BEFORE THE ADMINISTRATOR

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

IN THE MATTER OF Proposed Clean Air Act Title V Permit Issued to Luminant Generation Company, Sandow 5 Generating Plant)	PETITION FOR OBJECTION Permit Number O3025	AIR PERMITS SECTION	1 OCT -5 PM 4: 08	RECEIVED
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Pursuant to section 505(b)(2) of the Clean Air Act, 42 U.S.C. § 7661d(b)(2), 40 C.F.R. § 70.8(d), and 30 Tex. Admin. Code §122.360, the Environmental Integrity Project, Sierra Club, Public Citizen, Texas Campaign for the Environment, Environment Texas, and the SEED Coalition ("Petitioners") petition the Administrator of the U.S. Environmental Protection Agency ("EPA") to object to Federal Operating Permit No. O3025 ("Permit"), issued on August 18, 2011 by the Executive Director of the Texas Commission on Environmental Quality ("TCEQ" or "Commission") to the Luminant Generation Company, LLC ("Luminant") for operation of its Sandow 5 Generating Plant ("Sandow 5"). In the alternative, Petitioners petition EPA to reopen the Permit to correct its deficiencies and assure compliance with all applicable requirements of the Clean Air Act. Petitioners base this petition on comments filed by the Environmental Integrity Project with the TCEQ on August 3, 2009 during the public comment period on the draft permit. Petitioners incorporate by reference these comments, which are included here as Attachment 1.

Environmental Integrity Project ("EIP") is a nonpartisan, nonprofit organization dedicated to the effective enforcement of environmental laws. The Sierra Club is the nation's oldest and largest grassroots environmental group. Public Citizen is a nonprofit membership organization that advocates on behalf of the public interest on issues including clean, safe, and sustainable energy sources and strong environmental protections to public health. Texas Campaign for the Environment is a non-profit membership organization dedicated to informing and mobilizing Texans to protect the quality of their lives, their health, their communities, and their environment. Environment Texas is a non-profit statewide, citizen-based environmental advocacy organization that focuses exclusively on protecting Texas' air, water, and open spaces.

The SEED Coalition is an alliance of individuals, businesses, and organizations advocating sustainable energy strategies for Texas. Members and employees of these organizations live in, visit, or recreate in areas affected by air pollution from the Sandow 5 Generation Plant.

As required by the cited provisions, a copy of this Petition is being sent to the EPA Administrator, the TCEQ, and Luminant. A copy is also being provided to the EPA Region 6 Air Permit Section Chief.

EPA must object to or reopen the Permit because it contains provisions that are contrary to or fail to assure compliance with the Clean Air Act. Specifically, the Permit is deficient in the following respects:

- The Permit's use of incorporation by reference for emission limitations established by Sandow 5's major and minor NSR permits violates Title V of the Act and its implementing regulations at 40 C.F.R. Part 70, and renders the permit practically unenforceable;
- The Permit's incorporation by reference of 30 Texas Administrative Code, Chapter 106, Subchapter K Permits by Rule ("PBRs") is ambiguous, confusing, and renders the Permit practically unenforceable;
- 3. The Permit incorporates non-SIP-approved PBRs;
- 4. The Permit incorporates by reference Texas' disapproved Pollution Control Standard Permit;
- 5. Luminant lacks a MACT determination for the Sandow 5 CFB boilers, which is required by Section 112(g) of the Clean Air Act, and the Permit does not include enforceable emission limitations necessary to assure compliance with Section 112(g) of the Act.

ISSUES

The Administrator of the EPA must object to any proposed Title V permit if the Administrator determines that the permit contains provisions that are not in compliance with the requirements of the Clean Air Act.¹ Additionally, if a Title V permit fails to assure compliance with applicable requirements of the Clean Air Act and the Administrator has failed to timely

^{1 42} U.S.C. § 7661d(b)(1).

object to the permit, EPA must reopen the permit so that its deficiencies may be corrected.² EPA must object to or reopen a Title V permit once noncompliance has been demonstrated.³ EIP submitted comments on Luminant's Draft Title V Permit on August 3, 2009 demonstrating that the Draft Permit fails to comply with the requirements of the Clean Air Act.⁴ The Executive Director's Revised Notice of Proposed Permit and Response to Comments, issued on June 15, 2011, remedies some but not all of these deficiencies.. For example, the Draft Permit was modified to require that compliance with certain particulate matter limits incorporated by the Draft Permit be demonstrated by use of PM CEMS.⁵ However, as explained below, the Permit issued by the Executive Director still fails to comply with several basic requirements of the Clean Air Act. For this reason, EPA should object to and/or reopen the Permit.

1. The Incorporation of Emission Limits by Reference is Impermissible

The Permit's use of incorporation by reference poses a significant barrier to enforcement of applicable requirements insofar as it is extremely difficult to determine the emissions limits, monitoring, and recordkeeping requirements applicable to the Sandow 5 Plant.⁶ The plain language of the Clean Air Act and EPA's implementing regulations confirm that a Title V permit should do more than reference applicable requirements. The Act states that "[e]ach permit issued . . . shall include enforceable emission limitations and standards." EPA's implementing regulations confirm that permits must include *both* the emission limit and the regulatory citation codifying the limit.⁸ Accordingly, courts have held that a Title V permit should serve as a "source specific bible for Clean Air Act compliance." To achieve this goal, the Permit should

² 40 CFR § 70.7(f)(1)(iv).

³ N.Y. Pub. Interest Group v. Whitman, 321 F.3d 316, 334 (2nd Cir. 2003) (holding that EPA is required to object to Title V permits once petitioner has demonstrated that permits do not comply with the Clean Air Act.); 40 CFR § 70.7(f)(1)(iv) ("A permit shall be reopened and revised under any of the following circumstances: . . . (iv) The Administrator or the permitting authority determines that the permit must be revised or revoked to assure compliance with the applicable requirements.")(emphasis added).

⁴ Attachment 1.

⁵ Revised Notice of Proposed Permit and Executive Director's Response to Public Comment re: Permit No. O3025 (June 15, 2011) at 8-9. This document is included with this Petition as Attachment 2.

⁶ See EPA, Office of Air Quality and Planning and Standards, White Paper Number 2 for Improved Implementation of the Part 70 Operating Permits Program, Sec. II. E. (Mar. 5 1996).

^{7 42} U.S.C. § 7661c(a).

⁸ 40 C.F.R. § 70.6(a)(1), (a)(1)(i) (2010) (stating permits must include both "[e]missions limitations and standards" and a specific reference to the "origin and authority of each term or condition.")

⁹ Virginia v. Browner, 80 F.3d 869, 873 (4th Cir. 1996).

consolidate all the applicable requirements into a single document. ¹⁰ EPA has consistently found that Texas' practice of incorporating emission limits and monitoring requirements established by major NSR permits by reference into Title V permits fails to satisfy both the letter and the spirit of Title V.

EPA has explicitly and repeatedly disapproved Texas's use of incorporation by reference of emission limitations and standards, other than minor NSR permits and permits by rule. As explained in the EPA Administrator's May 28, 2009 Order Granting in Part and Denying in Part Petition for Objection to Permit, response to Petition Number VI-2007-01 ("Citgo Order"):

Consistent with EPA's previous statements on the use of incorporation by reference, I agree that the applicable emissions limits (MAERT)¹² should be explicitly identified in CITGO's title V permit. It is especially important here where the title V permit incorporates requirements from several permits (including two PSD permits, several federal regulations, and other requirements). Moreover, the title V permit cross references the PSD permits in their entirety. Thus, EPA grants the petition on this issue with regard to TCEQ's use of incorporation by reference for emissions limitations, with the exception of those emissions limitations from minor NSR permits and permits by rule. EPA directs TCEQ to reopen the permit and ensure that all such emissions limitations are included on the face of the title V permit.¹³

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¹⁰ See N.Y. PRIG v. Whitman, 321 F.3d 316, 320 (2nd Cir. 2003); 42 U.S.C. § 7661c(a)-(c) (2010); 40 C.F.R. § 70.6(a)(1) (2010).

¹² Emission limitations in Texas NSR permits are not found exclusively in the Maximum Allowable Emission Rate Table (MAERT). It is important that all of the applicable emission limitations are included in the draft Title V permit.

13 Citgo Order at 11.

¹¹ More recently, EPA has also expressed "significant concerns" with TCEQ's use of incorporation by reference for minor source NSR and permits by rule ("PBRs"). See, e.g., Letter from Al Armendariz, Regional Administrator, EPA Region 6 to Mark Vickery, Executive Director, TCEQ at 3 (June 10, 2010), which is included as Attachment 3 to this Petition. Some of EPA's concerns include "PBRs that purport to modify Major NSR emission limits . . . , failure of the TCEQ to make the currently applicable Minor NSR permits and PBRs readily available to the public, and the practical inability of EPA and the public to determine the applicable emissions limitations and standards for each particular emission unit." Id.

EPA Region 6 has reaffirmed the Citgo Order provisions regarding Texas' use of incorporation by reference of emissions limitations in many recent Title V Objection letters. ¹⁴ Instead of providing the emission limits and the monitoring and recordkeeping requirements within the Title V permit, TCEQ includes regulatory citations, or references to other permits that establish applicable requirements. Thus, instead of creating a "source specific bible," the Permit is more like a directory. Specifically, the Permit impermissibly incorporates by reference the emissions limitations established by Luminant's major NSR permit for the Sandow 5 facility, Permit No. 48437. ¹⁵ In order to ensure compliance with emissions limits and other requirements arising from Sandow 5's major NSR permits, EPA must object to the Permit. ¹⁶

2. The Permit Impermissibly Incorporates a Standard Permit for a Pollution Control Project, which is a Texas Rule that EPA has Rejected for Inclusion in the SIP

On September 15, 2010, EPA disapproved Texas' submitted Standard Permit for Pollution Control Projects because it does not meet the requirements of the Clean Air Act for a minor NSR Standard Permit program.¹⁷ EPA had previously approved Texas' general provisions for issuing and modifying standard permits, in part, because EPA had determined that these

¹⁴ See EPA objection letters for the following facilities: O2238, Valero Corpus East (11/20/2009), O2000 ExxonMobile Beaumont Chemical Plant (12/30/2009), O1626, ConocoPhillips Sweeny (1/8/2010), O15, Swepco Harrington Station (4/8/2011), O1420, CITGO Refining Corpus Christi Refinery West (10/29/2010), O2113, ChevronPhillips Cedar Bayou (10/30/2009), O1957, Formosa Olefins Plant (10/30/2009), O1253, Valero Texas City (10/30/2009), O2013, Ticona Polymers Co-Gen Plant (11/20/2009), O1958, Formosa Olefins Plant (11/25/2009), O2032, Union Carbide UCC Seadrift (11/25/2009), O1445, Flint Hills Corpus East (12/4/2009), O2327, Ineos Chocolate Bayou Plant (12/4/2009), O1956, Formosa Polypropylene (12/18/2009), O1240, Occidental Ingleside Plant (12/30/2009), O17, City of Garland Ray Olinger Plant (1/22/10), O1284, Ineos Green Lake Complex (1/28/2010), O2282, Lanxess Corp LiBR Flex Unit (2/5/2010), O1272, Flint Hills Corpus West (3/26/2010), O1555 DiamondShamrock McKee Refinery (6/4/2010), NRG Limestone County Plant (6/15/2010), O2269, ExxonMobil Baytown Chemical Plant (8/20/2010), O1498, Premcor Port Arthur Refinery (1/9/2007), O1420, Citgo Refining Nueces CO-West Plant (12/16/2006).

¹⁵ See New Source Authorization References, Permit at 59. Permit No. 48437 is not a PSD permit, but it is nonetheless a major NSR permit. The permit authorized construction of two new CFB boilers to replace three grandfathered 1954-vintage lignite boilers at the site. Because the project resulted in decreased emissions, it was not treated as a major modification. According to the Maximum Authorized Emission Rate Table for Permit No. 48437, each of Sandow 5's two CFB boilers may emit 1,296 tpy of NOx, 1,945 tpy SO2, 1,296 tpy of CO, 194 tpy of PM/PM10, 66 tpy of VOC, and 0.048 tpy of mercury.

The Revised Draft Renewal Title V Operating Permit O15 for the Harrington Station Power Plant represents a step in the right direction to meeting this fundamental requirement. Though the Harrington Station Power Plant draft permit still relied on incorporation by reference, the permit included a chart titled "Federally Enforceable Unit Specific Emission Limitations for Individual Emission Units," which listed the specific emission limits for individual units at the power plant. Furthermore, the draft permit included the relevant PSD permits. It is concerning the TCEQ has reverted back to incorporation by reference after making a positive step forward on this issue.

^{17 75} Fed. Reg. 56,424.

permits were to be issued for similar narrowly defined source categories. When EPA approved the Texas Standard Permit program as part of the Texas Minor NSR SIP, it explicitly did not approve the Pollution Control Project Standard Permit. EPA subsequently found that "TCEQ ha[d] failed to demonstrate how. . .[its Pollution Control Project Standard Permit] meets the Texas Standard Permits NSR SIP since it applies to numerous types of pollution control projects, which can be used at *any* source that wants to use a PCP, and is not an authorization for similar sources." Because the disapproved Pollution Control Project Standard Permit did not apply to a narrowly defined class of similar sources, and because the permit lacked "replicable standardized permit conditions specifying how the Director's discretion is to be implemented for the individual determinations," EPA found that the Pollution Control Project Standard Permit was not an appropriate vehicle for authorizing pollution control projects. Instead, such projects must be authorized through the minor NSR SIP case-by-case permit process under 30 Tex. Admin. Code § 116.110(a)(1).²²

Luminant's Permit No. 83346 is a Pollution Control Project Standard Permit registration issued by TCEQ on December 27, 2007. This authorization is incorporated by reference in Luminant's Title V Permit.²³ The PCP permit was used to authorize a fluidized bed flue gas desulfurization vessel and sorbent injection to reduce SO2 and mercury emissions from the Sandow 5 CFB boilers.²⁴ According to the Technical Review Document for the issuance of this permit, the project was anticipated to result in a significant net increase in particulate matter emissions that triggered PSD netting review requirements.²⁵ Because the Permit incorporates by reference Texas' disapproved Pollution Control Project Standard Permit, EPA must object to it and require Luminant to obtain a SIP-approved authorization for actual emissions increases resulting from the Sandow 5 FGD vessel, sorbent injection, and related storage facilities.²⁶

18 75 Fed. Reg. 56,444.

¹⁹ Id.; See also 68 Fed. Reg. 64,543, 64,547.

²⁰ 75 Fed. Reg. 56,444.

²¹ Id.

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²³ See, New Source Authorization References Table in Permit at 59.

²⁴ Technical Review Document for Permit No. 83346, Project No. 135219. This document is included as Attachment 4 to this Petition.

²⁵ Id.

²⁶ This issue was not raised during the comment period. However, it is proper for Petitioners to raise it here for the first time. According to 30 Tex. Admin. Code § 122.360(f), "Petitions shall be based only on objections to the permit that were raised with reasonable specificity during the public comment period, unless the petitioner

3. The Permit Impermissibly Incorporates Permits By Rule

Luminant's Permit incorporates by reference several PBR authorizations. The incorporation of these authorizations is objectionable both because the mode of incorporation used by the Commission is confusing and provides inadequate information to assure compliance with incorporated limits, and because some of the incorporated PBRs fail to comply the requirements of Texas' Minor NSR SIP and the Clean Air Act.

The mode of incorporation by reference of these PBR authorizations is defective because, based upon information included in the Permit and the Statement of Basis, one cannot identify:

1) how many PBR authorizations are incorporated by the Permit, 2) the emission limits established by many of the authorizations, 3) which emissions units are covered by each authorization, and 4) whether aggregate limitations for all PBRs established by 30 Tex. Admin. Code § 106.4(a)(4) apply to Sandow 5.

The 30 Texas Administrative Code, Chapter 106, Subchapter K General PBRs incorporated by the Permit are deficient for the same reasons that led EPA to disapprove Texas' Pollution Control Project Standard Permit. The Commission's Subchapter K General PBRs are not limited to narrowly defined classes of similar sources, and fail to identify specific monitoring and recordkeeping requirements sufficient to demonstrate compliance with all conditions of each PBR. For these reasons, EPA should object to Luminant's Permit.

a. The Permit's Incorporation by Reference of PBR Requirements Renders the Permit

Practically Unenforceable

The Commission's practice of incorporating by reference permit by rule authorizations into Title V permits is confusing, provides insufficient information, and fails to assure compliance with the requirements of those authorizations. EPA has acknowledged that the Commission's practice of incorporating PBR authorizations by reference into Title V permits is contributing to "ambiguous" and "unenforceable" Title V permits. In a letter dated June 10,

demonstrates in the petition to the EPA that it was not possible to raise the objections within the public comment period, or that the grounds for the objection arose after the public comment period." EPA did not disapprove Texas' Pollution Control Project Standard Permit until September 15, 2010. The public comment period for the draft permit ended on August 3, 2009. Thus, Petitioners could not have objected to the Draft Permit's incorporation of a disapproved Pollution Control Project Standard Permit during the public comment period.

2010, from EPA's Region 6 Regional Administrator to the Executive Director of the TCEQ, EPA explained:

We have continuing concerns that the exclusion of emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements on the face of the Title V permit by the use of IBR of Minor NSR and PBRs is contributing to ambiguous, unenforceable Title V permits. Particular issues of concern include, but are not limited to, PBRs that purport to modify Major NSR emission limits and that lead to the controlling limit not being reflected in the body of the Title V permit, failure of the TCEQ to make the currently applicable Minor NSR permits and PBRs readily available to the public, and the practical inability of EPA and the public to determine the applicable emission limitations and standards for each particular emissions unit. Based on a review of CAA Title V programs around the country, EPA is not seeing similar use of IBR by other states.²⁷

The letter goes on to state, "[w]e believe the above identified problems should be corrected in your permitting process immediately and would be happy to work with you." The Commission has not undertaken any serious action to resolve EPA's concerns or to correct problems with its PBR program. The Permit's use of incorporation by reference for PBR authorizations is confusing, incomplete, misleading, and fails to list and assure compliance with emissions limits arising from PBR authorizations at the Sandow 5 power plant. For these reasons, EPA should object to the Permit.

b. Mere Reference to Texas Administrative Code Provisions is not Sufficient to Assure Compliance with Site-Specific Limits under 30 Tex. Admin. Code § 106.262

The Commission's practice of incorporating by reference PBR authorizations does not directly reference any specific authorization. While it is the Commission's practice to directly reference specific major NSR permits by permit number in Title V permits, such is not the case for PBRs incorporated by the Texas Title V permits, including Luminant's Permit. Rather, PBR authorizations are incorporated into the Permit by referencing the Texas Administrative Code

²⁷ Attachment 3.

provision under which the authorizations were granted. For example, the NSR Authorization References table in the Permit identifies two specific 30 Tex. Admin. Code Chapter 116 permits, Permit Nos. 48437 and 83346 incorporated by reference by the Permit.²⁸ By way of contrast, the NSR Authorization References table incorporates by reference several PBR authorizations (how many, one cannot tell by looking at the Permit) by listing the rule under which those authorizations were made:

New Source Review Authorization References

The New Source Review authorizations listed in the table below are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

PSD Permits	NA Permits		
PSD Permit No.:	NA Permit No.:		
	ts, Special Permits, and Other Authorizations (Other nits, or NA Permits) for the Application Area.		
Authorization No.: 48437	Authorization No.: 83346		
Permits By Rule (30 TAC Chapte	er 106) for the Application Area		
Number: 106.144	Version No./Date: 03/14/1997		
Number: 106.144	Version No./Date: 09/04/2000		
Number: 106.227	Version No./Date: 09/04/2000		
Number: 106.261	Version No./Date: 11/01/2003		
Number: 106.262	Version No./Date: 11/01/2003		
Number: 106.263	Version No./Date: 11/01/2001		
Number: 106.371	Version No./Date: 09/04/2000		
Number: 106.454	Version No./Date: 11/01/2001		
Number: 106.472	Version No./Date: 09/04/2000		
Number: 106.473	Version No./Date: 09/04/2000		
Number: 106.511	Version No./Date: 09/04/2000		
Number: 106.532	Version No./Date: 09/04/2000		

²⁸ New Source Review Authorizations References Table, Permit at 59.

New Source Review Authorization References

The New Source Review authorizations listed in the table below are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Permit No.:	Permit No.:	

While it may be the case for some PBRs that all authorization made pursuant to a particular rule are identical, such is not the case for authorizations pursuant to 30 Tex. Admin. Code § 106.262 incorporated by the Permit. According to 106.262(a)(2), "[n]ew or increased emissions, including fugitives, of chemicals shall not be emitted in a quantity greater than five tons per year nor in a quantity greater than E as determined using the equation E=L/K and the following table." Thus, the specific limits that apply to a particular emissions unit or units authorized under 30 Tex. Admin. Code § 106.262 will differ according the specific value of the variables for L, and K appropriate for that unit (or those units).

The Permit indicates that numerous emissions units at Sandow 5 are authorized under 106.262 PBRs.³⁰ According to the Technical Review Document for Project No. 149754 and Permit No. 72378 concerning changes made to PBR authorizations for the coal, limestone, and ash handling systems at Sandow 5, emissions limits based upon site-specific L and K values apply for those emissions units at Sandow 5 covered by this authorization.³¹ Thus, one cannot determine the specific lb/hr limits for this authorization that are incorporated by reference into the Permit by looking at the text of 106.262. Thus, without information in addition to that in the Permit, its Statement of Basis, and documents directly referenced by the Permit, one cannot determine the hourly limit(s) that apply for at least some of the emissions units covered by the Permit. For this reason, the Permit fails to assure compliance with these emissions limits.

²⁹ The referenced table is included as Attachments 5 and 6 to this Petition.

³⁰ See NSR Authorization References and NSR Authorization References by Emissions Unit tables, Permit at 59-62.

c. Mere Reference to Texas Administrative Code Provisions is not Sufficient to Indicate how
Many PBR Authorizations are Incorporated by the Permit

According to the NSR Authorizations References by Emissions Unit table in the Permit, 35 emissions units are authorized under 30 Tex. Admin. Code § 106.262 PBRs. 32 This table does not indicate whether all of these emissions units are authorized under one or multiple 106.262 PBRs. If all of these emissions units are authorized under a single PBR, then emissions from all of these emissions units may not exceed the hourly and annual limits in 106.262. If, on the other hand, different emissions units are associated with different projects authorized under different 106.262 PBRs, then the emissions units covered by each 106.262 PBR must meet the emission limits in the referenced rule. For example, if all of the crushers listed in the NSR Authorization References by Emission Unit table in the Permit are covered by the same 106.262 authorization while all the belt feeder units listed in that table are covered by a separately registered 106.262 authorization, then emissions from these units added together might exceed the limits listed in 106.262 without violating any applicable requirement. However, if all of the crushers and belt feeder units are registered together as a single project, then emissions from all these units added together could not exceed the 106.262 limits without violating the PBR. In order to determine the emissions limits for each emissions unit covered by a PBR in the Permit, one must be able to figure out how many PBR authorizations under each Chapter 106 rule listed in the NSR Authorization References Table exist and which units are covered by each authorization. There is insufficient information included in the Permit and Statement of Basis to make these determinations. If one cannot determine what the emissions limits are for each emissions unit covered by the Permit, the Permit does not assure compliance with those limits. Because the Permit does not assure compliance with limits established by PBR authorizations it incorporates by reference, the Permit fails to comply with the requirements of Title V. Accordingly, EPA should object to the Permit.33

³² Permit at 59-62.

³³ While we used 106.262 to illustrate this problem, the same issue arises with respect to the Permit's incorporation by reference of 106.261 PBRs.

d. The Permit Fails to Identify Emissions Units Associated with Certain PBRs

The Permit's NSR Authorization References table indicates that PBR permits have been issued to Sandow 5 pursuant to 30 Tex. Admin. Code §§ 106.144 (1997), 106.144 (2000), 106.227, 106.263, 106.371, 106.454, 106.472, 106.473, and 106.532.34 However, the Permit's NSR Authorization Reference by Emissions Unit table fails to identify any emissions unit at Sandow 5 authorized by any of these PBRs. Assuming that emissions units at Sandow 5 are in fact authorized under these PBRs, the Permit fails to assure compliance with limits established by these PBRs. In order to assure compliance with PBR emissions limits, the Permit must, at the very least, indicate which emissions units are authorized under each PBR. For many of these PBRs, it appears that no registration is required. Thus, it is likely the case that no units are listed for these PBRs, because the Executive Director has no information regarding which units are covered by these authorizations.³⁵ However, both versions of 106.144 incorporated by reference by the Permit require registration using Form PI-7 and approval by the Executive Directory prior to construction. Because projects authorized by 106.144 PBRs must be registered and approved by the Executive Director prior to construction, information about which units are authorized under these PBRs should be available to the Executive Director. Thus, there is no reason that this information should not be included in the Permit.

The fact that no registration is required for many of these PBRs is problematic in itself. If the Commission does not know which PBRs apply to which units at a particular facility, how can the Commission ensure compliance with the requirements of these federally enforceable authorizations? If the Commission does not have sufficient information to enforce limits established by these PBRs, how can EPA or the public be expected to determine whether Luminant is complying with PBR emission limits? The Permit's failure to indicate which units are authorized under the above-cited PBRs renders the Permit ambiguous and confusing. EPA should object because such confusion undermines the practical enforceability of the permit.

Permit at 59.
 Attachment 2 at 11 ("Some of the PBRs claimed do not require registration..., thus, authorization letters will not always be available for those particular PBRs.")

e. The Permit Fails to Assure Compliance with 30 Tex. Admin. Code § 106.4(a)(4) Emission Limits

According to 30 Tex. Admin. Code § 106.4(a)(4):

Unless at least one facility at an account has been subject to public notification and comment as required in Chapter 116, Subchapter B or Subchapter D of this title (relating to New Source Review Permits or Permit Renewals), total actual emissions from all facilities permitted by rule at an account shall not exceed 250 tpy of CO or NO_X; or 25 tpy of VOC or SO₂ or PM; or 15 tpy of PM₁₀; or 10 tpy of PM_{2.5}; or 25 tpy of any other air contaminant except carbon dioxide, water, nitrogen, methane, ethane, hydrogen, and oxygen.

So far as Petitioners are aware, no facility at the Sandow 5 account has been subject to public notification and comment as required by Subchapters B and D. The only notice made regarding facilities at Sandow 5 that we have been able to identify occurred in June 2003. The technical review document for the permitting action that was subject to notice clearly indicates that this notice was not required by rule, but was instead the product of an enforcement agreement. This technical review document also indicates that the enforcement agreement only required one notice and comment period rather than two as required for most actions to which notice requirements under Chapter 116, Subchapters B and D apply. Thus, the June 2003 notice does not exempt Luminant from 30 Tex. Admin. Code § 106.4(a)(4) emissions limits. Unless there has been another notice made for a facility at Sandow 5 as required by Chapter 116, Subchapters B or D, the 106.4(a)(4) limits apply. The Permit does not refer to 106.4(a)(4) and nothing in the Permit or Statement of Basis indicates that the 106.4(a)(4) limits apply to Sandow 5. Therefore, the Permit may not adequately identify and assure compliance with all federally enforceable emissions limits. If this is the case, EPA should object to the Permit.

³⁶ This Technical Review Document is included with this Petition as Attachment 8.

³⁷ Id. Notably, notice was made and comments received after Luminant submitted its permit application, but there was no notice made or comment period after the Executive Director issued a draft permit.

f. The Permit Incorporates Several Unenforceable Non-SIP-Approved "General" PBR Authorizations

The Commission's PBR program provides a streamlined permitting option for construction or modification of certain kinds of minor sources of air pollution. Rather than requiring a full application and case-by-case pre-construction evaluation of that application, projects that qualify for a permit by rule are authorized under a rule rather than a source specific permit. EPA has recognized that "[f]or less complex plant sites, and for source categories involving relatively few operations that are similar in nature, case-by-case permitting may not be the most administratively efficient approach to establishing federally enforceable restrictions." Thus, EPA has approved Texas' General Requirements for PBRs at 30 Tex. Admin. Code Chapter 106, Subchapter A and parts of Texas' Standard Permit rules at 30 Tex. Admin. Code Chapter 116, Subchapter F, which authorize the Commission to issue generic permits for certain minor source categories. However, EPA has indicated that this approach to permitting is appropriate only for a limited number of source categories. To identify source categories properly covered by a generic permit, EPA has typically limited consideration to "categories for which a single type of activity tends to dominate emissions, and for which most sources in the

³⁸ Compare, e.g., 30 Tex. Admin. Code § 116.111 (General Application Requirements for Chapter 116, Subchapter B permits) with 30 Tex. Admin. Code § 106.472 (PBR for Organic and Inorganic Liquid Loading and Unloading). As indicated above, the fact that emissions limits in 106.262 PBRs vary from site to site depending upon site-specific variables complicates this issue considerably. While it may be the case that all 106.262 permits are the same permit, the limits that apply for sources may differ. As we contend below, this feature of 106.262 PBRs tends to indicate that the category of sources that may be authorized under this PBR is not sufficiently narrowly defined.

³⁹ Kathie Stein, Director Air Enforcement Division, EPA Guidance and Enforceability Requirements for Limiting Potential to Emit Through SIP and § 112 Rules and General Permits (Jan. 25, 1995) at 1. The memorandum is included with this Petition as Attachment 9. See also, 75 Fed. Reg. 56,424, 56,444, EPA's Final Disapproval of Texas' State Pollution Control Project Standard Permit ("The issuance of a Minor NSR permit for similar sources eliminates the need for a case-by-case review and evaluation to ensure that the NAAQS and RFP are protected and the permit is enforceable.")

⁴⁰ 68 Fed. Reg. 64,549 (November 14, 2003).

⁴¹ John S. Seitz, Director of EPA Office of Air Quality Planning and Standards, Memorandum regarding Approaches to Creating Federally-Enforceable Emissions Limits (Nov. 3, 1993) at 5. This memorandum is included with this Petition as Attachment 10. See also 75 Fed. Reg. 56,444, 56,446-47 (Texas Standard Permit for Pollution Control Projects is not approvable, because it is not limited to a sufficiently narrowly defined class of sources.); See also 74 Fed. Reg. 48,467 ("The PCP Standard Permit, as adopted and submitted by Texas. . .is not limited in its applicability to a single category of industrial sources, but to a broad class of pollution control techniques at all source categories. An individual Standard Permit must be limited to a single source category, which consists of numerous similar sources that can meet standard permit conditions.")

category actually emit at levels well below their potential, and well under the major source thresholds."42

Though EPA has approved portions of the Commission's Standard Permitting program as part of Texas' Minor NSR SIP, EPA disapproved the Texas Standard Permit for Pollution Control Projects, because the permit was not limited to a narrowly defined class of sources. Like the disapproved Pollution Control Project Standard Permit, the Commission's Chapter 106, Subchapter K PBRs are not source-category specific. Moreover, just like the Pollution Control Project Standard Permit, Subchapter K PBRs do not include standardized control protocols that are sufficiently reliable and replicable. Neither do these PBRs include monitoring requirements, and Luminant's Title V Permit fails to indicate how compliance with emissions limits established by incorporated Subchapter K General PBRs will be demonstrated. Thus, these emission limits are not enforceable as a practical matter. 44

In order to be approvable as part of a state SIP, the Commission's Subchapter K PBRs must meet the requirements of 40 CFR part 51, subpart I—Review of New Sources and Modifications. The Commission's Subchapter K PBRs fail to satisfy these requirements for at least two reasons. First, because the availability of Subchapter K permits is not limited to a narrowly defined class of sources there can be no adequate assurance that emissions from projects eligible for these permits will not result in a violation of applicable portions of the control strategy or interfere with attainment or maintenance of a national ambient air quality standard. Second, because Subchapter K permits are available to authorize construction or modification of any type of facility (except for types of facilities that may be authorized under category-specific PBRs), the Subchapter K PBRs fail to satisfy 40 CFR 51.160(e), which

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⁴² John S. Seitz, Director of EPA Office of Air Quality Planning and Standards and Eric Schaeffer, Director of EPA Office of Regulatory Enforcement, Memorandum regarding Potential to Emit Guidance for Specific Source Categories (April 14, 1998) at 4. This memorandum is included with this Petition as Attachment 11.
⁴³ 75 Fed. Reg. 56,424, 56,443.

⁴⁴ EPA has repeatedly found that, to be practicably enforceable, minor source permits must: (1) apply to a clearly defined category of sources that is narrow enough to allow specific limits and compliance monitoring to be identified and achieved by all sources in the category, (2) include technically accurate limits providing assurance that emissions will not exceed federal thresholds, (3) include a compliance timeframe (hourly/daily, etc.), and (4) include a specific compliance monitoring method sufficient to protect the standard involved. *Attachment 9*; See also, 61 FR 53,633, 53,635 (Oct. 15, 1996) and 62 Fed Reg. 2,587, 2,589 (Jan. 17, 1997). Similarly, the Texas Health and Safety Code requires that PBRs apply only to "types of facilities that will not significantly contribute air contaminants to the atmosphere" and only to "similar" facilities. Tex. Health & Safety Code § 382.051(b)(4).

⁴⁵ 40 CFR § 51.160(a); 68 Fed. Reg. 64545.

provides that the SIP must identify the types and sizes of facilities that will be subject to review. 46

It is not enough to limit the availability of Subchapter K PBRs to projects that will not exceed major source or significance thresholds, because while such limitations are necessary to assure compliance with applicable NAAQs and applicable control strategies (and for consistency with the Texas SIP provisions regarding construction requirements for major stationary sources and major modifications), they are not sufficient to assure compliance with these requirements. For example:

an agency limit to ensure that a source is minor for sulfur dioxide (SO2) may involve fuel sulfur limits. Because those same fuel sulfur limits could possible lead to short-term exceedances of the SO2 standards, and the agency could not categorically exempt such a source from minor NSR without addressing those air quality impacts; it is important to note that annual limits contained in the guidance, while ensuring that the source is not a "major source," may not ensure that the source meets all short-term NAAQS.⁴⁷

Because the availability of Subchapter K PBRs is not limited to a narrowly defined category of sources, and because these PBRs do not establish replicable generic conditions specifying how the Executive Director's discretion is to be implemented for individual determinations (e.g., these PBRs do not establish specific monitoring requirements), these rules must expressly include a mechanism for pre-construction application and agency review for facilities that wish to operate under generic permits established by these rules. Moreover, if such review indicates that a proposed facility or modification will interfere with an applicable control strategy or NAAQS, the Subchapter K rules must include procedures, "by which the state...will prevent such construction or modification." The Commission's Subchapter K rules do not expressly include such a mechanism for preconstruction review and they do not lay out procedures for preventing construction of projects that will interfere with an applicable control strategy or NAAQS. Thus, these rules are not approvable as part of the Texas SIP. Because the

^{46 68} Fed. Reg. 64545.

⁴⁷ Attachment 11 at 6-7.

^{48 71} Fed. Reg. 14,439, 14,441(March 22, 2006); 75 Fed Reg. 56,444.

^{49 40} CFR § 51.160(b).

Commission's Subchapter K PBRs suffer from the same deficiencies that led EPA to disapprove Texas' Pollution Control Project Standard Permit, and because these PBRs have not been approved as part of Texas' Minor NSR SIP, EPA should object to the Permit's incorporation of Subchapter K PRBs.

g. The Permit does not Include Monitoring Requirements for PBR Emissions Limits

To be practically enforceable, Luminant's Permit must include a specific compliance monitoring method for each emissions limit sufficient to protect the standard involved. The Subchapter K PBR rules listed in the New Source Authorization References table do not include any specific monitoring requirements for facilities authorized under those rules. Neither does the Permit identify any specific monitoring requirements for limits established by the PBRs listed in the NSR Authorization References table. Thus, the Permit does not include monitoring requirements sufficient to assure compliance with applicable emission limits and standards as required by 42 U.S.C. § 7661c, 40 CFR § 70.6(c)(1) and 30 Tex. Admin. Code § 122.142(c). Accordingly, EPA should object to the Permit.

To the extent that Luminant has relied upon Subchapter K PBRs to authorize emissions from the Sandow 5 power plant, Luminant is in violation of the Clean Air Act. Insofar as the Permit incorporates by reference Subchapter K PBRs, fails to include limits for incorporated PBRs on the face of the permit, and fails to include specific monitoring requirements sufficient to assure compliance with those limits, it fails to satisfy the requirements of Title V. Accordingly, EPA should object to the Permit and require Luminant to obtain SIP-approved authorizations for those emissions units at the Sandow 5 power plant that are authorized by Subchapter K PBRs.

4. The Permit does not Ensure Compliance with Section 112 MACT Requirements

The Permit does not assure compliance with the Clean Air Act's Section 112 Maximum Available Control Technology ("MACT") requirements applicable to Sandow 5. In order to assure compliance with these requirements, EPA should object to and/or reopen the Permit and require Luminant to submit a Section 112 permit application.

According to the Statement of Basis for the Permit, Sandow 5 is a major source of hazardous air pollutants, or "HAPs."50 The Sandow 5 facility is an electric utility steam generating unit ("EUSGU") as defined by Section 112 of the Clean Air Act. ⁵¹ The Clean Air Act reserves its most stringent and protective standards for the control of hazardous air pollutants from new major sources. 52 Sources covered under Section 112 are subject to maximum achievable control technology review, which is defined as follows:

The maximum degree of reduction in emissions that is deemed achievable for new sources in a category or subcategory shall not be less stringent than the emission control that is achieved in practice by the best controlled similar source[.]⁵³

EPA has not yet promulgated final MACT standards for EUSGUs. When EPA fails to promulgate a MACT standard for a source category covered by Section 112, any new major source of HAPs or modification to an existing covered source must undergo a "case-by-case" MACT review.⁵⁴ Even though Sandow 5 is subject to these requirements, it has not undergone a MACT review. Though Sandow 5's major NSR permit authorizes emissions of HAPs, this permit does not include MACT limits. Accordingly, the Permit does not assure compliance with the requirements of Section 112 of the Clean Air Act as required by 42 U.S.C. § 7661c(a). EPA should require Luminant to obtain a MACT determination, including MACT limits and monitoring sufficient to assure compliance.

CONCLUSION

For all of the foregoing reasons, EPA should object to the Permit and require that TCEQ revise the Permit to: 1) list emissions limits that apply for each emissions unit covered by the permit to be listed on the face of the permit; 2) specify the monitoring and recordkeeping requirements to assure compliance with each emissions limit on the face of the permit; 3) reflect emissions limits established by SIP-approved permitting mechanisms for those units currently authorized by non-SIP-approved Chapter 106, Subchapter K PBRs; and 4) include emissions limits and monitoring and recordkeeping requirements sufficient to ensure that Sandow 5's main

⁵⁰ Statement of Basis at 2. ⁵¹ 42 U.S.C. § 7412(a)(8).

^{52 42} U.S.C. § 7412(d)(3). 53 42 U.S.C. § 7412(d)(3). 54 42 U.S.C. § 7412(g)(2)(B)(3); 42 U.S.C. § 7412(j)(5).

boilers comply with the requirements of Section 112 of the Clean Air Act. Insofar as EPA is unable to object to the Permit, because some of these concerns were not raised during the comment period for this permit, EPA should reopen the Permit and require revisions sufficient to assure compliance with all applicable Clean Air Act requirements.

DATED: October 4, 2011

Respectfully submitted,

Cabriel Clark-Leach

Attorney

Environmental Integrity Project 1303 San Antonio St., Suite 200

Austin, TX

(512) 637-9477 (phone)

(512) 584-8019 (fax)

Neil Carman, Clean Air Program Director SIERRA CLUB, LONE STAR CHAPTER

Tom "Smitty" Smith, Director PUBLIC CITIZEN, TEXAS OFFICE

Robin Schneider, Executive Director
TEXAS CAMPAIGN FOR THE ENVIRONMENT

Luke Metzger, Director Environment Texas

Karen Hadden, Executive Director SEED COALTION

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CERTIFICATE OF SERVICE

I declare under penalty of perjury under the laws of the United States that I have provided copies of the foregoing Petition to persons or entities below via

Texas Commission on Environmental Quality Office of Permitting & Registration Air Permits Division Technical Program Support Section, MC-163 P.O. Box 13087 Austin, Texas 78711-3087

U.S. Environmental Protection Agency Administrator Lisa P. Jackson Ariel Rios Building (AR 1101A) 1200 Pennsylvania Avenue, NW Washington, DC 20460

Ms. Shawn Glacken Senior Vice President Luminant Generation Company LLC 500 North Akard Street LP 9 Dallas, Texas 75201-3302 U.S Environmental Protection Agency Attn: Air Permit Section Chief Region 6 1445 Ross Avenue, Suite 1200 Dallas, Texas 75202-2733

Gabriel Clark-Leach

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AIR PERMITS SECTION
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ATTACHMENT 1

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Environmental Integrity Project 1303 San Antonio, Suite 200 Austin, Texas 78701 Phone: (512) 637-9477 Fax: (512) 584-8019 www.environmentalintegrity.org

5125848019

August 3, 2009

Ms. LaDonna Castañuela Chief Clerk, MC-105 Texas Commission on Environmental Quality P.O. Box 13087 Austin, TX 78711-3087 Fax: (512) 239-3311

Mansuri.

Via Facsimile & U.S. Mail

Application of Luminant Generation Company LLC for Federal Title V Permit No. 3025

Dear Ms. Castañuela:

Enclosed for filing in the above-referenced cause, please find Public Comments on the Proposed Operating Permit for Luminant Generation Company LLC's Sandow 5 Generating Plant.

Thank you for your attention to this matter. Please call me at (512) 637-9477 should you have any questions.

Sincera

Layla Mansuri

Enclosure



PUBLIC COMMENTS ON THE PROPOSED OPERATING BERMIT FOR 4: 53 LUMINANT GENERATION COMPANY LLC'S SANDOW 5 GENERATING PLANT, PROPOSED PERMIT NO. O3025 CHIEF CLERKS OFFICE

INTRODUCTION

The Clean Air Act's Title V permit program should be implemented by Texas so as to improve compliance with, and enforcement of, federal air quality requirements and, thereby, improve Texas air quality. Correctly implemented, the Title V program "will enable the source, States, EPA, and the public to understand better the requirements to which the source is subject, and whether the source is meeting those requirements. Increased source accountability and better enforcement should result."

57 Fcd. Reg. 32,251 (1992). The proposed Title V permits fail to meet these objectives.

The Environmental Integrity Project (EIP) appreciates the opportunity to provide comments on Luminant Generation Company's proposed operating permit for its Sandow 5 Generating Plant Title V Operating Permit No. O-3025.

The Environmental Integrity Project (EIP) is a nonpartisan, nonprofit organization dedicated to more effective enforcement of environmental laws and to the prevention of political interference with those laws. EIP has offices and programs in Texas. EIP's research and reports shed light on how environmental laws affect public health. EIP works closely with communities seeking to enforce those laws.

DEFICIENCIES & CONCERNS

The D.C. Circuit Court of Appeals recently confirmed that Title V permits must include monitoring sufficient to assure compliance.

As the Texas Commission on Environmental Quality (TCEQ) is aware, Title V permits must include monitoring requirements sufficient to assure compliance with applicable emission limits and standards. On August 19, 2008, the D.C. Circuit Court of Appeals vacated an EPA rule that would have prohibited TCEQ and other state and local authorities from adding monitoring provisions to Title V permits if needed to "assure compliance." Sierra Club, et al., v. EPA, 536 F.3d 673 (D.C. Cir. 2008). The Court emphasized the statutory duty to include adequate monitoring in Title V permits:

Title V is a complex statute with a clear objective: it enlists EPA and state and local environmental authorities in a common effort to create a permit program for most stationary sources of air pollution. Fundamental to this scheme is the mandate that "[e]ach permit... shall set forth ...monitoring....requirements to assure compliance with the permit terms and conditions." 42 U.S.C. § 7661c(c). By its terms, this mandate means that a monitoring requirements insufficient "to assure compliance" with emission limits has no place in a permit unless it is supplemented by more rigorous standards." Id. at 677.

In addition, the Court acknowledged that the mere existence of periodic monitoring requirements may not be sufficient. *Id.* at 676-677.

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Has TCEQ conducted a review of the monitoring provisions for the Sandow 5 permit that complics with the court ruling? TCEQ should review and implement the Title V monitoring provisions to ensure that each provision is in compliance with the CAA and the Court's recent opinion. Wherever possible, the permit should require continuous emission monitoring that clearly measures compliance based on the averaging period in the underlying standard. For example, compliance with an emission limit that has to be met on a daily basis should be measured every day, not once a year. Where continuous monitoring is not available, the permit should require alternative methods that more closely match monitoring frequency to the averaging time for compliance. Specifically, the monitoring required for particulate matter is deficient. Continuous emission monitoring systems are available and should be required for monitoring of particulate matter emissions.

The draft permit impermissibly incorporates permits by rule.

The draft permit incorporates a dozen permit by rule (PBR) authorizations, the text of which appear nowhere in the draft renewal or its statement of basis. See the New Source Review Authorization References Table on *Draft p. 59*, incorporating among others, PBRs 101.261, 101.262 and 101.263.

These PBRs do not include specific emission limits and fail to include adequate monitoring and reporting requirements and compliance timeframes that violate EPA guidance and prior SIP approvals. Texas currently allows major sources to authorize emissions through PBRs. In its approval of Texas' general PBR provisions into the SIP, EPA stated that it was approving the use of PBRs only for non-major facilities. 68 FR 64543, 64544 (Nov. 14, 2003).

EPA guidance provides that facilities with emissions even approaching the major source threshold must authorize emissions through a case-by-case review of an individual permit. Potential to Emit Guidance for Specific Source Categories (April 14, 1998) p. 2. (Case-by-case reviews are "essential for complex sources warranting close scrutiny... and sources that limit their emissions to near-major amounts.") The Texas Health and Safety Code likewise prohibits the use of PBRs by "major" facilities. Tex. Health & Safety Code § 382.05196(a). These limits are intended to both ensure that federal major NSR requirements are met and to protect the NAAQS. Despite these limits, Texas allows major sources to authorize increases in emissions through PBRs. As a result sources are allowed to modify their major source NSR permit requirements without complying with federal public participation requirements.

The Clean Air Act requires SIPs to include provisions for regulating the modification and construction of stationary sources as necessary to assure compliance with the NAAQS. 42 U.S.C. §§ 7410(a)(2)(A)-(C). Texas PBRs must, therefore, include provisions to assure such compliance, including provisions making the permits practicably enforceable. 1

¹ EPA has repeatedly found that, to be practicably enforceable, minor source permits must: (1) apply to a clearly defined category of sources that is narrow enough to allow specific limits and compliance monitoring to be identified and achieved by all sources in the category, (2) include technically accurate limits providing assurance that emissions will not exceed federal thresholds, (3) include a compliance timeframe (hourly/daily, etc.), and (4) include a specific compliance monitoring method sufficient to protect the standard involved. Guidance on

EPA, however, has repeatedly notified Texas that its existing PBRs are inconsistent with the approved SIP and EPA policy and do not assure compliance. PBRs cannot be used to authorize emissions from major sources, cannot be used to amend individual permits, must be source specific and must not be incorporated into the proposed renewal draft. Use of these permits and incorporation of them into this Title V permit jeopardize air quality and thwart public participation while also conflicting with Texas' statutory law, EPA guidance and EPA action on Texas' and other states' SIPs.

Specific problems with the incorporation of PBRs into the Title V permit include the following:

- Interference with attainment or maintenance of the NAAQS. In order to assure protection of the NAAQS, Texas' PBR program must include a mechanism for denying PBR authorizations for cause. CAA § 110(a)(2)(c); 40 C.F.R. § 51.160. There must be preauthorization review of applications for coverage under individual PBRs to assure the emissions authorized by PBRs will not contribute to violations of control strategies or interfere with attainment or maintenance. See 71 Fed. Reg. 14439, 14441 (March 22, 2006) ("EPA proposes a conditional approval because this rule, as adopted by the Missouri Air Conservation Commission on June 26, 2003, does not expressly include a mechanism for pre-construction review of [PBR] applications ...") Texas rules include no provision for pre-construction review of PBR applicability claims.
- Lack of Adequate Public Participation: Because PBRs do not contain detailed provisions relating to emission limits and compliance (these are often found in the registrations, which are submitted after the close of public comment), the public is not given an adequate opportunity to comment when PBR rules are issued. Further, Texas rules expressly require PBRs to be "incorporated" into a facility's permit when the permit is amended or renewed. 30 Tex. Admin. Code § 16.116(d). Texas "incorporation" procedures do not provide adequate public participation or meet other requirements for permit amendments.

To the extent PBRs are used at a major facility, used to amend an individual permit, or are non source category specific, they violate the Texas SIP and EPA policy and prior SIP decisions. To assure compliance with the Act, Luminant must obtain valid authorizations, such as permit amendments, for any emissions currently authorized through illegal PBRs. Until it does so, Luminant is in ongoing noncompliance with the Clean Air Act.

The draft permit impermissibly relies on incorporation by reference.

The Applicable Requirements Summary relies extensively on incorporation by reference, thus basing the entire permit's emission limitations on incorporation by reference. This does not "assure compliance." To the contrary, it poses a significant barrier to members of the public who wish to discover and/or comment on whether the permit assures compliance.

Enforceability Requirements for Limiting Potential to Emit through SIP and Section 112 Rules and General Permits (Jan. 25, 1995); See also, 61 FR 53633, 53635 (Oct. 15, 1996) and 62 FR 2587, 2589 (Jan. 17, 1997). Similarly, the Texas Health and Safety Code requires that PBRs apply only to "types of facilities that will not significantly contribute air contaminants to the atmosphere" and only to "similar" facilities. Tex. Health & Safety Code § 382.051(b)(4).

As explained in the Citgo Order at p. 11, aside from minor NS permits and Permits by Rule, "EPA did not approve (and does not approve of) Texas' use of incorporation by reference of emissions limitations for other requirements." Citgo Order at 11.

The courts have made clear that the compilation of emission limits and monitoring requirements in one place is a fundamental piece of the permit and should be done in a manner so as to easily identify these limits and requirements. "EPA expects that title V permits will explicitly state all emission limitations and operational requirements for all applicable emission units at a facility." (Tesoro Order Petition No. IX-2004-6) Citgo Order at 11. Title V did more than require the compilation in a single document of existing applicable emission limits, and monitoring requirements. It also mandated that 'each permit issued under [Title V] set forth ... monitoring ... requirements to assure compliance with the permit terms and conditions.' Sierra Club, et al., v. EPA, 536 F.3d 673 (D.C. Cir. 2008).

The draft permit fuils to adequately incorporate the consent decree.

The Sandow 5 plant is subject to consent decree. In fact, the consent decree is referenced and relied upon in permit no. 48437. Permit 48437 is, in turn, incorporated by reference into the Title V permit. The Title V permit, however, inadequately identifies the consent decree and its requirements. The Title V permit simply states:

The permit holder will comply with the emissions limitation and other requirements for each Sandow Replacement Unit (Units SA-B5A and SA-B5B and associated air pollution control devices) as set forth in Section IV of the consent decree issued pursuant to Civil Action No. A-01-CA-881-SS and as set forth in court orders issued pursuant to Civil Action No. A-03-CA-222-SS according to the dates and schedules established in the consent decree and orders.

The permit must incorporate the requirements of the consent decree into the permit. "EPA believes that, because CDs and AOs reflect the conclusion of a judicial or administrative process resulting from the enforcement of "applicable requirements" under the Act, all CAA-related requirements in such CDs and AOs are appropriately treated as "applicable requirements" and must be included in title V permits, regardless of whether the applicability issues have been resolved in the CD." Citgo Order at 12.

The draft permit fuils to require adequate compliance certification.

The compliance certification provision in a Title V permit must meet the requirements set out at 30 TAC § 122.146 and 40 C.F.R. §70.5(c)(9). The compliance certification should, at a minimum, certify compliance with the monitoring method for every limit. Specifically, the certification should be "a statement of methods used for determining compliance, including a description of monitoring, recordkeeping, and reporting requirements and test methods." 40 C.F.R. § 70.5(c)(9)(ii). The draft permits fail to adequately address these requirements.

CONCLUSION

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For the foregoing reasons, proposed permit O-3025 does not comply with the CAA or its implementing regulations. The TCEQ should require Luminant to make the necessary changes.

Thank you for the opportunity to comment on the proposed Title V permit for the Sandow 5 Generating Plant.

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Layla Mansuri, Attorney

ENVIRONMENTAL INTEGRITY PROJECT



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Bryan W. Shaw, Ph.D., Chairman Buddy Garcia, Commissioner Carlos Rubinstein, Commissioner Mark R. Vickery, P.G., Executive Director



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

June 15, 2011

MS SHAWN GLACKEN SENIOR VICE PRESIDENT LUMINANT GENERATION COMPANY LLC 500 NORTH AKARD STREET LP 9 DALLAS TX 75201-3302

Re: Revised Notice of Proposed Permit and Executive Director's Response to Public Comment

Initial Issuance

Permit Number: O3025

Luminant Generation Company LLC

Sandow 5 Generation Plant Rockdale, Milam County

Regulated Entity Number: RN105369805 Customer Reference Number: CN603256413

Dear Ms. Glacken:

Due to an oversight, the June 9, 2011 initial Response 1 to Comment 1 was incorrectly stated and has subsequently been corrected in this revised letter. The draft permit was also revised to accurately depict the three options authorized for monitoring of particulate matter emissions under 40 CFR Part 60, Subpart Da for 'GRPBOILERS'. Please replace the previously sent draft permit pages 25 - 26 with the revised pages 25 - 26 attached. The Statement of Basis attached to the June 9 letter remains valid, however.

The Texas Commission on Environmental Quality (TCEQ) Executive Director's proposed final action is to submit a proposed federal operating permit (FOP) to the U.S. Environmental Protection Agency (EPA) for review. Prior to taking this action, all timely public comments have been considered and are addressed in the enclosed TCEQ Executive Director's Response to Public Comment (RTC). The executive director's RTC also includes resulting modifications to the FOP, if applicable.

As of June 14, 2011 the proposed permit is subject to an EPA review for 45 days, which has been extended by an additional 7 days by this letter, ending on August 5, 2011.

If the EPA does not file an objection to the proposed FOP, or the objection is resolved, the TCEQ will issue the FOP. If you are affected by the decision of the Executive Director (even if you are the applicant) you may petition the EPA within 60 days of the expiration of the EPA's 45-day review period in accordance with Texas Clean Air Act § 382.0563, as codified in the

Ms. Shawn Glacken Page 2 June 15, 2011

Texas Health and Safety Code and the rules [Title 30 Texas Administrative Code Chapter 122 (30 TAC Chapter 122)] adopted under that act. This paragraph explains the steps to submit a petition to the EPA for further consideration. The petition shall be based only on objections to the permit raised with reasonable specificity during the public comment period, unless you demonstrate that it was impracticable to raise such objections within the public comment period, or the grounds for such objections arose after the public comment period. The EPA may only object to the issuance of any proposed permit which is not in compliance with the applicable requirements or the requirements of 30 TAC Chapter 122. The revised 60-day public petition period begins on August 6, 2011 and ends on October 5, 2011. Public petitions should be submitted during the petition period to the TCEQ, the EPA, and the applicant at the following addresses:

Texas Commission on Environmental Quality Office of Permitting & Registration Air Permits Division Technical Program Support Section, MC-163 P.O. Box 13087 Austin, Texas 78711-3087

U.S. Environmental Protection Agency Administrator Mike O. Leavitt Ariel Rios Building (AR 1101A) 1200 Pennsylvania Avenue, NW Washington, DC 20460

Ms Shawn Glacken Senior Vice President Luminant Generation Company LLC 500 North Akard Street LP 9 Dallas TX 75201-3302 U.S. Environmental Protection Agency (EPA) Attn: Air Permit Section Chief Region 6 1445 Ross Avenue, Suite 1200 Dallas, Texas 75202-2733

Thank you for your cooperation in this matter. If you have questions concerning the processing of this permit application, please contact Mr. Chuck Lowary, P.E. at (512) 239-1263.

Sincerely,

Jesse E. Chacon, P.E., Manager

Operating Permits Section Air Permits Division

Texas Commission on Environmental Quality

Ms. Shawn Glacken Page 3 June 15, 2011

JEC/el

cc: Mr. Paul Coon, Air Permitting Coordinator, Luminant Generation Company LLC, Dallas Mr. Paul Barnes, Air Permitting Coordinator, Luminant Generation Company LLC, Dallas Mr. Ric Federwisch, Senior Vice President, Luminant Generation Company LLC, Dallas Air Section Manager, Region 9 - Waco
Air Permit Section Chief LLS, Environmental Protection Agency, Pagion 6, Dallas

Air Permit Section Chief, U.S. Environmental Protection Agency, Region 6-Dallas (Electronic copy)

Enclosures: Executive Director's Response to Public Comment

Proposed Permit Statement of Basis

Project Number: 11733

Ms. Shawn Glacken Page 4 June 15, 2011

bcc: Ms. Bridget Bohac, TCEQ Office of Public Assistance, MC-108, Austin

Ms. Deanna Avalos, Final Documents Team, TCEQ Office of the Chief Clerk, MC-105, Austin

Amy Browning, TCEQ Environmental Law Division (MC-173), Austin Terry Salem, TCEQ Environmental Law Division (MC-173), Austin John Minter, TCEQ Environmental Law Division (MC-173), Austin File Copy

Modifications Made from the Draft to the Proposed Permit

- The applicant has revised the application to clarify that NSPS Subpart Da
 provides three options for continuous monitoring of PM emissions: PM CEMS,
 bag filter leak detection systems, or continuous opacity monitoring systems
 (COMS). TCEQ notes that although NSPS Da allows the applicant to choose
 any of these compliance monitoring options for purposes of complying with
 NSPS Da, both the Consent Decree associated with the site and Permit No. 48437
 require use of a PM CEMS to demonstrate compliance with their PM emissions
 limits.
- The Consent Decree associated with the site is now addressed in both a revised Special Condition and as an attachment to the proposed permit.
- 3. In response to recent EPA objections related to 30 TAC 111, Subchapter A, Visible Emissions, the applicant has chosen to comply with 20% opacity requirements for all vents subject to § 111.111(a)(1)(A) and (B) requirements and subsequently the proposed permit has been updated to reflect this decision.
- The continuous compliance certification Special Condition was revised to clarify any confusion.
- Additionally, the recordkeeping general condition, and PBR condition have been revised to incorporate recent EPA objections on other operating permits.

EXECUTIVE DIRECTOR'S RESPONSE TO PUBLIC COMMENT

The Texas Commission on Environmental Quality (TCEQ) Executive Director provides this Response to Public Comment and the Executive Director's preliminary decision on the Luminant Generation Company LLC, Federal Operating Permit (FOP) application. As required by Title 30 Texas Administrative Code § 122.345 (30 TAC § 122.345) the Executive Director prepares a notice of proposed final action, which includes a response to all timely comments. These comments are summarized in this response. The Office of Chief Clerk (OCC) timely received comment letters from the following persons: Ms. Layla Mansuri, from the Environmental Integrity Project.

BACKGROUND

Procedural Background

The Texas Operating Permit Program requires that owners and operators of sites subject to 30 TAC Chapter 122 obtain a FOP that contains all applicable requirements in order to facilitate compliance and improve enforcement. The FOP does not authorize construction or modifications to facilities, nor does the FOP authorize emission increases. In order to construct or modify a facility, the facility must have the appropriate new source review authorization. If the site is subject to 30 TAC Chapter 122, the owner or operator must submit a timely FOP application for the site, and ultimately must obtain the FOP in order to operate. Luminant Generation Company LLC applied to the TCEQ for an initial issuance of a FOP for an Electric Services plant located in Rockdale, Milam County on May 1, 2009, and notice was published on July 2, 2009. The public comment period ended on August 2, 2009.

Description of Site

Luminant Generation Company LLC has applied to the TCEQ for the initial review of a FOP that would authorize the applicant to operate the Sandow 5 Generating Plant. The facility is located 9 miles southwest of Rockdale on FM 1786; 3986 Charles Martin Hall Road.

Each of the steam generators provides steam to a common turbine generator set capable of generating approximately 575 megawatts (net). The two circulating fluidized bed (CFB) boilers combust lignite within an air-suspended mass (i.e.-fluidized bed) of particles. Each boiler is equipped with fuel oil-fired burners that are used primarily for combustion support or during startup, shutdown, and malfunctions.

Lignite is supplied from Luminant's nearby Three Oaks Mine and is delivered to the site primarily by conveyor, but can also deliver coal to the Unit 5 storage pile via truck or other material-handling vehicles. Coal delivered by conveyor is transferred either onto the Unit 5 storage pile or to crushers. The crushers can receive coal directly from the mine or from the storage pile, via underground reclaim conveyors. The crushers reduce the coal to the specific size needed for the fluidized bed. Crushed coal is then conveyed to the CBF boilers.

Limestone used in the CFB boilers is delivered to the Unit 5 limestone storage pile primarily by

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the limestone handling system. Limestone can also be delivered by truck or other material-handling vehicles. Limestone is reclaimed from the Unit 5 storage pile and conveyed to the limestone bunkers. The limestone mills reclaim product from the bunkers and reduce it to the specific size needed for the fluidized bed. The limestone is then pneumatically conveyed into the boiler.

Each boiler unit uses limestone to reduce SO2 within the boiler, employs ammonia injection to reduce NOx, a cyclone to reduce heavy particulates back into the fluidized bed, a flue gas polishing scrubber to further reduce SO2 emissions, and pulse-jet baghouse for emission control of particulate matter.

All comments were submitted by Ms. Layla Mansuri on behalf of Environmental Integrity Project (EIP).

COMMENT 1: The D. C. Circuit Court of Appeals recently confirmed that Title V permits must include monitoring sufficient to assure compliance. As the Texas Commission on Environmental Quality (TCEQ) is aware, Title V permits must include monitoring requirements sufficient to assure compliance with applicable emission limits and standards. On August 19, 2008, the D,C. Circuit Court of Appeals vacated an EPA rule that would have prohibited TCEQ and other state and local authorities from adding monitoring provisions to Title V permits if needed to "assure compliance," Sierra Club, et al., v. EPA, 536 F.3d 673 (D.C. Cir. 2008). The Court emphasized the statutory duty to include adequate monitoring in Title V permits:

Title V is a complex statute with a clear objective: it enlists EPA and state and local environmental authorities in a common effort to create a permit program for most stationary sources of air pollution. Fundamental to this scheme is the mandate that "[e]ach permit... shall set forth ...monitoring.., requirements to assure compliance with the permit terms and conditions." 42 U.S.C. § 7661c(c). By its terms, this mandate means that a monitoring requirements insufficient "to assure compliance" with emission limits has no place in a permit unless it is supplemented by more rigorous standards." *Id* at 677.

In addition, the Court acknowledged that the mere existence of periodic monitoring requirements may not be sufficient. *Id* at 676-677.

Has TCEQ conducted a review of the monitoring provisions for the Sandow 5 permit that complies with the court ruling? TCEQ should review and implement the Title V monitoring provisions to ensure that each provision is in compliance with the CAA and the Court's recent opinion. Wherever possible, the permit should require continuous emission monitoring that clearly measures compliance based on the averaging period in the underlying standard. For example, compliance with an emission limit that has to be met on a daily basis should be measured every day, not once a year. Where continuous monitoring is not available, the permit should require alternative methods that more closely match monitoring frequency to the averaging time for compliance. Specifically, the monitoring required for particulate matter is deficient. Continuous emission monitoring systems are available and should be required for monitoring of particulate matter emissions.

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RESPONSE 1: Consistent with 40 Code of Federal Regulation (CFR) Part 70, the Luminant permit includes: (1) monitoring sufficient to yield reliable data from the relevant time period that is representative of compliance with the permit; and (2) monitoring sufficient to assure compliance with the terms and conditions of the permit, The Executive Director has determined that the monitoring required by this permit demonstrates compliance for the applicable state and federal requirements. For those requirements that do not include monitoring, or where the monitoring is not sufficient to assure compliance, the federal operating permit includes such monitoring for the emission units affected. Additional periodic monitoring or compliance assurance monitoring (CAM) was identified for emission units after a review of applicable requirements determined that additional monitoring was needed to assure compliance. Forty-six emission units were reviewed and additional monitoring incorporated for many. Each applicable requirement is reviewed to determine whether monitoring, recordkeeping, reporting, and testing (MRRT) are sufficient to assure compliance with that standard or requirement. Applicable requirements undergo this review when the requirement changes to ensure consistent application of MRRT sufficient to assure compliance for all permits that contain the applicable requirement. If additional monitoring is required, it is included in the "Additional Monitoring Requirements" attachment of the permit and the basis of the monitoring is included in the Statement of Basis, pages 16-35.

In accordance with the General Condition No. 13 and 14 in the underlying NSR permit and in accordance with 30 TAC 116.115(b)(2)(E)(i), Luminant maintains a copy of the permit along with records containing the information and data (gathered through monitoring) sufficient to demonstrate compliance with the permit, including production records and operating hours. The Maximum Allowable Emission Rate Limits were calculated using the maximum firing rate, the heating value of the fuel (the value is looked up from a table) and an emission factor taken from AP-42, Chapter 1, or provided by the vendor. The monitored fuel flow rate, with the heating value of the fuel and the factor that was used to calculate the maximum allowable emission rate, is used to calculate the actual emission rate to demonstrate compliance, unless a CEMS is utilized.

In response to the specific examples provided by the commenter, the ED provides the following specific information:

Under the FCAA, the source is subject to Title IV Acid Rain Monitoring for SO2 and NOX, as administered through EPA regulations found at 40 CFR Part 75; and Title V CAM and periodic monitoring, as administered through EPA regulations at 40 CFR Parts 64, and 70, respectively. The EPA has transferred to TCEQ the responsibility for assuring the Title V monitoring requirements are included in the Federal Operating Permits. The TCEQ conducts a thorough review of the New Source Review (NSR) permit and includes CAM and periodic monitoring in the NSR permit as part of the NSR permit process. Additionally, the TCEQ conducts a thorough review of all other applicable requirements and includes CAM and periodic monitoring in the FOP. CEMS are not required to comply with the federal or state rules. Although the purpose of CAM and periodic monitoring are to assure continuous compliance, neither CAM nor periodic monitoring require CEMS for each federally regulated air pollutant.

Texas Health and Safety Code § 382.016 authorizes the TCEQ to prescribe reasonable

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requirements for measuring and monitoring the emissions of air contaminants from a source. Similarly, 30 TAC § 116.111(a)(2)(B) states that "the proposed facility will have provisions for measuring the emission of significant air contaminants as determined by the Executive Director. This may include the installation of sampling ports on exhaust stacks . . ." It is clear that the state rules do not require CEMS for every type of air pollutant compound emitted.

In this instance, the Applicant did not propose PM CEMS in the draft FOP, and the TCEQ has not required them because of a general lack of industry experience with the technology. The TCEQ agrees that PM CEMS should be preferable to Continuous Opacity Monitoring System (COMS) because PM CEMS measure the pollutant PM rather than opacity, which has long been a surrogate for PM emissions. However, the TCEQ notes that the EPA relatively recently updated the NSPS Subpart Da requirements for electric utility steam generating units, and chose to make PM CEMS one of several options for PM monitoring for utility units. See 71 Fed.Reg. 9866-68 (February 27, 2006). In response to an industry petition, EPA stated: "We recognize that experience using PM CEMS at electric utility power plants in the United States is limited and not all affected owners and operators will choose to use PM CEMS." See 72 Fed. Reg. 32711 (June 13, 2007).

Subpart Da [40 CFR § 60.48a(o)] contains two other alternatives (as a surrogate for the PM CEMS) to assure compliance with the PM emission limits of NSPS Da. One is to use a COMS and maintain the opacity level less than or equal to that measured by the COMS during the most recent successful PM stack test. The other is to use a COMS and continuously monitor specified operating parameters of the PM control device (e.g. a bag leak detection system). These new, more rigorous alternatives to PM CEMS have provided an incentive for some owners to select PM CEMS. Because all of these techniques are new, some time may be required to demonstrate whether one has particular advantages compared to another.

The applicant has revised the application to reflect that Subpart Da provides three options for continuous monitoring of PM emissions: PM CEMS, leak detection system, or continuous opacity monitoring system (COMS). The applicant has elected to use COMS only to determine compliance with §111.153(b) since PM CEMS provides measurements of filterable PM rather than total PM (filterable + condensable PM), as required in 30 TAC §111.153(b). However, both the Consent Decree associated with the site and Permit No. 48437 require use of a PM CEMS to determine compliance with their PM emissions limits.

COMMENT 2: The draft permit impermissibly incorporates permits by rule. The draft permit incorporates a dozen permit by rule (PBR) authorizations, the text of which appear nowhere in the draft renewal or its statement of basis. See the New Source Review Authorization References Table on *Draft p.* 59, incorporating among others, PBRs 101.261, 101.262 and 101.263.

These PBRs do not include specific emission limits and fail to include adequate monitoring and reporting requirements and compliance timeframes that violate FPA guidance and prior SIP approvals. Texas currently allows major sources to authorize emissions through PBRs. In its approval of Texas' general PBR provisions into the SIP, EPA stated that it was approving the use of PBRs only for non-major facilities. 68 FR 64543, 64544 (Nov. 14, 2003).

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EPA guidance provides that facilities with emissions even approaching the major source threshold must authorize emissions through a case-by-case review of an individual permit. Potential to Emit Guidance for Specific Source Categories (April 14, 1998) p. 2. (Case-by-case reviews are "essential for complex sources warranting close scrutiny and sources that limit their emissions to near-major amounts.") The Texas Health and Safety Code likewise prohibits the use of PBRs by "major" facilities. Tex. Health & Safety Code § 382.05196(a). These limits are intended to both ensure that federal major NSR requirements are met and to protect the NAAQS. Despite these limits, Texas allows major sources to authorize increases in emissions through PBRs. As a result sources are allowed to modify their major source NSR permit requirements without complying with federal public participation requirements.

The Clean Air Act requires STPs to include provisions for regulating the modification and construction of stationary sources as necessary to assure compliance with the NAAQS. 42 U.S.C. §§ 7410(a)(2)(A)-(C). Texas PBRs must, therefore, include provisions to assure such compliance, including provisions making the permits practicably enforceable.

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EPA, however, has repeatedly notified Texas that its existing PBRs are inconsistent with the approved SIP and EPA policy and do not assure compliance. PBRs cannot be used to authorize emissions from major sources, cannot be used to amend individual permits, must be source specific and must not be incorporated into the proposed renewal draft. Use of these permits and incorporation of them into this Title V permit jeopardize air quality and thwart public participation while also conflicting with Texas' statutory law, EPA guidance and EPA action on Texas' and other states' SIPS.

Specific problems with the incorporation of PBRs into the Title V permit include the following:

• Interference with attainment or maintenance of the NAAQS. In order to assure protection of the NAAQS, Texas' PBR program must include a mechanism for denying PBR authorizations for cause. CAA § I 10(a)(2)(c); 40 C.F.R, § 51.160. There must be preauthorization review of applications for coverage under individual PBRs to assure the emissions authorized by PBRs will not contribute to violations of control strategies or interfere with attainment or maintenance. See 71 Fed. Reg. 14439, 14441 (March 22, 2006) ("EPA proposes a conditional approval because this rule, as adopted by the Missouri Air Conservation Commission on June 26, 2003, does not expressly include a mechanism for pre-construction review of [PBR] applications ..."). Texas rules include no provision for pre-construction review of PBR applicability claims.

¹ EPA has repeatedly found that, to be practicably enforceable, minor source permits most: (1) apply to a clearly defined category of sources that is narrow enough to allow specific limits and compliance monitoring to be identified and achieved by all sources in the category, (2) include technically accurate limits providing assurance that emissions will not exceed federal thresholds, (3) include a compliance timeframe (hourly/daily, etc.), and (4) include specific compliance monitoring method sufficient to protect the standard involved. *Guidance on Enforceability Requirements for Limiting Potential to Emit through SIP and Section 112 Rules and General Permits.* (Jan. 25, 1995); See also, 61 FR 53633, 53635 (Oct. 15, 1996) and 62. FR 2587, 2589 (Jan. 17, 1997). Similarly, the Texas Health and Safety Code requires that PBRs apply only to "types of facilities that will not significantly contribute air contaminants to the atmosphere" and only to "similar" facilities. Tex. Health & Safety Code §382.05 1(b)(4).

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• Lack of Adequate Public Participation: Because PBRs do not contain detailed provisions relating to emission limits and compliance (these are often found in the registrations, which are submitted after the close of public comment), the public is not given an adequate opportunity to comment when PBR rules are issued. Further, Texas rules expressly require PBRs to be "incorporated" into a facility's permit when the permit is amended or renewed. 30 Tex. Admin. Code § 16.1 16(d). Texas "incorporation" procedures do not provide adequate public participation or meet other requirements for permit amendments.

To the extent PBRs are used at a major facility, used to amend an individual permit, or are non source category specific, they violate the Texas SIP and EPA policy and prior SIP decisions. To assure compliance with the Act, Luminant must obtain valid authorizations, such as permit amendments, for any emissions currently authorized through illegal PBRs. Until it does so, Luminant is in ongoing noncompliance with the Clean Air Act.

RESPONSE 2: Texas' general PBR rules are approved as part of the SIP. In addition, Chapter 106, Subchapter A is a defined applicable requirement under Chapter 122 and the EPA-approved Texas operating permit program. Subchapter A includes applicability, requirements for permitting by rule, registration of emissions, recordkeeping and references to standard exemptions and exemptions from permitting. Additionally, PBR authorizations can apply to distinct, insignificant sources of emissions (i.e. engine, production process, etc.) at a Title V site. As such PBRs do not violate the SIP, EPA policy or prior SIP decisions; nor is incorporation of PBRs in to Luminant's operating permit impermissible. All current and historical PBRs and standard exemptions (predecessors to PBRs) are available on the TCEO website for review. Title 30 TAC Chapter 106 provides types of authorizations for certain types of facilities or changes within facilities which the Commission has determined will not make a significant contribution of air contaminants to the atmosphere. A PBR is a permit which is adopted under Chapter 106, and is only available to sources which belong to categories for which the Commission has adopted a PBR in that chapter. A PBR cannot be used to amend an individual NSR permit. 30 TAC §116.116(d), which is SIP-approved, sets forth that all changes authorized under Chapter 106 to a permitted facility shall be incorporated into that facility's permit when the permit is amended or renewed. Therefore, the ED disagrees with the assertion that PBRs incorporation into FOPs is impermissible.

Different versions of PBR are related to specific facilities or changes claimed at a specific moment in time. Versions only apply to a particular facility when the construction or change occurred under 106.4. Some of the PBRs claimed do not require registration (specifically 106.183 for boilers, heater and other combustion devices, 106.472 for organic and inorganic liquid loading and unloading, 106.478 for storage tank and change of service, and 106.371, cooling water units), thus, authorization letters will not always be available for those particular

² Texas Health & Safety Code (THSC) § 382.05196 and implementing rules in 30 TAC chapter 106, relating to PBRs, prohibit an owner or operator of a facility from using a PBR to authorize a major stationary source or major modification. This does not preclude the use of a PBR for non-major changes at a major stationary source, as that term is defined in federal law.

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PBRs.

Regarding specific problems the commenter describes with PBRs (i.e. public participation, interference with the NAAQS) these issues are beyond the scope of this FOP action.

COMMENT 3: The draft permit impermissibly relies on incorporation by reference. The Applicable Requirements Summary relies extensively on incorporation by reference, thus basing the entire permit's emission limitations on incorporation by reference. This does not "assure compliance." To the contrary, it poses a significant barrier to members of the public who wish to discover and/or comment on whether the permit assures compliance.

As explained in the Citgo Order at p. 11, aside from minor NSR permits and Permits by Rule, "EPA did not approve (and does not approve of) Texas' use of incorporation by reference of emissions limitations for other requirements." Citgo Order at 11.

The courts have made clear that the compilation of emission limits and monitoring requirements in one place is a fundamental piece of the permit and should be done in a manner so as to easily identify these limits and requirements. "EPA expects that Title V permits will explicitly state all emission limitations and operational requirements for all applicable emission units at a facility." (Tesoro Order Petition No. IX-2004-6) Citgo Order at 11. Title V did more than require the compilation in a single document of existing applicable emission limits, and monitoring requirements. It also mandated that 'each permit issued under [Title VI set forth ... monitoring .,. requirements to assure compliance with the permit terms and conditions.' Sierra Club, et al., v. EPA, 536 F.3d 673 (D.C. Cir. 2008).

RESPONSE 3: The ED acknowledges that air quality requirements can be voluminous. Large sites are subject to numerous federal requirements including New Source Performance Standards (NSPS) and National Emission Standards for Hazardous Pollutants (NESHAPs), as well as state rules and permits. The federally approved operating permit program was developed with this complexity in mind, and the applicable requirement summary table and accompanying unit summary table are designed to provide an efficient index to applicable requirements for emission units at sites subject to the operating permit program, to allow regulators, companies, and the public to "match" the requirement to the emission unit and avoid enforcement problems that could result from transcription errors or misinterpretations associated with paraphrasing the underlying applicable requirement. The ED therefore requires applicants to provide detailed information regarding each emission unit in order to verify the relevant applicable requirements for that unit. The FOP then identifies the relevant citations which document the applicable requirements for each emission unit, with which the applicant must comply and annually certify compliance.

Title 30 TAC §122.142 states that the operating permit shall contain the specific regulatory citations in each applicable requirement identifying the emission limitations and standards. Additionally, EPA discussed the use of incorporation by reference in the preamble to final Part 70 rule, discussing the requirements of § 70.6, Permit Content, stating:

Section 70.6(a)(1)(i) requires that the permit reference the authority for each term

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and condition of the permit. Including in the permit legal citations to provisions of the Act is critical in defining the scope of the permit shield, since the permit shield, if granted, extends to the provisions of the Act included in the permit. Including the legal citations in the permit will also ensure that the permittee, the permitting authority, EPA, and the public all have a common understanding of the applicable requirements included in the permit. This requirement is satisfied by citation to the State regulations or statutes which make up the SIP or implement a delegated program. See 57 Fed. Reg. 32250, 32275 July 21, 1992, emphasis added.

The federally approved operating permit program for Texas has allowed for applicable requirements to be incorporated by reference into the FOP since 1996. See Final Interim Approval, 61 Fed. Reg. 32693, June 25, 1996; Final Full Approval, 66 Fed. Reg. 63318, December 6, 2001; and Final Approval of Resolution of Deficiency, 70 Fed. Reg. 16134, March 30, 2005.

In comments on the proposed final interim approval of the operating permit program, in 1995, the Commission (then-TNRCC) proposed to include a standardized permit provision that incorporated by reference all preconstruction authorizations, both major and minor, to resolve the EPA identified deficiency of Texas' failure to include minor NSR as an applicable requirement. In the June 25, 1996 Final Interim Approval, EPA directed, "the State must be quite clear in any standardized permit provision that all of its major 'preconstruction authorizations including permits, standard permits, flexible permit, special permits, or special exemptions' are incorporated by reference into the operating permit as if fully set forth therein and therefore enforceable under regulation XII (the Texas Operating Permit Regulation) as well as regulation VI (the Texas preconstruction permit regulation)." (61 Fed. Reg. at 32695, emphasis added.) Given this explicit direction in EPA's 1996 final interim approval of the Texas program, TCEQ understood that the standardized permit provision for preconstruction authorizations incorporated all NSR authorizations by reference, including major NSR.

As a result of Texas' initial exclusion of minor NSR as an applicable requirement of the Texas Operating Permit program, and EPA's final interim approval of a program that provided for a phase-in of minor NSR requirements using incorporation by reference, EPA was sued by various environmental groups. See Public Citizen, Inc. v. U.S. E.P.A., 343 F.3d 449 (5th Cir. 2003). The petitioner raised several issues, including the use of incorporation by reference of minor NSR. because the exclusion of minor NSR as an applicable requirement was a program deficiency identified by EPA. Petitioners acknowledged that Texas' Operating Permit program incorporates all preconstruction authorizations by reference, through use of a table entitled "Preconstruction Authorization References". The Petitioner's brief in that case included an example of this table, which clearly contains sections for Prevention of Significant Deterioration (PSD), nonattainment (NA), 30 TAC Chapter 116 Permits, Special Permits and Other Authorizations, and Permits by Rule under 30 TAC Chapter 106. See Brief of Petitioners, p. 30. The Department of Justice (DOJ), representing EPA, responded to this allegation of improper use of IBR in the context of the specific allegation – whether "EPA reasonably determined that Texas corrected the interim deficiency related to minor new source review", answering unequivocally "yes". "Nothing in the statute or regulations prohibits incorporation of applicable requirements by reference. The Title

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V and Part 70 provisions addressing the content of Title V permits specify what Title V permits 'shall include,' but do not speak to how the enumerated items must be included." See, Brief of Respondents, pp. 25-26. The Court agreed that incorporation by reference is permissible stating "The Title V and Part 70 provisions specify what Title V permits "shall include" but do not state how the items must be included. Notably, the court did not distinguish between minor and major NSR when stating that IBR was permissible under both Title V and Part 70.

Thus, it is the ED's position that incorporation by reference of both major and minor NSR permits is acceptable and was fully approved by EPA. The ED will continue efforts with EPA on how to resolve IBR of major NSR on a broader, programmatic basis.

The commenter is incorrect that EPA has already disapproved TCEQ's use of IBR, citing the recent Premcor and CITGO Orders. In fact, as the commenter noted in its August 3, 2009 letter, EPA has not objected to TCEQ's incorporation of minor NSR and permits by rule (PBRs) in these Orders. EPA specifically granted the petition in regard to incorporation of major NSR permits. These Orders are not final actions and the ED respectfully disagrees with EPA's interpretation of their approval of Texas's operating permit program on this issue, as discussed above.

NSR authorizations, emission limits, terms and conditions and monitoring requirements are all applicable requirements of the operating permit to which they are incorporated, whether this is done by reference, or as part of the permit. NSR permit terms, conditions and emission limits are subject to the reporting, deviation and compliance certification requirements of the operating permit program as defined in Chapter 122 of the Texas Administrative Code. Unlike many other states, incorporation by reference is particularly appropriate in Texas where the preconstruction permits are a separate authorization from the operating permit. The procedures for issuance, amendment and renewal of preconstruction permits are also separate and distinct from the operating permits program; and these larger facilities frequently make changes at their sites requiring changes to NSR permits.

These permits can be found in the main TCEQ file room, located on the first floor of Building E, 12100 Park 35 Circle, Austin, Texas. Air Permits Division does have a standardized naming system for documents. The document type, permit number, company name, and project type are included in the subject line of the document. This naming system has been in place for several years. However, older projects may not be identified as such. TCEQ would be glad to assist any member of the general public or EPA with finding any documents or answering questions regarding them. The Office of Public Assistance (OPA) may be contacted at 1-800-687-4040 for help with any question.

COMMENT 4: The draft permit fails to adequately incorporate the consent decree. The Sandow 5 plant is subject to consent decree. In fact, the consent decree is referenced and relied upon in permit no. 48437. Permit 48437 is, in turn, incorporated by reference into the Title V permit. The Title V permit, however, inadequately identifies the consent decree and its requirements. The Title V permit simply states:

The permit holder will comply with the emissions limitation and other requirements for

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each Sandow Replacement Unit (Units SA-B5A and SA-B5B) and associated air pollution control devices) as set forth in Section IV of the consent decree issued pursuant to Civil Action No. A-01-CA-88I-SS and as set forth in court orders issued pursuant to Civil Action No. A-03-CA-222-SS according to the dates and schedules established in the consent decree and orders.

The permit must incorporate the requirements of the consent decree into the permit. "EPA believes that, because CDs and AOs reflect the conclusion of a judicial or administrative process resulting from the enforcement of "applicable requirements" under the Act, all CAA-related requirements in such CDs and AOs are appropriately treated as "applicable requirements" and must be included in title V permits, regardless of whether the applicability issues have been resolved in the CD." Citgo Order at 12.

RESPONSE 4: The draft Title V permit includes a Consent Decree Requirements Summary table where unit-specific requirements of the consent decree requiring future compliance actions are identified. The term and condition cited above will also be maintained, albeit with a revised sentences which will read:

"The Replacement Sandow Unit listed in the Consent Decree Requirements Summary attachment shall meet the limitations, standards, equipment specifications, monitoring, recordkeeping, reporting, testing and other requirements listed in the Consent Decree Requirements Summary attachment to assure compliance with the permit. The Consent Decree Requirements Summary incorporates requirements set forth by the United States District Court for the Western District of Texas, Austin Division in the Consent Decree issued on July 28, 2003 in Civil Action No. A-01-CA-881-SS, the Order Granting United States' Motion to Approve Stipulation to Resolve Certain Alleged Violations of Consent Decree (Stipulated Order) issued on February 27, 2007 in Civil Action No. A-03-CA-222-SS, and the Order issued on September 14, 2009 in Civil Action No. A-03-CA-222-SS."

Luminant has made or initiated all changes required under the consent decrees applicable to the Sandow 5 Plant, except those listed in the Consent Decree Requirements Summary attachment.

COMMENT 5: The draft permit fails to require adequate compliance certification. The compliance certification provision in a Title V permit must meet the requirements set out at 30 TAC § 122.146 and 40 C.F.R. §70.5(c)(9). The compliance certification should, at a minimum, certify compliance with the monitoring method for every limit. Specifically, the certification should be "a statement of methods used for determining compliance, including a description of monitoring, recordkeeping, and reporting requirements and test methods." 40 C.F.R. 70.5(c)(9)(ii). The draft permits fail to adequately address these requirements.

RESPONSE 5: The ED does not agree that Special Condition 13 of the draft permit needs to be revised in order to meet regulatory requirements. Special Condition 13 of the draft permit is in compliance with the specific requirements of the EPA approved Federal Operating Permit program, as found in 30 TAC Chapter 122. Specifically, § 122.146(5), requires the annual

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compliance certification to include or reference the specified elements, including: the identification of each term or condition of the permit for which the permit holder is certifying compliance, the method used for determining the compliance status of each emission unit, and whether such method provides continuous or intermittent data; for emission units addressed in the permit for which no deviations have occurred over the certification period, a statement that the emission units were in continuous compliance over the certification period; for any emission unit addressed in the permit for which one or more deviations occurred over the certification period, specific information indicating the potentially intermittent compliance status of the emission unit; and the identification of all other terms and conditions of the permit for which compliance was not achieved. All permit holders are required to comply with the requirements of 30 TAC § 122.146, as well as all other rules and requirements of the commission.

In addition, in 2006, EPA's Title V Task Force endorsed the 'short-form' approach used by TCEQ, as an option for compliance certification. (See Title V Task Force, Final Report to the Clean Air Act Advisory Committee, page 108 (April 2006)).

However, in order to help clarify any confusion, the term has been revised to read as follows:

"The permit holder shall certify compliance in accordance with 30 TAC § 122.146. The permit holder shall comply with 30 TAC § 122.146 using at a minimum, but not limited to, the continuous or intermittent compliance method data from monitoring, recordkeeping, reporting, or testing required by the permit and any other credible evidence or information. The certification period may not exceed 12 months and the certification must be submitted within 30 days after the end of the period being certified."

Respectfully submitted,

Jesse E. Chacon, P.E., Manager Operating Permits Section Air Permits Division Bryan W. Shaw, Ph.D., Chairman Buddy Garcia, Commissioner Carlos Rubinstein, Commissioner Mark R. Vickery, P.G., Executive Director



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

June 15, 2011

MS LAYLA MANSURI ENVIRONMENTAL INTEGRITY PROJECT 1303 SAN ANTONIO, SUITE 200 AUSTIN TX 78701

Re: Notice of Proposed Permit and Executive Director's Response to Public Comment

Initial Issuance

Permit Number: O3025

Luminant Generation Company LLC

Sandow 5 Generation Plant Rockdale, Milam County

Regulated Entity Number: RN105369805 Customer Reference Number: CN603256413

Dear Ms. Mansuri:

Due to an oversight, the June 9, 2011 initial Response 1 to Comment 1 was incorrectly stated and has subsequently been corrected in this revised letter. The draft permit was also revised to accurately depict the three options authorized for monitoring of particulate matter emissions under 40 CFR Part 60, Subpart Da for 'GRPBOILERS'. Please replace the previously sent draft permit pages 25 - 26 with the revised pages 25 - 26 attached. The Statement of Basis attached to the June 9 letter remains valid, however.

The Texas Commission on Environmental Quality (TCEQ) Executive Director's proposed final action is to submit a proposed federal operating permit (FOP) to the U.S. Environmental Protection Agency (EPA) for review. Prior to taking this action, all timely public comments have been considered and are addressed in the enclosed TCEQ Executive Director's Response to Public Comment (RTC). The executive director's RTC also includes resulting modifications to the FOP, if applicable.

As of June 14, 2011 the proposed permit is subject to an EPA review for 45 days, which has been extended by an additional 7 days by this letter, ending on August 5, 2011.

If the EPA does not file an objection to the proposed FOP, or the objection is resolved, the TCEQ will issue the FOP. If you are affected by the decision of the Executive Director (even if you are the applicant) you may petition the EPA within 60 days of the expiration of the EPA's

Ms. Layla Mansuri Page 2 June 15, 2011

45-day review period in accordance with Texas Clean Air Act § 382.0563, as codified in the Texas Health and Safety Code and the rules [Title 30 Texas Administrative Code Chapter 122 (30 TAC Chapter 122)] adopted under that act. This paragraph explains the steps to submit a petition to the EPA for further consideration. The petition shall be based only on objections to the permit raised with reasonable specificity during the public comment period, unless you demonstrate that it was impracticable to raise such objections within the public comment period, or the grounds for such objections arose after the public comment period. The EPA may only object to the issuance of any proposed permit which is not in compliance with the applicable requirements or the requirements of 30 TAC Chapter 122. The revised 60-day public petition period begins on August 6, 2011 and ends on October 5, 2011. Public petitions should be submitted during the petition period to the TCEQ, the EPA, and the applicant at the following addresses:

Texas Commission on Environmental Quality Office of Permitting & Registration Air Permits Division Technical Program Support Section, MC-163 P.O. Box 13087 Austin, Texas 78711-3087

U.S. Environmental Protection Agency Administrator Mike O. Leavitt Ariel Rios Building (AR 1101A) 1200 Pennsylvania Avenue, NW Washington, DC 20460

Ms Shawn Glacken Senior Vice President Luminant Generation Company LLC 500 North Akard Street LP 9 Dallas TX 75201-3302 U.S. Environmental Protection Agency (EPA) Attn: Air Permit Section Chief Region 6 1445 Ross Avenue, Suite 1200 Dallas, Texas 75202-2733

Thank you for your cooperation in this matter. If you have questions concerning the processing of this permit application, please contact Mr. Chuck Lowary, P.E. at (512) 239-1263.

Sincerely,

Jesse E. Chacon, P.E., Manager Operating Permits Section

Air Permits Division

Texas Commission on Environmental Quality

asse & Chacon

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JEC/EL

cc: Mr. Paul H. Coon, Air Permitting Coordinator, Luminant Generation Company LLC,
Dallas

Mr. Paul Barnes, Air permitting Coordinator, Luminant Generation Company LLC, Dallas

Mr. Ric Federwisch, Senior Vice President, Luminant Generation Company LLC, Dallas

Air Section Manager, Region 9 - Waco

Air Permit Section Chief, U.S. Environmental Protection Agency, Region 6-Dallas (Electronic copy)

Enclosures: Executive Director's Response to Public Comment

Proposed Permit

Project Number: 11733

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bcc:

Ms. Bridget Bohac, TCEQ Office of Public Assistance, MC-108, Austin Ms. Deanna Avalos, Final Documents Team, TCEQ Office of the Chief Clerk, MC-105,

Amy Browning, TCEQ Environmental Law Division (MC-173), Austin

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Modifications Made from the Draft to the Proposed Permit

- The applicant has revised the application to clarify that NSPS Subpart Da
 provides three options for continuous monitoring of PM emissions: PM CEMS,
 bag filter leak detection systems, or continuous opacity monitoring systems
 (COMS). TCEQ notes that although NSPS Da allows the applicant to choose
 any of these compliance monitoring options for purposes of complying with
 NSPS Da, both the Consent Decree associated with the site and Permit No. 48437
 require use of a PM CEMS to demonstrate compliance with their PM emissions
 limits.
- The Consent Decree associated with the site is now addressed in both a revised Special Condition and as an attachment to the proposed permit.
- 3. In response to recent EPA objections related to 30 TAC 111, Subchapter A, Visible Emissions, the applicant has chosen to comply with 20% opacity requirements for all vents subject to § 111.111(a)(1)(A) and (B) requirements and subsequently the proposed permit has been updated to reflect this decision.
- The continuous compliance certification Special Condition was revised to clarify any confusion.
- Additionally, the recordkeeping general condition, and PBR condition have been revised to incorporate recent EPA objections on other operating permits.

EXECUTIVE DIRECTOR'S RESPONSE TO PUBLIC COMMENT

The Texas Commission on Environmental Quality (TCEQ) Executive Director provides this Response to Public Comment and the Executive Director's preliminary decision on the Luminant Generation Company LLC, Federal Operating Permit (FOP) application. As required by Title 30 Texas Administrative Code § 122.345 (30 TAC § 122.345) the Executive Director prepares a notice of proposed final action, which includes a response to all timely comments. These comments are summarized in this response. The Office of Chief Clerk (OCC) timely received comment letters from the following persons: Ms. Layla Mansuri, from the Environmental Integrity Project.

BACKGROUND

Procedural Background

The Texas Operating Permit Program requires that owners and operators of sites subject to 30 TAC Chapter 122 obtain a FOP that contains all applicable requirements in order to facilitate compliance and improve enforcement. The FOP does not authorize construction or modifications to facilities, nor does the FOP authorize emission increases. In order to construct or modify a facility, the facility must have the appropriate new source review authorization. If the site is subject to 30 TAC Chapter 122, the owner or operator must submit a timely FOP application for the site, and ultimately must obtain the FOP in order to operate. Luminant Generation Company LLC applied to the TCEQ for an initial issuance of a FOP for an Electric Services plant located in Rockdale, Milam County on May 1, 2009, and notice was published on July 2, 2009. The public comment period ended on August 2, 2009.

Description of Site

Luminant Generation Company LLC has applied to the TCEQ for the initial review of a FOP that would authorize the applicant to operate the Sandow 5 Generating Plant. The facility is located 9 miles southwest of Rockdale on FM 1786; 3986 Charles Martin Hall Road.

Each of the steam generators provides steam to a common turbine generator set capable of generating approximately 575 megawatts (net). The two circulating fluidized bed (CFB) boilers combust lignite within an air-suspended mass (i.e.-fluidized bed) of particles. Each boiler is equipped with fuel oil-fired burners that are used primarily for combustion support or during startup, shutdown, and malfunctions.

Lignite is supplied from Luminant's nearby Three Oaks Mine and is delivered to the site primarily by conveyor, but can also deliver coal to the Unit 5 storage pile via truck or other material-handling vehicles. Coal delivered by conveyor is transferred either onto the Unit 5 storage pile or to crushers. The crushers can receive coal directly from the mine or from the storage pile, via underground reclaim conveyors. The crushers reduce the coal to the specific size needed for the fluidized bed. Crushed coal is then conveyed to the CBF boilers.

Limestone used in the CFB boilers is delivered to the Unit 5 limestone storage pile primarily by

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the limestone handling system. Limestone can also be delivered by truck or other material-handling vehicles. Limestone is reclaimed from the Unit 5 storage pile and conveyed to the limestone bunkers. The limestone mills reclaim product from the bunkers and reduce it to the specific size needed for the fluidized bed. The limestone is then pneumatically conveyed into the boiler.

Each boiler unit uses limestone to reduce SO2 within the boiler, employs ammonia injection to reduce NOx, a cyclone to reduce heavy particulates back into the fluidized bed, a flue gas polishing scrubber to further reduce SO2 emissions, and pulse-jet baghouse for emission control of particulate matter.

All comments were submitted by Ms. Layla Mansuri on behalf of Environmental Integrity Project (EIP).

COMMENT 1: The D. C. Circuit Court of Appeals recently confirmed that Title V permits must include monitoring sufficient to assure compliance. As the Texas Commission on Environmental Quality (TCEQ) is aware, Title V permits must include monitoring requirements sufficient to assure compliance with applicable emission limits and standards. On August 19, 2008, the D,C. Circuit Court of Appeals vacated an EPA rule that would have prohibited TCEQ and other state and local authorities from adding monitoring provisions to Title V permits if needed to "assure compliance," Sierra Club, et al., v. EPA, 536 F.3d 673 (D.C. Cir. 2008). The Court emphasized the statutory duty to include adequate monitoring in Title V permits:

Title V is a complex statute with a clear objective: it enlists EPA and state and local environmental authorities in a common effort to create a permit program for most stationary sources of air pollution. Fundamental to this scheme is the mandate that "[e]ach permit... shall set forth ...monitoring.., requirements to assure compliance with the permit terms and conditions." 42 U.S.C. § 7661c(c). By its terms, this mandate means that a monitoring requirements insufficient "to assure compliance" with emission limits has no place in a permit unless it is supplemented by more rigorous standards." *Id* at 677.

In addition, the Court acknowledged that the mere existence of periodic monitoring requirements may not be sufficient. *Id* at 676-677.

Has TCEQ conducted a review of the monitoring provisions for the Sandow 5 permit that complies with the court ruling? TCEQ should review and implement the Title V monitoring provisions to ensure that each provision is in compliance with the CAA and the Court's recent opinion. Wherever possible, the permit should require continuous emission monitoring that clearly measures compliance based on the averaging period in the underlying standard. For example, compliance with an emission limit that has to be met on a daily basis should be measured every day, not once a year. Where continuous monitoring is not available, the permit should require alternative methods that more closely match monitoring frequency to the averaging time for compliance. Specifically, the monitoring required for particulate matter is deficient. Continuous emission monitoring systems are available and should be required for monitoring of particulate matter emissions.

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RESPONSE 1: Consistent with 40 Code of Federal Regulation (CFR) Part 70, the Luminant permit includes: (1) monitoring sufficient to yield reliable data from the relevant time period that is representative of compliance with the permit; and (2) monitoring sufficient to assure compliance with the terms and conditions of the permit. The Executive Director has determined that the monitoring required by this permit demonstrates compliance for the applicable state and federal requirements. For those requirements that do not include monitoring, or where the monitoring is not sufficient to assure compliance, the federal operating permit includes such monitoring for the emission units affected. Additional periodic monitoring or compliance assurance monitoring (CAM) was identified for emission units after a review of applicable requirements determined that additional monitoring was needed to assure compliance. Forty-six emission units were reviewed and additional monitoring incorporated for many. Each applicable requirement is reviewed to determine whether monitoring, recordkeeping, reporting, and testing (MRRT) are sufficient to assure compliance with that standard or requirement. Applicable requirements undergo this review when the requirement changes to ensure consistent application of MRRT sufficient to assure compliance for all permits that contain the applicable requirement. If additional monitoring is required, it is included in the "Additional Monitoring Requirements" attachment of the permit and the basis of the monitoring is included in the Statement of Basis, pages 16-35.

In accordance with the General Condition No. 13 and 14 in the underlying NSR permit and in accordance with 30 TAC 116.115(b)(2)(E)(i), Luminant maintains a copy of the permit along with records containing the information and data (gathered through monitoring) sufficient to demonstrate compliance with the permit, including production records and operating hours. The Maximum Allowable Emission Rate Limits were calculated using the maximum firing rate, the heating value of the fuel (the value is looked up from a table) and an emission factor taken from AP-42, Chapter 1, or provided by the vendor. The monitored fuel flow rate, with the heating value of the fuel and the factor that was used to calculate the maximum allowable emission rate, is used to calculate the actual emission rate to demonstrate compliance, unless a CEMS is utilized.

In response to the specific examples provided by the commenter, the ED provides the following specific information:

Under the FCAA, the source is subject to Title IV Acid Rain Monitoring for SO2 and NOX, as administered through EPA regulations found at 40 CFR Part 75; and Title V CAM and periodic monitoring, as administered through EPA regulations at 40 CFR Parts 64, and 70, respectively. The EPA has transferred to TCEQ the responsibility for assuring the Title V monitoring requirements are included in the Federal Operating Permits. The TCEQ conducts a thorough review of the New Source Review (NSR) permit and includes CAM and periodic monitoring in the NSR permit as part of the NSR permit process. Additionally, the TCEQ conducts a thorough review of all other applicable requirements and includes CAM and periodic monitoring in the FOP. CEMS are not required to comply with the federal or state rules. Although the purpose of CAM and periodic monitoring are to assure continuous compliance, neither CAM nor periodic monitoring require CEMS for each federally regulated air pollutant.

Texas Health and Safety Code § 382.016 authorizes the TCEQ to prescribe reasonable

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requirements for measuring and monitoring the emissions of air contaminants from a source. Similarly, 30 TAC § 116.111(a)(2)(B) states that "the proposed facility will have provisions for measuring the emission of significant air contaminants as determined by the Executive Director. This may include the installation of sampling ports on exhaust stacks . . ." It is clear that the state rules do not require CEMS for every type of air pollutant compound emitted.

In this instance, the Applicant did not propose PM CEMS in the draft FOP, and the TCEQ has not required them because of a general lack of industry experience with the technology. The TCEQ agrees that PM CEMS should be preferable to Continuous Opacity Monitoring System (COMS) because PM CEMS measure the pollutant PM rather than opacity, which has long been a surrogate for PM emissions. However, the TCEQ notes that the EPA relatively recently updated the NSPS Subpart Da requirements for electric utility steam generating units, and chose to make PM CEMS one of several options for PM monitoring for utility units. See 71 Fed.Reg. 9866-68 (February 27, 2006). In response to an industry petition, EPA stated: "We recognize that experience using PM CEMS at electric utility power plants in the United States is limited and not all affected owners and operators will choose to use PM CEMS." See 72 Fed. Reg. 32711 (June 13, 2007).

Subpart Da [40 CFR § 60.48a(o)] contains two other alternatives (as a surrogate for the PM CEMS) to assure compliance with the PM emission limits of NSPS Da. One is to use a COMS and maintain the opacity level less than or equal to that measured by the COMS during the most recent successful PM stack test. The other is to use a COMS and continuously monitor specified operating parameters of the PM control device (e.g. a bag leak detection system). These new, more rigorous alternatives to PM CEMS have provided an incentive for some owners to select PM CEMS. Because all of these techniques are new, some time may be required to demonstrate whether one has particular advantages compared to another.

The applicant has revised the application to reflect that Subpart Da provides three options for continuous monitoring of PM emissions: PM CEMS, leak detection system, or continuous opacity monitoring system (COMS). The applicant has elected to use COMS only to determine compliance with §111.153(b) since PM CEMS provides measurements of filterable PM rather than total PM (filterable + condensable PM), as required in 30 TAC §111.153(b). However, both the Consent Decree associated with the site and Permit No. 48437 require use of a PM CEMS to determine compliance with their PM emissions limits.

COMMENT 2: The draft permit impermissibly incorporates permits by rule. The draft permit incorporates a dozen permit by rule (PBR) authorizations, the text of which appear nowhere in the draft renewal or its statement of basis. See the New Source Review Authorization References Table on *Draft p.* 59, incorporating among others, PBRs 101.261, 101.262 and 101.263.

These PBRs do not include specific emission limits and fail to include adequate monitoring and reporting requirements and compliance timeframes that violate FPA guidance and prior SIP approvals. Texas currently allows major sources to authorize emissions through PBRs. In its approval of Texas' general PBR provisions into the SIP, EPA stated that it was approving the use of PBRs only for non-major facilities. 68 FR 64543, 64544 (Nov. 14, 2003).

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EPA guidance provides that facilities with emissions even approaching the major source threshold must authorize emissions through a case-by-case review of an individual permit. Potential to Emit Guidance for Specific Source Categories (April 14, 1998) p. 2. (Case-by-case reviews are "essential for complex sources warranting close scrutiny and sources that limit their emissions to near-major amounts.") The Texas Health and Safety Code likewise prohibits the use of PBRs by "major" facilities. Tex. Health & Safety Code § 382.05196(a). These limits are intended to both ensure that federal major NSR requirements are met and to protect the NAAQS. Despite these limits, Texas allows major sources to authorize increases in emissions through PBRs. As a result sources are allowed to modify their major source NSR permit requirements without complying with federal public participation requirements.

The Clean Air Act requires STPs to include provisions for regulating the modification and construction of stationary sources as necessary to assure compliance with the NAAQS. 42 U.S.C. §§ 7410(a)(2)(A)-(C). Texas PBRs must, therefore, include provisions to assure such compliance, including provisions making the permits practicably enforceable.

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EPA, however, has repeatedly notified Texas that its existing PBRs are inconsistent with the approved SIP and EPA policy and do not assure compliance. PBRs cannot be used to authorize emissions from major sources, cannot be used to amend individual permits, must be source specific and must not be incorporated into the proposed renewal draft. Use of these permits and incorporation of them into this Title V permit jeopardize air quality and thwart public participation while also conflicting with Texas' statutory law, EPA guidance and EPA action on Texas' and other states' SIPS.

Specific problems with the incorporation of PBRs into the Title V permit include the following:

• Interference with attainment or maintenance of the NAAQS. In order to assure protection of the NAAQS, Texas' PBR program must include a mechanism for denying PBR authorizations for cause. CAA § 110(a)(2)(c); 40 C.F.R, § 51.160. There must be preauthorization review of applications for coverage under individual PBRs to assure the emissions authorized by PBRs will not contribute to violations of control strategies or interfere with attainment or maintenance. See 71 Fed. Reg. 14439, 14441 (March 22, 2006) ("EPA proposes a conditional approval because this rule, as adopted by the Missouri Air Conservation Commission on June 26, 2003, does not expressly include a mechanism for pre-construction review of [PBR] applications ..."). Texas rules include no provision for pre-construction review of PBR applicability claims.

EPA has repeatedly found that, to be practicably enforceable, minor source permits most: (1) apply to a clearly defined category of sources that is narrow enough to allow specific limits and compliance monitoring to be identified and achieved by all sources in the category, (2) include technically accurate limits providing assurance that emissions will not exceed federal thresholds, (3) include a compliance timeframe (hourly/daily, etc.), and (4) include specific compliance monitoring method sufficient to protect the standard involved. Guidance on Enforceability Requirements for Limiting Potential to Emit through SIP and Section 112 Rules and General Permits. (Jan. 25, 1995); See also, 61 FR 53633, 53635 (Oct. 15, 1996) and 62. FR 2587, 2589 (Jan. 17, 1997). Similarly, the Texas Health and Safety Code requires that PBRs apply only to "types of facilities that will not significantly contribute air contaminants to the atmosphere" and only to "similar" facilities. Tex. Health & Safety Code §382,05 1(b)(4).

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• Lack of Adequate Public Participation: Because PBRs do not contain detailed provisions relating to emission limits and compliance (these are often found in the registrations, which are submitted after the close of public comment), the public is not given an adequate opportunity to comment when PBR rules are issued. Further, Texas rules expressly require PBRs to be "incorporated" into a facility's permit when the permit is amended or renewed. 30 Tex. Admin. Code § 16.1 16(d). Texas "incorporation" procedures do not provide adequate public participation or meet other requirements for permit amendments.

To the extent PBRs are used at a major facility, used to amend an individual permit, or are non source category specific, they violate the Texas SIP and EPA policy and prior SIP decisions. To assure compliance with the Act, Luminant must obtain valid authorizations, such as permit amendments, for any emissions currently authorized through illegal PBRs. Until it does so, Luminant is in ongoing noncompliance with the Clean Air Act.

RESPONSE 2: Texas' general PBR rules are approved as part of the SIP. In addition, Chapter 106, Subchapter A is a defined applicable requirement under Chapter 122 and the EPA-approved Texas operating permit program. Subchapter A includes applicability, requirements for permitting by rule, registration of emissions, recordkeeping and references to standard exemptions and exemptions from permitting. Additionally, PBR authorizations can apply to distinct, insignificant sources of emissions (i.e. engine, production process, etc.) at a Title V site. As such PBRs do not violate the SIP, EPA policy or prior SIP decisions; nor is incorporation of PBRs in to Luminant's operating permit impermissible. All current and historical PBRs and standard exemptions (predecessors to PBRs) are available on the TCEO website for review. Title 30 TAC Chapter 106 provides types of authorizations for certain types of facilities or changes within facilities which the Commission has determined will not make a significant contribution of air contaminants to the atmosphere. A PBR is a permit which is adopted under Chapter 106, and is only available to sources which belong to categories for which the Commission has adopted a PBR in that chapter. A PBR cannot be used to amend an individual NSR permit. 30 TAC §116.116(d), which is SIP-approved, sets forth that all changes authorized under Chapter 106 to a permitted facility shall be incorporated into that facility's permit when the permit is amended or renewed. Therefore, the ED disagrees with the assertion that PBRs incorporation into FOPs is impermissible.

Different versions of PBR are related to specific facilities or changes claimed at a specific moment in time. Versions only apply to a particular facility when the construction or change occurred under 106.4. Some of the PBRs claimed do not require registration (specifically 106.183 for boilers, heater and other combustion devices, 106.472 for organic and inorganic liquid loading and unloading, 106.478 for storage tank and change of service, and 106.371, cooling water units), thus, authorization letters will not always be available for those particular

² Texas Health & Safety Code (THSC) § 382.05196 and implementing rules in 30 TAC chapter 106, relating to PBRs, prohibit an owner or operator of a facility from using a PBR to authorize a major stationary source or major modification. This does not preclude the use of a PBR for non-major changes at a major stationary source, as that term is defined in federal law.

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PBRs.

Regarding specific problems the commenter describes with PBRs (i.e. public participation, interference with the NAAQS) these issues are beyond the scope of this FOP action.

COMMENT 3: The draft permit impermissibly relies on incorporation by reference. The Applicable Requirements Summary relies extensively on incorporation by reference, thus basing the entire permit's emission limitations on incorporation by reference. This does not "assure compliance." To the contrary, it poses a significant barrier to members of the public who wish to discover and/or comment on whether the permit assures compliance.

As explained in the Citgo Order at p. 11, aside from minor NSR permits and Permits by Rule, "EPA did not approve (and does not approve of) Texas' use of incorporation by reference of emissions limitations for other requirements." Citgo Order at 11.

The courts have made clear that the compilation of emission limits and monitoring requirements in one place is a fundamental piece of the permit and should be done in a manner so as to easily identify these limits and requirements. "EPA expects that Title V permits will explicitly state all emission limitations and operational requirements for all applicable emission units at a facility." (Tesoro Order Petition No. IX-2004-6) Citgo Order at 11. Title V did more than require the compilation in a single document of existing applicable emission limits, and monitoring requirements. It also mandated that 'each permit issued under [Title VI set forth ... monitoring .,. requirements to assure compliance with the permit terms and conditions.' Sierra Club, et al., v. EPA, 536 F.3d 673 (D.C. Cir. 2008).

RESPONSE 3: The ED acknowledges that air quality requirements can be voluminous. Large sites are subject to numerous federal requirements including New Source Performance Standards (NSPS) and National Emission Standards for Hazardous Pollutants (NESHAPs), as well as state rules and permits. The federally approved operating permit program was developed with this complexity in mind, and the applicable requirement summary table and accompanying unit summary table are designed to provide an efficient index to applicable requirements for emission units at sites subject to the operating permit program, to allow regulators, companies, and the public to "match" the requirement to the emission unit and avoid enforcement problems that could result from transcription errors or misinterpretations associated with paraphrasing the underlying applicable requirement. The ED therefore requires applicants to provide detailed information regarding each emission unit in order to verify the relevant applicable requirements for that unit. The FOP then identifies the relevant citations which document the applicable requirements for each emission unit, with which the applicant must comply and annually certify compliance.

Title 30 TAC §122.142 states that the operating permit shall contain the specific regulatory citations in each applicable requirement identifying the emission limitations and standards. Additionally, EPA discussed the use of incorporation by reference in the preamble to final Part 70 rule, discussing the requirements of § 70.6, Permit Content, stating:

Section 70.6(a)(1)(i) requires that the permit reference the authority for each term

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and condition of the permit. Including in the permit legal citations to provisions of the Act is critical in defining the scope of the permit shield, since the permit shield, if granted, extends to the provisions of the Act included in the permit. Including the legal citations in the permit will also ensure that the permittee, the permitting authority, EPA, and the public all have a common understanding of the applicable requirements included in the permit. This requirement is satisfied by citation to the State regulations or statutes which make up the SIP or implement a delegated program. See 57 Fed. Reg. 32250, 32275 July 21, 1992, emphasis added.

The federally approved operating permit program for Texas has allowed for applicable requirements to be incorporated by reference into the FOP since 1996. See Final Interim Approval, 61 Fed. Reg. 32693, June 25, 1996; Final Full Approval, 66 Fed. Reg. 63318, December 6, 2001; and Final Approval of Resolution of Deficiency, 70 Fed. Reg. 16134, March 30, 2005.

In comments on the proposed final interim approval of the operating permit program, in 1995, the Commission (then-TNRCC) proposed to include a standardized permit provision that incorporated by reference all preconstruction authorizations, both major and minor, to resolve the EPA identified deficiency of Texas' failure to include minor NSR as an applicable requirement. In the June 25, 1996 Final Interim Approval, EPA directed, "the State must be quite clear in any standardized permit provision that all of its major 'preconstruction authorizations including permits, standard permits, flexible permit, special permits, or special exemptions' are incorporated by reference into the operating permit as if fully set forth therein and therefore enforceable under regulation XII (the Texas Operating Permit Regulation) as well as regulation VI (the Texas preconstruction permit regulation)." (61 Fed. Reg. at 32695, emphasis added.) Given this explicit direction in EPA's 1996 final interim approval of the Texas program, TCEQ understood that the standardized permit provision for preconstruction authorizations incorporated all NSR authorizations by reference, including major NSR.

As a result of Texas' initial exclusion of minor NSR as an applicable requirement of the Texas Operating Permit program, and EPA's final interim approval of a program that provided for a phase-in of minor NSR requirements using incorporation by reference, EPA was sued by various environmental groups. See Public Citizen, Inc. v. U.S. E.P.A., 343 F.3d 449 (5th Cir. 2003). The petitioner raised several issues, including the use of incorporation by reference of minor NSR, because the exclusion of minor NSR as an applicable requirement was a program deficiency identified by EPA. Petitioners acknowledged that Texas' Operating Permit program incorporates all preconstruction authorizations by reference, through use of a table entitled "Preconstruction Authorization References". The Petitioner's brief in that case included an example of this table, which clearly contains sections for Prevention of Significant Deterioration (PSD), nonattainment (NA), 30 TAC Chapter 116 Permits, Special Permits and Other Authorizations, and Permits by Rule under 30 TAC Chapter 106. See Brief of Petitioners, p. 30. The Department of Justice (DOJ), representing EPA, responded to this allegation of improper use of IBR in the context of the specific allegation - whether "EPA reasonably determined that Texas corrected the interim deficiency related to minor new source review", answering unequivocally "yes". "Nothing in the statute or regulations prohibits incorporation of applicable requirements by reference. The Title

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V and Part 70 provisions addressing the content of Title V permits specify what Title V permits 'shall include,' but do not speak to how the enumerated items must be included." See, Brief of Respondents, pp. 25-26. The Court agreed that incorporation by reference is permissible stating "The Title V and Part 70 provisions specify what Title V permits "shall include" but do not state how the items must be included. Notably, the court did not distinguish between minor and major NSR when stating that IBR was permissible under both Title V and Part 70.

Thus, it is the ED's position that incorporation by reference of both major and minor NSR permits is acceptable and was fully approved by EPA. The ED will continue efforts with EPA on how to resolve IBR of major NSR on a broader, programmatic basis.

The commenter is incorrect that EPA has already disapproved TCEQ's use of IBR, citing the recent Premcor and CITGO Orders. In fact, as the commenter noted in its August 3, 2009 letter, EPA has not objected to TCEQ's incorporation of minor NSR and permits by rule (PBRs) in these Orders. EPA specifically granted the petition in regard to incorporation of major NSR permits. These Orders are not final actions and the ED respectfully disagrees with EPA's interpretation of their approval of Texas's operating permit program on this issue, as discussed above.

NSR authorizations, emission limits, terms and conditions and monitoring requirements are all applicable requirements of the operating permit to which they are incorporated, whether this is done by reference, or as part of the permit. NSR permit terms, conditions and emission limits are subject to the reporting, deviation and compliance certification requirements of the operating permit program as defined in Chapter 122 of the Texas Administrative Code. Unlike many other states, incorporation by reference is particularly appropriate in Texas where the preconstruction permits are a separate authorization from the operating permit. The procedures for issuance, amendment and renewal of preconstruction permits are also separate and distinct from the operating permits program; and these larger facilities frequently make changes at their sites requiring changes to NSR permits.

These permits can be found in the main TCEQ file room, located on the first floor of Building E, 12100 Park 35 Circle, Austin, Texas. Air Permits Division does have a standardized naming system for documents. The document type, permit number, company name, and project type are included in the subject line of the document. This naming system has been in place for several years. However, older projects may not be identified as such. TCEQ would be glad to assist any member of the general public or EPA with finding any documents or answering questions regarding them. The Office of Public Assistance (OPA) may be contacted at 1-800-687-4040 for help with any question.

COMMENT 4: The draft permit fails to adequately incorporate the consent decree. The Sandow 5 plant is subject to consent decree. In fact, the consent decree is referenced and relied upon in permit no. 48437. Permit 48437 is, in turn, incorporated by reference into the Title V permit. The Title V permit, however, inadequately identifies the consent decree and its requirements. The Title V permit simply states:

The permit holder will comply with the emissions limitation and other requirements for

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each Sandow Replacement Unit (Units SA-B5A and SA-B5B) and associated air pollution control devices) as set forth in Section IV of the consent decree issued pursuant to Civil Action No. A-01-CA-88I-SS and as set forth in court orders issued pursuant to Civil Action No. A-03-CA-222-SS according to the dates and schedules established in the consent decree and orders.

The permit must incorporate the requirements of the consent decree into the permit. "EPA believes that, because CDs and AOs reflect the conclusion of a judicial or administrative process resulting from the enforcement of "applicable requirements" under the Act, all CAA-related requirements in such CDs and AOs are appropriately treated as "applicable requirements" and must be included in title V permits, regardless of whether the applicability issues have been resolved in the CD." Citgo Order at 12.

RESPONSE 4: The draft Title V permit includes a Consent Decree Requirements Summary table where unit-specific requirements of the consent decree requiring future compliance actions are identified. The term and condition cited above will also be maintained, albeit with a revised sentences which will read:

"The Replacement Sandow Unit listed in the Consent Decree Requirements Summary attachment shall meet the limitations, standards, equipment specifications, monitoring, recordkeeping, reporting, testing and other requirements listed in the Consent Decree Requirements Summary attachment to assure compliance with the permit. The Consent Decree Requirements Summary incorporates requirements set forth by the United States District Court for the Western District of Texas, Austin Division in the Consent Decree issued on July 28, 2003 in Civil Action No. A-01-CA-881-SS, the Order Granting United States' Motion to Approve Stipulation to Resolve Certain Alleged Violations of Consent Decree (Stipulated Order) issued on February 27, 2007 in Civil Action No. A-03-CA-222-SS, and the Order issued on September 14, 2009 in Civil Action No. A-03-CA-222-SS."

Luminant has made or initiated all changes required under the consent decrees applicable to the Sandow 5 Plant, except those listed in the Consent Decree Requirements Summary attachment.

COMMENT 5: The draft permit fails to require adequate compliance certification. The compliance certification provision in a Title V permit must meet the requirements set out at 30 TAC § 122.146 and 40 C.F.R. §70.5(c)(9). The compliance certification should, at a minimum, certify compliance with the monitoring method for every limit. Specifically, the certification should be "a statement of methods used for determining compliance, including a description of monitoring, recordkeeping, and reporting requirements and test methods." 40 C.F.R. 70.5(c)(9)(ii). The draft permits fail to adequately address these requirements.

RESPONSE 5: The ED does not agree that Special Condition 13 of the draft permit needs to be revised in order to meet regulatory requirements. Special Condition 13 of the draft permit is in compliance with the specific requirements of the EPA approved Federal Operating Permit program, as found in 30 TAC Chapter 122. Specifically, § 122.146(5), requires the annual

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compliance certification to include or reference the specified elements, including: the identification of each term or condition of the permit for which the permit holder is certifying compliance, the method used for determining the compliance status of each emission unit, and whether such method provides continuous or intermittent data; for emission units addressed in the permit for which no deviations have occurred over the certification period, a statement that the emission units were in continuous compliance over the certification period; for any emission unit addressed in the permit for which one or more deviations occurred over the certification period, specific information indicating the potentially intermittent compliance status of the emission unit; and the identification of all other terms and conditions of the permit for which compliance was not achieved. All permit holders are required to comply with the requirements of 30 TAC § 122.146, as well as all other rules and requirements of the commission.

In addition, in 2006, EPA's Title V Task Force endorsed the 'short-form' approach used by TCEQ, as an option for compliance certification. (See Title V Task Force, Final Report to the Clean Air Act Advisory Committee, page 108 (April 2006)).

However, in order to help clarify any confusion, the term has been revised to read as follows:

"The permit holder shall certify compliance in accordance with 30 TAC § 122.146. The permit holder shall comply with 30 TAC § 122.146 using at a minimum, but not limited to, the continuous or intermittent compliance method data from monitoring, recordkeeping, reporting, or testing required by the permit and any other credible evidence or information. The certification period may not exceed 12 months and the certification must be submitted within 30 days after the end of the period being certified."

Respectfully submitted,

Jesse E. Chacon, P.E., Manager Operating Permits Section Air Permits Division

ATTACHMENT 3



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 6 1445 ROSS AVENUE, SUITE 1200 DALLAS, TX 75202-2733

June 10, 2010

Mr. Mark R. Vickery, P.G. Executive Director Texas Commission on Environmental Quality P.O. Box 13087 Austin, Texas 78711-3087

Dear Mr. Vickery:

This letter is to clarify EPA's position on the use of incorporation by reference (IBR) in the issuance of Title V permits by the TCEQ under the EPA-approved Texas Title V Program. EPA provides oversight of Title V programs across the country. TCEQ's use of IBR in Title V permits is more extensive than the practices in any other state. Whether using IBR for inclusion of Major or Minor New Source Review permits, EPA is concerned that these practices are contributing to ambiguous and unenforceable permits.

IBR of Major New Source Review Permits

EPA has objected to approximately 38 draft TCEQ Title V permits, and TCEQ's use of IBR of Major New Source Review (NSR) permits has been a consistent basis for objection. This issue was apparently debated by EPA and TCEQ staff at a meeting in Waco on April 22, 2010, and I want to make sure that EPA's position on this matter is clear.

A central purpose of the Title V program is to "enable the source, states, EPA, and the public to better understand the requirements to which the source is subject, and whether the source is meeting those requirements." 57 Fed. Reg. 32250, 32251 (July 21, 1992) (EPA final action promulgating the Part 70 rule). 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 assured. To accomplish this purpose TCEQ must restate the emission limitations and standards, including those operational requirements and limitations that assure compliance with all

¹ See In the Matter of BP Products North America, Inc., Whiting Business Unit (October 16, 2009) (BP Whiting Order).

applicable requirements, from underlying Major PSD/Nonattainment NSR permits in the body of Title V permits.

EPA did not approve the use of IBR of Major NSR permits into Texasissued Title V permits as a part of the Texas Title V program. TCEQ's current use of IBR does not comply with the May 28, 2009 orders from Administrator Jackson regarding two Texas-issued Title V permit petitions. Because the Texas permits use IBR of Major NSR permits so extensively, as a practical matter it is extremely difficult to tell what emission limitations and standards apply to particular emission sources. For members of the public, it can be virtually impossible. This is completely contrary to the goals of the Title V program articulated above. EPA will continue to object to Title V permits that use IBR for emissions limitations and standards found in Major NSR permits.

Given the large number of EPA objections to Title V permits that are yet to be resolved by TCEQ and TCEQ's continued use of IBR of Major NSR permits (which will lead to further objections by EPA), TCEQ must address this issue promptly.

IBR of Minor New Source Review Permits

In addition, we are also evaluating the TCEQ's implementation of IBR of Minor NSR permits and permits by rule (PBRs). In our approval of the Texas Title V Program, we were willing to allow TCEQ to list the number of the Minor NSR permits and PBRs together with a statement that the permit terms are included as applicable requirements. EPA balanced the streamlining benefits of incorporation by reference against the value of a more detailed Title V permit. See *Public Citizen*, 343 F.3d, at 460-61 (5th Cir. 2003).

More recently, the EPA Administrator warned TCEQ in the CITGO and Premotor Orders that EPA would be evaluating this practice of IBR of Minor NSR and PBRs to determine how well it is working.

² Nor did the 5th Circuit's ruling, upholding EPA's discretion in allowing use by TCEQ of IBR for the terms in Minor NSR permits and permits by rule, address IBR for major NSR permits. *Public Citizen v. EPA*, 343 F.3d 449, at 460-61 (5th Cir. 2003). See also, 66 Fed. Reg. 63318, 63324 (Dec. 6, 2001).

³ In the Matter of CITGO Refining and Chemicals Company, L.P., West Plant, Corpus Christi, Texas, Petition No. VI-2007-01 (May 28, 2009)(CITGO Order) and In the Matter of The Premcor Refining Group, Inc., Port Arthur, Texas, Petition No. VI-2007-02 (May 28, 2009)(Premcor Order).

[W]hile EPA approved of the incorporation by reference approach for these types of permits, as discussed in a separate Title V order issued today (In the Matter of the Premcor Refining Group, Inc., Port Arthur, Texas, Petition VI-2007-02 (May 28, 2009)) it is important that that TCEQ ensure that referenced permits are part of the public docket or otherwise readily available, and currently applicable, and that the title V permit is clear and unambiguous as to how the emissions limits apply to particular emissions units.

CITGO Order at FN 5. (Emphasis added.) See also, FN 3, Premcor Order.

We have continuing concerns that the exclusion of emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements on the face of the Title V permit by the use of IBR of Minor NSR and PBRs is contributing to ambiguous, unenforceable Title V permits. Particular issues of concern include, but are not limited to, PBRs that purport to modify Major NSR emission limits and that lead to the controlling limit not being reflected in the body of the Title V permit, failure of the TCEQ to make the currently applicable Minor NSR permits and PBRs readily available to the public, and the practical inability of EPA and the public to determine the applicable emission limitations and standards for each particular emissions unit. Based on a review of CAA Title V programs around the country, EPA is not seeing similar use of IBR by other states.

We believe the above identified problems should be corrected in your permitting process immediately and would be happy to work with you. We are continuing to evaluate your current Minor NSR practices and may identify other issues, concerns and remedies in the near future.

Sincerely,

Al Armendariz

Regional Administrator/Region 6

c: Dr. Bryan W. Shaw, Chairman, TCEQ

Mr. Carlos Rubinstein, Commissioner, TCEQ

Mr. Buddy Garcia, Commissioner, TCEO

ATTACHMENT 4

TECHNICAL REVIEW: STANDARD PERMIT FOR POLLUTION CONTROL PROJECTS

Permit No.:	83346	Company Name:	Sandow Power Company LLC	APD Reviewer:	Mr. Dennis Chanmugam
Project No.:	135219	Site/Area Name:	Sandow 5 Generating Plant	SP No.:	6001

GENERAL INFORMATION			
Regulated Entity No.:	RN105369805	Project Type:	Standard Permit Application
Customer Reference No.:	CN603256405	Date Received by TCEQ:	December 20, 2007
Account No.:	Unassigned	Date Received by Reviewer:	December 27, 2007
City/County:	Rockdale, Milam County	Physical Location:	9.0 miles southwest of Rockdale on FM 1786

CONTACT INFORMATION					
Responsible Official/ Primary Contact Name and Title:	Mr. J. R. (Dick) Robertson Air Quality Manager	Phone No.: Fax No.:	(214) 812-8416 (214) 812-4395	Email:	dick.robertson@luminant.com
Technical Contact/ Consultant Name and Title:	Mr. Paul H. Coon Air Permitting Coordinator	Phone No.: Fax No.:	(214) 812-8409 (214) 812-4395	Email:	Paul Coon@luminant.com

GENERAL RULES CHECK	YES	NO	COMMENTS
Is confidential information included in the application?		X	
Are there associated authorizations at the site?		×	If YES, list all PBRs and standard permit numbers: na
Is the application for renewal of an existing standard permit?		X.	If YES, list expiration date:
Will any New Source Review permit be directly affected by this project?	X		If YES, list the NSR Permit No. NSR Permit # 48437
Do NSPS, NESHAP, or MACT standards apply to this registration?	11 31	X	If YES, list Subparts:
Is the following documentation included with this registration? 1. The General Requirements Checklist demonstrating compliance with 30 TAC §§ 116.110 and 116.601-615 2. Process description 3. Project description 4. Descriptions of any equipment being installed 5. Emissions calculations including the basis of the calculations 6. Emission increases and/or decreases associated with this project (quantified) 7. Description of efforts to minimize any collateral emissions or collateral increases	x to all		If NO, note any requests for additional information and date received: na
Are any requirements of § 116.110 circumvented by: (1) artificially limiting feed or production rates below the maximum capacity of the project's equipment; (2) claiming a limited chemical list; or (3) dividing and registering a project in separate segments?		x	If YES, are the limits intended to allow the project to move forward while waiting for a permit or permit amendment that will allow full-scale operations, particularly when the project would not be economically feasible until fully authorized? na

STANDARD PERMIT RULES CHECK	YES	NO	COMMENTS
Will the project include replacement of existing pollution control equipment and/or techniques?		x	If YES, is the new control technique at least as effective?
Will an increase in production capacity result from the installation of control equipment or the implementation of a control technique?		x	4
Does the project include installing a new production facility, reconstructing an existing production facility [as defined in 40 CFR § 60.15(b)(1) and (c)], or completely replacing an existing production facility?		x	
Without consideration of any other increases or decreases, will the project result in a significant net increase in emissions of any criteria pollutant?	x		Does the net increase trigger PSD, nonattainment, or netting review? YES x NO Document in technical summary below. Done
Are predictable maintenance, startup, and shutdown emissions directly associated with the pollution control project included in this project?		x	If NO, how are previous MSS emission authorized or permitted. Give permit nos. and emissions? No MSS emissions authorized at this time.

DESCRIBE OVERALL PROCESS AT THE SITE

Sandow Power Company LLC (Sandow) is currently constructing the Sandow 5 Generating Plant (Plant) an electric utility. The Plant uses two lignite-fired circulating fluidized bed boilers (EPNs: CFB 5A and CFB 5B) to produce steam for electric power generation (NSR Permit # 48437 authorizes the boilers: a Federal Operating Permit has been applied for and is pending).

TECHNICAL REVIEW: STANDARD PERMIT FOR POLLUTION CONTROL PROJECTS

Permit No.:	83346	Company Name:	Sandow Power Company LLC	APD Reviewer:	Mr. Dennis Chanmugam
Project No.:	135219	Site/Area Name:	Sandow 5 Generating Plant	SP No.:	6001

DESCRIBE PROJECT AND INVOLVED PROCESS

Sandow is targeting the reduction of emissions of mercury (Hg) and sulfur dioxide (SO₂) from its Plant emissions under this pollution control project (PCP). The new equipment and process to achieve the emission reduction will also assist in satisfying the intent of the conditions of Consent Decree (Case No. A-03-CA-222-SS), as well as emission reductions programs such as CAIR, CAMR, and voluntary emissions reduction commitments.

The reduction of SO₂ is to be achieved by adding one fluidized bed flue gas desulfurization vessel (polishing vessel) while reduction of Hg emissions is to be achieved by injecting a sorbent material (such as activated carbon) into the boilers flue gas. Support equipment for the process will consist of one sorbent storage silo with a sorbent injection system (common to both boilers), one silo for each of the two boilers, and one polishing scrubber for each boiler. The actual reduction will be from 0.20 MMBtu/hr to 0.15 MMBtu/hr per boiler. The process described below is common to both boilers.

Lime is transferred into each silo from enclosed delivery trucks using a pneumatic conveyor. Air emissions during the filling process of the silo are exhausted to the atmosphere through a bin vent filter. The lime silo transfers to the associated polishing scrubber via an enclosed air slide. The sorbent material is injected into the flue gas of the boilers and this material absorbs the Hg. The Hg-saturated sorbent removed from the flue gas by routing the stream through baghouse filters. SO₂ emissions are reduced when limestone in the circulating fluidized beds reacts with the SO₂ gas to form calcium sulfate (gypsum). The baghouse filters remove the gypsum from the flue gas while removal of residual SO₂ in the flue gas stream is enhanced when passed through the new polishing scrubbers.

The reduction of Hg is still to be quantified by the company since the technology being used is relatively new with no methods of accurately determining at this time, exactly what the reduction in Hg emissions will be. Thus, although reduction of Hg emissions is expected, Sandow, bound by federal regulations to reduce emissions of Hg nation-wide under a Cap and Trade Program, has therefore opted to be conservative in its representation of the decrease in emissions of Hg, and stated these to be zero (i.e. as reflected in the associated MAERT of this project, these emissions will remain at the previously allowable rate of Permit # 48437) after the introduction of the new processes. Minor collateral increases in emissions PM/PM₁₀ are expected and are reflected in the MAERT below.

TECHNICAL SUMMARY - DESCRIBE HOW THE PROJECT MEETS THE RULES

Background: When initially submitted as Project # 134077 on 11/12/2007, this registration received a deficiency letter (Std. 2), but with our assurance that as soon as clarifying information from the company in hand, we would re-activate the project ourselves (the standard practice requires a company receiving such a letter to re-submit appropriate documentation to re-activate the project). Following several telephone calls, e-mail exchanges and meetings (documented in the Technical Review of the initially submitted Project # 134077), clarifying information was received on Friday, 12/21/21007 which allowed for favorable of this project and addressed below.

This Review

Sandow claims that all requirements for the Pollution Control standard permit are met. Form PI-1S, a process description, a process flow diagram and emissions calculations (using the appropriate AP-42 emissions factors) were included in the registration packet.

§116.610. Applicability.

This PCP SP is for the addition of equipment and material to reduce emissions of Hg and SO₂. Minor, collateral increases in PM/PM₁₀ are expected (as reflected in the MAERT below).

§116.611. Registration to Use a Standard Permit.

Form PI-1S and all required documentation has been received. Conditions (a)-(c) will be met.

§116.614. Standard Permit Fees.

\$900 fee has been received.

§116.615. General Conditions.

All general conditions (1)-(10) will be met.

§116.617. State Pollution Control Project Standard Permit.

Conditions (a)-(f) will be satisfied.

Justification of collateral emissions increases:

- (1) Gypsum (as PM/PM₁₀) from flue gas: Allowables [per PBR 106.261(a)(2)] 6.0 lbs/hr and 10.0 tpy.
 - * EPN: SA5LS5AV Actuals: 0.38 lb/hr and 0.14 tpy.
 - * EPN: SA5LS5BV Actuals: 0.38 lb/hr and 0.14 tpy.

Total Actuals 0.76 lb/hr and 0.28 lb/hr

- (2) Sorbent Material (as PM/PM10) from Sorbent Silo Filter Stack: Allowables [per PBR 106.261(a)(3)] 1.0 lbs/hr and 4.38 tpy
 - * EPN: SA5SSV Actuals: 0.19 lb/hr and 0.01 tpy
- (3) The emission rates of Hg and SO2 are maintained at the same rates as currently permitted in Permit # 48437.

MSS Emissions: Based upon the discussion between Mr. Dick Robertson, Sandow, and this reviewer, it was agreed that, contrary to statement in the initial packet,

"Emission rates during startup, shutdown, and maintenance, of the polishing scrubbers, sorbent injection equipment, sorbent silo, and hydrated lime silos will not exceed the emissions rates associated with the routing operation of the equipment. Therefore, predictable emissions rates associated with startup, shutdown, and maintenance emissions from these sources are the same or lower than emissions associated with routine operation of equipment," MSS emissions, since neither identified nor quantified in the application packet, will neither be represented nor reviewed for this standard permit.

TECHNICAL REVIEW: STANDARD PERMIT FOR POLLUTION CONTROL PROJECTS

Permit No.:	83346	Company Name:	Sandow Power Company LLC	APD Reviewer:	Mr. Dennis Chanmugam
Project No.:	135219	Site/Area Name:	Sandow 5 Generating Plant	SP No.:	6001

Date	Time	Name/Company	Subject of Communication
7	1150 hrs		Mr. Robertson confirmed that the emissions attached to his e-mail of 12/18/2007 which he had earlier retracted in a telecon with this reviewer, were in fact good and should be used when reviewing this project.
	1650 hrs		Mr. Robertson submitted an e-mail quoted below under the MAERT.
12/20/0	1017 hrs & 1301 hrs	Mr. Dick Robertson, Sandow	Reviewer and Mr. Robertson exchanged e-mails (see Mr. Robertson's under MAERT below).
12/21/0	1429 hrs		Mr. Robertson called to check on the status of this project. Reviewer informed him that the administrative process of re-activating this project was in process and, due to the seasonal holidays, the re-activated project would probably be in reviewer's possession only after the holidays on Thur, 12/27/2007.
12/27/0	0745 hrs	Mr. Johnny Bowers APIRT	Reviewer met with Mr. Bowers and collected the folder related to the re-activated project.
7	0830 hrs	Mr. Dick Robertson	Reviewer informed Mr. Robertson and informed the latter that the project was now in process of being completed and good chance that it would be submitted to Ms. Anne Inman, P.E., RR Sec. Mgr. during the course of this morning. Mr. Robertson requested that the note

Note on Communications:

On 12/20/2007 there were confirmatory e-mails using the "Reply Everyone" capability from Mr. Richard Hyde, P.E. Director, Air Permits, and Mr. John Riley (iriley@velaw.com). The "Subject" line of these two e-mails indicated Sandow 5 was being referenced and sated that all PCP projects would be on hold and addressed again after the New Year.

In actuality, these two e-mails were not related to Sandow 5, but to the other PCP projects from TXU/Luminant which had just been received in APD and which had been the subject of discussions between APD management, Mr. Riley and representatives of TXU/Luminant.

EPN	Description	Pollutan t	Permitted Emission Rate		New Emission Rate		Change (+/-)	
			lb/hr	tpy	lb/hr	tpy	Ib/hr	tpy
SASSA	Circulating Fluidized Boiler 5A Stack	SO ₂	592	2,593	444	1,945	-148	- 648
	Circulating Fittidized Boiler 3A Stack	Hg	0.033	0.048	0.033	0.048	0	0
SAS5B	Circulating Fluidized Boiler 5B Stack	SO ₂	592	2,593	444	1,945	-148	- 648
	Circulating Fitholized Boller 513 Stack	Hg	0.033	0.048	0.033	0.048	0	0
SA5SSV	Sorbent Silo Filter Vent		0	0	0.19	0.01	+0.19	+0.0
SA5LS5AV	Hydrated Lime Silo 5A Filter Vent	PM/PM ₁₀	0	0	0.38	0.14	+0.38	+ 0.14
SA5LS5BV	Hydrated Lime Silo 5A Filter Vent		0	0	0.38	0.14	+0.38	+0.14

SO2 Emission Reduction/Boiler: Former Allowable: 0.20 MMBtu/hr New (this project): 0.15 MMBtu/hr Reduction: 0.05 MMBtu/hr

Notes:

Per e-mail dated 12/19/2007 at 4:50 pm from Mr. Dick Robertson:

This information is being provided as a follow-up to our discussions regarding the proposed standard permit for adding sulfur dioxide pollution control equipment to the Sandow 5 unit. As you are aware and we discussed, a federal court order issued in February 2007 requires that Sandow 5 meet a revised lower SO2 limit of 0.15 lb/MMBtu no later than March 31, 2010. The order allows several months after the projected start date of August 31, 2009 to commission, check out, test and establish reliable operation of the new power plant boilers and SO2 control equipment. Prior to March 31, 2010 the unit will maintain compliance with the current SO2 permit limit in accordance with present permit provisions. Compliance with the hourly and annual SO2 emission rates will be determined as currently required in TCEQ Air Quality Permit 48437 as amended September 25, 2003.

Per e-mail dated 12/20/2007 at 1:01 pm from Mr. Dick Robertson:

"The proposed pollution control project will be started up and operated in accordance with permit 48437 requirements for all pollution control equipment and will be used as necessary to maintain the current permit limits until March 31, 2010 when it will be used as necessary to achieve and maintain our new proposed SO2 limits. This is accordance with our discussions Richard Hyde and approval to use the new equipment to maintain and ultimately reduce emissions."

TECHNICAL REVIEW: STANDARD PERMIT FOR POLLUTION CONTROL PROJECTS

Permit No.:	83346	Company Name:	Sandow Power Company LLC	APD Reviewer:	Mr. Dennis Chanmugam
Project No.:	135219	Site/Area Name:	Sandow 5 Generating Plant	SP No.:	6001

	TECHNICAL REVIEWER	PEER REVIEWER	FINAL REVIEWER
SIGNATURE:	Claus themagone	Brinichtidge	
PRINTED NAME;	Dennis Chanmugam	Ms. Bonnie Evridge	Ms. Anne Inman, P.E.
DATE:	December 27, 2007	December 27, 2007	

BASIS OF PROJECT POINTS	POINTS
Base Points:	1.0
Project Complexity Description and Points: * Communications	3.0
Technical Reviewer Project Points Assessment:	4.0
Final Reviewer Project Points Confirmation:	

ATTACHMENT 5

Figure 1: 30 TAC §106.262(a)(2)

D, Feet	<u>K</u>	
100	326	E = maximum allowable hourly emission, and never to exceed 6 pounds per hour.
200	200	never to exceed a pounds per nour.
300	139	
400	104	
500	81	L = value as listed or referenced in Table 262
600	65	
700	54	
800	46	K = value from the table on this page.
900	39	(interpolate intermediate values)
1,000	34	
2,000	14	D = distance to the nearest off-plant receptor.
3,000 or more	8	

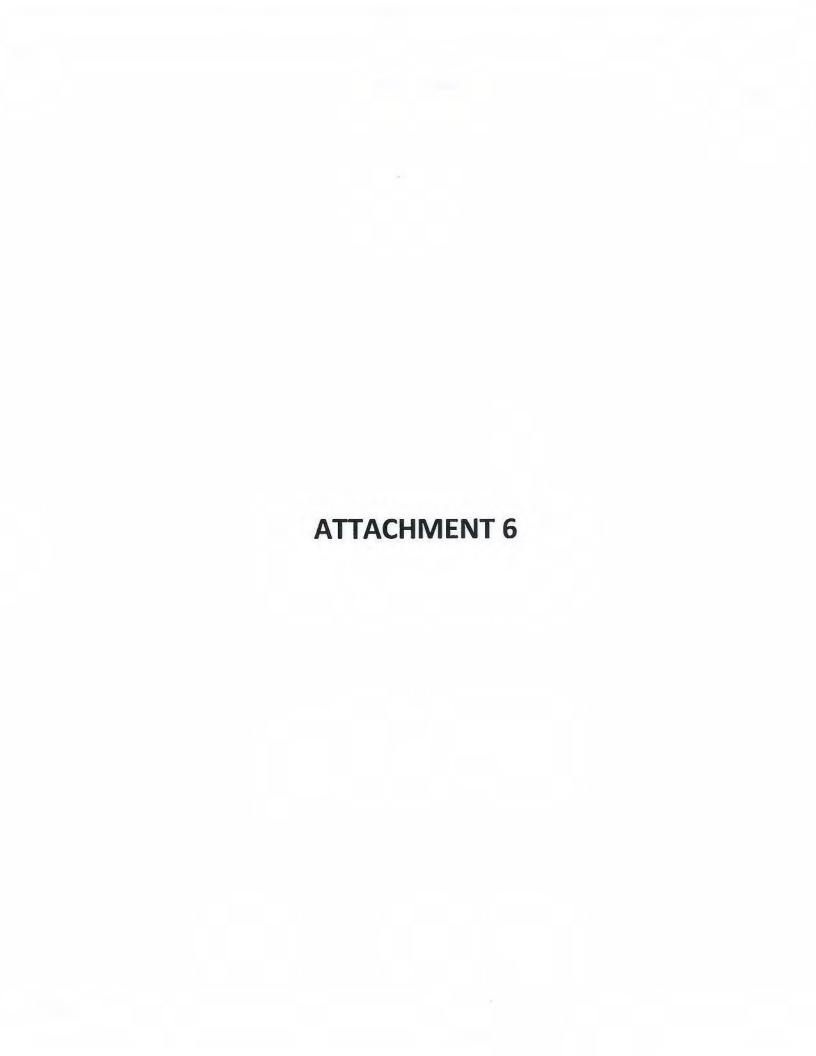


Figure 2: 30 TAC §106.262(a)(2)

TABLE 262 LIMIT VALUES (L) FOR USE WITH EXEMPTIONS FROM PERMITTING §106.262

The values are not to be interpreted as acceptable health effects values relative to the issuance of any permits under Chapter 116 of this title (relating to Control of Air Pollution by Permits for New Construction or Modification).

Compound	Limit (L) Milligrams Per Cubic Meter		
Acetone	590.		
Acetaldehyde	9.		
Acetone Cyanohydrin	4.		
Acetonitrile	34.		
Acetylene	2662.		
N-Amyl Acetate	2.7		
Sec-Amyl Acetate	1.1		
Benzene	3.		
Beryllium and Compounds	0.0005		
Boron Trifluoride, as HF	0.5		
Butyl Alcohol, -	76.		
Butyl Acrylate	19.		
Butyl Chromate	0.01		
Butyl Glycidyl Ether	30.		
Butyl Mercaptan	0.3		
Butyraldehyde	1.4		
Butyric Acid	1.8		
Butyronitrile	22.		
Carbon Tetrachloride	12.		
Chloroform	10.		

Chlorophenol	0.2
Chloroprene	3.6
Chromic Acid	0.01
Chromium Metal, Chromium II and III Compounds	0.1
Chromium VI Compounds	0.01
Coal Tar Pitch Volatiles	0.1
Creosote	0.1
Cresol	0.5
Cumene	50.
Dicyclopentadiene	3.1
Diethylaminoethanol	5.5
Diisobutyl Ketone	63.9
Dimethyl Aniline	6.4
Dioxane	3.6
Dipropylamine	8.4
Ethyl Acrylate	0.5
Ethylene Dibromide	0.38
Ethylene Glycol	26.
Ethylene Glycol Dinitrate	0.1
Ethylidene-2-norbornene, 5-	7.
Ethyl Mercaptan	0.08
Ethyl Sulfide	1.6
Glycolonitrile	5,
Halothane	16
Heptane	350.
Hexanediamine, 1,6-	0.32
Hydrogen Chloride	1.

Hydrogen Fluoride	0.5
Hydrogen Sulfide	1.1
Isoamyl Acetate	133.
Isoamyl Alcohol	15.
Isobutyronitrile	22.
Kepone	0.001
Kerosene	100.
Malononitrile	8.
Mesityl Oxide	40.
Methyl Acrylate	5.8
Methyl Amyl Ketone	9.4
Methyl-t-butyl ether	45.
Methyl Butyl Ketone	4.
Methyl Disulfide	2.2
Methylenebis (2-chloroaniline) (MOCA)	0.003
Methylene Chloride	26.
Methyl Isoamyl Ketone	5.6
Methyl Mercaptan	0.2
Methyl Methacrylate	34.
Methyl Propyl Ketone	530.
Methyl Sulfide	0.3
Mineral Spirits	350.
Naphtha	350.
Nickel, Inorganic Compounds	0.015
Nitroglycerine	0.1
Nitropropane	5.
Octane	350.

Parathion	0.05
Pentane	350.
Perchloroethylene	33.5
Petroleum Ether	350
Phenyl Mercaptan	0.4
Propionitrile	14.
Propyl Acetate	62.6
Propylene Oxide	20.
Propyl Mercaptan	0.23
Silica-amorphous- precipitated, silica gel	4.
Silicon Carbide	4.
Stoddard Solvent	350.
Styrene	21.
Succinonitrile	20.
Tolidine	0.02
Trichloroethylene	135.
Trimethylamine	0.1
Valeric Acid	0.34
Vinyl Acetate	15.
Vinyl Chloride	2.

NOTE: The time weighted average (TWA) Threshold Limit Value (TLV) published by the American Conference of Governmental Industrial Hygienists (ACGIH), in its TLVs and BEIs guide (1997 Edition) shall be used for compounds not included in the table. The Short Term Exposure Level (STEL) or Ceiling Limit (annotated with a "C") published by the ACGIH shall be used for compounds that do not have a published TWA TLV. This section cannot be used if the compound is not listed in the table or does not have a published TWA TLV, STEL, or Ceiling Limit in the ACGIH TLVs and BEIs guide.



		72	
	400		
*			

TECHNICAL REVIEW: AIR PERMIT BY RULE

Permit No.:	72378	Company Name:	Luminant Generation Company, LLC	APD Reviewer:	Ms. Dana Johnson
Project No.:	149754	Unit Name:	Sandow 5 Coal Limestone And Ash Handling Systems	PBR No(s).:	106.144, 106.261, 106.262

GENERAL INFORMATION			
Regulated Entity No.:	RN105369805	Project Type:	Permit by Rule Application
Customer Reference No.:	CN603256413	Date Received by TCEQ:	August 5, 2009
Account No.:	MM-A003-C	Date Received by Reviewer:	August 10, 2009
City/County:	Rockdale, Milam County	Physical Location:	3708 Charles Martin Hall Rd

CONTACT INFORMATION					
Responsible Official/ Primary Contact Name and Title:	Ms. Kim Mireles Director Of Environmental Generation	Phone No.: Fax No.:	(214) 875-8382 (214) 875-8333	Email:	kimberly.mireles@luminant.com
Technical Contact/ Consultant Name and Title:	Mr. Paul Barnes Senior Environmental Specialist	Phone No.: Fax No.:	(214) 875-8374 (214) 875-8333	Email:	paul_barnes@luminant.com

GENERAL RULES CHECK	YES	NO	COMMENTS
Is confidential information included in the application?		X	
Are there affected NSR or Title V permits for the project?	Х		St. Exemption 36880, PBR 85102, St. Permit 83346, NSR 48437, and Title-V O3025.
Is each PBR > 25/250 tpy?		Х	
Are PBR sitewide emissions > 25/250 tpy?	N/A		NSR Permit 48437 went to public notice 6/2003.
Are there permit limits on using PBRs at the site?		X	
Is PSD or Nonattainment netting required?	10.74	X	
Do NSPS, NESHAP, or MACT standards apply to this registration?	X		NSPS Y and OOO
Does NOx Cap and Trade apply to this registration?		Х	This site is not located in the Houston/Galveston nonattainment area.
Is the facility in compliance with all other applicable rules and regulations?	Х		

DESCRIBE OVERALL PROCESS AT THE SITE

Luminant Generation Company, L.L.C. owns and operates the Sandow 5 Generating Plant near Rockdale. The Sandow 5 facilities will include two circulating fluidized bed electric utility boilers and an aqueous ammonia storage tank, which are authorized by NSR Permit Number 48437. This project will be rolled in or referenced into Permit 48437 at the time of the next amendment or renewal.

DESCRIBE PROJECT AND INVOLVED PROCESS

The company submitted a Form PI-7 to for authorization to make the following revisions at the above referenced site (authorized 4/20/2009).

- Replacing of all representations related to the Sandow 5 salt handling system as the process utilizes two (2) brine tanks instead of one (1) salt delivered
 is transferred pneumatically from the delivery truck to either the 5A Brine Tank (EPN SA5ANACL) or to the 5B Brine Tank (EPN SA5BNACL). Exhaust air
 and salt dust exit each brine tank vent through a sock or bag filter. The brine solution is used in the CFB boilers fluidized bed flue gas desulfurization vessels to
 improve reaction efficiency.
- Changing the Coal Sampling System Collection Building emission point number and emission point description the dust emissions which are emitted as
 fugitives and have changed from EPN SA5CSSCBV to EPN SA5CCSCBF and changes the source description to "Unit 5 Coal Sampling System Collection
 Building Fugitives." (Emissions are authorized in the table below under "Coal Handling Systems")
- Revising the process flow diagram for lignite (coal) and limestone handling systems the transfer from conveyors 3 and 11 into the Central Receiving
 Hopper has been revised to clarify that both conveyors transfer coal into the hopper through a common chute. Also, at the transfer from conveyors 5A and 5B
 to conveyors 6A and 6B, there are two (2) sets of dust suppression sprays instead of four (4). Finally, dust collectors 5A and 5B collect dust from the discharge
 points on conveyors 6A and 6B; respectively. The company represents no change in emission rates.

TECHNICAL SUMMARY - DESCRIBE HOW THE PROJECT MEETS THE RULES

PBR 106.144 - Bulk Mineral Handling [as currently authorized]

- 1. All material will be transported in a closed conveying system with automatic cleaning fabric filters that have a maximum filtering velocity of 7.0 ft/min.
- 2. All permanent in-plant roads will be watered, treated with dust-suppressant chemicals, oiled, or paved and cleaned as needed to control dust emissions.
- 3. The facility is located at least 3,000 ft from the nearest off-site receptor.
- 4. The company did register with a Form PI-7.

PBR 106.261 - Facilities (Emissions Limitations) [as currently authorized]

- 1. The facilities or changes will be located more than 8,500 ft from the nearest off-site receptor.
- 2. Total new or increased emissions of PM from the limestone handling, is less than 6.0 lb/hr, as represented in the table below.
- 3. Not applicable, the company is not seeking registration of any of the chemicals listed in this section.
- 4. There will not be any changes to or additions of any existing abatement equipment.
- 5. Visible emissions will not exceed the opacity limit.
- 6. Form PI-7 and supporting documentation has been submitted.

PBR 106.262 - Facilities (Emissions and Distance Limitations)

TECHNICAL REVIEW: AIR PERMIT BY RULE

Permit No.:	72378	Company Name:	Luminant Generation Company, LLC	APD Reviewer:	Ms. Dana Johnson
Project No.:	149754	Unit Name:	Sandow 5 Coal Limestone And Ash Handling Systems	PBR No(s).:	106.144, 106.261, 106.262

- 1. The facilities or changes will be located more than 8,500 ft from the nearest off-site receptor.
- 2. Total new or increased emissions of PM from the coal, ash, and salt (sodium chloride) handling will be less than the calculated E=L/K values and less than 5.0 tpy, as represented in the table below.
- 3. Form PI-7 and supporting documentation has been submitted.
- 4. Not applicable, the company is not seeking registration of any of the chemicals listed in this section.
- 5. There will not be any changes to or additions of any existing abatement equipment.
- 6. Visible emissions will not exceed the opacity limit.

PBR Emission Limits													
Chemical PBR (Claimed	L	, mg/m	13		on Limit K), Ib/hr	Emis	ssion Limit tpy	Act	ual Emiss lb/hr	ions	Actual Em tpy	
Dust (Coal) 106	.262		2		0.	25		5.0	1	0.21		0.58	Ġ.
Dust (Ash) 106	.262		10		1.	25		5.0		0.11		0.09	e e
Sodium chloride (PM ₁₀) 106	.262		10		1.	25		5.0		1.10		0.03	
Limestone 106.	261(2)		**		6	.0		10.0		1.46		1.02	
					T	TAL ANN	UAL E	MISSION	S:			1.72	
ESTIMATED EMISSIONS				PAR.	140311								
EPN / Emission Source	PBR	VO	C	NO	NOx)	PM ₁₀		PM		Other	
		lbs/hr	tpy	lbs/hr	tpy	lbs/hr	tpy	lbs/hr	tpy	lbs/hr	tpy	lbs/hr	tpy
			Curre	ently Auth	norized l	Emission Ra	ates						
Coal Handling Emissions	106.262							0.21	0.58	1.10	3.02		
Limestone Handling System	106.261							1.46	1.02	3.94	2.74		
Ash Silos	106.144							0.21	0.93	0.61	2.65		
Ash Handling	106.262							0.11	0.09	0.31	0.26		
Salt Handling (UPDATED EMISSIONS BELOW)	106.262							0.72	0.07	0.72	0.07		
			Pro	posed Up	dated Er	nission Rat	es						
Salt Handling	106.262							1.10	0.03	3.14	0.08	1	
TOTAL INCREASE/DECREASE O EMISSIONS (TPY									-0.04		+0.01		
TOTAL EMISSIO	NS (TPY):								2.65		8.75		
MAXIMUM OPERATING SC	HEDULE	Hom	rs/Day		D	avs/Week		We	eks/Year		11	ours/Year	8,76

MAXIMUM OPERATING SO	CHEDUL	E: Ho	ours/Day	Days/Week	W	eeks/Year	Hours/Year 8,76
SITE REVIEW / DISTANCE LIMIT	Yes	No	ī	Description/Outcome		Date	Reviewed by
Site Review Required?	Х		No concerns. Pri investigation).	oceed with the registr	ration (original	April 2, 2009	Ms. Christian French
PBR Distance Limits Met?	X			distance to the nearest is represented at more		August 24, 2009	Ms. Dana Johnson
COMPLIANCE HISTORY				C. T. S.		A SECTION AND ADDRESS OF THE PARTY OF THE PA	
In accordance with 30 TAC Chapter 60, a	compliar	nce histor	y report was revie	wed on: August 24, 2	2009	was me CAsam	
The compliance period was from	08/05/	2004	to	08/05/20099			
Site rating & classification? 3.01 Aver-	age by De	fault	Com	pany rating & classif	ication? 3.01 A	verage by Default	
If site was Poor, what action(s) occurred	as a result	? (i.e. ch	anges to permit, re	duced renewal period	l, etc.) N/A		
If the rating is 40 <rating<45, td="" wa<="" what=""><td>s the outc</td><td>ome, if a</td><td>ny, based on the fi</td><td>indings in the formal</td><td>report? N/A</td><td></td><td>-</td></rating<45,>	s the outc	ome, if a	ny, based on the fi	indings in the formal	report? N/A		-
Is the permit recommended to be denied	on the bas	is of com	pliance history or	rating? No			
Has the permit changed on the basis of th	e complia	nce histo	ry or rating? No	j .			
	TE	CHNIC	AL REVIEWER	PEE	RREVIEWER	FI	NAL REVIEWER
SIGNATURE:		Dona	John John	1 Page	ild		
PRINTED NAME:	Ms. Dar	na Johnso	on	Ms. Molly Bra	addock	Ms. Anne I	nman, P.E., Manager

TECHNICAL REVIEW: AIR PERMIT BY RULE

Permit No.:	72378	Company Name:	Luminant Generation Company, LLC	APD Reviewer:	Ms. Dana Johnson
Project No.:	149754	Unit Name:	Sandow 5 Coal Limestone And Ash Handling Systems	PBR No(s).:	106.144, 106.261, 106.262

DATE:	August 24, 2009	August 24, 2009	August 24, 2009	
		BASIS	S OF PROJECT POINTS	POINTS
		Base I	Points;	1.5
		compl	t Complexity Description and Points: iance history eted in less than 21 days	0.25 0.50
		Techn	ical Reviewer Project Points Assessment:	2.25
		Final I	Reviewer Project Points Confirmation:	



ATTACHMENT 8

Construction Amendment REVIEW ANALYSIS & TECHNICAL REVIEW

Permit No: 48437 Company: Alcoa Inc Project Type: CAMD Facility Name: Circulating Fluidized Bed Boilers (Rockdale 1 & 2) Record No: 93321 City: Rockdale Account No: MM-0001-T County: Milam Permit Specialist: Mr. Randy Hamilton Authorization Checklist: If yes, please provide name and title of official: Have any changes to the application or subsequent proposals been required to increase protection of public health Project Overview Alcoa proposes to replace three existing lignite-fired boilers with two new ones with slightly larger total capacity at their Rockdale smelter. The project will result in large reductions of air pollutants as a result of application of BACT-level emission controls. In addition, the lignite driers which have occasionally been a source of nuisance odors, will be shut down. Compliance History Was the application received after September 1, 2002?...... Yes If yes, what was the site rating? 0.13 "Average" Company rating? 1.98 "Average" Is the permit recommended to be denied or has the permit changed on the basis **Public Notice Information** \$39,403 Public notification required? Yes If no, give reason: Not required by rule. Required by separate enforcement agreement. A. Date application received: 11/01/02 Date Administrative Complete: 11/20/02 D. Pollutants: PM, VOC, NOx, SOx, and CO E. Date Published: in Date Affidavits/Copies received: F. Bilingual notice required? Language: Date Published: in Date Affidavits/Copies received: G. Certification of Sign Posting / Application availability..... §39.604 H. Public Comments Received? Meeting requested? Meeting held? Hearing requested? Hearing held? Was/were the request(s) withdrawn? Date:

Page 2 Replies to Comments sent to OCC: Consideration of Comments: §39,419 If no, give reason: Public notice not required by rule. Enforcement agreement requires single PN. Preliminary determination Issue §39.420G. Consideration of Comments: RTC, Technical Review & Draft Permit Conditions sent to OCC: Request for Reconsideration Received? H. Final action: Issue Letters enclosed?..... **Emission Controls** §116.111(a)(2)(G) Is the facility expected to perform as represented in the application?......Yes §116.140 Sampling and Testing §116.111(a)(2)(A)(i) Are the emissions expected to comply with all TNRCC air quality rules and regulations, Will emissions be measured? Yes §116.111(a)(2)(B) Method: Stack testing for trace elements. Continuous emissions monitoring systems (CEMS) for opacity, SO₂, NO_x, and CO. Periodic testing or CEMS for ammonia. Federal Program Applicability §116.111(a)(2)(D) Subparts A and Da §116.111(a)(2)(E) Compliance with applicable NESHAP expected?.....NA Subparts and §116.111(a)(2)(F) Compliance with applicable MACT expected?......Yes Utility Boiler MACT expected to be proposed by EPA 12/03, adopted 12/04. Is nonattainment review required?......No §116.111(a)(2)(H) B. Is the site a federal major source for a nonattainment pollutant?......No C. Is the project a federal major source for a nonattainment pollutant by itself?No D. Is the project a federal major modification for a nonattainment pollutant?......No 1. Did the project emission increases for nonattainment pollutant minus the two-year 116.111(2)(I) Is PSD applicable? No A. Is the site a federal major source (100/250 tons/yr)?..... Yes 1. Did project emission increases, without decreases, for pollutant of concern, minus the two-year average actual emissions, trigger netting? 2. Was contemporaneous increase significant? 3. Change excluded by 40 CFR 52.21(b)(2)(iii)?

Permit No. 48437

Account No. MM-0001-T

Permit No. 48437 Page 3	Acc	ount No. MM-0001-T
§116.111(a)(2)(L)	Is Mass Cap and Trade applicable?	
Title V Applicabil		A Parinter and
§122.10(14)(A)	Is the site a major source under FCAA Section 112(b)?	Yes
0.==:-()(-)	(i). The site emits 10 tons or more of any single HAP?	
	(ii). The site emits 25 tons or more of a combination	
§122.10(14)(C)	Does the site emit 100 tons or more of any air pollutant?	
§122.10(14)(D)	Is the site a non-attainment major source?	

Request for Comments

Region: 9 Reviewed Jack Chaneyworth, 12/3/02

by: no concerns with site for project

City/County: NA

TARA: Reviewed Manuel Reyna, 4/9/03 by: Support issuance.

Process Description

Alcoa proposes to replace the three 1954-vintage, lignite-fired electric power boilers (125 MW net, each) at their Rockdale smelter with two new, lignite-fired, atmospheric circulating fluid bed (CFB) boilers (216.5 MW net, each). Net electric generation capacity would increase from 375 to 433 MW.

The new boilers will be designed to produce 1.6 million pounds of steam per hour at 2,400 psig at 1000°F with reheat at 1000°F. The new steam electric generation cycle will be more efficient than the current one, which operates at 1,500 psig at 1000°F with 1000°F reheat. New generators and condensers will be installed. The fuel supply and ash handling systems will use components of the existing systems and will be handled under separate permit authorizations.

The current boilers' generators serve only the smelter operations and would be considered industrial units under the federal New Source Performance Standards (NSPS); the proposed new boilers' generators are to be constructed for the purpose of supplying more than 1/3 of their potential electric output to the electric grid for sale, making the boilers electric utility steam generating units subject to NSPS Subpart Da and the EPA acid rain rules of Title 40 Code of Federal Regulations Parts 72-73 and 75-78.

Sources, Controls, and Best Available Control Technology [§116.111(a)(2)(C)]

The permit covers the boiler stack and the ammonia injection system emissions only. Alcoa will obtain authorization for the modified or new limestone and ash handling systems and the limestone handling system under separate permit actions.

The emission controls to be used by Alcoa include:

Sulfur dioxide (SO₂): The CFBs will use a limestone bed, which calcines to lime, which reacts with SO₂ to form solids (primarily calcium sulfate), which are collected in the baghouse. Emissions will not exceed 0.20 lb SO₂/MMBtu, averaged over 30 consecutive operating days, representing 94.6% average sulfur removal over the lifetime of the intended fuel source, the Twin Oak lignite mine.

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NO_x: Combustion controls and selective non-catalytic reduction (SNCR). Emissions will not exceed 0.10 lb NO_x/MMBtu, averaged over 30 consecutive operating days.

PM: Baghouse to meet 0.015 lb PM/MMBtu, front-half catch. All PM emissions are expected to be PM₁₀.

Acid gases [Hydrogen fluoride (HF), hydrogen chloride (HCl), and sulfuric acid (H₂SO₄]: The removal efficiency for fluorides and chlorides in the exhaust stream is estimated at 99.5%, with 0.5% emitted as HF and HCl. The sulfuric acid emission factor used is 0.0021 lb/MMBtu.

Volatile organic compounds (VOC) and carbon monoxide (CO): good combustion practice.

Selection of BACT:

SO₂ - Limestone bed scrubbing has been accepted as the only required SO₂ control technology in most CFB permits identified in this permit review. Flue gas scrubbers downstream of the CFB boiler have been used in combination with limestone bed scrubbing in two large projects which started commercial operation in 2002, JEA's Northside repowering project in North Jacksonville, Florida, and AES' Guayama plant in Puerto Rico. However, CFB permits issued in the same time frame and more recently than the permits for these two facilities have not required this additional level of SO₂ control.

The cost of scrubbers is significant in relation to the total capital cost of a large CFB project. Using the EPA's CUE Cost model, Alcoa estimated the cost for a limestone spray dryer (LSD) system at \$52 million, which would add 22% to their estimated project cost of \$228 million. The boiler project is geared toward maintaining the economic viability of the aluminum smelter, which competes in a world aluminum market. In contrast, the municipally-owned JEA Northside and the AES Puerto Rico plants sell electricity as their product, which can only be sold by production sources in a geographically-limited, local area. The limited competition in these electric supply systems makes it easier to pass along control costs, compared to the aluminum industry.

Both the total and incremental cost of LSD control in dollars per annual ton SO₂ reduced (\$/ton) are higher for Rockdale compared to JEA and AES, because the sulfur content of the Texas lignite is lower than the bituminous coal and petroleum coke of AES and JEA. The lower sulfur content means fewer tons of SO₂ reduced and the lower tons of SO₂ reduced in the denominator means a larger \$/ton cost. Alcoa estimated the incremental control cost of LSD, assuming an additional 50% reduction, at \$10,000/ton of SO₂ reduced. More recent revisions to permit a higher annual firing level and higher removal efficiencies as achieved at AES Puerto Rico would increase the removal and lower these costs, but the incremental cost would still be relatively high.

The project is a replacement project, rather than a grassroots new production facility. This is another factor in the recommendation not to require tail gas scrubbing.

Another reason to not require wet scrubbers is that there is limited space available for adding the new facilities. The smaller footprint of the CFB without tail end scrubbers will minimize the disruption to operation of the existing facilities while the new facilities are being constructed. Maintaining a continuous source of low cost electric power is important to the continued operation of the smelter operations.

In summary, because a major purpose of the electric generation facilities is to provide power for the aluminum production facilities which must compete in a worldwide aluminum market, and because the proposed facilities

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are replacement units which will reduce SO₂ emissions more than 90%, our recommendation is that the LSD scrubbers not be required.

NO_x - selective catalytic reduction (SCR) is not a demonstrated technology for the high-alkali dust environment of a circulating lime-limestone bed and it is not economically reasonable to employ such a system after the baghouse because of the large amount of reheat energy that would be required for SCR operation.

The combination of combustion controls and SNCR has been accepted as BACT in a number of the more recent CFB permits identified in this permit review. Combustion controls include air staging and minimizing excess oxygen. SNCR uses ammonia or urea to chemically reduce NO_x in the upper portion of the furnace.

There is some uncertainty as to the lowest emission level that can be met with the NO_x controls using the local lignite. Other CFBs have been permitted at 0.07 lb NO_x/MMBtu, but none have been permitted this low when firing Texas lignite. ADM Units 4 and 5 are operating at 0.07 lb NO_x/MMBtu with midwestern bituminous coal, which has fixed carbon/volatile matter properties similar to the proposed Texas lignite. This application gives an indication that a level below 0.10 lb NO_x/MMBtu may be technically feasible. In order to assure that BACT is applied, SNCR usage will be maximized following an evaluation period.

PM - baghouse meets 0.015 lb PM/MMBtu, which is equivalent to 0.01 gr/dscf, front half catch. An emission level of 0.01 gr/dscf is considered BACT for most PM sources controlled by baghouse.

Acid gas controls - The selection of the limestone bed CFB boiler controlled with a baghouse results in excellent capture of acid gases. The combined HCl + H₂SO₄ (primary components of condensible emissions) emission factor is 0.0023 lb/MMBtu, which is about 1/10th the lowest generalized AP-42 factor for condensibles from coal-fired combustion. The HF emissions are very low because of the low combustion temperatures, which favor mineral forms of fluoride rather than formation of HF, and the extended gas contact with the lime/limestone bed material, which promotes particulate rather than gaseous fluorides.

Trace metal controls - The CFB and baghouse system is estimated to remove more than 90% of the mercury contained in the coal. The removal efficiency of volatile metal such as mercury is enhanced by the low temperature and extended gas-solids contact conditions in the system. All other trace metal removal efficiencies are calculated at 99.5%. The baghouse design to achieve emissions of 0.01 grain particulate matter per dry standard cubic foot represents BACT for trace metal emissions.

EPA expects to propose Maximum Achievable Control Technology (MACT) rules for hazardous air pollutants from coal-fired electric utility boilers in December, 2003 and adopt them by December, 2004. Although it is fairly certain that these rules will focus on mercury emissions, it is unknown what the specific requirements will be and therefore what impact they may have on the proposed CFB boilers. Some of the more restrictive legislative proposals would require 90% reduction in electric utility mercury emissions from baseline levels. Control technology for mercury is currently under development. Elemental mercury is a volatile, difficult-to-control and difficult-to-measure metal at the low concentrations found in the exhaust stream, and there are many configurations of coal-fired utility boilers, so the identification of optimum technologies is not a simple task. However, the combination of sorbent bed (e.g. limestone) CFB with baghouse has been identified by EPA and other regulatory organizations as a promising mercury control measure. Nonetheless, Alcoa is leaving space upstream of the baghouses as a contingency for the future addition of a recirculating ash loop or other mercury capture enhancement should it become necessary.

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VOC and CO - the CFB results in low emissions of partial combustion byproducts CO and VOC because of the long contact time of combustibles with hot bed solids. BACT is applied in the boiler design and operation which strives to minimize unburned combustible gases for emission and efficiency reasons. The proposed emission factors are 0.10 lb CO/MMBtu and 0.0051 lb VOC/MMBtu, which Alcoa identified as being within the range of other CFB permits reviewed.

Impa	acts Evaluation
1.	Was modeling done? Yes Type? Screen - ratioing
2.	Will GLC of any air contaminant cause violation of NAAQS?
3.	Is this a sensitive location with respect to nuisance?
4.	Is the site within 3000 feet of any school?No
5.	Toxics Evaluation: All contaminants and impacts decrease, except short-term ammonia and nitrous oxide impacts are acceptable.
Misc	ellaneous
1.	Is applicant in agreement with special conditions?
	Company representative?
2.	Did the franchise tax verify the applicant to be in good standing?
3.	Emission reductions from source reduction or pollution prevention
4.	Emissions reductions resulting from the application of BACT required by state rules, avoidance of potential impacts problems, and voluntary reductionsReductions follow settlement excep
	NOx minimization evaluation is
	required.
5.	Other permit(s) affected by this action?
Perm	nit Specialist / Engineer Date Team Leader/Section Manager/BackupDate

ATTACHMENT 9



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

JAN 25 1995

OFFICE OF ENFORCEMENT AND COMPLIANCE ASSURANCE

SUBJECT: Guidance an Enforceability Requirements for

Limiting Potential to Emit through SIP and \$112 Rules

and General Permits

FROM: Kathie A. Stein, Director

Air Enforcement. Division

TO: Director, Air and, Pesticides and Toxics

Management Division, Regions I and IV Director, Air and Waste Management Division,

Region II

Director, Air, Radiation and Toxics Division,

Region III

Director, Air and Radiation Division,

Region V

Director, Air, Pesticides and Toxics Division,

Region VI

Director, Air and Toxics Division,

Regions VII, VIII, IX, and X

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

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

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

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

Air Branch Chiefs, Regions I -X

Enforceability Requirements for Limiting potential to Emit Through SIP and \$112 Rules and General Permits

Introduction

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

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

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

General permits -A concept similar to the exclusionary rule is the establishment Of a general permit for a given source type. A general permit is a single permit that establishes terms and conditions that must be complied with by all sources subject to that permit. The establishment of a general permit could provide for emission limitations in a one-time permitting process, and thus avoid the need to issue separate permits for each source. Although this concept is generally thought of as an element of Title V permit programs there in no reason that a state or local agency could not submit a general permit program as a SIP submittal Aimed at creating synthetic minor sources. Additionally FESOP [Federally Enforceable State Operating Permit usually reffering to Title I State OperatingPermit Programs approved under- the criteria established by EPA in the June 28, 1989 Federal Register notice, 54 FR 27274] programs can include general permits as an element of the FESOP program being approved into the SIP. The advantage of a SIP general permit, when compared to an exclusionary rule, is that upon approval by the EPA of the state's general permit program, a general permit could be written for an additional source type without triggering the need for the formal SIP revision process. (January 25, 1995 Seitz and Van Heuvelen memorandum, page 4.)

SIP or \$112 Rules

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

General Permits

The title V regulations set out provisions for general permits covering numerous similar sources. The primary purpose of general permits is to provide a permitting alternative where

the normal permitting process would be overly burdensome, such as for area sources under section 112. General permits may be issued to cover any category of numerous similar sources, including major sources, provided that such sources meet certain criteria laid out in 40 CFR part 70. Sources may be issued general permits strictly for the purpose of avoiding classification as major source. in other words, general permits may be used to limit the potential to emit for numerous similar sources. However, general permits must also most both legal and practical federal enforceable requirements.

With respect to legal sufficiency, the operating permit regulations provide that once the general permit has been issued, after opportunity for public participation and, EPA and affected State review, the permitting authority may grant or deny a sources request to be covered by a general permit without further public participation or EPA or affected State review. The action of granting or denying the source's request is not subject to judicial review. A general permit does not carry a permit shield. A source may be subject to enforcement action for operating without a part 70 permit if the source is later determined not to qualify for coverage under the general permit. Sources covered by general permits must comply with all part 70 requirements.

State SIP or 112(1) General Permits

Another mechanism available to limit potential to emit is a general permit program approved into the SIP or under section 112(1), the hazardous air pollutant program authority. This mechanism allows permitting authorities to issue and revise general permits consistent with SIP or 112(1) program requirements without going through the SIP or 112(1) approval process for each general permit or revision of a general permit. The program is also separate from title V, like Title I state operating permits, and issuance and revisions of the permits are to comply with title V procedures.

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

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

Enforceability Principles

In 1989, in response to challenges from the Chemical Manufacturers Association and other industry groups, EPA reiterated its position that controls and limitations used to limit a source's Potential to emit must be federally enforceable. See 54 FR 27274 (June 28, 1989). Federally enforceable limits can be established by Clean Air Act programs such as NSPS, NESHAPs, MACTs, and SIP requirements. However, source-specific limits are generally set forth in permits. Generally, to be considered federally enforceable, the permitting program must be approved by EPA into the SIP and include provisions for public participation. "In addition, permit terms and conditions must be practicably enforceable to be considered federally enforceable. EPA provided specific guidance on federally enforceable permit conditions in a June 13, 1989 policy memo "Limiting Potential to Emit in New Source Permitting" from John Seitz and in the June 28, 1989 Federal Register notice (54 FR 27274) Additional guidance Can also be found in <u>United states v. Louisiana Pacific</u>, 682 F. Supp 1122 (D. Colo. 1987) 682 F. Supp 1141 (D. Colo.1988), which led to these guidance statements and a number of other memoranda covering practicable enforceability as it relates to rolling averages, short-term averages, and emission caps. See "Use of Long Term Rolling Averages to Limit Potential to Emit," form John. B. Rasnic to David Kee, February 24, 1992; "Limiting Potential to Emit; " from Mamie Miller to George Czerniak, August, 1992; "Policy Determination an Limiting Potential to Emit for Koch Refining Company's Clean Fuels Project", from John B. Rasnic to David Kee, March 13, 1992; and "3M Tape Manufacturing Division Plant, St. Paul, Minnesota" from. John B. Rasnic to David Kee, July 14, 1992.

In 1987, EPA laid out enforceability criteria that SIP rules must meet. see "Review of State Implementation Plans and Revisions for Enforceability and Legal Sufficiency," from Michael Alushin, Alan Eckert, and John Seitz, September 3, 1987 (1997 SIP memo). The criteria include clear statements as to applicability, specificity as to the standard that must be met, explicit statements of the compliance time frames (e.g. hourly, daily, monthly, or 12-month averages, etc.), that the time frame and method of compliance employed must be sufficient to protect the standard involved, record keeping requirements must be specified, and equivalency provisions must meet certain requirements.

Based an these precedents this guidance describes six enforceability criteria which a rule or a general permit must meet to make limits enforceable as a practical matter. In general, practical enforceability for a source-specific permit term means that the provision must specify (1) a technically accurate limitation and the portions of the source subject to the limitation; (2) the time period for the limitation (hourly, daily, monthly, annually); and (3) the method to determine compliance including appropriate monitoring, record keeping and reporting. For rules and general permits that apply to categories of sources, practical enforceability additionally requires that the provision (4) identify the categories of sources that are covered by the rule; (5) where coverage is optional, provide for notice to the permitting authority of the source's election to be covered by the rule; and (6) recognize the enforcement consequences relevant to the rule.

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

A. Specific Applicability

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

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

General permits under Title V are assumed to include this

enforceability principle because the Part 70 regulations set out specific criteria that states should consider in developing their general permit provisions (See 57 FR 32278). These factors include requirements that

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

Another factor stated is "sources should be subject to the same or substantially similar requirements governing operation, emissions, monitoring, reporting, or record keeping." Examples of source categories appropriate for general permits include: degreasers, dry cleaners, small heating systems, sheet fed printers, and VOC storage tanks (see 57 FR 32278).

B. Reporting or Notice to Permitting Authority

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

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

C. Specific Technically Accurate Limits

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

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

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

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

D. Specific compliance Monitoring

The rule must specify the methods to determine compliance. Specifically, the rule must state the monitoring requirements, record keeping requirements, reporting requirements, and test methods as appropriate for each potential to emit limitation; and clarity which methods are used for making a direct determination of compliance with the potential to emit limitations.

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

E. Practicably Enforceable Averaging Times

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

F. Clearly Recognized Enforcement

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

G. Rule Requirements for State General Permit Programs

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

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

In addition, since the rule establishing the program does not provide the specific standards to be met by the source, each general permit, but not each application under each general permit, must be issued pursuant to public and EPA notice and comment. The 1989 Federal Register notice covering enforceability of operating permits requires that SIP operating permit programs issue permits pursuant to public and EPA notice and comment. Title V requires that permits, including general permits, be issued subject to EPA objection.

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

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



November 3, 1993

MEMORANDUM

SUBJECT: Approaches to Creating Federally-Enforceable

Emissions Limits

FROM: John S. Seitz, Director

Office of Air Quality Planning and Standards (MD-10)

TO: Director, Air, Pesticides and Toxics

Management Division, Regions I and IV

Director, Air and Waste Management Division,

Region II

Director, Air, Radiation and Toxics Division,

Region III

Director, Air and Radiation Division,

Region V

Director, Air, Pesticides and Toxics Division,

Region VI

Director, Air and Toxics Division,

Regions VII, VIII, IX, and X

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

The issue of creating federally-enforceable emissions limits has broad implications throughout air programs. Although many of the issues mentioned above have arisen in the context of the title V permits program, the same issues exist for other programs, including those under section 112 of the Act. As discussed below, traditional approaches to creating federally-enforceable emissions limits may be unnecessarily burdensome and time-consuming for certain types and sizes of sources. In addition, they have been of limited usefulness with respect to creating such limits for emissions of hazardous air pollutants (HAP's).

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

Background

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

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

State Operating Permits for Both Criteria Pollutants and HAP's

As indicated above, State operating permits issued by programs approved into the SIP pursuant to the process provided in the June 28, 1989 Federal Register are recognized as federally enforceable. This is a useful option, but has historically been viewed as limited in its ability to directly create emissions limits for HAP's because of the SIP focus on criteria pollutants.

Since that option was created, however, section 112 of the Act has been rewritten, creating significant new regulatory requirements and conferring additional responsibilities and authorities upon the Environmental Protection Agency (EPA) and the States. Section 112 now mandates a wide range of activities: source-specific preconstruction reviews, areawide approaches to controlling risk, provisions for permitting pursuant to the title V permitting program, and State program provisions in section 112(1) that are similar to aspects of the SIP program. A result of these changes is that implementation of toxics programs will entail the use of many of the same administrative mechanisms as have been in use for the criteria pollutant programs.

Upon further analysis of these new program mandates and corresponding authorities, EPA concludes that section 112 of the Act, including section 112(1), authorizes it to recognize these same State operating permits programs for the creation of federally-enforceable emissions limits in support of the implementation of section 112. Congress recognized, and longstanding State practice confirms, that operating permits are core-implementing mechanisms for air quality program requirements. This was EPA's basis for concluding that section 110 of the Act authorizes the recognition and approval into the SIP of operating permits pursuant to the June 28, 1989 promulgation, even though section 110 did not expressly provide for such a program. Similarly, broad provision of section 112(1) for "a program for the implementation and enforcement . . . of emission standards and other requirements for air pollutants subject to this section" provides a sound basis for EPA recognition of State operating permits for implementation and enforcement of section 112 requirements in the same manner as these permitting processes were recognized pursuant to section 110.

In implementing this authority to approve State operating permits programs pursuant to section 112, it should be noted that the specific criteria for what constitutes a federally-enforceable permit are also the same as for the existing SIP programs. The June 28, 1989 Federal Register essentially addressed in a generic sense the core criteria for creating federally-enforceable emissions limits in operating permits: appropriate procedural mechanisms, including public notice and opportunity for comment, statutory authority for EPA approval of the State program, and enforceability as a practical matter. The EPA did this in the context of SIP development, not because these criteria are specific to the SIP, but because section 110 of the Act was seen as our only certain statutory basis for this prior to the 1990 Amendments. Based on the discussion above, States can extend or develop State operating permits programs for toxics

pursuant to the criteria set forth in the June 28, 1989 <u>Federal</u> <u>Register</u>. The EPA is also evaluating analogous opportunities to enhance State NSR programs to address toxics and will address this in future guidance.

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

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

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

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

State air program officials have highlighted specific types of sources that are of particular administrative concern because

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

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

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

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

States have flexibility in their choice of administrative process for implementation. In some cases, it may be adequate for a State to apply these limits to individual sources through a

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

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

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

Implementation Guidance

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

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

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

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

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

cc: Air Branch Chief, Regions I-X Regional Counsel, Regions I-X OAQPS Division Directors

A. Eckert

M. Winer

A. Schwartz

E. Hoerath

ATTACHMENT 11

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April 14, 1998

MEMORANDUM

SUBJECT: Potential to Emit (PTE) Guidance for Specific Source Categories

FROM: John S. Seitz, Director /s/

Office of Air Quality Planning and Standards, OAR (MD-10)

Eric Schaeffer, Director /s/

Office of Regulatory Enforcement, OECA (2241A)

TO: See Addressees

This memorandum provides guidance for addressing the minor source status under the Clean Air Act (Act) for lower-emitting sources in eight source categories.

Background Information

Many Act requirements apply only to major sources with a potential to emit air pollutants at levels greater than a given amount. The Environmental Protection Agency (EPA), in its current regulations, defines a source's potential to emit air pollutants as follows:

"Potential to emit" is the maximum capacity of a stationary source to emit under its physical and operational design. Any physical or operational limitation on the source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation, or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation is enforceable by the (EPA) Administrator."

¹The EPA is currently reviewing the requirement in EPA's regulations that limitations must be federally enforceable in order for sources to take credit for those limits. Because this review is not yet complete, and is the subject of an upcoming rulemaking, the EPA has developed interim policies on this issue. The following policy memorandums describe EPA's interim policies: "Release of Interim Policy on Federal Enforceability of Limitations on Potential to Emit" (January 22, 1996) and "Extension of January 25, 1995 Potential to Emit Transition Policy" (August 27, 1996). The EPA describes the ways a State or local limit achieves "federally enforceable" status in a 1995 policy memorandum, "Options for Limiting the Potential to Emit (PTE) of a Stationary Source Under Section 112 and Title V of the Clean Air Act" (January 25, 1995).

Often, in describing the overall stationary source population regarding potential-to-emit issues, EPA groups sources into three general types:

- (1) Major sources those that actually emit major amounts of air pollutants, or have the potential to do so;
- (2) "True minor" (also called "natural minor") sources those that do not have the physical or operational capacity to emit major amounts (even if the source owner and regulatory agency disregard any enforceable limitations); and
- (3) "Synthetic minor" sources those that have the physical and operational capability to emit major amounts, but are not considered major sources because the owner or operator has accepted an enforceable limitation.

Many sources have the "capacity" to emit major amounts of air pollutants, but actually emit amounts that are much lower than the major source threshold. For such sources, States and local permitting agencies provide opportunities to obtain limits on their potential to emit through construction permit programs, operating permits, general permits applicable to multiple sources, State implementation plans (SIP), and other mechanisms.

There are two overall approaches that States and local agencies can use to establish enforceable emission limits which ensure that a source's potential emissions are below the major source threshold. Using the first approach, case-by-case permitting, agencies create terms and conditions tailored to a given plant site. This approach is essential for complex sources warranting close scrutiny, such as sources that comprise many different sources and source types, and sources that limit their emissions to near-major amounts. Under the second approach, generally appropriate for less complex sources, States and local agencies create a standard set of terms and conditions for many similar sources at the same time. The terms air quality agencies use to describe this approach include "general permits," "prohibitory rules," "exclusionary rules," and "permits-by-rule." (From this point on, rather than to repeat each of these terms, this guidance will use the term "prohibitory rule" for the latter three terms.) For a general permit, the permitting agency establishes a standard set of terms and conditions, and then incorporates those terms and conditions into the general permit. Sources wishing to be subject to the general permit must provide a notification to the permitting agency, and must comply with the standard terms and conditions. From the source's perspective, the administrative procedure for receiving a general permit is typically much more streamlined than receiving a case-by-case permit. State "prohibitory rules" are similar to general permits, but States or local agencies put them in place with a regulation development process rather than a permitting process.

²The Act requirements for criteria pollutant programs refer to nonmajor sources as "minor sources," while the air toxics program in section 112 refers to nonmajor sources as "area sources." For purposes of this discussion, the term "minor" means all nonmajor sources.

What Is The Purpose Of This Guidance Memorandum?

The EPA issues this guidance to assist States and local agencies in efficiently creating potential-to-emit limits for small sources, and to assist States and source owners in identifying sources that are minor sources without additional limits. Where States and local agencies need and use this guidance, small business owners will achieve greater certainty that EPA, States and local control agencies, and the public do not consider them major sources under the Act.

Trade groups for a number of industries, typically those representing small business owners, have informed the EPA that these owners have significant uncertainties and confusion over their major or minor source status. These groups have also indicated to EPA that they would prefer that EPA give explicit guidance showing with certainty how a source can be considered a natural minor or synthetic minor, rather than for source owners to be left with continuing uncertainty.

Today's guidance addresses eight specific industry categories. The guidance provides technical information useful in devising potential-to-emit limits for small sources in the included industries. A State may find this information particularly useful for creating generic potential-to-emit limits in prohibitory rules and general permits for numerous similar, small sources in an industry.

The EPA has developed this guidance as a pooled technical effort with the State and Territorial Air Pollution Program Administrators (STAPPA) and the Association of Local Air Pollution Control Officials (ALAPCO). The EPA hopes that this information-sharing exercise will help to reduce uncertainty and help to foster technical consistency among permitting agencies.

While this guidance summarizes the results of a significant amount of technical work, and should provide information readily usable by permitting agencies, EPA also recognizes that many States and local agencies have already addressed issues related to many categories discussed in this memorandum. Additionally, States and local agencies may possess State-specific emissions information for given source types. It is not EPA's intent to imply that the screening cutoff levels described in this guidance are the only limitations that would be appropriate for a given type of sources in a given State or local area. The EPA does not intend that these calculations should result in the only values that EPA would find acceptable. Also, EPA does not intend to imply that calculations previously approved by the EPA in prohibitory rules or general permits must be revisited to conform to this guidance.

In providing guidance that should help provide easy ways for sources to clarify that they are minor sources, the EPA is not intending to imply that minor sources are not important air quality sources. Readers should not interpret this guidance as making any judgment about the wisdom of emission control measures targeted at minor source categories.

What Types Of Source Categories Are Included In This Guidance?

In identifying source categories to be covered within this guidance, the EPA included those categories for which a single type of activity tends to dominate emissions, and for which most sources in the category actually emit at levels well below their potential, and well under the major source thresholds. For sources with numerous categories at the plant site and/or that emit amounts that are just below the major source threshold, EPA believes that there is generally no feasible way to ensure their minor source status without a case-by-case permitting process. In addition, categories covered by this guidance tend to be those for which the parameters that affect emissions are relatively easy for EPA to describe and characterize. With some exceptions, this guidance does not cover categories involving control equipment.

Which Specific Source Categories Are Included?

Eight source categories are included:

- (1) gasoline service stations;
- (2) gasoline bulk plants (bulk plants are small bulk gasoline distribution facilities that distribute less than 20,000 gallons per day, and that receive gasoline by truck rather than by rail or barge);
- (3) boilers (specifically, the guidance addresses natural gas and oil combustion in industrial boilers having a capacity of 100 million BTU/hour or less);
 - (4) cotton gins;
 - (5) coating sources;
 - (6) printing, publishing and packaging operations;
 - (7) degreasers using volatile organic solvents;
 - (8) hot mix asphalt plants.

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What Guidance Does EPA Provide For Those Categories?

In the attached tables, EPA provides guidance in the form of operational cutoffs. The tables contain cutoffs that States and local agencies can use as limits in general permits and prohibitory rules.³

How Did EPA Calculate The Cutoffs?

The EPA's calculations are discussed in a separate document attached to this guidance memorandum entitled "Technical Support Document for Lower-Emitting Source Guidance Memorandum Documentation of Emission Calculations." For some categories, calculations were easy to make because the amount of pollutant used equates to the amount of pollutant emitted. For others, EPA needed to make more difficult technical judgments to make the calculations. In about half the cases, EPA relied on AP-42 emission factors as part of the technical basis for calculating the cutoffs. It is important to note that the AP-42 factor was not the entire basis for the calculation, and that the calculations leave a margin, generally about 50 percent to account for uncertainty in the emissions estimate.⁴

³For categories with annual limits, the cutoffs are listed as values not to be exceeded during any rolling 12-month period. The EPA is accepting, on an interim basis, the use of a 12-month period, rather than the shorter time periods recommended by EPA's June 1989 policy memorandum "Guidance on Limiting Potential to Emit in New Source Permitting," given that the guidelines provide for cutoffs at levels nominally 50 percent of the major source threshold. Please note that EPA will be revisiting issues in an upcoming rulemaking related to the averaging times of potential-to-emit limits, including those for prohibitory rules and general permits.

⁴The EPA reiterates its position that emission factors, such as those in EPA's AP-42 compilation, are based upon the average of the values from available testing, and are not generally recommended as the approach to characterizing emissions from any given source for purposes of applicability determinations. The EPA believes, however, for the purposes of this guidance, that in a number of cases emission factors provide the only available means from which a cutoff could be determined. Rather than eliminate any such source category from consideration under this memorandum, the EPA feels that a reasonable approach is to make use of the AP-42 emission factors, building in a margin of error to account for the uncertainty in the data. The EPA believes that this approach should ensure that there is a low probability that any potentially major-emitting source would escape review. For source categories addressed by the guidance, which tend to be dominated by low-emitting sources for which source-specific emission factor data are not likely to be generated, the EPA believes this to be a reasonable approach. However, to the extent that source-test data, or other information indicate that the emission factors, or other assumptions made in calculating the limits are not appropriate for a specific source within a category, the source and permitting authority should not apply to this guidance. The EPA has not changed its position that such emission factors are not an acceptable approach for large industrial facilities. Finally, the EPA recognizes that as the emission factors used as the basis for the guidance are updated, it will be necessary to review the calculations in light of the revised factors to determine whether the guidance should be amended.

Similarly, the EPA believes that for nearly all source categories, even those that are simple enough to be good candidates for this guidance, there will usually be emitting activities that will be co-located with the activity described in the cutoff. Generally, these sources are a very low percentage of the emissions from the entire facility. Some examples of co-located sources are cold cleaners at gas stations, consumer product usage such as cleaners and white-out, lawn mowers, and small portable generators. To account for any such sources, EPA calculated the cutoffs leaving a small margin for any such sources that may be present. (Note that EPA does not mean to imply that overall these types of co-located sources are not environmentally significant-just that they probably have little bearing on whether a source is major or minor.)

Will This Guidance Replace The EPA's January 25, 1995 Transition Policy? If So, When Does That Transition Policy Expire?

Many lower-emitting sources in categories addressed by today's guidance may be operating under EPA's transition policy, first announced in a policy memorandum of January 25, 1995. The purpose of this transition policy was to alleviate concerns that sources may face gaps in the ability to acquire federally enforceable PTE limits. For sources lacking federally-enforceable limitations with low actual emissions, the transition policy provided a 2-year period extending from January 1995 to January 1997 (for sources lacking federally-enforceable limitations). On August 27, 1996, the EPA extended the transition period until July 31, 1998. During this transition period, State and local air regulators have the option of treating lower-emitting sources as minor, if the source owner maintains adequate records to demonstrate that actual emissions are less than 50 percent of the major source threshold. Today's guidance, in addressing sources that are common and numerous, should cover most of the lower-emitting sources that States may address by creating general permits or prohibitory rules. The EPA believes, however, that States will need a reasonable amount of time to implement today's guidance.

The EPA will release a separate guidance memorandum in the future to address issues related to the expiration of the transition policy. The transition policy involves other issues, in addition to those for sources emitting less than 50 percent of the major source threshold, and the EPA prefers to address all of those issues at the same time.

<u>How Does This Guidance Relate To State And Local Minor Source Construction Permit Programs?</u>

This guidance is <u>NOT</u> intended to affect minor source new source review (NSR) programs. Those programs are necessary for attainment and maintenance of the national ambient air quality standards (NAAQS), and for generally managing and protecting air quality in a given location. These are considerations independent of whether a source is a "major" or "minor" source. In making any change to a minor NSR program, the State or local agency needs to address air quality impact considerations in addition to those discussed here. For example, an agency limit to ensure that a source is minor for sulfur dioxide (SO₂) may involve fuel sulfur

limits. Because those same fuel sulfur limits could possibly lead to short-term exceedances of the SO₂ standards, and the agency could not categorically exempt such a source from minor NSR without addressing those air quality impacts; it is important to note that the annual limits contained in the guidance, while ensuring that the source is not a "major source," may not ensure that the source meets all short-term NAAOS.

Does this Policy Create Any Rights or Obligations?

The policies set forth in this memorandum are intended solely as guidance, do not represent final Agency action, are not binding on any party, and cannot be relied upon to create any rights enforceable by any party.

How Is This Guidance Being Distributed?

The Regional Offices should send this memorandum to State and local agencies within their jurisdiction. This memorandum and the accompanying technical support document are accessible from the Internet. The Internet location is the "Office of Air and Radiation (OAR) Policy Guidance" portion of EPA's "technology transfer network (TTNWeb)," bulletin board, that is, http://www.epa.gov/ttn/oarpg.

If There Is Something I Do Not Understand, Who Will Answer My Questions?

Questions concerning specific issues and cases should be directed to the appropriate EPA Regional Office. If you are a source owner and have questions about this policy, you should direct questions concerning specific issues and source-specific cases to the appropriate State or local agency. The Regional Office staff with questions may contact Timothy Smith of the Integrated Implementation Group at (919) 541-4718, or Carol Holmes of the Office of Regulatory Enforcement at (202) 564-8709.

Attachments

cc: C. Holmes (2242A)

T. Kelly (2131)

J. Ketcham-Colwill (6103)

T. Smith (MD-12)

J. Walke (2344)

Addressees:

Director, Office of Ecosystem Protection, Region I

Director, Environmental Planning and Protection Division, Region II

Director, Air Protection Division, Region III

Director, Air, Pesticides, and Toxics Management Division, Region IV

Director, Air and Radiation Division, Region V

Director, Multimedia Planning and Permitting Division, Region VI

Director, Air, RCRA and Toxics Division, Region VII

Assistant Regional Administrator, Office of Pollution Prevention, State, and Tribal Assistance, Region VIII

Director, Air and Toxics Division, Region IX

Director, Office of Air Quality, Region X

Regional Counsels, Regions I-X

Director, Office of Environmental Stewardship, Region I

Director, Division of Enforcement and Compliance Assurance, Region II

Director, Enforcement Coordination Office, Region III

Director, Compliance Assurance and Enforcement Division, Region VI

Director, Enforcement Coordination Office, Region VII

Assistant Regional Administrator, Office of Enforcement, Compliance and Environmental Justice, Region VIII

Enforcement Coordinator, Office of Regional Enforcement Coordination, Region IX

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GUIDANCE FOR STATES AND LOCAL AGENCIES TO USE FOR GENERAL PERMITS AND PROHIBITORY RULES

Table 1. Guidance For Gasoline Service Stations

If your regulations require these types of controls	and the major source cutoff in tons per year is	then the EPA guideline for a prohibitory rule or general permit cutoff in gallons per month is:
Uncontrolled	100 tpy VOC	380,000
	50 tpy VOC	190,000
	25 tpy VOC	95,000
	10 tpy VOC	38,000
Stage I vapor recovery	100 tpy VOC	630,000
	50 tpy VOC	310,000
	25 tpy VOC	160,000
	10 tpy VOC	63,000
Stage I and Stage II		
vapor recovery	100 tpy VOC	2,900,000
	50 tpy VOC	1,500,000
	25 tpy VOC	740,000
	10 tpy VOC	290,000

Table 1 applies to facilities for which 90 percent or more of volatile organic compounds (VOC) emissions come from gasoline service station operations.

NOTES ON TABLE 1:

- 1. There are probably very few uncontrolled gas stations in areas where the cutoff is 10, 25, and 50 tons per year VOC because Stage I and Stage II vapor recovery is required by the Act. The EPA made the calculations for "uncontrolled" in these areas to address any small stations that may be exempted by State regulations.
- 2. The EPA calculated the cutoff at 50 percent of major source threshold. The calculations are discussed in the technical support document.

Table 1 Continued Page 2

3. State and local prohibitory rules and general permits must require records sufficient to ensure that the cutoff can be enforced. The EPA guidelines on "practical enforceability" considerations are contained in a January 25, 1995 memorandum from EPA's Office of Enforcement and Compliance Assurance (OECA) entitled "Guidance on Enforceability Requirements for Limiting Potential to Emit Through SIP and Section 112 Rules and General Permits."

4. Where the cutoffs are contingent on stage I and/or stage II vapor recovery, the EPA recommends that general permit and prohibitory rule limits include a cross-reference to the applicable stage I and stage II regulations.

Table 1A. Guidance For Gasoline Stations Not Requiring Notifications
Under General Permits and Prohibitory Rules

If you own or operate a gasoline service station	and the type of vapor recovery required by SIP regulations is	and you are a State or local area whose major source cutoff for VOC in tons per year is:	then no formal notification is required by a State or local agency's prohibitory rule or general permit, if the number of refueling positions is no more than:
	No controls	100	17
	No controls	50	9
	No controls	25	4
(No controls	10	2
	Stage I	100	29
	Stage I	50	14
	Stage I	25	7
	Stage I	10	3
	Stage I and Stage II	100	134
	Stage I and Stage II	50	67
	Stage I and Stage II	25	34
	Stage I and Stage II	10	13

Table 1A Continued Page 2

NOTES ON TABLE 1A:

1. The EPA calculations (see attached technical support document) concluded that it is a reasonable likelihood that sources meeting the size cutoffs in table 1A would not exceed the suggested throughput limits in table 1. In addition, sources meeting this description already keep records on gasoline sales that agencies can use to confirm that the limits are not exceeded. The EPA, States and localities have readily available sources of information to identify existing gas stations. Based upon these considerations, the EPA considers sources meeting the size cutoffs in table 1A as a lower regulatory priority. Accordingly, the EPA suggests those gas stations meeting these size cutoffs may be exempted from notification requirements by State prohibitory rules and general permits. (If exempted, owners of these stations would not be required to submit a written notification accepting a throughput limit).

- 2. The number of "refueling positions" means the number of cars that could refuel at the same time. For example, a typical service station island with two dispensers has three nozzles on each side of both dispensers. Such a two-dispenser design has four "refueling positions" because a maximum of four vehicles could be refueling at any given time. If the island had three dispensers with three nozzles on each side of each dispenser, this would be six refueling positions because six vehicles could refuel at once.
- 3. The calculations for this table assume that the location where the gasoline refueling is a service station with only trivial emissions from other sources and does not contain other significant sources of emissions. Do not rely on this table unless gasoline loading and refueling emissions cause 90 percent or more of your VOC emissions.

Table 2. Guidance For Bulk Gasoline Plants

For bulk gasoline plants	If the major source cutoff is	then the EPA guideline for a prohibitory rule or general permit cutoff is
	[All areas]	the basic definition of a bulk plant. That is, a source owner agreeing to limit the amount of gasoline loaded to no more than 20,000 gallons per day is a minor source.

Table 2 applies to bulk distribution facilities for which 90 percent or more of VOC emissions come from bulk loading and unloading of gasoline.

NOTES ON TABLE 2:

- This guideline is based upon calculations that presume that reasonably available control technology (RACT) controls are required in all ozone nonattainment areas (see attached technical support document).
- 2. The calculations assume that the RACT regulations follow the control technique guideline (CTG), under which vapor balance is required for outgoing trucks when the bulk plant has a throughput greater than 4000 gallons per day. For areas with 10, 25, and 50 tons per year VOC major source cutoffs, the above guideline is sensitive to this assumption. If vapor balance is not required for outgoing trucks when the bulk plant has a throughput greater than 4000 gallons per day, prohibitory rules and general permits should contain a different cutoff that takes this into account. In any case, general permit and prohibitory rule limits at the 20,000 gallon limit should include a cross-reference to the applicable RACT regulation where such regulations are in place.
- 3. State and local prohibitory rules and general permits must require records sufficient to ensure that the cutoff can be enforced. The EPA guidelines on "practical enforceability" considerations are contained in a January 25, 1995 memorandum from EPA's OECA entitled "Guidance on Enforceability Requirements for Limiting Potential to Emit Through SIP and Section 112 Rules and General Permits."

Table 3. Guidance For Printing, Publishing And Packaging Operations

For this type of printing, publishing and packaging operation	and for this major source cutoff 	EPA's guideline for a simplified screening approach in a general permit or prohibitory rule would limit usage to the following amounts in any 12-month rolling period*:
Sheetfed (nonheatset) offset	100 tpy VOC	14,275 gallons of cleaning solvent and fountain solution additives
lithography	50 tpy VOC	7125 gallons of cleaning solvent and fountain solution additives
	25 tpy VOC	3550 gallons of cleaning solvent and fountain solution additives
	10 tpy VOC	1425 gallons of cleaning solvent and fountain solution additives
	25 tpy total HAP	3333 gallons of all hazardous air pollutant (HAP) containing materials
	10 tpy single HAP	1333 gallons of material containing any one HAP
Nonheatset web offset	100 tpy VOC	14,275 gallons of cleaning solvent and fountain solution additives
lithography	50 tpy VOC	7125 gallons of cleaning solvent and fountain solution additives
	25 tpy VOC	3550 gallons of cleaning solvent and fountain solution additives
	10 tpy VOC	1425 gallons of cleaning solvent and fountain solution additives
	25 tpy total HAP	3333 gallons of all HAP containing materials
	10 tpy single HAP	1333 gallons of material containing any one HAP

For this type of printing, publishing and packaging operation	and for this major source cutoff	EPA's guideline for a simplified screening approach in a general permit or prohibitory rule would limit usage to the following amounts in any 12-month rolling period*:
Heatset web offset lithography	100 tpy VOC	100,000 lbs of ink, cleaning solvent, and fountain solution additives
uncontrolled	50 tpy VOC	50,000 lbs of ink, cleaning solvent, and fountain solution additives
	25 tpy VOC	25,000 lbs of ink, cleaning solvent, and fountain solution additives
	10 tpy VOC	10,000 lbs of ink, cleaning solvent, and fountain solution additives
	25 tpy total HAP	3333 gallons of all HAP containing materials
	10 tpy single HAP	1333 gallons of materials containing any one HAP
Screen printers	100 tpy VOC	14,275 gallons of the sum of: (a) solvent based inks; (b) cleaning solvent; (c) adhesives; and (d) coatings
	50 tpy VOC	7,125 gallons of the sum of: (a) solvent based inks; (b) cleaning solvent; (c) adhesives; and (d) coatings
	25 tpy VOC	3,550 gallons of the sum of: (a) solvent based inks; (b) cleaning solvent; (c) adhesives; and (d) coatings
	10 tpy VOC	1,425 gallons of the sum of: (a) solvent based inks; (b) cleaning solvent; (c) adhesives; and (d) coatings
	25 tpy total HAP	3,333 gallons of all HAP-containing materials
	10 tpy single HAP	1,333 gallons of materials containing any one HAP

For this type of printing, publishing and packaging operation	and for this major source cutoff	EPA's guideline for a simplified screening approach in a general permit or prohibitory rule would limit usage to the following amounts in any 12-month rolling period*:
Flexography and rotogravure	100 tpy VOC	400,000 lbs of the sum of: (a) inks; (b) coatings; and (c) adhesives
water-based or UV-cured inks, coatings and	50 tpy VOC	200,000 lbs of the sum of: (a) inks; (b) coatings; and (c) adhesives
adhesives	25 tpy VOC	100,000 lbs of the sum of: (a) inks; (b) coatings; and (c) adhesives
	10 tpy VOC	40,000 lbs of the sum of: (a) inks; (b) coatings; and (c) adhesives
	25 tpy total HAP	3,333 gallons of all HAP-containing materials
	10 tpy single HAP	1,333 gallons of materials containing any one HAP
Flexography and rotogravure	100 tpy VOC	100,000 lbs of the sum of: (a) ink; (b) coatings; (c) adhesives; (d) dilution solvents; and (e) cleaning solvents
solvent inks uncontrolled	50 tpy VOC	50,000 lbs of the sum of: (a) ink; (b) coatings; (c) adhesives; (d) dilution solvents; and (e) cleaning solvents
	25 tpy VOC	25,000 lbs of the sum of: (a) ink; (b) coatings; (c) adhesives; (d) dilution solvents; and (e) cleaning solvents
	10 tpy VOC	10,000 lbs of the sum of: (a) ink; (b) coatings; (c) adhesives; (d) dilution solvents; and (e) cleaning solvents
	25 tpy total HAP	3,333 gallons of all HAP-containing materials
	10 tpy single HAP	1,333 gallons of materials containing any one HAP

^{*} Table 3 applies to facilities for which 90 percent or more of VOC and HAP emissions come from the listed type of printing, publishing, and packaging operation, and from the materials indicated in the right-hand column. In determining whether this screening approach can be used, be careful to ensure that VOC and HAP emissions from materials <u>not listed</u> in the right-hand column (or other VOC or HAP sources present at the facility) do not exceed 10 percent of the total facility emissions.

If any of the screening levels is exceeded or if there is a combination of printing technologies (e.g., lithography and flexography, or water-based and solvent-based flexography operations) used in the same facility, then a more detailed approach is needed (see note 2).

NOTES ON TABLE 3:

- These guidelines represent a simplified screening approach. This means that these cutoffs represent conservative calculations that would ensure that printers accepting these screening cutoffs as limits would be considered minor sources if records are kept of material usage.
- 2. A more sophisticated system of prohibitory rule or general permit limit is possible for sources exceeding these levels, but for which emissions remain well below the major source threshold. For such sources, who are willing to keep records of not only material usage but also the content of those materials, prohibitory rules may establish a 50 percent emissions cap. The technical support document includes equations to use in establishing that sources would remain below the 50 percent limitation. Note that emission calculations under this approach would use the actual density of each material used, rather than the "default" densities assumed in the technical support document. This more detailed approach must be used where any of the screening levels are exceeded, or there is a combination of printing technologies (e.g., lithographic and flexographic or water-based and solvent-based flexographic) present in the same facility.
- The EPA is working on software that could be used by printers to demonstrate that emissions are below the screening cutoffs, or below the 50 percent cap.
- 4. State and local prohibitory rules and general permits must require records sufficient to ensure that the cutoff can be enforced. The EPA guidelines on "practical enforceability" considerations are contained in a January 25, 1995 memorandum from EPA's OECA entitled "Guidance on Enforceability Requirements for Limiting Potential to Emit through SIP and Section 112 Rules and General Permits."
- 5. Note that the cutoffs for non-heatset sheetfeed and web-offset lithography do not require tracking of ink usage. As noted in the attached technical support document, only a small portion of the VOC content in ink is emitted for this type of printing, publishing, and packaging operation. Consequently, the EPA expects that more than 90 percent of emissions will be covered even if ink usage was not tracked. (Note that the screening approach can only be used if the materials in the right-hand column constitute more than 90 percent of emissions). In addition, the screening levels in the right-hand column are calculated at 50 percent of the major source threshold, and therefore provide a sufficient "cushion" to account for ink emissions.
- 6. Coatings use in printing and packaging operations are subject to the above table 3 cutoffs, rather than those in table 4.

7. The following industry trade groups have offered to provide their members with further information on this table: Gary Jones, Graphic Arts Technical Foundation (412) 741-6860; Marcia Kinter, Screenprinting and Graphic Imaging Association International (703) 359-1313; Dr. Doreen Monteleone, Flexographic Technical Association (516) 737-6020; Kelley Clark, Newspaper Association of America (703) 902-1833; Ben Cooper, Printing Industries of America (703) 519-8115; Monica McCabe, National Association of Printers and Lithographers (201) 444-6804.

Table 4. Guidelines For Surface Coating

For surface coating, the "limiting case pollutant" is	and the EPA guideline for a simplified screening cutoff for prohibitory rules and general permits would limit usage of coatings to:
10 TPY single HAP	250 gallons of coatings per month or 3000 gallons of coatings per 12-month period [See note 4 for description of more detailed approach]

Table 4 applies to facilities for which 90 percent or more of HAP emissions come from surface coatings.

NOTES ON TABLE 4:

- These guidelines represent a simplified screening approach. This means that these cutoffs represent conservative calculations that would ensure that surface coaters accepting these screening cutoffs as limits would be considered minor sources, and would only need to keep records of material usage.
- 2. The guidelines are derived in part from an assumption that 6 pounds per gallon as the worst-case value for any individual HAP. These guidelines should not be relied upon if the State or local agency or source has data indicating that coatings used could exceed this level. The EPA recommends including 6 pound per gallon individual HAP limit in general permits and prohibitory rules.
- 3. "Coatings" means coatings plus diluents plus cleanup solvents.
- 4. A more sophisticated system of prohibitory rule or general permit limits is possible for sources exceeding these levels, but for which emissions remain well below the major source threshold. For such sources, who are willing to keep records of not only material usage but also the content of those materials, prohibitory rules may establish a 50 percent emissions cap.
- 5. State and local prohibitory rules and general permits must require records sufficient to ensure that the cutoff can be enforced. The EPA guidelines on "practical enforceability" considerations are contained in a January 25, 1995 memorandum from EPA's OECA entitled "Guidance on Enforceability Requirements for Limiting Potential to Emit Through SIP and Section 112 Rules and General Permits."

Table 4A. Guidance For Auto Body Shops Not Requiring Notifications Under General Permits And Prohibitory Rules

If you own this type of auto body shop	then no formal notification is required by a State or local agency's prohibitory rule or general permit, if:
Business entirely, or almost entirely, for collision repairs	your shop has two or fewer bays devoted to painting.
Substantial portions of business devoted to repainting entire vehicles	your shop has only one bay devoted to painting.
All auto body shops	your shop does not have the physical or operational capacity to do more than 50 jobs per week

NOTES ON TABLE 4A:

- 1. The values in this table are for facilities involved in automobile repair and are not appropriate for facilities capable of painting much larger surfaces, such as buses or earthmoving equipment.
- 2. The values in this table assume that nearly all of the VOC and HAP emissions from your shop come from coatings (including diluents and cleanup solvents). Do not rely on this table if more than 90 percent of your VOC and HAP emissions do not come from coatings, diluents and cleanup solvents.
- 3. The EPA calculations (see attached technical support document) concluded that facilities meeting the above descriptions would have a reasonable likelihood of complying with the limits contained in table 4. Accordingly, the EPA suggests that these sources are a relatively low regulatory priority, and that sources meeting these guidelines may be exempted from notification requirements in State prohibitory rules or general permits.
- 4. Facilities should not rely on these values in cases where the shop is capable of handling substantially more jobs per week than a typical facility. Caution should be given especially in using these values for facilities that routinely perform more than 50 jobs per week.

Table 5. Guidelines For Degreasing Operations

For degreasing operations	for the following major source cutoff	the EPA guideline for a simplified screening cutoff for prohibitory rules and general permits would limit usage of degreasing solvent (from the entire plant) in any 12-month rolling period to
	10 TPY single HAP	2200 gallons of any one solvent-containing material (if no halogenated solvents) 1200 gallons (if contains perchloroethylene, 1,1,1-TCA, methylene chloride, or TCE) AND
	25 TPY total HAPs	5400 gallons of any combination of solvent- containing materials (if no halogenated solvents) 2900 gallons (if halogenated included)

Table 5 (except as noted in note 2 below) applies to facilities for which 90 percent or more of VOC and HAP emissions come from degreasing.

NOTES FOR TABLE 5:

- 1. These values were calculated originally by California agencies for the California model prohibitory rule (see attached technical support document).
- 2. These cutoffs provide a simplified method for sources for which degreasing constitutes nearly all of the emissions from a given site. A more sophisticated approach to prohibitory rules or general permits is possible for sites having significant contributions from both coating and degreasing sources. Such an approach would involve a 50 percent "cap" on emissions with documentation of material content and usage. An example approach for documenting that emissions are under such a

Table 5 continued Page 2

"cap" is contained in an EPA policy memorandum of October 15, 1993 entitled "Guidance for State Rules for Optional Federally-Enforceable Emissions Limits Based on Volatile Organic Compound Use," issued by D. Kent Berry, Acting Director, Air Quality Management Division.

3. State and local prohibitory rules and general permits must require records sufficient to ensure that the cutoff can be enforced. The EPA guidelines on "practical enforceability" considerations are contained in a January 25, 1995 memorandum from EPA's OECA entitled "Guidance on Enforceability Requirements for Limiting Potential to Emit Through SIP and Section 112 Rules and General Permits."

Table 6. Guidance For Cotton Gins

For cotton gins with the following configuration	if the major cutoff for PM-10 is	then the EPA prohibitory rule and general permit guideline for throughput, in bales of cotton ginned over a cotton ginning season, is
Cyclones on all exhaust points	100 tpy PM-10 70 tpy PM-10	90,000 bales 63,000 bales
Screened drums or cages on battery condenser and lint cleaner, cyclones on all other exhausts	100 tpy PM-10 70 tpy PM-10	72,000 bales 50,000 bales

Table 6 applies to facilities for which 90 percent or more of particles with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM-10) emissions come from cotton ginning operations.

NOTES FOR TABLE 6:

- 1. For a more detailed description of the two configurations listed above, please refer to EPA's AP-42 document, section 9.7.
- 2. State and local prohibitory rules and general permits must require records sufficient to ensure that the cutoff can be enforced. EPA guidelines on "practical enforceability" considerations are contained in a January 25, 1995 memorandum from EPA's OECA entitled "Guidance on Enforceability Requirements for Limiting Potential to Emit Through SIP and Section 112 Rules and General Permits."
- 3. The EPA calculated the 72,000 and 90,000 ton cutoffs based upon the upper end of the range from available tests. EPA believes these numbers are very conservative (worse than the typical "worst-case") and should ensure that there is a very low probability that a cotton gin limited to these levels would have a potential to emit major amounts. To reduce this probability even further, State and local agency prohibitory rules should ensure that the cutoff is not relied upon by the source in cases where: (1) the source owner, or a State or local agency has data for an individual source indicating major emissions at the cutoff; or (2) there are unique circumstances that would lead to greater emissions than for a typical plant design.

Table 7. Guidance For Oil And Natural Gas-Fired Boilers With Capacity
That Is No More Than 100 million BTUs per hour

For boilers capable of burning	if the major source cutoffs are	then EPA's guidelines for prohibitory rule and general permit cutoffs are the following 12-month rolling limits:	
NATURAL GAS ONLY	100 tpy NO _x 100 tpy SO2	710 million cubic feet	
	50 tpy NO _x 100 tpy SO2	360 million cubic feet	
	25 tpy NO _x 100 tpy SO2	180 million cubic feet	
	10 tpy NO _X 100 tpy SO2	71 million cubic feet	
DISTILLATE OIL ONLY	100 tpy NO _x 100 tpy SO2	700,000 gallons	
	50 tpy NO _x 100 tpy SO2	700,000 gallons	
	25 tpy NO _x 100 tpy SO2	700,000 gallons	
	10 tpy NO _x 100 tpy SO2	500,000 gallons	
RESIDUAL OIL ONLY	100 tpy NO _x 100 tpy SO2	160,000 gallons	
	50 tpy NO _x 100 tpy SO2	160,000 gallons	
	25 tpy NO _x 100 tpy SO2	160,000 gallons	
	10 tpy NO _x 100 tpy SO2	160,000 gallons	

For boilers capable of burning	if the major source cutoffs are	then EPA's guidelines for prohibitory rule and general permit cutoffs are the following 12-month rolling limits:
NATURAL GAS AND DISTILLATE OIL ONLY	100 tpy NO _x 100 tpy SO2	630 million cubic feet AND 600,000 gallons distillate
	50 tpy NO _x 100 tpy SO2	320 million cubic feet and 260,000 gallons distillate
	25 tpy NO _x 100 tpy SO2	160 million cubic feet and 130,000 gallons distillate
	10 tpy NO _x 100 tpy SO2	65 million cubic feet and 52,000 gallons distillate
NATURAL GAS AND RESIDUAL OIL ONLY	100 tpy NO _x 100 tpy SO2	650 million cubic feet and 160,000 gallons residual
	50 tpy NO _x 100 tpy SO2	300 million cubic feet and 160,000 gallons residual
	25 tpy NO _x 100 tpy SO2	150 million cubic feet and 160,000 gallons residual
	10 tpy NO _x 100 tpy SO2	51 million cubic feet and 51,000 gallons residual
NATURAL GAS, RESIDUAL AND DISTILLATE	100 tpy NO _x 100 tpy SO2	650 million cubic feet and 160,000 gallons residual
	50 tpy NO _x 100 tpy SO2	300 million cubic feet and 160,000 gallons residual
	25 tpy NO _x 100 tpy SO2	150 million cubic feet and 160,000 gallons residual
	10 tpy NO _x 100 tpy SO2	51 million cubic feet and 51,000 gallons residual

Table 7 applies to facilities where 90 percent of air emissions come from oil and natural gas-fired boilers with a capacity less than 100 million BTUs per hour.

NOTES FOR TABLE 7:

- For the combustion source categories listed above, please note that the tables cover limits for boilers only and the fuels listed only. These fuel use limits are not applicable to other types of combustion devices such as engines and gas turbines, and are not applicable to facilities combusting waste oil.
- 2. The values listed in *italics* may be adjusted by States to take into account State and local fuel sulfur regulations. As explained in further detail in the technical support document, EPA calculated these values based upon worst-case sulfur content. Typically allowed sulfur-in-fuel values are less than those used in these calculations.
- 3. State and local prohibitory rules and general permits must require records sufficient to ensure that the cutoff can be enforced. The EPA guidelines on "practical enforceability" considerations are contained in a January 25, 1995 memorandum from EPA's OECA entitled "Guidance on Enforceability Requirements for Limiting Potential to Emit Through SIP and Section 112 Rules and General Permits."
- 4. The guidelines are for the combined fuel use for all boilers at a given facility.

Table 7A. Boilers Not Needing Legal Limits On The Amount Of Fuel Burned

If you own or operate a boiler or group of boilers, and are capable of burning the following	and you are located in an area whose major source cutoff for NO_X is the following	then you are a minor source if the TOTAL COMBINED boiler capacity, in million BTUs per hour is no more than:
Natural gas only	25, 50, or 100 tons per year	25
Natural gas only	10 tons per year	10
Distillate oil, or a combination of distillate fuel and natural gas	[All areas]	10
Residual oil, or a combination of residual oil	[All areas]	5

NOTES ON TABLE 7A:

The calculations for this table are based upon calculations of nitrogen oxides (NO_X) and SO_2 emissions. The calculations assume that most of the emissions of these pollutants from your plant come from boilers. Do not rely on this table unless boilers cause 90 percent or more of your NO_X and SO_2 emissions.

Table 8. Guidance For Hot Mix Asphalt Plants

For asphalt plants, the following pollutants are the "limiting case" and	the EPA guideline for general permits and prohibitory rules is the following annual limit:	
100 tpy CO	250,000 tons hot mix asphalt	
100 tpy SO2	produced per 12-month rolling period	
100 tpy PM10 70 tpy PM10		

Table 8 applies to facilities for which 90 percent or more of air emissions come from hot mix asphalt production, including associated fugitives.

NOTES FOR TABLE 8:

- For asphalt plants, States must determine on a case-by-case basis whether the guidelines are
 appropriate for their situation because it is possible that particulates are the limiting pollutant for
 sources constructed before the 1973 applicability date for the new source performance standard
 (NSPS). The EPA could not, in developing this guidance, address the effect of each particulate SIP
 regulation for asphalt plants that may exist. Although EPA does not expect that there are many States
 or sources for which this is the case, these guidelines only cover sources subject to the NSPS unless
 the State has made a demonstration that the 250,000 ton cutoff assures minor source levels for preNSPS sources.
- 2. State and local prohibitory rules and general permits must require records sufficient to ensure that the cutoff can be enforced. The EPA guidelines on "practical enforceability" considerations are contained in a January 25, 1995 memorandum from EPA's OECA entitled "Guidance on Enforceability Requirements for Limiting Potential to Emit Through SIP and Section 112 Rules and General Permits."
- 3. The EPA calculated the 250,000 ton cutoff based upon AP-42 factors. Because the AP-42 factors are the averages of available tests, EPA included a margin to address sources whose emissions are greater than the average. State and local agency prohibitory rules should ensure that the cutoff is not relied upon by the source in cases where: (1) the source owner, or a State or local agency has data for an individual source indicating major emissions at the cutoff; or (2) there are unique circumstances

Table 8 Continued Page 2

(for example, the presence of a large on-site generator) that would lead to greater emissions than for a typical plant design.

4. Do not interpret this table as having any implications for minor source permitting. For example, as noted in the technical support document, sources meeting the above limit have the possibility to cause short-term violations of the ambient air quality standards for SO_2 .