



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

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**AUG - 4 2008**

Ref: 8P-AR

Terry O'Clair, Director  
Division of Air Quality  
Environmental Health Section  
North Dakota Department of Health  
918 E. Divide Ave.  
Bismarck, ND 58501-1947

RE: EPA Region 8 Comments on May 2008 Draft  
BART SIP (FLM Consultation Version)

Dear Terry:

EPA has completed a preliminary review of North Dakota's May 2008 draft Regional Haze SIP to meet Best Available Retrofit Technology (BART) requirements ("BART SIP"), as requested via email by Tom Bachman on June 2, 2008. Our comments and questions are detailed in Enclosure 1 to this letter. For the record, we are also including the numerous comments we've made previously on the company BART analyses that are now contained in Appendix C of the BART SIP (see Enclosure 2). We understand that you intend to consider all comments received on this Federal Land Manager (FLM) consultation version of the BART SIP prior to finalizing the documents. The final draft of the BART SIP, which will include a summary of the FLMs' comments and your responses, will then undergo a broader public hearing process prior to adoption and submission to EPA. We emphasize that we will only come to a final conclusion regarding the adequacy of North Dakota's BART determinations and SIP when we act on the North Dakota Regional Haze SIP revision, through our own public notice and comment rulemaking.

We want to acknowledge your tremendous efforts in developing BART for the subject-to-BART electric generating units in North Dakota and in working up front with us as issues arose. For the most part, your draft SIP is comprehensive and contemplates commendable reductions - approximately 90,000 tons/year SO<sub>2</sub> and 21,000 tons/year NO<sub>x</sub> based on our calculations using current actual annual emissions minus BART emission limits. Our comments are meant to ensure that the relevant BART analyses and determinations are robust and well-supported and that the SIP is in a form we can approve. We hope that you will give consideration to our

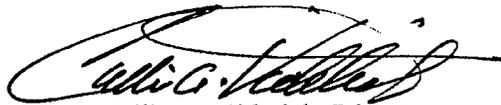


comments to assure truly "best available" BART levels and reasonable progress toward the National visibility goal.

You have previously indicated that the remainder of the Regional Haze SIP requirements, including reasonable progress and the long-term strategy, will be addressed separately, and we look forward to working with you on those SIP revisions. Please be aware that a BART SIP alone probably will not be adequate to avoid a finding of failure to submit the Regional Haze SIP by the required due date. Such a finding would initiate a 2-year clock for the completion of a Federal Implementation Plan to address any outstanding regional haze requirements.

We have appreciated working with you during the review of this FLM consultation version of the draft BART SIP and look forward to continued communications during the public hearing process. If you have any questions on EPA's comments, please contact me at 303-312-6434, or have your staff contact Amy Platt at 303-312-6449.

Sincerely,

A handwritten signature in black ink, appearing to read "Callie A. Videtich", with a large, sweeping flourish at the end.

Callie A. Videtich, Director  
Air Program

Enclosures

cc: Tom Bachman, NDDH  
Chris Shaver, NPS  
Sandra Silva, USFWS  
Thomas Dzomba, USFS  
John Mooney, EPA Region 5

## ENCLOSURE 1

### EPA Region 8 Preliminary Comments on May 2008 Draft BART SIP (FLM Consultation Version)

#### Summary of Major Concerns - (see detailed comments for more information):

1. There are numerous inconsistencies between the SIP text, North Dakota Department of Health (NDDH) BART determinations, and proposed permits regarding the BART limits. Please clarify/resolve.
2. We disagree regarding the technical feasibility of SCR for NO<sub>x</sub> control at the 3 cyclone units burning North Dakota lignite (Milton R. Young Units 1 & 2 and Leland Olds Unit 2).
3. NDDH's Leland Olds 5-factor analysis lacks SO<sub>2</sub> cost and visibility analyses for Unit 2.
4. NDDH's Milton R. Young 5-factor analysis lacks NO<sub>x</sub> visibility analyses entirely and relies on an incomplete BACT process to satisfy BART analysis requirements.
5. Startup/shutdown exemption for Milton R. Young NO<sub>x</sub> limit is not acceptable.
6. We believe that the inferior control technology proposed for Stanton Unit 1 (spray dryer/fabric filter), coupled with what we find to be an inflated uncontrolled emission rate, produces too high of an SO<sub>2</sub> limit (0.24 for lignite, 0.16 for PRB). Although this is the smallest of the subject-to-BART units in terms of megawatts, this and other power plants are among the largest emitters in the State. It may be more cost-effective to consider further controls now in order to meet reasonable progress requirements, rather than waiting to address these requirements with other sources during the development of the remainder of your Regional Haze SIP.

#### Detailed Comments

##### BART SIP text:

1. Definitions, pp. 11-15: Definitions are accurately cited from 40 CFR 51.301, however, each definition is designated by letter (*e.g.*, hh, e, w, d, l, m, etc.). Since 40 CFR 51.301 does not assign letters to the definitions, what is the basis for these letter designations? In addition, we suggest rewording 1<sup>st</sup> sentence on p. 13 to clarify that the definition for "existing stationary facility" is much broader than simply "a stationary source."
2. Screening Impact Threshold, pp. 16-17: A more robust discussion regarding NDDH's process for selection of the 0.5 deciview threshold should be provided to justify your selection. For example, the addition of a discussion of the number and relative impacts of BART-eligible units above and below 0.5 deciviews, and the potential for plume overlap due to the relative clustering of sources, would be useful.

3. Exclusion of Montana Dakota Utilities Heskett Unit No. 2, p. 23:
  - (A) We have concerns with ENSR's CALPUFF modeling. They reduce the CALMET/CALPUFF grid size from 3 km to 1 km. EPA has recently seen data indicating that Calpuff may inappropriately reduce predicted concentrations with such grid size manipulation. In addition, ENSR's use of annual average background visibility conditions will also decrease delta deciview impacts. According to NDDH's approved "Protocol for BART-Related Visibility Impairment Modeling Analyses in North Dakota," the 20% cleanest days should be used. Given that ENSR's refined results move Heskett from "subject-to-BART" to "exempt," a more robust discussion is necessary regarding why NDDH found ENSR's analysis "acceptable," including an explanation of why you think this approach will not lead to underestimates of visibility impacts.
  - (B) NDDH notes that MDU has committed to increase SO<sub>2</sub> removal efficiency to a minimum of 70% by 2013. How is this voluntary agreement formalized? We note that in a June 9, 2006 letter from MDU to Terry O'Clair, they commit to "control SO<sub>2</sub> emissions by installing and operating the necessary equipment to use limestone as the bed material in the boiler." They state that they will agree to include a condition in their Title V permit implementing this change, including a permit shield pertaining to BART applicability. Is NDDH taking credit for these emissions reductions in the BART SIP, *i.e.*, are these reductions included in the 99,000 tons/year figure provided in the SIP text? Does NDDH intend to use these reductions to satisfy reasonable progress requirements? If so, how do you intend to make this agreement federally enforceable?
4. SO<sub>2</sub> BART Determinations, pp. 24-26: As we have commented previously, we would like you to consider establishing limits that require the BART units to meet both lb/MMBtu emission rates *and* control efficiencies, rather than just one *or* the other. The potentially cost-effective additional reductions you can achieve now by having both limits apply to these large sources will be beneficial toward meeting reasonable progress requirements during the development of the remainder of your Regional Haze SIP.
5. SO<sub>2</sub> discussion on p. 25-26 doesn't match the table on p. 33, *e.g.*, the 90% reduction requirement for Milton R. Young Unit 2 is not included in the text, nor is the separate PRB limit for Stanton included in the table (see more detail below under source BART determination specific comments).
6. NO<sub>x</sub> discussion on p. 27 states that "[t]he seven BART sources determined SCR is not technically feasible for installation on boilers in North Dakota burning lignite coal." However, this statement is inconsistent with the Great River Energy BART analyses which found low-dust SCR feasible for the units burning lignite at their Coal Creek and Stanton Station facilities.
7. NO<sub>x</sub> BART section: In the absence of a final NO<sub>x</sub> BACT determination under the Consent Decree process for Minnkota's Milton R. Young facility, a full 5 factor NO<sub>x</sub> BART analysis is required for Milton R. Young in the BART SIP. If a final BACT decision is reached, and NDDH wants to rely on the BACT determination to satisfy BART, NDDH will need to include a discussion of BACT as a surrogate for BART in this section of the BART SIP text.
8. Tables 3 & 4, regarding SO<sub>2</sub> and NO<sub>x</sub> emissions reductions, pp. 32-34: These tables are

- confusing in that the BART level of control (% reduction) column is not easily reproduced from the data presented. These tables should be revised for more transparent public review.
9. Section 3.5, Air Pollution Control Permit to Construct for Subject-to-BART Sources, pp. 34-36: (A) NDDH indicates that emission limits, monitoring, recordkeeping, and reporting requirements specified in the BART determinations are included in federally enforceable permits to construct that will be issued to the owner/operator of the facility before the SIP is submitted to EPA. Later, the text indicates that the four permits are included in Appendix D. As we have commented previously, the limits, monitoring, recordkeeping, and reporting requirements must be part of the SIP. For the sake of clarity, the text in section 3.5 should state that the four permits are included in Appendix D and are incorporated “as part of this SIP.” (B) The public notice for the BART SIP needs to include notification that the BART permits are included.
  10. Section 4.3, Consultation with Other States, pp. 37-38: We note that in its September 19, 2007 Northern Class I Areas Consultation Conclusion, the Minnesota Pollution Control Agency determined that North Dakota is a significant contributor to visibility impairment at both Voyageurs National Park and Boundary Waters Canoe Area Wilderness. As a result, Minnesota requested that North Dakota evaluate further reductions of SO<sub>2</sub> and NO<sub>x</sub> emissions from its electric generating units (EGUs). We understand that you were a participant in that process, in part to meet the state-to-state consultation requirements under the regional haze rule. EPA will be evaluating Minnesota’s and North Dakota’s Regional Haze SIPs to assess both Minnesota’s request that you evaluate further reductions of emissions from EGUs, and your response to that request.
  11. Appendix B.5, BART SCR Technical Feasibility Analysis for ND Lignite: As we have commented previously, we do not agree with your rationale for determining that SCR is technically infeasible when burning North Dakota lignite. We have done a thorough review of the technical feasibility analyses submitted by Minnkota for Units 1 and 2 at Milton R. Young Station and NDDH’s preliminary BACT determination published for public notice on June 11, 2008. Our comments and supplemental information were provided in a July 31, 2008 letter from Andrew M. Gaydosh, Assistant Regional Administrator, Office of Enforcement, Compliance, and Environmental Justice, to Terry O’Clair, Director, North Dakota Department of Health, Division of Air Quality. Our letter provided substantial information and evidence that the SCR technology is technically feasible at facilities burning North Dakota lignite.
  12. Appendix E, Public Hearing Record: need to ensure that E.8, Response to Public Comments, includes a summary of all public comments received as well as the State’s response.

**Chapter 33-15-25 Regional Haze Requirements:**

13. 33-15-25-02.2: insert “part 51” before “section 301.”
14. 33-15-25-04: This section cross references the State’s Acid Rain Program (33-15-21) and Title V Program (33-15-14-06), neither of which is included in the federally approved SIP.

This may not be problematic if the specific requirements are spelled out in the SIP text and permits. If the requirements are not spelled out in the SIP text and permits, then the specific requirements need to be specified in this rule or the rule should cite to the federal regulations.

#### **NDDH BART Determinations – Pertaining to All 4 Determinations**

15. SO<sub>2</sub> analyses, Step 2: Eliminate Technically Infeasible Options: The arguments presented for Coal Cleaning/Washing and K-Fuel go more to environmental impacts and economic concerns than to technical feasibility. In addition, NDDH provides only a cursory discussion of the commercial history of the K-Fuel technology and vendor and source experiences. It's not clear whether the technology has been successfully employed elsewhere, or why or whether coal type, or the specific source mine, is really a significant distinguishing factor. Also, for TurboSorp, NDDH cites lack of commercial availability in the U.S., but this begs the question whether it's been in commercial use elsewhere. Based on the limited discussion presented, EPA wouldn't necessarily concur with NDDH's conclusion that these options are technically infeasible. Additional information should be provided to support the technical infeasibility determination, or it may be more appropriate to discuss your concerns under the analysis sections for cost effectiveness and/or energy and non-air quality impacts.
16. The References section should include a cite to the company BART analyses that were relied upon by NDDH in preparing these determinations. While we realize that Appendix C of the BART SIP incorporates the company analyses, the BART determinations should also reference them for ease of public review.

#### **NDDH Proposed Permit to Construct for BART – Pertaining to All 4 Permits**

The proposed permits were reviewed against the draft "model" BART permit format NDDH developed in March 2008. Concerns with deviations from that format are discussed here as applicable to all four proposed permits. Deviations of concern to specific proposed permits are addressed below under comments for the specific facilities.

17. II.A.1., 1<sup>st</sup> paragraph: Added a new last sentence citing to 40 CFR Part 60, Subpart Da. As our staffs have discussed, we recommend deleting all references to Da since the relevant language from Da on how to calculate 30-day rolling averages is already spelled out in the permit, and since the references to Da are problematic. The specific subsections of Da that describe how to calculate 30-day rolling averages also contain exemptions from emission limits for startup, shutdown and malfunction. We are concerned that the references to Da could be construed by permittees to mean BART sources get those same exemptions from BART limits, even though the permits say elsewhere that the BART limits apply at all times. An alternative would be to put a statement in the permits that the exemptions in Da do not apply to BART limits, but as we have noted, the references to Da do not appear to be necessary in the first place. The references to Da are also problematic since Da explicitly

prohibits use of Part 75 for data substitution procedures, whereas condition II.A.4.b.(3) of the BART permits allows it.

18. II.A.4.b.(7), Notes: Added a reference to Condition II.A.1. under 30-day rolling average which refers back to Da. This reference is problematic if the concerns noted above in II.A.1. are not corrected. However, if II.A.1. is corrected as described above, then the reference in II.A.4.b.(7), Notes, is a good idea.
19. II.A.6.g.: To avoid the implication that the source can determine the effective date of the BART emission limits, the phrase “and the effective date of the BART emission limits” should be deleted from the end of the sentence. Based on conversations between our staffs, we understand that you have agreed to this change.

### **Leland Olds:**

#### **NDDH BART Determination**

20. Unit 1 SO<sub>2</sub> BART evaluation: On p. 8, the emission factor for SO<sub>2</sub> is incorrectly stated as 35S. EPA’s AP-42 states that for lignite firing (either wall-fired or cyclone boilers), the emission rate is 30S. It appears that NDDH’s calculations for both the corrected and uncorrected emission rates are too high.
21. Unit 2 SO<sub>2</sub> BART evaluation: NDDH determines that because the “most efficient control option” was selected for SO<sub>2</sub> control, no evaluation of costs or visibility impacts is necessary. This approach does not meet the BART Guideline requirements for analysis. In fact, a full 5-factor analysis may find that even stricter controls would be cost effective and/or provide greater visibility benefits.
22. Unit 1 NO<sub>x</sub> BART evaluation: It is not clear how some of the 16 control options listed were eliminated from further consideration. However, the selection of SNCR plus SOFA at 0.19 lbs/MMBtu is a commendable level of control.
23. Unit 2 NO<sub>x</sub> BART evaluation: NDDH determined that SCR is not technically feasible. As you know, we disagree with this conclusion, based on our analyses related to Milton R. Young NO<sub>x</sub> BACT, analyses performed to support the BART Guidelines, and other sources of information. We note that NDDH, in reaching its conclusion regarding technical infeasibility of SCR, relies on the Milton R. Young NO<sub>x</sub> BACT evaluation; however, the Milton R. Young BACT process has not been completed.
24. Page 39: Typo in table heading – should be Unit 2?
25. Summary, p. 44-45: Units 1 and 2 PM limits are listed as 0.05 lbs/MMBtu; however, the text of the PM BART evaluation and the proposed Permit to Construct for BART lists 0.07 lbs/MMBtu. Please clarify.
26. Summary, p. 44-45: Unit 1 NO<sub>x</sub> limit is listed as 0.18 lbs/MMBtu with 849 tons/yr emissions reductions; however, the NO<sub>x</sub> BART evaluation lists 0.19 lbs/MMBtu as the limit and the BART SIP text, Table 4, lists 757 tons/yr emissions reduction. The proposed Permit to Construct for BART also lists the limit as 0.19. Please clarify.

27. We appreciate the revision to the visibility impacts analysis to present the required 98<sup>th</sup> percentile results, as previously requested.

#### NDDH Proposed Permit to Construct for BART – Leland Olds

28. II.A.1.c., PM emission limits: The expression “Unit 1 and Unit 2” is problematic since it could be construed to mean emission averaging across both units is allowed. For clarity, we recommend NDDH list the Units and the applicable PM limits individually.
29. II.A.4.b.(5): The phrase “EPA-approved” was deleted from the last sentence regarding other test methods and should be corrected.
30. II.A.4.b.(8): Added “Average AER” equation and allowable emission rate. Based on a conversation between our staffs, we understand that you have agreed to add a footnote clarifying that “Average ER = average actual emission rate,” so as not to confuse it with “AER” which is “allowable emission rate.”
31. II.A.6.d.: There appears to be an inadvertent deletion of the phrase “or portable analyzer test.” Based on a conversation between our staffs, we understand that this will be corrected.

#### Coal Creek:

#### NDDH BART Determination

32. We believe there may be an error in the computation used in the Future Case table, p. 10. Uncontrolled SO<sub>2</sub> emissions are scaled up by the ratio of 1.1%/0.61%, to account for dried vs. as-received lignite, to yield 76,888 tons/yr. This fails to recognize that Btu content will increase by the same ratio, thus, requiring less total tonnage of lignite to be burned. If an error was made, these calculations should be redone. The Future Case table also has 2 rows labeled “Existing Scrubber & 27% Bypass,” having control efficiencies of 68% and 83.1%. The first label should be changed and the scenario should be described.
33. SO<sub>2</sub> analyses, Step 6: Select BART, p. 12: We do not agree with NDDH’s characterization of the degree of visibility improvement (0.263 deciviews) achieved by selecting wet scrubber replacement versus wet scrubber modification as a “negligible improvement.” We note that NDDH selected a wet scrubber over a spray dryer in the Leland Olds BART determination, with a visibility improvement of 0.198 deciviews. In addition, it may be difficult to achieve similar visibility improvement more cost effectively for purposes of reasonable progress.
34. The NPS has raised concerns over Great River Energy’s (GRE’s) inclusion of almost \$14 million infrastructure “sunk costs” in its analysis of future economic costs for SCR and SNCR. We understand that you are continuing your discussions with GRE regarding the potential loss of future ash sales and cost of future ash disposal and expect to provide additional information. We will review any additional information when it becomes available.

NDDH Proposed Permit to Construct for BART – Coal Creek

35. II.A.1.c.: We note that the PM limit is worded as applicable to “either Unit 1 or Unit 2.” The expression “either Unit 1 or Unit 2” is problematic since it could be construed to mean that compliance must be demonstrated at only one of the two units. For clarity, we recommend that NDDH list the Units and the applicable PM limits individually.

**Milton R. Young**

NDDH BART Determination

36. Minnkota’s August 2007 analyses appear to rely heavily on Consent Decree (CD) options. As we have noted in previously submitted comments, the language of the CD does not indicate that EPA considered the controls to be BACT or BACT-equivalent. The BART analyses need to be a robust review of control technologies – not a validation of what was already agreed to in the CD.
37. SO<sub>2</sub> BART evaluation: Unit 1 visibility impacts for the 90<sup>th</sup> percentile are referenced from the source’s August 2007 BART analysis, and the reader is directed to extrapolate the required 98<sup>th</sup> percentile results from Appendix A of that document. This is not an adequate presentation of the required 98<sup>th</sup> percentile results. See previously submitted comments.
38. NO<sub>x</sub> BART evaluation:  
(A) The startup/shutdown exemption and separate limits for these periods are not acceptable. The BART Guidelines contemplate pounds per million Btu limits that apply continuously, with a 30-day rolling average period. Minnkota argues that SNCR does not function properly during startup and shutdown periods when operating outside of a specified temperature range. We understand that various types of control technologies, including SNCR, may not be fully effective outside specified temperature ranges. However, one of the purposes of a 30-day averaging period for the BART limits is to accommodate potential short-term fluctuations in the emissions rate that may result during startups and shutdowns and other conditions. NDDH indicates that, if historical worst-case startup durations occur, compliance with the 30-day rolling average limits will be “extremely difficult;” NDDH does not say it would be impossible. It is not clear what steps, if any, Minnkota may have taken historically to reduce emissions during startups or to limit the duration or frequencies of startups. NDDH does not indicate why startups lasted 61 or 115 hours, whether such durations were typical, or how frequently they occurred. We are concerned that NDDH’s proposed approach could result in a very large NO<sub>x</sub> emission event with resultant visibility impacts and no real incentive for Minnkota to minimize its emissions during startup and shutdown. We do not believe that startup/shutdown exemptions are necessary or appropriate for Milton R. Young’s 30-day NO<sub>x</sub> BART limits and that the exemptions should be eliminated. We also note that the same exemptions have not been sought by, or provided to, other facilities (Leland Olds & Stanton) for which SNCR is proposed as BART, and we know of no reason Milton R. Young warrants

special treatment. Leland Olds Unit 2 is also a cyclone unit.

(B) No visibility impacts analyses are provided since the source proposed the “most efficient technology.” First, we do not agree that the most efficient technology was selected since SNCR is proposed instead of SCR. Second, this approach does not meet the BART Guidelines requirements for a full 5-factor analysis and should be corrected. A full analysis may find that stricter controls provide greater visibility benefits.

(C) We believe that the presumptive limits should apply since the total generating capacity is actually greater than the reported nameplate capacity of 734 MW, in fact, > 750 MW (see previously submitted comments).

(D) On p. 21, NDDH refers to a “completed” BACT determination and on p. 45, the preliminary BACT determination is incorporated by reference. However, the NO<sub>x</sub> BACT process is not completed, and as we have commented previously, NDDH cannot rely upon an incomplete BACT process to satisfy the BART analysis requirements. Therefore, the NO<sub>x</sub> BART analysis for Milton R. Young is deficient.

39. Summary, p. 51: The Unit 2 SO<sub>2</sub> limit does not list the minimum 90% reduction with the 0.15 lbs/MMBtu limit, as is presented in both the table in the SIP text on p. 33 and in the proposed Permit to Construct for BART. Please clarify.

#### NDDH Proposed Permit to Construct for BART – Milton R. Young

40. II.A.1.c., NO<sub>x</sub> limits: The startup/shutdown exemption and separate limits for these periods are not acceptable. See discussion above in comment #38(A).
41. II.A.1.c., PM limits: The expression “Unit 1 and Unit 2” is problematic since it could be construed to mean emission averaging across both units is allowed. For clarity, we recommend that NDDH list the Units and the applicable PM limits individually.
42. II.A.1.e.: The condition that SO<sub>2</sub> and PM limits apply at all times, including startup, shutdown, emergency and malfunction should also apply to NO<sub>x</sub> limits.
43. II.A.4.b.(5): The phrase “EPA-approved” has been deleted from the last sentence regarding other test methods and should be corrected.

#### Stanton:

#### NDDH BART Determination

44. SO<sub>2</sub> BART evaluation in general: We believe that the proposed technology (spray dryer/fabric filter) is inferior, and coupled with what we find to be an inflated uncontrolled emission rate, results in SO<sub>2</sub> limits that are too high (0.24 for lignite, 0.16 for PRB coal). A lower emission limit can be achieved by using a more realistic uncontrolled rate and increasing the design removal efficiency. Although this is the smallest of the subject-to-BART units in terms of megawatts, this and other power plants are among the largest emitters in the State. It may be more cost-effective to consider further controls now in order

- to meet reasonable progress requirements, rather than waiting to address these requirements with other sources during the development of the remainder of your Regional Haze SIP.
45. SO<sub>2</sub> BART evaluation for lignite: (A) On p. 8, NDDH uses an uncontrolled emission rate of 2.4 lbs/MMBtu for calculation of BART limits. This number appears to be inflated since a value of 1.81 lbs/MMBtu is used on p. 4 and the highest year's value from CAMD (prior to the fuel switch) was 1.92 lbs/MMBtu. (B) A wet scrubber was eliminated from consideration based on environmental considerations, but it is not clear how significant these other considerations were and why they were not significant at any other plant. Please explain. We believe that consideration should be given to using a wet scrubber.
  46. SO<sub>2</sub> BART evaluation for PRB coal: On p. 22, a possible future sulfur content of 1.6 lbs/MMBtu is used to calculate the BART limit. We find this assumption unrealistic given that recent content at Stanton, since the switch to PRB coal, is closer to 0.5 lb/MMBtu. Please clarify if you disagree or provide a more realistic assumption for future sulfur content.
  47. The SO<sub>2</sub> analyses do not address the scenario for when a combination of PRB coal and lignite are burned, although this scenario is included in the proposed permit to construct for BART. If NDDH intends to keep this option in the permit, then the BART determination must include the necessary analyses.
  48. NO<sub>x</sub> BART evaluation for lignite and PRB coal: (A) On pp. 13 & 24, the amount of emission reductions that can be achieved is underestimated in these tables. Greater control efficiencies are generally achieved by combining combustion controls plus SNCR. (B) The State's proposal of LNB+OFA+SNCR is commendable since it goes beyond what can be achieved with just combustion controls. However, the BART limit should be tightened since current (pre-BART) emissions using PRB coal at Stanton are already very close to the proposed limit (0.26 lb/MMBtu vs. 0.23 lb/MMBtu).
  49. PM BART limit: We note that the proposed spray dryer/fabric filter would reduce PM emissions as well, but the BART determination does not seem to account for it in the proposed PM limit.
  50. Summary table, p. 27: (A) The SO<sub>2</sub> limit provided for PRB coal is not listed in the table of the SIP text, p. 33. (B) Neither this summary table nor the SIP text, p. 33, includes the SO<sub>2</sub> and NO<sub>x</sub> limits when a combination of lignite and PRB coal are burned, even though the proposed permit does include these "combination" limits. Please clarify/resolve these inconsistencies.

#### NDDH Proposed Permit to Construct for BART – Stanton

51. II.A.1.c. and II.A.1.f: These calculations for determining the SO<sub>2</sub> and NO<sub>x</sub> limits when a combination of lignite and PRB coals is burned do not seem consistent with the language in the SIP text, pp. 24 & 26, which states that the limits are the same whether burning PRB coal alone or in any combination with lignite. Please clarify/resolve this inconsistency.
52. II.A.1.g.: There appears to be a typo in the last sentence. The reference should be to II.A.4.b.(5), not III.A.4.b.5.
53. II.A.4.b.(5): The phrase "EPA-approved" was deleted from the last sentence regarding other

test methods and should be corrected.

54. II.A.4.b.(7): A cross-reference to II.A.1.c. should be included. Based on conversations between our staffs, we understand that you have agreed to make this change.

## ENCLOSURE 2

### Previously Submitted Region 8 Comments on Company BART Analyses

1. November 1, 2006 letter from Richard R. Long, EPA Region 8, Air & Radiation Program, to Terry O'Clair, NDDH, Division of Air Quality, regarding comments on draft BART analyses.
2. November 7, 2007 letter from Callie A. Videtich, EPA Region 8, Air & Radiation Program, to Terry O'Clair, NDDH, Division of Air Quality, regarding comments on revised Minnkota BART analyses.
3. December 19, 2007 email message from Amy Platt, EPA Region 8, Air & Radiation Program, to Craig Thorstenson, NDDH, Division of Air Quality, regarding comments on revised Stanton BART analyses.
4. February 26, 2008 email message from Amy Platt, EPA Region 8, Air & Radiation Program, to Craig Thorstenson, NDDH, Division of Air Quality, regarding comments on revised Stanton BART analyses.

