

SECOND NOTICE OF COMMENT PERIOD

LSA Document #05-116

DEVELOPMENT OF NEW RULES CONCERNING MERCURY EMISSIONS FROM COAL-FIRED POWER PLANTS

PURPOSE OF NOTICE

The Indiana Department of Environmental Management (IDEM) has developed draft rule language for a new rule, [326 IAC 24-4](#), concerning mercury emissions from coal-fired power plants to implement the federal Clean Air Mercury Rule (CAMR). 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: June 1, 2005, Indiana Register (28 IR 2815).

CITATIONS AFFECTED: [326 IAC 24-4](#).

AUTHORITY: [IC 13-14-8](#); [IC 13-17-3-1](#); [IC 13-17-3-4](#).

SUBJECT MATTER AND BASIC PURPOSE OF RULEMAKING

Basic Purpose and Background

On May 18, 2005, U.S. EPA issued the first federal rule to permanently cap and reduce mercury emissions from coal-fired power plants serving a generator larger than 25 megawatts that produces electricity for sale. The Clean Air Mercury Rule (CAMR) builds on U.S. EPA's Clean Air Interstate Rule (CAIR) to significantly reduce emissions from coal-fired power plants, the largest source of mercury emissions in the nation. The Air Pollution Control Board final adopted CAIR on November 1, 2006.

When fully implemented CAMR will reduce nationwide utility emissions of mercury from 48 tons a year to 15 tons, a nationwide reduction of nearly seventy percent (70%). The CAMR establishes "standards of performance" limiting mercury emissions from new and existing coal-fired power plants and creates a market-based cap and trade program that will reduce utility emissions of mercury in two phases. The first phase nationwide cap is 38 tons, due in 2010, with emissions reductions that are considered "co-benefit" reductions. These are mercury reductions that will be achieved by reducing sulfur dioxide (SO_2) and nitrogen oxides (NO_x) emissions under CAIR. In the second phase, due in 2018, coal-fired power plants will be subject to a second cap, which will reduce emissions to 15 tons upon full implementation. New coal-fired power plants will have to meet new source performance standards (NSPS) in addition to being subject to caps (40 CFR Part 60, Subpart Da).

U.S. EPA has assigned each state and two tribes an emissions "budget" for mercury. Indiana's annual electric generating unit mercury budget in CAMR is 2.097 tons in years 2010 through 2017, a 15% reduction from 2002 levels, and 0.828 tons in 2018 and thereafter, a 66% reduction from 2002 levels. IDEM has estimated that the 2010 and 2018 caps are a 43% and 77% reduction, respectively, compared to uncontrolled emissions. Using the co-benefit controls that existed in 1999 and the associated U.S. EPA control efficiency for those controls, IDEM has estimated uncontrolled emissions at 7,396 pounds. The cap is permanent, regardless of growth in the coal-fired electric utility sector. The trading program promotes reductions at the sources with the lowest control costs, typically the larger sources. The flexibility of allowance trading creates financial incentives for coal-fired power plants to look for new and low cost ways to reduce emissions and improve the effectiveness of pollution control equipment.

Reducing the amount of mercury emitted into the air is an important step in improving the health of Indiana's citizens. Once mercury is released to the air from coal combustion and other sources, it can fall to the earth through rain and snow (wet deposition) or dust particles (dry deposition). After it settles in lake or river sediments, mercury can be converted by bacteria into methylmercury, a more toxic form of mercury. Methylmercury readily accumulates in the food chain and can build up in fish tissue. Mercury in fish, both freshwater and marine, is then consumed by people and wildlife. Women of childbearing age are considered the population of greatest concern for mercury exposure, because the developing fetus is most sensitive. Children are at risk as well since their nervous system is still developing. According to the U.S. EPA, more than 300,000 children born every year nationwide may have some risk of neurological impairment from mercury exposure. At nearly 2.5 tons per year, Indiana ranks fourth in the nation for amount of mercury emitted from power plants. In order to provide maximum public health protection, Indiana has a conservative fish consumption advisory standard. The application of this standard has resulted in fish consumption advisories for mercury for certain species of fish harvested from all Indiana rivers, streams, and over 47,000 lake acres. Indiana's fish consumption advisory levels suggest that

consumption of white tuna, halibut, lobster, shark, swordfish, king mackerel, and tile fish should also be limited because of their mercury content.

U.S. EPA's modeling shows that CAMR will significantly reduce mercury deposition from coal-fired power plants in the United States, and those reductions will occur in areas where mercury deposition from coal-fired power plants is currently the highest. U.S. EPA evaluated the impact of CAMR on mercury deposition in 2,150 watersheds encompassing the United States and found the deepest reductions in deposition would be in places where utilities had the biggest impact. By 2020, utility emissions will account for not more than 20% of deposition in any one watershed. This is a reduction from the maximum 55% contribution in the 2001 base case. On average, U.S. utilities will contribute 2.5% to deposition rates in 2020 after CAMR, CAIR, and other Clean Air Act programs are in place.

CAMR includes a model cap and trade program (40 CFR Part 60, Subpart HHHH) that states can adopt to achieve and maintain the mercury emission budget. Emission monitoring and reporting requirements ensure that monitored data are accurate, reporting is consistent among sources, and that the emissions reductions occur. Each state must submit a state plan detailing how it will meet its budget for reducing mercury from coal-fired power plants by allowing their sources to participate in a national cap and trade program or by developing some other regulatory system. State plans were due November 17, 2006. IDEM plans to submit a state plan to U.S. EPA once this rulemaking process is completed.

The Air Pollution Control Board was petitioned by the Hoosier Environmental Council (HEC) in June of 2004 to regulate mercury emissions from power plants. The HEC petition requested mercury limits for coal-fired electric generating units of six-tenths pounds of mercury per trillion British thermal units (0.6 lbs Hg/TBtu) or an emissions rate equal to 90% reduction of mercury from the measured inlet conditions, regardless of coal type. The HEC petition did not allow for emissions trading among sources and required compliance by July 2008. The initial petition was later revised in September 2005 to require compliance by 2010, allow site-specific emissions averaging, and limit the applicability to electric generating units serving a generator that has a nameplate capacity greater than 25 megawatts and produces electricity for sale. From September 2004 through June 2005, IDEM convened a Mercury Workgroup to collect information on mercury, which later became the Utility Rules Workgroup for both the mercury rule and the CAIR. During these last two years, IDEM has received many comments that high mercury levels in fish due to air deposition is a very important concern for the citizens of Indiana. Citizens are concerned about both the risk of neurological impairment of newborns from methylmercury exposure, and the fact that some studies have shown that high levels of mercury in adult males are associated with higher rates of heart attacks and death. Since fish have significant nutritional benefits and have been shown to reduce the risk of heart attacks, a rule to reduce the level of mercury in fish will have important benefits.

Both IDEM and the Indiana Utility Group (IUG) have estimated the emissions reductions and the costs of CAMR and the HEC petition. IUG is comprised of the Indiana Electric Association and individual nonmember companies: Dominion State Line Energy, Indiana-Kentucky Electric Corporation, and Hoosier Energy REC, Inc. IDEM estimates that CAMR will result in a net annual revenue of \$26 million (IUG \$1 million) in 2010 due to allowance trading from CAIR co-benefit controls and annual costs of \$64 million (IUG \$68 million) in 2018 when the Phase II cap is in effect. The emissions reductions ranging between 2,883 lbs (IDEM) and 3,392 lbs (IUG) in 2018 compared to the 1999 estimated levels would be achieved at a \$/lb cost ranging from about \$20,000/lb (IUG) to \$22,000/lb (IDEM).

The HEC petition is estimated to result in emissions equal to 1,095 lbs (IUG) and 1,260 lbs (IDEM) beginning in 2010. IDEM's emissions estimates for 2010 are slightly higher because IDEM allowed for site-specific averaging in the fiscal analysis for the HEC petition. This amounts to emissions reductions ranging from about 74% and 78% compared to 1999 estimated levels. IDEM estimated that the HEC petition would cost \$207 million year (90% control or 0.6 lb/TBtu, whichever is readily achievable and allowing plantwide averaging) to implement and IUG estimated that the HEC petition would cost \$373 million a year (assuming that electrostatic precipitator (ESP), selective catalytic reduction (SCR), and a scrubber would not meet 90% reduction and activated carbon injection would be required on all units). The emissions reductions ranging between 3,624 lbs (IDEM) and 3,789 lbs (IUG) compared to 1999 estimated levels are estimated at a \$/lb cost ranging between \$57,000/lb (IDEM) and \$98,000/lb (IUG). IDEM is required to adopt a regulation at least as protective as CAMR; therefore, IDEM and the Purdue University State Utility Forecasting Group (SUFG) evaluated the cost of the additional reductions, due to the HEC petition. In 2018, these reductions range between 397 lbs (IUG) and 741 lbs (IDEM) and are estimated to be achieved at an incremental \$/lb cost ranging between \$193,000/lb (IDEM) and \$768,000/lb (IUG). This assumes the HEC petition emissions and costs remain unchanged in 2018. In terms of electricity rate impacts, SUFG estimated that due to the HEC petition rates would increase by 2.8% (IDEM) to 5% (IUG), incremental to CAMR.

The other part of the cost equation is the cost to society that results from adverse health effects due to mercury emissions. Using information submitted to IDEM by HEC, health care costs apportioned down to the state level based on 1999 mercury emissions from Indiana power plants are estimated at \$15,970/lb for IQ loss, \$41,464/lb for cardiovascular effects, \$3,071/lb for mental retardation, for a total of \$60,500/lb. References for the HEC health care costs can be found at the end of the Response to Comments section. The cost/benefit of the

HEC petition can be estimated by using the estimated health care costs associated with mercury emissions, the estimated cost of complying with the HEC petition, and the pounds of mercury emissions reduced by the HEC petition compared to CAMR. This is the marginal benefit of the HEC petition since IDEM is required to adopt a rule at least as stringent as CAMR. Assuming a linear relationship between health benefits and reductions in power plant emissions, the incremental benefit/cost ratio due to the HEC petition is estimated to range between 0.08 (IUG) and 0.38 (IDEM).

Due to uncertainties over the achievability of 90% control, reductions in actual mercury exposure levels, cardiovascular health effects, and the low benefit/cost ratio, IDEM is proceeding with a rulemaking based on CAMR. IDEM is proposing to implement CAMR by adopting the CAMR cap and trade program with modifications to the allocation methodology in Article 24: Trading Programs. All options for a mercury rule are still open for comment, however, and IDEM will continue to work with stakeholders to identify ways that the concerns of HEC and the public can be addressed in this rulemaking.

To ensure consistency, states participating in the national cap and trade program are required to adopt the following key operational elements: allowance management; banking without restriction; accountability for affected sources; and enforcement requirements. The model cap and trade rule does allow states to modify language to best suit their unique circumstances with regard to allocation methodologies. Mercury allocation methodology elements for which states have flexibility include: 1) the cost of the allowance distribution (e.g., free distribution or auction); 2) the frequency of allocation (e.g., permanent or periodically updated); 3) the basis for distributing the allowances (e.g., heat-input or power output); and 4) the use of allowance set-asides and their size, if used (e.g., new unit set-asides or set asides for energy efficiency, for development of integrated gasification combined cycle (IGCC) technology generation, for renewables, or for small units).

The draft rule includes several changes to the allocation methodology in the model rules for the mercury trading program. Where possible IDEM is proposing to make the allocation methodology consistent with the recently adopted CAIR.

Timing

IDEM is proposing a methodology that includes a six year allocation, six years in advance, allocation cycle. The initial allocation would only be for five years awarding allowances for 2010 through 2015 to be consistent with CAIR. This is slightly different than the model rule that provides for states to make an initial allocation for Phase I (2010-2014) and then make annual submissions of allocations six years in advance. While a more frequent allocation methodology allows new units to draw from the main pool of allowances more quickly, most affected sources have commented that they were in favor of longer allocations cycles that provide greater certainty on the number of available allowances for planning purposes.

Baseline

The allocation methodology makes a proportional allocation of allowances to individual EGUs based on heat input to the boiler, which is a measure of fuel usage and heat content of the fuel. The draft rule updates baseline heat input for subsequent allocation cycles using the most current eight years of heat input data. The longer look back period for the initial allocation (1998-2005) is more appropriate than the time frame in the model rule (2000-2004) because many Indiana sources were installing equipment to comply with the NO_x SIP Call, which would not be representative of "normal" operations. U.S. EPA's model rule did not include a baseline that would be updated over time; retired units would continue to receive allowances forever and existing units would have allocations based on data that is eventually decades old. The draft rule provides that the most recent operational data would be used for calculations and that a retired unit would eventually stop receiving allowances.

Heat Input and Electrical Output Adjustment Factors

IDEM is proposing a fuel neutral approach for calculating adjusted heat input values for different coal ranks. This approach will treat all coal types the same, and will be more simple to implement. The model rule included a fuel adjustment factor of 1.0 for bituminous coal, 1.25 for sub-bituminous coal, and 3.0 for lignite coal. New units use electrical output data to convert output into heat input for the determination of the baseline. The draft rule retains the output-based provision for new units in the model rule, but modifies the electrical output to heat input conversion factor to provide a greater benefit for more efficient units.

New Unit Set-aside

The draft rule includes a new unit set-aside of 5% of the budget for years 2010 through 2014 and 3% of the budget for year 2015 and after.

IDEM invites comments and suggestions on the draft rule language. As stated previously, all options for a mercury rule are open for comment and IDEM will continue to work with stakeholders to identify ways that the concerns of HEC and the public can be addressed in this rulemaking.

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. All changes to the CAMR model rule included in the draft language are modifications to the allocation methodology that are allowed under the federal CAMR.

Potential Fiscal Impact

This rulemaking will exceed the \$500,000 threshold requiring a fiscal impact analysis (FIA) under [IC 4-22-2-](#)

28, although the following costs are not above and beyond what would incur from the federal program. Both IDEM and the Indiana Utility Group (IUG) have estimated the cost of CAMR using the Integrated Planning Model (IPM) by ICF Consulting Inc. IPM is a multiregional, dynamic, deterministic linear programming model of the U.S. electric power sector. It provides forecasts of least cost capacity expansion, electricity dispatch, and emission control strategies for meeting energy demand and environmental, transmission, dispatch, and reliability constraints. IDEM and IUG used IPM with different assumptions for input parameters, such as electricity demand growth, fuel costs, and pollution control costs and effectiveness. Cost estimates include the fiscal impact of capital costs (retrofit controls), fixed and variable operation and maintenance costs, continuous emissions monitoring systems (CEMS), and allowance trading. IDEM estimates that CAMR will result in a net annual revenue of \$26 million in 2010 due to allowance trading from CAIR co-benefit controls and annual costs of \$64 million in 2018 when the Phase II cap is in effect. IUG estimates that CAMR will result in a net annual revenue of \$1 million in 2010 due to allowance trading from CAIR co-benefit controls and annual costs of \$68 million in 2018 when the Phase II cap is in effect.

Public Participation and Workgroup Information

An external workgroup, referred to as the "OAQ Utility Rules Workgroup," has been established to discuss issues involved in this rulemaking. The workgroup is made up of a variety of stakeholders and is convened by IDEM, Office of Air Quality staff. If you wish to provide comments to the workgroup on the rulemaking, attend meetings, or have suggestions related to the workgroup process, please contact Susan Bern, Rules Section, Office of Air Quality at (317) 233-5697 or (800) 451-6027 (in Indiana). Please provide your name, phone number, and e-mail address, if applicable, where you can be contacted. The public is encouraged to participate in the workgroup process. You can also request to be put on the OAQ Utility Rules Workgroup email distribution list to obtain information related to the rulemaking or workgroup meetings.

SUMMARY/RESPONSE TO COMMENTS FROM THE FIRST COMMENT PERIOD

IDEA requested public comment from June 1, 2005, through July 5, 2005, 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:

Amy Chinn (AYC)
Betty Wrigley (BYW)
Brian Kautz (BK)
Carl Lowry (CL)
Christine A. Carver (CAC)
Chuck and Kathy Brinkman (CKB)
Citizens Thermal Energy (CTE)
Dominion (DM)
Edward Brady Hansel (EBH)
Eugene F. Wallace (EFW)
Hoosier Environmental Council (HEC)
Improving Kids' Environment (IKE)
Indiana Office of Consumer Counselor (OUCC)
Indiana University Purdue University – Department of Public Health (IDH)
Indiana Energy Association/Utility Group (IEA)
Indiana Michigan Power Company, dba American Electric Power (AEP)
Indiana Municipal Power Agency (IMPA)
Indianapolis Power & Light Company (IPL)
Iris S. Carr (ISC)
J. Dan Webster (JDW)
Janet Braun (JTB)
Jean and Philip C. Ross (JPR)
Jeff Barnd (JFB)
Jeffrey V. Cefali (JVC)
John Braun (JNB)
Kenneth G. Reinhardt (KGR)
Kim Fisher (KF)
Kristina Lindborg (KAL)
Lucy Carver-Gay (LCG)
March of Dimes (MOD)
Marcia Campbell (MC)
Marian Cooley (MNC)
Martha V. Smith (MVS)
Mary Boghwalts (MYB)
Northern Indiana Public Service Company (NIP)

P. M. Pizzo (PMP)
Pat Berna (PTB)
Paul B. Overhauser (PBO)
Protect Our Rivers Now! (PRN)
Purdue University (PU)
Rosemarie M. Jeffery, M.D. (RMJ)
Sue Robinson (SER)
University of Notre Dame – Department of Biological Sciences (UND)
Valley Watch, Inc. (VWI)
Whitewater Valley Land Trust, Inc. (WVL)
Yvonne Lupear (YL)

Comments Collected and Submitted by the Hoosier Environmental Council (HEC) to IDEM:

Shanna Huff (SAH)
Cynde Connelley (CEC)
Barbara Searcy (BAS)
Julia Karr (JAK)
Linda Harmon (LAH)
Krystal Moriarty (KLM)
Rhonda Wolfe (RAW)
Rachel Koch (RLK)
Pam Morman (PMM)
Justin Schoof (JNS)
Melanie Loehwing (MEL)
Susan S. (SNS)
David Show (DDS)
Elizabeth Johnson (EHJ)
Barbara S. (BAS)
Sarah Vecker (SHV)
Charlotte Aldenhagen (CEA)
Bonnie H. (BEH)
Michelle Purvis (MEP)
John Pacer (JNP)
Jeana Toy (JAT)
Sam Shar (SMS)
Robert Winters (RTW)
Nathan Johnson (NNJ)
Jason Sucec (JNS)
Laura Sucec (LAS)
Miles Enright (MSE)
Robert Richardson (RTR)
Pamela McGinley (PAM)
Kourtney West Sanders (KWS)
Matthew Mossey (MWM)
Kevin Johnson (KNJ)
Courtney Williams (CYW)
A. Wilson (AW)
R. Eaton (AE)
Crystal Templeton (CLT)
Marilyn Nobbe (MNN)
J. Myers (JM)
Barb Ruess (BBR)
Laura Neiss (LAN)
Venita Wimbleduff (VAW)
Greg Swallow (GGS)
Nami Swallow-Novak (NSN)
Madeline Swallow (MES)
Marsha Cederquist (MAC)
Anna Feesa (AAF)
Cynthia Yanez (CAY)
Kathleen Moreland (KNM)
David Boone (DDB)

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P. Rhodes (PRS)
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Alice (A)
Amanda Hooper (AAH)
Danell Jones (DLJ)
Kelly S. (KYS)
Sheila M. P. (SMP)
Unidentifiable commenters (CT1 through CT215)

Following is a summary of the comments received thereto:

Applicability

Comment: The department should adopt the federal model rule. The petition for rulemaking filed by HEC captures any Title V source that generates electricity and obtains greater than ten percent (10%) of its heat input from coal. The federal rule specifically excludes existing generators less than twenty-five (25) megawatts, and any source that does not sell power to the grid. The Indiana rule should only cover units as specified in the federal rule because an industrial boiler brought in by the HEC petition would not have the same economies of scale as an utility boiler and is already subject to the Industrial Boiler MACT (40 CFR 63, Subpart DDDDD). Also, no proven and reliable technologies exist for these smaller industrial boilers at the six-tenths pounds of mercury per trillion British thermal units (0.6 lbs Hg/TBtu) emission level specified in the HEC petition. (CTE) (PU)

Response: The department is proposing to adopt a rule that applies to the same units as the federal rule. Also, HEC amended their petition during September of 2005 to apply to units serving a generator that has a nameplate capacity greater than twenty-five (25) megawatts and produces electricity for sale.

Fiscal

Comment: It is essential that the state of Indiana engage in the study of the fiscal impacts of whatever mercury regulatory program it determines best protects sensitive population groups. The fiscal analysis contained

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in the National Wildlife Federation's (NWF) report, "Getting the Job Done: Affordable Mercury Control at Control Burning Power Plants" is not thorough, nor representative of the issues the Indiana electric utility industry will be facing. As is evidenced by the assessment of this report by EPRI in October, 2004, "the data obtained to date, including those provided in "Getting the Job Done," show a wide range of mercury removal rates, suggesting that many plants would be unlikely to achieve ninety percent-plus (90+) mercury control on a consistent, maintainable basis." EPRI's analysis of this report provided that, "While significant progress has been and is being made on developing and testing mercury controls – including activated carbon injection (ACI), commercial availability is still several years away, especially at the levels of control NWF indicates can be achieved." The commenter rejects that study as an appropriate basis for understanding the fiscal impact of mercury regulation and is prepared to assist in the development and implementation of an adequate fiscal analysis of a mercury program. (IEA)

Comment: The department is obligated to perform a fiscal analysis for whatever mercury rule that may be proposed, although adopting the CAMR rule will be the easiest to do by updating U.S. EPA's cost analysis. An independent analysis is necessary since the cost to Indiana utilities of mercury-specific controls will be well above the threshold required in Indiana law. Any rule proposals beyond CAMR would clearly require a new independent analysis based on specific provisions of the proposed rule. The department could not legally use the National Wildlife Federation report for the fiscal since the work may not have been peer reviewed and the department is required to supply detailed analysis to support the cost estimates. The department should engage the State Utility Forecasting Group (SUFG) for their input. (AEP)

Comment: The OUCC is the state agency charged with representing the interests of utility consumers before state and federal bodies. While environmental quality is important, the commenter asks that the department's deliberations on new rules also consider the effect of higher compliance costs on the consumers of electricity in the state. The department should conduct a careful cost-benefit analysis of its various alternatives prior to implementing rules more stringent than required by the federal government. The commenter is of the opinion that under the proposed federal standards, Indiana utilities can meet their mercury compliance needs until the year 2018 without the installation of baghouse technologies. Baghouses would add significantly to the capital and operational cost for meeting mercury targets. The concern is that a state rule that tightens mercury standards might tip the scales in favor of Indiana utilities needing to consider and build baghouses prior to 2018 with consequent costs for electric consumers in the state. (OUCC)

Comment: In the First Notice under "Potential Fiscal Impact" the costs of Alternative 1 are the estimates for the entire country, whereas the costs of Alternative 2 are the estimates for Indiana from the NWF report. What is the cost for just Indiana for Alternative 1 so that the costs can be compared? (HEC)

Response: IDEM agrees that it is important to evaluate the costs associated with CAMR and the HEC petition and has spent a considerable amount of time, along with IUG, on the fiscal analysis. Both IDEM and IUG have estimated costs associated with CAMR and the HEC petition for Indiana. Cost estimates for just Indiana for Alternative 1 (CAMR) can be found in the section on Potential Fiscal Impacts.

Miscellaneous

Comment: Simultaneous rulemaking and co-locating of the CAMR and CAIR rules in the Indiana Administrative Code (IAC) is acceptable. The federal CAIR relies on the co-benefits of the CAIR emission controls to achieve many of the required mercury emissions reductions and both programs rely upon a cap and trade system. (AEP)

Comment: It would be helpful to the extent possible to consolidate the CAMR and CAIR rules into one location in the Indiana Administrative Code (IAC). Doing so would allow those affected by both rules to have their applicable requirements consolidated in one location within the [IAC](#) and prove more convenient than if located separately. Changes to 40 CFR Part 75 for emission monitoring requirements can be addressed in Article 21, Acid Deposition Control. (NIP)

Response: IDEM is proposing to locate the CAMR in Article 24 where the CAIR rule is already located to keep both utility trading rules in one location. Article 21 incorporates by reference 40 CFR Part 75 monitoring requirements, which will be updated to include new requirements when the reference to the Code of Federal Regulations definition at [326 IAC 1-1-3](#) is updated.

Support the Federal Rule

Comment: Trading programs have been instituted by Congress, U.S. EPA, and the states to address a range of both long term and short term issues from acid rain to one-hour ozone concerns. Trading programs are particularly well suited for long term broadly defined regional air pollution problems like mercury. Recent history with cap-and-trade programs has shown sources reduce more emissions faster and at a lower cost, plus they do not result in an increase in emissions as energy demand grows. The federal CAMR will effectively address local risks. First, while modeling runs suggest that large coal-fired utility units will likely have larger local deposition footprints than smaller units, the trading of allowances will likely involve larger units controlling their emissions more than required and selling allowances to smaller units. This prediction arises from the basic economics of capital investment in the utility industry. Second, the types of mercury that are deposited locally, ionic mercury (Hg^{++}) and particulate mercury ($Hg[p]$), are controlled by the same equipment that is being installed to control

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criteria air pollutants for other agency rules. The gaseous form of mercury (Hg^0) that is more difficult to control is most likely to transported long distances from the utility units. (IEA)

Comment: Any Indiana mercury rule which uses switching of the current fleet of coal-fired power plants to natural gas in order to minimize mercury emissions is not a realistic option. (IEA)

Comment: There is currently a lack of a robust mercury emissions database because of limited technology to monitor mercury emissions. Any regulatory program that goes beyond the federal rule must be based on verifiable information and a comprehensive understanding of the issues. (IEA)

Comment: The technologies that will be used to control emissions of mercury from coal-fired power plants are still in the formative stages. Flue gas desulfurization and selective catalytic reduction pollution control technologies designed to reduce SO_2 and NO_x , respectively, can produce mercury co-benefit reductions, however the specific reductions are not known with great certainty. The ability to consistently and reliably control emissions across a wide range of operating conditions, boilers and fuel types is an important issue for Indiana where there is a wide variation in boiler types and coals used as fuels. Mercury emission control technologies are not yet adequately tested for reliability, accuracy or representative application, nor reasonably available. Therefore it is essential that the department adopt U.S. EPA's two-phased approach that initially focuses upon the co-benefits of a multi-pollutant strategy and then mercury specific controls. (IEA)

Comment: In order to appropriately address the regional and national nature of the mercury issue, it is essential for all states, including Indiana, to participate in the federal Clean Air Mercury Rule (CAMR) trading program. This was the message delivered by Governor Daniels' when he stepped forward earlier this year in support of the Clear Skies legislation, which has served as the template for the U.S. EPA CAMR/CAIR rules. By participating in the U.S. EPA administered emissions budget and trading program, Indiana would be assuring consistency and accountability across the state, region, and nation. Indiana would also be demonstrating its support for the regulatory strategy of recognizing the co-benefits of a multi-pollutant approach supported by current science and sound economics. Furthermore, Indiana affected generating units, local coal mining operations, and ratepayers would not be disproportionately impacted. (IEA)

Comment: The cap-and-trade approach is the best method for reducing emissions at the lowest cost and encourages the continued development of mercury control technologies through economic incentives. (IEA)

Comment: The commenter recommends that the department adopt the federal CAMR. U.S. EPA has determined that a carefully designed "multi-pollutant" approach is the most effective way to reduce emissions from the power sector. Accordingly, U.S. EPA has designed this program to control NO_x , SO_2 , and mercury at the same time (i.e., CAIR implementation with CAMR). One key feature of such an approach is the interrelationship of the timing and cap levels for NO_x , SO_2 , and mercury. U.S. EPA's analysis shows that the use of FGD (to reduce SO_2 emissions) and SCR (to reduce NO_x) also has the effect of controlling mercury emissions at the same time. EPA has designed the CAIR and CAMR approach to take advantage of this so-called Hg "co-benefit." Based on the results of sophisticated economic and environmental modeling analyses, the Phase I mercury cap should be set at a level that reflects these co-benefits, and the additional controls designed specifically for mercury should not be required until after 2010. A multi-pollutant approach that focuses first on SO_2 and NO_x reductions will also achieve significant reductions in oxidized mercury. Reductions in this mercury species are the most beneficial to reductions in local and regional mercury deposition. The commenter supports the Indiana adoption of the federal CAMR because of this very important "co-benefit". (IEA)

Comment: U.S. EPA has concluded that it is not necessary to have the 2018 mercury cap mirror the mercury co-benefits achieved in CAIR Phase II cap because the 2018 cap ensures those reductions. The Phase II cap is timed such that the mercury specific control technologies currently being developed can be tested, installed and operational for all plant and coal types. In light of the developmental stage of reliable mercury specific control technologies, the commenter supports the phased approach U.S. EPA has finalized. (IEA)

Comment: The commenter supports the monitoring and reporting of emissions using 40 CFR Part 75 to ensure that emissions will be accurately and consistently monitored. (IEA)

Comment: The most recent U.S. EPA mercury deposition modeling using the national scale CMAQ (Community Multi-scale Air Quality) model indicates that the CAIR reductions, combined with the CAMR reductions, would have the same effect on mercury deposition as would the complete elimination of power plant emissions of mercury by 2020. In the evaluation of the CAMR rule, U.S. EPA conducted extensive modeling using the latest mercury deposition modeling techniques. These techniques were not available for the 1997 Mercury Report to Congress. U.S. EPA chose CMAQ because it is a three-dimensional grid-based Eulerian model designed to estimate pollutant concentrations over large spatial scales and because it accounts for spatial and temporal variations as well as differences in the reactivity of mercury emissions. The results of this modeling are described in the March 2005 EPA "Regulatory Impact Analysis of the Final Clean Air Mercury Rule", (EPA-452/R-05-003). The CAMR is well-developed and supported by state-of-the-art modeling analysis. (IEA) (DM)

Comment: There have been ongoing discussions during the Indiana Mercury Workgroup process regarding the merits of the ninety percent (90%) control proposal. As has been stated numerous times previously, neither U.S. EPA, the U.S. Department of Energy, or the Electric Power Research Institute (EPRI) say that there is

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mercury specific control technology that is readily available for implementation. A program more stringent than the federal national mercury program would only result in mercury reductions that would produce marginal, if any, benefit to Indiana residents. The costs to Indiana customers for a ninety percent (90%) control program would be enormous while creating minimal environmental benefit. Finally, the ninety percent (90%) control proposal is unachievable. Even assuming one could get ninety percent (90%) mercury reductions by July 2008, and you could install all of the controls in the next three (3) years, which also presumes sufficient craft labor and materials were available, it would require all the construction work on every Indiana power plant to occur simultaneously. That would dictate that every coal fired power plant in the state, which is ninety-seven percent (97%) of the electric energy produced in the state, would then have to be shut down simultaneously for an extended period of time between January and July 2008 to make final connections between the new control equipment and the rest of the power plant. Therefore, the commenter strongly supports the federal program and urges the department to not adopt the ninety percent (90%) control by 2008 option as it is premature and unsupportable by science, technology, or cost-benefit analyses. (IEA)

Comment: Reduction of the overall state cap, inconsistent with that established by U.S. EPA's CAMR would result in a scramble by Indiana to reduce mercury emissions in a manner that is neither technologically reliable, nor economically responsible particularly as both of those important factors relate to environmental benefit. There is no health benefit justification available that would support a decision to implement a program that is more stringent than U.S. EPA's CAMR program. There has been no discussion offered in support of reducing the overall state mercury cap that justifies departure from the national approach. (IEA)

Comment: An earlier compliance date for Phase II has absolutely no support as indicated by U.S. EPA in its decision to set a later compliance date for Phase II. There is significant concern over the availability of mercury control technology that is proven to be effective and efficient at an earlier date. Filed testimony on behalf on the Indiana Office of Utility Consumer Counselor in the Indiana Utility Regulatory Commission Cause Nos. 42622 and 42718, Petitions of PSI Energy, Inc., is supportive of the conclusion that "many emerging mercury emission reduction technologies will become commercialized and prove to be more economical than ACI and baghouse technology for PSI units under consideration by year 2018. It would be prudent to wait and watch." Testimony of Giriraj Sharma, March 2005. It is unclear how Indiana could justify taking a more stringent approach understanding the uncertainty that clearly exists with regard to mercury specific controls. (IEA)

Comment: The assignment of individual unit emission limits could seriously frustrate the national cap-and-trade program relied upon by U.S. EPA in the CAMR. There is data supporting the conclusion that cap-and-trade programs result in air quality improvement (i.e. Acid Rain, NO_x SIP Call). The commenter strongly objects to individual emission limits. The commenter supports a national mercury cap-and-trade program as presented by U.S. EPA as an effective program that would create a baseline against which future monitored mercury data could be measured. Such a baseline could be an effective tool to allay concerns about backsliding as it relates to mercury. (IEA)

Comment: The commenter believes that the adoption of the federal model Clean Air Mercury Rule (CAMR) is appropriate. Mercury is a global pollutant and the U.S. EPA has found that while coal-fired power plants are the largest remaining source of human-generated mercury emissions in the United States, they contribute very little to the global mercury pool. U.S. coal-fired power plants are estimated to account for only about one percent (1%) or about forty-eight (48) tons. (IPL)

Comment: An accelerated compliance date and more stringent reduction in emissions is not a viable option for Indiana and could potentially reduce the reliable supply of electricity. The U.S. EPA has found that the availability of mercury-specific pollution control technology has not been proven on a large-scale long-term basis. (IPL)

Comment: Indiana adopting a rule with modifications from the federal rule would require valuable resources by the department and interested stakeholders. An earlier compliance date is not possible since U.S. EPA has found that the availability of mercury-specific pollution control technology has not been proven on a large-scale long-term basis. Also, U.S. EPA's modeling shows that the CAIR will significantly reduce the majority of the coal-fired power plant mercury emissions that deposit in the United States, and those reductions will occur in areas where mercury deposition is currently the highest. CAMR is expected to make additional reductions in emissions that are transported regionally and deposited domestically, and it will reduce emissions that contribute to atmospheric mercury worldwide. A state-specific rule would place Indiana industries at an unfair advantage due to increased costs without commensurate environmental benefits. (IPL)

Comment: The commenter is committed to reducing mercury emissions. Mercury emissions have been reduced by about forty percent (40%) at the Petersburg Generating Plant Units 2 and 3 as a result of having both a scrubber and SCR and there have been similar reductions at the Harding Street Generating Plant Unit 7 this past spring. (IPL)

Comment: The commenter encourages the department to adopt the CAMR for the utility sector as finalized by the U.S. EPA. Allowances should be allocated for the longest reasonable period of time, five (5) to (10) ten years at a minimum, be based on fuel types, and by using heat input as the allocation metric with no set asides. (AEP)

Comment: The HEC petition is technically infeasible at this time at the levels and within the time frames proposed in the petition. The HEC petition does not take into account the differences in the various coals being used in Indiana at this time. The federal program takes these differences into account and also more properly acknowledges that mercury emission controls have not been developed and/or demonstrated to be effective across the variety of fuels in use. In addition, there is a large amount of new FGD systems being installed regionally for compliance with the CAIR rule and engineering or labor needed to meet the 2008 compliance date may not be available. (AEP)

Comment: The commenter does not support adopting a mercury rule with different limits or compliance dates than those in the CAMR. The commenter is puzzled by the department's discussion on antibacksliding. There are no current emission control requirements for mercury imposed on the utility industry and there is no ambient standard for mercury that has been used to develop an underlying SIP. Therefore, there could be no backsliding as the term has been classically used. (AEP)

Comment: The department should adopt the federal rule while considering the advantages and disadvantages of the various elements of flexibility provided by the federal rule. This would reduce the department's effort needed to accomplish the desired rule changes and assure the regulated community that they would not be subject to any additional requirements beyond those in the federal rule. This would not disadvantage the Indiana regulated community with respect to industry in other states that choose to adopt the federal rule without modification. The U.S. EPA cap and trade program, in conjunction with the CAMR timelines and tonnage caps, will allow for the most cost effective method to reduce emissions to be selected at the affected plants, and provide the time needed to develop control technology suitable to reach the tonnage limits that are below what would be achieved otherwise. (NIP)

Comment: The commenter opposes the HEC petition that includes the ninety percent (90%) control requirement, an earlier compliance date (2008) compared to the CAMR, and no emission cap and trade program. The petition does not account for the technical difficulties that will frustrate the best efforts of facilities to reach the proposed reductions levels and schedule. The difficulties include: the wide variation in mercury species and concentrations within the exhaust stream to be controlled; variations in the mercury content of the various coals used in Indiana; boiler type and configurations; and the ability of a control technology to control the specific form of mercury emitted from the specific fuel combustion process. Information presented by utilities and EPRI during the IDEM Mercury Workgroup process shows that the mercury specific controls are not commercially demonstrated and fully evaluated regarding their ability to meet the reduction requirements proposed by HEC. U.S. EPA's CAMR information indicated that reductions beyond the CAMR phase 1 level (CAIR co-benefits level) produce limited additional benefit, despite increased controls and costs. The CAMR is supported by state-of-the art modeling analysis. No such modeling and analyses has been provided to justify the HEC petition. (NIP)

Comment: The number of fish consumption advisories in Indiana compared to other states is a major concern of comments made in support of the HEC petition. However, there are discrepancies among the differing sampling and reporting methodologies used in different states, and these comments disregard the U.S. EPA disclaimer in the U.S. EPA fish advisory fact sheet that states it is inappropriate to make a comparison between states based on the number of fish advisories. The supporters of the HEC petition have not shown that the number of advisories is due to Indiana sources that would be affected by these rules nor have they shown that the proposed limits in the HEC petition would lessen the number of these advisories, and disregard the contribution from non-Indiana and non-utility sources to Indiana mercury concentrations. (NIP)

Comment: The commenter opposes the department imposing additional requirements to those found in the federal rule. The compliance date can not be accelerated for the same reasons as the compliance date for the HEC petition is not possible, i.e., the need for commercial development and demonstration of the mercury specific control technologies. There is no justification for individual emission limits and the commenter opposes any effort by the department to seek unit specific limits under the guise of anti-backsliding. First, there is no limit to measure backsliding against nor any measurement technique or data for which to make any comparisons. Second, there is no technical data to support the need for individual unit emission limits. Third, the imposition of unit specific limits would be in direct opposition to the principals of a trading program, threaten the very existence of an Indiana trading program, and be counter-productive to any attempt to seek cost effective emission controls, based on economies of scale for expenditure of limited capital on an individual company basis. Unit specific limits would also penalize any units that were under-utilized during the baseline period which allocations and limits were based, and could prevent their ability to return to operating levels more representative of their normal generation. (NIP)

Comment: The department should adopt the federal model rule. This approach will allow affected facilities to comply with the new emission reduction requirements in the most effective way and participate in the cap and trade program. Past history with the Acid Rain and NO_x SIP Call programs has shown that this approach is more cost-effective than the traditional command and control approach. While Dominion needed to reduce sulfur dioxide by about forty thousand (40,000) tons annually during the 1995-1999 period, early reductions resulted in a surplus of more than four (4) times that amount by 2000 for the Acid Rain program. Through early installation of nitrogen oxides controls, Dominion was eligible to receive more than nine thousand (9,000) early reduction

credits, real reductions that were achieved well ahead of the May 2004 start of the NO_x SIP Call program. In the NO_x SIP Call rule facilities were "rewarded" with "early reduction credits" that eased the emissions reduction burden once the deadlines kicked in. (DM)

Comment: The recently finalized Clean Air Interstate Rule (CAIR) requires large reductions of sulfur dioxide and nitrogen oxides from utility boilers in a twenty-nine (29) state region by 2010. The add-on control technologies that most effectively reduce emissions of sulfur dioxide and nitrogen oxides are, in many cases, very effective controls for emissions of mercury as well. Companies subject to both the CAIR and the CAMR will need to integrate planning for compliance for these two rules. The department should adopt a mercury emissions reduction program that is coordinated with the sulfur dioxide and nitrogen oxides reductions under the CAIR. (DM)

Comment: The HEC petition is not technically feasible at this time because mercury specific control technologies are not yet commercially available. U.S. EPA has recognized that mercury specific technologies such as activated carbon injection have not been demonstrated in practice on full-scale power plants for extended periods of time and are not considered commercially available in the preamble to the final CAMR. The Government Accountability Office (GAO) report from the May 2005 Clean Air Act report titled "Emerging Mercury Control Technologies Have Shown Promising Results, but Data on Long-Term Performance are Limited" confirms this conclusion. Test of sorbents lasting from several hours to several months have yielded average mercury emission reductions of thirty (30) to ninety-five (95) percent, with results varying depending on the type of coal used and other factors, according to the Department of Energy (DOE) and other stakeholders surveyed for the GAO report. The GAO report also recognizes that a number of factors complicate efforts to estimate the costs of installing mercury controls and that costs are expected to decline. (DM)

Comment: Adopting the federal rule with additional reductions or an earlier compliance date is not necessary given the results of the CMAQ modeling. The CMAQ modeling concludes that the mercury reduction required by the CAMR, combined with the co-benefit mercury reduction achieved through the CAIR, will have a dramatic effect on mercury deposition by 2020. (DM)

Comment: The department has proposed that one option in implementing the mercury rule is individual unit emissions limits as a potential "anti-backsliding" measure. Indiana utility companies have been very supportive and cooperative of the department's effort to develop these new emission reduction requirements, even before the final federal CAMR. There has not been any suggestion or attempt at "backsliding" from the utility sector. (DM)

Comment: The department should adopt the federal CAMR. This would ensure that Indiana facilities would not be penalized as compared with facilities in other states. The commenter opposes adopting a ninety percent (90%) control and no cap and trade rule or the federal CAMR rule with reduced overall state caps and earlier compliance dates. Only the federal CAMR rule is justified since it was developed by U.S. EPA after years of study and analysis. (IMPA)

Comment: The commenter supports the comments submitted by the Indiana Energy Association. (CTE) (IPL)

Response: IDEM has drafted rule language that incorporates the federal model CAMR with changes to the allocation methodology. IDEM will continue to work with stakeholders to identify ways that the concerns of HEC and the public can be addressed in this rulemaking.

Allocation Methodology

Comment: The department should provide free distribution of allowances. Charging for allowances would place an unnecessary additional economic burden on the affected parties who will be devoting considerable financial resources to controlling emissions to meet the emissions budget. (NIP) (IEA)

Comment: Allocations should be updated periodically as is done in the NO_x SIP Call. The federal model rule provides a workable program to transition from a fixed phase 1 allocation to an annual updating methodology. This will provide an opportunity to react to the ongoing evolution of the power generation market and avoid creation of an additional economic barrier to the installation of newer, potentially cleaner and more efficient units. (NIP)

Comment: If the department does not utilize the current NO_x budget trading program allowance allocation method, then the department should consider allocating allowances on an output basis, or at a minimum, create a set-aside to encourage development and implementation of clean efficient generation methods. (NIP)

Comment: The department should establish, within the Indiana rules, the baseline adjusted control period heat input allocation methodology that utilizes the heat input adjustment factors based on different coal ranks consistent with the CAMR model rule. (NIP)

Comment: A mechanism for encouraging energy efficiency and for managing the inclusion of new sources in the CAMR trading program should be accomplished with new unit set asides and set asides for energy efficiency or renewable energy in a manner similar to the NO_x SIP Call. (NIP)

Comment: The rule should include proactive economic incentives to encourage energy efficiency and renewable energy projects, as in the NO_x SIP Call. (IKE)

Comment: The department should explore the option of phasing in programs where emissions allowances must be purchased at an auction (i.e. the allocation of allowances is scaled back over time, so that industry purchases an increasing percentage) with the rulemaking workgroup. Proceeds from the auction could be used to fund research, pollution prevention technologies, clean energy programs and other efforts that can mutually

benefit public health, the environment and industry. (IKE)

Response: IDEM is not proposing to award allowances at an auction and is proposing an allowance methodology similar to the one used in the recently adopted CAIR. The proposed methodology awards allowances for six (6) years at a time, six (6) years in advance, while using an eight (8) year look back period for the heat input each time allocations are calculated. The control period heat input is not adjusted using factors based on different coal ranks. A new unit set aside is included using five percent (5%) of the budget in Phase 1 and three percent (3%) of the budget in Phase 2 with allocations calculated on a output basis. IDEM would like to discuss further with stakeholders the option of including a set aside to encourage energy efficiency and clean coal technologies, such as an integrated gasification combined cycle (IGCC) set aside.

New Source Performance Standard

Comment: The commenter is supportive of U.S. EPA establishing five subcategories with respective mercury limits based on a combination of coal rank and process type for the new source performance standards (NSPS). This approach recognizes the differences in the relative ability of the respective control technologies to effect emissions reductions on the various coal ranks. This approach can be revised in the future if the performance of control technologies advances to the point of coal rank being irrelevant in the level of mercury control achieved. (IEA)

Response: IDEM is not proposing to adopt NSPS limits different than those in the federal rule. The NSPS limits in 40 CFR 60 have already been incorporated by reference in Article 12.

Support the HEC Petition/Going Beyond the Federal Rule

Comment: The department should implement a stringent restriction in coal-fired power plant mercury emissions. Coal-fired power plants are a leading source of mercury emissions and other pollutants. All Indiana waterways are under fish consumption toxic effect advisories secondary to mercury pollution. The toxics effects of mercury are well documented and children are especially vulnerable to these effects. The proposal to restrict mercury by just fifteen percent (15%) is not sufficient when technology is currently available to curtail emissions from power plants by ninety percent (90%). The quality of life for all in Indiana ultimately depends upon the quality of our natural environment and ninety percent (90%) should be our goal. (RMJ)

Comment: The department should adopt ninety percent (90%) mercury reduction rules for coal-fired power plants which will maximally improve the quality of the water in our streams, and protect aquatic life and human health. All of Indiana's waterways are currently under fish consumption advisories by the State Department of Health. Mercury is introduced to our waterways via airborne deposition and storm water runoff. As substantial evidence demonstrates, we possess the technology to dramatically and cost –effectively reduce mercury levels in our waterways. A ninety percent (90%) reduction is technically feasible, affordable, and desirable. All we need is the cultural vision and political will to effect the needed change. In our desire to be "business-friendly", we have allowed for-profit corporations, including power plant operators, to shift their cost of production onto the backs of the public, in this case in the form of unregulated mercury emissions. A high quality of life is increasingly cited by development groups in their on-going efforts to generate economic development. (PRN)

Comment: The commenter requests that the department adopt a ninety percent (90%) reduction rule for mercury emissions from coal-fired power plants because Indiana ranks fourth in the country for mercury emissions from power plants, there are multiple fish consumption advisories, U.S. EPA's own modeling shows that larger than seventy percent (70%) reductions can be achieved in a shorter time frame without significant increases in electricity rates, there is a serious risk posed to children from mercury contamination, and because it is the right thing to do. (BK)

Comment: The department should mandate a ninety percent (90%) reduction of mercury emissions no later than 2008. The commenter is concerned about mercury released from coal-burning power plants in Indiana and that emissions can be greatly reduced with new technologies, without a substantial increase in utility rates. Any hesitation in reducing mercury emissions will significantly decrease the quality of Indiana lakes and streams, and pose a serious risk to young and unborn children. (YL)

Comment: The department should mandate a ninety percent (90%) reduction of mercury emissions no later than 2008. The commenter is concerned about mercury released from coal-burning power plants in Indiana. Currently mercury emissions from these power plants are unregulated, which puts Hoosiers' health at risk. (JPR)

Comment: The department should require a ninety percent (90%) reduction of mercury emissions from power plants. Indiana ranks fourth in the country for mercury emissions from coal plants, and virtually all of Indiana's lakes and streams are polluted with mercury at levels requiring fish advisories. Mercury is a potent, dangerous neurotoxin and damages the health of all of us. The monetary damage to Indiana's economy in increased health care costs must be considered when industry argues its economic issues. The federal rule will not protect the health of Hoosiers. Please protect our health from the toxic effects of mercury sooner rather than later. Giving industry twenty (20) years or so to clean up exposes an entire new generation to the toxic health effects of mercury. (JVC)

Comment: The commenter is concerned about mercury released from coal-burning power plants. The department should mandate a ninety percent (90%) reduction of mercury emissions no later than 2008 to protect the health of Hoosiers. (JDW)

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Comment: The department should adopt a ninety percent (90%) reduction of mercury emissions from coal fired power plants. We owe it to the people of Indiana to protect their health, especially those children living in Southeastern Indiana where there are seventeen (17) coal fired power plants. (CL)

Comment: As a long time Boy Scout /Scouter, yet staunch Republican, the commenter doesn't know what percentage of reduction of mercury is appropriate, but thinks a reduction is in order since according to available information Indiana has the fourth highest emissions from coal plants. The department should come up with a realistic improvement and implement a better program. (KGR)

Comment: The commenter encourages the department to mandate reductions of mercury emissions that exceed the federal rules set by the U.S. EPA by requiring ninety percent (90%) reductions by 2008. The commenter agrees with the widespread criticism of U.S. EPA under the Bush Administration which has gutted numerous federal rules and regulations effecting the environment. The most recent rule adopted by the U.S. EPA relating to mercury emissions takes too long to implement and does too little. In fact, the U.S. EPA Inspector General, Congress' Government Accountability Office, and the U.S. EPA's own Children's Health Protection Advisory Committee have criticized the U.S. EPA Mercury rule for failing to live up the requirements of the Clean Air Act. Thirteen states have challenged the mercury rule in court. The U.S. EPA rule requires a seventy percent (70%) reduction by 2018, but the U.S. EPA's modeling shows that those reductions will not actually be achieved until 2025. As a patent attorney, the commenter is familiar with the technology used for eliminating mercury from emissions. A local Indianapolis company has developed and employed technology, which adopted on a widespread basis, would allow mercury emissions to be reduced by well over ninety-five percent (95%). Regardless, the National Wildlife Federation reports that a ninety percent (90%) reduction in mercury emissions from coal fired power plants can be achieved using even earlier technology and the costs for such a reduction would increase monthly utility rates by less than two dollars (\$2.00). (PBO)

Comment: The department should adopt a more pro-active rule on mercury pollution than the one provided by the new federal rule on mercury emissions. Please adopt a rule that would reduce mercury emissions from coal-fired power plants by ninety percent (90%) as proposed by the Hoosier Environmental Council's petition. We need all the benefits we can possibly provide for the health of Hoosiers. The risks involved with mercury contamination may be insidious, but they have such a negative impact which carries on from birth throughout life, creating a plethora of problems which must be dealt with along the way (i.e. health care and education of those affected). (MC)

Comment: It is a disgrace for Indiana to be fourth in the nation for amount of mercury emissions from power plants. All of Indiana's waterways are presently under fish consumption advisories by the State Department of Health. The department should implement the reduction of mercury emissions by ninety percent (90%) to take Indiana from evolutionary to revolutionary. (KF)

Comment: The department should adopt a ninety percent (90%) reduction of mercury emissions from coal-fired power plants. (ISC)

Comment: The department should mandate a ninety percent (90%) reduction in mercury emissions by 2008. The federal rule set by the U.S. EPA is not adequate to protect the health of Hoosiers. As a registered dietitian the commenter is aware of the public health threat to children of methylmercury contamination. It is a shame that one (1) in six (6) women of childbearing age in the United States has enough mercury in her body to place her child at risk if she becomes pregnant. It is appalling that mercury emissions from coal-burning power plants are a major source of mercury in our water and that they are unregulated at this time. (CAC)

Comment: The commenter is concerned about mercury released from coal-burning power plants. Mercury emissions from power plants are currently unregulated, putting all of our health and our children's health, along with future generations, at risk. The department should mandate a ninety percent (90%) reduction of mercury emissions no later than 2008 to protect the health of Hoosiers. The federal rule requiring a seventy percent (70%) reduction by 2018 is not good enough. A ninety percent (90%) reduction would increase monthly utility rates by less than two dollars (\$2.00). Given the serious risk to children posed by mercury contamination, Indiana should not be satisfied with just adopting a flawed federal rule that has failed to stand up to independent analysis and will take too long to do too little. (JNB) (JTB)

Comment: The department should adopt a ninety percent (90%) reduction in mercury emissions from coal-fired power plants. Indiana ranks fourth in the country for mercury emissions from coal plants and these coal plants are the only remaining major source of mercury without any regulatory controls. Mercury pollution poses a serious threat, such as neurological problems, to developing fetuses, infants, and young children. The department should show that they are concerned about the health of children and the environment and help clean up the air and water. A ninety percent (90%) reduction in mercury emissions from coal fired power plants can be achieved using existing technology. The cost for such reductions would only increase monthly utility rates by less than two dollars (\$2.00). Surely, the health of our children is worth such a small cost. (MNC)

Comment: The department should write strong rules reducing mercury emissions from Indiana's coal-fired utilities. Specifically, the rules should include the lowest mercury emissions achievable and a rapid implementation of the reductions. If trading is allowed, the commenter requests that individual unit limits be set such that no unit can exceed its mercury emissions for 2002 and that there are regional caps so that no region

can be disproportionately burdened with mercury emissions. (HEC)

Comment: The primary reason that mercury emissions must be reduced by the maximum amount achievable is mercury's bioaccumulation and extraordinary toxicity. It is toxic in microgram quantities^{1,2} with medical studies demonstrating loss of IQ, developmental delays in children, and reduced memory and increased risk of heart attack in adults even at low blood levels³⁻¹⁴. As noted in the First Notice of Comment Period, Center for Disease Control (CDC) data show that mercury levels in the American public are already elevated sufficiently to put six hundred and thirty thousand (630,000) children born every year at risk for neurologic damage¹⁵. Reducing mercury emissions by the maximum amount achievable is essential to reducing mercury's effects on IQ and cardiovascular health. (HEC)

Comment: Indiana's contribution to mercury pollution is substantial. Indiana utilities rank fourth in the nation for mercury emissions, with release of two and one-half (2.5) tons of mercury in the year 2002¹⁶. To put that quantity into perspective, if entirely converted to methylmercury, it is sufficient to kill 3.67 million people¹⁷, or contaminate 7.6 billion pounds of fish beyond the limit set by the Indiana State Department of Health for consumption by women of childbearing years and children¹⁸. With this rate of mercury emissions from Indiana's utilities, we as a state are morally obligated to reduce mercury by the maximum possible amount as soon as possible. (HEC)

Comment: The loss of productivity from mercury-related IQ loss is estimated to cost the nation as a whole \$8.7 billion dollars per year¹⁹ with \$1.3 billion of that attributable to power plants. The annual cost of cardiovascular effects is estimated to be as high as \$3.3 billion²⁰. In contrast, it has been estimated that a ninety percent (90%) reduction in mercury emissions from Indiana's power plants would cost the utilities \$183 million and increase the electric bill for the average household from \$70 to \$71.90 per month, or by two and seven-tenths percent (2.7%)²¹. (HEC)

Comment: Studies demonstrate that reductions in mercury emissions reduce mercury deposition and mercury contamination in fish. Glacial ice cores show a significant reduction in the deposition of mercury since the U. S. EPA began regulation of mercury emissions from non-utilities in the 1990s²³. The Florida Department of Environmental Protection demonstrated that over ten years as local mercury emissions were reduced by over ninety percent (90%), the mercury in local fish declined sixty percent (60%)^{24, 25}. In Little Rock Lake, WI, from 1994 to 2000 a ten percent (10%) per year drop in atmospheric deposition led to a corresponding five percent (5%) per year drop in mercury in the fish²⁶. (HEC)

Comment: According to the U.S. EPA, mercury depositions are highest in the states with the highest emissions, and Indiana has one of the highest rates of deposition²⁷. Modeling discussed for the IDEM Mercury Workgroup by Dr. Mark Cohen of the National Oceanic and Atmospheric Administration (NOAA) shows that sixty-two percent (62%) of ionic mercury emissions deposit within one thousand kilometers (1000 km) (six hundred and twenty-five (625) miles) of a two hundred and fifty (250) meter stack and that utility coal combustion produces twenty-two to forty-one percent (22-41%) of its mercury emissions in ionic form. The model also showed four to fourteen percent (4-14%) of utility mercury emissions are particulate with twenty-two percent (22%) deposition within one thousand kilometers (1000 km) and fifty-four to sixty-two percent (54-62%) are elemental with three percent (3%) deposition at one thousand kilometers (1000 km). Altogether according to the NOAA model mercury deposition within one thousand kilometers (1000 km) of a power plant, is between twenty percent (20%) and twenty-eight and one-half percent (28.5%) of its total mercury output²⁸. Seigneur et al. (2004) also concluded that in regions with high deposition, such as Indiana, the impact of local and regional sources is the main cause of the elevated deposition²⁹. Since a significant proportion of utility emissions deposit within six hundred (600) miles, a reduction in emissions will reduce mercury deposition within Indiana. (HEC)

Comment: Considerable reduction of mercury emissions is possible with existing pollution control technologies. U.S. EPA data shows³⁰ several control configurations already in use achieving ninety percent (90%) reductions or better at plants burning bituminous coal (sixty-two percent (62%) of coal burning utilities in Indiana burn bituminous) and can achieve as high as seventy-two (72%) with subbituminous. Given the information in this table, it appears that simply optimizing the technology used for CAIR compliance could reduce mercury emissions well beyond the fifteen percent (15%) required in the first phase of U.S. EPA's Clean Air Mercury Rule (CAMR). Use of activated carbon injection (ACI) alone or in combination with fabric filters could bring the remaining plants in Indiana to ninety percent (90%) reduction^{21, 22}. Full scale demonstrations of ACI have been successful in a wide range of plant configurations and with different coal types over the last five (5) years. These demonstrations were discussed at length by both the National Wildlife Federation at the November meeting of the IDEM Mercury Workgroup and by ADA-ES at the February meeting^{33, 34}. Given the current state of control technology, the U.S. EPA's end goal, a sixty-six percent (66%) reduction achieved twenty (20) years from now³², does a disservice to the people of Indiana. It falls far short of what is achievable and at a high cost to Indiana's public health and to its fishing industry with thousands of pounds of excess mercury emitted over those twenty (20) years. (HEC)

Comment: Because of its extraordinary toxicity mercury pollution was targeted for reduction by Congress in the 1990 amendments to the Clean Air Act. Since 1990 there has been substantial progress as one by one industries emitting mercury have come under regulation by the U.S. EPA (30). The U.S. EPA is strikingly inconsistent in the time to implementation among these industries. By the U.S. EPA's own estimate, a sixty-nine

percent (69%) reduction in power plant mercury emissions nation-wide will not be achieved by utilities until 2025 despite the 2018 deadline because of the projected banking of emission credits³¹. This failure by the U.S. EPA to regulate the power industry in keeping with the other nation-wide efforts to reduce mercury emissions, particularly given utilities' large contribution to mercury emissions, leaves the responsibility for timely mercury reductions to the states. (HEC)

Comment: If the state chooses to move forward with the cap and trade model in CAMR, trading of emission credits could leave one (1) or more regions of the state with a disproportionate burden of mercury emissions. As noted above, a significant amount of mercury emissions deposit locally. To prevent leaving any region at a disadvantage, a rule that includes trading should have regional caps. (HEC)

Comment: Mercury control technologies will bring jobs to Indiana in production of the steel required for manufacturing, in installation of the systems, and in maintenance of the control systems. (HEC)

Comment: Stricter standards for fine particulate are likely from the U.S. EPA in the near future due to findings of health effects. As a result, many more Indiana counties will be out of compliance, and additional measures will have to be taken. Emission control technology could be configured to account for the anticipated tighter standard. The industry would see a benefit in the efficiency of adding control equipment once rather than twice. (HEC)

Comment: The commenter supports the department's initiative to adopt rules concerning mercury emissions from coal-fired power plants. Mercury emissions from all sources, including power plants, represent a compelling public health problem that affects all citizens in Indiana, including individuals at high risk such as pregnant women and children. A substantial body of basic, pathological, clinical, and epidemiological research over several decades has documented the adverse effects of mercury exposure in animals and humans. This research has found no "threshold effect," that is a time duration and mercury concentration product (area under the human exposure curve) at which toxicity does not occur. While current public policy accepts specific exposure levels for the American population, there are no prospective randomized controlled clinical or epidemiological studies that show that human exposure to mercury even at "low levels" does not cause serious and permanent neurological or other disease, particularly in "at risk" populations. For these reasons, the options for meeting the requirements in the Clean Air Mercury Rule (CAMR) must be carefully reasoned. For example, given the known toxicity of mercury and the lack of a "threshold effect" for toxicity, and given the widespread exposure to large numbers of the American and Hoosier populations to mercury, precautionary principles should govern the decisions for addressing requirements in CAMR. That is, even in the absence of "absolute proof" of a causal relationship between exposure to mercury and human disease, particularly at lower levels of exposure, prudent public policy should be predicated on the compelling evidence from decades of quality research that human toxicity likely occurs at even low levels of exposure. The commenter urges the department to consider the scientifically grounded and well-reasoned proposal by HEC to regulate mercury emissions from power plants. Specifically, there should be limits for coal fired EGUs of six-tenths pounds of mercury per trillion British thermal units (0.6 lbs Hg/TBtu) or an emissions reduction of ninety percent (90%) regardless of coal type with compliance by 2008 and emissions trading among sources should not be allowed. (IDH)

Comment: The commenter encourages the department to develop regulations that will strengthen the state's protection of women of childbearing age and children from the effects of methylmercury, and provide them the highest level of safety from mercury emissions in the country. Mercury, especially in the form of methylmercury, is of special concern because it is a potent developmental toxin. According to the American Academy of Pediatrics, at high ingested doses, mercury can disrupt migration and organization of nerve cells in the brain before and after birth, leading to severe mental deficiency, blindness, deafness, and chronic seizure disorders. Chronic, moderate to low-level methylmercury exposure before birth is associated with developmental delays and decrements by various measurements of attention, memory, intelligence, language ability, and motor skills (National Academy of Sciences). (MOD)

Comment: Although emissions of mercury are substantial in other parts of the world, Indiana's electric utilities contribute, relatively speaking within the United States, a significant portion. Approximately half of the mercury emitted by Indiana sources comes from the electric utility sector. Indiana ranks fourth in the nation for utility sector mercury emissions. All of Indiana's rivers and streams and many thousand lake acres are under fish consumption advisories issued by the Indiana State Department of Health warning Hoosiers to limit their consumption of fish caught in those waters because of health concerns, one of which is mercury found in fish. Studies show that as much as eighty percent (80%) of the mercury measured in Lake Michigan comes from air deposition (Mason and Sullivan (1997), cited by Dr. Mark Cohen, National Oceanic and Atmospheric Administration in presentation to Indiana Mercury Workgroup, April 2005). Mercury differs significantly from the types of air pollutants Indiana is accustomed to regulate because it is bioaccumulative. Therefore, the schedule of implementation and the effect of banking programs are very important in assessing the overall improvement to the environment and public health that will be achieved by the rule. The commenter is disappointed at the low reduction goals established by U.S. EPA. With the possibility that the federal rule will not withstand legal challenge and the possibility of further delay in implementation a number of states have set themselves a higher bar, yet still within a range of reductions that are feasible and cost-effective. This rulemaking is Indiana's opportunity to do the same. Because of the type of coal used in Indiana, the state is in a position to make substantial reductions. The department and the Air

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Pollution Control Board should continue an open process with the rulemaking workgroup where information can be openly presented and discussed, information from other state's programs can be reviewed, and the State Utility Forecasting Group and others evaluate cost of the various reduction targets and schedules. The commenter would like to see a rule that is environmentally protective, cost-effective, and one that will show that Indiana is a leader in reducing its impacts on public health, air and water. (IKE)

Comment: The department should draft a rule that requires as much mercury reduction as feasible, as expeditiously as possible. When other states have moved forward with their own programs, their reduction targets and schedules have been tailored to that state's utility fleet characteristics. Indiana should take the same approach. (IKE)

Comment: The department should take the time necessary for this rulemaking. The first phase of mercury reductions in CAMR will be achieved through the implementation of CAIR, so taking additional time for this rulemaking will not delay the initial federally required reductions. (IKE)

Comment: Emissions trading can be an effective and cost-effective approach to pollution reduction. The department should craft rule language in the draft rule that prevents utilities from increasing actual emissions of mercury at any existing plant beyond current levels. (IKE)

Comment: The commenter requests that the Indiana Air Pollution Control Board (APCB) reduce Indiana's mercury emissions from power plants by ninety percent (90%) by requiring utilities to use currently available technology. Six (6) other states have already passed similar safeguards, and Indiana also should adopt the ninety percent (90%) reduction. This reduction is feasible and economical, and it would add only about two and seven-tenths (2.7) percent to homeowner's bills. This two and seven-tenths (2.7) percent is trivial, in comparison to the cancers, developmental disorders, and neurological problems that Indiana residents, especially children, are suffering because of current levels of mercury pollution. Indiana's mercury pollution is fourth highest in the nation, which is disproportionate given its population. Indiana has repeatedly been called the "new" Cancer Alley, and many top professionals do not want to accept job offers in Indiana because of the disproportionate threat of Indiana pollution, the third highest of all states in the nation overall. The serious mercury emissions only add to an already troubling problem. Many Indiana counties, like Lake, already are in the worst ten percent (10%) of U.S. counties in terms of total environmental pollutants released, in the worst ten percent (10%) of U.S. counties in terms of particulate matter less than two and five-tenths (2.5) microns, and in the worst ten percent (10%) of U.S. counties in terms of added cancer risk as a result of hazardous air pollutants. The APCB needs to act now to reduce pollution otherwise no desirable businesses will choose to come to Indiana. (UND)

Comment: Indiana's mercury rule needs to be at least as strong as the federal rule. Mercury has been found to be a catalyst for autism. (PMP)

Comment: As a citizen of the state of Indiana, the commenter is concerned about the public health effects of mercury emissions from coal burning power plants. Lack of regulations of these emissions puts Hoosiers at risk, especially youth. The department should mandate a ninety percent (90%) reduction of mercury emissions by 2008. This is a vital step needed to protect Hoosier Health. (JFB)

Comment: The department should adopt a rule for ninety percent (90%) reduction in mercury emissions from Indiana power plants. The commenter has 600 acres of land where as recently as the 1960s the water on that land could be used for swimming and fishing without harm, or maybe the commenter was unaware of the risks of chemical pollution at that time. The pollution risk was probably exponentially smaller back then. Indiana should do more to protect Indiana's lakes and streams and look out for neighbors in the east. Many or most of the Whitewater Valley Land Trust support tougher standards and the corresponding rise in electricity rates. (WVL)

Comment: The department should adopt a rule for ninety percent (90%) reduction in mercury emissions from Indiana power plants. As the mother of two (2) young sons, the commenter can't comprehend that Indiana would be satisfied with a adopting a federal rule that doesn't meet the requirements of the Clean Air Act. This issue is very important to Hoosier health and economics. It is not attractive to businesses or families to move to a polluted state. (AYC)

Comment: The department should adopt a rule for ninety percent (90%) reduction in mercury emissions from Indiana power plants. It is nice to have a beautiful home and two (2) cars, but if you can't breathe the air or drink the water, what good are the benefits? (EFW)

Comment: The commenter supports a quick reduction of ninety percent (90%) of the level of mercury emitted to the air by utility and industrial coal fired sources. Testimony offered during the workgroup sessions clearly shows that such a reduction is practical, economical, and necessary to protect the health of Hoosiers. We must do whatever is necessary to eliminate mercury emissions or we will see a continual decline in the overall intelligence of Hoosiers and others unfortunate enough to live downwind of a mercury polluting facility. A new study, published in February of 2005, indicated that between three hundred sixteen thousand five hundred eighty-eight (316,588) and six hundred thirty-seven thousand two hundred thirty-three (637,233) children each year have cord blood mercury levels above five and eight-tenths (5.8) micrograms per liter (μ L), a level associated with loss of IQ. The resulting loss of intelligence causes diminished economic productivity that persists over the entire life of these children. Since Indiana is a major emitter of mercury, it stands to reason that a proportionate number of Indiana children are subject to this morbid statistic. In 2001, U.S. EPA

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estimated that a ninety percent (90%) reduction in mercury emissions from coal fired power plants could be achieved by 2008 using technology that has significantly improved since that time. The commenter believes that the federal CAMR rule will be widely challenged and be remanded by the courts with instructions to regulate mercury both as a hazardous waste and using the system of maximum achievable control technology (MACT) to get reductions instead of the ill conceived trading program that U.S. EPA proposed in their gift rule to coal fired electrical generators. All of the streams and lakes in Indiana carry fish consumptions advisories and many Indiana families continue to eat fish from these waters. Even reducing the level of emissions by ninety percent (90%) will still allow much of Indiana's fresh water resource to have mercury levels that will be enough to keep these fish consumption advisories in place. If we do not pursue an aggressive and timely effort to remove mercury from Indiana's water, more kids will be subject to inferior intelligence just so Indiana polluters can gain better profit or economic position. Indiana's mercury rule should include all unregulated sources of mercury in the state, not just coal fired power plants. (VWI)

Comment: The department should mandate a ninety percent (90%) reduction of mercury emissions by 2008. Currently, mercury emissions from coal-burning power plants are unregulated, which puts families at risk. Indiana has a chance to really step up and adopt a strong policy on emissions regulations. (EBH)

Comment: The department should mandate a ninety percent (90%) reduction of mercury emissions by 2008. Waiting till 2017 for a smaller reduction is embarrassing when available technology exists now to do the job. The commenter does not like the impact of mercury on Hoosier Health and does not like being ranked among the highest states for mercury emissions. This is a quality of life issue. The commenter fishes in many of the streams and lakes in Indiana, but does not contribute to any of the lake fish fries because of their impact on kid's health. (CKB)

Comment: The commenter has watched manufacturing companies flee this state in the last twenty (20) years and shares the concern for Indiana's ability to provide power cheaply from coal-burning plants. We have had cheap power, and still lose jobs to other states and countries. Cheap power is not the only answer. Indiana needs to have a workforce that doesn't sacrifice health, clean air, and clean water, in order to attract industry. Please address the mercury emissions from coal-burning power plants and protect the health of Indiana citizens. The technology is supposed to exist to provide for a ninety percent (90%) reduction in mercury emissions. The commenter is willing to pay a bit more for electricity. As a shareholder in Cinergy, AES, and Duke Power, those executives and directors could certainly sacrifice some of their egregiously inflated compensations to ensure that the best technology is installed to provide both jobs and good health for Hoosiers. Please set stringent mercury emissions standards to make Indiana a leader in clean power generation and perhaps neighboring states will follow suit. (MYB)

Comment: Indiana ranks fourth in the nation in the emissions of mercury from coal plants and nationwide one (1) in six (6) women has been exposed to enough of this toxin to seriously endanger the healthy development and delivery of her children. It is distressing that Indiana is currently debating whether or not to adopt the HEC petition that would reduce these dangerous emissions by ninety percent (90%). It is difficult to imagine why we would choose to adopt a policy that only reduces the mercury in the environment by seventy percent (70%) and not until 2025 according to U.S. EPA estimates. The costs of the HEC petition are nothing compared to the medical bills and emotional trauma, as well as damage to the environment that mercury emissions cause. The commenter requests that the department adopt the HEC petition and protect Hoosiers and children, born and unborn, from this unnecessary and avoidable threat. (LCG)

Comment: The department should mandate a ninety percent (90%) reduction of mercury emissions by 2008 to safeguard the health of Indiana residents now and in the future. Power plant mercury emissions are currently unregulated and the department has the authority to change this situation. (MVS)

Comment: As an elementary special education teacher, the commenter is acutely aware of the dangers that mercury poses to a child's development. The commenter thinks a lot about the kind of environment that will be left to our children and their children. Why accept unnecessary risk to their health and well-being? The department should mandate a ninety percent (90%) reduction of mercury emissions by 2008. (KAL)

Comment: As a mother, grandmother, and great-grandmother, the commenter can think of no issue more important than mercury control. The department should give careful consideration of requiring stronger safeguards as soon as possible. The *Indianapolis Star* states that Indiana has the fourth highest rate of cancer deaths. The need for safeguards is certainly apparent. (BYW)

Comment: The department should adopt a stringent rule to regulate mercury pollution from coal fired power plants. Please assist, promote, devise, and better enforce laws and regulations to reduce mercury pollution from coal fired power plants in Indiana. (PTB)

Comment: The department should mandate a ninety percent (90%) decrease in mercury emissions to be in place by 2008. Society can "pay now" or "pay later" in terms of increased health care costs. Let's pay now! (SER)

Comment: The following commenters submitted comments in support of the HEC petition and were delivered by the Hoosier Environmental Council (HEC) to the department: (SAH) (CEC) (BAS) (JAK) (LAH) (KLM) (RAW) (RLK) (PMM) (JNS) (MEL) (SNS) (DDS) (EHJ) (BAS) (SHV) (CEA) (BEH) (MEP) (JNP) (JAT) (SMS) (RTW) (NNJ) (JNS) (LAS) (MSE) (RTR) (PAM) (KWS) (CT1) (MWM) (KNJ) (CYW) (CT2) (AW) (AE) (CT3) (CT4) (CLT)

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Response: IDEM has drafted rule language that incorporates the federal model CAMR with changes to the allocation methodology. IDEM will continue to work with stakeholders to identify ways that the concerns of HEC and the public can be addressed in this rulemaking. As previously explained in the background, due to uncertainties over the achievability of 90% control, reductions in actual mercury exposure levels, cardiovascular health effects, and the low benefit/cost ratio, IDEM is proceeding with a rulemaking based on CAMR.

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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:

#05-116(APCB) Mercury Rule

Susan Bem 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 February 16, 2007.

Additional information regarding this action may be obtained from Susan Bem, Rules Development Section, Office of Air Quality, (317) 233-5697 or (800) 451-6027 (in Indiana).

DRAFT RULE

SECTION 1. [326 IAC 24](#), PROPOSED TO BE ADDED AT [20060809-IR-326050117PRA](#), SECTION 5, IS AMENDED BY ADDING A NEW RULE TO READ AS FOLLOWS:

Rule 4. Clean Air Mercury Rule (CAMR) Trading Program

[326 IAC 24-4-1](#) 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. (a) This rule establishes a mercury emissions budget and mercury trading program for coal-fired generating units. The following units shall be mercury budget units, and any source that includes one (1) or more such units shall be a mercury budget source and shall be subject to the requirements of this rule, except as provided in subsection (b):

(1) Any:

- (A) stationary, coal-fired boiler; or
- (B) stationary, coal-fired combustion turbine;

serving at any time, since the later of November 15, 1990, or the start-up of the unit's combustion chamber, a generator with nameplate capacity of more than twenty-five (25) megawatt electrical producing electricity for sale.

(2) If a stationary boiler or stationary combustion turbine that, under subdivision (1), is not a mercury budget unit begins to:

- (A) combust coal or coal-derived fuel; or
- (B) serve a generator with nameplate capacity of more than twenty-five (25) megawatt electrical producing electricity for sale;

the unit shall become a mercury budget unit as provided in subdivision (1) on the first date on which it both combusts coal or coal-derived fuel and serves such generator.

(b) Units that meet the following requirements shall not be mercury budget units:

(1) Any unit that is a mercury budget unit under subsection (a):

- (A) qualifying as a cogeneration unit during the twelve (12) month period starting on the date the unit first produces electricity and continuing to qualify as a cogeneration unit; and
- (B) not serving at any time, since the later of November 15, 1990, or the start-up of the unit's combustion chamber, a generator with nameplate capacity of more than twenty-five (25) megawatt electrical supplying in any calendar year more than one-third (1/3) of the unit's potential electric output capacity or two hundred nineteen thousand (219,000) megawatt hours, whichever is greater, to any utility power distribution system for sale.

If a unit qualifies as a cogeneration unit during the twelve (12) month period starting on the date the unit first produces electricity and meets the requirements of subdivision (1) for at least one (1) calendar year, but subsequently no longer meets all such requirements, the unit shall become a mercury budget unit starting on the earlier of January 1 after the first calendar year during which the unit first no longer qualifies as a cogeneration unit or January 1 after the first calendar year during which the unit no longer meets the requirements of subdivision (1)(B).

(2) Any unit that is a mercury budget unit under subsection (a), is a solid waste incineration unit combusting municipal waste, and is subject to the requirements of any of the following:

- (A) A state plan approved by the U.S. EPA in accordance with 40 CFR 60, Subpart Cb* (emissions guidelines and compliance times for certain large municipal waste combustors) and [326 IAC 11-7](#).
- (B) 40 CFR 60, Subpart Eb* (standards of performance for certain large municipal waste combustors).
- (C) 40 CFR 60, Subpart AAAA* (standards of performance for certain small municipal waste combustors).
- (D) A state plan approved by the U.S. EPA in accordance with 40 CFR 60, Subpart BBBB* (emission guidelines and compliance times for certain small municipal waste combustion units).
- (E) 40 CFR 62, Subpart FFF* (Federal plan requirements for certain large municipal waste combustors).
- (F) 40 CFR 62, Subpart JJJ* (Federal plan requirements for certain small municipal waste combustion units).

*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 24-4-1](#))

[326 IAC 24-4-2 Definitions](#)

Authority: [IC 13-14-8](#); [IC 13-17-3-4](#); [IC 13-17-3-11](#)

Affected: [IC 13-11-2](#); [IC 13-15](#); [IC 13-17](#)

Sec. 2. For purposes of this rule, the definition given for a term in this rule shall control in any conflict between [326 IAC 1-2](#) and this rule. In addition to the definitions provided in [IC 13-11-2](#) and [326 IAC 1-2](#), the following definitions apply throughout this rule, unless expressly stated otherwise or unless the context clearly implies otherwise:

- (1) "Account number" means the identification number given by the U.S. EPA to each mercury allowance tracking system account.
- (2) "Acid rain emissions limitation" means a limitation on emissions of sulfur dioxide or nitrogen oxides under the acid rain program.
- (3) "Acid rain program" means a multistate sulfur dioxide and nitrogen oxides air pollution control and emission reduction program established by the U.S. EPA under Title IV of the Clean Air Act and 40 CFR Parts 72 through 78*.
- (4) "Allocate" or "allocation" means, with regard to mercury allowances, the determination by a permitting authority or the U.S. EPA of the amount of mercury allowances to be initially credited to a mercury budget unit, a new unit set-aside, or other entity.
- (5) "Allowance transfer deadline":
 - (A) means, for a control period, midnight of March 1 (if it is a business day) or midnight of the first business day thereafter (if March 1 is not a business day) immediately following the control period; and
 - (B) is the deadline by which a mercury allowance transfer must be submitted for recordation in a mercury budget source's compliance account in order to be used to meet the source's mercury budget emissions limitation for such control period in accordance with section 9(i) and 9(j) of this rule.
- (6) "Alternate mercury designated representative" means, for a mercury budget source and each mercury budget unit at the source, the natural person who is authorized by the owners and operators of the source and all such units at the source in accordance with section 6 of this rule to act on behalf of the mercury designated representative in matters pertaining to the mercury budget trading program. If the mercury budget source is also:
 - (A) a CAIR NO_x source, then this natural person shall be the same person as the alternate CAIR designated representative under the CAIR NO_x trading program;
 - (B) a CAIR SO₂ source, then this natural person shall be the same person as the alternate CAIR designated representative under the CAIR SO₂ trading program;
 - (C) a CAIR NO_x ozone season source, then this natural person shall be the same person as the alternate CAIR designated representative under the CAIR NO_x ozone season trading program; and
 - (D) subject to the acid rain program, then this natural person shall be the same person as the alternate designated representative under the acid rain program.
- (7) "Automated data acquisition and handling system" or "DAHS" means that component of the CEMS, or other emissions monitoring system approved for use under section 11 of this rule, designed to interpret and convert individual output signals from pollutant concentration monitors, flow monitors, diluent gas monitors, and other component parts of the monitoring system to produce a continuous record of the measured parameters in the measurement units required under section 11 of this rule.
- (8) "Boiler" means an enclosed fossil fuel-fired or other fuel-fired combustion device used to:
 - (A) produce heat; and
 - (B) transfer heat to recirculating water, steam, or other medium.
- (9) "Bottoming-cycle cogeneration unit" means a cogeneration unit in which:
 - (A) the energy input to the unit is first used to produce useful thermal energy; and
 - (B) at least some of the reject heat from the useful thermal energy application or process is then used for electricity production.
- (10) "CAIR NO_x annual trading program" means a multistate nitrogen oxides air pollution control and emission reduction program approved and administered by the U.S. EPA in accordance with [326 IAC 24-1](#), 40 CFR 96*, Subparts AA through II*, and 40 CFR 51.123* or established by the U.S. EPA in accordance with 40 CFR 97, Subparts AA through II*, 40 CFR 51.123(p)*, and 40 CFR 52.35* as a means of mitigating interstate transport of fine particulates and nitrogen oxides.
- (11) "CAIR NO_x ozone season source" means a source that is subject to the CAIR NO_x ozone season trading program.
- (12) "CAIR NO_x ozone season trading program" means a multistate nitrogen oxides air pollution control and emission reduction program approved and administered by the U.S. EPA in accordance with [326 IAC 24-3](#), 40 CFR 96*, and 40 CFR 51.123* or established by the U.S. EPA in accordance with 40 CFR 97, Subparts AAAA through IIII*, 40 CFR 51.123(ee)*, and 40 CFR 52.35* as a means of mitigating interstate transport of ozone and nitrogen oxides.

(13) "CAIR NO_x source" means a source that is subject to the CAIR NO_x annual trading program.

(14) "CAIR SO_x source" means a source that is subject to the CAIR SO_x trading program.

(15) "CAIR SO₂ trading program" means a multistate sulfur dioxide air pollution control and emission reduction program approved and administered by the U.S. EPA in accordance with [326 IAC 24-2](#), 40 CFR 96*, and 40 CFR 51.124* or established in accordance with 40 CFR 97, Subparts AAA through III, 40 CFR 51.124*, and 40 CFR 52.36* as a means of mitigating interstate transport of fine particulates and sulfur dioxide.

(16) "Coal" means any solid fuel classified as:

- (A) anthracite;
- (B) bituminous;
- (C) subbituminous; or
- (D) lignite;

by the American Society of Testing and Materials (ASTM) Designation D388-77, 90, 91, 95, 98a, or 99**.

(17) "Coal-derived fuel" means any fuel, whether in a solid, liquid, or gaseous state, produced by the mechanical, thermal, or chemical processing of coal.

(18) "Coal-fired" means combusting any amount of coal or coal-derived fuel, alone or in combination with any amount of any other fuel, during any year.

(19) "Cogeneration unit" means a stationary, coal-fired boiler or stationary, coal-fired combustion turbine:

(A) having equipment used to produce electricity and useful thermal energy for industrial, commercial, heating, or cooling purposes through the sequential use of energy; and

(B) producing during the twelve (12) month period starting on the date the unit first produces electricity and during any calendar year after the calendar year in which the unit first produces electricity:

(i) for a topping-cycle cogeneration unit:

(AA) useful thermal energy not less than five percent (5%) of total energy output; and

(BB) useful power that, when added to one-half (½) of useful thermal energy produced, is not less than forty-two and one-half percent (42.5%) of total energy input, if useful thermal energy produced is fifteen percent (15%) or more of total energy output, or not less than forty-five percent (45%) of total energy input, if useful thermal energy produced is less than fifteen percent (15%) of total energy output; and

(ii) for a bottoming-cycle cogeneration unit, useful power not less than forty-five percent (45%) of total energy input.

(20) "Combustion turbine" means:

(A) an enclosed device comprising a compressor, a combustor, and a turbine and in which the flue gas resulting from the combustion of fuel in the combustor passes through the turbine, rotating the turbine; and

(B) if the enclosed device under clause (A) is combined cycle, any associated duct burner, heat recovery steam generator, and steam turbine.

(21) "Commence commercial operation" means, with regard to a unit, the following:

(A) To have begun to produce steam, gas, or other heated medium used to generate electricity for sale or use, including test generation, except as provided in section 3 of this rule, subject to the following:

(i) For a unit that is a mercury budget unit under section 1 of this rule on the later of November 15, 1990, or the date the unit commences commercial operation as defined in this clause and that subsequently undergoes a physical change, other than replacement of the unit by a unit at the same source, such date shall remain the date of commencement of commercial operation of the unit, which shall continue to be treated as the same unit.

(ii) For a unit that is a mercury budget unit under section 1 of this rule on the later of November 15, 1990, or the date the unit commences commercial operation as defined in this clause and that is subsequently replaced by a unit at the same source (for example, repowered), such date shall remain the replaced unit's date of commencement of commercial operation, and the replacement unit shall be treated as a separate unit with a separate date for commencement of commercial operation as defined in this clause or clause (B), as appropriate.

(B) Notwithstanding clause (A), and except as provided in section 3 of this rule, for a unit that is not a mercury budget unit under section 1 of this rule on the later of November 15, 1990, or the date the unit commences commercial operation as defined in clause (A), the unit's date for commencement of commercial operation shall be the date on which the unit becomes a mercury budget unit under section 1 of this rule subject to the following:

(i) For a unit with a date for commencement of commercial operation as defined in this clause and that subsequently undergoes a physical change (other than replacement of the unit by a unit at the

same source), such date shall remain the unit's date of commencement of commercial operation of the unit, which shall continue to be treated as the same unit.

(ii) For a unit with a date for commencement of commercial operation as defined in this clause and that is subsequently replaced by a unit at the same source (for example, repowered), such date shall remain the replaced unit's date of commencement of commercial operation, and the replacement unit shall be treated as a separate unit with a separate date for commencement of commercial operation as defined in this clause or (A), as appropriate.

(22) "Commence operation" means the following:

(A) To have begun any mechanical, chemical, or electronic process, including, with regard to a unit, start-up of a unit's combustion chamber.

(B) For a unit that undergoes a physical change (other than replacement of the unit by a unit at the same source) after the date the unit commences operation as defined in clause (A), such date shall remain the unit's date of commencement of operation of the unit, which shall continue to be treated as the same unit.

(C) For a unit that is replaced by a unit at the same source (for example, repowered) after the date the unit commences operation as defined in clause (A), such date shall remain the replaced unit's date of commencement of operation, and the replacement unit shall be treated as a separate unit with a separate date for commencement of operation as defined in this clause or clause (A) or (B), as appropriate.

(23) "Common stack" means a single flue through which emissions from two (2) or more units are exhausted.

(24) "Compliance account" means a mercury allowance tracking system account, established by the U.S. EPA for a mercury budget source under section 9 of this rule, in which any mercury allowance allocations for the mercury budget units at the source are initially recorded and in which are held any mercury allowances available for use for a control period in order to meet the source's mercury budget emissions limitation in accordance with section 9(i) and 9(j) of this rule.

(25) "Continuous emission monitoring system" or "CEMS" means the equipment required under section 11 of this rule to sample, analyze, measure, and provide, by means of readings recorded at least once every fifteen (15) minutes, using an automated DAHS, a permanent record of mercury emissions, stack gas volumetric flow rate, stack gas moisture content, and oxygen or carbon dioxide concentration, as applicable, in a manner consistent with 40 CFR 75*. The following systems are the principal types of continuous emission monitoring systems required under section 11 of this rule:

(A) A flow monitoring system:

(i) consisting of a stack flow rate monitor and an automated DAHS; and

(ii) providing a permanent, continuous record of stack gas volumetric flow rate, in standard cubic feet per hour (scfh).

(B) A mercury concentration monitoring system:

(i) consisting of a mercury pollutant concentration monitor and an automated DAHS; and

(ii) providing a permanent, continuous record of mercury emissions in micrograms per dry standard cubic meter ($\mu\text{g/dscm}$).

(C) A moisture monitoring system:

(i) as defined in 40 CFR 75.11(b)(2)*; and

(ii) providing a permanent, continuous record of the stack gas moisture content, in percent H_2O .

(D) A carbon dioxide monitoring system:

(i) consisting of a CO_2 concentration monitor, or an oxygen monitor plus suitable mathematical equations from which the CO_2 concentration is derived, and an automated DAHS; and

(ii) providing a permanent, continuous record of CO_2 emissions, in percent CO_2 .

(E) An oxygen monitoring system:

(i) consisting of an O_2 concentration monitor and an automated DAHS; and

(ii) providing a permanent, continuous record of O_2 , in percent O_2 .

(26) "Control period" means the period:

(A) beginning January 1 of a calendar year, except as provided in section 4(c)(2) of this rule; and

(B) ending on December 31 of the same year;

inclusive.

(27) "Emissions" means air pollutants exhausted from a unit or source into the atmosphere as:

(A) measured, recorded, and reported to the U.S. EPA by the mercury designated representative; and

(B) determined by the U.S. EPA in accordance with section 11 of this rule.

(28) "Excess emissions" means any ounce of mercury emitted by the mercury budget units at a mercury budget source during a control period that exceeds the mercury budget emissions limitation for the source.

(29) "General account" means a mercury allowance tracking system account, established under section 9(a) through 9(c) of this rule, that is not a compliance account.

(30) "Generator" means a device that produces electricity.

(31) "Gross electrical output" means, with regard to a cogeneration unit, electricity made available for use, including any such electricity used in the power production process. This process may include, but is not limited to, the following:

(A) Any on-site processing or treatment of fuel combusted at the unit.

(B) Any on-site emission controls.

(32) "Heat input" means, with regard to a specified period of time, the product, in million British thermal units per unit of time (MMBtu/time) of the gross calorific value of the fuel, in British thermal units per pound (Btu/lb), divided by one million (1,000,000) British thermal units per million British thermal units (Btu/MMBtu) and multiplied by the fuel feed rate into a combustion device, in pounds of fuel per unit of time (lb of fuel/time):

(A) as measured, recorded, and reported to the U.S. EPA by the mercury designated representative;

(B) as determined by the U.S. EPA in accordance with section 11 of this rule; and

(C) excluding the heat derived from preheated combustion air, recirculated flue gases, or exhaust from other sources.

(33) "Heat input rate" means the amount of heat input, in million British thermal units (MMBtu), divided by unit operating time, in hours, or, with regard to a specific fuel, the amount of heat input attributed to the fuel, in million British thermal units (MMBtu), divided by the unit operating time, in hours, during which the unit combusts the fuel.

(34) "Life-of-the-unit, firm power contractual arrangement" means a unit participation power sales agreement under which a utility or industrial customer reserves, or is entitled to receive, a specified amount or percentage of nameplate capacity and associated energy generated by any specified unit and pays its proportional amount of such unit's total costs, pursuant to a contract, for:

(A) the life of the unit;

(B) a cumulative term of not less than thirty (30) years, including contracts that permit an election for early termination; or

(C) a period not less than twenty-five (25) years or seventy percent (70%) of the economic useful life of the unit determined as of the time the unit is built, with option rights to purchase or release some portion of the nameplate capacity and associated energy generated by the unit at the end of the period.

(35) "Lignite" means coal that is classified as lignite A or B according to the American Society of Testing and Materials (ASTM) Designation D388-77, 90, 91, 95, 98a, or 99**.

(36) "Maximum design heat input" means the maximum amount of fuel per hour, in British thermal units per hour (Btu/hr), that a unit is capable of combusting on a steady state basis as of the initial installation of the unit as specified by the manufacturer of the unit.

(37) "Mercury allowance" means a limited authorization issued by a permitting authority or the U.S. EPA under provisions of a state plan that is approved under 40 CFR 52.23(h)(6)*, or under 40 CFR 62.15940 through 40 CFR 62.15943*, to emit one (1) ounce of mercury during a control period of the specified calendar year for which the authorization is allocated or of any calendar year thereafter under the mercury budget trading program. An authorization to emit mercury that is not issued under the provisions of a state plan that are approved under 40 CFR 60.24(h)(6)* or under 40 CFR 62.15940 through 40 CFR 62.15931* shall not be a mercury allowance.

(38) "Mercury allowance deduction" or "deduct mercury allowances" means the permanent withdrawal of mercury allowances by the U.S. EPA from a compliance account, for example, in order to account for a specified number of ounces of total mercury emissions from all mercury budget units at a mercury budget source for a control period, determined in accordance with section 11 of this rule, or to account for excess emissions.

(39) "Mercury allowances held" or "hold mercury allowances" means the mercury allowances recorded by the U.S. EPA, or submitted to the U.S. EPA for recordation, in accordance with sections 9 and 10 of this rule, in a mercury allowance tracking system account.

(40) "Mercury allowance tracking system" means the system by which the U.S. EPA records allocations, deductions, and transfers of mercury allowances under the mercury budget trading program. Such allowances shall be:

(A) allocated;

(B) held;

(C) deducted; or

(D) transferred;

only as whole allowances.

(41) "Mercury allowance tracking system account" means an account in the mercury allowance

tracking system established by the U.S. EPA for purposes of recording the:

- (A) allocation;
- (B) holding;
- (C) transferring; or
- (D) deducting;

of mercury allowances.

(42) "Mercury authorized account representative" means, with regard to a general account, a responsible natural person who is authorized, in accordance with sections 6 and 9 of this rule, to transfer and otherwise dispose of mercury allowances held in the general account and, with regard to a compliance account, the mercury designated representative of the source.

(43) "Mercury budget emissions limitation" means, for a mercury budget source, the equivalent, in ounces of mercury emissions in a control period, of mercury of the mercury allowances available for deduction for the source under section 9(i) and 9(j)(1) of this rule for the control period.

(44) "Mercury budget permit" means the legally binding and federally enforceable written document, or portion of such document, issued by the department under section 7 of this rule, including any permit revisions, specifying the mercury budget trading program requirements applicable to a mercury budget source, to each mercury budget unit at the source, and to the owners and operators and the mercury designated representative of the source and each such unit.

(45) "Mercury budget source" means a source that includes one (1) or more mercury budget units.

(46) "Mercury budget trading program" means a multistate mercury air pollution control and emission reduction program approved and administered by the U.S. EPA in accordance with this rule and 40 CFR 60.24(h)(6)* or established by the U.S. EPA in accordance with 40 CFR 62, Subpart LLL*, 40 CFR 60.24(h)(9), and 40 CFR 62.13(f), as a means of reducing national mercury emissions.

(47) "Mercury budget unit" means a unit that is subject to the mercury budget trading program under section 1 of this rule.

(48) "Mercury designated representative" means, for a mercury budget source and each mercury budget unit at the source, the natural person who is authorized by the owners and operators of the source and all such units at the source, in accordance with section 6 of this rule, to represent and legally bind each owner and operator in matters pertaining to the mercury budget trading program. If the mercury budget source is also:

- (A) a CAIR NO_x source, then this natural person shall be the same person as the CAIR designated representative under the CAIR NO_x trading program;
- (B) a CAIR SO₂ source, then this natural person shall be the same person as the CAIR designated representative under the CAIR SO₂ trading program;
- (C) a CAIR NO_x ozone season source, then this natural person shall be the same person as the CAIR designated representative under the CAIR NO_x ozone season trading program; and
- (D) subject to the acid rain program, then this natural person shall be the same person as the designated representative under the acid rain program.

(49) "Monitoring system" means any monitoring system that meets the requirements of section 11 of this rule, including any of the following:

- (A) A CEMS.
- (B) An alternative monitoring system.
- (C) An excepted monitoring system under 40 CFR 75*.

(50) "Municipal solid waste" means municipal waste as defined in the Clean Air Act, Section 129(g)(5).

(51) "Nameplate capacity" means, starting from the initial installation of a generator, the maximum electrical generating output, in megawatt electrical (MWe), that the generator is capable of producing on a steady state basis and during continuous operation (when not restricted by seasonal or other deratings) as of such installation as specified by the manufacturer of the generator or, starting from the completion of any subsequent physical change in the generator resulting in an increase in the maximum electrical generating output, in megawatt electrical (MWe), that the generator is capable of producing on a steady state basis and during continuous operation (when not restricted by seasonal or other deratings) such increased maximum amount, as of such completion, as specified by the person conducting the physical change.

(52) "Operator" means any person who operates, controls, or supervises a mercury budget unit or a mercury budget source and shall include, but not be limited to, any:

- (A) holding company;
- (B) utility system; or
- (C) plant manager;

of such a unit or source.

(53) "Ounce" means twenty-eight million four hundred thousand (2.84×10^7) micrograms. For the purpose of determining compliance with the mercury budget emissions limitation, total ounces of

mercury emissions for a control period shall be calculated as the sum of all recorded hourly emissions, or the mass equivalent of the recorded hourly emission rates, in accordance with section 11 of this rule, but with any remaining fraction of an ounce:

- (A) equal to or greater than five-tenths (0.50) ounces deemed to equal one (1) ounce; and
- (B) less than five-tenths (0.50) ounces deemed to equal zero (0) ounces.

(54) "Owner" means any of the following persons:

- (A) With regard to a mercury budget source or a mercury budget unit at a source, respectively, any:
 - (i) holder of any portion of the legal or equitable title in a mercury budget unit at the source or the mercury budget unit;
 - (ii) holder of a leasehold interest in a mercury budget unit at the source or the mercury budget unit; or
 - (iii) purchaser of power from a mercury budget unit at the source or the mercury budget unit under a life-of-the-unit, firm power contractual arrangement; provided that, unless expressly provided for in a leasehold agreement, the term shall not include a passive lessor, or a person who has an equitable interest through such lessor, whose rental payments are not based, either directly or indirectly, on the revenues or income from such mercury budget unit.

(B) With regard to any general account, any person who:

- (i) has an ownership interest with respect to the mercury allowances held in the general account; and
- (ii) is subject to the binding agreement for the mercury authorized account representative to represent the person's ownership interest with respect to mercury allowances.

(55) "Permitting authority" means the:

- (A) state air pollution control agency;
- (B) local agency;
- (C) other state agency; or
- (D) other agency authorized by the U.S. EPA;

to issue or revise permits to meet the requirements of the mercury budget trading program or, if no such agency has been so authorized, the U.S. EPA.

(56) "Potential electrical output capacity" means thirty-three percent (33%) of a unit's maximum design heat input, divided by three thousand four hundred thirteen (3,413) Btu/kilowatt hour, divided by one thousand (1,000) kilowatt hour/megawatt hour, and multiplied by eight thousand seven hundred sixty (8,760) hours/year.

(57) "Receive" or "receipt of" means, when referring to the department or the U.S. EPA, to come into possession of a document, information, or correspondence, whether sent in hard copy or by authorized electronic transmission, as indicated in an official log, or by a notation made on the document, information, or correspondence, by the department or the U.S. EPA in the regular course of business.

(58) "Recordation", "record", or "recorded" means, with regard to mercury allowances, the movement of mercury allowances by the U.S. EPA into or between mercury allowance tracking system accounts, for purposes of allocation, transfer, or deduction.

(59) "Reference method" means any direct test method of sampling and analyzing for an air pollutant as specified in 40 CFR 75.22*.

(60) "Replacement", "replace", or "replaced" means, with regard to a unit, the:

- (A) demolishing of a unit, or the permanent shutdown and permanent disabling of a unit; and
- (B) construction of another unit (the replacement unit) to be used instead of the demolished or shutdown unit (the replaced unit).

(61) "Repowered" means, with regard to a unit, replacement of a coal-fired boiler with one (1) of the following coal-fired technologies at the same source as the coal-fired boiler:

(A) Atmospheric or pressurized fluidized bed combustion.

(B) Integrated gasification combined cycle.

(C) Magnetohydrodynamics.

(D) Direct and indirect coal-fired turbines.

(E) Integrated gasification fuel cells.

(F) As determined by the U.S. EPA in consultation with the Secretary of Energy, a derivative of one (1) or more of the technologies under clauses (A) through (E) and any other coal-fired technology capable of controlling multiple combustion emissions simultaneously with:

- (i) improved boiler or generation efficiency; and

- (ii) significantly greater waste reduction;

relative to the performance of technology in widespread commercial use as of January 1, 2005.

(62) "Sequential use of energy" means:

- (A) for a topping-cycle cogeneration unit, the use of reject heat from electricity production in a

useful thermal energy application or process; or

(B) for a bottoming-cycle cogeneration unit, the use of reject heat from useful thermal energy application or process in electricity production.

(63) "Serial number" means, for a mercury allowance, the unique identification number assigned to each mercury allowance by the U.S. EPA.

(64) "Solid waste incineration unit" means a stationary, coal-fired boiler or stationary, coal-fired combustion turbine that is a solid waste incineration unit as defined in the Clean Air Act, Section 129(g)(1).

(65) "Source" means all buildings, structures, or installations located in one (1) or more contiguous or adjacent properties under common control of the same person or persons. For purposes of Section 502(c) of the Clean Air Act, a source, including a source with multiple units, shall be considered a single facility.

(66) "Subbituminous" means coal that is classified as subbituminous A, B, or C, according to the American Society of Testing and Materials (ASTM) Designation D388-77, 90, 91, 95, 98a, or 99**.

(67) "Submit" or "serve" means to send or transmit a document, information, or correspondence to the person specified in accordance with the applicable regulation:

(A) in person;

(B) by United States Postal Service; or

(C) by other means of dispatch or transmission and delivery.

Compliance with any submission or service deadline shall be determined by the date of dispatch, transmission, or mailing and not the date of receipt by the department or U.S. EPA.

(68) "Title V operating permit" or "Part 70 operating permit" means a permit issued under [326 IAC 2-7](#).

(69) "Title V operating permit regulations" or "Part 70 operating permit regulations" means the rules under [326 IAC 2-7](#).

(70) "Topping-cycle cogeneration unit" means a cogeneration unit in which:

(A) the energy input to the unit is first used to produce useful power, including electricity; and
(B) at least some of the reject heat from the electricity production is then used to provide useful thermal energy.

(71) "Total energy input" means, with regard to a cogeneration unit, total energy of all forms supplied to the cogeneration unit, excluding energy produced by the cogeneration unit itself.

(72) "Total energy output" means, with regard to a cogeneration unit, the sum of useful power and useful thermal energy produced by the cogeneration unit.

(73) "Unit" means a stationary coal-fired boiler or a stationary coal-fired combustion turbine.

(74) "Unit operating day" means a calendar day in which a unit combusts any fuel.

(75) "Unit operating hour" or "hour of unit operation" means an hour in which a unit combusts any fuel.

(76) "Useful power" means, with regard to a cogeneration unit, electricity or mechanical energy made available for use, excluding any such energy used in the power production process, which process includes, but is not limited to, any on-site:

(A) processing or treatment of fuel combusted at the unit; and
(B) emission controls.

(77) "Useful thermal energy" means, with regard to a cogeneration unit, thermal energy that is:

(A) made available to an industrial or commercial process, not a power production process, excluding any heat contained in condensate return or makeup water;

(B) used in a heating application (for example, space heating or domestic hot water heating); or

(C) used in a space cooling application (that is, thermal energy used by an absorption chiller).

(78) "Utility power distribution system" means the portion of an electricity grid owned or operated by a utility and dedicated to delivering electricity to customers.

*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.

**These documents are incorporated by reference. Copies 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 24-4-2](#))

326 IAC 24-4-3 Retired unit exemption

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) This section applies to any mercury budget unit that is permanently retired.

(b) Any mercury budget unit that is permanently retired shall be exempt from the mercury budget trading program, except for the provisions of this section and sections 1, 2, 4(c)(4) through 4(c)(7), 5, 6, 8(a), 9, and 10 of this rule.

(c) The exemption under this section shall become effective the day on which the mercury budget unit is permanently retired. Within thirty (30) days of the unit's permanent retirement, the mercury designated representative shall submit a statement to the department and shall submit a copy of the statement to the U.S. EPA. The statement shall state, in a format prescribed by the department, that the unit:

- (1) was permanently retired on a specific date; and**
- (2) shall comply with the requirements of subsection (e).**

(d) After receipt of the statement under subsection (c), the department shall amend any permit under section 7 of this rule covering the source at which the unit is located to add the provisions and requirements of the exemption under subsections (b) and (e).

(e) A unit exempt under this section shall comply with the following provisions:

- (1) The unit exempt shall not emit any mercury, starting on the date that the exemption takes effect.**
- (2) The department shall allocate mercury allowances under section 8 of this rule to the unit.**
- (3) For a period of five (5) years from the date the records are created, the owners and operators of the unit shall retain, at the source that includes the unit, or a central location within Indiana for those owners and operators with unattended sources, records demonstrating that the unit is permanently retired. The five (5) year period for keeping records may be extended for cause, at any time before the end of the period, in writing by the department or the U.S. EPA. The owners and operators bear the burden of proof that the unit is permanently retired.**
- (4) The owners and operators and, to the extent applicable, the mercury designated representative of the unit shall comply with the requirements of the mercury budget trading program concerning all periods for which the exemption is not in effect, even if such requirements arise, or must be complied with, after the exemption takes effect.**
- (5) A unit located at a source that is required, or but for this exemption would be required, to have an operating permit under [326 IAC 2-7](#) shall not resume operation unless the mercury designated representative of the source submits a complete mercury budget permit application under section 7(c) of this rule for the unit not less than two hundred seventy (270) days before the later of January 1, 2010, or the date on which the unit resumes operation.**
- (6) A unit exempt under this section shall lose its exemption on the earliest of the following dates:**
 - (A) The date on which the mercury designated representative:**
 - (i) submits a mercury budget permit application for the unit under subdivision (5); or**
 - (ii) is required under subdivision (5) to submit a mercury budget permit application for the unit.**
 - (B) The date on which the unit resumes operation, if the mercury designated representative is not required to submit a mercury budget permit application for the unit.**
- (7) For the purpose of applying monitoring, reporting, and record keeping requirements under section 11 of this rule, a unit that loses its exemption under this section shall be treated as a unit that commences commercial operation on the first date on which the unit resumes operation.**

(Air Pollution Control Board; [326 IAC 24-4-3](#))

326 IAC 24-4-4 Standard requirements

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 owners and operators and mercury designated representative of each mercury budget source and mercury budget unit shall comply with the following permit requirements:

(1) The mercury designated representative of each mercury budget source required to have a federally enforceable permit and each mercury budget unit required to have a federally enforceable permit at the source shall submit the following to the department:

(A) A complete mercury budget permit application under section 7(c) of this rule in accordance with the deadlines specified in section 7(b) of this rule.

(B) Any supplemental information that the department determines is necessary to:

(i) review a mercury budget permit application; and

(ii) issue or deny a mercury budget permit;

in a timely manner.

(2) The owners and operators of each mercury budget source required to have a federally enforceable permit and each mercury budget unit required to have a federally enforceable permit at the source shall:

(A) have a mercury budget permit issued by the department under section 7 of this rule for the source; and

(B) operate the source and the unit in compliance with such mercury budget permit.

(3) The owners and operators of a mercury budget source that is not otherwise required to have a federally enforceable permit and each mercury budget unit that is not required to have a federally enforceable permit are not required to:

(A) submit a mercury budget permit application; and

(B) have a mercury budget permit;

under section 7 of this rule for such mercury budget source and such mercury budget unit.

(b) The owners and operators and mercury designated representative of each mercury budget source and mercury budget unit shall comply with the following monitoring, reporting, and record keeping requirements:

(1) The monitoring, reporting, and record keeping requirements of section 11 of this rule.

(2) The emissions measurements recorded and reported in accordance with section 11 of this rule shall be used to determine compliance by each mercury budget source with the mercury budget emissions limitation under subsection (c).

(c) The owners and operators and mercury designated representative of each mercury budget source shall comply with the following mercury emission requirements:

(1) As of the allowance transfer deadline for a control period, the owners and operators of each mercury budget source and each mercury budget unit at the source shall hold, in the source's compliance account, mercury allowances available for compliance deductions for the control period under section 9(i) of this rule in an amount not less than the ounces of total mercury emissions for the control period from all mercury budget units at the source, as determined in accordance with section 11 of this rule.

(2) A mercury budget unit shall be subject to the requirements under subdivision (1) for the control period starting on the later of January 1, 2010, or the deadline for meeting the unit's monitor certification requirements under section 11(c)(1) or 11(c)(2) of this rule and for each control period thereafter.

(3) A mercury allowance shall not be deducted, for compliance with the requirements under subdivision (1), for a control period in a calendar year before the year for which the mercury allowance was allocated.

(4) Mercury allowances shall be:

(A) held in;

(B) deducted from; or

(C) transferred into or among;

mercury allowance tracking system accounts in accordance with sections 9 and 10 of this rule.

(5) A mercury allowance is a limited authorization to emit one (1) ounce of mercury in accordance with the mercury budget trading program. No provision of:

(A) the mercury budget trading program;

(B) the mercury budget permit application;

(C) the mercury budget permit;

(D) an exemption under section 3 of this rule; or

(E) law;

shall be construed to limit the authority of the department or the U.S. EPA to terminate or limit such

authorization.

(6) A mercury allowance does not constitute a property right.

(7) Upon recordation by the U.S. EPA under sections 8 through 10 of this rule, every allocation, transfer, or deduction of a mercury allowance to or from a mercury budget source's compliance account is incorporated automatically in any mercury budget permit of the source.

(d) If a mercury budget source emits mercury during any control period in excess of the mercury budget emissions limitation, then:

(1) the owners and operators of the mercury budget source and each mercury budget unit shall:

- (A) surrender the mercury allowances required for deduction under section 9(j)(4) of this rule; and
- (B) pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable state law; and

(2) each:

- (A) ounce of such excess emissions; and
- (B) day of such control period;

shall constitute a separate violation of this rule, the Clean Air Act, and applicable state law.

(e) Owners and operators of each mercury budget source and each mercury budget unit at the source shall comply with the following record keeping and reporting requirements:

(1) Unless otherwise provided, the owners and operators of the mercury budget source and each mercury budget unit at the source shall keep on site at the source or at a central location within Indiana for those owners and operators with unattended sources each of the following documents for a period of five (5) years from the date the document is created, which period may be extended for cause, at any time before the end of five (5) years, in writing by the department or the U.S. EPA:

(A) The certificate of representation under section 6(h) of this rule for the mercury designated representative for the source and each mercury budget unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such five (5) year period until such documents are superseded because of the submission of a new certificate of representation under section 6(h) of this rule changing the mercury designated representative.

(B) All emissions monitoring information, in accordance with section 11 of this rule, provided that to the extent that section 11 of this rule provides for a three (3) year period for record keeping, the three (3) year period shall apply.

(C) Copies of the following:

(i) All reports, compliance certifications, and other submissions and all records made or required under the mercury budget trading program.

(ii) All documents used to complete a mercury budget permit application and any other submission under the mercury budget trading program or to demonstrate compliance with the requirements of the mercury budget trading program.

(2) The mercury designated representative of a mercury budget source and each mercury budget unit at the source shall submit the reports required under the mercury budget trading program, including those under section 11 of this rule.

(f) The owners and operators of each mercury budget source and each mercury budget unit shall be liable as follows:

(1) Each mercury budget source and each mercury budget unit shall meet the requirements of the mercury budget trading program.

(2) Any provision of the mercury budget trading program that applies to a mercury budget source or the mercury designated representative of a mercury budget source shall also apply to the owners and operators of such source and of the mercury budget units at the source.

(3) Any provision of the mercury budget trading program that applies to a mercury budget unit or the mercury designated representative of a mercury budget unit shall also apply to the owners and operators of such unit.

(g) No provision of:

(1) the mercury budget trading program;

(2) a mercury budget permit application;

(3) a mercury budget permit; or

(4) an exemption under section 3 of this rule;

shall be construed as exempting or excluding the owners and operators, and the mercury designated

representative, of a mercury budget source or mercury budget unit from compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the Clean Air Act.

(Air Pollution Control Board; [326 IAC 24-4-4](#))

326 IAC 24-4-5 Computation of time and appeal procedures

Authority: [IC 13-14-8](#); [IC 13-17-3-4](#); [IC 13-17-3-11](#)

Affected: [IC 13-15](#); [IC 13-17](#)

Sec. 5. (a) Unless otherwise stated, any time period scheduled, under the mercury budget trading program, to begin on the occurrence of an act or event shall begin on the day the act or event occurs.

(b) Unless otherwise stated, any time period scheduled, under the mercury budget trading program, to begin before the occurrence of an act or event shall be computed so that the period ends the day before the act or event occurs.

(c) Unless otherwise stated, if the final day of any time period, under the mercury budget trading program, falls on a weekend or a state or federal holiday, the time period shall be extended to the next business day.

(d) The appeal procedures for decisions of the U.S. EPA under the mercury budget trading program will follow those procedures set forth in 40 CFR 78*.

*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 24-4-5](#))

326 IAC 24-4-6 Mercury designated representative for mercury budget sources

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) Except as provided under subsection (f), each mercury budget source, including all mercury budget units at the source, shall have one (1) and only one (1) mercury designated representative, with regard to all matters under the mercury budget trading program concerning the source or any mercury budget unit at the source.

(b) The mercury designated representative of the mercury budget source shall:

- (1) be selected by an agreement binding on the owners and operators of the source and all mercury budget units at the source; and
- (2) act in accordance with the certification statement in subsection (h)(4).

(c) Upon receipt by the U.S. EPA of a complete certificate of representation under subsection (h), the mercury designated representative of the source shall represent and, by his or her representations, actions, inactions, or submissions, legally bind each owner and operator of the mercury budget source represented and each mercury budget unit at the source in all matters pertaining to the mercury budget trading program, notwithstanding any agreement between the mercury designated representative and such owners and operators. The owners and operators shall be bound by any decision or order issued to the mercury designated representative by the department, the U.S. EPA, or a court regarding the source or unit.

(d) No:

- (1) mercury budget permit shall be issued;
- (2) emissions data reports shall be accepted; and
- (3) mercury allowance tracking system account shall be established;

for a mercury budget unit at a source, until the U.S. EPA has received a complete certificate of representation under subsection (h) for a mercury designated representative of the source and the mercury budget units at the source.

(e) The following shall apply to submissions made under the mercury budget trading program:

(1) Each submission under the mercury budget trading program shall be submitted, signed, and certified by the mercury designated representative for each mercury budget source on behalf of which the submission is made. Each such submission shall include the following certification statement by the mercury designated representative: "I am authorized to make this submission on behalf of the owners and operators of the source or units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.".

(2) The department and the U.S. EPA will accept or act on a submission made on behalf of owners or operators of a mercury budget source or a mercury budget unit only if the submission has been made, signed, and certified in accordance with subdivision (1).

(f) The following shall apply where the owners or operators of a mercury budget source choose to designate an alternate mercury designated representative:

(1) A certificate of representation under subsection (h) may designate one (1) and only one (1) alternate mercury designated representative, who may act on behalf of the mercury designated representative. The agreement by which the alternate mercury designated representative is selected shall include a procedure for authorizing the alternate mercury designated representative to act in lieu of the mercury designated representative.

(2) Upon receipt by the U.S. EPA of a complete certificate of representation under subsection (h), any representation, action, inaction, or submission by the alternate mercury designated representative shall be deemed to be a representation, action, inaction, or submission by the mercury designated representative.

(3) Except in subsections (a) and (d), this subsection, and subsections (g), (h), and (j), and sections 2 and 9(a) through 9(c) of this rule, whenever the term "mercury designated representative" is used in this rule, the term shall be construed to include the mercury designated representative or any alternate mercury designated representative.

(g) The following shall apply when changing the mercury designated representative or the alternate mercury designated representative or when there are changes in the owners or operators:

(1) The mercury designated representative may be changed at any time upon receipt by the U.S. EPA of a superseding complete certificate of representation under subsection (h). Notwithstanding any such change, all representations, actions, inactions, and submissions by the previous mercury designated representative before the time and date when the U.S. EPA receives the superseding certificate of representation shall be binding on the new mercury designated representative and the owners and operators of the mercury budget source and the mercury budget units at the source.

(2) The alternate mercury designated representative may be changed at any time upon receipt by the U.S. EPA of a superseding complete certificate of representation under subsection (h).

Notwithstanding any such change, all representations, actions, inactions, and submissions by the previous alternate mercury designated representative before the time and date when the U.S. EPA receives the superseding certificate of representation shall be binding on the new alternate mercury designated representative and the owners and operators of the mercury budget source and the mercury budget units at the source.

(3) Changes in owners and operators shall be made as follows:

(A) In the event an owner or operator of a mercury budget source or a mercury budget unit is not included in the list of owners and operators in the certificate of representation under subsection (h), such owner or operator shall be deemed to be subject to and bound by the certificate of

representation, the representations, actions, inactions, and submissions of the mercury designated representative and any alternate mercury designated representative of the source or unit, and the decisions and orders of the department, the U.S. EPA, or a court, as if the owner or operator were included in such list.

(B) Within thirty (30) days following any change in the owners and operators of a mercury budget source or a mercury budget unit, including the addition of a new owner or operator, the mercury designated representative or any alternate mercury designated representative shall submit a revision to the certificate of representation under subsection (h), amending the list of owners and operators to include the change.

(h) A complete certificate of representation for a mercury designated representative or an alternate mercury designated representative shall include the following elements in a format prescribed by the U.S. EPA:

(1) Identification of the mercury budget source, and each mercury budget unit at the source, for which the certificate of representation is submitted, including identification and nameplate capacity of each generator served by each such unit.

(2) The:

- (A) name;
- (B) address;
- (C) e-mail address, if any;
- (D) telephone number; and
- (E) facsimile transmission number, if any;

of the mercury designated representative and any alternate mercury designated representative.

(3) A list of the owners and operators of the mercury budget source and of each mercury budget unit at the source.

(4) The following certification statement by the mercury designated representative and any alternate mercury designated representative: "I certify that I was selected as the mercury designated representative or alternate mercury designated representative, as applicable, by an agreement binding on the owners and operators of the source and each mercury budget unit at the source. I certify that I have all the necessary authority to carry out my duties and responsibilities under the mercury budget trading program on behalf of the owners and operators of the source and of each mercury budget unit at the source and that each such owner and operator shall be fully bound by my representations, actions, inactions, or submissions. I certify that the owners and operators of the source and of each mercury budget unit at the source shall be bound by any order issued to me by the U.S. EPA, the department, or a court regarding the source or unit. Where there are multiple holders of a legal or equitable title to, or a leasehold interest in, a mercury budget unit, or where a utility or industrial customer purchases power from a mercury budget unit under a life-of-the-unit, firm power contractual arrangement, I certify that: I have given a written notice of my selection as the 'mercury designated representative' or 'alternate mercury designated representative,' as applicable, and of the agreement by which I was selected to each owner and operator of the source and of each mercury budget unit at the source; and mercury allowances and proceeds of transactions involving mercury allowances will be deemed to be held or distributed in proportion to each holder's legal, equitable, leasehold, or contractual reservation or entitlement, except that, if such multiple holders have expressly provided for a different distribution of mercury allowances by contract, mercury allowances and proceeds of transactions involving mercury allowances will be deemed to be held or distributed in accordance with the contract.".

(5) The signature of the mercury designated representative and any alternate mercury designated representative and the dates signed.

Unless otherwise required by the department or the U.S. EPA, documents of agreement referred to in the certificate of representation shall not be submitted to the department or the U.S. EPA. Neither the department nor the U.S. EPA shall be under any obligation to review or evaluate the sufficiency of such documents, if submitted.

(i) The following shall apply to objections concerning the mercury designated representative:

(1) Once a complete certificate of representation under subsection (h) has been submitted and received, the department and the U.S. EPA will rely on the certificate of representation unless and until a superseding complete certificate of representation under subsection (h) is received by the U.S. EPA.

(2) Except as provided in subsection (g)(1) or (g)(2), no objection or other communication submitted to the department or the U.S. EPA concerning the authorization, or any representation, action, inaction, or submission, of the mercury designated representative shall affect any representation, action,

inaction, or submission of the mercury designated representative or the finality of any decision or order by the department or the U.S. EPA under the mercury budget trading program.

(3) Neither the department nor the U.S. EPA will adjudicate any private legal dispute concerning the authorization or any representation, action, inaction, or submission of any mercury designated representative, including private legal disputes concerning the proceeds of mercury allowance transfers.

(j) The following shall apply to delegation by the mercury designated representative and alternate mercury designated representative:

(1) A mercury designated representative may delegate, to one (1) or more natural persons, his or her authority to make an electronic submission to the U.S. EPA provided for or required under this rule.

(2) An alternate mercury designated representative may delegate, to one (1) or more natural persons, his or her authority to make an electronic submission to the U.S. EPA provided for or required under this rule.

(3) In order to delegate authority to make an electronic submission to the U.S. EPA in accordance with subdivision (1) or (2), the mercury designated representative or alternate mercury designated representative, as appropriate, must submit to the U.S. EPA a notice of delegation, in a format prescribed by the U.S. EPA, that includes the following elements:

(A) The name, address, e-mail address, telephone number, and facsimile transmission number, if any, of the following:

(i) The mercury designated representative or alternate mercury designated representative.

(ii) The natural person, referred to as an "agent".

(B) For each such natural person, a list of the type or types of electronic submissions under subdivision (1) or (2) for which authority is delegated to him or her.

(C) The following certification statements by such mercury designated representative or alternate mercury designated representative:

(i) "I agree that any electronic submission to the U.S. EPA that is by an agent identified in this notice of delegation and of a type listed for such agent in this notice of delegation and that is made when I am a mercury designated representative or alternate mercury designated representative, as appropriate, and before this notice of delegation is superseded by another notice of delegation under [326 IAC 24-4-6\(j\)\(4\)](#) shall be deemed to be an electronic submission by me.".

(ii) "Until this notice of delegation is superseded by another notice of delegation under [326 IAC 24-4-6\(j\)\(4\)](#), I agree to maintain an e-mail account and to notify the U.S. EPA immediately of any change in my e-mail address unless all delegation of authority by me under [326 IAC 24-4-6\(j\)](#) is terminated.".

(4) A notice of delegation submitted under subdivision (3) shall be effective, with regard to the mercury designated representative or alternate mercury designated representative identified in such notice, upon receipt of such notice by the U.S. EPA and until receipt by the U.S. EPA of a superseding notice of delegation submitted by such mercury designated representative or alternate mercury designated representative, as appropriate. The superseding notice of delegation may:

(A) replace any previously identified agent;

(B) add a new agent; or

(C) eliminate entirely any delegation of authority.

(5) Any electronic submission:

(A) covered by the certification in subdivision (3)(C)(i); and

(B) made in accordance with a notice of delegation effective under subdivision (4);

shall be deemed to be an electronic submission by the mercury designated representative or alternate mercury designated representative submitting such notice of delegation.

(Air Pollution Control Board; [326 IAC 24-4-6](#))

[326 IAC 24-4-7](#) Mercury budget permit requirements

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) For each mercury budget source required to have a Part 70 operating permit, such permit shall include a mercury budget permit administered by the department as follows:

(1) The mercury budget portion of the Part 70 permit shall be administered in accordance with [326 IAC](#)

2-7, except as provided otherwise by this section.

(2) Each mercury budget permit shall:

- (A) contain, with regard to the mercury budget source and the mercury budget units at the source covered by the mercury budget permit, all applicable mercury budget trading program requirements; and
- (B) be a complete and separable portion of the Part 70 operating permit.

(b) The requirements for the submission of mercury budget permit applications are as follows:

(1) The mercury designated representative of any mercury budget source required to have a Part 70 operating permit shall submit to the department a complete mercury budget permit application under subsection (c) for the source covering each mercury budget unit at the source at least two hundred seventy (270) days before the later of:

(A) January 1, 2010; or

(B) the date on which the mercury budget unit commences commercial operation.

(2) For a mercury budget source required to have a Part 70 operating permit, the mercury designated representative shall submit a complete mercury budget permit application under subsection (c) for the source covering each mercury budget unit at the source to renew the mercury budget permit in accordance with the [326 IAC 2-7-4\(a\)\(1\)\(D\)](#).

(c) A complete mercury budget permit application shall include the following elements concerning the mercury budget source for which the application is submitted, in a format prescribed by the department:

- (1) Identification of the mercury budget source.
- (2) Identification of each mercury budget unit at the mercury budget source.
- (3) The standard requirements under section 4 of this rule.

(d) Each mercury budget permit shall contain, in a format prescribed by the department, all elements required for a complete mercury budget permit application under subsection (c).

(e) Each mercury budget permit is deemed to incorporate automatically the definitions of terms under section 2 of this rule and, upon recordation by the U.S. EPA under sections 8 through 10 of this rule, every allocation, transfer, or deduction of a mercury allowance to or from the compliance account of the mercury budget source covered by the permit.

(f) The term of the mercury budget permit shall be set by the department, as necessary to facilitate coordination of the renewal of the mercury budget permit with issuance, revision, or renewal of the mercury budget source's Part 70 operating permit.

(g) Except as provided in subsection (e), the department shall revise the mercury budget permit, as necessary, in accordance with the permit modification and revision provisions under [326 IAC 2-7](#).

(Air Pollution Control Board; [326 IAC 24-4-7](#))

[326 IAC 24-4-8](#) Mercury allowance allocations

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) The trading budget allocated by the department under subsections (d) through (f) for each control period shall equal the mercury allowances apportioned to the mercury budget units under section 1 of this rule, as determined by the procedures in this section. The total number of mercury allowances available for annual allocation of mercury allowances under this rule is sixty-seven thousand one hundred four (67,104) ounces in 2010 through 2017 and twenty-six thousand four hundred ninety-six (26,496) ounces in 2018 and thereafter, apportioned as follows:

(1) For existing units, which have a baseline heat input as determined under subsection (c)(1):

(A) sixty-three thousand seven hundred forty-nine (63,749) ounces in 2010 through 2014;

(B) sixty-five thousand ninety-one (65,091) ounces in 2015 through 2017; and

(C) twenty-five thousand seven hundred one (25,701) in 2018 and thereafter.

(2) For new unit allocation set-aside:

- (A) three thousand three hundred fifty-five (3,355) ounces in 2010 through 2014;
- (B) two thousand thirteen (2,013) ounces in 2015 through 2017; and
- (C) seven hundred ninety-five (795) in 2018 and thereafter.

(b) The department shall allocate mercury allowances to mercury budget units according to the following schedule:

(1) Within thirty (30) days of the effective date of this rule, the department shall submit to the U.S. EPA the mercury allowance allocations, in a format prescribed by the U.S. EPA and in accordance with subsections (c) and (d), for the control periods in 2010, 2011, 2012, 2013, and 2014.

(2) By October 31, 2009, and October 31 every six (6) years thereafter, the department shall submit to the U.S. EPA the mercury allowance allocations, in a format prescribed by the U.S. EPA and in accordance with subsections (c) and (d), for the control periods seven (7), eight (8), nine (9), ten (10), eleven (11), and twelve (12) years after the year of the allowance allocation.

(3) By October 31, 2010, and October 31 of each year thereafter, the department shall submit to the U.S. EPA the mercury allowance allocations, in a format prescribed by the U.S. EPA and in accordance with subsections (c), (e), and (f), for the control period in the year of the applicable deadline for submission under this subdivision.

(4) The department shall:

- (A) make available for review to the public the mercury allowance allocations under subdivision (2) on July 31 of each year allocations are made; and
- (B) provide a thirty (30) day opportunity for submission of objections to the mercury allowance allocations.

Objections shall be limited to addressing whether the mercury allowance allocations are in accordance with this section. Based on any such objections, the department shall consider any objections and input from affected sources and, if appropriate, adjust each determination to the extent necessary to ensure that it is in accordance with this section.

(c) The baseline heat input, in million British thermal units (MMBtu), used with respect to mercury allocations under subsection (d) for each mercury budget unit shall be as follows:

(1) For units commencing operation before January 1, 2001:

(A) For a mercury allowance allocation under subsection (b)(1), the average of the three (3) highest amounts of the unit's control period heat input for 1998 through 2005.

(B) For a mercury allowance allocation under subsection (b)(2), the average of the three (3) highest amounts of the unit's control period heat input for the eight (8) years preceding the calculation of the mercury allowance allocation.

(2) For units commencing operation on or after January 1, 2001, and operating each calendar year during a period of three (3) or more consecutive calendar years, the average of the three (3) highest amounts of the unit's total converted control period heat input for the years preceding the calculation of the mercury allowance allocation, not to exceed eight (8) years.

(3) A unit's control period heat input for a calendar year under subdivision (1), and a unit's total ounces of mercury emissions during a calendar year under subsection (e)(3), shall be:

(A) determined in accordance with 40 CFR 75*, to the extent the unit was otherwise subject to the requirements of 40 CFR 75* for the year; or

(B) based on the best available data reported to the department for the unit, to the extent the unit was not otherwise subject to the requirements of 40 CFR 75* for the year.

(4) A unit's converted control period heat input for a calendar year specified under subdivision (2) equals one (1) of the following:

(A) The control period gross electrical output of the generator or generators served by the unit multiplied by eight thousand nine hundred (8,900) British thermal units per kilowatt hour (Btu/kWh) and divided by one million (1,000,000) British thermal units per million British thermal units (Btu/MMBtu), provided that if a generator is served by two (2) or more units, then the gross electrical output of the generator shall be attributed to each unit in proportion to the unit's share of the total control period heat input of such units for the year.

(B) For a unit that has equipment used to produce electricity and useful thermal energy for industrial, commercial, heating, or cooling purposes through the sequential use of energy, the control period gross electrical output of the unit multiplied by eight thousand nine hundred (8,900) British thermal units per kilowatt hour (Btu/kWh), plus the useful energy, in British thermal units (Btu), produced during the control period divided by eight-tenths (0.8), and with the sum divided by one million (1,000,000) British thermal units per million British thermal units (Btu/MMBtu).

(d) For each control period in 2010 and thereafter, the department shall allocate to all mercury budget units that have a baseline heat input, as determined under subsection (c), a total amount of mercury allowances equal to the amount in subsection (a)(1), except as provided in subsection (f). The department shall allocate mercury allowances to each mercury budget unit in an amount determined by multiplying the total amount of mercury allowances under subsection (a)(1) by the ratio of the baseline heat input of such mercury budget unit to the total amount of baseline heat input of all such mercury budget units and rounding to the nearest whole allowance as appropriate.

(e) For each control period in 2010 and thereafter, the department shall allocate mercury allowances to mercury budget units that commenced operation on or after January 1, 2001, and do not yet have a baseline heat input, as determined under subsection (c), in accordance with the following procedures:

(1) The department shall establish a separate new unit set-aside for each control period equal to the following:

- (A) Three thousand three hundred fifty-five (3,355) ounces for a control period in 2010 through 2014.
- (B) Two thousand thirteen (2,013) for a control period in 2015 through 2017.
- (C) Seven hundred ninety-five (795) for a control period in 2018 and thereafter.

(2) The mercury designated representative of such a mercury budget unit may submit to the department a request, in a format specified by the department, to be allocated mercury allowances, starting with the later of the control period in 2010 or the first control period after the control period in which the mercury budget unit commences commercial operation and until the first control period for which the unit is allocated mercury allowances under subsection (d). A separate mercury allowance allocation request for each control period for which mercury allowances are sought must be submitted on or before May 1 of such control period and after the date on which the mercury budget unit commences commercial operation.

(3) In a mercury allowance allocation request under subdivision (2), the mercury designated representative may request for a control period mercury allowances in an amount not exceeding the mercury budget unit's total ounces of mercury emissions during the calendar year immediately before such control period.

(4) The department shall review each mercury allowance allocation request under subdivision (2) and shall allocate mercury allowances for each control period pursuant to such request as follows:

(A) The department shall accept an allowance allocation request only if the request meets, or is adjusted by the department as necessary to meet, the requirements of subdivisions (2) and (3).

(B) On or after May 1 of the control period, the department shall determine the sum of the mercury allowances requested, as adjusted under clause (A), in all allowance allocation requests accepted under clause (A) for the control period.

(C) If the amount of mercury allowances in the new unit set-aside for the control period is greater than or equal to the sum under clause (B), then the department shall allocate the amount of mercury allowances requested, as adjusted under clause (A), to each mercury budget unit covered by an allowance allocation request accepted under clause (A).

(D) If the amount of mercury allowances in the new unit set-aside for the control period is less than the sum under clause (B), then the department shall allocate to each mercury budget unit covered by an allowance allocation request accepted under clause (A) the amount of the mercury allowances requested, as adjusted under clause (A), multiplied by the amount of mercury allowances in the new unit set-aside for the control period, divided by the sum determined under clause (B), and rounded to the nearest whole allowance as appropriate.

(E) The department shall notify each mercury designated representative that submitted an allowance allocation request of the amount of mercury allowances, if any, allocated for the control period to the mercury budget unit covered by the request.

(f) If, after completion of the procedures under subsection (e)(4) for a control period, any unallocated mercury allowances remain in the new unit set-aside for the control period, the department shall allocate to each mercury budget unit that was allocated mercury allowances under subsection (d) an amount of mercury allowances equal to the total amount of such remaining unallocated mercury allowances, multiplied by the unit's allocation under subsection (d), divided by:

(1) sixty-three thousand seven hundred forty-nine (63,749) for 2010 through 2014;

(2) sixty-five thousand ninety-one (65,091) for 2015 through 2017; and

(3) twenty-five thousand seven hundred one (25,701) for 2018 and thereafter, rounded to the nearest whole allowance as appropriate.

*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 24-4-8](#))

326 IAC 24-4-9 Mercury allowance tracking system

Authority: [IC 13-14-8](#); [IC 13-17-3-4](#); [IC 13-17-3-11](#)

Affected: [IC 13-15](#); [IC 13-17](#)

Sec. 9. (a) Upon receipt of a complete certificate of representation under section 6(h) of this rule, the U.S. EPA will establish a compliance account for the mercury budget source for which the certificate of representation was submitted unless the source already has a compliance account.

(b) Any person may apply to open a general account for the purpose of holding and transferring mercury allowances. An application for a general account may designate one (1) and only one (1) mercury authorized account representative and one (1) and only one (1) alternate mercury authorized account representative who may act on behalf of the mercury authorized account representative. The agreement by which the alternate mercury authorized account representative is selected shall include a procedure for authorizing the alternate mercury authorized account representative to act in lieu of the mercury authorized account representative. The establishment of a general account shall be subject to the following:

(1) A complete application for a general account shall be submitted to the U.S. EPA and shall include the following elements in a format prescribed by the U.S. EPA:

(A) The following information concerning the mercury authorized account representative and any alternate mercury authorized account representative:

- (i) Name.**
- (ii) Mailing address.**
- (iii) E-mail address, if any.**
- (iv) Telephone number.**

(v) Facsimile transmission number, if any.

(B) Organization name and type of organization, if applicable.

(C) A list of all persons subject to a binding agreement for the mercury authorized account representative and any alternate mercury authorized account representative to represent their ownership interest with respect to the mercury allowances held in the general account.

(D) The following certification statement by the mercury authorized account representative and any alternate mercury authorized account representative: "I certify that I was selected as the mercury authorized account representative or the alternate mercury authorized account representative, as applicable, by an agreement that is binding on all persons who have an ownership interest with respect to mercury allowances held in the general account. I certify that I have all the necessary authority to carry out my duties and responsibilities under the mercury budget trading program on behalf of such persons and that each such person shall be fully bound by my representations, actions, inactions, or submissions and by any order or decision issued to me by the U.S. EPA or a court regarding the general account."

(E) The signature of the mercury authorized account representative and any alternate mercury authorized account representative and the dates signed.

(F) Unless otherwise required by the department or the U.S. EPA, documents of agreement referred to in the application for a general account shall not be submitted to the department or the U.S. EPA. Neither the department nor the U.S. EPA shall be under any obligation to review or evaluate the sufficiency of such documents, if submitted.

(2) Upon receipt by the U.S. EPA of a complete application for a general account under subdivision (1), the following shall apply:

(A) The U.S. EPA will establish a general account for the person or persons for whom the application is submitted.

(B) The mercury authorized account representative and any alternate mercury authorized account representative for the general account shall represent and, by his or her representations, actions, inactions, or submissions, legally bind each person who has an ownership interest with respect to

mercury allowances held in the general account in all matters pertaining to the mercury budget trading program, notwithstanding any agreement between the mercury authorized account representative or any alternate mercury authorized account representative and such person. Any such person shall be bound by any order or decision issued to the mercury authorized account representative or any alternate mercury authorized account representative by the U.S. EPA or a court regarding the general account.

(C) Any representation, action, inaction, or submission by any alternate mercury authorized account representative shall be deemed to be a representation, action, inaction, or submission by the mercury authorized account representative.

(D) Each submission concerning the general account shall be submitted, signed, and certified by the mercury authorized account representative or any alternate mercury authorized account representative for the persons having an ownership interest with respect to mercury allowances held in the general account. Each such submission shall include the following certification statement by the mercury authorized account representative or any alternate mercury authorized account representative: "I am authorized to make this submission on behalf of the persons having an ownership interest with respect to the mercury allowances held in the general account. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.".

(E) The U.S. EPA will accept or act on a submission concerning the general account only if the submission has been made, signed, and certified in accordance with clause (D).

(3) The following shall apply to changing the mercury authorized account representative, and alternate mercury authorized account representative, and changes in persons with ownership interest:

(A) The mercury authorized account representative for a general account may be changed at any time upon receipt by the U.S. EPA of a superseding complete application for a general account under subdivision (1). Notwithstanding any such change, all representations, actions, inactions, and submissions by the previous mercury authorized account representative before the time and date when the U.S. EPA receives the superseding application for a general account shall be binding on the new mercury authorized account representative and the persons with an ownership interest with respect to the mercury allowances in the general account.

(B) The alternate mercury authorized account representative for a general account may be changed at any time upon receipt by the U.S. EPA of a superseding complete application for a general account under subdivision (1). Notwithstanding any such change, all representations, actions, inactions, and submissions by the previous alternate mercury authorized account representative before the time and date when the U.S. EPA receives the superseding application for a general account shall be binding on the new alternate mercury authorized account representative and the persons with an ownership interest with respect to the mercury allowances in the general account.

(C) In the event a person having an ownership interest with respect to mercury allowances in the general account is not included in the list of such persons in the application for a general account, such person shall be deemed to be subject to and bound by the application for a general account, the representation, actions, inactions, and submissions of the mercury authorized account representative and any alternate mercury authorized account representative of the account, and the decisions and orders of the U.S. EPA or a court, as if the person were included in such list.

(D) Within thirty (30) days following any change in the persons having an ownership interest with respect to mercury allowances in the general account, including the addition of new persons, the mercury authorized account representative or any alternate mercury authorized account representative shall submit a revision to the application for a general account amending the list of persons having an ownership interest with respect to the mercury allowances in the general account to include the change.

(4) Once a complete application for a general account under subdivision (1) has been submitted and received, the U.S. EPA will rely on the application unless and until a superseding complete application for a general account under subdivision (1) is received by the U.S. EPA.

(5) Except as provided in subdivision (3)(A) or (3)(B), no objection or other communication submitted to the U.S. EPA concerning the authorization, or any representation, action, inaction, or submission of the mercury authorized account representative or any alternate mercury authorized account representative for a general account shall affect any representation, action, inaction, or submission of the mercury authorized account representative or any alternate mercury authorized account representative or the finality of any decision or order by the U.S. EPA under the mercury budget

trading program.

(6) The U.S. EPA will not adjudicate any private legal dispute concerning the authorization or any representation, action, inaction, or submission of the mercury authorized account representative or any alternate mercury authorized account representative for a general account, including private legal disputes concerning the proceeds of mercury allowance transfers.

(7) The following shall apply to delegation by the mercury authorized account representative and alternate mercury authorized account representative:

(A) A mercury authorized account representative may delegate, to one (1) or more natural persons, his or her authority to make an electronic submission to the U.S. EPA provided for or required under this section and section 10 of this rule.

(B) An alternate mercury authorized account representative may delegate, to one (1) or more natural persons, his or her authority to make an electronic submission to the U.S. EPA provided for or required under this section and section 10 of this rule.

(C) In order to delegate authority to make an electronic submission to the U.S. EPA in accordance with clause (A) or (B), the mercury authorized account representative, as appropriate, must submit to the U.S. EPA a notice of delegation, in a format prescribed by U.S. EPA, that includes the following elements:

(i) The name, address, e-mail address, telephone number, and facsimile transmission number, if any, of the following:

(AA) The mercury authorized account representative or alternate mercury authorized account representative.

(BB) Each natural person, referred to as an "agent".

(ii) For each such natural person, a list of the type or types of electronic submissions under clause (A) or (B) for which authority is delegated to him or her.

(iii) The following certification statements by such mercury authorized account representative or alternate mercury authorized account representative:

(AA) "I agree that any electronic submission to the U.S. EPA that is by an agent identified in this notice of delegation and of a type listed for such agent in this notice of delegation and that is made when I am a mercury authorized account representative or alternate mercury authorized representative, as appropriate, and before this notice of delegation is superseded by another notice of delegation under [326 IAC 24-4-9\(b\)\(7\)\(D\)](#) shall be deemed to be an electronic submission by me.".

(BB) "Until this notice of delegation is superseded by another notice of delegation under [326 IAC 24-4-9\(b\)\(7\)\(D\)](#), I agree to maintain an e-mail account and to notify the U.S. EPA immediately of any change in my e-mail address unless all delegation of authority by me under [326 IAC 24-4-9\(b\)\(7\)](#) is terminated.".

(D) A notice of delegation submitted under clause (C) shall be effective, with regard to the mercury authorized account representative or alternate mercury authorized account representative identified in such notice, upon receipt of such notice by the U.S. EPA and until receipt by the U.S. EPA of a superseding notice of delegation submitted by such mercury authorized account representative or alternate mercury authorized account representative, as appropriate. The superseding notice of delegation may:

(i) replace any previously identified agent;

(ii) add a new agent; or

(iii) eliminate entirely any delegation of authority.

(E) Any electronic submission:

(i) covered by the certification in clause (C)(iii)(AA); and

(ii) made in accordance with a notice of delegation effective under clause (D);

shall be deemed to be an electronic submission by the mercury authorized account representative or alternate mercury authorized account representative submitting such notice of delegation.

(c) The U.S. EPA will assign a unique identifying number to each account established under subsection (a) or (b).

(d) Following the establishment of a mercury allowance tracking system account, all submissions to the U.S. EPA pertaining to the account, including, but not limited to, submissions concerning the deduction or transfer of mercury allowances in the account, shall be made only by the mercury authorized account representative for the account.

(e) The U.S. EPA will record in the mercury budget source's compliance account the mercury

allowances allocated for the mercury budget units at a source, as submitted by the department in accordance with section 8(b)(1) of this rule, for the control periods in 2010, 2011, 2012, 2013, and 2014.

(f) By December 1, 2009, and every six (6) years thereafter, the U.S. EPA will record in the mercury budget source's compliance account the mercury allowances allocated for the mercury budget units at the source, as submitted by the department in accordance with section 8(b)(2) of this rule, for the control periods seven (7), eight (8), nine (9), ten (10), eleven (11), and twelve (12) years after the allowance allocation.

(g) By December 1, 2010, and December 1 of each year thereafter, the U.S. EPA will record in the mercury budget source's compliance account the mercury allowances allocated for the mercury budget units at the source, as submitted by the department in accordance with section 8(b)(3) of this rule, for the control period in the year of the applicable deadline for recordation under this subsection.

(h) When recording the allocation of mercury allowances for a mercury budget unit in a compliance account, the U.S. EPA will assign each mercury allowance a unique identification number that will include digits identifying the year of the control period for which the mercury allowance is allocated.

(i) Mercury allowances are available to be deducted for compliance with a source's mercury budget emissions limitation for a control period in a given calendar year only if the mercury allowances:

- (1) were allocated for the control period in the year or a prior year; and
- (2) are held in the compliance account as of the allowance transfer deadline for the control period or are transferred into the compliance account by a mercury allowance transfer correctly submitted for recordation under section 10(a) through 10(d) of this rule by the allowance transfer deadline for the control period.

(j) The following shall apply to deductions for purposes of compliance with a source's emissions limitations:

(1) Following the recordation, in accordance with section 10(b) through 10(d) of this rule, of mercury allowance transfers submitted for recordation in a source's compliance account by the allowance transfer deadline for a control period, the U.S. EPA will deduct from the compliance account mercury allowances available under subsection (i) in order to determine whether the source meets the mercury budget emissions limitation for the control period in one (1) of the following ways:

- (A) Until the amount of mercury allowances deducted equals the number of ounces of total mercury emissions, determined in accordance with section 11 of this rule, from all mercury budget units at the source for the control period.
- (B) If there are insufficient mercury allowances to complete the deductions in clause (A), until no more mercury allowances available under subsection (i) remain in the compliance account.

(2) The mercury authorized account representative for a source's compliance account may request that specific mercury allowances, identified by serial number, in the compliance account be deducted for emissions or excess emissions for a control period in accordance with subdivision (1), (4), or (5). Such request shall:

- (A) be submitted to the U.S. EPA by the allowance transfer deadline for the control period; and
- (B) include, in a format prescribed by the U.S. EPA, the identification of the mercury budget source and the appropriate serial numbers.

(3) The U.S. EPA will deduct mercury allowances under subdivision (1), (4), or (5) from the source's compliance account, in the absence of an identification or in the case of a partial identification of mercury allowances by serial number under subdivision (2), on a first-in, first-out (FIFO) accounting basis in the following order:

- (A) Any mercury allowances that were allocated to the units at the source, in the order of recordation.
- (B) Any mercury allowances that were allocated to any entity and transferred and recorded in the compliance account under section 10 of this rule, in the order of recordation.

(4) After making the deductions for compliance under subdivision (1) for a control period in a calendar year in which the mercury budget source has excess emissions, the U.S. EPA will deduct from the source's compliance account an amount of mercury allowances, allocated for the control period in the immediately following calendar year, equal to three (3) times the number of ounces of the source's excess emissions.

(5) Any allowance deduction required under subdivision (4) shall not affect the liability of the owners and operators of the mercury budget source or the mercury budget units at the source for any fine, penalty, or assessment, or their obligation to comply with any other remedy, for the same violations, as ordered under the Clean Air Act or applicable state law.

(6) The U.S. EPA will record in the appropriate compliance account all deductions from such an account under subdivision (1), (4), or (5).

(7) The U.S. EPA may:

(A) review and conduct independent audits concerning any submission under the mercury budget trading program; and

(B) make appropriate adjustments of the information in the submissions.

(8) The U.S. EPA may:

(A) deduct mercury allowances from or transfer mercury allowances to a source's compliance account based on the information in the submissions, as adjusted under subdivision (7); and

(B) record such deductions and transfers.

(k) Mercury allowances may be banked for future use or transfer in a compliance account or a general account. Any mercury allowance that is held in a compliance account or a general account will remain in such account unless and until the mercury allowance is deducted or transferred under subsection (i), (j), or (l) or section 10 of this rule.

(l) The U.S. EPA may, at its sole discretion and on its own motion, correct any error in any mercury allowance tracking system account. Within ten (10) business days of making such correction, the U.S. EPA will notify the mercury authorized account representative for the account.

(m) The mercury authorized account representative of a general account may submit to the U.S. EPA a request to close the account, which shall include a correctly submitted allowance transfer under section 10(a) through 10(d) of this rule for any mercury allowances in the account to one (1) or more other mercury allowance tracking system accounts.

(n) If a general account has no allowance transfers in or out of the account for a twelve (12) month period or longer and does not contain any mercury allowances, the U.S. EPA may notify the mercury authorized account representative for the account that the account will be closed following twenty (20) business days after the notice is sent. The account will be closed after the twenty (20) day period unless, before the end of the twenty (20) day period, the U.S. EPA receives a:

(1) correctly submitted transfer of mercury allowances into the account under section 10(a) through 10(d) of this rule; or

(2) statement submitted by the mercury authorized account representative demonstrating to the satisfaction of the U.S. EPA good cause as to why the account should not be closed.

(Air Pollution Control Board; [326 IAC 24-4-9](#))

326 IAC 24-4-10 Mercury allowance transfers

Authority: [IC 13-14-8](#); [IC 13-17-3-4](#); [IC 13-17-3-11](#)

Affected: [IC 13-15](#); [IC 13-17](#)

Sec. 10. (a) A mercury authorized account representative seeking recordation of a mercury allowance transfer shall submit the transfer to the U.S. EPA. To be considered correctly submitted, the mercury allowance transfer shall include the following elements, in a format specified by the U.S. EPA:

(1) The account numbers for both the transferor and transferee accounts.

(2) The serial number of each mercury allowance that is in the transferor account and is to be transferred.

(3) The name and signature of the mercury authorized account representative of the transferor account and the date signed.

(b) Within five (5) business days, except as provided in subsection (c), of receiving a mercury allowance transfer, the U.S. EPA will record a mercury allowance transfer by moving each mercury allowance from the transferor account to the transferee account as specified by the request, provided the

following:

- (1) The transfer is correctly submitted under subsection (a).
- (2) The transferor account includes each mercury allowance identified by serial number in the transfer.

(c) A mercury allowance transfer that is submitted for recordation after the allowance transfer deadline for a control period and that includes any mercury allowances allocated for any control period before such allowance transfer deadline will not be recorded until after the U.S. EPA completes the deductions under section 9(i) and 9(j) of this rule for the control period immediately before such allowance transfer deadline.

(d) Where a mercury allowance transfer submitted for recordation fails to meet the requirements of subsection (b), the U.S. EPA will not record such transfer.

(e) The following notification requirements shall apply to mercury allowance transfers:

(1) Within five (5) business days of recordation of a mercury allowance transfer under subsections (b) through (d), the U.S. EPA will notify the mercury authorized account representatives of both the transferor and transferee accounts.

(2) Within ten (10) business days of receipt of a mercury allowance transfer that fails to meet the requirements of subsection (b), the U.S. EPA will notify the mercury authorized account representatives of both accounts subject to the transfer of a decision not to record the transfer and the reasons for such nonrecordation.

(f) Nothing in this section shall preclude the submission of a mercury allowance transfer for recordation following notification of nonrecordation.

(Air Pollution Control Board; [326 IAC 24-4-10](#))

[326 IAC 24-4-11](#) Mercury monitoring and reporting

Authority: [IC 13-14-8](#); [IC 13-17-3-4](#); [IC 13-17-3-11](#)

Affected: [IC 13-15](#); [IC 13-17](#)

Sec. 11. (a) The owners and operators, and to the extent applicable, the mercury designated representative, of a mercury budget unit, shall comply with the monitoring, record keeping, and reporting requirements as provided in this section and 40 CFR 75, Subpart I*. For purposes of complying with such requirements, the definitions in section 2 of this rule and in 40 CFR 72.2* shall apply, and the terms "affected unit", "designated representative", and "continuous emission monitoring system (CEMS)" in 40 CFR 75* shall be deemed to refer to the terms "mercury budget unit", "mercury designated representative", and "continuous emission monitoring system (CEMS)", respectively, as defined in section 2 of this rule. The owner or operator of a unit that is not a mercury budget unit but that is monitored under 40 CFR 75.82(b)(2)(i)* shall comply with the same monitoring, record keeping, and reporting requirements as a mercury budget unit.

(b) The owner or operator of each mercury budget unit shall do the following:

(1) Install all monitoring systems required under this section for monitoring mercury mass emissions and individual unit heat input. This includes all systems required to monitor:

- (A) mercury concentration;
- (B) stack gas moisture content;
- (C) stack gas flow rate; and
- (D) CO₂ or O₂ concentration;

as applicable, in accordance with 40 CFR 75.81* and 40 CFR 75.82*.

(2) Successfully complete all certification tests required under subsections (g) through (j) and meet all other requirements of this section and 40 CFR 75, Subpart I*, applicable to the monitoring systems under subdivision (1).

(3) Record, report, and quality-assure the data from the monitoring systems under subdivision (1).

(c) Except as provided in subsection (f), the owner or operator shall meet the monitoring system

certification and other requirements of subsection (b) on or before the following dates. The owner or operator shall record, report, and quality-assure the data from the monitoring systems under subsection (b)(1) on and after the following dates:

(1) For the owner or operator of a mercury budget unit that commences commercial operation before July 1, 2008, by January 1, 2009.

(2) For the owner or operator of a mercury budget unit that commences commercial operation on or after July 1, 2008, by the later of the following dates:

(A) January 1, 2009.

(B) Ninety (90) unit operating days or one hundred eighty (180) calendar days, whichever occurs first, after the date on which the unit commences commercial operation.

(3) For the owner or operator of a mercury budget unit for which construction of a new stack or flue or installation of add-on mercury emission controls, a flue gas desulfurization system, a selective catalytic reduction system, or a compact hybrid particulate collector system is completed after the applicable deadline under subdivision (1) or (2), by the earlier of:

(A) ninety (90) unit operating days after the date on which emissions first exit to the atmosphere through the new stack or flue, add-on mercury emissions controls, flue gas desulfurization system, selective catalytic reduction system, or compact hybrid particulate collector system; or

(B) one hundred eighty (180) calendar days after the date on which emissions first exit to the atmosphere through the new stack or flue, add-on mercury emissions controls, flue gas desulfurization system, selective catalytic reduction system, or compact hybrid particulate collector system.

(d) Except as provided in subdivision (2), the owner or operator of a mercury budget unit that does not meet the applicable compliance date set forth in subsection (c) for any monitoring system under subsection (b)(1) shall, for each such monitoring system, determine, record, and report maximum potential or, as appropriate, minimum potential, values for mercury concentration, stack gas flow rate, stack gas moisture content, and any other parameters required to determine mercury mass emissions and heat input in accordance with 40 CFR 75.80(g)*.

(e) The following shall apply to any monitoring system, alternative monitoring system, alternative reference method, or any other alternative for a CEMS required under this rule:

(1) No owner or operator of a mercury budget unit shall use any alternative monitoring system, alternative reference method, or any other alternative to any requirement of this section without having obtained prior written approval in accordance with subsection (o).

(2) No owner or operator of a mercury budget unit shall operate the unit so as to discharge, or allow to be discharged, mercury emissions to the atmosphere without accounting for all such emissions in accordance with the applicable provisions of this section and 40 CFR 75, Subpart I*.

(3) No owner or operator of a mercury budget unit shall disrupt the CEMS, any portion thereof, or any other approved emission monitoring method, and thereby avoid monitoring and recording mercury mass emissions discharged into the atmosphere or heat input, except for periods of recertification or periods when calibration, quality assurance testing, or maintenance is performed in accordance with the applicable provisions of this section and 40 CFR 75, Subpart I*.

(4) No owner or operator of a mercury budget unit shall retire or permanently discontinue use of the CEMS, any component thereof, or any other approved monitoring system under this section, except under any one (1) of the following circumstances:

(A) During the period that the unit is covered by an exemption under section 3 of this rule that is in effect.

(B) The owner or operator is monitoring emissions from the unit with another certified monitoring system approved, in accordance with the applicable provisions of this section and 40 CFR 75, Subpart I*, by the department for use at that unit that provides emission data for the same pollutant or parameter as the retired or discontinued monitoring system.

(C) The mercury designated representative submits notification of the date of certification testing of a replacement monitoring system for the retired or discontinued monitoring system in accordance with subsection (h)(3)(A).

(f) The owner or operator of a mercury unit is subject to the applicable provisions of 40 CFR 75* concerning units in long term cold storage.

(g) The owner or operator of a mercury budget unit shall be exempt from the initial certification

requirements of this section for a monitoring system under subsection (b)(1) if the following conditions are met:

- (1) The monitoring system has been previously certified in accordance with 40 CFR 75*.
- (2) The applicable quality-assurance and quality-control requirements of 40 CFR 75.21* and 40 CFR 75, Appendix B*, are fully met for the certified monitoring system described in subdivision (1).

The recertification provisions of this subsection and subsections (h) through (j) shall apply to a monitoring system under subsection (b)(1) exempt from initial certification requirements under this subsection.

(h) Except as provided in subsection (g), the owner or operator of a mercury budget unit shall comply with the following initial certification and recertification procedures for a continuous monitoring system (that is, a CEMS and an excepted monitoring system (sorbent trap monitoring system) under 40 CFR 75.15*) under subsection (b)(1). The owner or operator of a unit that qualifies to use the mercury low mass emissions excepted monitoring methodology under 40 CFR 75.81(b)* or that qualifies to use an alternative monitoring system under 40 CFR 75, Subpart E* shall comply with the procedures in subsection (i) or (j) respectively.

- (1) The owner or operator shall ensure that each continuous monitoring system under subsection (b)(1), including the automated DAHS, successfully completes all of the initial certification testing required under 40 CFR 75.20* by the applicable deadline in subsection (c). In addition, whenever the owner or operator installs a monitoring system to meet the requirements of this rule in a location where no such monitoring system was previously installed, initial certification in accordance with 40 CFR 75.20* is required.
- (2) Whenever the owner or operator makes a replacement, modification, or change in any certified CEMS, or an excepted monitoring system (sorbent trap monitoring system) under 40 CFR 75.15*, under subsection (b)(1) that may significantly affect the ability of the system to accurately measure or record mercury mass emissions or heat input rate or to meet the quality-assurance and quality-control requirements of 40 CFR 75.21* or 40 CFR 75, Appendix B*, the owner or operator shall recertify the monitoring system in accordance with 40 CFR 75.20(b)*. Furthermore, whenever the owner or operator makes a replacement, modification, or change to the flue gas handling system or the unit's operation that may significantly change the stack flow or concentration profile, the owner or operator shall recertify each CEMS, and each excepted monitoring system (sorbent trap monitoring system) under 40 CFR 75.15*, whose accuracy is potentially affected by the change, in accordance with 40 CFR 75.20(b)*. Changes to a CEMS that require recertification include, but are not limited to:

- (A) replacement of the analyzer;
- (B) complete replacement of an existing CEMS; or
- (C) change in location or orientation of the sampling probe or site.

- (3) Clauses (A) through (D) apply to both initial certification and recertification of a continuous monitoring system under subsection (b)(1). For recertifications, replace the words "certification" and "initial certification" with the word "recertification", replace the word "certified" with the word "recertified", and follow the procedures in 40 CFR 75.20(b)(5)* in lieu of the procedures in clause (E). Requirements for the certification approval process for initial certification, recertification, and loss of certification are as follows:

- (A) The mercury designated representative shall submit to the:
 - (i) department;
 - (ii) appropriate U.S. EPA Regional Office; and
 - (iii) U.S. EPA;

written notice of the dates of certification testing, in accordance with subsection (m).

- (B) The mercury designated representative shall submit to the department a certification application for each monitoring system. A complete certification application shall include the information specified in 40 CFR 75.63*.

- (C) The provisional certification date for a monitoring system shall be determined in accordance with 40 CFR 75.20(a)(3)*. A provisionally certified monitoring system may be used under the mercury budget trading program for a period not to exceed one hundred twenty (120) days after receipt by the department of the complete certification application for the monitoring system under clause (B). Data measured and recorded by the provisionally certified monitoring system, in accordance with the requirements of 40 CFR 75*, will be considered valid quality-assured data (retroactive to the date and time of provisional certification), provided that the department does not invalidate the provisional certification by issuing a notice of disapproval within one hundred twenty (120) days of the date of receipt of the complete certification application by the department.

- (D) The department will issue a written notice of approval or disapproval of the certification

application to the owner or operator within one hundred twenty (120) days of receipt of the complete certification application under clause (B). In the event the department does not issue such a notice within such one hundred twenty (120) day period, each monitoring system that meets the applicable performance requirements of 40 CFR 75* and is included in the certification application will be deemed certified for use under the mercury budget trading program. The issuances notices shall be as follows:

- (i) If the certification application is complete and shows that each monitoring system meets the applicable performance requirements of 40 CFR 75*, then the department will issue a written notice of approval of the certification application within one hundred twenty (120) days of receipt.
- (ii) If the certification application is not complete, then the department will issue a written notice of incompleteness that sets a reasonable date by which the mercury designated representative must submit the additional information required to complete the certification application. If the mercury designated representative does not comply with the notice of incompleteness by the specified date, then the department may issue a notice of disapproval under item (iii). The one hundred twenty (120) day review period shall not begin before receipt of a complete certification application.
- (iii) If the certification application shows that any monitoring system does not meet the performance requirements of 40 CFR 75* or if the certification application is incomplete and the requirement for disapproval under item (ii) is met, then the department will issue a written notice of disapproval of the certification application. Upon issuance of such notice of disapproval, the provisional certification is invalidated by the department and the data measured and recorded by each uncertified monitoring system shall not be considered valid quality-assured data beginning with the date and hour of provisional certification, as defined under 40 CFR 75.20(a)(3)*. The owner or operator shall follow the procedures for loss of certification in clause (E) for each monitoring system that is disapproved for initial certification.
- (iv) The department may issue a notice of disapproval of the certification status of a monitor in accordance with subsection (I).

(E) If the department issues a notice of disapproval of a certification application under clause (D)(iii) or a notice of disapproval of certification status under clause (D)(iv), then the following shall apply:

- (i) The owner or operator shall substitute the following values, for each disapproved monitoring system, for each hour of unit operation during the period of invalid data specified under 40 CFR 75.20(a)(4)(iii)* or 40 CFR 75.21(e)* and continuing until the applicable date and hour specified under 40 CFR 75.20(a)(5)(i)*:
 - (AA) For a disapproved mercury pollutant concentration monitor and disapproved flow monitor, respectively, the maximum potential concentration of mercury and the maximum potential flow rate, as defined in 40 CFR 75, Appendix A, Sections 2.1.7.1 and 2.1.4.1*.
 - (BB) For a disapproved moisture monitoring system and disapproved diluent gas monitoring system, respectively, the minimum potential moisture percentage and either the maximum potential CO₂ concentration or the minimum potential O₂ concentration, as applicable, as defined in 40 CFR 75, Appendix A, Sections 2.1.5, 2.1.3.1, and 2.1.3.2*.
 - (CC) For a disapproved excepted monitoring system (sorbent trap monitoring system) under 40 CFR 75.15* and disapproved flow monitor, respectively, the maximum potential concentration of mercury and maximum potential flow rate, as defined in 40 CFR 75, Appendix A, Sections 2.1.7.1 and 2.1.4.1*.
- (ii) The mercury designated representative shall submit a notification of certification retest dates and a new certification application in accordance with clauses (A) and (B).
- (iii) The owner or operator shall repeat all certification tests or other requirements that were failed by the monitoring system, as indicated in the department's notice of disapproval, not later than thirty (30) unit operating days after the date of issuance of the notice of disapproval.

(i) The owner or operator of a unit qualified to use the mercury low mass emissions (HgLME) excepted methodology under 40 CFR 75.81(b)* shall meet the applicable certification and recertification requirements in 40 CFR 75.81(c) through 40 CFR 75.81(f)*.

(j) The mercury designated representative of each unit for which the owner or operator intends to use an alternative monitoring system approved by the U.S. EPA under 40 CFR 75, Subpart E*, shall comply with the applicable notification and application procedures of 40 CFR 75.20(f)*.

(k) Whenever any monitoring system fails to meet the quality-assurance and quality-control requirements or data validation requirements of 40 CFR 75*, data shall be substituted using the applicable missing data procedures in 40 CFR 75, Subpart D*.

(l) Whenever both an audit of a monitoring system and a review of the initial certification or recertification application reveal that any monitoring system should not have been certified or recertified because it did not meet a particular performance specification or other requirement under subsections (g) through (j) or the applicable provisions of 40 CFR 75*, both at the time of the initial certification or recertification application submission and at the time of the audit, the department will issue a notice of disapproval of the certification status of such monitoring system. For the purposes of this subsection, an audit shall be either a field audit or an audit of any information submitted to the department or the U.S. EPA. By issuing the notice of disapproval, the department revokes, prospectively, the certification status of the monitoring system. The data measured and recorded by the monitoring system shall not be considered valid quality-assured data from the date of issuance of the notification of the revoked certification status until the date and time that the owner or operator completes subsequently approved initial certification or recertification tests for the monitoring system. The owner or operator shall follow the applicable initial certification or recertification procedures in subsections (g) through (j) for each disapproved monitoring system.

(m) The mercury designated representative for a mercury budget unit shall submit written notice to the department and the U.S. EPA in accordance with 40 CFR 75.61*.

(n) The mercury designated representative shall comply with all record keeping and reporting requirements in this subsection, the applicable record keeping and reporting requirements of 40 CFR 75.84*, and the requirements of section 6(e)(1) of this rule as follows:

(1) The owner or operator of a mercury budget unit shall comply with the requirements of 40 CFR 75.84(e)*.

(2) The mercury designated representative shall submit an application to the department within forty-five (45) days after completing all initial certification or recertification tests required under subsections (g) through (j), including the information required under 40 CFR 75.63*.

(3) The mercury designated representative shall submit quarterly reports, as follows:

(A) Report the mercury mass emissions data and heat input data for the mercury budget unit, in an electronic format prescribed by the U.S. EPA, for each calendar quarter beginning with:

(i) for a unit that commences commercial operation before July 1, 2008, the calendar quarter covering January 1, 2009, through March 31, 2009; or

(ii) for a unit that commences commercial operation on or after July 1, 2008, the calendar quarter corresponding to the earlier of the date of provisional certification or the applicable deadline for initial certification under subsection (c), unless that quarter is the third or fourth quarter of 2008, in which case reporting shall commence in the quarter covering January 1, 2009, through March 31, 2009.

(B) Submit each quarterly report to the U.S. EPA within thirty (30) days following the end of the calendar quarter covered by the report. Quarterly reports shall be submitted in the manner specified in 40 CFR 75.84(f)*.

(C) For mercury budget units that are also subject to an acid rain emissions limitation or the CAIR NO_x annual trading program, CAIR SO₂ trading program, or CAIR NO_x ozone season trading program, quarterly reports shall include the applicable data and information required by 40 CFR 75, Subparts F through H*, as applicable, in addition to the mercury mass emission data, heat input data, and other information required by this section.

(4) The mercury designated representative shall submit to the U.S. EPA a compliance certification, in a format prescribed by the U.S. EPA, in support of each quarterly report based on reasonable inquiry of those persons with primary responsibility for ensuring that all of the unit's emissions are correctly and fully monitored. The certification shall state the following:

(A) The monitoring data submitted were recorded in accordance with the applicable requirements of this section and 40 CFR 75*, including the quality assurance procedures and specifications.

(B) For a unit with add-on mercury emission controls, a flue gas desulfurization system, a selective catalytic reduction system, or a compact hybrid particulate collector system and for all hours where mercury data are substituted in accordance with 40 CFR 75.34(a)(1)*:

(i) the mercury add-on emission controls, flue gas desulfurization system, selective catalytic reduction system, or compact hybrid particulate collector system were operating within the range of parameters listed in the quality assurance or quality control program under 40 CFR 75, Appendix B;

(ii) with regard to a flue gas desulfurization system or a selective catalytic reduction system, quality-assured SO₂ emission data recorded in accordance with 40 CFR 75* or quality-assured NO_x emission data recorded in accordance with 40 CFR 75* document that the selective catalytic

system was operating properly, as applicable; and
(iii) the substitute data values do not systematically underestimate mercury emissions.

(o) The mercury designated representative of a mercury budget unit may submit a petition under 40 CFR 75.66* to the U.S. EPA requesting approval to apply an alternative to any requirement of this section. Application of an alternative to any requirement of this section is in accordance with this section only to the extent that the petition is approved in writing by the U.S. EPA, in consultation with the department.

*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 24-4-11](#))

[Notice of Public Hearing](#)

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