generic limits on material usage or limits on hours of operation to be sufficient. For example, a rule or general permit that applies to fossil-fuel fired boilers of a certain size may allow for limits on material usage, such as fuel-type and quantity. A rule or general permit that applies only to standby diesel generators or emergency generators may allow restrictions on hours of operation to limit potential to emit. The necessary compliance terms (i.e., monitoring or recordkeeping) associated with any of these limits, such as with hours of operation, can readily be specified in the rule or the general permit itself.

General permits under Title V are assumed to include this enforceability principle because the Part 70 regulations set out specific criteria that States should consider in developing their general permit provisions (See 57 FR 32278). These factors include requirements that

"categories of sources covered by general permits should be generally homogenous in terms of operations, processes, and emissions. All sources in the category should have essentially similar operations or processes and emit pollutants with similar characteristics."

Another factor stated is "sources should be subject to the same or substantially similar requirements governing operation, emissions, monitoring, reporting, or recordkeeping." Examples of

source categories appropriate for general permits include: degreasers, dry cleaners, small heating systems, sheet fed printers, and VOC storage tanks (see 57 FR 32278).

B. Reporting or Notice to Permitting Authority

The rule or general permit should provide specific reporting requirements as part of the compliance method. Although the compliance method for all sources must include recordkeeping requirements, the permitting authority may make a determination that reporting requirements for small sources would provide minimal additional compliance assurance. Where ongoing reporting requirements are determined not to be reasonable for a category of sources, the rule or general permit should still provide that the source notify the permitting authority of its coverage by the rule or the permit. In the limited situation where all the sources described in a source category are required to comply with the all of the provisions of a rule or general permit, notice is not needed. However, where there are no reporting requirements and no opt-in provisions, the permitting authority must provide the public with the names and locations of sources subject to the rule or permit.

For Title V general permits, Part 70 requires sources to submit an application for a general permit which must be approved or disapproved by the permitting authority. For SIP or §112 rules and SIP or §112 general permits, in response to receiving the notice or application, the permitting authority may issue an individual permit, or alternatively, a letter or certification. The permitting authority may also determine initially whether it will issue a response for each individual application or notice, and may initially specify a reasonable time period after which a source that has submitted an application or notice will be deemed to be authorized to operate under the general permit or SIP or §112 rule.

### C. Specific Technically Accurate Limits

The rule or general permit issued pursuant to the SIP or §112 must specify technically accurate limits on the potential to emit. The rule or general permit must clearly specify the limits that apply, and include the specific associated compliance monitoring. (The compliance monitoring requirements are discussed further in the next section.) The standards or limits must be technically specific and accurate to limit potential to emit, identifying any allowed deviations.

The 1987 policy on SIP enforceability states that limitations "must be sufficiently specific so that a source is fairly on notice as to the standard it must meet." For example, "alternative equivalent technique" provisions should not be approved without clarification concerning the time period over which equivalency is measured as well as whether the equivalency applies on a per source or per line basis or is facility-wide.

Further, for potential to emit limitations, the standards set must be technically sufficient to provide assurance to EPA and the public that they actually represent a limitation on the potential to emit for the category of sources identified. Any presumption for control efficiency must be technically accurate and the rule must provide the specific parameters as enforceable limits to assure that the control efficiency will be met. For example, rules setting presumptive efficiencies for incineration controls applied to a specific or broad category must state the operating temperature limits or range, the air flow, or any other parameters that may affect the efficiency on which the presumptive efficiency is based. Similarly, material usage limits such as fuel limits, as stated above, require specifying the type of fuel and may require specifying other operating parameters.

A rule that allows sources to submit the specific parameters and associated limits to be monitored may not be enforceable because the rule itself does not set specific technical limits. The submission of these voluntarily accepted limits on parameters or monitoring requirements would need to be federally enforceable. Absent a source-specific permit and appropriate review and public participation of the limits, such a rule is not consistent with the EPA's enforceability principles.

### D. Specific Compliance Monitoring

The rule must specify the methods to determine compliance. Specifically, the rule must state the monitoring requirements, recordkeeping requirements, reporting requirements, and test methods as appropriate for each potential to emit limitation; and

clarify which methods are used for making a direct determination of compliance with the potential to emit limitations.

"Monitoring" refers to many different types of data collection, including continuous emission or opacity monitoring, and measurements of various parameters of process or control devices (e.g. temperature, pressure drop, fuel usage) and recordkeeping of parameters that have been limited, such as hours of operation, production levels, or raw material usage. Without a verifiable plantwide emission limit, verifiable emission limits must be assigned to each unit or group of units subject to the rule or general permit. Where monitoring cannot be used to determine emissions directly, limits on appropriate operating parameters must be established for the units or source, and monitoring must verify compliance with those limits. The monitoring must be sufficient to yield data from the relevant time period that is representative of the source's compliance with the standard or limit. Continuous emissions monitoring, especially in the case of smaller sources, is not required.

#### E. Practicably Enforceable Averaging Times

The averaging time for all limits must be practicably enforceable. In other words, the averaging time period must readily allow for determination of compliance. EPA policy expresses a preference toward short term limits, generally daily but not to exceed one month. However, EPA policy allows for rolling limits not to exceed 12 months or 365 days where the permitting authority finds that the limit provides an assurance that compliance can be readily determined and verified. See June 13, 1989 "Guidance on Limiting Potential to Emit," February 24, 1992 Memorandum "Use of Long Term Rolling Averages to Limit Potential to Emit" from John Rasnic to David Kee, and March 13, 1992 "Policy Determination on Limiting Potential to Emit for Koch Refining Company's Clean Fuels Project" from John B. Rasnic to David Kee, stating that determinations to allow an annual rolling average versus a shorter term limit must be made on a case by case basis. Various factors weigh in favor of allowing a long term rolling average, such as historically unpredictable variations in emissions. Other factors may weigh in favor of a shorter term limit, such as the inability to set interim limits during the first year. The permitting agency must make a determination as to what monitoring and averaging period is warranted for the particular source-category in light of how close the allowable emissions would be to the applicability threshold.

#### F. Clearly Recognized Enforcement

Violations of limits imposed by the rule or general permit that limit potential to emit constitute violations of major

source requirements. In other words, the source would be violating a "synthetic minor" requirement which may result in the source being treated as a major source under Titles I and V. The 1989 Federal Register Notice provides for separate enforcement and permitting treatment depending on whether the source subsequently chooses to become major or remain minor. Thus, violations of the rule or general permit or violation of the specific conditions of the rule or general permit subjects the source to potential enforcement under the Clean Air Act and state law. The operating permit rule states that notwithstanding the shield provisions of part 70, the source subject to a general permit may be subject to enforcement action for operating without a part 70 permit if the source is later determined not to qualify for the conditions and terms of the general permit. Moreover, violation of any of the conditions of the rule or general permit may result in a different determination of the source's potential to emit and thus may subject the source to major source requirements and to enforcement action for failure to comply with major source requirements from the initial determination.

#### Rule Requirements for State General Permit Programs

As discussed above, general permit programs must be submitted to EPA for approval under SIP authority or under section 112(1), or both, depending on its particular pollutant application. SIP and 112(1) approval and rulemaking procedures must be met, including public notice and comment. The specific application of the enforceability principles for establishing State SIP or §112(1) general permit programs require that the rule establishing the program set out these principles as rule requirements. In other words, these principles must be specific rule requirements to be met by each general permit.

The rule establishing the program must require that (1) general permits apply to a specific and narrow category of sources; (2) sources electing coverage under general permits, where coverage is not mandatory, provide notice or reporting to the permitting authority; (3) general permits provide specific and technically accurate (verifiable) limits that restrict the potential to emit; (4) general permits contain specific compliance monitoring requirements; (5) limits in general permits are established based on practicably enforceable averaging times; and (6) violations of the permit are considered violations of the State and federal requirements and may result in the source being subject to major source requirements.

In addition, since the rule establishing the program does not provide the specific standards to be met by the source, each general permit, but not each application under each general permit, must be issued pursuant to public and EPA notice and

comment. The 1989 Federal Register notice covering enforceability of operating permits requires that SIP operating permit programs issue permits pursuant to public and EPA notice and comment. Title V requires that permits, including general permits, be issued subject to EPA objection.

Finally, sources remain liable for compliance with major source requirements if the specific application of a general permit to the source does not limit the source's potential to emit below major source or major modification thresholds. (The limits provided in these mechanisms may actually limit the potential to emit of sources but may not limit the potential to emit for some sources to below the threshold necessary to avoid major source requirements. For example, a general permit for industrial boilers may in fact provide limits that are sufficient to bring a source with only two or three boilers to below the subject thresholds, but a source with more than three boilers may have a limited PTE but not limited below the major source threshold.) Also, where the source is required to use another mechanism to limit potential to emit, i.e., a construction permit, the general permit may not be relied upon by the source or the State to limit potential to emit.

Permits issued pursuant to the approved program, meeting the above requirements, are adequate to provide federally enforceable limits on potential to emit for New Source Review, title V, and section 112 programs as long as they are approved pursuant to SIP (section 110) and section 112(1) authorities.

**Attachment 5**  
**Example Language for Affirming Limits**

[Note: the following language is taken from the Thursday December 17, 1992 Federal Register, page 59931. To place this excerpt into context, readers are encouraged to obtain the entire Federal Register notice]

"The USEPA today finds the existing Illinois SIP regulations to be consistent with federal requirements. If the State followed its own procedures, each permit issued under this regulation was subject to public notice and prior USEPA review. Therefore, USEPA will consider all operating permits issued which were processed in a manner consistent with both the State regulations and the five criteria to be federally enforceable with the promulgation of this rule provided that any permits that the State wishes to make federally enforceable are submitted to USEPA and accompanied by documentation that the procedures approved today have been followed. USEPA will expeditiously review any individual permits so submitted to ensure their conformity to the program requirements."

November 14, 1995

MEMORANDUM

SUBJECT: Calculating Potential to Emit (PTE) and Other  
Guidance for Grain Handling Facilities

FROM: John S. Seitz, Director  
Office of Air Quality Planning and Standards (MD-10)

TO: Director, Office of Ecosystem Protection, Region I  
Director, Air and Waste Management Division,  
Region II  
Director, Air, Radiation, and Toxics Division,  
Region III  
Director, Air, Pesticides, and Toxics Management  
Division, Region IV  
Director, Air and Radiation Division, Region V  
Director, Multimedia Planning and Permitting  
Division,  
Region VI  
Director, Air, RCRA, and TSCA Division, Region VII  
Assistant Regional Administrator, Office of  
Pollution  
Prevention, State and Tribal Assistance, Region VIII  
Director, Air and Toxics Division, Region IX  
Director, Office of Air, Region X

The purpose of this guidance is to address the determination of PTE for grain elevators and other issues for grain handling facilities.

Background

In a memorandum dated January 25, 1995, the Environmental Protection Agency (EPA) addressed a number of issues related to the determination of a source's PTE under section 112 and



title V of the Clean Air Act (Act). [Memorandum from John Seitz to EPA Air Directors entitled "Options for Limiting the Potential to Emit (PTE) of a Stationary Source Under Section 112 and Title V of the Clean Air Act," hereinafter referred to as the "January 25 memorandum"]. One of the issues discussed in the memorandum was the term "maximum capacity of a stationary source to emit under its physical and operational design," which is part of the definition of "potential to emit." The memorandum clarified that

inherent physical limitations and operational design features which restrict the potential emissions of individual emission units, should be taken into account. This clarification was intended to address facilities for which the theoretical use of equipment is much higher than could ever actually occur in practice. For such facilities, if their physical limitations or operational design features are not taken into account, the potential emissions could be overestimated and the source owner could be subject to the Act requirements affecting major sources. Although such source owners could accept enforceable limitations restricting the operation to its designed level, the EPA believes this administrative requirement to be unnecessary and burdensome.

On the topic of "physical and operational design," the January 25 memorandum provided a general discussion. In addition, the EPA committed to providing technical assistance on the type of inherent physical and operational design features that may be considered acceptable in determining the potential to emit for certain individual small source categories. The EPA is currently conducting category-specific analyses in support of this effort, and hopes as a result of these analyses to generate more general guidance on this issue as well. The purpose of this memorandum is to address the issue as it relates specifically to grain elevators, and to provide EPA guidance on other issues related to grain handling facilities.

The policies set forth in this memorandum represent official EPA guidance on this issue and are intended to provide guidance to State regulators on methods that the EPA believes are appropriate for sources whose potential emissions are, as a practical matter, restricted by inherent operational limitations. The policies set forth in this memorandum are intended solely as guidance, do not represent final Agency action, and cannot be relied upon to create any rights enforceable by any party.

In addition to today's guidance, there are two additional recent EPA activities that relate to emission calculations for grain elevators and other grain handling facilities. First, the EPA recently issued a policy memorandum entitled "Definition of Regulated Pollutant for Particulate Matter for Purposes of Title V," (Lydia Wegman to Regional Offices, October 16, 1995.) In this memorandum, the EPA recognizes PM-10 as the only regulated form of particulate matter for

purposes of determining applicability to title V major source requirements. Second, the EPA is issuing revised emission calculation methods (interim update to AP-42, section 9.9.1, "Grain Elevators and Processes") The combined result of the October 16 memorandum and the revised emission calculation methods is a substantial reduction in the particulate emission estimates from a given grain elevator and grain handling facilities.

#### Guidance for Grain Elevators

For purposes of today's guidance, a "country grain elevator" means any grain elevator that receives more than 50 percent of its grain from farmers in the immediate vicinity during the harvest season, and a grain terminal is an elevator that receives grain primarily from other elevators.

Grain elevators emit particulate matter, including PM-10, during the receiving, handling, and shipping of grain. The rate of particulate matter emitted is directly proportional to the amount of grain handled by the elevators.

The EPA recognizes that country grain elevators are clearly constrained in their operation, to the extent that they are designed to service, and as a matter of operation only service, a limited geographic area from which a finite amount of grain can be grown and harvested. Moreover, the principal determinant of which given elevator will be used by a farmer is the proximity of the elevator to the harvest. Consequently, a single elevator services essentially the same geographic area from year to year. The EPA believes that this constraint is "inherent" to the operation of the elevator (i.e., operation of the grain elevator is directly linked to a specific and definable harvest area). The grain handling and storage facilities at grain elevators are designed to handle very large amounts of grain in a relatively short period of time (i.e., at harvest). Although the physical capability exists to handle large amounts of grain throughout the year, such a year-round operation is clearly unachievable as a practical matter and does not occur in reality. Although the amount of grain harvested during any 1 year will vary somewhat, the EPA believes that an estimable and reasonable upper bound can be determined which would never be exceeded absent extraordinary circumstances.

For existing country grain elevators, the EPA has determined that a reasonable and realistic "upper-limit" estimate of the number of bushels of grain projected to be delivered to the elevator may be considered in identifying the "maximum capacity" of such elevators for the purpose of estimating their PTE. Consequently, the EPA does not recommend basing the potential to emit calculation for existing country grain elevators on a throughput estimate based upon year-round operation of the elevator at its maximum rate of operation.

Instead, the EPA recommends that the PTE be determined based upon a more realistic estimate of the maximum amount of grain that could be received during a record crop year in the geographic area served by the elevator. The EPA believes that the highest amount of grain received during the previous 5 years, multiplied times an adjustment factor of 1.2, will constitute a realistic upper bound on the amount of grain a country elevator could receive. The adjustment factor of 1.2 is designed to take into account additional considerations that might affect the maximum harvest including: (1) the possibility that the number of acres harvested in the local area could increase, (for example, if an increased percentage of acres in the growing region became available for planting because of changes in government policy); and (2) increases in crop yields.

The EPA expects that there may be rare cases where the future grain receipts in a given year could exceed the 1.2 times the historical production figure. Where this is the case, the maximum receipt estimate should be recalculated.

Example: The maximum amount of grain received during the previous 5 years for a given elevator is 2 million bushels. Consequently, the estimate of maximum receipt, to be used for purposes of determining the facility's potential to emit, is  $2 \times 1.2$ , or 2.4 million bushels. In some future year, 2.6 million bushels are received. At this point, the maximum receipt estimate becomes  $2.6 \times 1.2$ , or 3.1 million bushels.

The EPA believes that this guidance, in combination with the previously mentioned updates to emission calculation methods, will result in few, if any, country grain elevators exceeding the major source threshold for PM-10.

### Permitting of Nonmajor Sources

In response to recent questions, the EPA wishes to clarify the requirements of the title V program for nonmajor source grain elevators subject to section 111 or 112 standards. This issue is addressed in 40 CFR part 70, paragraph 70.3(b)(1), which allows States to exempt nonmajor sources from title V permitting until such time as the EPA completes a rulemaking to determine how the program should be structured in the future for nonmajor sources.

For grain elevators over a certain size, there is an existing new source performance standard (i.e., a section 111 standard) that was promulgated during the late 1970s. This same standard also applies to additional agriculturally-related facilities such as flour mills, corn mills (human consumption), and rice mills. Some sources covered by this standard may have potential emissions less than the major source threshold. For these nonmajor sources, as indicated in section 70.3(b)(1), the EPA has granted a temporary exemption from title V permitting. As noted, this temporary exemption from title V permitting is set to expire when the EPA completes a further rulemaking addressing permitting of nonmajor sources. However, it is the EPA's intent that this rulemaking or a separate rulemaking will establish a permanent exemption for grain elevators, feed mills, and other grain handling facilities that are nonmajor sources.

There are currently no applicable section 112 standards for the grain and feed industry. As indicated by paragraph 70.2(b)(2), the EPA will, for any future section 111 or 112 standards that may apply, determine whether to exempt any or all nonmajor sources from the requirement to obtain a title V permit at the time the standard is promulgated.

### Facilities with Low Actual Emissions

The EPA also believes it useful to reiterate its policy guidance with respect to sources with low annual rates of actual emissions. In the January 25 memorandum, the EPA announced a 2-year transition policy for plant sites emitting less than 50 percent of the major source threshold. Under this transition policy, sources emitting less than this amount, and keeping adequate records, are not required to be treated by States as major sources for purposes of determining

applicability of title V and section 112 requirements. The transition period in the memorandum expires in January 1997.

The EPA intends to promulgate rulemaking amendments that would extend permanent relief to low-emitting sources, excluding such sources from being classified as "major sources" for purposes of title V permitting. (The exact cutoff for what constitutes a low-emitting source would be determined in the rulemaking process). Such amendments are scheduled for completion before the end of the 2-year transition period. (If the amendments are not promulgated by January 1997, the transition period will be extended for the facilities addressed in this document until the above-mentioned amendments are finalized).

The EPA believes that these provisions for low-emitting sources will ease the regulatory burden for grain elevators, feed mills, and other agriculturally-related facilities. Using the recently adopted (November 1995) interim emission factors for PM-10, even on an uncontrolled basis, the EPA has determined that grain elevators with an actual throughput less than the values listed in Attachment 1 will not exceed 50 percent of the major source threshold. So long as adequate records of annual throughput are kept, sources handling less than those levels are considered by the EPA to be emitting less than the 50 percent cutoff and can be exempted from title V. Because these facilities are often well controlled, many grain terminals with greater throughputs will not be subject to title V permitting. In addition, preliminary calculations indicate that only the largest of feed mills are likely to exceed this cutoff.

#### Consideration of Control Measures

The effect of control devices and measures in grain handling facilities can be taken into account in determining whether a source can be considered a "low-emitting source" as described above, so long as adequate records are kept documenting the proper operation and maintenance of the control devices and measures.

The EPA and the grain industry are working to develop estimates of the effectiveness of oil addition as a control measure. The results of this effort should be available by later this year or early next year. Interim guidance on the

effectiveness of oil addition is available in the above-described revisions to section 9.9.1 of AP-42. Consistent with the provisions affecting other types of control devices or measures, the effectiveness of oil addition can be taken into account in determining whether actual emissions are below the cutoff for "low-emitting" facilities as described above.

For sources whose actual emissions exceed the cutoff described above, consistent with the EPA's general PTE policy, the effect of control measures (including oil addition) can be taken into account where those control devices and measures are subject to enforceable limits or are inherent to the operation of the facility. [Control measures that are "inherent" are those which are always being operated and maintained for reasons other than community air quality protection. Examples of inherent control measures would include (a) product collection devices for which the value of the product collected greatly exceeds the cost of the collection device, and (b) devices for which the primary purpose is to improve product quality control, to recover product, or to enhance production operating efficiency (for example, product recovery cyclones associated with operations such as pellet cooling at feed mills).]

There are a number of grain elevators that have "closed loop" systems in which conveyors are completely enclosed essentially from the grain unloading point to the point at which grain is deposited to the bin. Where this is the case, some agencies (for example, the State of Michigan) have made adjustments in the emission estimate to take this into account. The EPA agrees that such adjustments are appropriate, particularly in estimating emissions from the "headhouse" or "internal" portions of the emission factors. Further, in the case of feed mills, there are certain operations which can be totally enclosed. Where this is the case, the emission calculations should take this into account.

Cautions

This guidance is not intended to replace the establishment of operational limitations in permits to construct or operate when such limitations are deemed appropriate or necessary, such as the establishment of PTE limits in a minor source preconstruction permit for sources not yet in operation. (For such sources, there may not be a historical data base on crop production). Additionally, this memorandum is not intended to be used as the basis to rescind any such restrictions already in place.

This guidance should not be interpreted as having any effect on whether new source performance standards apply to a given elevator. The guidance is not intended to prevent any control agency from imposing requirements designed to provide for attainment of the national ambient air quality standards.

Distribution/Further Information

The Regional Offices should send this memorandum to States within their jurisdiction. Questions concerning specific issues and cases should be directed to the appropriate Regional Office. Regional Office staff may contact Tim Smith of the Integrated Implementation Group at 919-541-4718. The document is also available on the technology transfer network (TTN) bulletin board, under "Clean Air Act, Title V, Policy Guidance Memos." (Readers unfamiliar with this bulletin board may obtain access by calling the TTN help line at 919-541-5384).

## Attachment

cc: Chief, Air Branch, Regions I-X



**Grain Throughput associated with Uncontrolled PM-10 emissions of 50 tons/yr**

<b>Type of shipping/receiving</b>	<b>Grain</b>	<b>Total throughput (bushels)</b>
Truck or rail receiving/truck or rail shipping	Wheat Corn/soybeans Milo (sorghum)	32 million 14 million 20 million
Truck or rail receiving/barge shipping	Wheat Corn/soybeans Milo (sorghum)	24 million 10 million 15 million
Barge receiving/ship shipping	Wheat Corn/soybeans Milo (sorghum)	10 million 4.0 million 6.1 million
Truck or rail receiving/ship shipping	Wheat Corn/soybeans Milo (sorghum)	17 million 7.1 million 10 million

Notes:

1. This table indicates, based upon the EPA's recommended interim emission factors, the throughput associated with 50 tons per year of uncontrolled PM-10 emissions, which is 50 percent of the major source threshold for PM-10. (For a small number of geographic locations designated as serious PM-10 nonattainment areas, the major source threshold is 70 tons per year. For any elevators located in such areas, the above number should be multiplied times 0.7).

2. The estimates take into account: (a) receiving, (b) internal grain handling emissions, (c) bin vents, and (d) shipping. These are the sources that are generally present at a given terminal. If there are other significant sources of PM-10 at a given terminal, these would need to be considered.

3. Calculations assume density of wheat = 60 lb/bushel. Density of corn, soybeans, milo (sorghum) = 56 lb/bushel.

BEFORE THE ADMINISTRATOR  
 UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

IN THE MATTER OF )	
ORANGE RECYCLING AND ETHANOL )	ORDER RESPONDING TO
PRODUCTION FACILITY, PENCOR- )	PETITIONERS' REQUEST THAT
MASADA OXYNOL, LLC )	THE ADMINISTRATOR OBJECT
)	TO ISSUANCE OF A
Permit ID: 3-3309-00101/00003 )	STATE OPERATING PERMIT
Facility NYSDEC ID: 3330900101 )	
)	
Issued by the New York State )	
Department of Environmental Conservation )	Petition No.: II-2001-05
)	
)	

ORDER DENYING PETITIONS FOR OBJECTION TO PERMIT

The New York State Department of Environmental Conservation, Region 3 (NYSDEC) issued a modified state operating permit to Pencor-Masada Oxynol, LLC (Masada<sup>1</sup>) on October 1, 2001, incorporating changes made pursuant to the Order of the Environmental Protection Agency (EPA) Administrator, dated May 2, 2001 (May 2001 Order). *See* 66 FR 30904, June 8, 2001.<sup>2</sup> This Order was in response to petitions received regarding the initial permit issued to authorize construction and operation of the Orange Recycling and Ethanol Production Facility in Middletown, NY. The modified Masada permit was issued pursuant to title V of the Clean Air Act (CAA or the Act), 42 U.S.C. §§ 7661-7661f, CAA §§ 501-507, the federal implementing regulations, 40 CFR Part 70, and the New York State permitting regulations.

In October and November 2001, the EPA received four petitions from 14 different petitioners, requesting that EPA object to the issuance of the modified Masada permit. Specifically, we received separate petitions from Jeanette Nebus, Robert C. LaFleur, president of Spectra Environmental Group, Inc. (Spectra), and Deborah Glover. We also received a fourth petition with 11 signatories: Talkini Alves, Vidal Milland, Kristine Hannon, Bridget Coppola, Nicole Young, Kathleen House, Campbell House, Susan Cohen, Debbie Carlisle, Roberta Constantino, and Elizabeth Collard.

Under section 505(b)(1) of the Act, EPA may object to the issuance of a permit on its

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<sup>1</sup> Pencor-Masada Oxynol, LLC is the corporate owner of the Orange Recycling and Ethanol Production Facility to be built in Middletown, New York. In the interests of clarity, this Order uses the term "Masada" to encompass both the corporate owner and the Middletown facility at issue here. The phrase "the Masada permit" refers to the permit issued by NYSDEC for the Middletown facility.

<sup>2</sup> The full text of the Administrator's May 2001 Order is available at [http://www.epa.gov/region07/program\\_s/artd/air/title5/petitiondb/petitions/masada\\_decision2000.pdf](http://www.epa.gov/region07/program_s/artd/air/title5/petitiondb/petitions/masada_decision2000.pdf).

own initiative if the Administrator finds that it is “not in compliance with the applicable requirements of the [Act], including the requirements of an applicable [state] implementation plan.” *See also* 40 CFR 70.8(c). The Act and EPA’s implementing regulations provide that, if the Administrator does not object in writing, “any person” may petition the Administrator to object to the permit. CAA § 505(b)(2); 40 CFR § 70.8(d).

In the May 2001 Order, I granted petitions from Spectra Environmental Group Inc. and Ms. Jeanette Nebus to object to the NYSDEC permit on two grounds: inadequate public notice with respect to the limits on the facility’s potential to emit (PTE) - specifically permit conditions 36 and 41 - and the applicability of the record keeping requirements of the Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units (NSPS) Subpart Db. The remaining petitions were denied. Pursuant to the Order, NYSDEC reopened the comment period and, ultimately, issued the revised permit on October 1, 2001. NYSDEC’s new permitting action with respect to these narrow issues, namely its consideration of the PTE limits and NSPS Db record keeping requirements, is an appropriate subject matter for petitions under section 505(b)(2) of the Act.

The new petitions with respect to this facility raise a number of claims. Some relate to the October 2001 NYSDEC permit decision and some repeat issues previously addressed in the May 2001 Order. With respect to the NYSDEC revised permit decision, the petitioners allege that (1) the permit fails to include the physical or operational limits necessary to properly limit the source’s PTE, (2) the permit limits actual emissions instead of potential emissions, (3) the annual emissions limits are set too close to major thresholds, (4) the hourly emissions limits have too long an averaging period, (5) the consequences of deviations from or exceedances of permit limits are not severe enough, and (6) the inspection and maintenance measures for data from continuous emissions monitors (CEM) should be clarified. Additionally, the petitioners raise two issues with respect to the applicable requirements of the NSPS, suggesting that the requirement to calculate the annual capacity factor needs clarification, and the criteria and implications of the use of an emerging technology should be specified. The petitioners request that EPA object to the issuance of the Masada permit pursuant to section 505(b)(2) of the Act and 40 CFR § 70.8(d) for these reasons.

The petitioners also reassert several of the claims from previous petitions, including the applicability of the major New Source Review and Prevention of Significant Deterioration programs, and the emissions of toxic air pollutants. These issues, which were addressed in great detail in the May 2001 Order, were not part of NYSDEC’s October 2001 permit decision and are thus beyond the scope of this title V petition process. Accordingly, EPA denies all such claims that do not relate to the defined scope of the NYSDEC October 2001 permitting decision.

Finally, one of the petitions raises concerns about environmental justice. While the May 2001 Order addressed issues regarding NYSDEC’s compliance with Executive Order 12898, the new petition questions EPA’s compliance with the Executive Order. This issue will be discussed below in section ILC.

In sum, EPA has performed an independent review of the petitioners’ claims. Based on

review of all the information before me, including the initial Masada permit of July 25, 2000, the modified permit of October 1, 2001, my previous Order of May 2, 2001, and the information provided by the petitioners in the petitions, I hereby deny the petitions for the reasons set forth in this Order.

## **I. STATUTORY AND REGULATORY FRAMEWORK**

Major stationary sources of air pollution and other sources covered by title V are required to obtain an operating permit that includes emission limitations and such other conditions as are necessary to assure compliance with applicable requirements of the Act. See CAA §§ 502(a) and 504(a). Section 502(d)(1) of the Act calls upon each State to develop and submit to EPA an operating permit program to meet the requirements of title V. EPA granted interim approval to the title V operating permit program submitted by the State of New York effective December 9, 1996. 61 Fed. Reg. 57589 (Nov. 7, 1996); see also 61 Fed. Reg. 63928 (Dec. 2, 1996) (correction); 40 CFR Part 70, Appendix A. EPA subsequently granted full approval to New York's program effective November 30, 2001. 66 Fed. Reg. 63180 (Dec. 5, 2001).

The title V operating permit program does not generally impose new substantive air quality control requirements (which are referred to as “applicable requirements”), but does require permits to contain monitoring, record keeping, reporting, and other compliance requirements to assure compliance by sources with existing applicable requirements. 57 Fed. Reg. 32250, 32251 (July 21, 1992). One purpose of the title V program is to enable the source, EPA, States, and the public to clearly understand the regulatory requirements applicable to the source and whether the source is meeting those requirements. Thus, the title V operating permits program is a vehicle for assuring that existing air quality control requirements are appropriately applied to facility emission units in a single document and assuring compliance with these requirements.

Under section 505(a) of the Act and 40 CFR § 70.8(a), States are required to submit to EPA for review all operating permits proposed for issuance, following the close of the public comment period. EPA is authorized under section 505(b)(1) of the Act and 40 CFR § 70.8(c) to review proposed permits, and object to permits that fail to comply with applicable requirements of the Act, including the State's implementation plan (and the associated public participation requirements), or the requirements of 40 CFR Part 70.

If EPA does not object to a permit on its own initiative, section 505(b)(2) of the Act and 40 CFR § 70.8(d) provide that any person may petition the Administrator, within 60 days of the expiration of EPA's 45-day review period, to object to the permit. Petitions must, in general, be based on objections to the permit that were raised with reasonable specificity during the public comment period. When a petitioner asks EPA to object to a title V permit, a petitioner must provide enough information for EPA to discern the basis for its petition. The statute provides that a petition for review does not stay the effectiveness of the permit or its requirements if the permit was issued after the expiration of EPA's 45-day review period and prior to an EPA objection. If EPA objects to a permit in response to a petition and the permit has been issued, the permitting authority or EPA will modify, terminate, or revoke and reissue such a permit

consistent with the procedures in 40 CFR §§ 70.7(g)(4) or (5)(i) and (ii) for reopening a permit for cause.

## **II. ISSUES RAISED BY THE PETITIONERS**

The Administrator's Order of May 2, 2001, directed the NYSDEC to reopen the Masada permit to allow additional public comments on the methodology for limiting the potential emissions of the facility. Also, EPA directed NYSDEC to incorporate the portions of the NSPS Subpart Db applicable to the gasifier. The NYSDEC took the necessary steps to remedy these deficiencies. The petitioners have now requested that EPA object to Masada's modified permit based on a variety of alleged flaws in the PTE-limiting strategy and the supporting permit terms. Petitioners also have concerns with the NSPS requirements and EPA's compliance with the Executive Order 12898 on environmental justice.

### **A. Adequacy of Permit Provisions Limiting Masada's Potential To Emit (PTE)**

#### **1. Need for Physical or Operational PTE Limits**

Several of the petitioners argue that the PTE limits in Masada's permit are inadequate because they are not based on physical or operational limitations. Petitioners Nebus and Glover, quoting from EPA's June 13, 1989 *Guidance on Limiting Potential to Emit in New Source Permitting*,<sup>3</sup> (hereinafter "1989 Guidance"), argue that "short term limits are the most useful and reasonable way to restrict and thereby verify limits on potential to emit." Petitioner Nebus demands that the permit contain operational constraints, including "hours of operations, controls, amounts of materials and fuels, input and throughput, limits on what the source does and how much capacity they have." Petitioners Alves et al. also argue in favor of strictly enforced hourly limits and limitations on hours of operation and production rates. Petitioner LaFleur claims that the NYSDEC and EPA have employed unenforceable blanket emissions limitations in the permit, and that Masada is unable to correlate process feedstock and ethanol production with emissions. We are addressing these claims under a common heading, since all of these claims relate to the need for physical or operational restrictions on the facility's PTE.

The Clean Air Act does not specifically address how to calculate a facility's PTE. EPA's regulatory definition of "potential to emit"<sup>4</sup> refers generally to physical and operational

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<sup>3</sup> This memorandum was transmitted from Terrell E. Hunt, Associate Enforcement Counsel, Air Enforcement Division, Office of Enforcement and Compliance Monitoring and John S. Seitz, Director, Stationary Source Compliance Division, Office of Air Quality Planning and Standards, to EPA Regional air directors, EPA Regional Counsels, other EPA headquarters offices and the Chief of the Environmental Enforcement Section at the Department of Justice.

<sup>4</sup> EPA regulations define "potential to emit" as "the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as (continued...)"

constraints, but leaves room for interpretation about what forms of practically enforceable limitations may be appropriate in particular circumstances. Thus, in addition to the 1989 Guidance cited by the petitioners, which discusses strategies for limiting potential emissions from newly constructed facilities, EPA has issued several subsequent guidance documents on these issues.<sup>5</sup> These documents illustrate that the Clean Air Act and the implementing regulations allow for a flexible, case-by-case evaluation of appropriate methods for ensuring practical enforceability of PTE limits. The key consideration throughout these policy and guidance documents is whether the terms and conditions that limit the potential emissions are, in fact, enforceable as a practical matter.

Masada's permit relies on a 365-day "rolling cumulative total" emissions limit for nitrogen oxides (NO<sub>x</sub>) and sulfur dioxide (SO<sub>2</sub>), with emissions recorded each day and added to the total from the previous 364 days to determine an annual emissions total each day. To support this approach, the permit requires extensive data collection procedures and quality assurance measures, including stack testing and direct real-time continuous emissions measurements (CEM) to track the total daily emissions from the facility. As discussed below, EPA finds that this rolling cumulative methodology is a practically enforceable and effective means of limiting PTE in this case.

The 1989 Guidance cited by some of the petitioners specifically contemplates PTE limits based solely on an emissions limit in particular circumstances. For example, the 1989 Guidance recognizes that emissions limits, coupled with the requirement to install, maintain and operate a CEM system to determine compliance, may be appropriate where setting operating parameters for control equipment is infeasible. 1989 Guidance, at 8. Likewise, the 1989 Guidance notes that "emissions limits are more easily enforceable than operating or production limits" in volatile organic compound surface coating operations where the emissions limit is combined with a requirement to calculate daily emissions. *Id.*

Petitioners have not demonstrated that NYSDEC erred in determining that it was appropriate to employ such emissions limits, coupled with a CEMs system, in this permit.

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<sup>4</sup>(...continued)

part of its design if the limitation or the effect it would have on emissions is federally enforceable. Secondary emissions do not count in determining the potential to emit of a stationary source." 40 CFR 52.21(b)(4).

<sup>5</sup> See, e.g., Memorandum entitled "Guidance an[d] Enforceability Requirements for Limiting Potential to Emit through SIP and §112 Rules and General Permits," from Kathie A. Stein, Director, Air Enforcement Division, Office of Enforcement and Compliance Assurance, to Regional Air Directors, dated January 25, 1995; Memorandum entitled "3M Tape Manufacturing Division Plant, St. Paul, Minnesota," from John B. Rasnic, Director, Stationary Source Compliance Division, EPA's Office of Air Quality Planning and Standards, to David Kee, Director, EPA Region V Air and Radiation Division, dated July 14, 1992; Memorandum entitled "Policy Determination on Limiting Potential to Emit for Koch Refining Company Clean Fuels Project," from John Rasnic to David Kee, dated March 13, 1992; Memorandum entitled "Use of Long Term Rolling Averages to Limit Potential to Emit," from John Rasnic to David Kee, dated February 24, 1992. These memos are available on EPA's Title V Policy and Guidance Database, at <http://www.epa.gov/region07/programs/artd/air/policy/search.htm>.

Masada's operations will have significant fluctuations due to the variability of the processed waste, making an operating parameter-based PTE limit less appropriate. The emissions-based PTE limit discussed below recognizes this fact, and provides Masada with operational flexibility accordingly. Moreover, Masada will be measuring its emissions on a real-time basis using CEMs, thus obviating the need to limit and monitor operating parameters as a surrogate for emissions.<sup>6</sup> Thus, the petitioners have not demonstrated that it was inappropriate for NYSDEC to use the PTE limit to restrict Masada's emissions directly, rather than its operations or production.

Although it is generally preferred that PTE limitations be as short-term as possible (e.g., not to exceed one month), EPA guidance also allows permits to be written with longer term limits if they are rolled (meaning recalculated periodically with updated data) on a frequent basis (e.g., daily or monthly). The 1989 Guidance recognizes that such longer rolling limits may be appropriate for sources with "substantial and unpredictable annual variation in production." 1989 Guidance, at 9. Similarly, the Agency explained in a 1995 guidance document that "EPA policy allows for rolling limits not to exceed 12 months or 365 days where the permitting authority finds that the limit provides an assurance that compliance can be readily determined and verified."<sup>7</sup> Annual limits rolled on a daily basis are entirely appropriate where, as here, the operations of the facility will fluctuate throughout the year and CEMs are used to ensure practical enforceability. Thus, contrary to petitioners' assertions, shorter term limits are not always essential to a practically enforceable limit.

Thus, EPA finds that the permit is consistent with the Clean Air Act, EPA's implementing regulations, and Agency policy and guidance. EPA denies the petitions with regard to this issue.

## 2. Actual emissions vs. PTE

Petitioners Nebus and Glover assert that the permit constrains the actual emissions, rather than potential emissions, of the facility. Ms. Nebus claims that "the issued Masada permit limits actual emissions, but not PTE." She then elaborates that the permit only warns the facility when it is getting close to the limit, and does not effectively limit the facility because there are no

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<sup>6</sup> This is consistent with prior EPA practice in appropriate circumstances. See e.g., Memorandum entitled "3M Tape Manufacturing Division Plant, St. Paul, Minnesota," from John Rasnic to David Kee, dated July 14, 1992 ("a federally enforceable emissions limit may be used ... to limit the potential to emit as long as a continuous emissions monitor (CEM) or an acceptable alternative is used."); and Memorandum entitled "Policy Determination on Limiting Potential to Emit for Koch Refining Company Clean Fuels Project," from John Rasnic to David Kee, dated March 13, 1992 ("Use of an emission limit to restrict potential to emit ... is acceptable provided that emissions can be and are required to be readily and periodically determined or calculated.")

<sup>7</sup> Memorandum entitled "Guidance and Enforceability Requirements for Limiting Potential to Emit through SIP and §112 Rules and General Permits," from Kathie A. Stein, Director, Air Enforcement Division, Office of Enforcement and Compliance Assurance, to Regional Air Directors, dated January 25, 1995.

operational constraints. Petitioner Glover states that, “this permit disregards PTE and is based on actual emissions.”

In order to be considered practically enforceable, an emissions limit must be accompanied by terms and conditions that require a source to effectively constrain its operations so as to not exceed the relevant emissions threshold. These terms and conditions must also be sufficient to enable regulators and citizens to determine whether the limit has been exceeded and, if so, to take appropriate enforcement action. In other words, a source may not lawfully exceed that limit. Therefore, under EPA’s regulatory framework, the source does not have the "potential to emit" above that limit. This is true whether the limit restricts emissions directly or restricts specific operating parameters, as petitioners would prefer. As discussed above in #1, EPA believes that Masada’s permit limits are practically enforceable. Therefore, they effectively limit Masada’s potential emissions and EPA denies the petitions on this basis.

### 3. Annual limits too close to major thresholds

Petitioners LaFleur, Nebus and Alves et al. each remark on either the unreliability of the emissions estimates, or the level at which the annual limits were set for NO<sub>x</sub> and SO<sub>2</sub>. Petitioner LaFleur states that, “Masada has not provided adequate data nor substantiation of its emissions estimates.” Petitioners Alves et al. claim that “the emissions calculations are simply not reliable or realistic.” Petitioner Nebus states that the SO<sub>2</sub> annual emissions should be limited to less than 246 tpy and NO<sub>x</sub> should be limited to less than 99.5 tpy<sup>8</sup>. EPA finds that these individual claims relate to each other, and is reading them to mean that petitioners request the annual limits to be lowered to provide a greater margin of compliance, due to the uncertainty in the facility’s emissions estimates.

This issue was addressed in great detail in the May 2001 Order, and EPA continues to disagree that there is a need for a greater margin of compliance between Masada’s PTE limits and the applicable major source thresholds. Although EPA agrees that there is some uncertainty in Masada’s estimates, it is unrealistic to expect precise emission factors prior to construction in cases where the process involves new technology and the facility is the first of its kind. The fact that there is some uncertainty regarding the estimates, however, is yet another reason to require careful monitoring of actual emissions.

I already concluded in the May 2001 Order that, based on the Agency’s review of the best information currently available, the source’s emissions estimates are sufficiently credible to serve as a reasonable basis for determining that the PTE limits can be met by the source operating as planned. May 2001 Order, at 24. I also determined that the CEM system, operated properly as required by the permit, provides reliable data to assure that Masada’s emissions stay

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<sup>8</sup> Notwithstanding the determination that the Masada facility falls within a 250 tpy source category, the Clean Air Act and NYSDEC regulations (6 NYCRR 231) establish a 100 tpy major source cutoff for NO<sub>x</sub> for attainment areas that fall within the Ozone Transport Region, as is the case here.



below the major source thresholds. In addition, stringent measures are included in the permit for conservative treatment of missing CEM data, as well as limits on how much data can be missing.

As noted in the previous Order, a strength of the rolling cumulative total approach is that it accounts for the variability in the data. It does so by limiting the source's operational constraints to the actual measured emissions, not the emissions factor, which itself often contains inherent uncertainty when applied to an individual case. May 2001 Order, at 23. Indeed, Masada bears the risk if it has underestimated emissions in that the source would be required under the permit to constrain facility operations to keep emissions below the permit limits. Therefore, there is no need for additional margins of compliance, and EPA denies the petitions on this issue.

#### 4. Averaging of hourly emissions limits

Petitioner LaFleur claims that, "although pounds-per-hour mass limits are expressed in the permit, those limits are meaningless because compliance with those short term limits is to be demonstrated on a 30-day rolling average." Many traditional PTE limits are constructed using limitations on hourly emissions rates along with restrictions on hours of operation. Since this comment could be read broadly as relating to NYSDEC's October permitting decision regarding PTE, I am exercising my discretion to consider this comment as a valid petition issue.

Petitioner LaFleur is correct that Masada's PTE limits generally do not rely on the hourly mass limits to establish the facility as a minor source. Instead, as discussed above, they rely on a 365-day rolling total emissions limit, supported with stack testing and direct, real time data from CEM. The hourly limits are not directly related to the annual emissions limits specified in conditions 36 and 41.

EPA disagrees with petitioner that the hourly limits on mass emissions of NO<sub>x</sub> and SO<sub>2</sub> (see condition 81) are meaningless. They serve two important purposes. First, they provide a maximum operating level for the facility, which is used in calculating a fallback PTE if CEM data availability falls below 75% (see permit conditions 36.2 (I)(3) and 41.2 (I)(4)). Second, Masada is required to control its SO<sub>2</sub> emissions by 97% under 6 NYCRR 212.9(b), and the hourly limit of 61.2 lb/hr represents the level to which Masada must control. Therefore, the hourly limit serves to help make the 97% control limit practically enforceable. For the purposes described here, it is reasonable for the permit to allow the collected CEM data to be compiled and averaged every 24 hours, incorporating data from the most recent 30 days. EPA denies Mr. LaFleur's petition on this issue.

#### 5. Consequences

Petitioners Nebus and Glover both claim that there should be severe consequences to Masada for exceeding any emissions limit. They each have similar statements in their respective petitions, claiming that in all instances of excess emissions, the facility must immediately submit a major source permit application. Ms. Nebus goes a step further and contends that, in the case of an exceedance, the facility should be shut down until all requirements are met.

EPA believes the permit has sufficiently strong language about some of the possible consequences of exceeding a PTE limit or any permit violation. However, the permit does not, nor should it, list comprehensively all the potential enforcement ramifications of noncompliance. The permit describes varying degrees of consequences, depending on the nature of the violation. Conditions 36.2 (I)(4) and 41.2 (I)(5) specify that if the CEM data availability drops below 95%, a record keeping violation will be cited, after the first year of operation. Conditions 36.2 (I)(3) and 41.2 (I)(4) specify that if the CEM data availability drops below 75%, then a new methodology for calculating PTE is to be used. The maximum hourly emission rate is to be multiplied by 8,760 hours (365 days x 24 hours), resulting in PTE above major source thresholds, and Masada must promptly submit the appropriate permit applications for review under major NSR and/or PSD. Conditions 36.2 (I)(1) and (III)(1) and 41.2 (I)(1) & (III)(1) specify that any exceedance of the annual limit (99.5 tpy NO<sub>x</sub> or 246 tpy SO<sub>2</sub>) shall constitute 365 days of violation. Conditions 36.2 (I)(2) and 41.2 (I)(2) specify that if the facility exceeds 100 tpy NO<sub>x</sub> or 250 tpy SO<sub>2</sub>, then the facility shall be subject to major NSR and/or PSD as though construction had not yet commenced, and Masada must promptly submit the appropriate permit applications. It is important to note that if the facility exceeds these limits, not only does it need to get a major source permit, but it may be considered to have been in violation of PSD and/or NSR from the time it was initially constructed. Finally, condition 41.2 (I)(3), relating to SO<sub>2</sub>, specifies that if Masada applies to relax any permit restrictions and thus becomes a major source, then the facility must undergo PSD review as though construction had not yet commenced.

Petitioner Nebus also claims that Masada should shut down in the case of an exceedance. EPA disagrees that the permit needs to be revised to include such a statement. The CAA provides sufficient enforcement authority for EPA to enforce this permit and all other CAA requirements. *See e.g.* § CAA 113, 303, 502(b)(5)(E). States have similar authority. EPA and the state must retain discretion to determine what remedy is appropriate in any given situation. There may be occasions where NYSDEC or EPA may see a need to shut down a facility. As expressed in Condition 1 of the Facility Level section of the permit, NYSDEC has authority under 6 NYCRR 200.5 to seal access to any air contamination source.<sup>9</sup> EPA has authority to address similar compliance problems, including seeking an immediate injunction to cease operation. The authority to enforce this permit can not be expanded by this permit and it is not appropriate to attempt to specify or limit the response that will be taken in the case of a violation.

If EPA or NYSDEC requires Masada to submit a permit application because of a permit violation, a prompt submittal is sufficient, and there is no need to require an immediate application. NYSDEC has the authority to determine if an application is delayed beyond reason,

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<sup>9</sup> The commissioner may seal an air contamination source to prevent its operation if compliance with 6 NYCRR Chapter III is not met within the time provided by an order of the commissioner issued in the case of the violation. Sealing means labeling or tagging a source to notify any person that operation of the source is prohibited, and also includes physical means of preventing the operation of an air contamination source without resulting in destruction of any equipment associated with such source, and includes, but is not limited to, bolting, chaining or wiring shut control panels, apertures or conduits associated with such source. (6 NYCRR 200.5, page 5 of permit, Item 1.1(a))

and take appropriate action. In conclusion, EPA believes the permit is sufficient, and denies the petitions on this issue.

## 6. CEM Inspection and Maintenance

Petitioner Nebus expresses concerns that there are not enough backup measures or safeguards for times when the CEM are not operational. She also believes the permit should specify the schedule for inspecting and performing maintenance on the CEM.

EPA believes the permit is clear about what Masada should do in case of problems with the CEM. Conditions 36.2 (I)(3-4), (II)(5) and 41.2 (I)(4-5), 41.2 (II)(5) specify measures to take when CEM are not available. Calculations are to be made, substituting data according to 40 CFR §§ 75.31 or 75.33 (c)(1) (if availability above 95%) or permit-specific procedures (if availability below 95%). If CEM data availability ever falls below 75%, the facility is to use its maximum permitted hourly rate multiplied by 8,760 hours. Regarding maintenance of the systems, the terms at conditions 36.2 (II)(2-4) and 41.2 (II)(2-4) say to install, maintain and operate NO<sub>x</sub> and SO<sub>2</sub> CEM systems. Although these terms are not specific in how frequently to perform maintenance on the CEM, the permit specifies elsewhere that Masada will comply with 40 CFR Part 75 regarding the maintenance of CEM systems. Also, condition 76.2 (10) specifies that daily CEM drift tests and quarterly accuracy assessments must be performed on CEM measuring NO<sub>x</sub> from the package boiler (40 CFR 60 Appx. F, Procedure 1).

In conclusion, it should be noted that the burden is on the petitioners to demonstrate how the safeguards and related provisions in the permit are not adequate. The petitioners in this case have not met this burden to justify an objection to the permit. Finally, EPA believes that the permit is structured to provide a powerful incentive for Masada to maintain its CEM in optimum operating condition, because of the consequences associated with loss of data. EPA believes the permit is satisfactory in this regard, and denies the petitions on this issue.

## **B. New Source Performance Standards**

### 1. Annual Capacity Factor

Petitioners Nebus and Glover request clarification of what Masada's obligations are regarding some of the terms in the permit addressing Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units. The notification requirement at 40 CFR 60.49b (a) in Subpart Db, listed in permit condition 1-4, specifies four items that must be reported at the time the facility begins to operate. Specifically, sources are required to report (1) the design heat input capacity and identification of the fuels to be combusted, (2) a copy of any federally enforceable requirement that limits the annual capacity factor, (3) a calculation of the annual capacity factor at which the facility expects to operate, and (4) notification of any emerging technology that will be used for controlling emissions of sulfur dioxide. These factors are to be reported for each fuel that the facility expects to fire. In addition, permit condition 1-5 cites the record keeping requirement at 40 CFR § 60.49b(d), which requires calculation of the annual capacity factor using a rolling 12-month average. Petitioners Nebus and Glover believe

the permit should specify what fuels Masada uses, which fuel is most polluting, and how emissions are controlled.

Both the 124 mmBtu/hr natural gas-fired package boiler and the 245 mmBtu/hr fluidized bed gasifier are subject to 40 CFR 60.49b (d). Permit condition 75 incorporates this requirement for the package boiler, and is identical to permit condition 1-5 relating to the gasifier. In accordance with EPA's May 2001 Order, NYSDEC's October 2001 permitting decision reopened the permit to apply the NSPS to the gasifier, as the regulation was properly applied to the package boiler in the July 2000 permit. Therefore today's response addresses this comment as it relates to the gasifier.

EPA disagrees that the permit needs to be revised. The facility description states that the gasifier will combust only natural gas, lignin, processed biosolids and digester gas and the permit properly requires the facility to identify the fuels that are being combusted as part of the initial start-up notification. However, the issue of which fuel is most polluting and how the emissions from the firing of these fuels are controlled is not germane because the substantive emissions limitations of NSPS Db apply only to coal-fired and oil-fired steam generating units and thus do not apply to the gasifier.

Petitioner Nebus expresses a concern that the annual capacity factor is only calculated on a 12-month rolling average, instead of a daily average. She refers to the 365-day rolling total that exists elsewhere in the permit. EPA wishes to clarify that the annual capacity factor (ACF) is a ratio of how much energy a steam generating unit actually produces in a year divided by the maximum energy it could produce if it ran 8,760 hours (365 days x 24 hours) at its maximum heat input capacity. This factor is generally useful because some of the requirements in the NSPS vary depending on the ACF for a facility. In Masada's case, there are no applicable requirements that depend on the unit's calculated ACF, and Masada has no restrictions on how high its ACF can be. Therefore, EPA believes there would be no value if Masada were to calculate its ACF on a more frequent basis than required by the NSPS as stated. EPA denies the petitions on this issue.

## 2. Emerging Technologies

Petitioner Nebus expresses a concern that the permit is ambiguous as to whether Masada will use an emerging technology. Permit condition 1-4.2 (4), in applying the NSPS at Subpart Db (Industrial-Commercial-Institutional Steam Generating Units) to the gasifier, specifies that Masada must report whether it intends to use an emerging technology to control SO<sub>2</sub> emissions as part of the notification of startup. The regulations also specify that EPA must review and approve a determination of whether a technology qualifies as emerging for purposes of this rule. If the EPA determines that a technology qualifies as "emerging", then the regulation at 40 CFR 60.42b allows facilities using emerging technology to have more lenient control requirements for SO<sub>2</sub> than facilities using conventional technology.

Ms. Nebus claims the emerging technology should be named in the permit, and the public has a right to know whether the Administrator makes such a determination in a given case. EPA

agrees that in a case where the Administrator does determine that a technology qualifies as emerging, and the facility receives more lenient permit limits as a result, the public should be informed. However, as noted previously, the standards regulating emissions of SO<sub>2</sub> at 40 CFR 60.42b only apply to facilities that combust coal or oil. Because the gasifier does not combust these fuels, it is not subject to this standard.

EPA understands why there may be some confusion on the part of the petitioner regarding whether Masada will use an emerging technology. As it happens, the dry lime injection and spray dryer absorber to be used by Masada to control SO<sub>2</sub> emissions from the gasifier are conventional technologies. EPA denies the petitions on this issue.

### **C. Environmental Justice - Executive Order 12898**

EPA also received a petition arguing that EPA failed to evaluate the “environmental disparate impacts” on minority and low-income communities under Executive Order 12898.<sup>10</sup> The petition asserts that the proposed plant site is in the vicinity of a day care center, nursery, retirement home, senior citizen apartments, three public schools and three low-income housing projects. The petitioners state that EPA had extensive involvement in reviewing the NYSDEC permit, which now “carries EPA’s imprimatur.” Petitioners cite, by way of example, letters and meetings between EPA and the NYSDEC on the adequacy of the state’s proposed and draft permit, meetings and letters between Senator Richard Shelby (R-AL), Masada CEO Daryl Harms and Administrator Browner, and the Administrator’s May 2, 2001 Order.

Executive Order 12898, signed on February 11, 1994, focuses federal attention on the environmental and human health conditions of minority populations and low-income populations with the goal of achieving environmental protection for all communities. The Executive Order also is intended to promote non-discrimination in federal programs substantially affecting human health and the environment, and to provide minority and low-income communities access to public information on, and an opportunity for public participation in, matters relating to human health or the environment. It generally directs federal agencies to make environmental justice part of their mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority and low-income populations. I recently reaffirmed EPA’s commitment to ensuring that environmental justice is secured for all communities in a memorandum to senior Agency officials dated August 9, 2001.

Environmental justice issues can be raised and considered in a variety of actions carried out under the Clean Air Act, as for example when EPA or a delegated state issues a PSD or NSR

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<sup>10</sup> The petition was signed by the following people: Talkini Alves, Vidal Milland, Kristine Hannon, Bridget Coppola, Nicole Young, Kathleen House, Campbell House, Susan Cohen, Debbie Carlisle, Roberta Constantino, and Elizabeth Collard.

permit.<sup>11</sup> Unlike PSD or NSR permits, however, title V generally does not impose new, substantive emission control requirements, but rather requires that all underlying applicable requirements be included in the operating permit. Title V also includes important public participation provisions as well as monitoring, compliance certification and reporting obligations intended to assure compliance with the applicable requirements.

In this particular case, petitioners have not demonstrated that the Masada title V permit fails to properly identify and comply with the applicable underlying requirements of the Act, the approved state implementation plan, or the requirements of title V itself; thus, the petition to object to the permit must be denied. In addition, the record does not indicate that concerns about environmental justice and the application of the Executive Order were raised to NYSDEC during the comment period on the revised permit which ended on June 25, 2001. EPA's title V regulations provide that issues may not be raised for the first time in the context of a petition to the Administrator. 40 CFR §70.8(d). This issue is, therefore, not one which provides grounds for me to object to NYSDEC's issuance of the Masada permit.

However, as explained in the May 2001 Order, as a recipient of EPA financial assistance, the programs and activities of NYSDEC, including its issuance of the Masada permit, are subject to the requirements of title VI of the Civil Rights Act of 1964, as amended, and EPA's implementing regulations, which prohibit discrimination by recipients of EPA assistance on the basis of race, color, or national origin. 42 U.S.C. § 2000d et seq.; 40 CFR Part 7. The petitioners may file a complaint under title VI and EPA's title VI regulations if they believe that the state discriminated against them in violation of those laws by issuing the permit to Masada. The complaint, however, must meet the jurisdictional criteria that are described in EPA's title VI regulations in order for EPA to accept it for investigation.<sup>12</sup>

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<sup>11</sup> Indeed, as indicated in the response to another Title V permit petition, section 173(a)(5) of the Clean Air Act requires that a permit for a "major source" subject to the NSR program may be issued only if an analysis of alternative sites concludes that "the benefits of the proposed source significantly outweigh the environmental and social costs imposed as a result of its location, construction or modification." See Borden Chemical, Inc., Title V petition No. 6-01-01 (Dec. 22, 2000), pp. 34-44, available at [http://www.epa.gov/region07/programs/artd/air/title5/petitiondb/petitions/borden\\_response1999.pdf](http://www.epa.gov/region07/programs/artd/air/title5/petitiondb/petitions/borden_response1999.pdf).

<sup>12</sup> Under Title VI, a recipient of federal financial assistance may not discriminate on the basis of race, color, or national origin. Pursuant to EPA's Title VI administrative regulations, EPA's Office of Civil Rights conducts a preliminary review of Title VI complaints for acceptance, rejection, or referral. 40 CFR § 7.120(d)(1). A complaint should meet jurisdictional requirements as described in EPA's Title VI regulations. First, it must be in writing. Second, it must describe alleged discriminatory acts that may violate EPA's Title VI regulations. Title VI does not cover discrimination on the grounds of income or economic status. Third, it must be timely filed. Under EPA's Title VI regulations, a complaint must be filed within 180 calendar days of the alleged discriminatory act. 40 CFR § 7.120(b)(2). Fourth, because EPA's Title VI regulations only apply to recipients of EPA financial assistance, it must identify an EPA recipient that allegedly committed a discriminatory act. 40 CFR § 7.15.

**III. CONCLUSION**

For the reasons set forth above and pursuant to sections 505(b) and 505(e) of the Act, 42 U.S.C. §§ 7661d(b) and (e), and 40 CFR §§ 70.7(g)(4) or (5) and 70.8(d), I deny the petitions submitted by Jeanette Nebus, Robert LaFleur, Deborah Glover, Talkini Alves, Vidal Milland, Kristine Hannon, Bridget Coppola, Nicole Young, Kathleen House, Campbell House, Susan Cohen, Debbie Carlisle, Roberta Constantino, and Elizabeth Collard.

April 8, 2002

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Dated:

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Christine Todd Whitman,  
Administrator

BEFORE THE ADMINISTRATOR  
 UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

IN THE MATTER OF	)	
Pope and Talbot, Inc., Lumber Mill	)	
Spearfish, South Dakota	)	
	)	ORDER RESPONDING TO
	)	PETITIONERS' REQUEST THAT
Permit Number: 28.4401-09	)	THE ADMINISTRATOR OBJECT
	)	TO ISSUANCE OF A
	)	STATE OPERATING PERMIT
Issued by the South Dakota Department of	)	
Environment & Natural Resource,	)	
Air Quality Program	)	
	)	Petition Number: VIII-2006-04
	)	
	)	

**ORDER PARTIALLY GRANTING AND PARTIALLY DENYING  
 PETITION FOR OBJECTION TO PERMIT**

The United States Environmental Protection Agency (“EPA”) received a petition on April 11, 2006, from Biodiversity Conservation Alliance, Rocky Mountain Clean Air Action, Defenders of the Black Hills, Native Ecosystems Council, Prairie Hills Audubon Society of Western South Dakota, Center for Native Ecosystems, Nancy Hilding, Brian Brademeyer, and Jeremy Nichols (hereafter “Petitioners”). Petitioners requested that EPA object, pursuant to section 505(b)(2) of the Clean Air Act (“CAA” or “the Act”), 42 U.S.C. § 7661d(b)(2), to the issuance of a state operating permit to Pope and Talbot, Inc., for operation of a lumber mill facility located at 1501 West Oliver Street, Spearfish, South Dakota. The permittee will be referred to as “Pope and Talbot” for purposes of this Order. Pope and Talbot is a wood products company that produces finished lumber and wood pellets from raw logs. The Pope and Talbot facility (“Facility”) includes a wood waste boiler, a 1980 Lamb Debarker, a rotary drier, chip grinder, cooling tower and associated equipment. The various plant operations include: wood waste combustion, lumber drying in kilns, chip grinding, bark transfer and storage. The modified and renewed permit was issued by the South Dakota Department of Environment & Natural Resources (“DENR”) Air Quality Program on February 15, 2006, pursuant to Title V of the Act, the federal implementing regulations at 40 C.F.R. Part 70, and chapter 34A-1-21 of the South Dakota Codified Laws and the Air Pollution Control Regulations of the State of South Dakota.

The petition alleges that the February 15, 2006 Pope and Talbot, Inc. renewed and modified Title V permit fails to: (1) ensure compliance with Carbon Monoxide (CO)



emissions limits, (2) require sufficient periodic monitoring of CO emissions, (3) comply with Title V and South Dakota's State Implementation Plan (SIP) permit modification requirements, (4) require sufficient opacity monitoring, (5) require prompt reporting of deviations, (6) adequately support the determination that the Facility is not subject to Maximum Achievable Control Technology ("MACT") requirements for emissions of hazardous air pollutants, and (7) contains several problematic permit conditions that warrant objection. Petitioners have requested that EPA object to the issuance of the Pope and Talbot Title V permit for the foregoing reasons and pursuant to the requirements of section 505(b)(2) of the Act, 40 CFR § 70.8(d) and the applicable substantive federal and state regulations.

EPA has reviewed these allegations in accordance with the standard set forth by section 505(b)(2) of the Act, which places the burden on the Petitioners to "demonstrate to the EPA Administrator that the permit is not in compliance" with the applicable requirements of the Act or the requirements of 40 C.F.R. Part 70. *See also*, 40 C.F.R. § 70.8(c) (1); *New York Public Interest Research Group, Inc. v. Whitman*, 321 F.3d 316, 333 n.11 (2nd Cir. 2002).

In reviewing the merits of the various allegations made in the petition, EPA considered information in the permit record including: the petition; pertinent sections of the permit application; Mr. Nichols' November 11, 2005 comments to DENR in response to DENR's solicitation for public comment; DENR's December 22, 2005 response to Mr. Nichols comments (hereafter "Response to Comment"); final Operating Permit (Permit #28.4401-09) for Pope and Talbot, Inc. issued by DENR in February 15, 2006; Statement of Basis Document for Renewal with Modification of the Operating Permit issued by DENR in September 2005 (hereafter "Statement of Basis") and the Pope and Talbot Stack Test Report, February 2006. Based on the review of all the information before me, I grant in part and deny in part the Petitioners' request for an objection to the issuance of the renewed and modified Title V operating permit to Pope and Talbot, Inc. to operate a lumber mill in Spearfish, South Dakota for the reasons set forth in this Order.

## STATUTORY AND REGULATORY FRAMEWORK

Section 502(d)(1) of the Act calls upon each State to develop and submit to EPA an operating permit program to meet the requirements of Title V. EPA granted final interim approval to the Title V operating permit program submitted by the State of South Dakota effective April 21, 1995. 60 Fed. Reg. 15066 (March 22, 1995). EPA also granted final full approval to South Dakota's Title V operating permit program effective February 28, 1996. 61 Fed. Reg. 2720 (January 29, 1996). *See also* 40 C.F.R. Part 70, Appendix A. Major stationary sources of air pollution and other sources covered by Title V are required to apply for an operating permit that includes emission limitations and such other conditions as are necessary to assure compliance with applicable requirements of the Act. *See* CAA §§ 502(a) and 504(a).

The Title V operating permit program does not generally impose new substantive air quality control requirements (which are referred to as "applicable requirements") but

does require permits to contain monitoring, recordkeeping, reporting, and other conditions to assure compliance by sources with existing applicable emission control requirements. *See* 57 Fed. Reg. at 32250, 32251 (July 21, 1992). One purpose of the Title V program is to enable the source, EPA, States, and the public to better understand the applicable requirements to which the source is subject and to readily discern whether the source is meeting those requirements. Thus, the Title V operating permits program is a vehicle for ensuring that existing air quality control requirements are appropriately applied to a facility's emission units and that compliance with these requirements is assured.

Under section 505(a) of the Act and 40 C.F.R. § 70.8(a), States are required to submit all proposed Title V operating permits to EPA for review. Section 505(b)(1) of the Act authorizes EPA to object if a Title V permit contains provisions that are not in compliance with applicable requirements, including the requirements of the applicable SIP. *See also* 40 C.F.R. § 70.8(c)(1).

Section 505(b)(2) of the Act states that if the EPA does not object to a permit, any member of the public may petition the EPA to take such action, and the petition shall be based on issues that were raised with reasonable specificity during the public comment period, unless the petitioner demonstrates that it was impracticable to do so or unless the grounds for objection arose after the close of the comment period. *See also* 40 C.F.R. § 70.8(d). If EPA objects to a permit in response to a petition and the permit has been issued, EPA or the permitting authority will modify, terminate, or revoke and reissue such a permit consistent with the procedures in 40 C.F.R. §§ 70.7(g)(4) or (5)(i) and (ii) for reopening a permit for cause.

In a letter dated November 11, 2005, Petitioners submitted comments to the DENR during the public comment period, raising concerns with the draft Title V operating permit that provided a partial basis for this petition. DENR responded to the comments in a letter to the Petitioners dated December 22, 2005.

## ISSUES RAISED BY PETITIONERS

### **I. Carbon Monoxide (CO) Facility-wide Limit**

Petitioners raise several issues concerning the facility-wide CO limit contained in Pope and Talbot's permit. Petitioners claim that the permit fails to ensure compliance with the CO limit, because it does not contain conditions to ensure that the limit is not exceeded and does not require sufficient periodic monitoring of CO emissions. Petitioners assert further that because of these deficiencies with the CO limit, the Facility is not currently in compliance with Prevention of Significant Deterioration ("PSD") requirements at 40 CFR §52.21 et. seq. and a schedule of compliance may be needed.

Permit Condition 6.9 provides that Pope and Talbot shall not emit greater than or equal to 238 tons of CO per 12 months rolling period. DENR's Statement of Basis and Response to Comment states that DENR considers Pope and Talbot to be a major

stationary source for PSD purposes based on CO emissions, but that a PSD permit review and permit were not required because Pope and Talbot was constructed before the 1974 promulgation of the PSD program. (Statement of Basis at 11). DENR also determined that the proposed addition of a grinder and cyclone (units #12 and #13) were not major modifications for PSD purposes. Id.

DENR's Response to Comment further states "Pope and Talbot proposed equipment is not subject to the PSD program.... There are no federal or state regulations that require Pope and Talbot to accept limitations to avoid the PSD program if they are not applicable to it." (Response to Comment at 4). DENR explains the origin of the CO emission limit (despite its determination that PSD requirements do not apply) as follows: Pope and Talbot does not believe that DENR's estimated carbon monoxide emissions from the boiler are accurate and does not believe it should be considered an existing major source under the PSD program. Pope and Talbot has agreed to accept a facility-wide carbon monoxide limit...until it can be demonstrated through a stack test that the carbon monoxide emissions are not above the major source threshold under the PSD program." Id. at 2.

Based on DENR's Response to Comments and the discussion in the Statement of Basis, it appears that the limit established in Condition 6.9 is not required under the PSD program or required to avoid PSD requirements because the Pope and Talbot facility is considered a grandfathered source, and has not undergone a major modification for PSD purposes and thus is not subject to 40 C.F.R. § 52.21. However, there is also language in the permit suggesting that DENR established the condition based on a belief that it was required to avoid PSD applicability. Condition 9.1 of the permit provides that the Facility's exemption from PSD requirements is based on Condition 6.9.

EPA notes that DENR staff informed EPA staff in a recent (October 31, 2006) phone conversation that the source conducted a stack test and has demonstrated to the satisfaction of DENR that the CO emissions are below the PSD major source threshold. (February 2006 Stack Test Report, available from the South Dakota Department of Environment and Natural Resources (DENR), PMB 2020, Joe Foss Building, 523 East Capitol, Pierre, South Dakota 57501-3182)

**I (A) Permit Fails to Ensure Compliance with CO Limits**

Petitioners allege that the Title V permit fails to ensure compliance with the 238 tons per year (tpy) CO limit established in the permit to avoid PSD requirements. Petitioners argue that based on the operating rates allowed by the Title V permit, CO emissions can greatly exceed 238 tpy because the permit did not limit wood waste consumption, natural gas consumption and/or the hours of operation of the lumber mill. Petitioners allege that Condition 6.9 establishes the potential to emit ("PTE") emissions on the basis of an emission factor of 0.6 lb/MMBtu and that if the boiler were to operate 24 hours a day, seven days a week, CO emissions would amount to 267 tpy. Petitioners conclude that in order to ensure compliance with the permit limit of 238 tpy, there should be a limit on wood and natural gas consumption that correspond to such limit.

The Facility is required under Condition 6.9 together with Condition 5.8.4 of the Title V permit to monitor and record compliance with the plantwide CO synthetic minor source tpy limit (i.e., a limit established to keep the source's emissions below the major source threshold) established at the request of the Facility by the State under authority of the State operating permit requirements, ARSD 74:36:05:16.01(8). Condition 6.9 of the Title V permit establishes the plantwide CO emission limits at 238 tpy on a 12-month rolling average and specifies three equations prescribing exactly how the Facility must calculate total monthly CO emissions for the Boiler (unit #1) and the Dryer (unit #10). The permit requires the Facility to demonstrate that it is meeting limits on CO emissions by requiring monthly monitoring, recordkeeping and reporting of fuel usage (wood waste usage and natural gas fuel usage); recorded monthly fuels usage is multiplied by prescribed fuels emissions factors for CO, and this is summed with the previous months on a 12 month rolling basis to demonstrate continuous compliance with the annual 238 tpy CO limit. (See Permit Conditions 1.1, 5.1, 5.4, 5.8.4, and 6.9). Permit Standard Condition 1.1, Table 1, describes the emissions units, operations and processes at the Facility, including the 2 units with the potential to emit CO, the Dryer and the Boiler, their maximum operating emissions rate, and the associated controls.

In light of these Conditions, and in particular the 12-month rolling limit and terms of Condition 6.9, EPA does not agree that a specific limit on the amount of wood and natural gas consumed at the Facility is necessary to ensure compliance with Condition 6.9. Instead, the Facility has a 238 tpy annual limit on CO; compliance with this limit is assured by the monitoring requirements for CO emissions using the equations prescribed in Condition 6.9. Other conditions such as the annual compliance certification in Condition 5.6, recordkeeping and reporting requirements of Condition 5.1, monitoring log requirement of 5.8.4 and annual records requirements of Condition 5.4 can serve to assure compliance with the emission limit. Therefore, I deny the petition on this issue.

**I (B) Permit Lacks Sufficient Periodic Monitoring of CO Emissions**

Petitioners allege that limits on CO emissions are unenforceable as a practical matter due to the lack of sufficient periodic monitoring of CO emissions. Petitioners cite Condition 6.9 as deficient because, they argue, it only requires monitoring of CO emissions once every five years in accordance with Condition 7.6 and that it is insufficient under 40 C.F.R. § 70.6(a)(3)(i)(B). They further argue that one-time performance testing fails to constitute sufficient periodic monitoring in accordance with 40 C.F.R. § 70.6(a)(3)(i)(B). Petitioners cite the *Appalachian Power Co. v. Environmental Protection Agency*, 208 F. 3d 1015 (D.C. Cir 200) case to support their claim that one time test does not constitute periodic monitoring.

Petitioner's allegations regarding Conditions 6.9 and 7.6 are incorrect. The permit as discussed above requires the Facility to demonstrate that it is meeting the 238 tpy limit on plantwide CO emissions every month based on required monthly monitoring and recordkeeping of fuel usage (wood waste usage and natural gas fuel usage). (See Permit Conditions 5.1, 5.4, 5.8.4, and 6.9). For the reasons discussed above, we find that Conditions 5.4, 5.8.4, 5.1 and 6.9 requiring monitoring and recordkeeping, and prompt

deviation reporting meet the periodic monitoring requirement for demonstrating compliance with CO emissions. I, therefore, deny Petitioners' request on this issue.

**I(C) Schedule of Compliance May Need to be Included in the Title V Permit**

Petitioners allege that because the Title V permit fails to ensure that CO emissions are limited below the major source threshold under PSD, the permit is currently not in compliance with PSD requirements. Petitioners argue that because the Facility is in violation of an applicable requirement at the time of permit issuance, the permit must include a schedule containing a sequence of actions with milestones, leading to compliance with any applicable requirement in accordance with 42 U.S.C. § 7661b (b) (1) and 40 C.F.R. § 70.5(c) (8) (iii) (C).

I deny the petition on this claim because, for the reasons discussed above, the permit terms and conditions assure compliance with the 238 tpy CO limit; moreover, test results documented in the February 2006 stack test report prepared for the Facility seem to indicate the Facility plant-wide CO emissions are approximately 210 tpy; thus the emissions appear to be below the PSD major source level of 250 tpy. This suggests that, even in the absence of this 238 tpy limit, the Facility is not subject to PSD.

**II. Permit Fails to Ensure Compliance with South Dakota SIP and Title V Permit Modification Procedure**

Petitioners claim that the Condition 6.9 of the Title V permit allows CO emission factors for the boiler and the dryer to be changed through minor permit amendments, regardless of the significance of the changes in relation to CO emissions and regardless of the criteria set forth at Condition 3.4 in the Title V permit, which is also enumerated in the South Dakota SIP at ARSD 74:36:05:35<sup>1</sup>. Petitioners argue that the permit cannot automatically authorize a minor permit amendment as it does in Condition 6.9.

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<sup>1</sup> **74:36:05:35. Requirements for minor permit amendments.** A minor permit amendment is an amendment to an existing permit and is issued by the secretary. A minor permit amendment may be issued by the secretary if the proposed revision meets the following requirements:

- (1) It does not violate any applicable requirement;
- (2) It does not involve significant changes to existing monitoring, reporting, or record keeping requirements in the permit;
- (3) It does not require or change a case-by-case determination of an emission limit or other standard, a source-specific determination for temporary sources of ambient impacts, or a visibility or increment analysis;
- (4) It does not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement that the source has assumed to avoid an applicable requirement, a federally enforceable emissions cap assumed to avoid classification as a modification under any provision of Title I, and an alternative emissions limit approved pursuant to regulations promulgated under § 112(i)(5) of the Clean Air Act; and

EPA agrees with Petitioners that the statement in Condition 6.9 that “The change in the emission factor will be considered a minor permit amendment,” is inappropriate if not properly limited. Many changes in emission factor as result of future performance tests conducted in accordance with the requirement of Condition 7.0 could be considered a minor permit amendments. However, if such change results in a higher CO emission factor which would cause a change to a permit limit and/or permit term, that could not be allowed as a minor permit amendment. Furthermore, ARSD 74:36:05:35 (see footnote 1) lists various provisions, under which changes could not be accomplished through a minor permit amendment if the PTE limit were to increase. Based on this discussion, I grant Petitioners’ claim that Condition 6.9 as currently written contradicts the provisions of Condition 3.4 and the ARSD 74:36:05:35. Therefore, I direct DENR to remove from Condition 6.9 the language “The change in the emission factor will be considered a minor permit amendment” or appropriately limit the term to circumstances that are allowable as minor permit amendments.

**III. Permit Fails to Require Sufficient Periodic Opacity Monitoring; Monitoring that Ensures Compliance with 20% Opacity Limit.**

Petitioners allege that the Title V permit fails to require sufficient periodic monitoring of opacity and/or fails to require monitoring that ensures compliance with applicable requirements, in violation of 40 C.F.R. § 70.6(a)(3)(i)(B) and 40 C.F.R. § 70.6(c)(1) because the permit Condition 8.1 fails to require continuous opacity monitoring.

Petitioners allege that the two-step requirement of conducting monthly visible emissions test (step 1) and the subsequent Method 9 (step 2) if any visible emissions are detected as required by Condition 8.1 is inadequate to ensure compliance with the 20% opacity limit established in Condition 6.0 for all emitting units because visible emissions monitoring is not an adequate means to ensure compliance. Petitioner argues that compliance can only be determined by a Method 9 observation and that visible emissions monitoring cannot substitute for Method 9.

Petitioners further allege that, even if the two-step monitoring strategy were appropriate, monthly visible emissions reading is not adequate and such readings must be required daily. Petitioner also objects to provisions in the permit that allow the frequency of visible emission monitoring to be reduced to semi-annually or annually.

The DENR response to comment document at page 13 states “The monitoring frequency and methods used to determine opacity compliance in permit condition 8.1 were developed based on the federal requirements in 40 CFR, Part 63, Subpart LLL. The procedures in the permit condition reflect monitoring approaches that were deemed sufficient by EPA’s rule for determining compliance with the opacity requirements for

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(5) It does not constitute a modification under Title I of the Clean Air Act.

portland cement plants. Therefore, DENR believes that the opacity procedures in permit condition 8.1 are sufficient in demonstrating compliance with the opacity limits in permit condition 6.1.”

Condition 8.1 establishes periodic monitoring in accordance with ARSD 74:36:13:07<sup>2</sup> to demonstrate compliance with opacity limits in Condition 6.0 (Condition 6.1 establishes 20 % opacity limit for all emission points in Table 1). The DENR response fails to address why the monitoring EPA specified for portland cement plants is appropriate for use in this permit for a lumber mill. While, as a general principle, EPA believes routine source surveillance pursuant to visible emissions survey, along with recordkeeping and reporting of such surveillance followed by Method 9 readings when visible emissions monitoring suggests an exceedance can provide assurance that sources are meeting their visible emissions requirements, there is a need to justify the monitoring frequency on a case specific basis. The justification should be provided in the permit’s statement of basis or other documents contained in the permit’s administrative record.

Petitioners question the appropriateness of step 1 of Conditions 8.1(a), (b) and (c) by citing EPA’s position that a large margin of compliance alone is insufficient to demonstrate that emissions will not change over the life of the permit.<sup>3</sup> Petitioner asserts that visible emission/opacity monitoring must occur on at least a daily basis. EPA believes that the possibility of significant variability in the types of fuel (wood waste) may result in significant variability of emissions. The DENR has failed to address this issue in its response on the comment.

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<sup>2</sup> 74:36:13:07. **Credible evidence.** Notwithstanding any other provision, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of a plan. Credible evidence is as follows:

(1) Information from the use of the following methods is presumptively credible evidence of whether a violation has occurred at the source:

(a) A monitoring method approved for the source pursuant to 40 C.F.R. § 70.6(a)(3) (July 1, 2005) and incorporated in a federally enforceable operating permit;

(b) Compliance methods specified in the applicable plan; and

(2) The following testing, monitoring, or information gathering methods are presumptively credible testing, monitoring, or information-gathering methods;

(a) Any federally enforceable monitoring or testing methods, including those in 40 C.F.R. Parts 51, 60, 61, and 75 (July 1, 2005);

(b) Other testing, monitoring, or information-gathering methods that produce information .

(c) Comparable to that produced by any method in subdivision (1) or (2)(a) of this section.

<sup>3</sup> See In Matter of Fort James Camas Mill, Petition No. X-1999-1 (December 22, 2000) at 17-18.

Petitioners also argue that although step 2 of Condition 8.1 requires Method 9 observations if a visible emission is observed, such scenario would allow the source to exceed the applicable opacity limit as a practical matter. Petitioners concluded that visible emissions could exceed the 20% opacity limit, but such exceedance would not be detected until a Method 9 observation is conducted. As discussed above, Condition 8.1's two-step requirement of conducting visible emissions test and subsequent Method 9 if any visible emissions are detected is an acceptable approach. Petitioner has not supported its claim that such an approach fails to assure compliance. Although, we find that monthly visible emissions monitoring has not been adequately justified, we disagree with Petitioners' conclusion that relying on visible emissions monitoring in step 1 allows the source to exceed the 20% opacity limit without detection until the Method 9 test is performed. Condition 8.1 requires a Method 9 test to be performed within one hour if and when any visible emission from any emission unit is detected.

Therefore, I grant in part and deny in part Petitioners' request with reference to this issue. In granting Petitioners' request, I direct DENR to justify in the Statement of Basis or elsewhere in the permit's administrative record why monthly observations ( or observations on a different frequency) are appropriate and to eliminate the provisions in condition 8.1, step 1, paragraph b. and c. that allow the frequency of visible emissions monitoring to be reduced to semi-annually or annually.

**IV (A) Permit fails to Require Prompt Reporting of Opacity Deviations**

Petitioners allege that the permit fails to require prompt reporting of opacity deviations as required by 40 C.F.R. § 70.6(a)(3)(iii)(B) in the event of soot blowing, startups, shutdowns, and malfunction. Petitioners noted that Condition 5.7 requires prompt reporting of permit violations, but expressed concern that such violations may not be reported during soot blowing, startup, shut-down, or malfunction. Condition 6.2 of the Pope and Talbot permit, "Visibility exceedances," states that an exceedance of the operating permit limit of 20% opacity established in Condition 6.1 for all permitted units, operation, or processes listed in Table 1 (See Permit at 1) is not considered a violation during soot blowing, start-up, shutdown, or malfunction. This Condition is established in accordance with the SIP ARSD 74:36:12:02(3)<sup>4</sup>. Thus, Petitioners are correct in concluding that exceedances during these brief periods of soot blowing, start-up, shut-

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<sup>4</sup> 74:36:12:02. Exceptions to restrictions. The provisions of § 74:36:12:01 do not apply in the following circumstances:

- (1) If the presence of uncombined water is the only reason for failure to meet the requirements of § 74:36:12:01;
- (2) If smoke is emitted for the purpose of training or research and is approved by the department;  
and
- (3) For brief periods during such operations as soot blowing, start-up, shut-down, and malfunctions.



down and malfunction are not violations and need not be reported as violations under the terms of the Condition 5.7 of the permit. I note that the provisions specify that the exceptions are for brief periods during specific activities.

However, as Petitioners correctly point out, 40 C.F.R. § 70.6(a)(3)(iii)(B) requires “prompt reporting of deviations from permit requirements, including those attributable to upset conditions as defined in the permit, the probable cause of such deviations and any corrective actions or preventive measures taken.”(emphasis added). I deny the petition on this point, however, because compliance is not a deviation.

In response to comment on this issue, the State said “An opacity reading during soot blowing, startup, shutdown and malfunction is not considered a deviation; it is exempt under federal law. Therefore reporting of such an event is not required.”

(Response to Comment at 9)

Based on the discussion above, I grant the petition on the issue of the permit’s failure to properly reflect the provisions of ARSD 74:36:12:02(3) and I direct DENR to revise Condition 6.2 so that it applies only during “brief periods during such operations as soot blowing, start-up, shut down, and malfunction.” To ensure compliance with this provision, I direct DENR to require Pope and Talbot to keep appropriate records of the events with event duration and make such records available for DENR inspection upon request.

#### **IV (B) Permit does not require “Prompt” Reporting**

Petitioners allege that Condition 5.7 fails to require prompt reporting of permit violations, as required by 40 C.F.R. § 70.6(a) (3) (iii) (B). Petitioners also express concern that Condition 5.7 allows the Secretary to extend the submittal deadline for a written report of permit violations up to 30 days. They concluded that “thirty days is not ‘prompt’ in relation to prompt reporting.”

Condition 5.7 of the permit “Reporting permit violations” states “in accordance with ARSD 74:36:05:16.01(9), the owner or operator shall report all permit violations. A permit violation should be reported as soon as possible, but no later than the first business day following the day the violation was discovered...The permit violation may be reported by telephone to the South Dakota Department of Environment and Natural Resource at (605) 773-3151 or by FAX at (605) 773-5286... A written report shall be submitted within five days of discovering the permit violation...upon prior approval from Secretary, the submittal deadline for the written report may be extended up to 30 days.” (Permit at 8).

Our review of 40 C.F.R. § 70.6(a) (3) (iii) (B)<sup>5</sup> and ARSD 74:36:05:16.01(9) (e) (ii)<sup>6</sup> does not support Petitioners' argument that DENR's determination as to appropriate timing of reports is inappropriate. We note that 40 C.F.R. § 70.6 (a) (3) (iii) (B) allows the permitting authority to define prompt, which DENR defined in the permit as "as soon as possible but no later than first business day following the day the violation was discovered." Condition 5.7 requires the source to submit a written report within five days of discovering the permit violation. Petitioners base their argument on the provision in the permit authorizing the Secretary to grant extensions up to 30 days to submit written reports. Given the stringent reporting requirement for verbal notification, EPA believes that the provision allowing for the Secretary to grant an extension of time up to 30 days for the written report to be submitted is not inconsistent with the requirement for prompt reporting of a violation. I therefore deny Petitioners' request to object to the permit on this basis.

#### **V. Lumber Mill is subject to Maximum Achievable Control Technology**

Petitioners allege that Hazardous Air Pollutants (HAPs) emissions factors and the PTE calculations in the permit are inaccurate, thus rendering as unsupported the DENR's finding that the lumber mill is not a major source of HAPs and not subject to Maximum Achievable Control Technology ("MACT"). More specifically, Petitioner claims that DENR inappropriately relied on emission factors derived from AP-42 and that EPA has stated that AP-42 emission factors do not yield accurate emissions estimates for individual sources.

The Statement of Basis estimates the HAPs uncontrolled potential emissions to be 23 tpy. (See section 4.0 "Potential Emissions"). DENR identified in the Statement of Basis that its estimates differed with SECOR's (Pope and Talbot's) HAPs estimates inventory for both the Boiler and the Dryer – the primary sources of HAP emissions at the Facility. In both instances, DENR's analyses showed higher HAP estimates than the Facility's estimates. Nonetheless, DENR states that it relied on the speciated HAP analysis in AP-42 – Chapter 1.6 (Wood Residue Combustion in Boilers) as well as the facility HAP estimates inventory to establish "that methanol will be the most abundant single HAP emitted at 1.3 pounds per hour or 5.7 tons per year" (Statement of Basis at 9). AP-42 – Chapter 1.6, however, does not list an emission factor for methanol. Thus, the basis for establishing the 5.7 tpy methanol limit is unclear. Based on these reasons, EPA agrees with the Petitioners that HAP emission calculations are not properly documented - in particular the emission factor used for methanol - and therefore I grant on this issue. I direct DENR to provide additional information on the methanol emission factor and if necessary based on any changes to that factor, provide additional analysis to determine whether this source is a major source of HAPs and thus subject to MACT.

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<sup>5</sup> 40 CFR 70.6(a)(3)(iii)(B) - Prompt reporting of deviations from permit requirements, including those attributable to upset conditions as defined in the permit, the probable cause of such deviations, and any corrective actions or preventive measures taken. The permitting authority shall define "prompt" in relation to the degree and type of deviation likely to occur and the applicable requirements. (emphasis added)

<sup>6</sup> ARSD 74:36:05:16.01(9) (e) (ii) - Deviations from permit requirements, including those attributable to upset conditions as defined in the permit, the probable cause of such deviations and any corrective actions or preventive measures taken must be promptly reported and certified by a responsible official

## **VI. Problems with Other Permit Conditions Warranting Objection by the Administrator**

**Condition 5.4** – Petitioners allege that while Condition 5.4.1 requires the source to maintain a monitoring log that contains information such as the amount of fuel burned and/or the operating hours for various units at the Facility, nothing in the permit explains how the source shall calculate and record such data. Petitioners state that the Administrator must object to the permit due to the failure of the permit to explain how the source shall “calculate and record” the data required in Condition 5.4.

This Condition is established pursuant to ARSD 74:36:05:16:01(9) which contains the requirements for complying with monitoring, recordkeeping and reporting requirements. 40 C.F.R. § 70.6 (a)(3)(ii) provides that the permit shall include, with respect to recordkeeping, where applicable, analytical techniques or methods used and certain record retention requirements. The permit contains an appropriate amount of detail to meet the conditions of these two rules and, therefore, I deny Petitioners’ request on this issue.

**Condition 6.1** – Petitioners allege that the permit fails to require sufficient periodic monitoring to ensure compliance with the opacity limits set out in Condition 6.1. of the permit in violation of 40 C.F.R. § 70.6(a) (3) (i) (B) and 40 C.F.R. § 70.6(c) (1). Petitioners cite to the fact that the permit does not include monitoring requirements for the presence of uncombined water and/or its effects on the opacity to ensure that this exemption is properly utilized and not abused by Pope and Talbot.

This Condition is established under ARSD 74:36:12(01) which allows for this exemption for uncombined water. (See Permit at 9) Furthermore, 40 CFR Part 60, Appendix A, Method 9 also grants this exemption. Condition 8.1, step 2 requires that if there are any visible emission observed from a unit, a certified observer shall perform a Method 9 visible emission test. Method 9 requires that a “certified observer” be able to distinguish between steam and opacity plumes and require such observer to take a reading at a point not impacted by the steam plume. Reliance on expertise of the certified reader trained to determine whether uncombined water is impacting an opacity reading is appropriate and adequately assures compliance with the underlying opacity limit. The recordkeeping requirements are designed to ensure accountability for the readings. Condition 5.8 requires the Facility to maintain a monitoring log that records information on each visible emission reading required by Condition 8.1. Such entry must be signed by the person performing the reading or evaluation. Therefore, I deny the Petitioners’ request.

**Condition 6.3** - Petitioners allege that the permit fails to require sufficient periodic monitoring of Total Suspended Particulates (TSP) and/or monitoring that ensures compliance with TSP limits. Petitioners claim that the permit does not require actual monitoring of the amount of TSP emissions released into the atmosphere.

This Condition is established in accordance with ARSD 74:36:06:02(1)(b) and ARSD 74:36:06:03 which authorizes the State's limits for fuel burning units and processes (See Permit Condition 6.3, Table #2 at 10). These State's limits are established in accordance with emission equations in the above SIP citations in conjunction with unit capacities and process rates established in Condition 1.1 (See Permit Condition 1.1 – Description of permitted Units, Operations, and Processes). To demonstrate compliance with these limits, Condition 7.6 requires performance tests on units #1, #5 and #10, Condition 7.1 allows DENR to require additional stack tests if one is warranted, Condition 8.0 requires visible emissions monitoring and Condition 5.8 requires recordkeeping and reporting associated with such monitoring. EPA agrees with DENR's determination in its Response to Comment at 11 that such requirements are adequate to demonstrate compliance in this case with TSP limits in Table #2. (See Permit Condition 6.3 at 10).

Petitioners also argue that “nothing in the Statement of Basis or any other supporting permit documentation indicates that compliance with the 20% opacity limit will, in fact, limit TSP emissions below the allowable limits set forth at Condition 6.3”. Petitioners suggests that in order to support the use of opacity to demonstrate compliance with applicable TSP limits, DENR must show a correlation exists between opacity and TSP emission that would ensure compliance with the limits at Condition 6.3.

EPA disagrees with Petitioners' suggestion that correlation data between TSP limits and opacity limits is necessary. EPA believes Condition 8.1's two-step test of daily visible emission test and subsequent Method 9 to characterize opacity when there are any visible emissions is adequate. This is a more stringent requirement than would be likely to be established through a correlation between TSP limits and opacity limits.

In addition, EPA's evaluation of Table 4 (Statement of Basis at 13) reveals that, generally, there is a wide margin of compliance<sup>7</sup> between the Facility's PTE and the limits established in Condition 6.3. EPA has stated that “considering a substantial difference between controlled emissions and allowable emissions, periodic observations which verify the absence of visible emissions will provide reasonable assurance of compliance with particulate matter emissions standards.”<sup>8</sup>

For the reasons cited above, I deny Petitioners' request.

**Condition 6.5** – Petitioners allege that Condition 6.5 is unenforceable as a practical matter because “manufacturer's specification” are not defined and/or referenced. The manufacturer's specifications are considered for guidance purposes only and are not an enforceable requirement. EPA has explained its position on manufacturers' specification in other orders responding to Title V petitions. In *Lovett Generating Station*, EPA explained that “...most manufacturers' recommendations are intended to be guidelines and are frequently updated to improve operator and equipment performance as

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<sup>7</sup> See Fort James Camas Mill, Petition No. X-1990-1, (December 22, 2000) for further discussion of the relationship between margins of compliance and acceptable monitoring approaches.

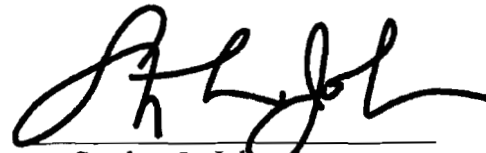
<sup>8</sup> See Kerr-McGee Chemicals, LLC, Petition No. IV-2000-1, (February 1, 2002).

time goes on, therefore, EPA does not require that the specification manual itself be incorporated into a Title V permit.”<sup>9</sup> Noting that frequent revisions to manufacturers’ recommendations could trigger many unnecessary permit re-openings to adopt the latest changes, EPA generally believes that incorporation of these recommendations into a permit would not be practical. *Id.* The permit, however, should clarify that the manufacturers’ specification are not enforceable and merely guidance. Therefore, I deny Petitioners’ request to object to the issuance of this permit based on this matter.

### CONCLUSION

For the reasons set forth above and pursuant to section 505(b) (2) of the Clean Air Act, I grant in part and deny in part the Petitioners’ requests for an objection to the issuance of the Pope and Talbot, Inc. Title V permit.

Dated: MAR 22 2007

  
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Stephen L. Johnson  
Administrator

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<sup>9</sup> Petition Order # II-2001-07; In the Matter of the Lovett Generating Station, Petition at 26.