# SOI Attachment 1



### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

#### **REGION VIII** 999 18th STREET - SUITE 500 DENVER, COLORADO 80202-2466

May 21, 1998

Ref: 8P2-A

Lynn Menlove, Manager New Source Review Section Utah Division of Air Quality P.O. Box 144820 Salt Lake City, UT 84114-4820

Re:

Response to Request for Guidance in Defining Adjacent with Respect to Source

Aggregation

Dear Mr. Menlove:

This is in response to your letter of January 15, 1998, to Mike Owens of my staff, requesting guidance and/or specific recommendations in the matter of Utility Trailer Manufacturing Company. For the purpose of determining if two Utility Trailer facilities should or should not be aggregated into a single source under Clean Air Act Title V and New Source Review permitting programs, you asked what is the specific physical distance associated with the definition of "adjacent." The word "adjacent" is part of the definition of "source" in the Utah SIP regulations, at R307-1-1. The SIP definition follows the Federal definition found in 40 CFR

In brief, our answer is that the distance associated with "adjacent" must be considered on a case-by-case basis. This is explained in the preamble to the August 7, 1980 PSD rules, which says "EPA is unable to say precisely at this point how far apart activities must be in order to be treated separately. The Agency can answer that question only through case-by-case determinations." After searching the New Source Review Guidance Notebook, and after querying the other Regions and EPA's Office of Air Quality Planning and Standards, we have found no evidence that any EPA office has ever attempted to indicate a specific distance for "adjacent" on anything other than a case-by-case basis. We could not find any previous EPA determination for any case that is precisely like Utility Trailer, i.e., two facilities under common control, with the same primary 2-digit SIC code, located about a mile apart, both producing very similar products, but claimed by the company to be independent production lines.

Utah SIP regulations do not define "adjacent." The definition in the 1995 edition of Webster's New College Dictionary is: 1. Close to; nearby, or 2. Next to; adjoining. We realize this leaves considerable gray area for interpretation; however, since the term "adjacent" appears in the Utah SIP as part of the definition of "source," any evaluation of what is "adjacent" must relate to the guiding principle of a common sense notion of "source." (The phrase "common

sense notion" appears on page 52695 of the August 7, 1980 PSD preamble, with regard to how to define "source.") Hence, a determination of "adjacent" should include an evaluation of whether the distance between two facilities is sufficiently small that it enables them to operate as a single "source." Below are some types of questions that might be posed in this evaluation, as it pertains to Utility Trailer. Not all the answers to these questions need be positive for two facilities to be considered adjacent.

- -- Was the location of the new facility chosen primarily because of its proximity to the existing facility, to enable the operation of the two facilities to be integrated? In other words, if the two facilities were sited much further apart, would that significantly affect the degree to which they may be dependent on each other?
- Will materials be routinely transferred between the facilities? Supporting evidence for this could include a physical link or transportation link between the facilities, such as a pipeline, railway, special-purpose or public road, channel or conduit.
- -- Will managers or other workers frequently shuttle back and forth to be involved actively in both facilities? Besides production line staff, this might include maintenance and repair crews, or security or administrative personnel.
- Will the production process itself be split in any way between the facilities, i.e., will one facility produce an intermediate product that requires further processing at the other facility, with associated air pollutant emissions? For example, will components be assembled at one facility but painted at the other?

One illustration of this type of evaluation involved Great Salt Lake Minerals in Utah, which we wrote to you about on August 8, 1997, in response to your inquiry. (See enclosure #1.) We recommended, as EPA guidance, that you treat the two GSLM facilities as a single source (i.e., "adjacent"), despite the fact that they are a considerable distance apart (21.5 miles). We based that advice on the functional inter-relationship of the facilities, evidenced in part by a dedicated channel between them. We wrote that the lengthy distance between the facilities "is not an overriding factor that would prevent them from being considered a single source."

Another illustration is ESCO Corporation in Portland, Oregon, which operates two metal casting foundries (a "Main Plant" and a "Plant 3"), a couple of blocks apart. All castings produced by foundries at both facilities are coated, packaged and shipped at the "Main Plant". EPA Region 10 wrote to the State of Oregon on August 7, 1997 (see enclosure #2), that the guiding principle in evaluating whether the two facilities are "adjacent" is "the common sense notion of a plant. That is, pollutant emitting activities that comprise or support the primary product or activity of a company or operation must be considered part of the same stationary source." EPA determined that the two ESCO facilities must be considered a single major stationary source, since they function together in that manner, even though the Plant 3 foundry operates independently from the Main Plant foundry.

Another illustration is Anheuser-Busch in Fort Collins, Colorado, which operates a brewery and landfarm about six miles apart. A memo from OAQPS to our Regional Office, dated August 27, 1996 (see enclosure #3), stated that with regard to "contiguous or adjacent," the facilities should be treated as one source, due to their functional inter-relationship (landfarm as an integral part of the brewery operations), evidenced in part by a disposal pipeline between them. The fact that they are a considerable distance apart "does not support a PSD determination that the brewery proper and the landfarm constitute separate sources for PSD purposes."

Another illustration is Acme Steel Company, which operates an integrated steel mill consisting of coke ovens and blast furnaces at a site in Chicago, Illinois, along with basic oxygen furnaces, casting and hot strip mill operations at a site in Riverdale, Illinois, about 3.7 miles away. The blast furnace in Chicago produces hot metal that is transported via commercial rail to the BOF shop in Riverdale for further processing into steel. EPA Region 5 wrote to the State of Illinois on March 13, 1998 (see enclosure #4), that "Although the two sites are separated by Lake Calumet, landfills, I-94, and the Little Calumet River, USEPA considers that the close proximity of the sites, along with the interdependency of the operations and their historical operation as one source, as sufficient reasons to group these two facilities as one."

Therefore, in the matter of Utility Trailer, we recommend you evaluate, using questions such as those we posed above, whether the two facilities (one existing and one proposed for construction) will, in fact, operate independently of each other, as the company has claimed. Athough Utility Trailer writes that "The present facility is not capable of conversion to the new trailer manufacturing process," they also write that the existing facility is "an inefficient manufacturing process which has made this facility less cost-competitive." This suggests to us the possibility that the existing facility could become a support facility for the new one. The company should be advised that if the two facilities are later discovered by the State and/or EPA to be actually operating as a single major source, and no Title V or PSD permit applications have been submitted where required by regulation, the company could become subject to State or EPA enforcement action or citizen suit.

Finally, please be aware that if the facilities are treated as two separate sources, no emission netting between them can be allowed, to avoid major source NSR permitting at either facility, in the event of future facility modifications.

We hope this letter will be helpful. It has been written only as guidance, as it remains the State's responsibility to make source aggregation determinations under EPA-approved State programs and regulations. This letter has been reviewed by specialists at OAQPS, by our Office of Regional Counsel, and by Office of General Counsel at EPA Headquarters. We apologize for the delay in getting our response to you.

# SOI Attachment 2

#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

May 19,1999

**4APT-ARB** 

Mr. Randy C. Poole Air Hygienist II Mecklenburg County Department of Environmental Protection 700 N. Tryon Street, Suite 205 Charlotte, North Carolina 28202-2236

SUBJ: Applicability of Title V Permitting Requirements to Gasoline Bulk Terminals Owned by Williams Energy Ventures, Inc.

Dear Mr. Poole:

Thank you for your letter of April 15, 1999 requesting an opinion on the applicability of Title V major source operating permit requirements to two bulk gasoline terminals owned by Williams Energy Ventures, Inc. (WEV) in the Paw Creek area of Mecklenburg County. The specific question is whether emissions from the two terminals should be aggregated for Title V applicability purposes. Our determination is that the terminals can be considered as separate sources without aggregation of emissions, subject to certain qualifications.

#### **Background**

Under the Title V permit program, a major source is defined in 40 CFR 70.2 as follows:

"Major source means any stationary source (or any group of sources that are located on one or more contiguous or adjacent properties, and are under common control of the same person (or persons under common control)) belonging to a single major industrial grouping and that are described in paragraph (1), (2), or (3) of this definition. For the purposes of defining 'major source,' a stationary source or group of stationary sources shall be considered part of a single industrial grouping if all of the pollutant emitting activities at such source or group of sources on contiguous or adjacent properties belong to the same Major Group (i.e., all have the same two-digit code) as described in the Standard Industrial Classification Manual, 1987."

Paragraph (1) referred to in this definition pertains to major source classification based on potential emissions of hazardous air pollutants; paragraph (2) pertains to major source classification based on

potential emissions of any air pollutant in amounts of 100 tons per year or more; and paragraph (3) pertains to major source classification based on emissions of regulated pollutants in ozone, carbon monoxide, and particulate matter nonattainment areas.

The Environmental Protection Agency (EPA) Region 4 understands that Mecklenburg County Department of Environmental Protection (MCDEP) has determined conclusively that the two WEV terminals are under "common control of the same person" and belong "to a single major industrial grouping." The remaining question is whether they should be considered as "located on one or more contiguous or adjacent properties." In developing our determination, we have taken note of the following information presented in your letter, in the letter from Williams Energy Services attached to your letter, and during telephone calls to you to obtain additional information.

- The two terminals are approximately nine-tenths of a mile apart "by public road." (The quoted phrase is from your April 15, 1999 letter.) We assume that this is the approximate straight-line separation distance as well.
- The only operating relationship between the two terminals currently is that some WEV employees have responsibilities at both terminals and the terminals are served by common delivery pipelines. The two terminals are not connected by pipelines or other utilities that allow the terminals to exchange liquid fuels or utilities such as water and electric power. Therefore, neither terminal is a support facility for the other, and each terminal can be operated independently.
- Other terminals occupy most of the land area between the two WEV terminals.
- If the two WEV terminals were combined as one source, the combination would be a major Title V source for volatile organic compounds but not for hazardous air pollutants.

Further, although not specifically stated in either your letter or the Williams Energy letter, we assume that WEV does not own, lease, or otherwise control the properties between the two terminals.

#### Regulatory and Policy Guidance

EPA has never specifically defined by regulation an exact separation distance that would cause two facilities to be considered as located on adjacent or contiguous properties. Case-by-case variations preclude a "one size fits all" definition that would be reasonable in every instance. Nevertheless, regulatory and policy guidance exists to help us develop a determination in response to your request. The following discussion summarizes some of the numerous EPA documents that are available as guidance. The ordering of these documents is chronological and not degree of importance. We can provide copies of any or all of these documents at your request. Also, please note that some

of these documents refer to prevention of significant deterioration (PSD) and to nonattainment area determinations and not to Title V determinations specifically. Use of documents not directly related to Title V is appropriate because the Title V

definition of major source is an outgrowth of the definitions used for PSD and nonattainment area new source review purposes.

The Williams Energy letter included with your request letter refers to a discussion with a representative of the Georgia Environmental Protection Division (GA EPD) concerning decisions that the agency might make in the future. Since GA EPD has no jurisdiction over terminals in Charlotte, North Carolina, the comments Williams Energy may have received during this discussion with GA EPD are neither persuasive nor relevant.

Summary of documents:

1. Preamble to the August 7, 1980 final PSD regulations.

The preamble language at 45 FR 52695 is often cited as confirmation that "contiguous and adjacent" assessments are case-by-case and that two facilities separated by a distance of 20 miles would be too far apart to treat as one source. Relevant language in the preamble includes the following: "EPA is unable to say precisely at this point how far apart activities must be in order to be treated separately. The Agency can answer that question only through case-by-case determinations."

Memo dated June 30, 1981 from EPA Division of Stationary Source Enforcement to EPA
Region 5 concerning treatment of two separated facilities as one source. (This is document No.
3.18 in the New Source Review (NSR) Guidance Notebook series.)

The situation addressed in this memo consisted of two General Motors plants separated by a distance of approximately 4,500 feet. One plant made auto bodies that were transported to the other plant by truck for use in final assembly. Additionally, the two plants were the only facilities served by a rail spur for materials delivery. The Division concurred that the two General Motors plants should be considered as one source "Based on the unique set up of these facilities," namely, that they "are approximately one mile apart, have a dedicated railroad line between them and are programmed together to produce one line of automobiles."

3. Letter dated May 18, 1995 from EPA Region 4 to the GA EPD regarding two separated fuel terminals in the context of Title V (part 70) applicability.

The two terminals in question were under common ownership and located approximately one-half mile apart. In addition, diesel fuel and water pipelines linked the two terminals. EPA concluded that the two facilities should be treated as one source based on the following

reasoning: "Based on the information provided, we have concluded the two facilities are in close proximity and should be treated as one source under Part 70. Additionally, we have noted that both facilities use the same access road, share diesel fuel and water pipelines, and interestingly, have their storage tank numbers listed sequentially on the air quality permits issued to both facilities." Physical proximity was the main factor in the determination.

4. EPA summary discussing the topics for a January 25, 1996 conference call on contiguous or adjacent properties as related to Title V.

This summary contains the following comments:

"A physical separation of property does not in itself constitute separate sources, for example, the fact that some property at a plant site is divided by a highway or railroad right-of-way does not create separate and distinct sources;"

"EPA made a determination that two GM auto plants, separated from each other by approximately one mile (and connected by a private rail), could be considered one major source;" [The referenced determination is discussed above.]

"Region 4 determined that two bulk gasoline terminals located approximately one-half mile from each other should be considered one source primarily based upon geographic proximity and secondarily upon shared diesel and water pipelines;" [The referenced determination is discussed above.]

"There are some other factors you may wish to consider when evaluating sources which are physically separated: like whether there are any unique structures (i.e., private rail line, pipelines, etc.) that 'tie' the sources together;"

5. Memo dated August 27, 1996 from the Office of Air Quality Planning and Standards (OAQPS) to EPA Region 8 concerning whether a brewery and an off-site land farm under common ownership should be treated as a single source.

This memo concerned a brewery and an associated wastewater disposal land farm separated by a distance of about 6 miles and connected by a pipeline. OAQPS agreed with Region 8 that the land farm and brewery should be considered a single source for PSD applicability purposes. The opinion from OAQPS reads in part as follows:

"A specific distance between pollutant emitting activities has never been established by EPA for determining when facilities should be considered separate or one source for PSD purposes. Whether facilities are contiguous or adjacent is determined on a case-by-case basis, based on the relationship between the facilities. The EPA considers the

brewery and land farm to be contiguous or adjacent since the land farm operation is an integral part of the brewery operations, i.e., land application at the land farm is the means chosen by Anheuser-Busch to dispose of the ethanol contaminated process water from the brewery operations. Without a means of waste water disposal the brewery cannot operate. The additional fact that a pipeline physically connects the brewery and land farm strengthens the conclusion that the brewery operation is dependent on land farm operations. For this case, the distance between the brewery and land farm does not support a PSD determination that the brewery proper and the land farm constitute separate sources for PSD purposes."

6. Letter dated March 13, 1998, from EPA Region 5 to the Illinois Environmental Protection Agency regarding a NSR permitting action.

The facilities addressed in this letter were two steel mill facilities located 3.7 miles apart. One of EPA's concluding statements is as follows: "Although the two sites are separated by Lake Calumet, landfills, I-94, and the Little Calumet River, ISOPIA considers that the close proximity of the sites, along with the interdependency of the operations and their historical operation as one source, as sufficient reasons to group these two facilities as one."

7. Letter dated May 21, 1998, from EPA Region 8 to the Utah Division of Air Quality responding to a request for guidance in defining "adjacent" for Title V and NSR source aggregation purposes.

The issue involved can be summarized by the following statement from the letter: "We could not find any previous EPA determination for any case that is precisely like Utility Trailer, i.e., two facilities under common control, with the same primary 2-digit SIC code, located about a mile apart, both producing very similar products, but claimed by the company to be independent production lines." In providing a response to the state agency, EPA first stated that deciding what "adjacent" means should take into account a "common sense notion" of source. (This phrase appears in the August 7, 1980 final PSD rule preamble discussed above and in the prior *Alabama Power* court case.) The letter then goes on to recommend that the state agency ask the following questions to decide if the two facilities should be considered "adjacent" and therefore one source:

"Was the location of the new facility chosen primarily because of its proximity to the existing facility, to enable the operation of the two facilities to be integrated? In other words, if the two facilities were sited much farther apart, would that significantly affect the degree to which they may be dependent on each other?"

"Will materials be routinely transferred between the facilities? Supporting evidence for this could include a physical link or transportation link between the facilities, such as a pipeline, railway, special-purpose or public road, channel or conduit."

"Will managers or other workers shuttle back and forth to be involved actively in both facilities? Besides production line staff, this might include maintenance and repair crews, or security or administrative personnel."

"Will the production process itself be split in any way between the facilities, i.e., will one facility produce an intermediate product that requires further processing at the other facility, with associated air pollutant emissions?"

The letter concludes by saying that, if the facilities are treated as separate sources, "no emission netting between them can be allowed, to avoid major source NSR permitting at either facility, in the event of future facility modifications."

#### **Determination**

Before restating our determination, we list first some of the considerations on which our determination is based:

- For this and future such determinations, our position is that separate facilities could be
  considered a single source for Title V permit applicability purposes strictly on the basis
  of proximity without regard to whether the facilities are dependent on each other or
  physically connected in some way.
- The separation distance of nine-tenths of a mile between the two WEV terminals
  certainly does not eliminate consideration of the two facilities as one source. Many of
  EPA's past determinations that two separated facilities should be treated as one source
  have involved situations where the separation distance was considerably more than a
  mile.
- In most of the EPA documents we reviewed, the key factor in deciding that separate facilities should be considered as one source was that the facilities were interdependent or linked in some sense. Our understanding of the WEV terminals is that they can and do operate independently, that one terminal does not act as a support operation for the other, and that they are not physically connected by a structure such as a pipeline dedicated to the transfer of material or energy between the two terminals. Although this understanding is based solely on information supplied by MCDEP and Williams Energy and not independently verified, it is supported by the fact that the two terminals were at one time under separate ownership and presumably operated independently when

owned separately.

EPA Region 4 considers the separation distance of nine-tenths of a mile close enough for the two terminals to be considered one source; however, based primarily on the lack of interdependence, we conclude that the two WEV terminals can be considered as two separate

sources for Title V (part 70) permit applicability purposes. Furthermore, we add the following qualifications to our determination:

- 1. If MCDEP does in fact separate the two terminals for Title V purposes, WEV (or any future owner) will not be allowed to use emission decreases at one terminal in a netting analysis to avoid major or minor source NSR permitting for a future modification at the other facility.
- WEV must notify MCDEP if property is purchased to expand the boundaries of either terminal. Likewise, WEV must notify MCDEP if partial or total ownership interest is acquired in any of the other liquid fuels terminals in the Paw Creek area. Upon receipt of such notifications, MCDEP should determine whether to reopen the question of Title V permit applicability.
- 3. If WEV adds a physical link between the two terminals or otherwise changes operations to increase the interrelationships between the two terminals, the determination in this letter is no longer applicable.

If you have any questions or comments concerning this letter, please contact Jim Little at (404) 562-9118 or Kelly Fortin at (404) 562-9117.

Sincerely,

Winston A. Smith
Director
Air, Pesticides and Toxics
Management Division

### SOI ATTACHMENT 3



#### **UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

WASHINGTON, D.C. 20460

JAN 12 2007

OFFICE OF AIR AND RADIATION

#### **MEMORANDUM**

SUBJECT: Source Determinations for Oil and Gas Industries

FROM: William L. Wehrum
Acting Assistant Administrator 610

TO: Regional Administrators I-X

The purpose of this memorandum is to provide guidance to assist permitting authorities in making major stationary source determinations for the oil and gas industry. This guidance extends to oil and gas operations on land, in state waters, and on the federal Outer Continental Shelf (OCS).<sup>1</sup>

Currently, significant oil and gas development is occurring in the Western United States. With this development, we expect issues to arise related to whether exploration, extraction or production activities need to be aggregated together to determine whether the activities qualify as a "major stationary source" for purposes of the major New Source Review (NSR) and the Title V permitting programs.<sup>2</sup> As explained in detail below, we suggest that permitting authorities begin the analysis by evaluating whether each individual surface site qualifies as a separate stationary source, and then aggregating two or more surface sites only if the surface sites are under common control and are located in close proximity to each other. The term "surface site" generally refers to a single area of development and includes any combination of one or more graded pad sites, gravel pad sites, foundations, platforms, or the immediate physical location upon which equipment is physically affixed. See e.g. 40 CFR 63.761.

<sup>&</sup>lt;sup>1</sup> On the OCS, "emissions from any vessel servicing or associated with an OCS source, including emissions while at the OCS source or en route to or from the source within 25 miles of the OCS source, shall be considered direct emissions from the OCS source." See CAA §328(a)(4)(C). This memorandum does not supercede our existing interpretation of this regulatory language.

<sup>&</sup>lt;sup>2</sup> Oil and gas development activities include such things as geological and geophysical exploration for petroleum deposits, drilling oil and gas wells, and separating natural gas liquids from crude oil. The activities generally fall into the major Standard Industrial Code (SIC) 13 including SIC 1311, 1321, 1381, 1382, and 1389.

The Federal NSR regulations define a "major stationary source" as any "stationary source" that emits or has the potential to emit above certain specified emissions thresholds (ranging from 10-250 tons per year) depending on the attainment status of the area. The Federal NSR regulations define "stationary source" to mean "any building, structure, facility, or installation which emits or may emit any air pollutant subject to regulation under the Act." The regulations establish three criteria for identifying emissions activities that belong to the same "building," "structure," "facility," or "installation": (1) whether the activities are under common control, (2) whether the activities are located on one or more contiguous or adjacent properties; and (3) whether the activities belong to the same major industrial grouping. The Title V program also considers whether activities are under common control and located on contiguous or adjacent property.

In implementing the stationary source definition for the major NSR and Title V permit programs, the foremost principle that guides our decision-making is that we should apply a "common sense notion" of a plant. In *Alabama Power v. Costle*, the court cautioned that "...EPA cannot treat contiguous and commonly owned units as a single source unless they fit within the four permissible statutory terms," and that "EPA should ...provide for the aggregation, where appropriate, of industrial activities according to considerations such as proximity and ownership." In 1980, we expressed the view that *Alabama Power* set boundaries on our discretion to interpret the component terms of "stationary source." Specifically, we indicated that we must (1) reasonably carry out the purposes of Prevention of Significant Deterioration (PSD); (2) approximate a common sense notion of a "plant"; and (3) avoid aggregating pollutant-emitting activities that as a group would not fit within the ordinary meaning of "building," "structure," "facility" or "installation." Accordingly, we follow these overarching principles in interpreting the three regulatory criteria in context of a given source determination.

Source determinations within the oil and gas industries are not always straightforward. Even when two or more pollutant-emitting activities are clearly under common control and belong to the same 2-digit SIC code, the unique geographical attributes of the oil and gas industry necessitate a detailed evaluation of whether the activities are contiguous and adjacent. For example, well sites can be located hundreds of miles from the natural gas processing plant, and some oil and gas operations (e.g., a production field) can cover many square miles. Moreover, unlike many industries, land ownership and control are not easily distinguished in this industry, because subsurface and surface property rights are often owned and leased by different entities, and drilling and exploration activities are contracted to third parties. While it is not uncommon for a single company to gain the use of a large area of contiguous property through

<sup>&</sup>lt;sup>3</sup> See e.g. 40 CFR 52.21(b)(5)

<sup>&</sup>lt;sup>4</sup> Under this definition, activities are within the same industrial grouping if they share the same two-digit Standard Industrial Classification (SIC). Exploration, extraction or production activities in the oil and natural gas development industry share the same two-digit SIC code – "13".

<sup>&</sup>lt;sup>5</sup> 40 CFR 70.2 also includes a SIC reference which is not contained in the statute. We have proposed to delete this reference from the title V regulations.

<sup>&</sup>lt;sup>6</sup> Alabama Power Co. v. Costle 636 F.2d 323, 397 (D.C. Cir. 1979)

<sup>&</sup>lt;sup>7</sup> 45 FR 52676, 52695 (August 7,1980)

these lease and mineral rights agreements, owners or operators of production field facilities typically control only the surface area necessary to operate the physical structures used in oil and gas production, and not the land between well drill sites.<sup>8</sup>

The concept of "contiguous and adjacent" considers whether the land associated with the pollutant-emitting activity is connected to, or is nearby, land associated with another pollutant-emitting activity. Historically, we also have used such factors as operational dependence and proximity to inform our analysis of whether two properties are contiguous or adjacent. The concept of "operational dependence" considers the extent to which each activity relies on the other for its operations. In the oil and gas industries, materials are transferred between pollutant-emitting points and many activities are physically connected via pipelines, but the extent of the operational reliance may vary widely from point to point.

Notably, in 1980, we declined to add a specific "functionality" criteria to the definition of source because we believed that "assessments of functional interrelationships would be highly subjective" and "embroil[] the Agency in fine-grained analysis." We also made clear that we do not intend "source" to encompass activities that would be many miles apart along a long-line. For instance, EPA would not treat all of the pumping stations along a pipeline as one source. Accordingly, for this industry, we do not believe determining whether two activities are operationally dependent drives the determination as to whether two properties are contiguous or adjacent, because it would embroil the Agency in precisely the fine-grained analysis we intended to avoid, and it would potentially lead to results which do not adhere to the common sense notion of a plant.

The concept of proximity considers the physical distance between two activities. EPA has not specifically defined an exact separation of distance that would cause two activities to be considered contiguous or adjacent. Nonetheless, we have stated that proximity can be the most informative factor in determining whether two activities are contiguous or adjacent. For example, we stated that when two facilities are close together, a permitting authority can consider the two facilities as a single source irrespective of an absence of physical connection and operational dependence.<sup>12</sup> We also think that the opposite is equally true. A permitting authority can find that two pollutant-emitting activities are separate sources when they are located far apart, irrespective of the presence of physical connections and operational dependence between the sites.

Given the diverse nature of the oil and gas activities, we believe that proximity is the most informative factor in making source determinations for these industries. We do not believe that it is reasonable to aggregate well site activities, and other production field activities that

<sup>&</sup>lt;sup>8</sup> We recognized the unique challenges this industry presents in our discussion of the facility definition in the section 112 rulemaking. 64 FR 32620, 32617 (June 17, 1999).

<sup>&</sup>lt;sup>9</sup> See e.g. Memo. from Winston Smith, Director Air, Pesticides and Toxics Management Division to Randy C. Poole, Air Hygienist II, Applicability of Title V Permitting Requirements to Gasoline Bulk Terminals Owned by Williams Energy Ventures, Inc. (May 19, 1999)

<sup>10 45</sup> FR 52676, 52694 (August 7, 1980).

<sup>11</sup> Id at 52695

<sup>&</sup>lt;sup>12</sup> Memo. from Winston Smith at 6.

occur over large geographic distances, with the downstream processing plant into a single major stationary source. Aggregation of such geographically-dispersed activities defies the concept of contiguous and adjacent. While the land mass may be "contiguous or adjacent" when viewed as a whole, the limited portion of the properties physically associated with the pollutant-emitting activity are not necessarily nearby, connected, or in any way proximate to each other.

Congress also recognized the unique geographic attributes of the oil and gas industries when it provided specific direction on how emission sources in the oil and gas exploration and production industry should be grouped together for purposes of defining a major source under the Section 112 Air Toxics Program.<sup>13</sup> Specifically, Section 112(n)(4) of the Act states:

[E]missions from any pipeline compressor or pump station shall not be aggregated with emissions from other similar units, whether or not such units are in a contiguous area or under common control, to determine whether such units or stations are major sources, and in the case of any oil or gas exploration or production well (with its associated equipment), such emissions shall not be aggregated for any purpose under this section.

Applying our interpretation of the Section 112(a)(1) and (n)(4) statutory language, and our understanding of hazardous air pollutant (HAP) emission sources, we defined the major source under Section 112, for purposes of these industries, in reference to individual surface sites.<sup>14</sup>

For purposes of making source determinations for NSR and Title V, we recommend that permitting authorities first look to the Section 112 approach of segregating each individual surface site. While we do not believe that permitting authorities should strictly apply the Section 112 definition of major stationary source for purposes of the NSR and Title V permit programs, we do believe that the "surface site" is a reasonable place to begin the source determination analysis. This is because we have already determined that a surface site fits within a reasonable interpretation of the term stationary source in context of one regulatory program, and administratively, we think it reasonable for a permitting authority to at least consider whether the same boundaries are appropriate in administrating other regulatory programs.

After identifying the individual surface site, the permitting authority should consider aggregating pollutant-emitting activities at multiple surface sites, when the surface sites are under common control and located in close proximity to each other. A reviewing authority can consider two surface sites to be in close proximity if they are physically adjacent, or if they are separated by no more than a short distance (e.g. across a highway, separated by a city block or

<sup>&</sup>lt;sup>13</sup> Although Congress provided direction in Section 112(n)(4) absent a specific finding related to whether the activities are within a "contiguous area," notably, the Congressional Record shows that Congress explained its basis for creating special treatment for these industries under Section 112 partially based on a finding that emissions, "are typically located in widely dispersed geographic areas, rather than concentrated in a single area." 136 Cong.Rec H12848-01.

<sup>&</sup>lt;sup>14</sup> See 64 FR 32618 and 40 C.F.R. Part 63, Subpart HH.

<sup>&</sup>lt;sup>15</sup> It is common practice, when making NSR source determinations, to first look at a small group of pollutantemitting activities, and then determine whether it is appropriate to aggregate these activities with other activities to define the major stationary source. In the oil and gas industries, we think that a surface site contains an appropriate collection of pollutant-emitting activities to begin this analysis.

some similar distance). <sup>16</sup> Once the stationary source is identified, the permitting authority should consider the emissions from all equipment located either temporarily or permanently on the surface site(s) collectively to determine whether the surface site(s) qualifies as a major stationary source for NSR and Title V. <sup>17,18</sup>

In a great majority of cases, we expect that permitting authorities will find that a single surface site is the most-suitable industrial grouping because it correlates best with the definition of a stationary source. Accordingly, permitting authorities could treat each surface site as a separate stationary source and generally would not need to aggregate activities located on different oil and gas properties (oil and gas lease, mineral fee tract, subsurface unit area, surface fee trace or surface lease tract) or located on the same lease, when the sites are not located in close proximity to each other.

Whether or not a permitting authority should aggregate two or more pollutant-emitting activities into a single major stationary source for purposes of NSR and Title V remains a case-by-case decision considering the factors relevant to the specific circumstances. Nonetheless, today's guidance provides permitting authorities a reasonable analytical approach that simplifies the determination process and assures greater uniformity in permitting decisions. Unless unique factors (such as proximity or interdependence) indicate otherwise, permitting authorities can consider oil and gas exploration.

interdependence) indicate otherwise, permitting authorities can consider oil and gas exploration and production activity located on a single surface site to be an individual stationary source.

<sup>16</sup> In making major stationary source determinations for this industry, some southern States apply a rule that generally results in separating pollutant-emitting activities located outside a ¼ mile radius.

This approach differs from the Section 112 approach for these industries. The Section 112 approach exempts activities at the well and its associated equipment from the regulations. 64 FR 32610. Congress' based its direction to disaggregate these emission points for purposes of Section 112 on a finding that these emissions points generally have low HAP emissions. 17 136 Cong.Rec H12848-01. This is not necessarily the case for criteria pollutants. Drilling sites can contribute high levels of CO, NO<sub>x</sub>, and SO<sub>2</sub> emissions from internal combustion engines. Accordingly, a potential to impact ambient air quality exists if these pollutant-emitting activities are closely located, and we believe it appropriate to consider these emissions points in defining the major stationary source for the NSR and Title V permitting programs.

<sup>&</sup>lt;sup>18</sup> Temporary emissions include emissions from a portable stationary source that would be less than two years in duration, unless the Administrator determines that a longer period would be appropriate. 45 FR 52728. Temporary emissions, however, do not include emissions from non-road engines.

## SOI Attachment 4

#### INTRODUCTION

This document sets forth the statement of basis for the terms and conditions of Operating/Construction Permit No. 182TVP01.

NOTE: During the Spring of 2003 House Bill 160 was passed which modified Alaska Statute 46.14 Air Quality Control. One of the modifications was to change terminology in the statute to make it identical to that used in the Federal Clean Air Act. In the following discussion GATHERING CENTER #1 STATIONARY SOURCE IDENTIFICATION this new terminology has been used so that the US EPA clearly understands ADEC's decision. The new terminology used is "stationary source" which replaces "facility" and "emission unit" which replaces "source". For purposes of this issue of aggregation alone, the terms "facility", "source", and "emission unit" have the meaning given by the federal definition and the new state statutory definition.

The remainder of the Permit and Statement of Basis was written before the Spring of 2003 and therefore uses the old terminology for "facility" and "source". The relevant definitions are:

"Facility" means one or more structures, buildings, installations, or properties that are contiguous or adjacent and are owned or operated by the same person or by persons under common control and upon which a source or sources are located....

"Source" means a device, process, activity, or equipment that causes, or could cause, a release of an air contaminant.

#### **GATHERING CENTER #1 STATIONARY SOURCE IDENTIFICATION**

#### **Decision**

Gathering Center #1 is located within the Prudhoe Bay Unit (PBU) on the North Slope of Alaska. The Department has determined the Gathering Center #1 (GC#1) stationary source is the surface structures with their associated emission units located on the GC#1 production pad and emissions units located on PBU well pads D, E, F, G, Y, and P. This determination applies to both the State's Title I and Title V air quality permitting programs.

Currently, the significant emission units on these pads for Title V purposes are those identified in Table 1 of permit no. 182TVP01. Additional insignificant emission units are located on the GC#1 production pad and the well pads, for instance the drill site manifold and wellhead enclosures are considered insignificant emission units in accordance with state regulation 18 AAC 50.335(s)(93).

Drill rigs and other temporary emission units will periodically operate at the well pads. Operation of such emission units will be considered temporary activities as long as they are not located and operated (continuously or intermittently) at the same well pad for more than 24 consecutive months. The 24-month clock is reset each time these emission units are moved from well pad to well pad, even if the new physical location is at a well pad governed by the same permit as the previous well pad location.

#### Discussion

In reaching this decision the Department relied on the definition of stationary source and the concept of common sense notion of plant as discussed in the preamble to the Federal PSD regulations, 45 Fed. Reg. 52693.

The following Federal definitions from 40 C.F.R. §51.166(b) have been adopted by the State statute and are relevant to this discussion.

Stationary source means any building, structure, facility, or installation, which emits or may emit a regulated NSR pollutant.

Building, structure, facility, or installation means all of the pollutant-emitting activities which belong to the same industrial grouping, are located on one or more contiguous or adjacent properties, and are under the control of the same person (or persons under common control).... Pollutant-emitting activities shall be considered as part of the same industrial grouping if they belong to the same Major Group (i.e., which have the same two-digit code) as described in the Standard Industrial classification Manual, 1972....

Emission unit means any part of a stationary source that emits or would have the potential to emit any regulated NSR pollutant....

Based on these definitions, the pollutant-emitting activities must meet three criteria to be included in the stationary source:

- 1) They must "belong to the same industrial grouping" as described by their SIC code. On the North Slope all the oilfield facilities have the same SIC code (1311 Crude Petroleum and Natural Gas Production).
- 2) They must be "located on one or more contiguous or adjacent properties". This is a location based physical proximity requirement, as discussed in the preamble to the Federal PSD regulations, 45 Fed. Reg. 52676.
- 3) They must be "under the control of the same person". Within the PBU, BP Exploration (Alaska) Inc. (BPXA) is the operator and implements the decisions of the leaseholders via the Unit Operating Agreement.

Since items #1 and #3 above are self-evident no further discussion is needed.

Item #2 is the proximity criterion. To determine if the "property" or "properties" are located in close proximity, the relevant "property" must first be identified. The ADEC has determined that within the North Slope oilfields "property" is considered to be the improved surface areas (pads) because: 1) oil and gas production activities occur over vast areas in which there is limited surface disturbance, 2) land use permits must be obtained from the state for any surface disturbances, 3) the unique permafrost environment limits the extent of any surface disturbances, and 4) the pollutant emitting activities are located on the pads.

The PBU production centers and production wells are located on separate pads that are not contiguous (i.e., not touching). Thus the adjacency (i.e., the nearness or closeness) must be evaluated. To evaluate the adjacency of facilities, ADEC has used the concept of the common

sense notion of a plant to inform proximity. In its analysis, ADEC has developed what is referred to as the "wagon wheel" model based on the production centers (hubs) and well pads (spokes). In this model of the plant, the well pads deliver raw materials (wellhead fluids consisting of crude oil, water, and hydrocarbon gases) to the production center for processing into finished product (sales oil) for delivery and custody transfer at Pump Station #1 of the Alyeska Pipeline Service Co.

The wagon wheel model for determining the stationary source for PSD and Title V applicability is currently used at other operating units on the North Slope such as Lisburne, Endicott, Kuparuk, and Alpine. The physical proximity (miles) varies widely at these sources and ADEC does not propose to establish a fixed value for this parameter. For instance, the longest spoke at Lisburne is drill site DS-L5, which is 6 miles from the production center (hub), at Endicott is drill site SDI, which is 3 miles from the production center (hub), at Kuparuk is drill site 3R, which is 3 miles from the CPF-3 production center (hub), and at Alpine is drill site DS2, which is 3 miles from the production center (hub). Within the Prudhoe Bay Unit, Z-Pad is 9 miles from the GC-2 production center (hub) and for the GC-1 stationary source Y-Pad is 4 miles from the production center (hub).

Which spokes will be attached to which hubs are, of course, determined by the flow of wellhead fluids (raw materials) and sales oil (finished crude). Whether a production well pad is part of a larger stationary source centered at a production center (hub) will be determined on a case-by-case basis taking into consideration site-specific factors such as the common sense notion of a plant, air impact overlaps/airshed, predictable emission impacts on hub, different operating units/control, service contracts with other operating units, ease of permit administration, and other case-specific factors deemed relevant. For instance, for a new unitized development the presumptive maximum radius of the spokes would be based on the original development project. Under the wagon wheel model, the associated infrastructure is considered a separate stationary source, unless co-located on the same pad or primarily associated with a hub or another stationary source.

#### Rationale for Hub and Spoke Aggregation Model

In the context of the Prudhoe Bay Unit, the relevant units of property are the pads on which the sources are situated, as distinguished from the surrounding tundra. Guidance developed by the State of Texas (Definition of Site, March 2002) for determining stationary sources located within producing oilfields states "For leased properties, 'property' is considered the surface area on which a stationary source has been placed, including any immediate area graded or cleared for stationary sources."

Why consider the production centers (hubs) along with their associated production well pads (spokes) as the basic stationary source or production plant for the PBU?

1) Proximity. The primary function of the production centers at the PBU (GC-1, GC-2, GC-3, FS-1, FS-2, FS-3, and Lisburne) is separation and processing of three-phase well fluids (oil, gas, and water) into sales-quality crude oil for delivery to the Trans-Alaska Pipeline System at Pump Station #1. Each production center is capable of performing this function independently of the other production centers. For example, if FS-2 were shutdown for maintenance, FS-1, FS-3, GC-1, GC-2, GC-3, and Lisburne would continue to process oil, gas, and water without adverse impact. Grouping the well pads with their

respective production centers maintains the important role of proximity in aggregation decisions.

2) Common Sense Notion of Plant. In the preamble to the PSD regulations of 1980 EPA (45 Fed. Reg. 52693) emphasized the importance of a "common sense" notion of source for the PSD program as follows:

In EPA's view, the December opinion of the court in <u>Alabama Power</u> sets the following boundaries on the definition for PSD purposes of the component terms of "source"; 1) it must carry out reasonably the purposes of PSD, 2) it must approximate a common sense notion of "plant", and 3) it must avoid aggregating pollutant-emitting activities that as a group would not fit within the ordinary meaning of "building," "structure," "facility," or "installation."

Due to the nature of the oil and gas extraction business, facilities must be scattered across the resource area creating duplicate facilities performing identical functions. Well production pads must be dispersed evenly across the unit so that all the leases can be accessed. Likewise, production centers must be scattered since they act as collection points of the raw materials brought to the surface at the well pads. The hub and spoke production model develops naturally from the logistics of the business.

Within this conceptual framework, ADEC determines the plant to be the well production pads that extract the raw materials (wellhead fluids) from the subsurface and deliver them to the factory (production center) for processing into finished product (crude oil for sales) and waste products (water and gas for underground disposal). Wellhead facilities and separation facilities cannot exist without each other and constitute a complete production plant.

3) Reasonable Permit Administration. This approach allows ADEC more feasible permit administration with comparable environmental benefits. The benefit of going beyond the reasonably scaled wagon wheel approach for evaluating emission effects on other facilities is not apparent. Finally, previous permitting actions by ADEC at Kuparuk, Lisburne, Endicott, and Alpine support the determined stationary sources using the hub and spoke model. The facilities within the PBU would then be treated the same as these other operating units.

#### Other Models of Aggregation Discussed

There were two other questions considered to determine the appropriate stationary sources for permitting purposes at the PBU. First, should the entire PBU be the stationary source? Second, should each individual pad with its emitting units be considered a separate stationary source? Both of these potential permitting approaches were evaluated and rejected for reasons discussed below and the wagon wheel approach was accepted as being reasonable decision making.

1) Prudhoe Bay Unit \( \neq \) Stationary Source. The PBU is made up of the oil leases that overlie the Prudhoe Bay Permo-Triassic Reservoir and covers roughly 300 square miles. To consider all the facilities located therein as a single stationary source severely stretches the concept of proximity. The ADEC does not believe that the leases and operating units constructed from these leases is the proper focus of a regulatory program

concerned with air emissions. The leases and unit agreement pertain to subsurface development and long-term reservoir management to maximize economic gain for the leaseholders and lessor. If the Prudhoe Bay operating unit were to be determined the relevant facility for aggregation, then there is no logical reason to stop at the boundaries of the PBU since contiguous operating units (i.e. Lisburne, Endicott, Milne, Northstar, and Pt. McIntyre) are also under the common control of BPXA.

Should pipeline connections be used to determine the appropriate stationary source? The ADEC does not believe this is a deciding factor because in the oil and gas industry pipelines connect everything. Pipelines are used throughout the operating unit as the preferred method for transferring fluids between facilities. To only consider the connectivity of operations via pipelines to determine proximity and to not also consider the concept of a common sense notion of a plant would result in one stationary source extending from the North Slope oil fields all the way to the Valdez Marine Terminal.

The complexity of administering (government) and operating (industry) a stationary source as large as the PBU without clear corresponding environmental benefit argues against this approach. Some of the identified problems are:

- a) Netting analyses conducted over such a large stationary source could lead to avoiding all PSD reviews.
- b) De-bottlenecking analyses would be more difficult; judgment calls about how far out from the equipment modification would become more complicated.
- c) Tracking cause and effect of activities within the unit would be difficult; calculation of associated emission effects would become more complicated.
- d) Permit maintenance burden would be greater; both Title I and Title V permits would be in a constant state of revision.
- e) Scope of review and analysis could discourage discrete facility upgrades. If ADEC were required to evaluate all air-related issues across the entire PBU at the same time, agency resources could be overwhelmed resulting in permitting delays.

Finally, there is no precedent for defining such a large stationary source, either the size of the PBU, the size of the contiguous North Slope oil fields operated by BPXA, or the size of all the current and future North Slope facilities and the transportation corridor to the deep water port of Valdez.

- 2) Individual Pad \( \neq \) Stationary Source. Treating each individual pad and the emission units located on it as a stationary source is the current permitting practice for PBU. This practice does not conform to the court decision in the <a href="Alabama Power">Alabama Power</a> case concerning the definition of source and its component terms for PSD purposes.
  - a) It must carry out reasonably the purposes of PSD. Permitting individual sources does not adequately serve the purposes of PSD when major projects that contribute to the production process and emissions can be located on well pads

but avoid PSD review. The primary purpose of PSD review being to maintain air quality within the applicable increments.

- b) It must approximate a common sense notion of plant. The complete production process defining the plant that starts at the wellhead and ends at the sales oil line outlet from the production center is ignored.
- c) It must avoid aggregating pollutant-emitting activities that as a group would not fit within the ordinary meaning of "building", "structure", "facility", or "installation". Permitting individual pollutant-emitting activities does completely avoid aggregating those activities that do not fit the ordinary meaning of "facility".

Finally, using the wagon wheel approach for determining the appropriate stationary sources at PBU will ensure permitting consistency with the other operating units on the North Slope.

#### Status of Support Facilities at PBU

The services that support facilities provide (e.g., Seawater Treatment Plant, Grind & Inject, Base Operations Center, Central Power Station, etc.) are spread over the entire PBU (with six hubs) and other operating units such as Kuparuk, Lisburne, and Endicott with no one hub receiving a majority of the support provided. When these services have been co-located on a pad with another stationary source, they have been aggregated as in the case of the Crude Oil Topping Unit with PBOC/MCC and the Seawater Injection Plant West with Gathering Center #1. The purposes the support facilities serve are secondary to the function of the production hubs. In addition, some of the support facilities (Base Operations Center, Central Power Station, and Prudhoe Bay Operations Center/Main Construction Camp) only exist because of the remote location of the North Slope oilfields and are not inherent to oil and gas production. The service infrastructure has different purposes and, therefore, these activities are considered separate stationary sources.

The ADEC does propose combining two of the separate support facilities as part of this review of stationary sources operating at PBU. The ADEC has determined the Central Gas Facility (CGF) and the Central Compressor Plant (CCP) to be a single stationary source (the Gas Plant) for purpose of Title I and Title V permitting for the following reasons:

- 1) Physical proximity the two facilities are located ¼ of a mile from each other.
- 2) Common sense notion of a plant these two facilities constitute the gas handling plant. The raw material (low pressure high molecular weight gas) is delivered to CGF from the hubs for removal of miscible inject/natural gas liquids and pressurization (to intermediate pressure) for distribution, the vast majority of which is delivered to the Central Compressor Plant for additional pressurization. This final product (high pressure low molecular weight gas) is then distributed to injection wells nearby CCP for ultimate disposal/storage underground.
- 3) These two facilities were originally permitted as a single stationary source but were disaggregated during the late 1980s.

## SOI Attachment 5

### BEFORE THE ADMINISTRATOR UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

IN THE MATTER OF BP Exploration (Alaska), Inc. GATHERING CENTER #1	)	ORDER RESPONDING TO PETITIONER'S
	j	REQUEST THAT THE ADMINISTRATOR
Permit No. 182TVP01	)	OBJECT TO ISSUANCE OF A STATE
(Revision 1)	)	OPERATING PERMIT
Issued by the Alaska Department	)	
of Environmental Conservation	í	
	<u>ن</u>	

#### ORDER DENYING PETITION FOR OBJECTION TO PERMIT

On February 17, 2004, the State of Alaska Department of Environmental Conservation (ADEC) issued Revision 1 to the State operating permit to BP Exploration (Alaska), Inc. - Gathering Center #1 (GC1) at Prudhoe Bay, Alaska (Revision 1 to the GC1 Permit or Revision 1), pursuant to title V of the Clean Air Act (CAA), 42 U.S.C. §§ 7661-7661f, CAA §§ 501-507. On April 14, 2004, the Environmental Protection Agency (EPA) received a petition from Public Employees for Environmental Responsibility on behalf of Bill MacClarence (Petitioner) requesting that EPA object to the issuance of this permit pursuant to section 502(b)(2) of the CAA, the federal implementing regulations, 40 C.F.R. part 70, and the State of Alaska implementing regulations, 18 Alaska Administrative Code (AAC) Ch. 50.

The petition alleges that:

(1) Revision 1 to the GC1 Permit violates title V of the CAA because Revision 1 does not explain the departure from ADEC's March 7, 2003 draft permit and because the provisions of Prevention of Significant Deterioration (PSD), National Emission Standards for Hazardous Air Pollutants (NESHAP), and New Source Performance Standards

- (NSPS) are all based on the aggregated impact of air emissions and this permit did not aggregate all facilities within the Prudhoe Bay Unit (PBU);
- (2) The pollution consequences of this violation are significant because elevated levels of nitrogen oxide on the North Slope of Alaska present a serious health problem for workers and native communities in the region and have been created by not aggregating facilities within the PBU; and
- (3) ADEC and EPA failed to exercise proper regulatory oversight in this matter by issuing the final permit with no public notice or discussion.

The Petitioner has requested that EPA object to the issuance of Revision 1 to the GC1 permit pursuant to section 505(b)(2) of the CAA for the reasons identified above.

Based on a review of available information, including Revision 1 to the GC1 Permit; the statement of basis for Revision 1; the original GC1 Permit and statement of basis; the permit application; and information provided by the Petitioner in his petition, EPA denies the petition.

#### I. STATUTORY AND REGULATORY FRAMEWORK

Section 502(d)(1) of the CAA requires 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 Alaska effective December 5, 1996, 61 FR 64463 (December 5, 1996), and full approval effective November 30, 2001, 66 FR 63184 (December 5, 2001). See 40 C.F.R. part 70, appendix A. Major 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 CAA. 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 that permits contain monitoring, recordkeeping, reporting, and other compliance requirements when not adequately required by existing applicable requirements to assure compliance by sources with existing applicable emission control requirements. 57 FR 32250, 32251 (July 21, 1992). One purpose of the title V program is to enable the source, the permitting authority, EPA, and the public to better understand the applicable requirements to which the

source is subject and 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 facility emission units and that compliance with these requirements is better assured.

Under section 505(a) of the CAA, permitting authorities are required to submit all proposed title V operating permits to EPA for review. Section 505(b)(1) of the CAA authorizes EPA to object if a permit contains provisions not in compliance with applicable requirements. Section 505(b)(2) of the CAA states that if EPA does not object to a permit, any person may petition the Administrator, within 60 days of the expiration of EPA's 45-day review period, to object to the permit. To justify exercise of an objection by EPA to a title V permit pursuant to section 505(b)(2), a petitioner must demonstrate that the permit is not in compliance with the requirements of the CAA. See 40 C.F.R. § 70.8(c)(1); NYPIRG v. Whitman, 321 F.3d 316, 333 n.11 (2d Cir. 2003).

Petitions must be based "only on objections to the permit that were raised with reasonable specificity during the public comment period...unless the petitioner demonstrates that it was impracticable to raise such objections within such period, or unless the grounds for the objection arose after the public comment period." 40 C.F.R. § 70.8(d); see also CAA § 505(b)(2). A public petition for administrative 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 before receipt of the objection. 40 C.F.R. § 70.8(d). 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 using the procedures in 40 C.F.R. § 70.7(g) for reopening a permit for cause. The permitting authority has 90 days from receipt of EPA's objection letter to propose a determination of termination, modification, or revocation and reissuance, as appropriate, in accordance with EPA's objection. 40 C.F.R. § 70.7(g)(4). If the permitting authority fails to resolve EPA's objection, EPA will terminate, modify, or revoke and reissue the permit after providing at least 30 days' notice to the permittee. 40 C.F.R. § 70.7(g)(5)(i).

#### II. BACKGROUND

BP Exploration (Alaska), Inc. - Gathering Center #1 (GC1) is an existing oil and gas production facility within the PBU on the North Slope of Alaska. GC1 processes crude oil production fluids from various crude oil accumulations on the North Slope, primarily well pads D, E, F, G, K, Y, and P. Since April 2002, BP Exploration (Alaska), Inc. (BPX) has operated the entire PBU on behalf of the other owners in accordance with a mutual agreement. According to Alaska's Department of Natural Resources, BPX currently has a 26.35% ownership interest in the PBU; the other owners are: ExxonMobil (36.40 %), ConocoPhillips Alaska (36.07%), ChevronTexaco (1.16%), and Forest Oil (0.02%).

Three-phase crude oil is extracted from the ground at 38 individual drill sites and pumped to one of six dedicated production centers within the PBU (GC1, GC2, GC3, FC1, FC2, and FC3). At the production centers, the three-phase crude oil is separated into crude oil, produced water, and hydrocarbon gases. The crude oil is distributed to the Trans-Alaska Pipeline for sale; the produced water is pumped into disposal wells or injected back into the production reservoir on the well pads, and the hydrocarbon gases are dispatched to both the central gas facility and central compressor plant for further processing prior to reinjection. Other facilities located within the PBU include a central power station that generates electricity for the entire PBU; seawater treatment and injection plants to enhance oil recovery; a crude oil topping unit that supplies diesel fuel throughout the PBU and greater North Slope; an operations center that includes administrative offices, water and waste-water treatment plants, emergency power generation, health and safety facilities, repair and storage facilities, and dining and recreational facilities for up to 450 camp residents; and a main camp that provides dining, health, recreational, and other facilities for up to 675 camp residents.

ARCO, then the owner/operator of GC1, submitted a title V permit application to ADEC in November 1997. ADEC issued a draft permit for public comment on February 22, 2002, and the Petitioner submitted comments on March 23, 2002. In the initial draft permit, ADEC did not aggregate GC1 with any other facilities in the PBU for purposes of title V or for other CAA programs. ADEC issued a revised draft permit on March 6, 2003, in which ADEC aggregated

http://www.dog.dnr.state.ak.us/oil/products/maps/northslope/images/NS\_%20Pool\_Ownership.pdf

GC1 with the other oil production facilities in the PBU operated by BPX for purposes of determining the applicability of the modification requirements of ADEC's new source review regulations, including the PSD program. The public comment period on the revised draft permit closed on May 7, 2003, and Petitioner did not submit comments during that time.

After responding to comments received on the revised draft CG1 permit, ADEC further revised the draft permit and submitted to EPA a proposed title V permit dated July 2, 2003, which EPA received on July 9, 2003. In that July 2003 proposed permit, ADEC did not aggregate GC1 with any other facilities in the PBU. After discussions with EPA regarding the proposed permit and other title V permits for North Slope operations, ADEC issued the final permit for GC1 on October 20, 2003, which EPA received on October 23, 2003. In the final GC1 Permit, ADEC made revisions to the statement of basis for the GC1 Permit to clarify that ADEC considered the stationary source for purposes of the title V permit to be GC1 and all surface structures with their associated emission units located on the GC1 production pad, as well as well pads D, E, F, G, Y, and P, and to explain its approach to aggregating facilities within the PBU. However, ADEC did not make any changes to the terms and conditions contained in the July 2003 proposed permit when issuing the October 2003 GC1 Permit, because ADEC determined that emission units on the well pads, if any, were not subject to any emission unit-specific applicable requirements.

In response to an inquiry from the Petitioner, Region 10 advised the Petitioner that, because of changes ADEC made to the statement of basis between the proposed permit sent to EPA on July 9, 2003, and the final permit issued on October 20, 2003, EPA considered the permit issued by ADEC on October 20, 2003, and received by EPA on October 23, 2003, to be the proposed permit for purposes of filing a petition under section 505(b) of the CAA. Region 10 further advised the Petitioner that it would consider the Petitioner's petition to be timely if received by EPA within 105 days (45 days for EPA review plus the 60 day petition period) of EPA's receipt of the final GC1 Permit on October 23, 2003. On February 5, 2004, EPA received

<sup>&</sup>lt;sup>2</sup> On August 26, 2005, ADEC again revised the title V permit for GC1 to add well pad K to the GC1 "major source"/"major stationary source" after BPX and ADEC realized that BPX's title V application and the GC1 permit mistakenly omitted well pad K. ADEC stated that there was no need to modify any permit conditions because no significant emission units are located on well pad K. According to ADEC, the only changes to the permit and

Petitioner's request that EPA object to the October 20, 2003 GC1 Permit (February 2004 Petition). The February 2004 Petition alleged that:

- (1) The GC1 Permit violates title V of the CAA because the provisions of PSD, NESHAPS, and NSPS are all based on the aggregated impact of air emissions and this permit did not aggregate all facilities within the PBU;
- (2) The pollution consequences of the violation are significant because elevated levels of nitrogen oxide on the North Slope of Alaska present a serious health problem for workers and native communities in the region and have been created by not aggregating facilities within the PBU; and
- (3) ADEC and EPA failed to exercise proper regulatory oversight in this matter by issuing the final permit with no public notice or discussion.

On December 31, 2003, ADEC forwarded to EPA a proposed Revision 1 to the GC1 Permit for EPA's 45 day review period. The proposed Revision 1 added to the permit itself the definition of the title V source, which was previously only in the statement of basis; added language to the permit and to the statement of basis stating that the permit did not apply to temporary emission units and facilities, such as drill rigs and associated activities and equipment that periodically operates at the well pads covered by the permit; made minor changes to the aggregation discussion in the statement of basis; and made revisions to three permit terms to make them consistent with other permits issued to BPX sources. ADEC stated that it was revising the permit under its informal agency review provisions of 18 AAC 15.185. ADEC issued the final Revision 1 to GC1 Permit on February 17, 2004, and the Petitioner filed the instant petition on April 14, 2004 (April 2004 Petition). The April 2004 Petition stated that, because Revision 1 did not explain the departure from ADEC's March 7, 2003 draft permit for GC1 that proposed to aggregate all facilities within the PBU and did not address the Petitioner's original objections to the October 2003 GC1 final permit, the Petitioner was resubmitting the objections raised in his February 2004 Petition.

EPA's 45-day review period for Revision 1 ended on February 14, 2004. The 60th day following that date was April 14, 2004. Accordingly, EPA finds that the April Petition was timely filed.<sup>3</sup>

#### III. ISSUES RAISED BY THE PETITIONER

#### A. Aggregation of Oil and Gas Facilities in the PBU

The Petitioner alleges that Revision 1 violates title V because, as explained in his comments on the initial draft permit, the permit did not aggregate all facilities within the PBU. The Petitioner argues this failure is important because the provisions of PSD, NESHAP, and NSPS are all based on the aggregated impact of air emissions at the source. February 2004 Petition, p. 2 (incorporated by reference in the April 2004 Petition). According to the Petitioner, the analysis ADEC included with the draft permit ADEC proposed on March 7, 2003, which called for the aggregation of all facilities in the BPU, complies with federal requirements for aggregation and is based on EPA directives, whereas the permit decisions referenced by ADEC in the final permit are at variance with EPA guidance on aggregation. February 2004 Petition, p. 2 (incorporated by reference in the April 2004 Petition). In his comments on the initial February 2002 draft permit during the State public comment process, which Petitioner refers to in the February 2004 Petition, the Petitioner stated that all of the facilities within the PBU are under common control, are interdependent, and share the same SIC code and pointed to language from the Statement of Basis for the draft February 22, 2002 permit stating that GC1 processes fluids received from other well pads and other production centers within the PBU. Thus, the Petitioner asserts, "Gathering Center 1 should not be identified as the 'facility,' but rather, as a unit of the Prudhoe Bay Facility." E-Mail from Bill MacClarence to John Kuterbach and Kathy Stringham, dated March 23, 2002.

After consideration of all available information, EPA concludes that the Petitioner has failed to provide adequate information to support his claim that the entire PBU should be

<sup>&</sup>lt;sup>3</sup> In EPA's April 23, 2004 letter to Petitioner acknowledging receipt of the April 2004 Petition, EPA stated that it did not intend to take further action on the February 2004 Petition, since the April 2004 Petition resubmitted, in full, the February 2004 Petition.

aggregated and has also failed to demonstrate that the failure to aggregate all facilities within the PBU has led to a deficiency in the content of the permit. As discussed above, ADEC initially took public comment on a draft permit which did not aggregate GC1 with any other facilities within the PBU and then took public comment on a draft permit that aggregated GC1 with most other facilities within the PBU for PSD purposes. In issuing the final permit in October 2003 and Revision 1 in February 2004, ADEC aggregated GC1 with its associated well pads, but not with any other facilities within the PBU. Statement of Basis, p. 2; Revision 1 Statement of Basis, p. 2. ADEC provided a detailed explanation of its aggregation decision in the statement of basis for the final permit for GC1 issued in October 2003, as well as in the statement of basis for Revision 1 issued in February 2004. ADEC discussed in great detail why it decided, based on the applicable statutes, regulations, and EPA guidance and the specific facts before ADEC, that it was not appropriate to aggregate all facilities within the entire PBU.

The April 2004 Petition, as well as the February 2004 Petition and Petitioner's March 2002 comments on the February 2002 initial draft permit, make only generalized statements that all facilities in the PBU must be aggregated and do not provide adequate references, legal analysis, or evidence in support of these general assertions. In arguing that such aggregation is necessary, the February and April 2004 Petitions generally point to the Statement of Basis provided in support of the March 2003 revised draft permit, but Petitioner does not provide any argument as to why ADEC's decision not to aggregate, which is described in great detail in the Statement of Basis for the final Revision 1 permit, is unreasonable. Moreover, neither Petition identifies any flaw under the Clean Air Act in the Revision 1 permit that resulted from the allegedly deficient decision not to aggregate all facilities in the PBU.

As discussed above, Section 502(b)(2) of the CAA places the burden on the petitioner to "demonstrate[] to the Administrator that the permit is not in compliance" with the applicable requirements of the CAA or the requirements of part 70. See also 40 C.F.R. § 70.8(c)(1); NYPIRG, 321 F.3d at 333 n.11. I find that the general allegations of the Petitioner in the April 2004 Petition, which incorporates the February 2004 Petition and his March 2002 comments, fail to demonstrate a basis for Petitioner's claim that Revision 1 to the GC1 Permit violates the CAA, because the permit fails to aggregate all facilities within the PBU for purposes of PSD, NESHAPS, and NSPS. Therefore, EPA denies the Petition on this issue. See Tesoro Refining

and Marketing Co., Petition No. IX-2004-6, at 11 (March 15, 2005) (denying title V petition where petitioner failed to substantiate its "generalized contention" that the permit was flawed and the permit's statement of basis provided an explanation of the allegedly flawed permit requirement).

#### B. Pollution Consequences of Not Aggregating All Facilities Within the PBU

The Petitioner asserts that the pollution consequences of not aggregating all facilities within the PBU are significant because elevated levels of nitrogen oxide and other pollutants on the North Slope of Alaska present a serious health problem for workers and native communities in the region and have been created by not aggregating facilities within the PBU. February 2004 Petition, pp. 2-3 (incorporated by reference in the April 2004 Petition).

Petitioner's second claim is in essence an extension of the first issue raised by the Petitioner: that the Clean Air Act requires aggregation of all facilities within the PBU. As discussed above, Petitioner has failed to provide adequate information to support his claim that the entire PBU should be aggregated and has also failed to demonstrate that failure to aggregate all facilities within the PBU has led to a deficiency in the content of the permit, i.e. that a CAA applicable requirement is missing from the Revision 1 permit.

Moreover, title V does not authorize a permitting authority to impose substantive new requirements on a permittee, see 40 C.F.R. § 70.1(b), and Petitioner again fails to provide support for his claim that the alleged pollution consequences arising from ADEC's failure to aggregate all facilities within the PBU are significant and result in a permit that is not in compliance with the requirements of the CAA. Therefore, to the extent that Petitioner's pollution consequences allegation could be read to raise an issue separate and apart from his first claim, EPA denies the Petition on this issue. See generally Shintech, Inc., Permit Nos. 2466-VO, 2468-VO (Sept. 10, 1997) (denying petitioners' claims with regard to various alleged permit deficiencies, including those resulting in negative health consequences, because

petitioners had failed to provide specific information demonstrating how the permits' provisions did not comply with the Clean Air Act).<sup>4</sup>

#### C. Alleged Lack of Public Notice or Discussion

The Petitioner alleges that the proposed permit issued on July 3, 2003, 5 was issued without public notice and with no public discussion of the pollution consequences of the permit or the decision not to aggregate all facilities within the PBU. The Petitioner contends that ADEC's decision not to aggregate all facilities within the PBU and EPA's acquiescence in that decision occurred behind closed doors in consultation with the oil and gas industry. The Petitioner further asserts that EPA reversed its position on this permit due to aggressive lobbying of the Alaska oil and gas industry, because an August 14, 2003, letter from EPA to ADEC expressed reservations about ADEC's decision not to aggregate all facilities within the PBU. The Petitioner concludes that proper regulatory oversight was lost because EPA did not object to issuance of the permit. February 2004 Petition, pp. 3-4 (incorporated by reference in the April 2004 Petition).

At the outset, it is important to note that the procedural concerns raised by the Petitioner in his petition relate to the process of issuing the initial GC1 Permit on October 23, 2003, and not to the issuance of Revision 1 of the GC1 Permit on February 17, 2004. As discussed above, ADEC issued an initial draft permit for public comment in February 2002 in which ADEC proposed to consider GC1 as a separate title V and PSD source and not to aggregate GC1 with any other facilities in the PBU. In response to public comment on the initial draft permit, including those made by Petitioner, ADEC issued for public comment a revised draft permit in March 2003 in which ADEC proposed to aggregate GC1 with essentially all facilities within the PBU. After considering public comment on the second draft permit, including comments from the permit applicant arguing that aggregation of all facilities within the PBU was inconsistent with the Clean Air Act as well as impractical, ADEC submitted a proposed title V permit to EPA

The petition states that the proposed permit was issued on July 3, 2002. The proposed permit was in fact issued on July 3, 2003 and received by EPA on July 9, 2003

<sup>&</sup>lt;sup>4</sup> EPA also notes that the North Slope of Alaska is currently designated attainment with the National Ambient Air Quality Standards (NAAQS) for all criteria pollutants, including nitrogen dioxide.

for review in July 2003 in which ADEC aggregated GC1 with well pads D, E, F, G, Y, and P, but not with any other facilities in the PBU.

Thereafter, in response to further discussions with EPA, ADEC issued a final permit for GC1 on October 20, 2003, which EPA received on October 23, 2003. In the final GC1 Permit, ADEC made revisions to the Statement of Basis for the GC1 Permit to clarify that ADEC considered the stationary source for purposes of title V and PSD to be GC1 and all surface structures with their associated emission units located on the GC1 production pad, as well as well pads D, E, F, G, Y, and P, and to explain its approach to aggregating facilities within the PBU. However, ADEC did not make any changes to the terms and conditions contained in the July 2003 proposed permit when issuing the October 2003 GC1 Permit, because ADEC determined that emission units on the well pads, if any, were not subject to any emission unit-specific applicable requirements.

EPA believes that, in issuing the final GC1 Permit in October 2003, ADEC complied with the public notice and comment requirements of title V and ADEC's title V regulations. Part 70 requires that issuance of a title V permit be subject to adequate procedures for public notice, including offering an opportunity for public comments and a hearing on the draft permit. ADEC's approved title V program requires public notice and a 30 day public comment period on draft permits as do the new title V regulations recently adopted by Alaska. See 18 AAC 50.340(e)(2000); 18 AAC 50.040(2005); 18 AAC 50.326(k)(2005). The Alaska Supreme Court has held that a final agency decision subject to public notice and comment requirements can vary from the original proposal if the subject matter remains the same and the public has been reasonably notified that the proposed action might affect its interests. Trustees for Alaska v. State Department of Natural Resources, 795 P.2d 805, 808 (Alaska 1990). The court specifically noted that Alaska law on this point is similar to the approach followed by federal courts in reviewing the actions of federal agencies, which is referred to as the "logical outgrowth" test. The question under the "logical outgrowth" test is whether the final action is in character with the original proposal and a logical outgrowth of the notice and comments. Environmental Defense Center, Inc. v. U.S. E.P.A., 344 F.3d 832, 837 (9th Cir. 2003); Hodge v. Dalton, 107 F.3d 705, 712 (9th Cir. 1997). Accordingly, a new opportunity for public comment is not generated every time the agency reacts to public comments that it receives. Id.

In this case, ADEC provided two opportunities for public comment on two different versions of the permit: one version considering GC1 a source in and of itself and another version aggregating GC1 with essentially all other facilities within the PBU. In the end, the final permit issued by ADEC fell between the two alternative proposals: the final permit aggregated GC1 with well pads D, E, F, G, Y, and P, but not with any other facilities within the PBU. During both opportunities for public comment, the issue of how GC1 should be aggregated under the various CAA programs was clearly an issue ripe for comment. In fact, ADEC considered all public comments it received regarding aggregation and, in issuing the final permit, explained why the final permit did not aggregate all facilities within the PBU into a single facility.

Because the aggregation decision contained in the October 2003 GC1 Permit was a logical outgrowth of the prior draft permits and related public comments, EPA believes that ADEC satisfied the public notice and comment requirements of title V and ADEC's approved title V program in issuing the final GC1 Permit in October 2003. Accordingly, EPA denies the Petition on this issue.<sup>6</sup>

### III. CONCLUSION

For the reasons set forth above and pursuant to section 505(b)(2) of the Clean Air Act, EPA is denying the Petitioner's petition requesting the Administrator to object to the issuance of Revision 1 of the GC1 Permit.

APR 2 0 2007 Dated

Stephen L. Johnson

Administrator

<sup>&</sup>lt;sup>6</sup> Furthermore, EPA disagrees that it altered its position on aggregation on the North Slope because of aggressive lobbying by the Alaska oil and gas industry or failed to exercise proper regulatory oversight because it did not object to the October 2003 GC1 Permit. EPA did meet with the applicant, at the applicant's request, on two occasions to discuss aggregation of facilities within the PBU. Notes of the meetings are in the record for this petition response. On each occasion, EPA advised the applicant that because of the procedural posture of the permitting decisions and pending title V petitions raising aggregation issues, EPA would listen to the applicant's concerns and would take notes of the meeting, but EPA could not respond to the ments of the applicant's presentation as it related to aggregation of sources.

# SOI Attachment 6

#### **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 federallyenforceable 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.

# <u>Available Approaches for Creating Federally-enforceable</u> <u>Limitations on the Potential to Emit</u>

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:

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

<sup>&</sup>lt;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").

- <u>Limitations established by rules.</u> 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). 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. 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).

- 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(1). 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