TITLE 326 AIR POLLUTION CONTROL BOARD

SECOND NOTICE OF COMMENT PERIOD
LSA Document #06-208

DEVELOPMENT OF A NEW RULE CONCERNING BEST AVAILABLE RETROFIT TECHNOLOGY

PURPOSE OF NOTICE

The Indiana Department of Environmental Management (IDEM) has developed draft rule language for a new article at 326 IAC 26 concerning best available retrofit technology (BART) for the implementation of the federal regional haze rule. The regional haze rule requires Indiana to submit a state implementation plan (SIP) by December 17, 2007, that includes BART. The United States Environmental Protection Agency (U.S. EPA) published guidelines for BART to assist states with the requirement. By this notice, IDEM is soliciting public comment on the draft rule language. IDEM seeks comment on the affected citations listed and any other provisions of Title 326 that may be affected by this rulemaking.

HISTORY

First Notice of Comment Period: August 15, 2006, Indiana Register (DIN: 20060726-IR-326060208FNA).

CITATIONS AFFECTED: 326 IAC 26.

AUTHORITY: IC 13-14-8; IC 13-14-9; IC 13-17-3-4; IC 13-17-3-11.

SUBJECT MATTER AND BASIC PURPOSE OF RULEMAKING

Basic Purpose and Background

On July 6, 2005, U.S. EPA published the BART guidelines in the Federal Register (70 FR 39104). These guidelines are a component of the Regional Haze regulations, published on July 1, 1999, that are intended to protect and improve visibility in national parks and wilderness areas.

The Regional Haze rule requires IDEM to submit a SIP to address visibility impairment in federally-protected parks and wilderness areas (Class I areas). To meet this requirement, IDEM must evaluate whether certain emission units within affected industries adversely impact visibility in Class I areas. Although there are no Class I areas in Indiana, there are several in the region that may be affected by emissions from Indiana sources. The BART guidelines provide the mechanism for complying with the requirement to address visibility impairment in Class I areas. IDEM is obligated to submit the regional haze SIP by December 17, 2007, including a commitment that BART will be implemented in accordance with the federal guidelines.

The Regional Haze Rule

In 1999, U.S. EPA published a final rule to address a visibility impairment known as regional haze (64 FR 35714, July 1, 1999). Regional haze is caused by tiny particles that absorb and scatter sunlight, creating white and brown haze. The regional haze rule requires states to submit SIPs to address regional haze visibility impairment in 156 federally-protected parks and wilderness areas. These 156 scenic areas are called "mandatory Class I Federal areas" in the Clean Air Act (CAA) but are generally referred to as "Class I areas". The 1999 rule was issued to fulfill the requirements of Section 169A and 169B of the CAA. As required by the CAA, U.S. EPA included in the final regional haze rule a requirement for BART at certain large stationary sources. The regional haze rule uses the term "BART-eligible source" to describe these sources. Under the CAA, BART is required for any BART-eligible source that a state determines "emits any air pollutant which may reasonably be anticipated to cause or contribute to any impairment of visibility in any such area." Accordingly, for stationary sources meeting these criteria, states must address the BART requirement when they develop their regional haze SIPs.

Though states have some discretion on use of the BART guidelines for most sources, Section 169A(b) of the CAA and 40 CFR 51.308 (e)(1)(ii)(B) require that states follow the BART guidelines for fossil-fuel fired generating powerplants having a capacity in excess of 750 megawatts.

BART Alternatives

In the First Notice of Comment Period published in the Indiana Register on August 15, 2006 (DIN: 20060726-IR-326060208FNA), an overview of the BART process was provided. Since that time, IDEM has reviewed and considered several comments and approaches by other states on various alternatives allowed by the federal guidelines.

IDEM believes following the BART guidelines rather than a statewide alternative program is the most efficient approach for Indiana to meet the federal deadline. Commentors support this approach but also stated a desire for flexibility. IDEM intends to provide flexibility in establishing BART controls to the extent allowed by the federal guidelines and consistent with the goal of improved visibility.

IDEM is concerned that an emissions trading program would not be practical in Indiana because there is not a sufficient number of companies in the state impacted by BART to establish a viable trading program. Sources

subject to BART can choose to install and operate BART controls in accordance with the BART guidelines rather than participate in a BART emission trading program, which could further reduce the number of participants. In addition, Indiana has determined that the Clean Air Interstate Rule (CAIR) can substitute for BART for electric generating units (EGUs) for NO_x and SO_2, so those EGUs would not be included in the BART program.

On October 13, 2006, U.S. EPA published a final rule on alternatives to source-specific BART (71 FR 60612) that will allow sources subject to BART to propose an alternative to BART controls. Sources that propose an alternative to BART would be required to demonstrate that the proposed alternative is better than BART and would still have to conduct the analysis to establish what the BART control level should be for the sources subject to BART. The analysis would need to show greater reasonable progress toward improved visibility. The alternative could affect BART and non-BART units. Any alternative must be for the same pollutant and must be demonstrated to attain a greater improvement in visibility than BART.

One alternative to installing controls on every BART unit is that a company could submit a compliance plan with a BART analysis in which the source agrees to limitations that would provide a greater improvement in visibility. The analysis would need to demonstrate how visibility would be improved and could include limitations at different locations of the same company, different companies, or at a source not subject to BART. IDEM invites comments on this alternative approach to installing BART controls.

IDEM has been working with the Midwest Regional Planning Organization (MRPO) using CALPUFF for a consistent regional and national modeling approach for addressing BART eligibility and the analyses to determine which sources are subject to BART. IDEM compared results of using a 0.5 deciview threshold at both the 98th and 99th percentile. Results show that sources that exceed the 0.5 deciview at the 99th percentile also exceeded at the 98th percentile. Therefore, consistent with U.S. EPA guidance, IDEM proposes using the 98th percentile as the boundary to determine visibility impairment at Class I areas for BART determinations.

The BART guidelines require BART determinations for sources subject to BART for sulfur dioxide (SO_2), oxides of nitrogen (NO_x), and particulate matter (PM). The guidelines allow states to determine whether or not volatile organic compounds (VOCs) or ammonia need to be included in the BART determinations. Based on comments received and consideration of a consistent regional approach, IDEM proposes not to include VOCs or ammonia in Indiana's BART determinations. IDEM notes that several other upcoming state rulemakings will address VOC emissions including: architectural and industrial maintenance (AIM) coatings, automobile refinishing, consumer products, degreasing, portable fuel containers, and stage I vapor recovery.

Based on comments received and further consideration of potential BART controls, IDEM has determined that establishing a compliance date of less than five years after approval of the Regional Haze SIP may be difficult for many of the affected companies. However, U.S. EPA meant for the five years to start from the time the BART emission limits become federally enforceable. Because this rule proposes a time period and process to submit the BART engineering analysis rather than including the emission limits, it is necessary to set a compliance date consistent with the BART guidelines. Therefore, IDEM proposes to require compliance with approved BART controls within five years of effective date of this rule. This rule is anticipated to become effective in early 2008, so the compliance date of 2013 is consistent with U.S. EPA expectations for source compliance with BART requirements.

In states affected by the Clean Air Interstate Rule (CAIR), U.S. EPA has stated that states may determine that CAIR improves visibility more than implementing BART for electric generating units (EGUs) participating in a CAIR cap and trade program. By participating in the CAIR cap-and-trade program, Indiana may chose to use CAIR as a substitute for BART rather than require BART-eligible EGUs to install, operate, and maintain BART. After consideration of the CAIR and BART programs, Indiana has determined that participation in CAIR should satisfy the BART requirements for EGUs for NO_x and SO_2. The potential impact of PM from EGUs is still being evaluated to determine if there are impacts on Class I areas.

BART in Indiana

IDEM identified sources within the BART source categories and sent a survey to obtain additional information to develop a list of BART-eligible sources. Based on the surveys and subsequent discussions and comments, IDEM has determined that the following sources have at least one unit that is BART-eligible:

County	County ID	Plant ID	Name
Cass	017	00006	Logansport Municipal Light & Power
Cass	017	00005	ESSROC Materials, Inc.
Clark	019	00008	ESSROC Cement Corporation
Dearborn	029	00002	American Electric Power-Tanners Creek
Gibson	051	00013	Duke Energy - Gibson
Jasper	073	00008	NIPSCO - R. M. Schahfer
Lake	089	00318	Mittal Steel USA Inc.- Indiana Harbor West
Lake	089	00003	BP Products North America, Inc. - Whiting Refinery
Lake	089	00112	Carmeuse Lime, Inc.

Lake	089	00210	State Line Energy, L.L.C.
Lake	089	00121	U.S. Steel - Gary Work
Lake	089	00316	Mittal Steel USA Inc.- Indiana Harbor East
Lake	089	00117	NIPSCO - D. H. Mitchell Station
LaPorte	091	00021	NIPSCO - Michigan City
Lawrence	093	00002	Lehigh Cement Company
Marion	097	00033	IPL Harding Street Station
Marion	097	00034	Citizens Thermal Energy
Montgomery	107	00003	Crawfordsville Electric Light & Power
Pike	125	00002	Indianapolis Power & Light/AES Petersburg
Pike	125	00001	Hoosier Energy - Ratts Station
Porter	127	00002	NIPSCO - Bailly Station
Porter	127	00001	Mittal Steel USA Inc.- Burns Harbor
Posey	129	00002	GE Plastics Mt. Vernon, Inc.
Posey	129	00010	SIGECO - A. B. Brown
Putnam	133	00002	Buzzi Unicem USA
Sullivan	153	00005	Hoosier Energy - Merom Station
Tippecanoe	157	00012	Purdue University
Vermillion	165	00001	Duke Energy - Cayuga
Vermillion	165	00009	Eli Lilly and Company-Clinton Labs
Vigo	167	00021	Duke Energy - Wabash River
Warrick	173	00002 & 00007	ALCOA Inc.
Warrick	173	00001	SIGECO - F. B. Culley Generating Station
Wayne	177	00009	Richmond Power & Light

IDEM has conducted further modeling in coordination with the Midwest Regional Planning Organization (MRPO) to determine which BART-eligible sources are subject to BART. Using dispersion modeling (Option 1 in the BART guidelines), IDEM has determined that the following non-EGUs are subject to BART: ALCOA Inc., ESSROC Cement Corporation, GE Plastics Mt.Vernon, Inc., Mittal Steel USA Inc.-Burns Harbor, and U.S. Steel-Gary Works. ESSROC Materials is BART-eligible, but has not submitted information to conduct revised BART modeling, therefore it will be assumed that ESSROC Materials is subject to BART until IDEM receives emissions and stack information and a BART determination can be made through CALPUFF modeling. Preliminary modeling indicates that the following EGUs are subject to BART: ALCOA Inc., Hoosier Energy - Ratts Station, Richmond Power & Light, State Line Energy, NIPSCO - D. H. Mitchell Station, NIPSCO - Michigan City, NIPSCO - Bailly Station, SIGECO - A. B. Brown, and SIGECO - F. B. Culley Generating Station. However, IDEM has determined that CAIR is a substitute for BART, so these EGUs will not be required to install and operate BART controls for NO_x and SO_2.

In addition, IDEM has identified the following fossil-fuel fired generating powerplants as having a capacity in excess of 750 megawatts: Duke Energy - Gibson, Duke Energy - Cayuga, and Indianapolis Power & Light/AES Petersburg, IPL - Harding Street Station, NIPSCO - R. M. Schahfer, American Electric Power-Tanners Creek, Duke Energy - Wabash River, and Hoosier Energy - Merom Station. These EGUs will also be covered by CAIR and, therefore, not be required to install and operate BART for NO_x and SO_2.

The companies subject to BART will be required to submit to IDEM a BART analysis to determine the proper level of BART control for each emissions unit and pollutant subject to BART. This analysis must consider the following factors identified by U.S. EPA: (1) the costs of compliance, (2) the energy and nonair quality environmental impacts of compliance, (3) any existing pollution control technology in use at the source, (4) the remaining useful life of the source, and (5) the degree of improvement in visibility that may reasonably be anticipated to result from the use of such technology.

Enforceable Limits and Compliance Dates

Indiana must establish enforceable emission limits based on the BART guidelines and require compliance within five years after U.S. EPA approves the regional haze SIP. An enforceable emission limit must be established for each affected emission unit and for each pollutant subject to review that is emitted from the source. Under certain circumstances, a design, equipment, work practice, operation standard, or combination of these types of standards may be used in place of conventional emission limits. Sources subject to BART may also propose another alternative in the BART analysis. U.S. EPA recommends allowing "averaging" emissions across any set of BART-eligible emission units within a fence line, as long as the emission reductions from each pollutant being controlled for BART would be equal to or greater than those reductions that would be obtained by simply controlling each of the BART-eligible units that constitute BART-eligible source.

Because the BART requirements themselves are "applicable" requirements of the CAA, they must be included as Title V permit conditions according to the procedures established in 40 CFR Part 70. Section 302(k)

of the CAA requires emissions limits such as BART to be met on a continuous basis. Although this provision does not necessarily require the use of continuous emissions monitoring (CEMs), it is important that sources employ techniques that ensure compliance on a continuous basis. Monitoring requirements generally applicable to sources, including those that are subject to BART, are governed by other regulations.

IC 13-14-9-4 Identification of Restrictions and Requirements Not Imposed Under Federal Law

No element of the draft rule imposes either a restriction or a requirement on persons to whom the draft rule applies that is not imposed under federal law. This draft rule imposes no restrictions or requirements because it implements federal requirements that are applicable to Indiana and contains no amendments that have a substantive effect on the scope or application of the federal rule.

Potential Fiscal Impact

IDEM anticipates that the impact of this rule on sources subject to BART will exceed $500,000. However, the estimate of the overall fiscal impact can only be determined as part of the required BART analysis to be submitted to IDEM by the affected sources. U.S. EPA identified "the costs of compliance" as one of the five factors to be analyzed during this process.

U.S. EPA requires sources subject to BART to install and operate BART within five years of approval of each state's Regional Haze SIP. This rulemaking is implementing this federal requirement and does not impose any additional requirements or costs beyond what is required by U.S. EPA.

U.S. EPA conducted an analysis of the benefits and costs of implementation of the BART guidelines and predicts a net benefit of $1.9 to $12.0 billion nationally in 2015. The range reflects differing assumptions about what actions individual states may take to comply with the guidelines. Analysis of costs included several scenarios based on control stringency, discount rate, and industry sector. Nationwide, U.S. EPA estimates annualized costs associated with reductions of SO_2 and NO_x in 2015 to range from $151.43 million to $2.24 billion (1999$) for costs estimated at a 7 percent discount rate and from $272.23 million to $1.8 billion (1999$) for costs estimated at a 3 percent discount rate. The capital costs associated with these reductions in 2015 range from $655.70 million to $14.75 billion for costs estimated at a 7 percent discount rate and from $1.9 billion to $12.73 billion. Additional information on U.S. EPA's analysis can be found in "Regulatory Impact Analysis for the Final Clean Air Visibility Rule or the Guidelines for Best Available Retrofit Technology (BART) Determinations Under the Regional Haze Regulations," EPA-452/R-05-004, June 2005, www.epa.gov/air/visibility/pdfs/bart_ria_2005_6_15.pdf

Public Participation and Workgroup Information

IDEM convened a public meeting on BART on August 17, 2006, to discuss the First Notice of Comment Period and answer questions from interested parties. IDEM will reconvene this workgroup for additional discussions during the rulemaking process. The workgroup is made up of IDEM staff and a cross section of stakeholders. If you wish to provide comments to the workgroup on the rulemaking, attend meetings, or have suggestions related to the workgroup process, please contact Christine Pedersen, Rules Development Section, Office of Air Quality at (317) 233-6868 or (800) 451-6027 (in Indiana). Please provide your name, phone number and email address, if applicable, where you can be contacted.

SUMMARY/RESPONSE TO COMMENTS FROM THE FIRST COMMENT PERIOD

IDEM requested public comment from July 26, 2006, through August 25, 2006, on alternative ways to achieve the purpose of the rule and suggestions for the development of draft rule language. IDEM received comments from the following parties by the comment period deadline:

American Electric Power (AEP)
Citizens Thermal Energy (CTE)
GE Plastics Mt. Vernon, Inc. (GEP)
Hatchett & Hauck LLP, on behalf of Essroc Cement Corporation (ECC)
Improving Kids' Environment (IKE)
Indiana Energy Association (IEA)
Mittal Steel USA Inc. (MSU)
NiSource Corp. Services (NCS)
PSEG Lawrenceburg Energy Company LLC (PSEG)
Purdue University (PUR)
Vectren Corporation (VEC)

Following is a summary of the comments received and IDEM's responses thereto:

General Comments

Comment: The BART guidelines issued by U.S. EPA are complex, and IKE agrees that it makes good sense for IDEM to continue to meet with interested parties, including potentially regulated sources, as it works to develop the rule. These workgroups have worked well for other complicated rulemakings. (IKE)

Comment: IDEM should initiate a stakeholders workgroup to develop draft rule language. (ECC) (IEA) (CTE) (VEC) (AEP)

Comment: Essroc requests to participate in the workgroup. (ECC)

Comment: Based on the interest shown in this rulemaking at the August 17, 2006 public meeting on the BART First Notice, IDEM should continue with these meetings. Due to the similarity in the audience for this meeting and those attending the CAIR/CAMR meetings, IDEM should coordinate future BART meetings with the CAIR/CAMR meetings to the maximum extent possible. This would minimize the travel requirements that the regulated community would see to participate in both of these rulemakings. (AEP)

Comment: IDEM should initiate a stakeholder workgroup to ensure that IDEM acquires necessary and accurate data regarding the possibility of acquiring and installing BART controls within the timeframe necessary to do so. (IEA) (ECC) (CTE) (VEC) (AEP)

Response: IDEM will continue to meet with stakeholders throughout the rulemaking. IDEM will coordinate the timing of the BART meetings with the Utility Rules Workgroup to the extent possible.

Comment: IDEM should develop the rule in a manner that achieves the stated goals in the most cost-effective manner possible. IDEM should consider the necessity, structure, and requirements of the proposed rules within the context of the numerous existing state and federal regulatory programs that have reduced emissions as well as those upcoming rules, such as the Indiana version of the Clean Air Interstate Rule (CAIR) that were recently preliminarily adopted by the Air Pollution Control Board, and the Clean Air Mercury Rule (CAMR). (NCS)

Response: IDEM will continue to take into consideration other regulatory programs for reducing emissions and the cost-effectiveness of requirements during the BART rulemaking.

Comment: IDEM should provide maximum flexibility in the BART rule language to owners and operators in selecting controls and other alternatives, including emissions averaging to meet visibility criteria. Given the age of these emission units, the formidable costs for retrofitting emission control technologies, and the impacts arising from other current or future regulatory requirements, IDEM would serve Indiana businesses well by allowing sources to be as creative as possible in developing a compliance strategy for BART. (GEP)

Comment: IDEM should draft the BART rules to permit owners and operators who must install BART controls the maximum degree of operational flexibility. (MSU)

Response: IDEM anticipates that the BART rule will provide a regulatory foundation for the actual BART controls which will be identified, reviewed, and approved during the BART determination process. IDEM will work with stakeholders on specific suggestions for operational flexibility during the BART determination process and invites stakeholders to provide suggestions with their BART analyses.

Comment: IDEM should follow the BART guidelines for BART-eligible sources. (ECC) (AEP)

Response: IDEM plans to follow the BART guidelines, but may make adjustments to address issues specific to Indiana.

Comment: While Essroc agrees a fiscal impact needs to be performed, the costs of compliance are likely to be extremely burdensome to the regulated community regardless of the alternatives selected by IDEM. (ECC)

Comment: The Indiana Energy Association looks forward to the opportunity to provide input and work with IDEM as the required fiscal analysis is prepared for this rulemaking. (IEA) (CTE) (VEC) (AEP)

Response: IDEM appreciates input from stakeholders on fiscal impacts of alternatives or requirements proposed during this rulemaking. Specific data on the costs of compliance are to be addressed during the BART analysis submitted to IDEM by each source subject to BART. IDEM does not anticipate that this rulemaking will impose any costs beyond those required to comply with the federal BART guidelines, and is not planning to develop a fiscal analysis beyond that conducted by U.S. EPA for the Regional Haze rule.

Rule Structure

Comment: IKE recommends that IDEM list the known sources in the rule, but also include the general definition on the chance that a source has been missed. (IKE)

Comment: IDEM should place general requirements for BART-eligible sources in the rule and not attempt to develop a source specific rule due to the time constraints of the rulemaking process. (AEP)

Comment: IDEM should not list the sources subject to BART or emission limits for specific sources in the BART rule. IDEM should concentrate on its BART engineering analysis guidance, and provide the criteria that a source should use to evaluate control and other options to determine what constitutes BART for its units. (GEP)

Response: IDEM agrees that the BART rule should include general requirements for compliance with the federal BART guidelines. IDEM has identified known BART-eligible sources and sources likely to be subject to BART in this notice and therefore does not believe it is necessary to include them in the rule language. The draft rule language in 326 IAC 26-1-3 provides a mechanism to ensure any possible unknown BART-eligible sources are subject to this rule.

Comment: IDEM should expressly confirm in the final rulemaking that sources with BACT or LAER controls automatically satisfy BART, and need not undergo any further assessment. The final rule should contain a specific and definitive list of sources and units where BART is required. This certainty is essential to business planning and compliance management. (MSU)

Response: A decision that BACT or LAER automatically satisfies BART cannot be made. However, U.S. EPA has indicated that if a unit is already controlled with the best control technology available under MACT, BACT or LAER, a streamlined approach to BART may be used by including a discussion of the control with an explanation

of why it is the best control technology available. It would be necessary to ensure that more stringent technologies have not emerged since the MACT, BACT or LAER determination, and include that information in the discussion in the BART analysis. If newer technologies have emerged, then they would have to be included in a full BART analysis.

Comment: IDEM should provide the timelines for various activities such as completion of site specific modeling, development of the engineering analysis and submission of the BART determination, compliance date for BART, performance tests, and notification of compliance status. (GEP)

Response: IDEM agrees and continues to invite suggestions from stakeholders on timelines for various activities associated with this rulemaking. For instance, in 326 IAC 26-1-6(a), IDEM has proposed that the BART analysis be submitted to IDEM within 270 days of a source being notified that it is subject to BART.

Comment: BART-eligible emission units not subject to BART should not have limits set in the Title V permit. These units should be identified as BART-eligible with a determination that BART is not required. (GEP)

Response: BART-eligible emission units that are not subject to BART will not have BART controls established in the Title V permit. However, IDEM will consider language in the Title V permit to clearly state the status of BART-eligible emission units that are determined not to be subject to BART.

Applicability

Comment: PSEG Lawrenceburg Energy Company LLC was incorrectly listed as having at least one unit that is BART-eligible. The property was undeveloped prior to construction which began in 2001, so no units were in existence between 1962 and 1977. (PSEG)

Response: IDEM agrees and has removed the units from the list of BART-eligible emission units.

Comment: The Perry K plant was omitted from the list sources with BART-eligible units, however, we believe two oil-fired boilers are BART-eligible based on our understanding of U.S. EPA's interpretation of the source category "steam electric plants of more than 250 MMBtu/hr heat input," their construction date in the early 1970's, and the potential emissions of SO_2 exceed 250 tons per year for each boiler. These boilers are non-EGUs and are not affected units under CAIR because the individual boiler design heat input is less than 250 MMBTu/hr. (CTE)

Response: IDEM agrees and will include these units in the list of BART-eligible emission units.

Comment: The Ohio River Station facility (Vanderburgh County) on the list of BART-eligible sources has been decommissioned since 1978. The old units are inoperable and do not have a Title V permit, therefore, the Ohio River Station should not be considered in the list of BART-eligible sources. (VEC)

Response: IDEM agrees and has removed the units from the list of BART-eligible emission units.

Comment: The Rockport Plant is not BART-eligible since it is not an "existing stationary source" as defined in 40 CFR 51.301. Rockport Plant received its first construction permit from U.S. EPA on October 11, 1977 and from the Indiana Air Pollution Control Board on October 17, 1977, after the latest date to be classified as BART-eligible (August 7, 1962, to August 7, 1977). (AEP)

Response: IDEM agrees and has removed the units from the list of BART-eligible emission units.

Comment: The list of BART-eligible units published in the First Notice should be confirmed by IDEM for accuracy. If the list is not accurate, it will result in erroneous decisions being made by IDEM as part of the BART process. (ECC) (IEA) (CTE) (VEC) (AEP)

Response: IDEM has revised the list of BART- eligible units and included the list in this notice for further comment.

Emissions Cap and Trade

Comment: IKE does not believe that a trading program makes sense for this rule, at least without further analysis of what impact trading would have on the success of reducing visibility impairment and how effective it would be in making compliance more cost efficient. Given the small number of sources likely to be affected, a statewide trading program would not be very robust and, to our knowledge, U.S. EPA has not proposed a regional or national trading program. Averaging among units for a single pollutant would be appropriate, however, and could provide opportunities for efficiencies. (IKE)

Comment: IDEM should leave open the possibility of establishing a BART trading program. There may be non-EGUs that may want to opt into the CAIR cap and trade program and, for that reason, the possibility of a BART trading program is important to these sources. (PUR) (IEA) (CTE) (VEC) (AEP)

Comment: Essroc may decide to opt into the annual CAIR cap and trade program, and suggests that IDEM leave open the possibility of establishing a BART trading program. (ECC)

Comment: A BART trading program is an appropriate geographic enhancement for IDEM to incorporate if IDEM chooses to use CAIR as a substitute for BART for EGUs. IDEM should choose CAIR as a substitute for BART and include the geographic enhancement of a BART trading program in its final BART rule. (ECC) (IEA) (CTE) (VEC) (AEP)

Comment: U.S. EPA has indicated that trading under the BART program must include BART sources but can include sources not subject to BART. IDEM should investigate trading as an alternative to requiring sources to install, operate, and maintain BART. An option should be included in the BART rule allowing sources to trade with BART or non-BART sources on a case-by-case basis with IDEM approval to achieve required reductions. (GEP)

Comment: IDEM should provide information on the trading options that will be offered under BART. Flexibility should be provided because, although there are not many non-EGUs currently in the BART program, this is another potential alternative that some sources may wish to investigate for compliance with BART. (GEP)

Response: IDEM has considered the possibility of implementing a trading program option under BART, but has determined that it is not practical. There are an insufficient number of sources subject to BART in the state to make trading viable and of those sources, some could chose not to participate by installing and operating BART controls based on a BART determination. In addition, IDEM has determined that CAIR should satisfy BART for EGUs in Indiana, therefore, affected EGUs would have the opportunity to participate in the CAIR cap and trade program.

IDEM has not received suggestions on any other alternatives to BART for consideration.

CAIR to Satisfy BART Requirements

Comment: A key question in this rulemaking is whether electric utilities should be included or whether the Clean Air Interstate Rule (CAIR) will effectively require BART for these sources. IDEM has correctly pointed out that CAIR regulates only SO_2 and NO_x, and does not address fine PM. In addition, CAIR is not so much concerned with the combined effect of SO_2 and NO_x that is relevant for visibility purposes. IKE believes that it is premature to exclude the utilities from this rule until further analysis is available of the impact of emissions of pollutants other than SO_2 and NO_x and of the combined effects of those pollutants from this source category on visibility. (IKE)

Comment: IDEM should choose CAIR as a substitute for BART for electric generating units. (PUR) (VEC) (ECC) (IEA) (CTE) (AEP)

Comment: At various meetings, the IDEM Commissioner has stated that CAIR should be sufficient for EGU sources to meet BART in Indiana. IDEM staff needs to follow the policy espoused by the Commissioner. (AEP)

Comment: IDEM should consider determining CAIR as a substitute for BART for non-EGU opt-in units choosing the stringent Alternative Opt-In. The Alternative Opt-In requires reductions in NO_x and SO_2 similar to that required of the EGUs. A unit choosing the Alternative Opt-In cannot opt-out at a later date, thus ensuring an opt-in unit will not be able to avoid emission reductions it would have had to achieve under BART by simply opting out of CAIR. Opting out is available to sources choosing the Base Opt-In. (PUR)

Comment: IDEM should choose CAIR as a substitute for BART, both because U.S. EPA has determined that CAIR improves visibility more than implementing BART for EGUs and because Essroc and other non-EGU sources may decide to opt into the CAIR annual cap and trade program. IDEM choosing CAIR as a substitute for BART for EGUs and implementing a BART trading program will facilitate use of the programs by Essroc and other non-EGU sources in order to work with IDEM in reaching both $PM_{2.5}$ nonattainment and visibility goals. (ECC)

Comment: All CAIR participants should be exempt from BART. For EGUs subject to both NO_x and SO_2 regulation under the CAIR program, that exemption should be complete (as proposed in the federal rules). Non-EGUs opting into the annual CAIR NO_x program should be exempt from BART NO_x obligations. (MSU)

Comment: IDEM should use the flexibility in the federal rule and the companion BART guidelines to adopt CAIR as a substitute for BART rather than require BART-eligible EGUs to install, operate, and maintain BART. (NCS)

Response: After consideration of the CAIR and BART programs, as well as comments submitted, Indiana has determined that participation in CAIR should satisfy the BART requirements for EGUs.

Modeling

Comment: IDEM is encouraged to adopt a position that minimizes any additional modeling that must be conducted by non-EGU sources as part of the BART evaluation process, or that allows facilities to use data generated through the IDEM modeling exercises to complete the evaluation under BART. Many non-EGU facilities are on the BART-eligible list for only one or two fossil-fuel fired boilers, including many individual boilers with nameplate capacities less than 250 MMBtu/hr design heat input. It seems redundant to allocate resources to undertake additional modeling on these individual facilities that, based on IDEM's own modeling exercises, have no impact on visibility in the Class I areas considered. (CTE) (PUR)

Response: The BART modeling protocol that IDEM is using has been accepted by U.S. EPA and will suffice as an appropriate tool to determine which sources are subject to BART. No additional modeling will be necessary for sources that have submitted IDEM's BART survey forms concerning emissions (including potential and/or actual 24-hour emissions during the highest emitting day) and stack parameters and that have been modeled by IDEM. Those sources found to not exceed the 98th percentile for the modeled visibility value of 0.5 deciviews will not be subject to BART.

Comment: IDEM requests comment on the visibility threshold that should be included in the rule. This gets complicated really quickly, but the primary decision point appears to be whether Indiana will look at the 98th percentile of days when a source contributes at least 0.5 deciviews to haze in a Class 1 area (as determined by modeling) or the 99th percentile. Using the 98th percentile, a source could have an impact on 7 days in one year or a total of 21 days over a three year period. Using the 99th percentile, the number of allowable days decreases (and one additional source may become subject to control requirements, according to IDEM's analysis to date).

In evaluating this issue, IKE notes that the Clean Air Act's goal for regional haze is to return visibility to

"natural conditions" by 2064. We also note that the BART rule is only a portion of Indiana's obligation for a regional haze plan, addressing only a subset of sources that may be contributing to visibility impairment. IKE encourages IDEM to look closely at the difference it would make for the Indiana regional haze plan as a whole, and what other reductions might be required of other sources, before recommending a standard to include in this rule. (IKE)

Comment: In order to maintain consistency and transparency in the rules among all states, IDEM should adopt the .5 deciview threshold. (ECC) (AEP) (IEA) (CTE) (VEC)

Comment: IDEM should consider a higher deciview threshold with respect to determining if a source has an impact on visibility since a 1 deciview or up to 2 deciview change would be necessary to provide a just noticeable change in scene visibility. While a change of one deciview may be perceptible, especially where the scene being viewed is highly sensitive to small amounts of pollution, that would not seem to be the case in the eastern United States (U.S.), specifically Mammoth Cave National Park, which has higher baseline visibility levels than Class I areas in the western U.S. Thus, it appears that IDEM could use at least a 1 deciview threshold to determine the applicability of BART, since a 0.5 deciview change would not produce a noticeable change in visibility. (GEP)

Response: Based on the BART modeling conducted to date, thirteen of the fourteen BART eligible non-EGU sources identified by IDEM have been modeled, using the BART survey forms to gather accurate emissions and stack parameter information. Of the thirteen modeled sources, five are subject to BART at the 98th percentile of the 0.5 deciview threshold. At the 99th percentile (4 days per year or 12 days over the 3-year modeled period), none of the remaining eight modeled sources would be subject to BART. Two of the twelve modeled sources showed no impact days; all other modeled sources had at least 1 impact day. Due to the conservative emissions profiles being modeled and meteorological files covering weather conditions over the 365 days per year over a three-year period, the 98th percentile suffices as an appropriate boundary to determine visibility impairment at Class I areas for BART determinations.

BART guidance states that the threshold used for determining source contributions to visibility impairment is 0.5 deciviews and represents the upper bound of visibility impairment from single sources. IDEM anticipates maintaining the 98th percentile of the CALPUFF modeling results against the contribution threshold of 0.5 deciviews. This is consistent with the other Midwest Regional Planning Organization states and many other states as well. Regarding comments received by the U.S. EPA on visibility impairment in the proposed BART rule, the fact that multiple sources may affect visibility in Class I areas is the reason that the threshold is set at 0.5 deciviews. Any source causing a 0.5 deciview change can expect to contribute to noticeable visibility impairment and therefore would be subject to BART.

Comment: IDEM should exempt sources not reasonably anticipated to impact a Class I area. (ECC) (IEA) (CTE) (VEC) (AEP)

Response: States are required to determine whether to make BART determinations for all sources or to consider exempting some of them from BART because they may not reasonably be anticipated to cause or contribute to any visibility impairment in a Class I area. Based on the final BART modeling conducted from the BART eligible survey forms that were submitted, there were ten of the twelve sources modeled that had at least one day with visibility impacts of 0.5 deciviews or greater. This indicates that while the majority of BART eligible sources may not impact Class I areas to a degree where sources would be subject to BART, the sources have some visibility impact on a Class I area and should be modeled. Therefore, all identified BART eligible sources in Indiana have been modeled by IDEM, in accordance with the Lake Michigan Air Directors Consortium's (LADCO) "Single Source Modeling to Support Regional Haze BART Modeling Protocol," dated March 21, 2006.

Comment: There are extant modeling exercises that appear to confirm that BART-eligible sources within Indiana may have the potential to contribute to some modicum of visibility impairment in a Class I area. The cumulative modeling option to show that no sources in a state are subject to BART is not a reasonable option for IDEM to adopt. The option of development of common characteristics for model plants that could be used to exempt BART-eligible sources will be extremely difficult and time consuming. Therefore, the option of using individual source attribution using dispersion modeling is the appropriate option for IDEM to adopt. Individual source modeling is a familiar technique since dispersion models are readily available and provide results that are easily reproducible. In addition, individual source modeling provides stakeholders with the opportunity to participate in the modeling exercise regarding their individual sources. IDEM should use individual source attribution through dispersion modeling to determine if a source is impacting a Class I area. It is the most realistic and reliable method of the three presented. (ECC) (IEA) (CTE) (VEC) (AEP)

Response: The BART modeling conducted by IDEM uses option 1 from the BART rule of individual source attribution approach (dispersion modeling). The U.S. EPA recommends CALPUFF as the best regulatory modeling application available for predicting single source contribution to visibility impairments. It is currently the only EPA approved model for estimating single source concentrations from long range transport. IDEM has the capability to model individual sources throughout the state using option 1 to determine each source's visibility impacts on surrounding Class I areas.

Comment: U.S. EPA modeling guidelines for the CALPUFF dispersion model state that the model does not produce accurate results at distances of greater than 300 kilometers from the source being modeled. IDEM

should not consider impacts on Class I areas that are beyond 300 kilometers from the sources being modeled, particularly if the model is being performed using CALPUFF. Any analysis of Indiana sources using CALPUFF should exclude those Class I areas that are greater than 300 kilometers from the source being analyzed. (ECC) (IEA) (CTE) (VEC) (AEP)

Comment: The modeling method chosen by IDEM has been documented to inaccurately project visibility impacts for distant locations. Overestimation will have a substantial impact on IDEM's assessment of emissions from the Burns Harbor mill, particularly given the great distance to Class I areas for sources in northern Indiana. The limitations of the CALPUFF model should be carefully considered by IDEM when assessing BART eligibility and its overestimation bias should be corrected by reducing the modeled results using a factor of at least three. (MSU)

Comment: The Class I areas used during modeling should be limited to those within the 300 kilometer range listed as the limit of the effective range for the model in the EPA modeling guidelines. (NCS)

Comment: U.S. EPA indicated that CALPUFF should not be used in applications beyond 300 kilometers without adequate justification and U.S. EPA approval. IDEM has not to date shown documentation of either. In addition, the chemistry module in CALPUFF is questionable in the way it handles visibility. The use of CALPUFF for visibility analyses at Class I areas well beyond 300 kilometers should be discontinued. In their modeling protocol and the modeling practices, VISTAS (Visibility Improvement State and Tribal Association of the Southeast) has essentially imposed a hard 300 kilometer limit on CALPUFF. (AEP)

Response: The U.S. EPA recognizes that theoretically, CALPUFF's chemical simulations may lead to model predictions that are over-predicted. Based on Lake Michigan Air Directors Consortium's (LADCO) photochemical modeling, the results from the Comprehensive Air Quality Model with extensions (CAMx) show similar impacts as shown from the CALPUFF results.

In determining the distance of the nearest Class I areas to Indiana, the National Park Service website offers maps of the 300 kilometer radii out from each Class I area. Indiana falls within 300 kilometers of Mammoth Cave and Mingo and these sites will be considered the controlling Class I areas in the BART analysis. Visibility impacts at other Class I areas will be evaluated based on the emissions and distance from each source to Class I area.

Comment: U.S. EPA recommended that states use the 24-hour average actual emission rate from the highest emitting day of the meteorological period modeled, unless this rate reflects periods of startup, shutdown, or malfunction. IDEM has used the peak 24-hour potential emissions rates for SO_2 and NO_x for each of the six GE emissions units affected by the BART rule development efforts. GE believes the use of potential emission rates overestimates GE's actual impact on visibility and may subject some or all of the emission units at the GE Mt Vernon facility to BART, for exceedences of the 98th percentile that will never occur. GE requests that the CALPUFF modeling protocols used for BART determination allow using 24-hour average actual emissions from the highest emitting day for the meteorological modeling period rather than potential emissions. (GEP)

Comment: The use of "peak actual" emissions in dispersion modeling will only further exacerbate the existing tendency to overstate visibility impacts. As proposed, the rules already base the identification of BART sources on the 98th percentile of days modeled. There is no need to presume worst case emissions every day, particularly for batch operations, thus creating an even greater bias toward overestimation. Mittal requests the use of actual average emissions based upon verifiable data, process inputs and other operating parameters for modeling purposes. (MSU)

Response: The U.S. EPA recommends that states use the 24 hour-average actual emission rate from the highest emitting day of the meteorological period modeled, which is 2002, 2003 and 2004. This is to ensure that the CALPUFF model "reflects steady-state operating conditions during periods of high capacity utilization." In discussions with the U.S. EPA concerning the type of emissions to be modeled and visibility impairment thresholds, alternative options included modeling actual emissions but comparing to the 99th percentile, which would represent the fourth day per year (12 days per 3-year period) or determine whether a source had any day with visibility impacts of 0.5 deciviews or higher and would then be subject to BART. Rather than use these alternative options, the MRPO states through LADCO are using 24-hour potential emission rates and comparing them to the 98th percentile.

Comment: It is our understanding that IDEM's CALPUFF modeling was based on SO_2 and NO_x from all emission units being combined and modeled as one number. Also, all stack heights and other data were averaged together. GE believes that the averaging of stack heights could overestimate the impact of SO_2 and NO_x on visibility. It also appears that SO_2 has a significantly higher impact than NO_x, which could be important if emission averaging options are used or if emission units are shutdown, leaving the remainder with impacts below the BART threshold. Sources faced with BART controls need to understand which units impact visibility so emission reduction decisions can be effectively made. GE should not have to control all six of its emission units if emission reductions from a subset of emission units achieves the necessary visibility improvements. GE requests that the CALPUFF modeling protocols to be used for BART determinations appropriately allow demonstration of individual emission unit visibility impacts from SO_2 and NO_x. (GEP)

Response: The BART modeling was based on total SO_2 emissions and total NO_x emissions from all BART eligible units within a source. The input file is designed to model each pollutant; therefore SO_2 and NO_x are

modeled separately within the CALPUFF run.

The U.S. EPA requires the states to make a net visibility improvement determination. CALPUFF modeling will be conducted at pre-control and post-control emission levels for all sources subject to BART. The target of the visibility improvement is to model the visibility impairment from a source within the 98th percentile of 0.5 deciviews. There is flexibility in assessing BART controls by one or more methods, considering the frequency, magnitude and duration components of impairment.

Comment: If a BART-eligible source wants to determine if it would be exempt using the fine-scale refined CALPUFF simulation or further refinements, the source should have the option of establishing a site-specific protocol with IDEM and presenting an independent analysis, since the fine-scale analysis often results in lower predictions due to better terrain resolution. (GEP)

Response: IDEM will work with any source that wishes to conduct its own CALPUFF modeling. IDEM will require a modeling protocol for review and approval and the modeling results would be subject to review.

Comment: IDEM should provide information on key modeling protocol parameters so that sources performing their own modeling can reduce the review time and obtain approval when they submit a protocol to IDEM. (GEP)

Response: IDEM will make available all LADCO BART modeling protocols and the three sets of input files for CALPUFF, POSTUTIL and CALPOST. The CALMET files for the three years of meteorological data (2002, 2003 and 2004) can be obtained, with the source supplying the appropriate electronic storage devices (~70 gigabytes of disk space required) in order to transfer the meteorological files.

Pollutants

Comment: Essroc believes that the present IDEM emission inventory for ammonia is not accurate, so IDEM should not include ammonia for evaluation of impacts to Class I areas. However, there are ongoing modeling exercises that may well provide IDEM with sufficient data to conclude that controls will be implemented in the future on mobile source VOCs may be more cost effective than controls on stationary source pollutants in achieving regional haze guidelines and $PM_{2.5}$ attainment requirements. IDEM should consider VOCs as a pollutant that may impact visibility in Class I areas. (ECC)

Comment: The Indiana Energy Association believes that the present IDEM emission inventory for ammonia is not accurate, so IDEM should not include ammonia for evaluation of impacts to Class I areas. IDEM should verify and supplement its ammonia inventory so that the agency will be in a position to determine whether ammonia emissions from BART-eligible sources may have an impact on visibility in Class I areas. It is premature for IDEM to consider the inclusion of VOC emissions at this stage of the BART evaluation process. While there are ongoing modeling exercises that could lead to the conclusion that controls on VOCs from certain source categories may be cost-effective and useful for attainment of the $PM_{2.5}$ NAAQS, IDEM should not consider VOC emissions from fossil fuel combustion as it develops the regulations in response to U.S. EPA's BART program. (IEA) (CTE) (VEC) (AEP)

Comment: Since organic PM is an important portion of PM in a number of areas, IDEM should not dismiss VOCs at this time. However, adequate analyses should be done prior to including any other pollutant in the BART program. (AEP)

Comment: IDEM should base BART rules on the required pollutants (i.e., NO_x, SO_2, and perhaps particulate matter at a later date). Other pollutants such as VOC and ammonia would be stretching the limits of visibility modeling knowledge considering that the various impacts of SO_2, NO_x, and PM are not yet fully understood. Expanding the BART program beyond the required pollutants would unfairly burden Indiana businesses which compete on a national and global basis. (GEP)

Response: As defined in the final BART rule, the visibility-impairing pollutants include sulfur dioxide, nitrogen oxides and particulate matter. The BART rule is structured so that states would use their best judgment in determining whether volatile organic compounds or ammonia would possibly impact visibility at any Class I areas. The final BART modeling analysis modeled NO_x and SO_2, consistent with the BART modeling within the Midwest Regional Planning Organization (MRPO). Any additional modeling including VOCs, ammonia or primary particulate matter would be conducted by Indiana or the MRPO with U.S. EPA approved modeling.

Comment: BART sources should be able to over-control one BART pollutant (e.g. SO_2) and receive credit toward controlling other BART pollutants. The model used to determine impact on visibility in Class I areas uses NO_x and SO_2 inputs. Facilities should have the flexibility to demonstrate BART compliance by reducing emissions of one pollutant instead of both as long as the reduction is equivalent to the effect of applying BART to both pollutants. (MSU)

Response: U.S. EPA has indicated that inter-pollutant trading is not allowable under the rule.

Emissions Averaging

Comment: Averaging would allow large facilities to substantially reduce emissions at one, or a few, sources rather than making smaller changes at many sources. The ability to focus on the most cost-effective reductions will be particularly valuable for large, complex facilities like Mittal's Burns Harbor mill. The adoption of similar approaches in recent federal regulations (e.g. the Boiler MACT rules) confirms that emissions averaging will not erode the environmental benefit of the proposed rule. Rather, facilities with multiple BART sources would be required to have the same overall emissions profile as under individual BART limits. The only distinction is that

owners would be able to internally allocate emissions reductions in a more cost-effective manner. (MSU)

Comment: IDEM should be flexible in allowing emissions averaging across the source. Emissions averaging under BART that does not equate to equivalent equal control from all affected units should be allowed as long as the SO_2 and NO_x emission levels for the entire source are reduced enough to allow the source to remain under the threshold of 0.5 (or higher) deciview and 98th percentile for the requisite number of days required in the BART applicability criteria, or otherwise meet the source-wide reduction of emissions that is determined to be BART control. BART rules should allow the use of CALPUFF modeling to demonstrate effectiveness of emissions averaging. (GEP)

Comment: IDEM should provide information on the types of emissions averaging that will be allowed under BART. IDEM needs to allow as much flexibility as possible as long as the necessary improvements in visibility, or reductions in emissions, are demonstrated. (GEP)

Comment: A BART facility should be allowed to achieve comparable voluntary emissions reductions from any emission point with a modeled impact on the same Class I area. The core purpose of the BART requirements is to improve visibility. Often, equivalent visibility improvement will be more cost-effectively achievable at different locations. The rule should not discriminate among these alternatives as long as the ultimate result, improved visibility, is met. (MSU)

Response: IDEM supports emissions averaging in accordance with the BART guidelines. The federal BART guidelines provide flexibility in making BART determinations. IDEM will consider source-specific proposals submitted with the BART analysis as long as the proposals are consistent with the federal BART guidelines.

BART Determinations

Comment: IDEM should delineate the procedures and metrics for compliance it expects sources to follow for the BART determination engineering analysis, based on its interpretation of the BART guidelines. IDEM mentioned that the BART engineering analysis will be similar to the site specific VOC RACT Plan for VOC sources. IDEM should provide guidance that assists sources in determining the degree of flexibility available in evaluating control technologies and other alternatives for compliance with BART, and provide the circumstances under which an emission unit would be considered exempt from control under BART. This guidance should cover the five factors identified by U.S. EPA for making BART determinations.

IDEM should recognize that useful life of existing emission units is an important factor in determining cost effectiveness of control technologies. (GEP)

Response: IDEM does not anticipate that many sources will be subject to BART. Rather then spending time and resources on extensive guidance that only a few companies will need, IDEM proposes to work closely with these companies on issues specific to their situation. IDEM staff will be available to work with companies during the development of the BART analysis to ensure that all the factors identified by U.S. EPA are addressed and that the resulting BART controls meet federal requirements.

Comment: IDEM has indicated that under certain circumstances, a design, equipment, work practice, operation standard, or combination of these types of standards may be used in place of conventional emission limits. IDEM should elaborate on this alternative either in the BART rule or in separate guidance on the engineering analysis to be performed for BART. Since BART units are older and may practically require different approaches to achieve emission reductions than would typically be used for newer units, the approaches may necessitate non-conventional emission limits. IDEM's BART rule should allow this combination of standards. (GEP)

Response: IDEM expects the BART analysis to include recommendations on the circumstances and specific alternate requirements that the company believes will effectively substitute for emission limits, as needed. IDEM will work with the company to ensure that the recommendations will meet the federal BART requirements.

Comment: Requirements for controls should be considerate of the deciview threshold for BART applicability as well as other potential endpoints for compliance with BART. The engineering analysis performed by the source to determine the most flexible, cost effective approach to comply with BART should be used in conjunction with the 0.5 deciview (or higher) visibility scale to determine one of the potential endpoints (of which there may be others, such as managing coal sulfur content or taking enforceable limits on operation) for controlling emissions to reduce visibility impacts. If post control modeling demonstrates that a source can stay below 0.5 deciviews (or higher) at the 98th percentile for less than 8 days per year or less than 21 days over three years, by cost-effectively controlling SO_2 and/or NO_x from some emission units while not controlling emissions from others, no additional controls should be required. Conversely, if a source has satisfied BART requirements for its emission units taking into account all of the factors identified in the engineering analysis guidance, and still cannot reach the 0.5 deciview threshold, no additional controls should be required. (GEP)

Response: The BART controls will be identified through the BART analysis and approval of the BART determination. IDEM will work with affected companies during development and approval of the BART controls to provide flexibility where possible.

Compliance Date

Comment: To the extent BART reductions of SO_2, NO_x or PM will help Indiana meet the federal health standard for fine particles, setting a BART compliance date that will also meet the fine particle compliance

deadline makes sense. Nationally, states and the U.S. EPA are moving towards trying to harmonize regulatory deadlines as much as possible, so that industries will not be subject to sequential control requirements that make planning difficult and uncertain. This is a perfect opportunity for Indiana to develop a single control program (at least for these affected sources) that serves to meet two regulatory requirements. U.S. EPA's delay in issuing BART guidelines means that time has ticked by and thus a five-year compliance deadline would be more consistent with Clean Air Act timelines. (IKE)

Comment: Essroc may not be able to meet a shortened compliance schedule, particularly if the date chosen is April of 2010 or earlier as mentioned in the First Notice. The rulemaking process alone will take nearly 18 months and if Essroc is required to install additional control equipment as a result of the BART rulemaking, it may not be possible to acquire and install the control equipment by the earlier compliance date. IDEM should not adopt a shortened compliance schedule. (ECC)

Comment: Because the State of Indiana is disputing the $PM_{2.5}$ designations, accelerating the BART compliance date before the litigation is resolved is unwise and unwarranted. Also, given the complexity of the Burns Harbor facility and the potential for regulation of numerous BART units, Mittal must insist on the full five-year period for achieving compliance under BART. (MSU)

Comment: IDEM should retain the implementation schedule contained in the federal BART provisions and not attempt to accelerate the compliance deadline for purposes of assisting the Indiana $PM_{2.5}$ nonattainment counties reach attainment. The ability of sources to obtain necessary approvals to install controls while allowing sufficient time for planning, engineering, and construction is highly unlikely with an accelerated timeframe. Also, questions remain concerning the need for additional EGU controls with respect to bringing the Indiana $PM_{2.5}$ nonattainment areas into attainment. In addition, recent modeling indicates that the number of $PM_{2.5}$ nonattainment counties will be greatly diminished, if not eliminated, with the implementation of CAIR in combination with other "on the books" rules expected to be in place by the $PM_{2.5}$ deadline. There is also uncertainty due to the litigation on the validity of the nonattainment designations and there are questions about the EPA source attribution methodology that may have significantly overstated the EGU contribution to $PM_{2.5}$ nonattainment. (NCS)

Comment: IDEM should not impose a compliance deadline shorter than five years for the implementation of BART controls. The utility industry is starting to see strains in the ability to install the needed controls for the CAIR program at this time. By leaving the BART control deadline at five years, it would ease the strain on materials and labor now being observed by stretching out the installation of these controls into a period where there are currently fewer demands on the material vendors and labor pool. This would help all sources needing to install controls under the BART program meet their obligations in a timely fashion. (AEP)

Comment: Sources should be given the full 5 years to comply with the BART rules. This time will be needed to allow sufficient time to complete the required engineering analysis and to adequately address the many issues that are associated with retrofitting new control technology to older sources. The NAAQS compliance date for seventeen Indiana counties in nonattainment for $PM_{2.5}$ is April 5, 2010, which is less than 2 years after expected approval of IDEM's BART SIP in 2008. If IDEM decides to shorten the compliance date from 2013 to 2010, it should provide provisions in the BART rule for sources to obtain an extension to the full 5 year compliance date if they cannot meet the earlier compliance date. (GEP)

Comment: It is not technically or physically possible to comply with the BART deadlines by 2010, so IDEM should not establish a compliance deadline of less than five years. IDEM should consider that preliminary modeling results seem to implicate mobile sources as a significant cause of the $PM_{2.5}$ nonattainment issue. Also an error has recently been discovered regarding the carbon emissions attributed to EGUs. This error is being analyzed by U.S. EPA and others and, if substantiated, may also result in EGU reductions having less influence on $PM_{2.5}$ attainment and regional haze than previously thought. (IEA) (CTE) (VEC) (AEP)

Response: IDEM is proposing to establish a compliance date of five years after the effective date of this rule. Because this rule is anticipated to become effective in early 2008, the compliance date of 2013 is consistent with U.S. EPA expectations for source compliance with BART requirements.

Comment: IDEM's BART rule should allow 18 months for sources to submit BART determinations. This would allow sufficient time to submit modeling protocols, obtain approval from IDEM, perform the modeling, perform the engineering evaluation, and submit a BART application. This would leave 3 to 3.5 years for implementation of the BART strategy. Subsequent milestones, such as performance testing and notification of compliance status, should be established around the compliance date with timing similar to those applicable to MACT standards, such as the Industrial Boiler and Process Heater NESHAP. Additionally, the BART rule should establish a time period (e.g., 30 days) within which IDEM will approve or request changes to any modeling protocol submitted by a source, so that sources can factor appropriate review time into planning their assessments. (GEP)

Response: IDEM believes that nine months (270 days) will provide sufficient time to develop and submit the BART analysis, especially given the lead time in 2007 during the rulemaking for sources that are clearly subject to BART. IDEM does not believe it is necessary to establish a timeframe for a review of modeling protocols in the rule, however, it is not necessary for the source to wait until the BART rule becomes effective to begin submitting information. IDEM will review and respond to submittals as quickly as feasible.

Comment: Although a shorter mandatory schedule is unwarranted, the BART program can still be used to create strong incentives for voluntary, early emissions reductions. Emissions averaging and trading would create one fiscal driver for early reduction. Another incentive can be created by allowing BART sources to reevaluate their BART status if they install significant controls before they are required by BART. Facilities reducing emissions early should be given the opportunity to submit revised BART modeling results based upon their new emissions profile. If the modeling confirms that the requisite visibility impacts no longer exist, then the facility should be removed from the BART process. (MSU)

Response: IDEM does not believe a BART trading program is a viable option, however, IDEM does support emissions averaging in accordance with the federal guidelines. IDEM believes there is an opportunity to make changes to the BART status prior to the required compliance date of five years after the effective date of this rule. However, sufficient documentation must be provided to support the change in status. In addition, because BART controls will be implemented through Part 70 permits, the documentation must be submitted early enough to allow time for review and modifications to the Part 70 permit if the documentation should be insufficient to support the claim.

REQUEST FOR PUBLIC COMMENTS

This notice requests the submission of comments on the draft rule language, including suggestions for specific revisions to language to be contained in the draft rule. Mailed comments should be addressed to:

#06-208(APCB) BART
Christine Pedersen Mail Code 61-50
c/o Administrative Assistant
Rules Development Section
Office of Air Quality
Indiana Department of Environmental Management
100 North Senate Avenue
Indianapolis, Indiana 46204.

Hand delivered comments will be accepted by the receptionist on duty at the tenth floor reception desk, Office of Air Quality, 100 North Senate Avenue, Indianapolis, Indiana.

Comments may be submitted by facsimile at the IDEM fax number: (317) 233-2342, Monday through Friday, between 8:15 a.m. and 4:45 p.m. Please confirm the timely receipt of faxed comments by calling the Rules Development Section at (317) 233-0426.

COMMENT PERIOD DEADLINE

Comments must be postmarked, faxed, or hand delivered by April 13, 2007.

Additional information regarding this action may be obtained from Christine Pedersen, Rules Development Section, Office of Air Quality, (317) 233-6868 or (800) 451-6027 (in Indiana).

DRAFT RULE

SECTION 1. 326 IAC 26 IS ADDED TO READ AS FOLLOWS:

ARTICLE 26. REGIONAL HAZE

Rule 1. Best Available Retrofit Technology

326 IAC 26-1-1 Applicability

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 1. This rule applies to BART-eligible sources in Indiana as defined in 40 CFR 301* and as determined in accordance with 40 CFR 51, Appendix Y, "Guidelines for BART Determinations Under the Regional Haze Rule*".

***This document is incorporated by reference. Copies may be obtained from the Government Printing Office, 732 North Capitol Street NW, Washington, D.C. 20401 or are available for review and copying at the Indiana Department of Environmental Management, Office of Air Quality, Indiana Government Center-North, Tenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204.**

(Air Pollution Control Board; 326 IAC 26-1-1)

326 IAC 26-1-2 Incorporation by reference

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 2. The air pollution control board incorporates by reference the following:
(1) 40 CFR 51, Appendix Y, "Guidelines for BART Determinations Under the Regional Haze Rule*".
(2) 40 CFR 51.301*, "Definitions".
(3) 40 CFR 51.308(e)*, "Best Available Retrofit Technology (BART) requirements for regional haze visibility impairment".

***These documents are incorporated by reference. Copies may be obtained from the Government Printing Office, 732 North Capitol Street NW, Washington, D.C. 20401 or are available for review and copying at the Indiana Department of Environmental Management, Office of Air Quality, Indiana Government Center-North, Tenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204.**

(Air Pollution Control Board; 326 IAC 26-1-2)

326 IAC 26-1-3 Notification

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 3. (a) By the effective date of this rule, the department shall provide a written notification to the owner or operator of each BART-eligible source that identifies each BART-eligible emissions unit evaluated by the department.

(b) If the owner or operator of a BART-eligible source does not receive a notification, the owner or operator of the BART-eligible source shall submit written notification to the department of all BART-eligible emissions units within three (3) months of the effective date of this rule. The notification shall include the following information:
(1) Complete source identification and contact information.
(2) A list of all BART-eligible emissions units at the source.
(3) A description of each BART-eligible emissions unit including applicable:
(A) processes;
(B) potential emissions; and
(C) emissions unit and emission point characteristics.
(4) The date construction commenced and the date of start-up of each BART-eligible emissions unit.

(c) The department may require additional information from BART-eligible sources to be submitted to evaluate emissions units potentially affected by this rule.

(Air Pollution Control Board; 326 IAC 26-1-3)

326 IAC 26-1-4 Determination of sources subject to BART

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 4. (a) The department shall determine if a BART-eligible source is subject to BART based upon all of the following criteria:
(1) The source meets the definition of BART-eligible source in 40 CFR 51.301*.
(2) Modeling conducted in accordance with option 1 of the individual source attribution approach as

described in 40 CFR 51, Appendix Y*.
(3) The impact on visibility in a Class 1 area as determined by a comparison of the 98th percentile of the source specific modeling to a 0.5 deciview threshold level. A source causes or contributes to visibility impairment at a Class 1 area when the modeled impacts are equivalent to eight (8) or more days in one (1) year or a total of twenty-two (22) or more days in a three (3) year period that would exceed the 0.5 deciview threshold level.

(b) The department shall provide a written determination to each BART-eligible source indicating if the source has been determined to be subject to BART.

***These documents are incorporated by reference. Copies may be obtained from the Government Printing Office, 732 North Capitol Street NW, Washington, D.C. 20401 or are available for review and copying at the Indiana Department of Environmental Management, Office of Air Quality, Indiana Government Center-North, Tenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204.**

(Air Pollution Control Board; 326 IAC 26-1-4)

326 IAC 26-1-5 CAIR participation by electric generating units

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 5. Participation in the CAIR cap and trade program shall satisfy the sulfur dioxide (SO_2) and oxides of nitrogen (NO_x) requirements of this rule.

(Air Pollution Control Board; 326 IAC 26-1-5)

326 IAC 26-1-6 BART analysis

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 6. (a) The owner or operator of a source determined to be subject to BART shall submit:
(1) a BART analysis to the department within two hundred seventy (270) days of being notified by the department of being subject to BART; or
(2) a description and analysis of the BART-eligible emission units sufficient to demonstrate that the source is not subject to BART within ninety (90) days of being notified by the department of being subject to BART. After the submittal of a description and analysis that the source is not subject to BART, if the source is notified by the department that the description and analysis are inadequate and that the source is subject to BART, the source shall submit a BART analysis to the department within one hundred eighty (180) days of the notification.

(b) The department shall review the BART analysis for completeness and notify the source of its completeness determination within sixty (60) days of receipt of the BART analysis. A source that is notified that its BART analysis is incomplete shall submit the missing information within sixty (60) days of notification of the completeness determination.

(c) The BART analysis under subsection (a)(1) must comply with 40 CFR 51, Appendix Y, "Guidelines for BART Determinations Under the Regional Haze Rule*" and must consider the following factors:
(1) The costs of compliance.
(2) The energy and nonair quality environmental impacts of compliance.
(3) Any existing pollution control technology in use at the source.
(4) The remaining useful life of the source.
(5) The degree of visibility improvement which may reasonably be anticipated from the use of BART.

(d) At a minimum, the BART analysis shall address SO_2, NO_x, and particulate matter.

(e) The department may require additional information from sources subject to BART to complete the review of the BART analysis.

(f) The department shall provide a written notification to the owner or operator of a source subject to BART upon approval of the BART analysis.

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(Air Pollution Control Board; 326 IAC 26-1-6)

326 IAC 26-1-7 Alternative to BART

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 7. (a) The department may approve an alternative to the installation of BART that complies with the following:
(1) 40 CFR 51, Appendix Y, "Guidelines for BART Determinations Under the Regional Haze Rule*".
(2) 40 CFR 51.308(e)*, "Best Available Retrofit Technology (BART) requirements for regional haze visibility impairment".

(b) If a source proposes an alternative to BART, the source shall submit to the department the BART analysis of the alternative within two hundred seventy (270) days of being notified by the department of being subject to BART as described in section 4(b) of this rule and the analysis must include the following:
(1) A comparison of the emission reductions and visibility impacts with the controls that would result from the BART analysis.
(2) Emission reductions that are surplus to those reductions resulting from measures adopted to meet requirements of the Clean Air Act as of the baseline of the state implementation plan.
(3) A method of evaluating compliance.
(4) A demonstration that the alternative approach will achieve greater reasonable progress towards improving visibility than would be achieved by implementation of the BART requirements.

(c) The department shall provide a written notification to the owner or operator of a source subject to BART upon approval of an alternative to BART.

***These documents are incorporated by reference. Copies may be obtained from the Government Printing Office, 732 North Capitol Street NW, Washington, D.C. 20401 or are available for review and copying at the Indiana Department of Environmental Management, Office of Air Quality, Indiana Government Center-North, Tenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204.**

(Air Pollution Control Board; 326 IAC 26-1-7)

326 IAC 26-1-8 Part 70 permit modifications

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 8. (a) Within five (5) years of the effective date of this rule, the owner or operator of a source subject to BART that is required to submit a BART analysis shall submit an application to the department to modify its Part 70 permit to reflect all approved BART requirements or alternatives to the BART requirements to include the following:

(1) Enforceable emission limits, if applicable.
(2) Design, equipment, work practice, operation standard, or combination of these types of standards, if applicable.
(3) Compliance schedules that require compliance with the requirements in subdivisions (1) and (2) within five (5) years of the effective date of this rule.

(b) Enforceable emission limits and compliance schedules that reflect the BART requirements or an approved alternative to the BART requirements shall be included in the Part 70 permit in accordance with the following:
(1) 40 CFR 51, Appendix Y, "Guidelines for BART Determinations Under the Regional Haze Rule*".
(2) 40 CFR 51.308(e)*, "Best Available Retrofit Technology (BART) requirements for regional haze visibility impairment".
(3) 326 IAC 2-7.

(c) The requirements listed in subsection (a) shall be submitted to U.S. EPA for approval into the state implementation plan.

***These documents are incorporated by reference. Copies may be obtained from the Government Printing Office, 732 North Capitol Street NW, Washington, D.C. 20401 or are available for review and copying at the Indiana Department of Environmental Management, Office of Air Quality, Indiana Government Center-North, Tenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204.**

(Air Pollution Control Board; 326 IAC 26-1-8)

Notice of Public Hearing

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