BEFORE THE ADMINISTRATOR
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

IN THE MATTER OF: NORANDA ALUMINA, LLC GRAMERCY, ST JAMES PARISH, LOUISIANA TITLE V PERMIT NUMBER 2453-V2 ISSUED BY THE LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY	PETITION NUMBER VI-2011-04

ORDER DENYING PETITION FOR
OBJECTION TO PERMIT

INTRODUCTION

The United States Environmental Protection Agency (EPA) received a Petition dated March 28, 2011, from the Louisiana Environmental Action Network (LEAN), Sierra Club, and O'Neil Couvillion (the Petitioners) pursuant to Section 505(b)(2) of the Clean Air Act (CAA or Act), 42 United States Code (U.S.C.) § 7661d(b)(2) and 40 Code of Federal Regulations (C.F.R.) § 70.8(d). The Petition requests that the EPA object to the title V operating permit 2453-V2 issued by the Louisiana Department of Environmental Quality (LDEQ) on February 15, 2011, to Noranda Alumina, LLC (Noranda). LDEQ issued Part 70 operating permit 2453-V1 to Noranda in 2003, which was renewed and modified by LDEQ as permit 2453-V2. Permit 2453-V2 renewed the authorization to continue operations of the Noranda Bauxite Processing, Products, and Power areas of the facility. Permit 2453-V2 (the 2011 title V permit) is a state Part 70 operating permit, issued pursuant to title V of the Act, 42 U.S.C. §§ 7661-7661f. The amendments to the 2011 title V permit also incorporated various applicable requirements related to changes at the site, including revisions to Noranda's Prevention of Significant Deterioration (PSD) permit number PSD-LA-684(M-1) that was concurrently issued with the 2011 title V permit. The facility is an existing alumina extraction and processing plant.

This Order contains EPA's response to the Petitioners' March 28, 2011, request that the EPA object to the 2011 title V permit. Based on a review of the Petition, other relevant materials, including Noranda's title V and PSD permits, permit applications, and permit record, and relevant statutory and regulatory authorities, and as explained below, I deny the Petition requesting that the EPA object to Noranda's title V permit 2453-V2.

STATUTORY AND REGULATORY FRAMEWORK

Section 502(d)(l) of the CAA, 42 U.S.C. § 766la(d)(l), calls upon each state to develop and submit to the EPA an operating permit program intended to meet the requirements of title V of the CAA. The state of Louisiana originally submitted its title V program governing the issuance of operating permits in 1993, and the EPA granted full approval on September 12, 1995. 60 *Fed. Reg.* 47296. C.F.R. Part 70, Appendix A. This program, which became effective on October 12, 1995, was codified in Louisiana Administrative Code (L.A.C.), Title 33, Part III, Chapter 5[1] All major stationary sources of air pollution and certain other sources are required to apply for title V operating permits that include emission limitations and other conditions as necessary to assure compliance with applicable requirements of the CAA, including the requirements of the applicable State Implementation Plan (SIP). CAA §§ 502(a) and 504(a), 42 U.S.C. §§ 7661a(a) and 7661c(a).

The title V operating permit program does not generally impose new substantive air quality control requirements (referred to as "applicable requirements"), but does require permits to contain monitoring, recordkeeping, reporting and other conditions to assure sources' compliance with applicable requirements. 57 *Fed. Reg.* 32250, 32251 (July 21, 1992). One purpose of the title V program is to "enable the source, States, the EPA, and the public to understand better the requirements to which the source is subject, and whether the source is meeting those requirements." *Id.* Thus, the title V operating permit program is a vehicle for ensuring that air quality control requirements are appropriately applied to facility emission units and for assuring compliance with such requirements.

Applicable requirements for a new major stationary source or for a major modification to a major stationary source include the requirement to obtain a preconstruction permit that complies with applicable new source review requirements. Part C of the CAA establishes the PSD program, the preconstruction review program that applies to areas of the country, such as St. James Parish, Louisiana, that are designated as attainment or unclassifiable for the national ambient air quality standards (NAAQS). CAA §§ 160-169, 42 U.S.C. §§ 7470-7479. New Source Review, or NSR, is the term used to describe both the PSD program, as well as the nonattainment NSR program (applicable to areas that are designated as nonattainment with the NAAQS). In attainment areas, a major stationary source may not begin construction or undertake certain modifications without first obtaining a PSD permit. CAA § 165(a)(1), 42 U.S.C. § 7475(a)(1). The PSD program analysis must address two primary and fundamental elements (among other requirements) before the permitting authority may issue a permit: (1) an evaluation of the impact of the proposed new or modified major stationary source on ambient air quality in the area, and (2) an analysis ensuring that the proposed facility is subject to Best Available Control Technology (BACT) for each pollutant subject to regulation under the PSD program. CAA § 165(a)(3), (4), 42 U.S.C. § 7475(a)(3), (4).

The EPA implements the PSD program in two largely identical sets of regulations: one set, found at 40 C.F.R. § 52.21, contains the EPA's federal PSD program, which applies in areas without a SIP-approved PSD program; the other set of regulations, found at 40 C.F.R. § 51.166 contains

[1]. Date of signature by the Secretary is November 9, 1993; promulgated in the *Louisiana Register*, Volume 19, Number 11, 1420-1421, November 20, 1993.

the requirements that state PSD programs must meet to be approved as part of a SIP. On August 14, 1985, the Governor of Louisiana submitted a copy of the Louisiana PSD Air Quality Regulations – Part V, adopted by the Secretary of the Department of Environmental Quality on May 23, 1985, as a SIP revision along with the State's other commitments for implementing and enforcing the PSD program in the State. On April 24, 1987, the EPA approved a revision to the Louisiana SIP which provides for State issuance and enforcement of PSD permits. 52 *Fed. Reg.* 13671. The EPA has approved subsequent revisions to Louisiana's PSD regulations. 40 C.F.R. §§ 52.970(c) and 52.999(c), and 40 CFR 52.986. The PSD program in the Louisiana SIP is codified at LAC 33:III.509.

As LDEQ administers a SIP-approved PSD program, the applicable requirements of the Act for new major sources or major modifications include the requirement to comply with PSD requirements under the Louisiana SIP. *See e.g.,* 40 C.F.R §70.2.[2] In this case, the "applicable requirements" include Louisiana's NSR provisions contained in LAC 33:III.509, as approved by the EPA into Louisiana's SIP. As we have previously stated, if a PSD permit that is incorporated into a title V permit does not meet the requirements of the SIP, the title V permit will not be in compliance with all applicable requirements. Where a Petitioner's request that the Administrator object to the issuance of a title V permit is based in whole, or in part, on a permitting authority's alleged failure to comply with the requirements of its approved PSD program (as with other allegations of inconsistency with the Act) the burden is on the Petitioners to demonstrate that the permitting decision was not in compliance with the requirements of the Act, including the requirements of the SIP. Such requirements, as EPA has explained in describing its authority to oversee the implementation of the PSD program in states with approved programs, include the requirements that the permitting authority: (1) follow the required procedures in the SIP; (2) make PSD determinations on reasonable grounds properly supported on the record; and (3) describe the determinations in enforceable terms. *See, e.g., In the Matter of Wisconsin Power and Light, Columbia Generating Station,* Permit No. Ill 003090-P20; Petition Number V -2008-1 (October 8, 2009) at 8 (*Columbia Generating Order*).

Under CAA section 505(a), 42 U.S.C. § 766ld(a), and the relevant implementing regulations found at 40 C.F.R. § 70.8(a), states are required to submit each proposed title V operating permit to the EPA for review. Upon receipt of a proposed permit, EPA has 45 days to object to final issuance of the permit if it is determined not to be in compliance with applicable requirements or the requirements under 40 C.F.R. Part 70. 40 C.F.R. § 70.8(c). If the EPA does not object to a permit on its own initiative, section 505(b)(2) of the Act and 40 C.F.R. §70.8(d) provide that any person may petition the Administrator, within 60 days of the expiration of the EPA's 45-day review period, to object to the permit. The petition shall be based only on objections to the permit that were raised with reasonable specificity during the public comment period provided by the permitting agency (unless the petitioner demonstrates in the petition to the Administrator that it was impracticable to raise such objections within such period or unless the grounds for such objection arose after such period). 42 U.S.C. § 7661d(b)(2); 40 C.F.R. §

[2] Under 40 C.F.R. § 70.1(b), "[a]ll sources subject to [the Title V regulations] shall have a permit to operate that assures compliance by the source with all applicable requirements." "Applicable requirements" are defined in 40 C.F.R. § 70.2 to include "(1) [a]ny standard or other requirement provided for in the applicable implementation plan approved or promulgated by EPA through rulemaking under title I of the [Clean Air] Act that implements the relevant requirements of the Act, including any revisions to that plan promulgated in [40 C.F.R.] part 52."

70.8(d). In response to such a petition, the Act requires the Administrator to issue an objection if a petitioner demonstrates that a permit is not in compliance with the requirements of the Act. 42 U.S.C. § 7661d(b)(2); 40 C.F.R. § 70.8(c)(1); *see also New York Public Interest Research Group, Inc. (NYPIRG) v. Whitman,* 321 F.3d 316,333 n.11 (2d Cir. 2003). Under section 505(b)(2) of the Act, the burden is on the petitioner to make the required demonstration to the EPA. *MacClarence v. EPA,* 596 F.3d 1123, 1130-33 (9th Cir. 2010); *Sierra Club v. Johnson,* 541 F.3d 1257, 1266-1267 (11th Cir. 2008); *Citizens Against Ruining the Environment v. EPA,* 535 F.3d 670,677-78 (7th Cir. 200.8); *Sierra Club v. EPA,* 557 F.3d 401,406 (6th Cir. 2009) (discussing the burden of proof in title V petitions); *see also NYPIRG,* 321 F.3d at 333 n.11. In evaluating a petitioner's claims, the EPA considers, as appropriate, the adequacy of the permitting authority's rationale in the permitting record, including the response to comment. If, in responding to a petition, the EPA objects to a permit that has already been issued, the EPA or the permitting authority will modify, terminate, or revoke and reissue the permit consistent with the procedures set forth in 40 C.F.R. §§ 70.7(g)(4) and (5)(i) - (ii), and 40 C.F.R. § 70.8(d).

BACKGROUND

Noranda owns and operates an alumina production facility located in Gramercy, St. James Parish, La. Noranda is located in an area that is currently designated as attainment for the 8-hour ozone NAAQS and as attainment for the 1997 $PM_{2.5}$ NAAQS. The area is in attainment or unclassifiable for all other NAAQS.

On April 22, 2003, LDEQ concurrently issued a title V permit and two PSD permits to Noranda. One of these permits was a PSD permit, PSD-LA-684,[3] authorizing the Bauxite Processing Area (BPA) Rebuild project (2003 BPA Project). PSD-LA-684 established maximum allowable emissions rates for five units in the 2003 BPA Rebuild project: calcining kilns nos. 1-3, power boiler no. 2, and gas turbine no. 3.[4] The other PSD permit, PSD-LA-676, covered two Electrical Projects (Electrical Projects).[5]

Based on the level of emissions increase, PSD-LA-684 addressed only NO_x emissions. LDEQ determined that BACT review was not required for the BPA Rebuild Project in PSD-LA-684, as it did not involve a physical modification or a change in the method of operation at the emissions units that experienced an increase in NO_x emissions. See, LAC 33: III.509.J.3; 40 C.F.R. 51.166(j)(3); *In re: Rochester Public Utilities*, 11 E.A.D. 593 (EAB 2004) (supplemental opinion of Judge Fulton citing brief submitted by EPA OGC). LDEQ concluded that NO_x emissions from the facility would not cause or contribute to a violation of the NAAQS or PSD increments.[6]

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[3] LDEQ EDMS Document 1777111. RTC documents may be accessed through the Electronic Document Management System (EDMS), the LDEQ's electronic repository of official records at this web address: http://www.deq.louisiana.gov/portal/ONLINESERVICES/ElectronicDocumentManagementSystem.aspx Such records may be searched using a variety of search terms including document date, but most directly by using the EDMS assigned document number (EDMS Doc No). LDEQ's RTC to EPA is found at EDMS Doc. No: 7827638 while RTC to Tulane may be found at EDMS Doc. No: 7827634.

[4] LDEQ EDMS Document 1777111 at 4.

[5] LDEQ EDMS Document 1776754.

[6] LDEQ EDMS Document 1777111, pg. 6.

Noranda's 2003 Permit PSD-LA-684, Specific Condition 2, required stack tests for NO_x emissions for Kilns 1, 2, and 3 to ensure compliance with the maximum allowable emissions rates in the permit. General Condition 1 of Permit PSD-LA-684 provided that "if emissions are determined to be greater than those allowed by the permit (e.g., during the shakedown period for new or modified equipment) or if proposed control measures and/or equipment are not installed or do not perform according to design efficiency, an application to modify the permit must be submitted."[7] *See also* PSD-LA-684, General Conditions VII-IX. Noranda's 2003 Permit PSD-LA-676, Specific Condition 3, required stack tests for NO_x emissions for Gas Turbine No. 3 and Power Boiler 2 to ensure compliance with the maximum allowable emissions rates in the permit. General Condition 1 of Permit PSD-LA-676 provided that if emissions were determined to be greater than those allowed by the permit, an application to modify the permit must be submitted.[8] *See also* PSD-LA-676, General Conditions VII-IX.

Stack testing in 2003-4 indicated NO_x emissions in excess of the maximum allowable emissions rates in the permit for Kilns 2 and 3 and NO_x emissions below maximum allowable emissions rates in the permit for the power generation equipment tested. In August of 2004, Noranda submitted an application to renew and amend the title V permit 2453-V1 and revise the 2003 PSD-LA- 684, based on 2003-4 NO_x stack test results consistent with the permit conditions described above.[9]

In 2004, the company also sought authority to make several other changes, among them, to authorize a new Yield Improvement Project (Yield Improvement Project). The 2004 Yield Improvement Project resulted in an increase in the maximum annual output of the bauxite processing area from 1.25 million metric tons to 1.28 million metric tons per year (tpy), as alumina, by operating the precipitators in continuous mode rather than batch mode. LDEQ determined the NO_x emission increases associated with the Yield Improvement Project to be 23.33 tpy.[10]

Public notice was issued on August 19, 2010, for the revision of the PSD permit PSD-LA-684 and for the amendments to and renewal of title V permit 2453-V1. Among other things, the proposed revision of the PSD permit addressed the stack test results and related revisions to the NO_x emission limitations for five emissions units, as well as the permit changes needed to accommodate the 2004 Yield Improvement Project. The proposed title V permit amendments included various changes to processes and emission units at the site and incorporated the revised PSD requirements reflected in the modified PSD permit. The comment period ended on September 23, 2010. Public comments, including comments from the Petitioners, and two different hearing requests were submitted during the comment period. The hearing requests were made by Petitioners and the Sierra Club on August 31, 2010, and September 20, 2010, respectively. Petition at Exhibit A. The EPA Region 6 commented on the title V and PSD permits on October 4, 2010. The LDEQ denied the hearing requests by letter on October 26, 2010.

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[7] LDEQ EDMS Document 1777111, pgs. 8-9.
[8] LDEQ EDMS Document1776754, pg. 10 and pg. 12.
[9] LDEQ EDMS Document 2359827.
[10] LDEQ EDMS Document 7827630, pg. 5.

On December 13, 2010, the LDEQ sent by email to the EPA Region 6 a written response to comments (RTC) to those comments received by the LDEQ during the comment period. The LDEQ responded to comments made by the EPA Region 6 (RTC to EPA) and to those submitted by the citizens, including the Petitioners (RTC to Tulane), in separate documents. The EPA did not object to the proposed title V permit in the 45 day objection period that commenced on December 13, 2010.

On February 15, 2011, the LDEQ made the written RTCs to Tulane and EPA publicly available and concurrently issued the final permits (2011 PSD and renewal title V).[11] Under the statutory timeframe in CAA section 505(b)(2), March 28, 2011, was the deadline to file a petition requesting that the EPA object to the issuance of Noranda's title V renewal permit; the Petitioners timely submitted their Petition on March 28, 2011. EPA has agreed in a settlement agreement with the Petitioners to grant or deny the petition no later than December 15, 2012. 77 *Fed. Reg.* 47381.

The record reflects that the permit applicant and LDEQ considered the 2011 PSD permit to be a revision of a previously issued PSD permit. LDEQ-EDMS Doc. No. 6798676 at 1, 158-163; Permit PSD-684(M1) at 2, 5. LDEQ described the action as "modification" of a permit or a "modified permit," but EPA construes such terminology to have the same meaning as the revision of a previously-issued PSD permit. This order generally uses the term "revision" to describe the 2011 permit transaction in order to more clearly distinguish between actions to amend an existing PSD permit and a modification to a stationary source that must be covered by a PSD permit because it qualifies as a major modification under the applicable PSD regulations. Louisiana's air permitting regulations appear to provide LDEQ with authority to revise a PSD permit under certain circumstances. *See e.g.,* LAC 33:III.529.A; LAC 33:III.523 (establishing procedures for incorporating stack test results into permits). EPA regulations do not contain specific procedures or criteria for revising or modifying previously issued PSD permits. In the 1980s, EPA developed a draft policy on revisions to PSD permits but did not finalize the policy or codify it in regulations. Memorandum from Darryl D. Tyler, EPA Control Programs Development Division, Revised Draft Policy on Permit Modifications and Extensions (July 5, 1985); 40 C.F.R. 124.5(g) (reserving space for PSD permit modifications provisions). Nevertheless, EPA has generally recognized that PSD permitting authorities have inherent authority to revise previously issued permits in some circumstances.

EPA has recognized that previously issued PSD permits may be revised to correct errors in the permit, including when the subsequent operation of a source reveals that a source, despite efforts to comply, is unable to achieve an emission limitation that was considered achievable at the time of permitting. Memorandum from Gary McCutchen, *EPA New Source Review Section, Request for Determination of Best Available Control Technology (BACT) Issues – Ogden Martin Tulsa Municipal Waste Incinerator Facility* (Nov. 19, 1987). EPA has also recognized that permitting authorities can address uncertainties in the performance of emission controls by establishing permit conditions that enable emission limitations in a PSD permit to be amended or optimized

[11] The final 2011 PSD permit, PSD-LA-684-M-1, did in fact revise the maximum allowable emissions rates for the 5 emission units in the BPA Rebuild Project. Compared to the previous PSD permit for these units, PSD-LA-684, the allowable NOx emissions for the 5 units decreased. *Compare* PSD-LA-684 M-1, LDEQ EDMS 7827630 at 11, with Permit PSD-LA-684, LDEQ EDMS 1777111 at 8.

based on performance data obtained after operations of the source begin. *In Re Prairie State Generating Co.*, PSD Appeal No. 05-05, 13 E.A.D. 1, 84-85 (EAB 2006); *In Re AES Puerto Rico, L.P.*, 8 E.A.D. 324, 348-50 (EAB 1999); *In Re Hadson Power 14*, 4 E.A.D. 258 (EAB 1992). EPA has also revised PSD permits in certain instances where a condition in a previously issued PSD permit would restrict a source's ability to make a minor modification that does not itself constitute a major modification that triggers the full scope of PSD permitting requirements. 62 Fed. Reg. 33405 (June 19, 1997).

Revisions of a previously-issued PSD permit usually pertain to actions that are not themselves major modifications invoking the requirement to obtain a PSD permit. Consequently, revisions of previously issued PSD permits are not necessarily required to meet all the requirements that apply in the case of a PSD permit issued to authorize a major modification of an existing stationary source. Given the absence of regulations on the topic, EPA has generally addressed the scope of PSD requirements that must be addressed in a revision of permit on a case-by-case basis considering the particular circumstances. *See e.g. In re: Chehalis Generating Facility,* PSD Appeal No. 01-06, Slip. Op. at 24-29 (EAB August 20, 2011). EPA has identified cases where a permit revision would require a reevaluation of a BACT determination and all other PSD requirements that may be affected by an increase in permitted emissions, such as the protection of air quality standards and PSD increments. *See e.g.*, Ogden at 2-3. EPA has also advised permitting authorities to provide an opportunity for public comment on permit revisions that involve more than administrative changes. *Id.* In general, a revised PSD permit should be supported by a record showing that the permit as revised meets all applicable PSD permitting requirements in the same manner as the previously issued permit.

ISSUES RAISED BY THE PETITIONER

Claim I.: The Title V Permit Fails to Incorporate Applicable PSD Requirements.

Claim I. of the Petition includes four subparts (A-D) alleging that the 2011 title V permit fails to incorporate PSD requirements that the Petitioners consider applicable to the 2011 PSD permit revision. Each is addressed in turn below.

Claim I.A.: LDEQ Issued the Permits in Violation of the PSD Public Participation Requirements

Claim I.A. in the Petition claims that EPA should object to the 2011 title V permit because of alleged violations of PSD public participation requirements. Petition at 6. In support of this claim, the Petitioners assert that a title V permit must assure compliance with applicable requirements of the Act, including requirements provided for in the applicable state implementation plan. *Id.* (citing 42 U.S.C. § 7661c(a); LAC 33:III.507.A.3; and 40 C.F.R. § 70.2). The Petitioners also cite section 160 of the CAA, 42 U.S.C. § 160(5), claiming that one of the stated purposes of PSD is to ensure that decisions to allow increased air pollution in PSD areas are made only after an adequate opportunity for informed public participation in the decision-making process. *Id.* Petitioners further state that EPA must object to the title V permit because it fails to incorporate emission limits and standards from a valid PSD review. *Id.* More specifically, the Petitioners allege that LDEQ issued the permit in violation of two PSD public

participation requirements, a provision relating to an opportunity for a public hearing and a provision relating to the opportunity for public comment on the preliminary determination summary. Accordingly, this claim is divided into two parts, Claim I.A.i. and I.A.ii., as follows.

Claim No. I.A.i: LDEQ's Denial of the Request for a Public Hearing Violated PSD Public Participation Requirements in the Louisiana SIP.

Petitioners' Claims. Quoting LAC 33:III.509.Q.2.e., the Petitioners claim the Louisiana SIP regulations implementing PSD require LDEQ to "provide opportunity for a public hearing for interested persons to appear and submit written or oral comments on the air quality impact of the source, alternatives to it, the control technology required, and other appropriate considerations." Petition at 4. The Petitioners state that they requested public hearing on the 2011 PSD and Title V renewal permits, but LDEQ denied the request, thereby violating the LAC 33:III.509.Q.2.e. *Id.*

EPA Response. The Petition is denied on this issue because LDEQ provided an opportunity to request a public hearing and the Petitioners have not demonstrated that LDEQ lacked the discretion to deny such a request under the circumstances. Furthermore, LDEQ provided an opportunity for petitioners to submit written comments on the proposed 2011 PSD permit revisions, and Petitioners submitted written comments. Petitioners have not demonstrated that they lacked an adequate opportunity for informed public participation in the LDEQ's decision-making process for the 2011 PSD permit revision.

LDEQ's public notice on the 2011 PSD permit revision stated that "a public hearing will be held" if LDEQ finds "a significant degree of public interest." Public Notice for Proposed Part 70 Air Operating Renewal/Modification and PSD Modification Permits, LDEQ-EDMS Doc. No. 7295712, at 4 (Aug. 23, 2010). This is similar to the standard that EPA applies to determine whether to convene an oral public hearing on PSD permits issued by EPA. Section 124.12 of EPA's regulations provides that an EPA Regional Administrator shall hold a public hearing "whenever he or she finds, on the basis of requests, a significant degree of public interest in a draft permit." 40 C.F.R. 124.12(a). This regulation also says that a Regional Administrator "may hold a public hearing at his or her discretion" including whenever such a hearing might clarify one or more issues involved in the permit decision. 40 C.F.R. 124.12(b). Based on this provision, the EPA has recognized some discretion in the permitting authority to not hold a public hearing for every PSD permit proceeding. *See In the Matter of Spokane Regional Waste-To-Energy Project*, 3 E.A.D 68, 1990 EPA App. LEXIS 91, *3-*4 (Adm'r, January 2, 1990) (affirming decision to not hold a formal public hearing where permitting authority determined that the scope of the PSD permit revision was narrow and it found no significant public interest in that revision); *see also In Re Russell City Energy Center*, 14 E.A.D. __, Slip. Op. at 15, n. 13 (July 29, 2008) (noting that § 124. 12(a) directs a permit issuer to hold a hearing only when it "finds, on the basis of requests, a significant degree of public interest in a draft permit(s)" and further noting that the decision to conduct a public hearing is "largely discretionary").

While section 124.12 is not directly applicable in this circumstance, the Petitioners have not demonstrated that LDEQ lacked the discretion to apply an analogous standard to determine

whether to convene an oral public hearing in additional to providing an opportunity to submit written comments.

The Louisiana PSD rule that the Petitioners cite requires that LDEQ "provide opportunity for a public hearing …to appear and submit written or oral comments." Moreover, Louisiana's SIP states that "The administrative authority may, upon request of any interested person made during the comment period, hold a public hearing at which persons may appear and submit written or oral comments on the air quality impact of the source, alternatives to it, the control technology required, and any other appropriate considerations."[12] While this provision states that LDEQ "may" hold a public hearing if one is requested, it does not appear to require a public hearing to be held in every instance. LDEQ provided an opportunity for the Petitioners to demonstrate that an oral public hearing should be conducted. Petitioners have not demonstrated that either of these provisions precludes LDEQ from providing such an opportunity but exercising discretion to determine that it was not necessary in this instance to hold an oral public hearing. As discussed above and in the sections that follow, the 2011 PSD permit was a revision of a previously issued PSD permit and not an authorization for a major modification of the source. Furthermore, based on the stack tests, the maximum allowable NO_x emissions from the five emissions units tested decreased, while increases in NO_x emissions due to the Yield Improvement Project were only 23.33 tpy NO_x.[13] The Petitioners have not demonstrated that it was unreasonable under the circumstances for LDEQ to decline the request to hold an oral public hearing.

The Petitioners have also not demonstrated that the Clean Air Act required LDEQ to hold an oral hearing under the circumstances. Although the Petitioners cite CAA §160(5) later in this part of the Petition, they do not appear to argue that section 160(5) requires a public hearing for PSD permits. Indeed, section 160(5) provides that one of the purposes of the PSD program is to "to assure that any decision to permit increased air pollution in any area to which this section applies is made only after careful evaluation of all the consequences of such a decision and after adequate procedural opportunities for informed public participation in the decision-making process" but does not directly mention a public hearing. The Petitioners have not demonstrated that a written comment opportunity was not adequate in this case to assure informed public participation in the decision-making process.

Finally, consistent with the discussion in Claim I.A.ii. below, relating to meaningful public participation in the permitting process, it bears noting that the Petitioners have not provided any explanation of how the denial of their hearing request deprived them of a meaningful opportunity for participation in the permit proceedings, including how the alleged flaw resulted in, or may have resulted in, a deficiency in the contents of the permits. *See In the Matter of Cash Creek Generation, LLC*, Petition No. IV-2010-4 (Order on Petition) (June 22, 2012) at 9 (discussing application of concept of meaningful public participation under title V).[14]

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[12] Section 90.17(5) (later LAC 33:III.509.Q.5) of the Louisiana Air Quality Regulations, as approved by 52 *Fed Reg.* 13671 on April 24, 1987. *See* 40 C.F.R. § 52.986..

[13] As indicated in the Statement of Basis for the 2011 title V permit, total NOx emissions for Noranda decreased 2935 tpy compared to those in the 2003 title V permit. See LDEQ EDMS Document 6798676, pg. 133.

[14] We do not interpret the Petition to raise a claim that any provision under title V requires a public hearing in this

Claim No. I.A.ii.: LDEQ Failed to Provide an Opportunity for Public Comment on the PSD Preliminary Determination on Which LDEQ Based its Decision.

Petitioners' Claims. The Petitioners claim that LDEQ violated Louisiana SIP requirements in LAC 33:III.509.Q.2.a-c by failing to provide opportunity for public comment on the information upon which LDEQ based its final decision for the 2011 PSD permit modification, pointing specifically to the preliminary determination on PSD applicability for the stack test incorporation and the Yield Improvement Project. Petition at 4-5. The Petitioners claim that the information provided in the public comment period was "entirely different" from the information made available with the final PSD permit. *Id.* at 5. Specifically, the Petitioners claim that the Draft Preliminary Determination Summary (draft PDS) included in the public notice for the draft 2010 PSD permitting action was different because it indicated that the Projected Actual Emissions (PAE) were based on the stack tests as well as the Yield Improvement Project, but LDEQ stated in its RTC to EPA and RTC to Tulane that emissions from the Yield Improvement Project were not included in the emissions estimates at public comment. *Id.* The Petitioners further state that, for the final permit, LDEQ claimed that it was a mistake to provide PAE for the stack tests. *Id.* The Petitioners further claim that the draft PSD showed a PAE increase of 549.91 tpy of NO_x and a net emissions increase of 1349.90 tpy for the stack test emissions changes and Yield Improvement Project, but LDEQ inserted new figures in the Final Preliminary Determination Summary (final PDS) that accompanied the final PSD permit without providing an opportunity to comment on the new figures. *Id.* at 5-6.

Further, the Petitioners claim LDEQ failed to give the public an opportunity to comment on the emission estimates for the Yield Improvement Project, *id.* at 6, or on its conclusion that the Yield Improvement Project does not exceed PSD thresholds, *id.* at 9. The Petitioners further claim that LDEQ failed to provide information about certain increases and decreases in NO_x emissions, as well as the overall decrease in permitted NO_x emissions, from the five emission units for which emissions limits were changed based on the stack tests during the public comment period. *Id.* at 7.

EPA Response. The Petition is denied on this issue because the Petitioners have not demonstrated that LDEQ failed to provide an adequate opportunity for public comment on the information upon which LDEQ based its final decision for the 2011 PSD permit revision.

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instance. However, to the extent that the Petitioners intend to claim that denial of the public hearing requests violated a procedural requirement under title V, the Petitioners have not met their burden to demonstrate that the 2011 title V permit is not in compliance with the Act, since they have not claimed that a hearing is required by any procedural provision under title V nor cited any provision of title V of the Act, part 70, or LDEQ's approved title V program that addresses public hearings. Accordingly, the Petitioners have not demonstrated that LDEQ's denial of their request for a public hearing was inconsistent with any applicable PSD requirement or otherwise inconsistent with title V. Moreover, in the title V context, EPA has explained that a permitting authority has discretion to deny a public hearing: "[n]either the Act nor EPA's implementing regulations require a permitting authority to hold a hearing when one is requested. Rather, the Act and applicable regulations require only that States offer an opportunity for a public hearing." *In the Matter of Exxonmobil Operating Permits*, Petition No. VI-2004-01 (Order on Petition) (June 29, 2005), at 12 (denying petition issue where petitioners failed to demonstrate that this discretion was not reasonably exercised). See also CAA § 502(b)(6); 40 C.F.R. § 70.7(h).

As an initial matter, although the Petitioners claim that LDEQ failed to provide an opportunity for public comment on the preliminary determination for PSD applicability for the stack tests and Yield Improvement Project, Petitioner acknowledges that a draft preliminary determination for the 2011 PSD permit revision was published for public comment. *See* Petition at 4; *see generally* Draft PDS. Thus, Petitioners' claim focuses on changes to the draft PDS after public notice but before the final PDS was issued, claiming that the public had no opportunity to comment on the PDS upon which LDEQ based its final decision.

EPA's PSD regulations address public notice requirements in 40 C.F.R. §§ 51.166, 52.21(q), and 124.10. EPA has observed that its PSD regulations require that the public notice on a permit must provide a meaningful opportunity for public comment. 43 *Fed. Reg.* 26403 (June 19, 1978) (final rule promulgating changes to EPA's PSD regulations under § 52.21); *see also In re City of Palmdale*, 15 E.A.D. __, Slip Op. at 16-17 (EAB 2012) (applying concept of meaningful opportunity to comment standard to a PSD public participation claim); *In Re Hadson Power 14*, 4 E.A.D. 258, 272 (EAB 1992) ("The Clean Air Act requires meaningful public participation in the PSD permitting process."). Moreover, EPA has also recognized based on judicial precedent that it would be "'antithetical to the whole concept of notice and comment'" if a final permit was required to be identical to the corresponding draft permit; rather, it is to be expected that final permit decisions will be somewhat different and improved from those originally proposed. *In re City of Palmdale*, 15 E.A.D. __, Slip Op. at 21 (EAB 2012) (quoting *In re Natural Res. Def. Council v. EPA*, 279 F.3d 1180, 1186 (9th Cir. 2002)). Thus, in this context, EPA is evaluating the Petitioners' claims regarding the allegedly deficient public notice on PSD issues in this light. To show an error in the public notice on a PSD permit incorporated into a title V permit for purposes of a title V petition, the Petitioner must demonstrate that an alleged error or omission in the public notice deprived the public of an opportunity to meaningfully comment on the applicable PSD requirements. By analogy, when a title V petition seeks an objection based on the unavailability of information during the public comment period in violation of title V's public participation requirements, EPA has previously stated that the petitioner must demonstrate that the unavailability of the information deprived the public of the opportunity to meaningfully participate during the permitting process and that EPA would generally look to whether the petitioner had demonstrated that the alleged flaws resulted in or may have resulted in a deficiency in the permit's content. *See, e.g.,* Cash Creek Order at 9. EPA further noted that where a permitting authority has explained its decision not to make information available during the public comment period, the petitioner bears the burden of demonstrating that the explanation is unreasonable. *Id.*

The Petitioners have not demonstrated that alleged deficiencies in the public notice were such that they deprived the public of a meaningful opportunity to comment on the 2011 PSD permit revision. Petitioners' central allegation in this claim appears to be that the PDS was not clear enough to apprise the Petitioners that the adjustment to the NO_x limits based on the stack test results and the Yield Improvement Project did not qualify individually or collectively as major modifications that would have been required to meet particular PSD permitting requirements.

Although the final permitting record articulated LDEQ's rationale for the 2011 PSD permit revision more clearly, the draft PDS and supporting record were not insufficient to provide the Petitioners with a meaningful opportunity to comment on the extent of PSD requirements

applicable to the increases in emissions proposed to be authorized in the 2011 PSD permit. The PSD permit application stated that the applicant sought a revision of the previously issued PSD permit and that the increases in emissions covered by the application were not major modifications.

For the PSD permit revision, the public notice package referenced at least 779 pages of publicly available background documents. *See* LDEQ-EDMS Doc. No. 6798676. This record included the relevant, underlying information on which LDEQ relied in making its final determination. The PSD application materials were also included as part of the public notice package, which included emissions estimates. LDEQ-EDMS Doc. No. 6798676. In light of the availability of the underlying information, the Petitioners have not demonstrated they lacked a meaningful opportunity to comment on the figures that were revised to better match the accessible underlying information.

To support their claim, the Petitioners point to the fact that at public notice LDEQ indicated that the PAE for the project were based on both the stack tests and Yield Improvement Project. However, the draft PDS also stated that the emissions increases authorized in the proposed revision of the 2003 PSD permit are derived from two sources: the stack test results and a new Yield Improvement Project. Draft PDS at 9. It further stated that the Yield Improvement Project was a minor change of the sort that did not generally require modeling, and that the stack test results would not change the modeling results from the previous permit. *Id.* Thus, the draft PDS reflected that the permit revisions based on the Yield Improvement Project and the stack tests were distinct. As a result, the Petitioners' claim that they lacked meaningful opportunity to comment on LDEQ's decision to look at these separately is undermined by the aforementioned information in the Draft PDS.

The Petitioners also claim that they did not have an opportunity to comment on information related to the stack tests in the final PDS. However, the results of the stack tests were publicly available at the time of public notice, and the date of the stack tests was listed in the draft PDS. Draft PDS at 3 (for stack test results see EDMS Doc. Nos. 2120413 and 2452349). Information in the permit record, including materials from Noranda, also indicated that Noranda was simply seeking to revise the permitted NO_x emissions in its early PSD permit based on the stack tests and that this would lead to an overall decrease in permitted NO_x emissions over the relevant emissions units. *See* LDEQ-EDMS Doc. No. 6798676 at 158-163. In addition, the permitted NO_x emissions reflected in the Draft PDS were lower than the permitted emissions in the original PSD permit. *Compare* Draft PDS at 11 with Permit PSD-LA-684 at 7. These emissions tables also reflect increased NO_x emissions at the kilns, but decreased NO_x emissions at the turbines and boilers. *See* LDEQ-EDMS Doc. No. 6798676 at 158-163; *compare* Draft PDS at 11 with Permit PSD-LA-684 at 7. This information does not indicate that PAE would be applied to the stack test data. Moreover, the statement of basis for the PSD section of draft 2010 title V permit stated that "the performance test results reflect that the combined NO_x from the three kilns increased by 549.91", but that net NO_x emissions decreased. *See* LDEQ-EDMS Doc. No. 6798676 at 139. Overall, this information is consistent with LDEQ's analysis and explanation of the permit revisions based on the stack test data in the final PDS. The Petitioners have thus failed to demonstrate why the information available in the record was insufficient to allow for meaningful comment regarding the stack test results.

The Petitioners also claim that LDEQ did not provide an opportunity to comment on the revised figures for the Yield Improvement Project or its conclusion that emissions from the Yield Improvement Project did not exceed the PSD significance threshold. However, the PSD application indicated that the NO_x emission increase from the Yield Improvement Project would be 23.35 tpy, which is below the PSD significance threshold, and listed emissions increases for other pollutants all of which were also below the significance level. LDEQ-EDMS Doc. No. 6798676 at 559. These figures are almost identical to those reflected in the final PDS. *See* Final PDS at 3, 6. Petitioners failed to demonstrate why the information available in the record was insufficient to allow for meaningful comment regarding the NO_x emissions for the Yield Improvement Project.

In addition, in its response to comments, LDEQ further clarified the two subjects that were being addressed in the PSD permit revision and explained that it was correcting certain representations of its analysis of PAE for the permit revision because the Yield Improvement Project was a separate and distinct project that should have been represented independently and that the PAE test was not adopted as a matter of state at the time of the BPA Project. RTC to Tulane at 3; RTC to EPA at 4. The Petitioners have not demonstrated that this explanation for the changes in the PDS was unreasonable.

Furthermore, the Petitioners did in fact provide written comments concerning the draft PDS, which contained a summary of the underlying information upon which LDEQ relied in issuing the final PSD permit. Petitioners' comments during the public comment period addressed PSD requirements, including BACT and the air quality impacts analysis. *See* Comments submitted on behalf of the Petitioners on the Proposed Part 70 Air Operating Permit and Prevention of Significant Deterioration Permit for Noranda Alumina, LLC, AI 1388 (Sept. 23, 2010) at 1-3. The Petitioners have not argued that they would have made any other comments had the information and analysis in the final PDS been made available during the public comment period. Nor have they demonstrated that the alleged flaws may have resulted in a deficiency in the permit content. Accordingly, the Petitioners have not demonstrated that failure to provide the referenced information deprived the public of a meaningful opportunity for comment on the PSD permit revisions.

Claim I.B.: Although the 2003 Stack Tests Show Noranda is a Major Source of NO_x Emissions, LDEQ Failed to Analyze the Emissions from the 2003 Stack Tests in the Final PSD Permit, PSD-LA-684 (M-1), and the Title V Permit Fails to Include Applicable PSD Requirements for NO_x.

Petitioners' Claims. The Petitioners claim[15] that LDEQ must analyze the NO_x emissions increases from the stack tests using PAE, as it did in the draft PDS released for comment as part of the package for the draft 2010 PSD permit, PSD-LA-684 (M-1), claiming that LDEQ failed to support its final decision. Petition at 7. The Petitioners state that, based on that draft PDS, NO_x emissions increases associated with 2003 stack tests were 549.91 tpy, exceeding the PSD threshold. *Id*. The Petitioners also state that "Noranda was unable to net out with a net increase

[15] To the extent that Claim I.B. raises a claim related to alleged deficiencies in the public participation process, that claim is addressed in EPA's response to Claim I.A. above.

of NO_x emissions at 1349.90 tpy." *Id.*

The Petitioners, therefore, claim that Noranda should have been subjected to PSD review as "new construction," including a BACT analysis. *Id.* In support of their claim that a BACT analysis was required, the Petitioners cite to a letter from J. Luehrs, EPA Region 6 (Luehrs Letter), in particular the statement in the letter that, "The reviewing authority should treat the press vents as new construction, and process the permit accordingly. These emissions should be treated as new emissions and permitted under current BACT." [16] *Id.* The Petitioners conclude that because of this "failed PSD review for the stack emissions, the Title V Permit fails to include applicable PSD requirements." *Id.* at 8.

The Petitioners additionally claim that "Noranda cannot obtain a synthetic minor source permit based on low/inaccurate emissions estimate, and then ask LDEQ to update its title V permit to include the higher emissions rate without meeting PSD requirements for those emission sources that Noranda discovered do in fact trigger PSD." Petition at 8.

The Petitioners also claim that "upon discovering the plant's true NO_x emissions rate, LDEQ should have reopened and revised the PSD and title V permits it issued in 2003." *Id.* The Petitioners assert that the NO_x emissions estimate was "grossly inaccurate" due to use of the wrong emissions factor. *Id.* Citing to LAC III.529A, the Petitioners state that "the regulations provide that LDEQ may reopen and revise any Title V or PSD permit if any person demonstrates that the permit contains a material mistake." *Id.* The Petitioners, therefore, claim that LDEQ must reopen and revise the 2003 PSD and title V permits to address all PSD requirements, including BACT. *Id.*

EPA Response. The Petition is denied on this issue, as the Petitioners have not demonstrated that LDEQ failed to apply any PSD permitting requirements applicable as a result of the NO_x stack test results. As LDEQ indicated in the final PDS, the PSD permit issued in 2011 (PSD-LA-684 (M-1)) revises the NO_x limitations for five emissions units based on the results of stack tests conducted after the initial PSD permit (PSD-LA-684) was issued.[17] Thus, as the Petitioners contend it should have, LDEQ did in fact revise the 2003 PSD permit for the BPA Rebuild Project in order to correct the emissions rates based on the stack test results. The Petitioners have not demonstrated that the correction of allowable emissions rates in the PSD permit based on stack tests was itself a major modification that triggered additional applicable PSD requirements that were not included in the 2011 title V permit or that LDEQ otherwise erred in revising the 2003 PSD permit (PSD-LA-684) to reflect more accurate NO_x emission rates for several emission units.

As noted above, the 2003 BPA Project did previously undergo PSD review as a major modification, and the resulting PSD permit provided for certain stack tests and that an application to modify the PSD permit should be made if emissions proved to be above the allowable levels. *See* Permit PSD-LA-684, Specific Condition 2 and General Condition 1. As

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[16] Letter from Jole C. Luehrs, Chief, Air Permits Section, U.S. EPA Region 6, to Jeffrey A. Saitas, P.E., Deputy Director, Office of Air Quality, Texas Natural Resource Conservation Commission, concerning International Paper, Nacogdoches, TX., April 11, 1996.

[17] Final PDS at 5.

LDEQ explained in the final PDS for the instant PSD permit revision, while the modified PSD permit revised NO_x emission limitations for five emission units, total permitted emissions from those units decreased substantially, so that the air quality impacts analysis did not need to be repeated to support the revised PSD permit issued in 2011. Final PDS at 5. LDEQ also explained that because a BACT determination was not required for the initial PSD permit (PSD-LA-684), there was no need to reanalyze any BACT determination based on the stack test results. *Id.* In its response to comments, LDEQ also explained its rationale for revising the NO_x emissions analysis in the final PDS, including why it no longer used PAE. RTC to EPA at 4; RTC to Tulane at 3. As described below, the Petitioners have not demonstrated that LDEQ's explanation in this regard was unreasonable or deficient.

The Petitioners have also failed to demonstrate that the increase in emissions at some units identified in the stack test was a distinct major modification that triggered the PSD BACT requirement for NO_x separate and apart from the 2003 BPA Rebuild project that LDEQ previously permitted as a major modification. A major modification is defined as "any physical change or change in the method of operation" that results in certain emissions increases. *See* LAC 33:III.509(B); 40 C.F.R. §§ 51.166(b)(2). *See also In the Matter of Georgia Pacific Consumer Products LP Plant*, Petition No. V-2011-1 (Order on Petition) (July 23, 2012) at 7 (*Georgia Pacific Order*). The Petitioners do not provide any discussion as to whether the adjustment to the NO_x limits based on the stack tests constitutes a physical change or change in the method of operation of any of the relevant emissions units. Furthermore, the Petitioners also overlook the fact that the original PSD permits appear to have contemplated and authorized such permit revisions. Thus, the Petitioners have not demonstrated that additional PSD requirements independently applied to the adjustment to the NO_x limits based on the stack tests, so the Petitioners' assertions regarding how the emissions from the stack tests should have been analyzed in the record and regarding deficiencies of the 2011 title V permit in failing to include PSD requirements are without merit.

In addition, the Luehrs Letter does not support the Petitioners' claim that the adjustment to the NO_x limits based on the stack tests was the result of a major modification that invoked additional PSD review. Unlike Noranda, where a PSD permit for the 2003 BPA Project had previously been issued, the source that is the subject of the cited letter had never obtained the necessary PSD permits to modify the emission units in question. *See* Luehrs Letter at 1 (noting that the facility had recently discovered certain emissions from the process vent, which had not been permitted in prior permit action).

The Petitioners also have not demonstrated that Noranda obtained a synthetic minor source permit based on low/inaccurate emissions estimates. Rather, as noted above, the BPA Project went through PSD review for NO_x as part of the 2003 PSD permitting actions for Permit PSD-LA-684. Then, in the 2011 PSD permit, LDEQ utilized more accurate information to correct the emissions limitations initially established in the 2003 PSD permit for certain emissions units. The Petitioners' claim that the 2003 PSD and title V permits contain a material mistake that requires reopening and revising the permits is puzzling. LDEQ did in fact revise both permits to correct an error in the NO_x emissions limitations for specific emissions units after obtaining more accurate information from the stack tests results. The Petitioners have not shown any error in the permit revisions that have already been made based on the stack test results.

In addition, EPA notes that the issues related to reopening and revising the 2003 PSD and title V permits under L.A.C. III.529.A, were not raised with reasonable specificity during the public comment period, and the Petitioners have not demonstrated it was impracticable to raise these issues during the public comment period or that the grounds for it arose after the public comment period closed. Nor is there any reason to believe that the grounds for the objection arose after the public comment period ended or was impracticable to rise earlier, as the claim relates to stack test data from 2003. *See* 42 U.S.C. § 7661d(b)(2); 40 C.F.R. § 70.8(d).

Claim I.C.: LDEQ Failed to Support its Conclusion that Emissions from the Yield Improvement Project Did Not Trigger PSD Review for NO_x.

Petitioners' Claims. The Petitioners contend that the permit record for the Yield Improvement Project does not support LDEQ's conclusion that the project was not a major modification for NO_x emissions.[18] Petition at 9-11. Specifically, the Petitioners point to elements of the actual-to-projected-actual PSD applicability test relied upon by LDEQ in reaching its conclusion that PSD requirements did not apply to the Yield Improvement Project. The Petitioners cite the 2005-2006 average production figure of 1.173 million metric tpy used to determine baseline actual emissions and claim that LDEQ provided no support for this figure. Petition at 9. The Petitioners also contend that LDEQ's assessment of projected actual emissions was flawed because: (1) LDEQ failed to provide information on emissions that it excluded in determining the emissions increase for the Yield Improvement Project; and (2) Noranda had excluded emissions in excess of the 1.25 million metric tpy BPA production limit that the source was not legally capable of accommodating. Petition at 10-11.

EPA Response. The Petition is denied on this issue for the reasons provided below. The Petitioners have not demonstrated any deficiency in the permit record supporting LDEQ's conclusion that the Yield Improvement Project was not a major modification. As a result, the Petitioners have not demonstrated that any analysis or documentation required by PSD regulations was missing from the record.

As to the baseline production figure, the Petitioners contend that LDEQ did not support the average production figure of 1.173 million metric tpy[19] used to determine baseline actual emissions, but the Petitioners have not provided any evidence that the production rate is incorrect, nor have they provided any citations or reasoning as to why the production rate was determined or documented in a manner inconsistent with applicable regulatory or statutory requirements. In addition, the Petitioners have not pointed to any specific information that would have been required to support this production figure but was missing from the permit record.

With regard to the exclusion of emissions in determining whether the Yield Improvement Project was a major modification, the Petitioners have not demonstrated its claim that any emissions that the affected units could not legally have accommodated in the period selected to determine the

[18] To the extent that Claim I.C. raises a claim related to alleged deficiencies in the public participation process, that claim is addressed in EPA's response to Claim I.A. above.

[19] See LDEQ-EDMS Document 7827638, pg. 2, which states that "Baseline actual emissions are based on 2005 and 2006 data, during which the BPA produced an average of 1.173 million metric tpy (as alumina)."

baseline actual emissions were excluded in determining project emissions increases.

The Petitioners are correct that Permit PSD-LA-648 established the 1.25 million metric tpy BPA production limit. However, the Petitioners' claim that emissions associated with a production rate above that limit were excluded from PAE is not supported by the permit record. In its response to EPA comments regarding excludable emissions, LDEQ gave the following information on the emissions that were excluded: "The BPA can generate 1.25 million metric tpy (as alumina) under its current design and operational status. There are no existing bottlenecks or other limitations (e.g., due to the deterioration of equipment) unrelated to product demand that could prevent the process area from achieving this rate. Thus, any emissions increases attributed to the difference between the observed throughput in 2005 and 2006 and the area's capacity prior to the Yield Improvement Project were discounted." RTC to EPA at 3. Contrary to Petitioners' claim, it seems clear from this explanation that in LDEQ's analysis, emissions associated with production between the baseline actual average production rate and up to the limit on production capacity of 1.25 million metric tpy were excluded. This statement does not suggest, as the Petitioners claim, that emissions above the applicable production limit of 1.25 million metric tpy were excluded. The Petitioners have not provided any additional basis for their claim that emissions that the source was not legally capable of accommodating were excluded in determining the emissions increase resulting from the Yield Improvement Project. Furthermore, the Petitioners do not contend that LDEQ lacks authority to amend a previously issued PSD permit to accommodate a minor modification or that the 2011 PSD permit failed to satisfy any applicable requirement with respect to the revision of a prior PSD permit in this particular circumstance.

Claim I.D.: LDEQ Failed to Apply BACT to NO_x Emissions from the Yield Improvement Project.

Petitioners' Claims. The Petitioners contend that LDEQ's conclusion that BACT does not apply to NO_x emissions from the 2004 Yield Improvement Project is incorrect because the authorized increase in the BPA maximum production rate from 1.25 to 1.28 million metric tpy constitutes a "change in the method of operation" under Louisiana's and EPA's PSD rules. Petition at 11-13 (citing LAC 33:III.509(B); 40 C.F.R. § 51.166; 40 C.F.R. §52.21; and a Memorandum filed by the United States in Support of its Fourth Motion for Summary Judgment in *U.S. v. East Kentucky Power Cooperative*, Case No. 04-34 KSF). The Petitioners state that because permit PSD-LA-684, issued April 22, 2003, and the 2003 title V permit 2453-VI contain a federally enforceable production limit restricting BPA throughput to 1.25 million tpy, the production increase from 1.25 to 1.28 million metric tpy authorized by permit PSD-LA-684 (M-1) constitutes, by definition, a "physical change or a change in the method of operation" per the "major modification" provisions in LAC 33.III.509.B and 40 CFR §§ 52.21(b)(2)(i) and (b)(2)(iii)(f). *Id.*

EPA Response. The Petition is denied on this issue for the reasons provided below. BACT is a PSD requirement that applies to construction of a new source or a major modification of an existing source. LAC 33:III.509.J. Determining whether a source is proposing a "major modification" is a two-step process. *See Georgia Pacific Order* at 7. First, there must be a physical or a change in the method of operation from the project. *Id.* Second, there must be the

requisite type of "emissions increase" that results from that project based upon the applicable definitions. *Id.* For PSD and NSR purposes, a "major modification" is defined as any physical change in or change in the method of operation of a major stationary source that would result in a "significant emissions increase" of a regulated NSR pollutant and a "significant net emissions increase" of that pollutant from the major stationary source. *See id.* (citing 40 C.F.R. §§ 51.166(b)(2); 52.21(b)(2)(i)); *see also* LAC 33:III.509(B). Thus, if a project is a physical change or a change in the method of operation, the next step in determining whether it is a major modification, and accordingly whether BACT applies, is to determine whether there was the necessary emissions increase under the applicable regulations. *See Georgia Pacific Order* at 8. A major modification shall apply BACT for each regulated NSR pollutant for which a significant net emissions increase results at the source, and this requirement applies to each proposed emissions unit at which a net emissions increase in the pollutant would occur as a result of a physical change or change in the method of operation in the unit. LAC 33.III.509.J(3); 40 C.F.R. §§ 51.166(j)(3).

The Petitioners' arguments only address the first step of PSD applicability for a major modification – whether the project is a physical change or change in the method of operation. However, the Petitioners have not demonstrated that the Yield Improvement Project resulted in a significant emissions increase and significant net emission increase in NO_x emissions from the source, nor have they addressed whether BACT would apply to any affected emissions unit. The Petitioners argue that the Yield Improvement Project is a "physical change or a change in the method of operation," but that is only one part of the test to determine whether PSD applies to a project at all, and, if so, whether BACT applies to any affected emissions units. In the final PDS and RTC, LDEQ documented that the Yield Improvement Project was a separate project that did constitute a "physical change or change in the method of operation." Final PDS at 6. RTC to Tulane at 3-4. However, in those same documents and in the draft PDS and accompanying materials that were made available for public review, LDEQ also documented that the emissions increases associated with the Yield Improvement Project were below respective significant emission rates for NO_x. Final PDS at 6. RTC to Tulane at 3-4. *See also* LDEQ-EDMS Doc. No. 6798676 at 556-560. In particular, the NO_x emissions increase associated with the Yield Improvement Project was calculated as 23.33 tpy, which is below the significant emission rate for NO_x of 40 tpy. Final PDS at 6. RTC to Tulane at 3-4.

Accordingly, the permit record supports LDEQ's determination that the Yield Improvement Project would not result in a significant emissions increase in NO_x, and the Petitioners have not demonstrated otherwise or explained why LDAQ's analysis was unreasonable or deficient.[20] Accordingly, the Petitioners have not demonstrated that there was any applicable requirement to apply BACT for NO_x emissions that was not met for any emissions unit, regardless of whether such units were undergoing a "physical change or change in the method of operation" as part of the Yield Improvement Project.

Claim II.: Permit Fails to Include $PM_{2.5}$ Emission Limits.

Petitioners' Claim. The Petitioners contend that LDEQ failed to include limits for $PM_{2.5}$ emissions in the 2011 title V permit. Petition at 13. The Petitioners contend that EPA must

[20] As there was no significant emissions increase in NOx, a netting analysis was not required.

object to the permit because neither the permit nor the application identify Noranda as a source of direct $PM_{2.5}$ emissions or as a $PM_{2.5}$ source by virtue of emissions of its precursor NO_x. *Id.* Because LDEQ "conservatively assumed" that $PM_{2.5}$ equals PM_{10} (and concluded that because PM_{10} is below the significance threshold, then $PM_{2.5}$ must also be below the significance threshold), the Petitioners contend that LDEQ was required to provide a case-specific demonstration that its use of PM_{10} as a surrogate for $PM_{2.5}$ is reasonable under the facts and circumstances of this permit. *Id.* The Petitioners continue by explaining their interpretation of EPA's history and policy with respect to using PM_{10} as a surrogate for $PM_{2.5}$. *Id.* at 14-15. The Petitioners conclude that EPA must object to the 2011 title V permit for failure to include $PM_{2.5}$ limits and failure to provide an appropriate analysis on the pollutant. *Id.* at 15.

EPA Response. The Petition is denied on this issue for the reasons provided below. The Petitioners have not demonstrated that LDEQ failed to provide an adequate $PM_{2.5}$ analysis or that any PSD requirements were applicable to PM2.5 emissions increases from the Yield Improvement Project.

First, in evaluating emissions of direct $PM_{2.5}$, LDEQ explained that it did not rely on a surrogacy approach. RTC to Tulane at 6-7. Rather, the emissions increases of $PM_{2.5}$ were considered in LDEQ's review of the Yield Improvement Project. In evaluating whether the project resulted in a significant increase in $PM_{2.5}$ emissions, LDEQ conservatively assumed that all PM_{10} emissions increases resulting from the Yield Improvement Project at Noranda were also $PM_{2.5}$ emissions. *Id.* at 7.

As discussed above, to qualify as a major modification, a project must result in a "significant emissions increase" of a regulated NSR pollutant and a "significant net emissions increase" of that pollutant from the major stationary source. To the extent a project qualifies as a major modification, an application to authorize that construction in a PSD permit must contain an analysis of air quality in the area that the major modification would affect for each pollutant for which the modification would result in a significant net emissions increase. LAC 33:III.509.M; 40 CFR 51.166(m)(1)(i)(b). Such an applicant must also apply the BACT requirements for each regulated NSR pollutant for which the modification would result in a significant net emissions increase at the source. LAC 33:III.509.J; 40 CFR 51.166(j)(3). Accordingly, if either the emissions increase or the net emissions increase of $PM_{2.5}$ projected to result from the Yield Improvement Project is not significant, then the project is not a major modification for PM2.5 and no air quality or BACT analyses are required.

The projected PM_{10} increases associated with the Yield Improvement Project are 1.78 tpy. RTC to Tulane at 3. As noted in LDEQ's response to comment, LDEQ applied a significant emissions rate (SER) for $PM_{2.5}$ of 10 tpy of direct $PM_{2.5}$ emissions. *Id.* at 7. This SER is consistent with EPA's regulations. 40 C.F.R. 51.166(b)(23). Conservatively assuming that that the $PM_{2.5}$ increases associated with the Yield Improvement Project are equal to the PM_{10} increases at 1.78 tpy, as LDEQ did, the maximum possible emissions increase of $PM_{2.5}$ from the project was necessarily below the SER of 10 tpy for $PM_{2.5}$ applied by LDEQ. *See* RTC to Tulane at 7. Accordingly, the Petitioners have not demonstrated a flaw in LDEQ's assessment that the emissions increase of $PM_{2.5}$ resulting from the Yield Improvement Project was not significant. The Petitioners thus have not demonstrated that the project was a major modification for PM2.5,

nor that LDEQ and Noranda were required to conduct any further air quality analysis or apply BACT for $PM_{2.5}$. Additionally, in the Petition, the Petitioners failed to respond to LDEQ's explanation or explain why LDEQ's analysis was unreasonable or deficient. *Cf. In the Matter of Kentucky Syngas, LLC*, Petition No. IV-2010-9 (Order on Petition) (June 22, 2012) at 41 (denying title V petition issue where Petitioners failed to acknowledge or reply to state's response to comments or provide a particularized rationale for why the state erred or the permit was deficient).

The assumption that all PM_{10} emissions increases associated with the Yield Improvement Project are also $PM_{2.5}$ emissions is not the same as the permit applicant using a PM_{10} analysis as a surrogate for a $PM_{2.5}$ analysis. As the Petitioners acknowledged, Petition at 14, PM_{10} surrogacy has traditionally been applied to allow a PSD permit applicant to substitute the required $PM_{2.5}$ air quality and BACT analyses with comparable analyses for PM_{10}. Thus, in such cases, EPA observed that judicial opinions on the use of surrogate pollutants generally required that a permit applicant seeking to use PM_{10} as a surrogate for $PM_{2.5}$ make a case-specific demonstration that such a substitution is reasonable and appropriate, i.e., by demonstrating that an air quality analysis showing compliance with the PM_{10} NAAQS will also assure compliance with the $PM_{2.5}$ NAAQS or that BACT for PM_{10} is also appropriate BACT for $PM_{2.5}$. *See, e.g.*, *In the Matter of Louisville Gas and Electric Company, Trimble County*, Petition No. IV-2008-3 (Order on Petition) (August 12, 2009) (describing surrogacy demonstration for required BACT analysis); Memo from Stephen D. Page re: Modeling Procedures for Demonstrating Compliance with $PM_{2.5}$ NAAQS (March 23, 2010) (describing surrogacy demonstration for required air quality analysis).[21] Here, the Petitioners have not demonstrated that such a surrogacy demonstration was required. The Petitioners have not shown a flaw in the analysis that LDEQ did for $PM_{2.5}$ to show that the maximum $PM_{2.5}$ emissions increases associated with the Yield Improvement Project do not reach the significance threshold applied by LDEQ. LDEQ did not rely on a surrogacy approach to analyze $PM_{2.5}$ emissions for purposes of meeting PSD requirements for $PM_{2.5}$ applicable to the Yield Improvement Project. Rather, LDEQ's analysis was that no PSD requirements applied to $PM_{2.5}$ at all based on the insignificant increase in the rate of emission of $PM_{2.5}$ from the Yield Improvement Project. Consequently, the Petitioners have not demonstrated that LDEQ and Noranda were required to provide any demonstration that PM_{10} is an adequate surrogate for $PM_{2.5}$ under the facts and circumstances of this permit.

Second, the Petitioners have also failed to demonstrate that there was an applicable requirement at the time the final permit was issued to include a $PM_{2.5}$ emissions limit in the 2011 title V permit based on Noranda's NO_x emissions. The final permit was issued on February 15, 2011. In its response to comments documents, LDEQ explained that, at that time, it had not yet adopted the provisions of the 2008 $PM_{2.5}$ NSR Implementation Rule, which includes the requirement to regulate NO_x as a precursor to $PM_{2.5}$. RTC to Tulane at 7, nor was Louisiana yet required to do so. Rather, as LDEQ acknowledged, the 2008 Rule required States with SIP-approved PSD programs to adopt the provisions within three years of the final rule, or by May 16, 2011. 73 Fed. Reg. 28,321, 28,341 (May 16, 2008); *see also* RTC to Tulane at 6. EPA explained in the 2008 final rule that, during the three-year transition period, "both of the precursors designated in

[21] The 1997 PM10 Surrogate Policy, which enabled permit applications to address the PSD requirements for $PM_{2.5}$ by satisfying the requirements for PM_{10}, has been ended as of May 16, 2011. 76 Fed. Reg. 28,646, 28,648 (May 18, 2011).

the final rule – SO_2 and NO_x (presumptively) – are already regulated under State NSR programs for other criteria pollutants. Thus, those precursors will be subject to NSR through those other programs." 73 Fed. Reg. at 28,341; *see also* RTC to Tulane at 7. As Louisiana was not yet required to regulate NO_x as precursor to $PM_{2.5}$, no emissions increase of NO_x, regardless of whether or not was significant, would have triggered PSD obligations with respect to $PM_{2.5}$.

Although LDEQ cited this portion of the 2008 final rule in its response to comments, the Petitioners do not acknowledge the argument nor point to legal authority otherwise requiring LDEQ to evaluate NO_x as a $PM_{2.5}$ precursor prior May 16, 2011. *Cf. In the Matter of Kentucky Syngas, LLC*, Petition No. IV-2010-9 (Order on Petition) (June 22, 2012) at 41 (denying title V petition issue where the Petitioners failed to acknowledge or reply to state's response to comments or provide a particularized rationale for why the state erred or the permit was deficient). Neither do the Petitioners provide any legal support or explanation for their suggestion that NO_x emissions could lead to an applicable requirement under title V for $PM_{2.5}$ or a requirement under Part 70. Assuming the Petitioners are relying on the PSD requirements from the 2008 final rule, they have not demonstrated that the NO_x emissions were required to be regulated to implement the LDEQ's PSD program for $PM_{2.5}$ at the time the permit was issued. Rather, the preamble to the 2008 final rule reflected a conscious decision not to require regulation of NO_x as a $PM_{2.5}$ precursor prior to the May 16, 2011 deadline for revised SIP submissions. Accordingly, LDEQ and Noranda were not required to analyze the facility as a $PM_{2.5}$ source by virtue of its emissions of NO_x.

Claim III.: LDEQ Failed to Include a Case-Specific MACT Standard Under § 112(j) for the Industrial Boilers.

Petitioners' Claims. The Petitioners claim that LDEQ failed to impose case-by-case Maximum Achievable Control Technology (MACT) standards for Noranda's industrial boilers, as required by section 112(j) of the CAA, 42 U.S.C. § 7412(j). Petition at 16. The Petitioners state that the 2011 title V permit would allow Noranda to emit 32.78 tpy of hazardous air pollutants (HAP), which exceeds the 25 tpy threshold limit contained in section 112 of the CAA, 42 U.S.C. § 7412. *Id.*at 15.

The Petitioners state that although EPA has promulgated a MACT standard for industrial boilers, it is not "yet effective."[22] Petition at 16-17. As a result, the Petitioners claim that section 112(j)(1-3) of the CAA, 42 U.S.C. § 7412(j)(1-3), and 40 C.F.R. § 63.52(e), require that MACT determinations be done on a case-by-case basis, and that Noranda must submit a Part 2 MACT application. *Id.* at 17. The Petitioners conclude that section 112(j) and 40 CFR 63.50-63.56 are applicable requirements and that "EPA must object to the Title V Permit because LDEQ failed to require them." *Id.* It is not clear whether the Petitioners are arguing that the permit should have incorporated a case-by-case MACT limit or that the permit should have incorporated a requirement that Noranda submit a 112(j) application.

EPA Response. The Petition is denied on this issue as explained below. Whether the Petitioners are arguing that the 2011 title V permit should have incorporated a case-by-case MACT limit or

[22] At the time that LEAN filed its petition, the rule had been promulgated, but was not in effect. However, the rule is now in effect. 76 *Fed. Reg.* 15,554 (March 21, 2011).

that the permit should have incorporated a requirement that Noranda submit a 112(j) application, the Petitioners have not demonstrated that the 2011 title V permit does not assure compliance with applicable requirements. EPA's regulations implementing section 112(j) provide that no further action to develop a case-by-case limit are required after a federal standard has been promulgated whether or not the rule is in effect:

> The procedures in §§ 63.50 through 63.56 apply for each affected source only after the section 112(j) deadline for the source category or subcategory in question has passed, and only until such time as a generally applicable Federal standard governing that source has been promulgated under section 112(d) or 112(h) of the Act. Once a generally applicable Federal standard governing that source has been promulgated, the owner or operator of the affected source and the permitting authority are not required to take any further actions to develop an equivalent emission limitation under section 112(j) of the Act.
>
> 63 CFR 63.50(c) (emphasis added).

The Preamble to the final rule further explains:

> In the proposed rule, we stated our intent to include new language concerning general applicability in the final amendments to the section 112(j) rule. We proposed to state explicitly that no further process to develop a case-by-case MACT determination under section 112(j) is required for any source once a generally applicable Federal MACT standard governing that source has been promulgated. In our view, it is obvious that no further process to implement section 112(j) with respect to a particular source is required or appropriate once a Federal standard governing that source has been promulgated under CAA section 112(d) or 112(h). All commenters who addressed this issue supported our proposal. A new paragraph effectuating it has been added to the general applicability provisions as 40 CFR 63.50(c).
>
> 68 Fed. Reg. 32593 (May 30, 2003) (emphasis added).

In any event, the relevant 112(d) emissions standard for boilers is now promulgated and in effect. 76 *Fed. Reg.* 15,554 (March 21, 2011). Even if Petitioners' claim on this issue were correct, it is now moot. The requested relief would no longer be appropriate. The EPA does not believe it would be appropriate to now require that the 2011 title V permit be revised to reflect requirements or standards under section 112(j) of the CAA, 42 U.S.C. § 7412(j), that are no longer applicable, as explained above. *Cf. In the Matter of CF&I Steel LP dba EVRAZ Rocky Mountain Steel*, Petition No. VIII-2011-1 (Order on Petition) (May 31, 2012) at 23 (denying title V petition issue where provisions claimed to be applicable requirements no longer existed). Moreover, if EPA were to grant the petition and require the 2011 title V permit to incorporate the superseded 112(j) requirements, it could lead to conflicting requirements under title V.

Further, the Petitioners failed to acknowledge or address the LDEQ'S RTC to Tulane with regard to this claim. LDEQ's RTC to Tulane included a discussion of whether section 112(j) of the CAA, 42 U.S.C. § 7412(j), applied in this context, and whether the Part 2 MACT application was required. RTC to Tulane at 9-10. The Petitioners have not acknowledged or addressed those

points, and have failed to demonstrate why LDEQ's rationale is deficient. *Cf. In the Matter of Kentucky Syngas, LLC*, Petition No. IV-2010-9 (Order on Petition) (June 22, 2012) at 41 (denying title V petition issue where Petitioners failed to acknowledge or reply to state's response to comments or provide a particularized rationale for why the state erred or the permit was deficient).

Notwithstanding the denial of the Petition on this issue, we note that following promulgation of the 112(d) standard, permitting authorities may be required under 40 C.F.R. 70.7(f)(1)(i) to reopen title V permits to ensure they incorporate newly applicable requirements now contained in section 112(d) of the CAA, 42 U.S.C. § 7412(d). Thus, EPA believes the appropriate course in this situation is for a permitting authority to consider whether a title V permit must be reopened under title V to incorporate the newly applicable requirements under section 112(d), rather than incorporating an applicable requirement that no longer exists.[23]

CONCLUSION

For the reasons set forth above and pursuant to CAA section 505(b)(2) and 40 C.F.R. § 70.8(d), I hereby deny the Petition requesting that the EPA object to the title V permit 2453-V2 issued to Noranda Alumina, LLC for the Bauxite Processing, Production, and Power areas at its Gramercy facility located in St. James Parish, Louisiana.

Dated: 12/14/12

Lisa P. Jackson
Administrator

[23] EPA notes that while the 112(d) standard for industrial boilers was promulgated in March 2011, EPA has proposed reconsideration of that standard, 76 Fed. Reg. 80598 (12/23/2011). Final action on that reconsideration is pending.