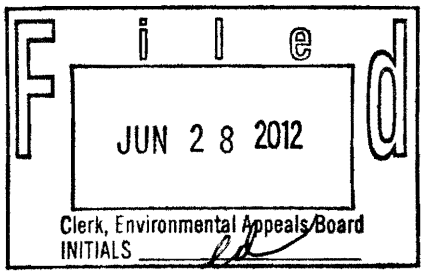

(Slip Opinion)

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BEFORE THE ENVIRONMENTAL APPEALS BOARD
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C.

In re:	)	
MHA Nation Clean Fuels Refinery	)	NPDES Appeal
	)	Nos. 11-02, 11-03, 11-04
Permit No. ND-0030988	)	& 12-03
	)	

[Decided June 28, 2012]

ORDER DISMISSING PETITIONS AND DENYING REVIEW

Before Environmental Appeals Judges Kathie A. Stein and Anna L. Wolgast.

IN RE MHA NATION CLEAN FUELS REFINERY

NPDES Appeal Nos. 11-02, 11-03, 11-04 & 12-03

ORDER DISMISSING PETITIONS AND DENYING REVIEW

Decided June 28, 2012

Syllabus

Section 511 of the Clean Water Act ("CWA") requires that the Environmental Protection Agency ("EPA") comply with National Environmental Policy Act ("NEPA") requirements when issuing a National Pollutant Discharge Elimination System ("NPDES") permit to a "new source" as defined in CWA section 306. This consolidated case involves issuance of an NPDES permit ("Permit") that U.S. EPA Region 8 (the "Region") issued to the Three Affiliated Tribes, comprising the Mandan, Hidatsa, and Arikara Nation (collectively referred to as "MHA Nation"), allowing wastewater discharges from a new source. Four petitioners each filed a petition challenging on different grounds certain aspects of the Permit and parts of the NEPA analysis the Region conducted in connection with the Permit.

Held: Upon examination of the petitions, the Environmental Appeals Board ("Board") dismisses two of the petitions on timeliness grounds and denies review of the other two petitions.

(1) NPDES Appeal Nos. 11-04 and 12-03 were filed after the filing deadline 40 C.F.R. § 124.19(a) prescribes. The Board strictly construes threshold procedural requirements, such as the timely filing of a petition, and will relax a filing deadline only where special circumstances exist. Both petitions failed to demonstrate special circumstances. The Board dismisses both petitions on timeliness grounds.

(2) NPDES Appeal No. 11-02 failed to meet threshold procedural requirements, such as issue preservation, and identification of challenged permit conditions or specific errors in the decisionmaking process for either the Permit or the NEPA analysis. The failure to demonstrate that an issue was preserved, as well as the lack of specificity in a petition, are bases for denying review. The flaws in NPDES Appeal No. 11-02 are fatal and prevent Board consideration. The Board denies review of this petition.

(3) The Environmental Awareness Committee ("EAC") timely filed NPDES Appeal No. 11-03 questioning the analysis and information that led the Region to conclude that supplementation of the project's final environmental impact statement ("FEIS"), in light of MHA Nation's proposed change in feedstock, was unnecessary, and raising concerns about certain effluent limits for Outfall 002, including sulfide. The arguments EAC raises present the following issues for Board consideration: (a) whether

the Region satisfied its NEPA obligations with respect to EIS supplementation; and (b) whether EAC demonstrated that the issue it raises about sulfide warrants review.

(a) The Region Satisfied Its NEPA Obligations Regarding NEPA Supplementation

- Contrary to EAC's allegations, the record clearly shows that the Region took a "hard look" at the information available and that the Region engaged in extensive expert review before deciding that FEIS supplementation was unnecessary. The Region's multiple requests for information to ensure the sufficiency and adequacy of the air quality analysis, as well as its comments on the reports MHA provided, demonstrate the Region's engagement and commitment to carefully examine available information in its assessment of the need for supplementation.

- The criterion the Region used to assess the significance of the change in air emissions due to the processing of a different feedstock was reasonable. The Region used the National Ambient Air Quality Standards ("NAAQS") as the criterion to assess the significance of the potential change in air emissions. This is consistent with the air quality analysis in the FEIS and the manner in which the Agency evaluates air quality impacts from pollutant emissions in other contexts. NAAQS are standards designed to protect public health and welfare. The Board concludes that using NAAQS as the determining factor as to whether the proposed change is "significant" is appropriate.

- The Region reasonably evaluated potential emissions from individual air pollutants. The record does not support EAC's claims that the Region underestimated nitrogen oxides, sulfur dioxide, and volatile organic compound ("VOC") emissions, or that the Region did not consider hydrogen sulfide emissions in its analysis. Instead, the record shows that the Region exercised its considered judgement in accepting the emissions estimates MHA Nation provided and considered the variability in sulfur content, the emissions from flaring, the impacts from VOC emissions from processing Bakken crude oil, and the need to evaluate hydrogen sulfide emissions.

(b) EAC Did Not Demonstrate That the Sulfide Issue It Raises Warrants Review

- EAC failed to demonstrate that the issue it raises was preserved for Board review; therefore, the Board declines to review the Permit on the basis EAC proposes.

Before Environmental Appeals Judges Kathie A. Stein and Anna L. Wolgast.

Opinion of the Board by Judge Wolgast:

I. *STATEMENT OF THE CASE*

This consolidated case of four petitions challenges, each on different grounds, a Clean Water Act ("CWA") National Pollutant Discharge Elimination System ("NPDES") permit[1] ("Permit") U.S. Environmental Protection Agency ("EPA" or "Agency") Region 8 ("Region") issued to the Three Affiliated Tribes, comprising the Mandan, Hidatsa, and Arikara Nation (collectively referred to as "MHA Nation"), as well as certain aspects of the National Environmental Policy Act ("NEPA")[2] analysis the Region conducted in connection with the Permit. The Permit allows wastewater discharges from a petroleum refinery MHA Nation has proposed to construct and operate on the Fort Berthold Indian Reservation in North Dakota.

For the reasons set forth below, the Environmental Appeals Board ("Board") dismisses two of the petitions and denies review of the other two.

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[1] Under the CWA, persons who discharge pollutants from point sources into waters of the United States must have an NPDES permit in order for the discharge to be lawful. CWA § 301, 33 U.S.C. § 1311. The NPDES program is one of the principal permitting programs under the CWA. *See* CWA § 402, 33 U.S.C. § 1342.

[2] *See infra* Parts III, VI.C.1.a (discussing NEPA requirements applicable in this case).

II. *ISSUES ON APPEAL*

The issues the Board must consider are as follows:

A. Did the Region satisfy its NEPA obligations with respect to Environmental Impact Statement ("EIS")[3] supplementation?

B. Did the Environmental Awareness Committee ("EAC")[4] demonstrate that the sulfide issue it raises warrants review?

III. *STATUTORY HISTORY*

Section 511 of the CWA requires that EPA, under certain circumstances, comply with NEPA requirements when issuing an NPDES permit. *See* CWA § 511(c)(1), 33 U.S.C. § 1371(c)(1); *see also* 40 C.F.R. § 122.29(c). Issuance of an NPDES permit to a "new source," as defined in CWA section 306,[5] requires NEPA compliance. *See* CWA § 511(c)(1), 33 U.S.C. § 1371(c)(1); *see also* 40 C.F.R. § 122.29(c)(1)(i).

Among other things, NEPA requires that federal agencies proposing "major federal actions significantly affecting the quality of the human environment" document the environmental impacts of the proposed action. *See* NEPA § 102(2)(C), 42 U.S.C. § 4332(2)(C). Once

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[3] *See infra* Part III (discussing EIS requirements applicable in this case).

[4] As explained in more detailed later in this decision, the EAC filed NPDES Appeal No. 11-03, challenging the analysis and information that led the Region to conclude that supplementation of the project's final EIS was unnecessary, and challenging the effluent limitations in the NPDES permit for Outfall 002, including sulfide. *See infra* Parts V, VI.C.2

[5] The term "new source" means "any source, the construction of which is commenced after the publication of proposed regulations prescribing a standard of performance * * * which will be applicable to such source," if such standard is promulgated in accordance with CWA section 306. CWA § 306(a)(2), 33 U.S.C. § 1316(a)(2); *see also* 40 C.F.R. § 122.2 (regulatory definition of "new source").

the lead federal agency has determined that the proposed federal action may significantly affect the quality of the human environment, the lead agency shall proceed to prepare an EIS.[6] *See* 40 C.F.R. pt. 1502 (Council on Environmental Quality ("CEQ") regulations); 40 C.F.R. pt. 6 (EPA-specific NEPA regulations). An EIS is a detailed written statement documenting the impacts of a proposed federal action. *See* 40 C.F.R. § 1508.11 (EIS definition promulgated by the ("CEQ"), which applies to all federal agencies). The EIS requirement comprises the heart of NEPA. In addition to compiling detailed information on the environmental impacts of the proposed federal action, the EIS must include adverse environmental effects that cannot be avoided if the proposal is implemented, alternatives to the proposed action, the relationship between local short-term uses of the human environment and the maintenance and enhancement of long-term productivity, and any irreversible and irretrievable commitments of resources that would be involved in the proposed action if it is implemented. NEPA § 102(2)(C)(i)-(v), 42 U.S.C. § 4332(2)(C)(i)-(v).

After an EIS has been prepared, agencies must be alert to new information or circumstances that may change the initial environmental analysis. Under certain circumstances EIS supplementation may be required. In particular, agencies are required to supplement draft EISs or final EISs ("FEIS") when "[t]he agency makes substantial changes in the proposed action that are relevant to environmental concerns; or [t]here are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts." 40 C.F.R. § 1502.9(c)(1). CEQ regulations also allow for EIS

[6] Sometimes proposed actions require the input of several agencies. The agency responsible for the main action is known as the lead agency; other agencies are termed cooperating agencies. The CEQ regulations, which implement NEPA, define both the role of the lead agency, 40 C.F.R. §§ 1501.5, 1508.16, and the role of cooperating agencies, *id*. § 1501.6.

supplementation when the Agency "determines that the purposes of the Act will be furthered by doing so." *Id.* § 1502.9(c)(2).[7]

IV. *STANDARD OF REVIEW*

A. *Permit Challenges*

In determining whether to review a petition filed under 40 C.F.R. § 124.19(a), the Board first considers whether the petitioner has met threshold procedural requirements such as timeliness,[8] standing,[9] issue preservation,[10] and compliance with the standard of specificity for review.[11] *See* 40 C.F.R. § 124.19; *see also In re Beeland Group, LLC*,

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[7] In addition, EPA NEPA regulations require EIS supplementation "[f]or all NEPA determinations [] that are five years old or older, and for which the subject action has not yet been implemented." 40 C.F.R. § 6.200(h).

[8] Under the regulations governing permit appeals, a petition for review must ordinarily be filed with the Board within 30 days of service of notice of the final permit decision by the permitting authority. 40 C.F.R. § 124.19(a). The 30-day period within which a person may request review begins with the service of notice unless the permitting authority specifies a later date. *Id.* Where, as here, the filing date falls on a weekend or legal holiday, a petitioner has until the next working day to file the petition. *Id.* § 124.19(c).

[9] A petitioner must establish standing to appeal by demonstrating prior involvement in the public review process, either by filing written comments on the draft permit or by participating in a public hearing. 40 C.F.R. § 124.19(a).

[10] A petitioner must demonstrate that any issues and arguments it raises on appeal have been preserved for Board review (i.e., were raised during the public comment period or hearing on the draft permit), unless the issues or arguments were not reasonably ascertainable at the time. 40 C.F.R. §§ 124.13, .19; *see, e.g., In re City of Attleboro*, NPDES Appeal No. 08-08, slip op. at 10, 58-59 (EAB Sept. 15, 2009), 14 E.A.D. __; *In re City of Moscow*, 10 E.A.D. 135, 141, 149-50 (EAB 2001).

[11] A petition must meet the standard of specificity for review, and contain, at a minimum, two essential components: (1) clear identification of the conditions in the permit that are at issue, and (2) argument that the conditions warrant review. *In re Puna Geothermal Venture*, 9 E.A.D. 243, 274 (EAB 2000) (citing *In re Beckman Prod. Servs.*,

(continued...)

UIC Appeal Nos. 08-01 through 08-03, slip op. at 8-9 (EAB Oct. 3, 2008), 14 E.A.D. __ (explaining that a petitioner must demonstrate that the threshold procedural requirements for permit appeals are met). Assuming that a petitioner satisfies all threshold procedural obligations, the Board then evaluates the petition to determine if it warrants review. *In re Guam Waterworks Auth.*, NPDES Appeal Nos. 09-15 & 09-16, slip op. at 9 (EAB Nov. 16, 2011), 15 E.A.D. __.

Ordinarily, the Board will not review an NPDES permit decision unless the permit conditions at issue are based on "a finding of fact or conclusion of law which is clearly erroneous." 40 C.F.R. § 124.19(a)(1). In addition, the Board may review the exercise of discretion by the permit issuer or an important policy consideration.[12] *Id*. § 124.19(a)(2). The Board analyzes petitions for review guided by the caution in the preamble to the part 124 permitting regulations that the Board's power of review "should be only sparingly exercised." Consolidated Permit Regulations, 45 Fed. Reg. 33,290, 33,412 (May 19, 1980). This reflects EPA's policy that favors final adjudication of most permits at the permit issuer's level. *Id*.

A petitioner seeking review of a permit provision bears the burden of demonstrating that review is warranted. 40 C.F.R. § 124.19(a)(1)-(2). In order to show clear error, the petitioner must specifically state its objections to the permit and explain why the permit issuer's previous response to those objections is clearly erroneous, an abuse of discretion, or otherwise warrants review. *Guam*, slip op. at 10, 15 E.A.D. at __; *In re City of Attleboro*, NPDES Appeal No. 08-08, slip op. at 11 (EAB Sept. 15, 2009), 14 E.A.D. __.

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[11](...continued)
5 E.A.D. 10, 18 (EAB 1994)); *accord Beeland*, slip op. at 9, 14 E.A.D. at __.

[12] In reviewing the exercise of discretion by the permitting authority or an important policy consideration, the Board applies an abuse of discretion standard, which comports with the standards the Administrative Procedure Act establishes for the review of agency actions. *See* 5 U.S.C. § 706; *see also Guam*, slip op. at 9 n.7, 15 E.A.D. at __.

Finally, a petitioner seeking review of issues that are technical in nature bears a particularly heavy burden because the Board generally gives substantial deference to the permit issuer on questions of technical judgment. *Guam*, slip op. at 10, 15 E.A.D. at __; *Attleboro*, slip op. at 11, 14 E.A.D. at __; *In re NE Hub Partners, LP*, 7 E.A.D. 561, 567-68 (EAB 1998), *review denied sub nom. Penn Fuel Gas, Inc. v. EPA*, 185 F.3d 862 (3d Cir. 1999). The Board, however, will not defer to the permit issuer on the issues challenged without first examining the administrative record prepared in support of the permit decision and satisfying itself that the permit issuer made a reasoned decision and exercised his or her "considered judgment." *In re Ash Grove Cement Co.*, 7 E.A.D. 387, 417-18 (EAB 1997); *accord In re Cape Wind Assocs., LLC*, OCS Appeal No. 11-01, slip op. at 5 (EAB May 20, 2011), 15 E.A.D. __; *In re GSX Servs. of S.C., Inc.*, 4 E.A.D. 451, 454 (EAB 1992). The permit issuer must articulate with reasonable clarity the reasons supporting its conclusion and the significance of the crucial facts it relied upon when reaching its conclusion. *E.g., In re Shell Offshore, Inc*., 13 E.A.D. 357, 386 (EAB 2007) (citing *In re Carolina Light & Power Co.*, 1 E.A.D. 448, 451 (Act'g Adm'r 1978)); *Ash Grove*, 7 E.A.D. at 417 (same). As a whole, the record must demonstrate that the permit issuer "duly considered the issues raised in the comments and [that] the approach ultimately adopted by the [permit issuer] is rational in light of all information in the record." *Attleboro*, slip op. at 18, 14 E.A.D. at __; *NE Hub*, 7 E.A.D. at 568.

B. *NEPA Challenges*

The same threshold procedural requirements that apply to appeals of conditions in final NDPES permits apply to NEPA challenges made in the context of NPDES permit review. *In re Carlota Copper Co.,* 11 E.A.D. 692, 777 (EAB 2004), *vacated on other grounds sub nom. Friends of Pinto Creek v. EPA*, 504 F.3d 1007 (9th Cir. 2007); *see In re Louisville Gas & Elec. Co.*, 1 E.A.D. 687, 691 (JO 1981) ("[T]he relevant considerations which govern the presiding officer's scope of review in a case involving an EIS are no different from those which govern a conventional NPDES proceeding involving specific terms and conditions of a permit."); *see In re Ecoeléctrica, LP*, 7 E.A.D. 56, 75

(EAB 1997) (denying petitioner's challenges to content of an EIS because petitioner failed to adequately preserve such objections for Board review). Therefore, as a prerequisite to Board review of NEPA challenges, a petitioner must file a timely appeal, satisfy standing requirements, demonstrate that the issues it raises on appeal were preserved for review (unless not reasonably ascertainable at the time), and comply with the standard of specificity.

As with a petition challenging NPDES permit conditions, if all threshold procedural requirements are met, the Board will examine the petition to determine if the arguments warrant review. In reviewing NEPA challenges, the Board has adopted the so-called "rule of reason" standard employed by federal courts, which the Board has equated to a "reasonableness" standard. *Carlota*, 11 E.A.D. at 790; *In re Dos Republicas Res. Co.*, 6 E.A.D. 643, 663 (EAB 1996) (finding that the Region's treatment of a particular alternative met the "rule of reason" standard under NEPA); *see Louisville*, 1 E.A.D. at 694 (stating that an agency's actions under NEPA are to be measured against standards of reasonableness and due regard must be given to all of the surrounding circumstances). Accordingly, the Board's role in reviewing NEPA compliance consists of ensuring that the Agency has adequately considered and disclosed the environmental impacts of the proposed actions in light of the totality of the circumstances. *Carlota*, 11 E.A.D. at 790.

V. *RELEVANT FACTUAL AND PROCEDURAL HISTORY*

In 2004, MHA Nation applied for an NPDES permit from the Region. As noted above, the Permit would allow discharges from a petroleum refinery MHA Nation has proposed to construct and operate on the Fort Berthold Indian Reservation in North Dakota. The proposed refinery qualifies as a new source under the CWA, triggering the need to conduct NEPA review as part of the permitting process.

In this particular case, the project as a whole required involvement of several other federal agencies, including EPA. The Bureau of Indian Affairs ("BIA") was originally the lead agency for

NEPA purposes and the Region was a cooperating agency.[13] BIA, with the Region's input, determined that the construction of a petroleum refinery would cause significant impacts on the quality of the environment, and that an EIS was required. In light of this determination, BIA and the Region proceeded with the required NEPA analysis.[14]

Formal scoping for the NEPA analysis began on November 7, 2003, and concluded in April 2005 with a Formal Scoping Report.[15] In 2006, BIA and EPA entered into a Memorandum of Agreement designating each as co-lead agencies for the NEPA analysis of this project. On June 29, 2006, BIA and the Region made available for public comment a draft EIS for the entire project and a draft NDPES permit that would allow wastewater discharges from the proposed refinery. The public comment period for the draft EIS and draft NPDES permit closed on September 14, 2006. On August 20, 2009, BIA and the Region issued the FEIS for the project and a revised draft NPDES permit.

On February 4, 2010, MHA Nation notified the Region of its intention to change the refinery feedstock from synthetic crude oil to Bakken crude oil. Immediately thereafter, the Region asked MHA Nation to provide information regarding how the feedstock change would affect the preliminary refinery design and crude transportation as

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[13] BIA's lead status was based on MHA Nation's request that BIA accept tribally owned land into trust for purposes of constructing and operating the proposed refinery. Administrative Record ("A.R.") EPA MHA-011410 (Supplemental Information Report at 2). The Region's cooperating status was based on MHA Nation's request that the Region issue an NPDES permit for the proposed refinery.

[14] In particular, BIA was concerned with the entire refinery project, while the Region focused on the impacts associated with the discharge of wastewaters from the proposed refinery.

[15] CEQ regulations require that there be an early and open process for determining the scope of issues to be addressed in an EIS and for identifying the significant issues related to a proposed action. This process is termed "scoping." 40 C.F.R. § 1501.7.

described in the FEIS. *See* Administrative Record ("A.R.") EPA MHA-010691 to -010748. MHA Nation complied with the Region's request in March 2011 by submitting a revised emission inventory. A.R. EPA MHA-011233 to -011276 (Addendum: Air Quality Technical Report for the Final Environmental Impact Statement for the Mandan, Hidatsa, and Arikara Nation's Proposed Clean Fuel Refinery Project) [hereinafter Addendum]. The Region then began evaluating the information MHA provided, and requested additional modeling, including modeling of worst-case scenarios. *See* A.R. Index at 99-112. Based on the information MHA provided, the Region evaluated whether a supplemental EIS would be necessary before issuing its final NPDES permit decision.

The Region concluded that a supplemental EIS was unnecessary, and summarized its findings in a Supplemental Information Report ("SIR"), which the Region completed on July 29, 2011. A.R. EPA MHA-011409 to -011510 [hereinafter SIR]. On August 3, 2011, the Region issued a Record of Decision ("ROD") documenting its decision to issue the NPDES permit to MHA Nation,[16] and on August 4, 2011, the Region issued the final NPDES permit decision. A.R. EPA MHA-011387 to -011408 [hereinafter ROD]; A.R. EPA MHA-01-085 [hereinafter Final Permit]. The Region provided notice in the *Federal Register*, on August 12, 2011, of its decision to issue the NPDES permit. A.R. EPA MHA-010894; Mandan, Hidatsa and Arikara (MHA) Nation's Refinery, Notice of Availability of the Record of Decision (ROD), National Pollutant Discharge Elimination System (NPDES) Permit, 76 Fed. Reg. 50,214 (Aug. 12, 2011). The *Federal Register* notice triggered the 30-day permit appeal period to challenge a permit decision pursuant to 40 C.F.R. § 124.19(a). *See id.* The 30-day appeal period ended on September 11, 2011, but the applicable regulations extended the appeal deadline to September 12, 2011. 40 C.F.R. § 124.20(c);[17] *see also* A.R. EPA MHA-011386.

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[16] CEQ regulations require the preparation of a concise public record of decision in cases requiring EISs. 40 C.F.R. § 1505.2.

[17] *See also supra* note 8.

On September 7, 2011, Mr. James Stafslien filed NPDES Appeal No. 11-02 ("Stafslien's Pet."), expressing concerns about potential flooding of his property from the proposed refinery. On September 12, 2011, the Environmental Awareness Committee, Jodie White, Theodora Bird Bear, and Joletta Bird Bear (collectively "EAC") filed NPDES Appeal No. 11-03 ("EAC Pet."), challenging the analysis and information that led the Region to conclude that supplementation of the project's FEIS was unnecessary, and raising concerns about the Region's consideration of effluent limits for Outfall 002, including sulfide.[18] On September 19, 2011, Ms. Elise Packineau filed NPDES Appeal No. 11-04 ("Packineau's Pet."), raising general concerns about the construction of the proposed refinery and its environmental impacts. On April 9, 2012, Plaza Township Supervisor Mr. Tim Gray, on behalf of Plaza Township, filed NPDES Appeal No. 12-03 ("Gray's Pet."), claiming that the Township "should have been better notified" of the NPDES permit and raising concerns regarding the sufficiency of the FEIS.

Both the Region and MHA Nation[19] responded to NPDES Appeal Nos. 11-02, 11-03, and 11-04. *See* EPA Region 8's Response to Consolidated Petitions for Review ("Reg.'s Resp.") (Dec. 20, 2011);

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[18] EAC's petition raised concerns about several of the Permit's effluent limitations for Outfall 002. Specifically, EAC challenged the effluent limitations for biological oxygen demand (BOD), total suspended solids (TSS), chemical oxygen demand (COD), oil and grease, total chromium, and sulfide applicable to Outfall 002. On November 22, 2011, the Region withdrew the effluent limitations for BOD, TSS, COD, oil and grease, total chromium, and phenolic compounds applicable to Outfall 002. The Region then issued a revised draft permit addressing the withdrawn conditions, and reopened the public comment period, which closed on January 26, 2012. On February 17, 2012, the Board issued an order dismissing, on mootness grounds, the portions of the EAC petition that relate to the withdrawn Permit conditions. *In re MHA Nation Clean Fuels Refinery*, NPDES Appeal No. 11-03 (EAB Feb. 17, 2012) (Order Dismissing Petition in Part). The only NPDES issue remaining for Board consideration is the concern EAC raises regarding sulfide.

[19] On November 23, 2011, the Board granted MHA Nation's request to intervene as a party in this matter. *In re MHA Nation Clean Fuels Refinery*, NPDES Appeal Nos. 11-02 through 11-04 (EAB Nov. 23, 2011) (Order Granting Motion to Intervene).

MHA Nation's Response to Petitions for Review ("MHA's Resp.") (Dec. 16, 2011). On April 30, 2012, both the Region and MHA Nation filed briefs in response to Mr. Gray's petition. *See* EPA Region 8's Response to Petition of Tim Gray, Plaza Township Supervisor ("Reg.'s Resp. to Gray's Pet."); MHA Nation's Motion to Dismiss ("MHA's Resp. to Gray's Pet.").

VI. *ANALYSIS*

A. *Ms. Packineau's and Mr. Gray's Petitions*

Elise Packineau, a pro se petitioner,[20] filed NPDES Appeal No. 11-04, which the Board received on September 19, 2011,[21] seven days after the appeal deadline. *See* 40 C.F.R. § 124.19(a).[22] Mr. Gray, also a pro se petitioner, filed NPDES Appeal No. 12-03 on April 9, 2012, almost seven months after the appeal deadline.

Failure to ensure that the Board receives a petition for review by the filing deadline will generally lead to dismissal of the petition on timeliness grounds. *In re AES P.R., LP*, 8 E.A.D. 324, 328 (EAB 1999), *aff'd, Sur Contra La Contaminación v. EPA*, 202 F.3d 443 (1st Cir.

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[20] A pro se petitioner is a litigant unrepresented by counsel. The Board endeavors to construe liberally objections raised by parties unrepresented by counsel so as to fairly identify the substance of the arguments being raised. *In re Sutter Power Plant*, 8 E.A.D. 680, 687 & n.9 (EAB 1999); *accord In re Shell Gulf of Mex., Inc*., OCS Appeal Nos. 11-02 through 11-04 & 11-08, slip op. at 10-11 (EAB Jan. 12, 2012), 15 E.A.D. __; *In re Envtl. Disposal Sys., Inc.*, 12 E.A.D. 254, 292 n.26 (EAB 2005); *In re New Eng. Plating Co.*, 9 E.A.D. 726, 730 (EAB 2001). While the Board does not expect such petitions to contain sophisticated legal arguments or to utilize precise technical or legal terms, the Board nonetheless expects such petitions "to articulate some supportable reason or reasons as to why the permitting authority erred or why review is otherwise warranted." *Sutter*, 8 E.A.D. at 687-88 (citing *In re Beckman Prod. Servs.*, 5 E.A.D. 10, 19 (EAB 1994)).

[21] Documents are considered filed on the date the Board receives them. *Puna*, 9 E.A.D. at 273.

[22] *See supra* note 8.

2000).[23] The Board strictly construes threshold procedural requirements, such as the timely filing of a petition, and will relax a filing deadline only where special circumstances exist. *Id*. at 329.

The Board has found special circumstances to exist in cases where mistakes by the permitting authority have caused the delay or when the permitting authority has provided misleading information.[24] Delays stemming from extraordinary events, such as natural disasters and response to terrorist threats, or from causes not attributable to the petitioner, such as problems with the delivery service, have also led the Board to relax the filing deadline.[25]

Ms. Packineau's petition does not present any of the special circumstances that have led the Board, in other cases, to relax the 30-day appeal rule. In fact, her one-page petition does not address the delay or offer an explanation as to why the petition was filed after the deadline, or why the Board should review the late-filed appeal. One of the "concerns" Ms. Packineau raises is that she was unaware "of any public notices regarding the changes to the 'Proposed Refinery' to include the

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[23] *Cf. In re Knauf Fiber Glass, GmbH*, 9 E.A.D. 1, 5 (EAB 2000) (denying review of several petitions on timeliness and standing grounds and noting Board's expectations of petitions for review); *In re Knauf Fiber Glass, GmbH*, 8 E.A.D. 121, 127 (EAB 1999) (noting strictness of standard of review and Board's expectation of petitions); *In re Envotech, LP*, 6 E.A.D. 260, 266 (EAB 1996) (dismissing as untimely permit appeals received after the filing deadline).

[24] *See, e.g., In re Kawaihae Cogeneration Project*, 7 E.A.D. 107, 123-24 (EAB 1997) (delay attributable to permitting authority as it mistakenly instructed petitioners to file appeals with EPA Headquarters Hearing Clerk); *In re Hillman Power Co., LLC*, 10 E.A.D. 673, 680 n.4 (EAB 2002) (permit issuer failed to serve all parties that had filed written comments on the draft permit).

[25] *See, e.g.*, *In re Avon Custom Mixing Servs., Inc.*, 10 E.A.D. 700, 703 n.6 (EAB 2002) (delay in petition reaching the Board caused by anthrax sterilization process); *AES P.R.*, 8 E.A.D. at 328 (extraordinary circumstances created by hurricane and its aftermath impeded timely filing), 329 (delay in petition reaching the Board attributable to aircraft problems experienced by FedEx).

'Bakken.'" Packineau's Pet. This in itself does not explain the late appeal.

Ms. Packineau's petition indicates that she was on notice of the issuance of the ROD, which addresses the change in feedstock, the Region's permit decision, and the deadline for appeal. In her petition, she states that she"[r]eceived [the] EPA Issues Record of Decision and NPDES Permit" – this is the letter that accompanied the ROD and NPDES Permit announcing that EPA had issued those documents. Packineau's Pet. This letter also clearly identifies the appeal deadline and provides a link to the Board's website for additional information on the permit appeals process. *See* A.R. EPA MHA-011385 to -011386. Ms. Packineau's failure to demonstrate special circumstances that would justify the filing of an untimely appeal is fatal to her petition. Therefore, the Board dismisses NPDES Appeal No. 11-04 on timeliness grounds.

Similarly, Mr. Gray's petition fails to demonstrate special circumstances that would warrant relaxation of the 30-day appeal deadline. The Board is not persuaded by the reasons Mr. Gray provides to justify the late filing. Mr. Gray claims that the Township Board of Supervisors was under the impression that the refinery "was not going to happen." Gray's Pet. This is not a special circumstance that justifies a late filing. Mr. Gray also states that "[o]ur board feels we should have been *better notified* by the tribe or the EPA about this NPDES Permit." *Id*. (emphasis added). Mr. Gray does not elaborate, nor is it clear what he means by being "better notified of the NPDES Permit." His claim is too vague and lacks any specificity to support a claim that special circumstances warranted the late filing.

The record indicates that the Region complied with applicable notification requirements under part 124.[26] The Region states that it announced in the *Federal Register* and in various newspapers in North Dakota the availability of the draft EIS and draft NPDES permit for

[26] *See, e.g*., 40 C.F.R. §§ 124.10 (establishing notification and comment period requirements for draft permits), .15 (establishing notification requirements for issuance of a final permit decision).

public comment. Reg.'s Resp. at 5. Such forms of notice are consistent with governing regulations. *See* 40 C.F.R. § 124.10(c)(2)(i), (c)(4) (identifying method of notice for general outreach regarding availability of, and public comment period for, draft permits).[27] Here the Township received notice of the draft permit in the manner afforded to the general public. Mr. Gray does not claim that the Township was entitled to a different form of notice.

The Region also states that it mailed written notice of the final permit decision to MHA Nation and the approximately 200 people who had submitted written comments or requested notification of the final permit decision. Reg.'s Resp. to Gray's Pet. at 3. This is also consistent with applicable regulations. *See* 40 C.F.R. § 124.15(a). The regulations require that the permit issuer "notify the applicant and each person who has submitted written comments or requested notice of the final permit decision." *Id*. Mr. Gray does not claim that the Township submitted written comments or that it requested notice of the final permit decision.

The vagueness of Mr. Gray's petition also raises the question of whether Mr. Gray's objection even goes to the final permit decision, as opposed to the still-pending permit modification. Mr. Gray's petition states that he "knows that the comment period ended on January 26th 2012." As noted earlier in this decision, the Region withdrew some of the permit conditions, issued a revised draft, and reopened the public comment period to address the modified permit condition.[28] That comment period closed on January 26, 2012. To the extent that Mr. Gray's petition raises concerns about the public comment period for

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[27] Section 124.10 establishes the timing, method and content, and who should be notified of the issuance of a draft permit and the opportunity to comment on a draft permit. 40 C.F.R. § 124.10. Designated governmental agencies and officials, and certain groups and members of the public, are entitled to receive notice by mail, whereas the general public is only entitled to a general form of notification, such as notice in a daily or weekly newspaper. *Id*. at § 124.10(c)(1)(i)-(xi) (listing different entities entitled to notice by mail); *id*. § 124.10(c)(2)(i), (c)(4) (identifying method of notice for general outreach).

[28] *See supra* note 18.

the permit modification, the issue does not belong in this proceeding. A petition challenging the permit modification proceedings will only be ripe for Board review after the permit issuer issues a final permit decision.

In light of the vagueness of Mr. Gray's petition, and absent any showing of special circumstances to excuse the late filing, the Board dismisses NPDES Appeal No. 12-03 on timeliness grounds.

B. *Mr. Stafslien's Petition*

James Stafslien, also a pro se petitioner, timely filed NPDES Appeal No. 11-02. The one-page petition expresses concerns about potential flooding of his property from the proposed refinery's wastewater discharges and requests installation of a gate "on the quarter line" to prevent flooding. Stafslien's Pet.

Fatal flaws in Mr. Stafslien's petition prevent consideration by the Board. First, Mr. Stafslien's petition fails to meet threshold procedural requirements. Mr. Stafslien's petition fails to demonstrate that the concerns he raises on appeal were raised during the public comment period. As noted above, a petitioner seeking review must demonstrate that any issues and arguments he or she raises on appeal have been preserved for Board review, unless the issues or arguments were not reasonably ascertainable.[29] The Board has consistently declined to review issues or arguments in petitions that fail to satisfy this basic requirement.[30] Adherence to this requirement is necessary to ensure that the permit issuer has an opportunity to address potential problems with the draft permit before the permit becomes final, thereby promoting the Agency's longstanding policy that most permit issues should be resolved

[29] *See supra* note 10.

[30] *See, e.g., In re Arecibo & Aguadilla Reg. Wastewater Treatment Plants*, 12 E.A.D. 97, 116-17, 122 (EAB 2005) (declining to entertain arguments not raised in public comments); *New Eng. Plating*, 9 E.A.D. at 732-37 (denying review of issues not preserved).

at the permitting authority level, and to provide predictability and finality to the permitting process. *In re New Eng. Plating Co.*, 9 E.A.D. 726, 732 (EAB 2001). Significantly, Mr. Stafslien's petition does not claim that the issue he raises was not reasonably ascertainable at the time of the public comment period.

Second, Mr. Stafslien's petition does not identify any permit conditions that may warrant review or point to specific errors in the decisionmaking process for either the NPDES permit or the NEPA analysis. As previously noted, a petition must contain, at a minimum, a clear identification of the conditions in the permit that are at issue and an argument that the conditions warrant review. *In re Puna Geothermal Venture*, 9 E.A.D. 243, 274 (EAB 2000). In addition, the Board expects petitions to articulate some supportable reason or reasons as to why the permitting authority erred in its decisionmaking.[31] The burden of demonstrating clear error falls on the petitioner, and Mr. Stafslien has failed to meet this burden.

In sum, not only does the petition fail to meet important threshold procedural requirements, such as issue preservation and the standard for specificity, it also fails to provide a basis for Board review by demonstrating clear error by the permit issuer. For these reasons the Board denies review of NPDES Appeal No. 11-02.

C. *EAC's Petition*

EAC timely filed NPDES Appeal No. 11-03, questioning the Region's compliance with certain NEPA obligations and challenging certain aspects of the Permit. EAC questions the analysis and information that led the Region to conclude that supplementation of the project's FEIS, in light of MHA's proposed change in feedstock, was unnecessary. After examination of the arguments EAC raises regarding NEPA compliance, the Board determines that the issue for Board consideration is whether the Region satisfied its NEPA obligations with respect to EIS supplementation.

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[31] *See supra* note 20.

EAC also challenges the Region's consideration of sulfide as an effluent limitation for Outfall 002, and the Board must determine whether EAC has demonstrated that this issue warrants review.

The Board begins its analysis by examining EAC's NEPA challenges.

1. *Did the Region Satisfy Its NEPA Obligations with Respect to EIS Supplementation?*

Before delving into the arguments, the Board first examines applicable principles of law that guide its analysis.

a. *Applicable Principles of Law*

NEPA itself does not address when an agency is required to supplement an EIS. This requirement is governed by CEQ regulations, which require EIS supplementation when "the agency makes *substantial changes in the proposed action* that are relevant to environmental concerns; or there are *significant new circumstances or information* relevant to environmental concerns and bearing on the proposed action or its impacts." 40 C.F.R. §1502.9(c)(1) (emphasis added). Notably, the regulations do not define what would be considered "a substantial change" or what would be considered "significant new circumstances or information."

Case law guides the Board's analysis on this topic. The U.S. Supreme Court has stated that an agency must apply a "rule of reason" and prepare a supplemental EIS "[i]f there remains 'major Federal actio[n]' to occur, and if the new information is sufficient to show that the remaining action '*will affec[t] the quality of the human environment' in a significant manner or to a significant extent not already considered*." *Marsh v. Or. Natural Res. Council*, 490 U.S. 360, 374 (1989) (citing 42 U.S.C. § 4332(2)(C)) (emphasis added). Federal circuit courts have held that the new circumstance must present a "seriously different picture" of the environmental impact of the proposed project from that previously envisioned. *E.g., Hickory Neighborhood Def.*

League v. Skinner, 893 F.2d 58, 63 (4th Cir. 1990); *Sierra Club v. Froehlke,* 816 F.2d 205, 210 (5th Cir. 1987).

The standard for assessing the significance of "new circumstances or information" or "substantial changes in the proposed action" allows the decisionmaker to exercise considered judgment. *Cf. Marsh*, 490 U.S. at 375-77 (noting that when the analysis of relevant documents requires a high level of technical expertise, courts must defer to the informed discretion of the responsible federal agencies). An agency need not supplement an EIS every time new information comes to light,[32] and not every new circumstance is a "significant new circumstance" requiring a supplemental EIS.[33] Finally, regardless of the eventual assessment of the significance of the new circumstances or information to determine the need for supplementation, the agency making the determination has a duty to take a "hard look"[34] at the environmental consequences of the change or new circumstances. *Id.* at 385.[35]

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[32] *Marsh*, 490 U.S. at 373; *Ark. Wildlife Fed'n v. U.S. Army Corps of Eng'rs,* 431 F.3d 1096, 1104 (8th Cir. 2005) ("An agency does not have to provide a SEIS every time new information comes to light; 'to require otherwise would render agency decisionmaking intractable, always awaiting updated information only to find the new information outdated by the time a decision is made.'"); *accord Mid States Coal. for Progress v. Surface Transp. Bd.*, 345 F.3d. 520, 544 (8th Cir. 2003).

[33] *Hickory*, 893 F.2d at 63; *The New River Valley Greens v. U.S. Dep't of Transp.*, No. 97-1978, slip op. 4 (4th Cir. Sept. 10, 1998) ("The word 'significant' carries the weight of this regulation. Without it, NEPA compliance could paralyze executive agencies, forcing them to perpetually reevaluate proposed projects in response to inconsequential tidbits of information * * *.").

[34] *Nat'l Audubon Soc'y v. Dep't of Navy*, 422 F.3d 174, 185 (4th Cir. 2005) ("What constitutes a 'hard look' cannot be outlined with rule-like precision. At the least, however, it encompasses a thorough investigation into the environmental impacts of an agency's action and a candid acknowledgment of the risks that those impacts entail.").

[35] *See also Kleppe v. Sierra Club*, 427 U.S. 390, 410 n.21 (1976) ("The only role for a court is to insure that the agency has taken a 'hard look' at environmental consequences."); *Hughes River Watershed Conservancy v. Glickman,* 81 F.3d 437, 443 (continued...)

With these principles in mind, the Board examines EAC's claims.

b. *EAC Arguments*

Notably, EAC does not argue that the Region was required to prepare a supplemental EIS. Rather, EAC contends that the analysis that led the Region to conclude that FEIS supplementation was unnecessary is flawed because the Region did not fully evaluate the environmental impacts of the change in feedstock. EAC Pet. at 7. To support this contention, EAC identifies alleged flaws in the SIR – a sixteen-page single-spaced document that summarizes the Region's evaluation and consideration of the change in feedstock and the Region's decision not to supplement the FEIS.[36]

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[35](...continued)
(4th Cir. 1996) (stating that a court examining the sufficiency of an agency's environmental analysis under NEPA must determine whether the agency has taken a "hard look" at an action's environmental impacts).

[36] While neither NEPA nor its implementing regulations require the use of a SIR to document an agency's decision not to supplement an EIS, federal courts have recognized agency use of SIRs and similar documents for such purposes. *Idaho Sporting Cong. Inc. v. Alexander*, 222 F.3d 562, 565-66 (9th Cir. 2000) ("Supplemental Information Reports are nowhere mentioned in NEPA or in the regulations implementing NEPA promulgated by the Council on Environmental Quality. Courts nonetheless have recognized a limited role within NEPA's procedural framework for SIRs and similar 'non-NEPA' environmental evaluation procedures. Specifically, courts have upheld agency use of SIRs and similar procedures for the purpose of determining whether new information or changed circumstances require the preparation of a supplemental EA or EIS."); *see, e.g., Marsh*, 490 U.S. at 383-85 (upholding Army Corps of Engineers' use of a SIR to analyze significance of new reports questioning the environmental impact of a dam project); *Friends of the Bow v. Thompson*, 124 F.3d 1210, 1218-19 (10th Cir. 1997) (upholding use of a SIR to evaluate significance of new survey of area to be logged).

EAC does not challenge the Region's entire SIR analysis.[37] EAC only takes issue with the air quality component of the SIR, arguing that the Region did not take a "hard look" at the air emission data MHA Nation provided before deciding that a supplemental EIS was unnecessary. *Id*. at 8-10. According to EAC, the Region conducted its analysis in a short amount of time,[38] did not seek an independent evaluation of relevant information,[39] failed to discuss certain relevant information in the SIR,[40] relied on flawed information,[41] and underestimated air emissions.[42]

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[37] The SIR evaluates several factors that are expected to be affected by the proposed change in feedstock. The factors include: (1) changes to the refinery design; (2) crude oil transportation; (3) traffic considerations; and (4) environmental consequences. The environmental consequences category includes: (1) change in air quality; (2) groundwater quality and underground injection; (3) spills and emergency response; (4) surface water quality; (5) solid and hazardous waste; (6) vegetation and wetlands; (7) wildlife, threatened and endangered species; (8) climate change; and (9) environmental justice and socioeconomic impacts. SIR at 3-13.

[38] EAC Pet. at 4 (claiming that the Region conducted its analysis in less than two months).

[39] EAC Pet. at 9-10 (noting that the Region did not hire an independent contractor).

[40] EAC Pet. at 14-17. EAC argues that the Region provided no explanation in the SIR as to why the expected increase in emissions does not constitute a significant change in impacts, *id*. at 6, and points to alleged discrepancies between the conclusions in the SIR and assumptions used in the FEIS that the Region allegedly failed to address. *Id*. at 14-17. In particular, EAC claims that the Region failed to address why the potential change in status from "minor" source to "major" source is not a significant change that would trigger the need for supplementation, and why the estimated increase in sulfur dioxide ("SO_2") emissions and exceedance of the new SO_2 National Ambient Air Quality Standard ("NAAQS") are not significant changes requiring a supplemental EIS. *Id*.

[41] EAC Pet. at 13 (claiming that the Region called into question the information MHA Nation provided in the Air Quality Modeling Update, and yet the Region relied on that information to determine the need for FEIS supplementation).

[42] EAC Pet. at 6-7, 10-13 (alleging flaws in air emission estimates for SO_2, nitrogen oxides ("NO_x"), and volatile organic compounds ("VOCs") that led to (continued...)

In light of these allegations, the Board examines whether the Region satisfied its NEPA obligations regarding EIS supplementation by taking a "hard look" at available information before deciding that supplementation of the FEIS was unnecessary, by reasonably assessing the significance of the change in air emissions due to the change in feedstock, and by evaluating the potential emissions from individual air pollutants.

c. *The Region Took a "Hard Look" at the Information Available*

Contrary to EAC's allegations, the record clearly shows that the Region took a hard look at the information available, carefully scrutinized the information MHA Nation provided, and engaged in extensive expert review before determining that the change in feedstock did not require supplementation of the project's FEIS.

The record shows that the Region held meetings, consulted, and requested information from MHA Nation and its contractors on several occasions before making a final determination that the FEIS did not require supplementation. The information exchange process began in early 2010 and continued through mid 2011,[43] and included: (1) the Region's request on March 24, 2010, that MHA Nation update the air emissions information in light of comments raised during the public comment period and the change in feedstock, *see* A.R. EPA MHA-010691 to -010748; (2) revised emission inventory estimates provided by MHA Nation, *see* A.R. EPA MHA-011233 to -011276 (Addendum); (3) formal meetings between the Region and MHA Nation and its contractors to discuss data MHA Nation submitted in response to the Region's request, *see* A.R. EPA MHA-011226 to -011232 (May 2011);

[42](...continued)
underestimation of emissions).

[43] *See* A.R. Index at 99-112; Reg.'s Resp. at 25-27 (providing detailed explanation of documentation and evaluation process on air quality impacts associated with change in feedstock).

(4) revised air quality modeling results, *see* A.R. EPA MHA-011310 to -011322 (Air Quality Modeling Update for the Final Environmental Impact Statement for the Mandan, Hidatsa and Arikara Nation's Proposed Clean Fuels Refinery Project (May 2011)) [hereinafter Air Quality Modeling Update];[44] (5) comments from the Region to MHA Nation and its contractors on the Air Quality Modeling Update, *see* A.R. EPA MHA-010885 to -010892 (May 2011);[45] (6) June 2011 revised air quality modeling update from MHA Nation to address Region's comments, *see* A.R. EPA MHA-011368 to -011382 (Air Quality Modeling Analysis - Air Quality Modeling Update for the Final Environmental Impact Statement for the Mandan, Hidatsa and Arikara Nation's Proposed Clean Fuels Refinery Project (June 2011)) [hereinafter Revised Air Quality Modeling Update];[46] (7) the Region's request that MHA Nation model a worst-case scenario for the National Ambient Air Quality Standards ("NAAQS") 1-hour average and 24-hour average sulfur dioxide ("SO_2") impacts, *see* A.R. EPA MHA-011484

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[44] *See* Reg.'s Resp. at 25 (explaining that the Air Quality Modeling Update report addresses changes in the proposed refinery emissions and updates ambient air quality data since the 2007 air quality modeling performed for the FEIS; also noting that the updated air modeling uses an updated air quality model from the FEIS version, which includes a modeling analysis of the 1-hour average NAAQS for SO_2 and nitrogen dioxide ("NO_2")).

[45] *See* Reg.'s Resp. at 26 (explaining that Region's comments expressed concerns with the updated modeling report, including use of incorrect background concentration information for modeling 24-hour average particulate matter with a nominal aerodynamic diameter of less than 2.5 micrometers ("$PM_{2.5}$"), and need for additional information to calculate $PM_{2.5}$ emissions inventory, document frequency of intermittent SO_2 emissions from refinery, and determine whether the EPA's guidance on 1-hour NO_2 modeling on intermittent emissions applied to the refinery).

[46] *See* Reg.'s Resp. at 26 (explaining that the Revised Air Quality Modeling Update included corrections to the background $PM_{2.5}$ concentrations, revisions to the $PM_{2.5}$ emissions inventory, correction in the calculation of the SO_2 modeled impacts, and a more detailed description and justification for the treatment of the flare emissions as an intermittent source to be excluded in the modeling of the NAAQS 1-hour average SO_2 impacts).

to -011489;[47] and (8) worst-case scenario results from MHA Nation, *see* A.R. EPA MHA-011480 to -011490.

In addition, as part of its analysis, the Region updated the summary of air impacts tables published in the FEIS. The new tables include updated information on existing air quality, more refined design and operation information, and projected emissions from additional refinery units that would be needed to refine the Bakken crude. *See* Reg.'s Resp. at 27 (citing A.R. EPA MHA-011409).[48]

The bulk of the analysis appears to have occurred within a timeframe of three to four months (i.e., between March and July 2011), a short period of time according to EAC. Given the record of engagement detailed above, the length of time during which the Region's analysis took place provides no basis to conclude that the Region did not engage in a serious and careful evaluation of potential changes to air quality from air emissions associated with the proposed change in feedstock. In this particular case, the record paints a far different picture than the one EAC portrays, and clearly shows that the Region took its responsibility to take a "hard look" at the change in air emissions seriously. The Region's multiple requests for information to ensure the sufficiency and adequacy of the data, as well as its comments on the reports MHA provided, demonstrate the Region's engagement and

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[47] *See* Reg.'s Resp. at 27 (explaining that the Revised Air Quality Modeling Update used the standard EPA modeling guidance for modeling intermittent emissions such as flares, and that the worst-case scenario modeling was conducted to assess the sensitivity of the model for scenarios with increased flaring).

[48] The SIR's air quality analysis includes an evaluation of updated air emission calculations that take into account potential emissions from the additional refinery units needed to refine Bakken crude and a modeling analysis of the projected emissions from the refinery using Bakken crude as feedstock. *See* SIR at 7. Particularly, the SIR compares potential air emissions from the proposed refinery processing Bakken oil with the emissions expected from processing synthetic crude oil for five pollutants (i.e., NO_2, carbon monoxide ("CO"), PM_{10} and $PM_{2.5}$, SO_2, and VOCs) and compares expected changes in air quality concentrations between Bakken and synthetic crude oil in relation to the NAAQS for four pollutants (i.e., NO_2, CO, PM, and SO_2). *Id*. tbls. 3-4.

commitment to carefully examine available information and determine the need for supplementation.

d. *The Criterion the Region Used to Assess the Significance of the Change in Air Emissions is Reasonable*

The Region used the NAAQS as the criterion to assess the significance of the potential change in air emissions from the processing of a different crude oil.[49] Specifically, whether emissions for certain air pollutants would exceed the NAAQS became the determining criterion in the Region's evaluation of the need for EIS supplementation.

The SIR analyzed the increases in emissions and in ambient air concentrations for nitrogen dioxide ("NO_2"), carbon monoxide ("CO"), particulate matter ("PM_{10}/$PM_{2.5}$"), volatile organic compounds ("VOCs"), and SO_2 based on the change of feedstock from synthetic crude to Bakken crude oil. *See* SIR tbls. 3-4.[50] While the evaluation of air emissions indicates that individual pollutant emissions would increase due to the additional units required to process the Bakken crude oil,[51] the Region

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[49] The NAAQS are air quality standards for particular pollutants "measured in terms of total concentration of a pollutant in the atmosphere." Office of Air Quality Planning & Standards, U.S. EPA, *New Source Review Workshop Manual* C.3 (draft Oct.1990) ("NSR Manual"). EPA has set NAAQS for six principal pollutants (also known as "criteria pollutants"): sulfur oxides ("SO_x"), NO_x, CO, PM, lead, and ozone. *See* 40 C.F.R. pt. 50.

[50] *See* SIR at 7 tbl. 3 (showing estimated changes in annual emissions between conditions in FEIS and SIR for NO_2, SO_2, CO, $PM_{2.5}$/PM_{10}, and VOCs); *id*. at 8 tbl. 4 (showing estimated changes in air quality concentration between conditions considered in FEIS and SIR and comparing them to the NAAQS for NO_2, SO_2, CO, and $PM_{2.5}$/PM_{10}).

[51] The Region estimates that several other units will be needed for the refinery to be able to process Bakken crude oil, such as a vacuum heater, two decant oil tank heaters, a desalter, desalter brine disposal facilities, and additional air pollution controls. SIR at 4. The Region notes, however, that "[f]or most environmental resources and issues of concern, the environmental analysis for a refinery using Bakken crude is similar to that of a refinery using * * * synthetic crude." *Id*. In this case, the Region reasons that the refinery is still projected to be a relatively small refinery processing light, sweet crude;

(continued...)

concluded that a change in feedstock from synthetic crude oil to Bakken will not significantly change the impacts the proposed refinery may have on air quality because ambient air concentrations are expected to stay below the NAAQS.[52]

EAC implies that other criteria should have been used to assess the significance of the change in air quality due to the change in feedstock, such as the percentage increase in individual pollutants. It also suggests that the categorization of the refinery as a "minor" or "major" source under the Clean Air Act's ("CAA") Prevention of Significant Deterioration ("PSD") program should have played a more significant role. Specifically, EAC claims that the SIR is flawed because

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[51](...continued)
the refinery will remain in the same location with the same general site layout; no increase in output capacity is expected; and the new process units are expected to fit within the existing site boundaries. *Id*.

EAC claims that modifying the refinery design to add new process units will possibly require a change in the refinery's capacity. EAC Pet. at 15. Other than this conclusory statement, EAC has not provided any evidence that would indicate that this will be the case. In addition, nothing in the record suggests that MHA Nation intends to increase production capacity.

[52] Modeling projected the SO_2 1-hour standard to be below the NAAQS under normal conditions; however, worst-case scenario modeling indicates that the standard may be exceeded under unusual conditions. SIR at 7. Specifically, the SO_2 1-hour standard is expected to be exceeded *if* the flare operates more frequently than anticipated *and* both the sulfur recovery unit and the back-up unit are down at the same time. *Id*.; ROD at 11.

According to the Region, this worst-case scenario, modeled for uncontrolled flaring conditions (i.e., continuous flaring for a whole year (8760 hours/year) during worst-case meteorological conditions and with both sulfur recovery units inoperable), is highly unlikely to occur. Reg.'s Resp. at 28; SIR at 8 tbl. 4 n.6. The Region also states that "no refinery operates in this mode except during short-term situations." Reg.'s Resp. at 31. As explained in more detail below, *see infra* Part VI.C.1.e.ii, to address concerns about the variability of sulfur content of Bakken crude, MHA Nation proposed the installation of an additional redundant sulfur recovery unit to process potentially increased sulfur emissions. For additional discussion of other SO_2 arguments EAC makes, see *infra* Part VI.C.1.e.ii.

it does not explain why the potential change in status of the refinery from a "minor" to "major" source[53] and the expected increases in individual pollutant emissions do not constitute significant changes in impacts that would trigger EIS supplementation.[54]

The Board finds the Region's reliance on NAAQS compliance to be a reasonable indicator of the significance of the change in feedstock. Ensuring that emissions from the proposed refinery would stay below the NAAQS is consistent with the air quality analysis in the

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[53] In 2005, before the FEIS was issued, the Region made a nonapplicability determination under the CAA concluding that the proposed refinery was a "minor" source and would not need a CAA PSD permit. *See* A.R. EPA MHA-010692. In 2010, after the FEIS was issued and MHA Nation proposed to change the feedstock to Bakken crude, the Region requested information from MHA Nation and withdrew the nonapplicability determination because the preliminary nature of the design did not allow the Region to make a determination of PSD applicability at the time. *Id.*; SIR at 9. Later on, the Region recommended that MHA Nation apply for a PDS permit so that the Region could obtain the information needed to determine whether the proposed refinery will be subject to PSD requirements. *See id.*; A.R. EPA MHA-010877 to -010878.

EAC places significant weight on the Region's withdrawal of its PSD nonapplicability determination, claiming that the Region failed to explain why the potential change in status from "minor" source to "major" source is not a significant change that would trigger EIS supplementation. EAC Pet. at 14, 15-16. The Region explains that the withdrawal does not constitute a finding by the Agency that a PSD permit was required for CAA purposes or that air impacts were significant for NEPA purposes. Reg.'s Resp. at 23.

[54] EAC also claims that the expected increases in individual pollutant emissions are significant in absolute terms and that the Region failed to explain why these expected increases in pollutant emissions do not constitute a significant change in impacts. EAC Pet. at 6, 16 (noting that the change in crude oil would increase NO_x by 56%, PM by 131%, and SO_2 by 57%). The Region notes that estimated air emissions have increased for several parameters between the draft EIS, the FEIS and the SIR, but that the overall air quality impacts have remained consistently below the NAAQS. Reg.'s Resp. at 27-28.

FEIS[55] and the manner in which the Agency evaluates air quality impacts from pollutant emissions in other contexts.[56]

The Region's decision to assess the significance of the change in feedstock based on the expected changes in air quality concentration of criteria pollutants and whether those emissions exceed the NAAQS, as opposed to focusing on the percentage increase in emissions of individual pollutants, does not strike the Board as unreasonable. Neither NEPA nor its implementing regulations offer guidance as to what is considered to be a "significant new circumstance" or a "substantial change," leaving such determination to the discretion of the lead agency. In this case the Region, exercising its technical judgment and informed discretion, decided to use the NAAQS as the criterion for its determination of whether the change in emissions constitutes a "substantial change" or a "significant new circumstance" warranting supplementation.

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[55] One of the main factors used in the FEIS to evaluate the potential effects of air pollutant emissions from the proposed refinery was the impact on the NAAQS. *See* FEIS at 4-108 (explaining that "[a]n air quality analysis for the proposed refinery project was conducted to model the impact the project would have on the NAAQS."); *id*. at 4-137 (noting that "[t]he modeled results showed the potential emissions of criteria pollutants from the refinery are below all NAAQS"). Other factors evaluated in the FEIS included the PSD increments for the Class I and Class II areas, the Class I Air Quality Related Values, and the concentration of Hazardous Air Pollutants in the project and surrounding areas.

Even EAC states in its petition that "the FEIS' conclusion that the refinery would have negligible impacts on the quality of air was based on the finding that the potential emissions of criteria pollutants from the refinery *are below all NAAQS*." EAC Pet. at 5 (emphasis added).

[56] The Agency has used the NAAQS in the context of environmental justice as an indicator that Agency action will not result in disproportionately high and adverse human health or environmental effects on minority and low-income populations residing near a proposed facility. *See, e.g., In re Avenal Power Ctr., LLC,* PSD Appeal Nos. 11-02 through 11-05, slip op. at 22 (EAB Aug. 18, 2011), 15 E.A.D. __; *In re Shell Offshore, Inc.*, 13 E.A.D. 357, 404-05 (EAB 2007); *In re Knauf Fiber Glass, GmbH*, 9 E.A.D. 1, 16-17 (EAB 2000); *In re Ash Grove Cement Co.*, 7 E.A.D. 387, 413-14 (EAB 1997).

NAAQS are standards designed to protect public health, including the health of "sensitive" populations such as asthmatics, children, and the elderly,[57] with an adequate margin of safety, and to protect public welfare, including protection against visibility impairment and damage to animals, crops, vegetation, and buildings.[58] Therefore, using compliance with the NAAQS as the determining factor as to whether the proposed change in feedstock is significant strikes the Board as appropriate.[59] The Board has no reason, and EAC has provided none, to second-guess the Region's determination.

In addition, EAC's suggestion that the ultimate characterization of the proposed refinery as a "major" or "minor" source for CAA PSD permitting purposes should have played a more significant role in the Region's analysis is unpersuasive and lacks support. The ultimate characterization of the proposed refinery does not appear to have been a factor used in the FEIS to evaluate the impact of pollutant emissions on

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[57] These are known as "primary standards." *See* CAA § 109(b)(1), 42 U.S.C. § 7409(b)(1); *see also AES P.R.,* 8 E.A.D. at 351 (noting that primary NAAQS are health based standards, designed to protect public health with an adequate margin of safety, including sensitive populations such as children, the elderly, and asthmatics.); CAA § 109, 42 U.S.C. § 7409 (under section 109 of the CAA, primary NAAQS are "ambient air quality standards the attainment and maintenance of which in the judgment of the Administrator, based on such criteria and allowing an adequate margin of safety, are requisite to protect the public health.").

[58] These are known as "secondary standards." *See* CAA § 109(b)(2), 42 U.S.C. § 7409(b)(2).

[59] This is consistent with Board practice, in the context of PSD permit appeals, of upholding a permit issuer's environmental justice analysis based on a proposed facility's compliance with the relevant NAAQS. *In re Shell Gulf of Mex.*, OCS Appeal Nos. 10-01 through 10-04, slip. op. at 73-74 (Dec. 30, 2010), 15 E.A.D. ___ (stating that the "Board relies on and defers to the Agency's cumulative expertise when upholding a permit issuer's environmental justice analysis based on a proposed facility's compliance with the relevant NAAQS in a PSD appeal."). The Board has stated that "[i]n the context of an environmental justice analysis, compliance with the NAAQS is emblematic of achieving a level of public health protection that, based on the level of protection afforded by a primary NAAQS, demonstrates that minority or low-income populations will not experience disproportionately high and adverse human health or environmental effects due to exposure to relevant criteria pollutants." *Id*. at 74.

ambient air quality and human health.[60] *See* FEIS at 4-137, 4-146 (concluding that the proposed refinery would have negligible impacts on air quality and the human health of the local and area communities). Therefore, absent any evidence to the contrary, the Board agrees with the Region that whether the refinery is subject to PSD permit regulations is a distinct and separate inquiry from the Region's obligation to evaluate air impacts for NEPA purposes, and is not controlling as to whether any increase in air emissions of criteria pollutants constitutes a "substantial change in the proposed action" or "significant new circumstances" that requires EIS supplementation.

Based on all the above, the Board concludes that the criterion the Region used to assess the significance of the change in air emissions is reasonable. Furthermore, because the increase in air emissions associated with refining Bakken crude oil is expected to stay below the NAAQS, and nothing in the record suggests that this determination was based on flawed information,[61] the Board finds that it was reasonable for the Region to conclude that the proposed change will not "affect the environment in a significant manner or to a significant extent not already

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[60] While the FEIS does acknowledge the Region's nonapplicability determination (i.e., characterization of the refinery as a "minor" source at the time), the FEIS also mentions that "an increase in the proposed refinery's emissions due to any modifications could trigger additional permitting requirements for applicability of the PSD program." FEIS at 4-102.

[61] As noted earlier, *see supra* notes 41-42, EAC also claims that the Region relied on flawed information. To support this claim, EAC argues that the Region's withdrawal of the nonapplicability determination, *see supra* note 53, called into question the information MHA Nation provided in the Air Quality Modeling Update, and yet, the Region relied on that information to determine the need for FEIS supplementation. The Board has examined the withdrawal letter and related subsequent communications, *see* A.R. EPA MHA-010691 to -010748, -010877 to -010878, and nothing in those documents suggests that the information MHA Nation provided should not have been used to evaluate exceedances of the NAAQS. In addition, this argument fails to acknowledge the reports and data MHA Nation provided in response to comments the Region made on the Air Quality Modeling Update (specifically, the June 2011 Revised Air Quality Modeling Update and worst-case scenario results). EAC's claim, therefore, lacks merit.

considered," and therefore, supplementation of the project's FEIS was unnecessary.

e. *The Region Reasonably Evaluated Potential Emissions from Individual Air Pollutants*

EAC further claims that the Region did not adequately analyze the impact of nitrogen oxides ("NO_x"), SO_2, and VOCs because the estimated emissions for each of these pollutants were based on wrong assumptions that underestimated pollutant emissions. EAC Pet. at 6-7, 10-13. EAC also claims that the Region never considered or analyzed the possibility of increased hydrogen sulfide emissions and potential exposure associated with the processing of a crude oil with higher sulfur content. *Id*. at 13.

The Board notes, as a preliminary matter, that EAC has a heavy burden to overcome. The challenges EAC makes to the air emission analysis are technical in nature and the Board generally gives substantial deference to the permitting authority on these types of questions. *In re NE Hub Partners, LP*, 7 E.A.D. 561, 567-68 (EAB 1998), *review denied sub nom. Penn Fuel Gas, Inc. v. EPA*, 185 F.3d 862 (3d Cir. 1999); *see also Marsh v. Or. Natural Res. Council*, 490 U.S. 360, 377 (1989) (noting that courts must defer to informed discretion of the responsible federal agencies). That being said, the Board proceeds to analyze the arguments EAC makes.

i. *NO_x*

With respect to NO_x, EAC claims that the annual emissions MHA projected assumed much lower emissions rates for the facility's heaters and boilers, and therefore, instead of the projected 55.8 tons per year ("tpy") rate of emissions, the refinery will more likely exceed 100 tpy.[62] *See* EAC Pet. at 11-12. In support of this assertion, EAC

[62] EAC explains that this figure is based on the assumption that the refinery will not install $LoNO_x$ or Ultra $LoNO_x$ burners on heaters and boilers at the refinery (because (continued...)

identifies two alleged flaws in the assumptions used to estimate NO_x emissions. EAC questions the assumption that the heaters at the refinery will emit 40 parts per million ("ppm") NO_x,[63] and the assumption that the boilers will emit 30 ppm NO_x.[64]

With respect to the assumption that the heaters will emit 40 ppm NO_x, the Region explains that MHA Nation relied on 40 C.F.R. part 60 subpart Ja as a simple way to develop a conservative estimate of the likely NO_x emissions from the proposed refinery. Reg's. Resp. at 32.[65] The estimated NO_x emissions for heaters were calculated based on (1) vendor information indicating availability of a variety of process heaters that emit between 17 and 100 ppm; (2) vendor information showing that low-NO_x heaters emit between 25 and 35 ppm;

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[62](...continued)
it is not legally required). EAC Pet. at 12.

[63] This assumption is based on compliance with 40 C.F.R. part 60 subpart Ja, which establishes standards of performance for new stationary sources under the CAA. Among other things, subpart Ja establishes the limit on NO_x emissions allowed from large process heaters. Section 60.102a(g)(2) requires process heaters with a rated capacity of greater than 40 million British thermal units per hour to emit no more than 40 ppm of NO_x. 40 C.F.R. § 60.102a(g)(2).

According to EAC, the use of this figure to estimate NO_x emissions from the proposed heaters is flawed because (1) EPA has stayed the standards in subpart Ja; (2) subpart Ja only applies to one of the fourteen heaters MHA Nation is proposing for its refinery; and (3) the letter from the manufacturer MHA Nation included in the Addendum states that the NO_x emission rate without Ultra $LoNO_x$ and $LoNO_x$ burners is 100 ppm, which should have been the assumption used. EAC Pet. at 11-12.

[64] EAC claims that the Region should not have accepted the assumption that the boilers will emit less than 30 ppm NO_x because that number is based on estimates from one vendor only and because the correct assumption should have been 100 ppm – the industry standard, according to EAC. EAC Pet. at 12.

[65] The Region also explains that the fact that subpart Ja has been stayed, and that only one of the heaters is large enough to trigger application of subpart Ja during permitting, are not germane to this proceeding because the Region and MHA Nation were not involved in the air permitting process and the Region was not developing air permit limits. Reg.'s Resp. at 32.

(3) similarity between the original suite of units proposed for the refinery and the units proposed to account for the switch to Bakken feedstock; (4) the availability of low NO_x technology making 35 ppm control of NO_x achievable; and (5) the fact that MHA Nation used a NO_x emission rate of 40 ppm to conservatively estimate overall NO_x emissions. *Id*. at 33.

With respect to the boilers, the Region explains that it requested MHA Nation to consult with vendors and suppliers of refinery combustion device burners and to supply the Region with information demonstrating what values might be expected from the refinery combustion devices. *Id*. The Region explains further that vendor information indicated that boilers are available that emit 9 ppm NO_x and higher, and that while vendor data shows a range of potential emission rates, the Region is not required to use a worst-case assumption. *Id*. The Region adds that it determined that the supplied data was within the realm of emission rates for similar types of units, and concluded that the NO_X emissions estimates for boiler in the Addendum was reasonable. *Id*.

EAC's challenges to the assumptions used to estimate NO_x emissions from heaters and boilers are unpersuasive. The process of selecting an appropriate emission rate for boilers and heaters to estimate overall NO_x emissions requires the exercise of technical judgment, which the Board will not second-guess unless it is clear that the Agency failed to make a reasoned decision or failed to exercised its considered judgment. *See NE Hub*, 7 E.A.D. at 567-68; *see also Marsh*, 490 U.S. at 77. Clearly, the Region considered several factors before concluding that the assumptions used to estimate emissions from heaters and boilers were reasonable. That the assumption used for boilers came from data provided by only one vendor is not sufficient for the Board to conclude that the Region failed to make a reasoned decision, specially because EAC has not provided any evidence (such as data from other vendors) that would call into question the information the Region relied upon. In addition, in evaluating the change in feedstock, the Region not only examined the difference in NO_x emissions that would result from the additional heaters and boilers necessary to process Bakken crude, it also analyzed the impact on ambient air, particularly the impact of NO_x emissions on the NO_2 NAAQS. Reg.'s Resp. at 34. Air modeling results

predicted that the change in feedstock would not result in any violation of the NO_2 NAAQS. *See* SIR at 7-8.

In light of all this, the Board concludes that the Region exercised its considered judgment in both accepting the emission estimates MHA Nation provided with respect to heaters and boilers and concluding, based on the totality of the analysis, that NO_x emissions resulting from the change in feedstock do not rise to the level of significance necessary to trigger EIS supplementation.

ii. *SO_2*

With respect to SO_2, EAC claims that the information the Region relied upon (1) did not include flaring emissions for shutdown events; (2) underestimated startup SO_2 flaring emissions; and (3) assumed lower sulfur content in Bakken crude oil than what otherwise would be the case. EAC Pet. at 10-11.

The Region explains that it evaluated MHA Nation's air modeling and estimated flaring rates and examined various flaring rates from existing refineries. Reg.'s Resp. at 30. Flaring rates, the Region notes, are highly variable and can change through more rigorous operational procedures to reduce flaring. *Id*. In response to concerns raised in comments on the FEIS and the proposed change in feedstock, the Region asked MHA Nation to model a worst-case scenario for the NAAQS 1-hour average and 24-hour average SO_2 emissions to assess the sensitivity of the model for scenarios with increased flaring.[66] *Id*. at 30-31. The model predicted that during the worst-case scenario, which is highly unlikely to occur, the 1-hour SO_2 NAAQS may be exceeded but not the 24-hour SO_2 NAAQS. *Id*. at 31. The Region also explains that air modeling for Bakken predicted that the 24-hour and annual SO_2 levels

[66] The worst-case scenario is based on four worst-case conditions occurring simultaneously: (1) uncontrolled flaring; (2) worst-case meteorological conditions; (3) both sulfur recovery units out of order for 5 years; and (4) the maximum observed background SO_2 concentration occurring at the same time as the maximum modeled SO_2 emissions from the flare. Reg.'s Resp. at 27 n.22. These events are all highly unlikely to occur simultaneously; thus, the worst-case scenario itself is highly unlikely to occur.

were less than modeled for the FEIS, which were below NAAQS, and that the refinery would meet the 1-hour SO_2 NAAQS during normal operations, except, as previously noted, during worst-case conditions. *Id.* The Region notes that NEPA does not require evaluation of worst-case scenarios and that it went beyond NEPA requirements in asking for this analysis. *Id*. at 27 n.22.

With respect to sulfur content, the Region notes that Bakken oil is also a low sulfur crude. In fact, the average sulfur content in Bakken oil is less than the sulfur content for synthetic crude oil analyzed in the FEIS. Bakken, however, has more variability in sulfur content than synthetic crude oil. *Id*. at 29. Therefore, to evaluate the impact of air emissions from a more variable crude oil, the Region requested that MHA Nation conduct modeling on SO_2 emissions, which MHA Nation did. *Id*. To address the issue of sulfur content variability MHA Nation proposed the installation of an additional sulfur recovery unit to process increase sulfur loads and to act as a back up should the primary sulfur recovery unit malfunction. *Id*.

The Board finds that the Region reasonably estimated SO_2 emissions. It is clear that, in its evaluation of SO_2 emissions, the Region not only considered normal operating conditions, it also considered the variability in sulfur content and emissions from flaring during worst-case conditions (which exceed flare emissions from startup and shutdown events).[67] Having found that criteria pollutant emissions will be under the NAAQS, except for the 1-hour SO_2 emissions occurring during worst-case conditions, and satisfied that the addition of a second sulfur recovery unit will be sufficient to address sulfur variability, the Region concluded that ambient air quality will not be significantly affected by SO_2 emissions from refining Bakken crude. Clearly, the Region exercised its considered judgment, and the Board has no basis to second-guess the Region's determination.

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[67] *See* Reg.'s Resp. at 26 n.21 (noting that elevated flaring emissions would be similar to startup/shutdown events); *see also id*. at 27 n.27 (noting that worst-case scenario is based on four worst case conditions happening at the same time, including uncontrolled flaring for 5 years).

iii. *VOCs*

EAC claims that the Air Quality Modeling Update MHA Nation provided erroneously assumed that there would be zero VOC emissions from flaring. EAC Pet. at 12-13. The Region explains that this allegation is incorrect, and clarifies that the Region did not require MHA Nation to include modeling of VOC impacts in the Air Quality Modeling Updated, the FEIS, or the SIR because the Region's technical experts' review of available data did not indicate potential violations of the ozone NAAQS from VOC emissions.[68] Reg.'s Resp. at 35. The Region did, however, request information about all criteria pollutants, including ozone for both the FEIS and the SIR. *Id.* at 35-36 (citing A.R. EPA MHA-010682 to -010684; A.R. EPA MHA-010691 to -010707). After the proposed change in feedstock, MHA Nation complied with the Region's request by submitting criteria pollutant emission estimates, including VOCs, in its Addendum. *See* A.R. EPA MHA-011233 to -011276. The Region explains that the Addendum did show that there will be an increase in VOC emissions due to the change in feedstock, but because the change is not accompanied by a production increase, VOC emissions estimates for the refinery processing Bakken crude are in essence similar to the ones in the FEIS. *See* Reg.'s Resp. at 36 (comparing Air Quality Technical Report for FEIS with Addendum for SIR); *see also* SIR at 7 tbl. 3 (comparing estimated FEIS emissions (77 tpy of VOCs) with estimated Bakken emissions (86.2 tpy of VOCs)).[69] Based on those observations, the Region concluded that the impact from the change in VOC emissions was not significantly different from the impacts already evaluated in FEIS.

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[68] High VOC levels are an indicator of potential ozone problems, and EPA has promulgated NAAQS for ozone. Reg.'s Resp. at 35; *see also* 40 C.F.R. pt. 50 (standards).

[69] The Region notes that if MHA Nation had assumed 100% combustion efficiency in its calculations of VOC emissions from the flare unit, as EAC alleges in its petition, the VOC emissions estimates for that unit would have been zero, which was not the case. Reg.'s Resp. at 36.

The record clearly shows that the Region considered the impact from potential VOC emissions from processing Bakken crude oil. The Region's analysis is reasonable, and because EAC's argument about the Air Quality Modeling Updated assuming zero VOC emissions from flaring is incorrect, the Board has no basis to second-guess the Region's technical determination.

iv. *Hydrogen Sulfide*

EAC charges the Region with failing to consider hydrogen sulfide emissions and potential exposure associated with the processing of a crude oil with higher sulfur content. EAC Pet. at 13. The Region first notes that hydrogen sulfide is primarily an issue of worker's safety and that this type of issue is generally addressed by the U.S. Department of Labor, Occupational Safety and Health Administration, rather than EPA. Reg.'s Resp. at 37 n.22. The Region also explains that its air emissions analysis, for both the FEIS and the SIR, did not include hydrogen sulfide emissions because hydrogen sulfide is not anticipated to be present at the refinery in significant quantities. This conclusion, the Region explains, is based on the following factors: (1) the refinery will have several systems to control the release of hydrogen sulfide, such as closed processing and removal of sulfur from the crude; (2) the refinery will not be refining sour crude[70] (or high sulfur crude); (3) the minor sulfur releases that would be associated with the refinery are addressed through CAA technology and permitting requirements; (4) the variability in sulfur content from Bakken oil will be addressed by the installation of an additional sulfur recovery unit; and (5) the overall refinery production level is not expected to increase from the change in feedstock. Therefore, the Region determined that there will not be an increase in hydrogen sulfide from that anticipated in the FEIS. *Id.* at 37-38.

Clearly, the Region did consider whether specific data on hydrogen sulfide emissions were necessary as part of the air impacts analysis of the proposed change in feedstock and decided, based on the

[70] As previously noted, both the synthetic crude oil originally proposed and Bakken are considered sweet crudes, low in sulfur content.

reasons stated above, that such information was unnecessary. The Region's decision not to require air emission data or modeling of hydrogen sulfide emissions is a judgment the Region made based on its technical expertise. Its conclusion that hydrogen sulfide emissions were not a concern both prior to and after the proposed change in feedstock is based on reasonable considerations (e.g., the refinery will process sweet crudes; an additional sulfur recovery unit will be installed to handle sulfur variability; the change in feedstock does not come with a change in production level; permitting requirements can help control sulfur releases). Because the Region did consider the need to evaluate hydrogen sulfide emissions and exercised its considered judgment not to require such emission data, the Board declines to second-guess the Region's technical judgment.

f. *The Region Was Not Required to Hire an Independent Contractor*

As noted earlier, EAC suggests that the Region was required to hire, or should have hired, an independent expert to evaluate the significance of the proposed change in feedstock. EAC Pet. at 9-10. For this proposition, EAC cites *Marsh v. Oregon Natural Resources Council*, 490 U.S. 360, 377 (1989). *Id*. (attempting to draw parallel between the Army Corps of Engineers in *Marsh* and the Region in this case, noting that the Army Corps of Engineers hired two independent experts to evaluate the new information and carefully scrutinized the new information, and claiming that EPA did not engage in "any such evaluation of the environmental impacts of the proposed change").

The Board rejects EAC's suggestion. The case EAC relies upon does not stand for the proposition EAC proposes. While it is true that the Army Corps of Engineers in *Marsh* hired independent contractors to evaluate certain studies, *see Marsh*, 490 U.S. at 383, the *Marsh* decision does not mandate, or even suggest, that a lead agency hire independent contractors to fulfill its obligation of "taking a hard look" as it assesses the significance of new information or circumstances. *See id*. at 378-85. The *Marsh* decision does mention the hiring of independent contractors,

but only as an additional step the Army Corps of Engineers took in that particular case in its evaluation of new information.

Significantly, the *Marsh* case stands for a different proposition than the one EAC proposes. *Marsh* states that review of a decision by a responsible agency not to supplement an EIS is controlled by the arbitrary and capricious standard of the Administrative Procedure Act, and that courts must defer to the informed discretion of the responsible agency when resolution of issues requires a high degree of technical expertise. *See id*. at 377 (noting that when "analysis of [] relevant documents 'requires a high level of technical expertise,' [courts] must defer to 'the informed discretion of the responsible federal agencies'") (quoting *Kleppe v. Sierra Club*, 427 U.S. 390, 412 (1976)).

In light of all this, the Board concludes that the Region satisfied its NEPA obligations with respect to EIS supplementation.

2. *Did EAC Demonstrate That the Sulfide Issue It Raises Warrants Review?*

As noted earlier in this decision, EAC's petition challenges several of the Permit conditions, but since the Region withdrew most of the challenged conditions, the only issue remaining for Board examination is the challenge EAC makes with respect to sulfide.[71] The challenge, however, is procedurally barred.

EAC has not demonstrated that the issue (or issues) it attempts to raise about sulfide was (or were) preserved for Board review.[72] The

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[71] *See supra* note 18.

[72] It is unclear exactly what EAC attempts to challenge regarding sulfide. EAC argues that for certain pollutants, including sulfide, the Region did not calculate technology-based effluent limits correctly. *See* EAC Pet. at 19. If it had, the Region would have calculated much more stringent limits. *Id*. at 19-20. EAC even suggests what those limits should be. *Id*. at 20-21 (table comparing limits EAC proposes with limits in final permit).

(continued...)

Board has examined the comment letters EAC included in its petition as Exhibit 4, and none of them raise any issues related to sulfide. If any comments on this topic were in fact raised during the public comment period, EAC has not identified them. As the Board has stated on numerous occasions, it is not incumbent upon the Board to scour the record to determine whether an issue was properly raised below or determine what part of the Region's analysis the petitioner is challenging. *See, e.g., In re Guam Waterworks Auth.*, NPDES Appeal Nos. 09-15 & 09-16, slip op. at 20 n.14 (EAB Nov. 16, 2011), 15 E.A.D. __; *In re Encogen Cogeneration Facility*, 8 E.A.D. 244, 250 n.10 (EAB 1999). The burden of demonstrating that an issue was preserved for review falls on the petitioner, and the failure to make such demonstration is a basis for denying review.[73] In addition, this is not the case where the issue was not reasonably ascertainable during the public comment period, particularly because no changes to the effluent limitations were made between the draft permit and final permit.[74]

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[72](...continued)
The problems with these arguments are that the Permit does not have a sulfide limit, and EAC does not articulate a challenge to the lack of a sulfide limit. The Region assumes that EAC is challenging the hydrogen sulfide limit in the Permit, *see* Reg.'s Pet. at 18-19, but that is inconsistent with the text of the petition. This lack of specificity leaves the Board with no ability to review the challenge to the extent that there is one. Like the failure to demonstrate that an issue has been preserved for Board review, the lack of specificity in a petition also constitutes a basis for denying review.

[73] *See* 40 C.F.R. § 124.13 ("All persons, including applicants, who believe any condition of a draft permit is inappropriate * * *, must raise all reasonably ascertainable issues and submit all reasonably available arguments supporting their position by the close of the public comment period (including any public hearing) under §124.10."); *see also In re Russell City Energy Ctr.*, PSD Appeal Nos. 10-01 through 10-05, slip op. at 57 n.46 (EAB Nov. 18, 2010), 15 E.A.D. __ (stating that it is the petitioner "who bears the burden of demonstrating that this issue was raised, and with sufficient specificity, during the public comment period") (citing 40 C.F.R. § 124.19(a) and Board cases).

[74] *Compare* Effluent Limitation Table for Outfall 002 in Draft Permit (A.R. EPA MHA-094) *with* Revised Draft Permit (EPA MHA-06818) *and* Final Permit (A.R. EPA MHA-010); *see* Fact Sheet at 1 (noting that the "Permit was Public Noticed on June 23, 2006," and "[t]he comments received and the supplemental information provided following public notice did not change the conditions in the NPDES permit") (continued...)

Because EAC has failed to demonstrate that the issue it raises was preserved, a prerequisite to demonstrating that an issue warrants review, the Board declines to review the Permit on the basis EAC proposes.

VII. *CONCLUSION*

Based on the foregoing discussion, the Board determines that:

1. The Region satisfied its NEPA obligations with respect to EIS supplementation;

2. EAC failed to demonstrate that the issue it raises about sulfide warrants review.

VIII. *ORDER*

The Board dismisses NPDES Appeal Nos. 11-04 and 12-03 and denies review of NPDES Appeal Nos. 11-02 and 11-03.

So ordered.

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[74](...continued)
(A.R. EPA MHA-038).

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing **Order Dismissing Petitions and Denying Review** in the matter of *MHA Nation Clean Fuels Refinery*, NPDES Appeal Nos. 11-02, 11-03, 11-04, and 12-03, were sent to the following persons in the manner indicated:

By First Class Certified Mail, Return Receipt Requested:

Sparsh Khandeshi, Esq.
Environmental Integrity Project
1 Thomas Circle, Suite 900
Washington, D.C. 20005

Thomas W. Fredericks, Esq.
Fredericks Peebles & Morgan, LLP
1900 Plaza Drive
Louisville, Colorado 80027

James Stafslien
Post Office Box 0094
Makoti, North Dakota 58756

Pastor Elise Packineau
Post Office Box 496
New Town, North Dakota 58763

Tim Gray
Plaza Township Supervisor
3702 61st Avenue NW
Makoti, ND 58756

By EPA Pouch Mail:
Erin E. Perkins, Esq.
Assistant Regional Counsel
U.S. Environmental Protection Agency, Region 8
Office of Regional Counsel
1595 Wynkoop Street
Denver, Colorado 80202-2466

By EPA Interoffice Mail:
Thomas S. Marshall, Esq.
U.S. Environmental Protection Agency
Office of General Counsel
1200 Pennsylvania Avenue, N.W.
Mail Code 2322A
Washington, D.C. 20460

Dawn M. Messier, Esq.
Pooja Parikh, Esq.
U.S. Environmental Protection Agency
Office of General Counsel
1200 Pennsylvania Avenue, N.W.
Mail Code 2355A
Washington, D.C. 20460

Dated: JUN 28 2012

Annette Duncan
Secretary