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Subject Attention Docket ID No. OAR-2002-0056 SEC comments

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<<SEC Comments 2004-06-02.pdf>>

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Environmental Protection Agency
EPA Docket Center (EPA/DC)
Air and Radiation Docket and Information Center, 6102T
1200 Pennsylvania Avenue, N.W.
Washington, D.C. 20460

Attn: Docket ID No. OAR-2002-0056
Via E-mail: **A-and-R-Docket@epa.gov**

Dear Sir or Madam:

The Subbituminous Energy Coalition submits the following comments on the Proposed National Emission Standards for Hazardous Air Pollutants; and in the Alternative, Proposed Standards of Performance for New and Existing Stationary Sources; Electric Utility Steam Generating Units; Proposed Rule; 69 FR 4652 *et seq*., January 30, 2004.

Background on SEC

The Subbituminous Energy Coalition (SEC) is a group of utilities, coal companies, suppliers and vendors that are dedicated to maintaining subbituminous coal as an environmentally acceptable and economically competitive fuel source. The SEC leverages collective resources of its members to provide and share environmental information; develop environmental technology developments; and provide funding information regarding the testing and development of environmental technologies. This is achieved via regional information exchange forums.

The mission of the SEC includes identifying the information, testing and technology required to develop a sustainable future for the subbituminous coal industry. The SEC also identifies national, regional, state and industry issues that affect the producers and users of subbituminous coal. This includes EPA's proposed mercury emission reduction rule.

SEC Statement Regarding Mercury Reduction Rules

SEC members want to ensure that no coal rank gains a market or competitive advantage as a result of the implementation of any mercury reduction rules. SEC members include utilities that burn all ranks of coal and coal companies that have reserves of different rank throughout the United States, and have a vested interest in maintaining the viability of

those operations. The SEC seeks to minimize the compliance costs of the mercury reduction rules without artificially shifting the market for coal.

Basis For Mercury Reduction Rules

The SEC supports the statement of the National Mining Association (NMA) and others regarding the lack of demonstrated need for these rules. Coal-fired power plants in the United States account for only about 1% of the total (anthropogenic and natural) global mercury emissions of mercury. Even if all U.S. coal-fired power plants in the United States were shut down, the difference in mercury in the atmosphere or deposited would be imperceptible. However, it is recognized that EPA is proposing mercury reduction rules, and it is incumbent upon the SEC to provide constructive, substantive comments.

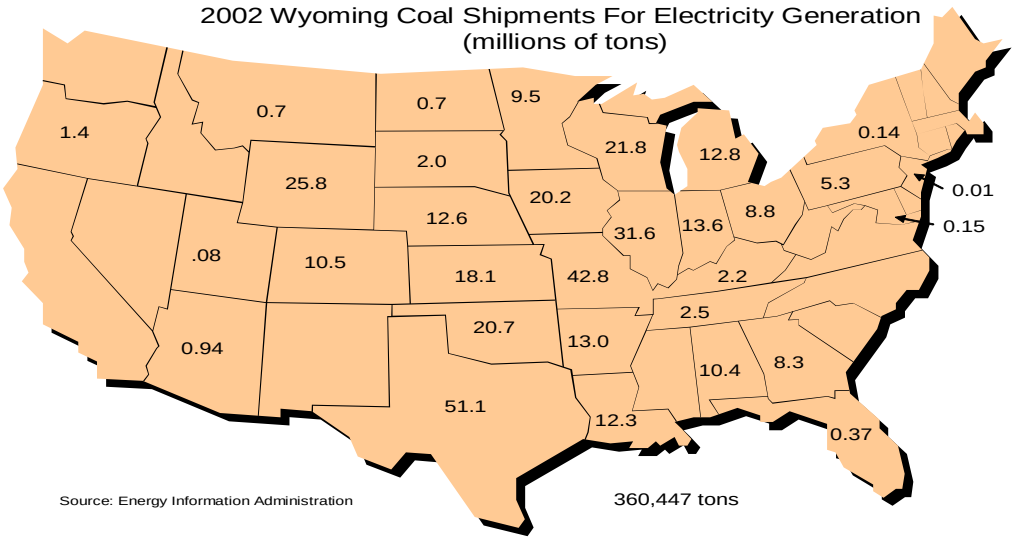
SEC Strongly Supports Subcategorization By Coal Rank

Based upon the 80 plant testing conducted under the Information Collection Request (ICR), it is clearly evident that there are distinct differences in achievable emission reductions between coal-fired plants burning bituminous and subbituminous coals. Therefore, SEC strongly supports EPA's subcategorization of coal rank and combustion type under any regulatory option EPA develops, including the MACT proposal, and the cap and trade options (that take the form of the allocation adjustment factors).

<u>Importance of Powder River Basin Subbituminous Coal</u>

The Powder River Basin (PRB) of Wyoming has become one of the most strategic fuel resources in the United States. PRB coal accounts for about 1/3 of all coal produced in the nation, and over 40% of the coal used for generation of electricity. This coal is shipped throughout the United States and is a key component in providing low cost, affordable electricity. The distribution of PRB coal throughout the nation in 2002 is shown on Figure 1.

Figure 1.



MACT Discussion

Although the SEC does not support the MACT option, it offers the following comments specifically on EPA's MACT proposal. In evaluating EPA's list of best performing subbituminous coal-fired power plants, the AES Hawaii plant is listed as one of the best performing subbituminous units. SEC urges EPA to eliminate this plant from the calculation to set the subbituminous emission limit for two reasons. First, the plant is a fluidized bed combustor (FBC) unit, which relies on a fundamentally different combustion process and is not representative of the type of plant that burns subbituminous coal in the 48 contiguous United States. Second, the plant burns Indonesian subbituminous coal, which is also not representative of the subbituminous coal burned in the 48 contiguous States. In addition to the coal not being representative, EPA must recognize that coal is our largest reserve of domestic fossil fuel, and should not be using a foreign coal to set a domestic standard. This goes against EPA's stated principle of not considering fuel switching as a viable method for setting a MACT floor. Use of Indonesian coal to set the MACT floor will result in more domestic coal being displaced from use in domestic coal-fired power plants.

In the unlikely event that EPA selects the MACT option, then the SEC supports compliance for meeting the mercury emission limits on a facility-wide basis, as opposed to a unit-by-unit basis. The SEC urges EPA to reevaluate the MACT determination for subbituminous coal so as to account for the large differences between subbituminous coals in the Wyoming PRB and subbituminous coals elsewhere in the western United States. These differences are discussed more in the following text.

Wyoming Powder River Basin Does Not Set the Subbituminous Emission Limit

The Wyoming Powder River Basin (PRB) subbituminous coal, which is the most widely used subbituminous coal, does not set the MACT mercury emission limit for subbituminous plants. Rather, Colorado, Montana and New Mexico subbituminous coals set the MACT emission limit for subbituminous coal plants. These coals are typically higher in caloric (Btu) content, and resemble a bituminous coal. Wyoming PRB coal grades out as a Subbituminous C coal, while most other western subbituminous coals grade out as Subbituminous A (according to ASTM standards). As the MACT is currently proposed The National Mining Association analysis estimates that 41% of subbituminous coals would not be able to meet the existing unit limit with any degree of confidence due to the high variability in mercury content of the coal. PRB coal will be disproportionably represented in the subbituminous coals unable to comply with the existing source emission limits.

A summary of EPA's top four best-performing subbituminous plants is shown in the following table. The coal source shown on Table 1 was obtained from Energy Information Administration data on coal source for the year 1999, which is the same year that the 80 plant ICR data was obtained.

Table 1. EPA Best Performing Subbituminous MACT Units

Plant	Control	Coal Source	Unit Size (MWe)	Location
AES Hawaii	Baghouse/FBC	99% Indonesia; 1% tires	180	Hawaii
Clay Boswell	Baghouse/Compliance coal	97% MT Subbit; 3% WY PRB	75	Minnesota
Craig	Baghouse/SDA	96% CO Subbit; 4% CO Bit	420	Colorado
Cholla	ESP-HS	90.4% NM Subbit; 6.3% CO Subbit; 1.9% MT Subbit; 1.6% PRB Subbit	290	Arizona

Non-Subbituminous Coals Should Not Be Categorized Under Subbituminous Coal

In setting the MACT floor for subbituminous coal, EPA selected the top four best performing plants for mercury reduction. However, due to some potential misclassifications of blended fuel units as subbituminous units, EPA could have used the best five performing plants due to the reduced number of plants in the category. The number of plants classified as burning subbituminous coal by EPA could be reduced further, as some of the plants listed in Table 2 are potentially blends of subbituminous and bituminous plants (Craig, La Cygne, Lawrence, Newton and Presque Isle). For each of the plants identified as burning subbituminous coal, the EIA database was reviewed to determine which mine the coal was shipped from in 1999. Table 2 shows a summary of the coal supply data as reported to the Energy Information Administration (EIA) for these plants, which instead of being properly called a subbituminous plant, may instead be plants that burn a blend of bituminous and subbituminous coals.

Neither the EIA data nor the ICR data differentiates as to what coals were delivered to which unit within a facility, so the shipments listed above are for the plant as a whole for 1999. The SEC was unable to find any clear documentation as to what type of coal was being burned during the EPA ICR tests. Unless EPA is able to accurately determine what coals were burned during the test, the assumption must be made that it was a subbituminous/bituminous blend. Consistent with that classification, the plant must be placed in the "blend" category along with other subbituminous/bituminous plants. Some have suggested that any plant that burned over 90% subbituminous coal should still be classified as a subbituminous unit. The remaining blend would be considered a de-minimis amount. SEC is not convinced that this is a sound assumption. There needs to be a better evaluation of blended coals, and how these different ranks of coals interact relative to the species of mercury that is emitted.

Table 2. EPA ICR Plant Coal Source Analysis

Plant	Unit	Coal Source	%Subbit/%Bit
Lawrence	4	Colowyo (178,000 tons) – Sub (CO) Spring Creek (815,000 tons) – Sub(MT) Twentymile (267,000 tons) – Bit (CO)	80%/20%
Presque Isle	9	Antelope (532,000 tons) – Sub (WY) Leatherwood (21,000 tons) – Bit (KY) Sanborn Creek (807,000 tons) – Bit CO) Spring Creek (57,000 tons) – Sub (MT) West Decker (377,000 tons) – Sub (MT)	55%/45%
Newton	2	Black Beauty (118,000 tons) – Bit (IN) Black Thunder (570,000 tons) – Sub (WY) North Antelope/Rochelle (2,566,000 tons) – Sub (WY) Twentymile (236,000) – Bit (CO)	90%/10%
Craig	C1	Colowyo (1,555,200 tons) – Sub (CO) Trapper (1,343,100 tons) – Sub (CO) Twentymile (265,100 tons) – Bit CO)	96%/4%
Craig	C3	Same as above	Same as above
La Cygne	1	Big Osage (205,000 tons) – Bit (KS) Black Thunder (87,000 tons) – Sub (WY) Caballo (2,535,000 tons) – Sub (WY) Coal Creek (85,000 tons) – Sub (WY) Cordero (2,348,000 tons) – Sub (WY) Labardie II (197,000 tons) – Bit (KS) North Antelope/Rochelle (14,000 tons) – Sub (WY)	96%/4%

EPA ICR Subbituminous Plant Emissions

EPA conducted testing of 80 coal-fired units around the United States. These 80 units burned various coals, and have various types of control technologies. Out of these 80 units, only ten (10) of the units burned 100% Wyoming Powder River Basin (PRB) coal. The plants that EPA categorized as subbituminous were verified in two separate ways. The first method was to review the EPA ICR II database, and the second was to cross-check the coal source against the EIA Form 423 data submitted by the utilities. Subbituminous plants that did not use Wyoming PRB coal were eliminated from this analysis. Using the EIA data, the following plants were eliminated from the subbituminous category:

- Clay Boswell Units – almost 98% of coal received in 1999 was from Montana. The remainder came from Wyoming PRB.
- Colstrip burns 100% Montana subbituminous coal

- La Cygne received about 8% of their coal in 1999 from Kansas (bituminous coal)
- Lawrence is actually a bituminous/subbituminous blend, obtaining 80% of their coal from Montana (subbituminous), and 20% from Colorado (bituminous)
- Newton is a bituminous/subbituminous blend, receiving 10% of their coal from Colorado and Indiana (bituminous), with the remainder from the Wyoming PRB.
- Presque Isle is a bituminous/subbituminous blend, receiving bituminous coal from Colorado and Kentucky in 1999. Only 30% came from the Wyoming PRB in 1999.
- Sherburne County received 46% of their coal in 1999 from the Wyoming PRB, with the remainder from Montana.
- AES Hawaii – subbituminous coal from Indonesia.

It is difficult, if not impossible, to definitively determine the source of coal that was burned during the ICR III test. This is an important distinction because the proper method of setting the standard or the budget emission rates is to consider the impact on one plant burning all possible ranks of coal.

Concern has been raised by some that the proposed 5.8 lb Hg/TBtu emission limit makes Wyoming PRB coal a compliance coal for mercury, as it is alleged that most, if not all, of Wyoming PRB has mercury contents at or less than the 5.8 lb Hg/TBtu standard. The ten Wyoming PRB units tested under the EPA ICR protocol are shown on Table 3, along with the stack emission rates of total mercury, as determined from the ICR III testing.

Table 3. EPA ICR Plants Burning WY PRB Coal

Plant	Unit	Stack lb Hg/TBtu
Comanche	2	2.593
Laramie River	1	3.018
Laramie River	3	3.341
Montrose	1	5.857
Wyodak	BW91	7.07
George Neal South*	4	7.727
Rawhide	101	7.763
Sam Seymour*	3	8.635
Columbia	1	10.31
Platte	1	10.612

* Could not verify source of coal from EIA database. Accepted EPA ICR II Data for these plants.

This summary shows that only three of the plants tested had mercury emissions of less than EPA's proposed MACT emission limit of 5.8 lb Hg/TBtu. It is noted that these numbers are emission rates out the stack, which means that unless there is a negative

removal of mercury, the mercury content of the coal would be equal or higher than the stack emissions. Given this premise, the mercury content of the coal used in the Montrose, Wyodak, George Neal South, Rawhide, Sam Seymour, Columbia and Platte plants would be significantly in excess of the 5.8 lb Hg/TBtu emission limit proposed by EPA.

Plant Mercury Emissions Show Considerable Variability

As noted above, EPA conducted mercury emission testing at 80 coal-fired units in 1999. Since that point in time, the SEC, through the Western Research Institute in Laramie, Wyoming, retested some of the plants burning Wyoming Powder River Basin coal in 2003. Partial funding for these retests and new tests came through the U.S. Department of Energy. The re-testing methods used at these plants were consistent with the methodologies and protocols used in the EPA ICR III testing. A full set of the test results can be provided upon request. The summaries of these tests are shown on Table **4.**

Table 4. ICR and SEC Test Data

Plant Name	Hg-E-In	Hg -In Total	% Elemental	F-Factor Hg lb/TBtu @ APCD Inlet	Hg-E-Out	Hg -Out Total	% Elemental	F factor Hg lb/TBtu @ APCD Outlet	Hg Removal Eff.,% (1)
	µg/dscm (@ 3% O2)				µg/dscm (@ 3% O2)				
Laramie River Unit 3- ICR	6.13	8.60	71.3	6.21	4.56	4.65	98.1	3.34	-78.5
Laramie River Unit 3 - SEC	8.37	10.57	79.2	7.58	10.25	10.60	96.7	7.61	-0.4
Laramie River Unit 1 - ICR	7.80	10.70	72.9	7.70	4.99	5.13	97.3	3.72	51.6
Laramie River Unit 1- SEC	6.18	10.17	60.7	7.03	3.33	3.96	84.2	2.84	59.6
Rawhide Unit 101 - ICR	13.34	16.19	82.4	11.65	9.90	10.81	91.6	7.76	31.8
Rawhide Unit 101 - SEC	6.21	8.26	75.2	5.92	5.60	7.40	75.7	5.31	7.9
Columbia Unit 1- ICR	14.11	16.55	85.3	11.87	11.84	14.36	82.5	10.31	11.9
Columbia Unit1 - SEC	15.06	18.36	82.0	13.20	11.61	12.48	93.0	8.97	31.5
Platte Unit 1 - ICR	10.94	14.48	75.6	10.35	13.52	14.79	91.4	10.61	-3.0
Platte Unit 1 - SEC	8.86	11.15	79.5	8.01	8.86	9.95	89.0	7.15	10.7

Note: *(1) F factor-based Hg removal efficiency (across the APCD) is calculated for each of the three test runs and then averaged. Hg-E: Elemental mercury*

The following Figures 2 and 3 show the mercury species concentration at the inlet and the outlet of the Air Pollution Control Devices (APCDs). Irrespective of the distribution of the mercury species at the APCD inlet, the outlet stream contains mostly elemental mercury. Both the ICR and the SEC data are directionally consistent but have significant variation due to coal mercury content and operational variability. This corroborates the earlier observations that data variability is an issue. Hence, the regulatory guidelines must account for the variability, specifically in the case of subbituminous coal due to its higher fraction of elemental mercury exiting the furnace.

Fig. 2 Mercury Species Concentration at APCD Inlet

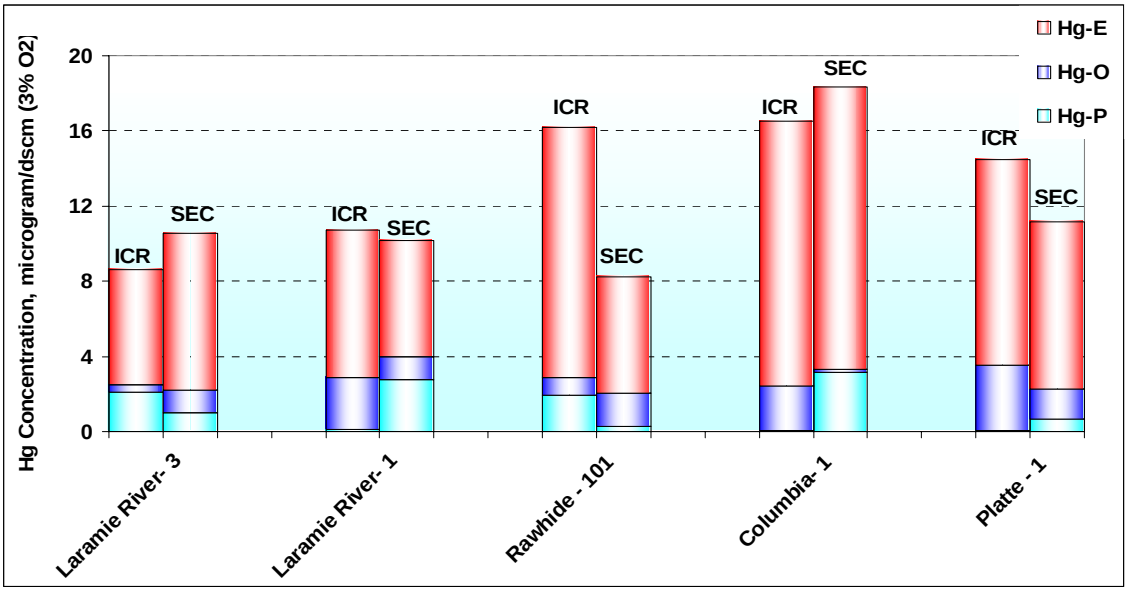
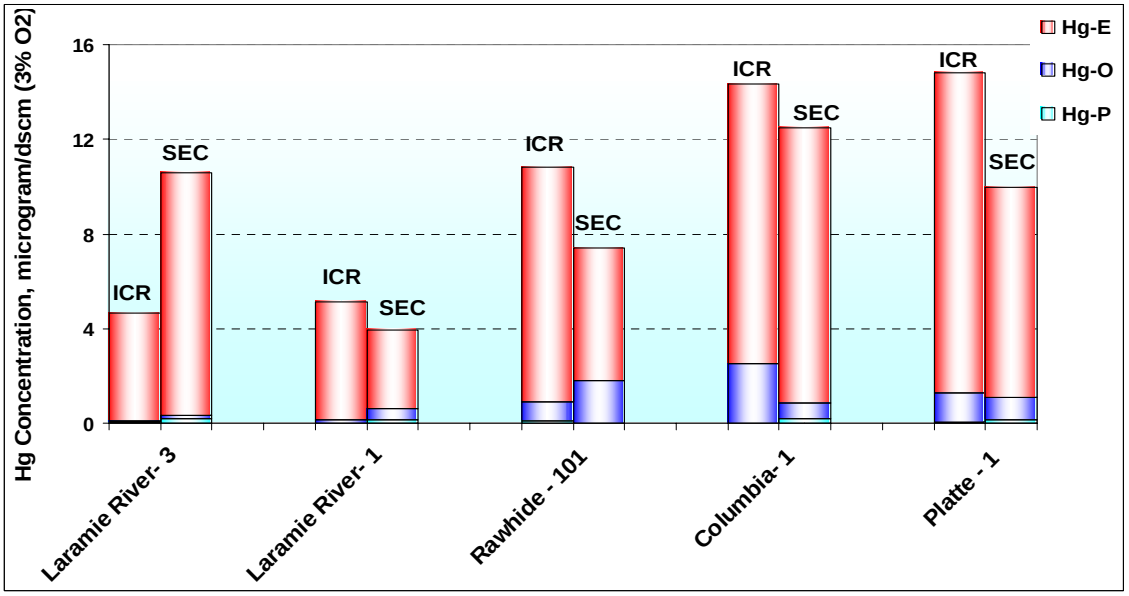


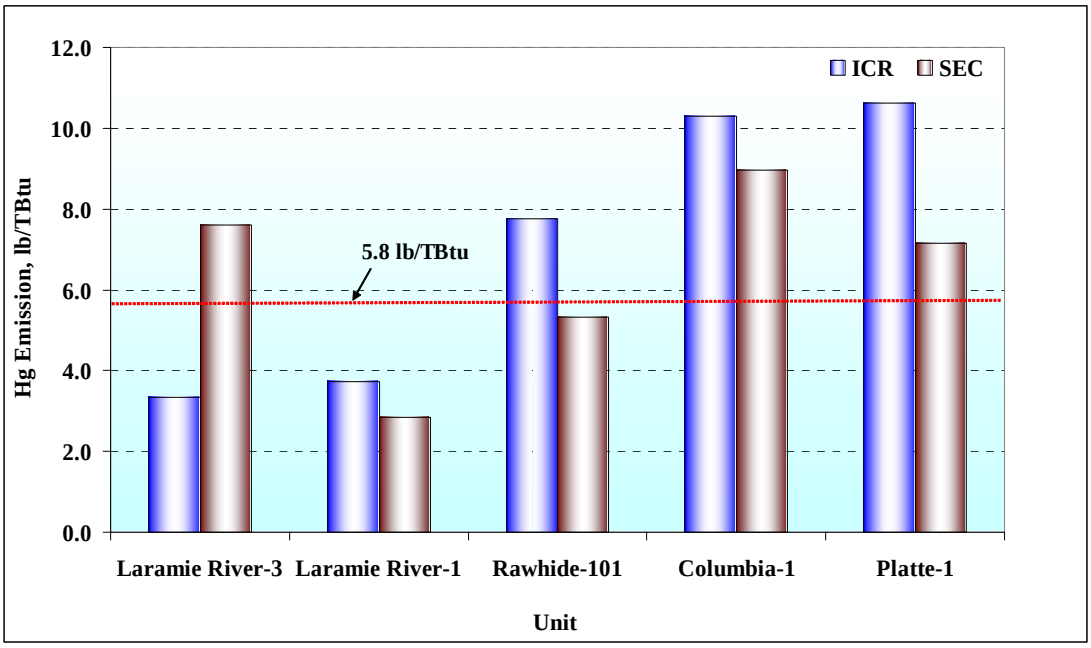
Fig. 3 Mercury Species Concentration at the APCD Outlet



Note: *Hg-P: Particulate mercury; Hg-O: Oxidized mercury*

Figure 4 presents the emission values at various plants along with the emission limit of 5.8 lb/MMBtu. Out of the five plants, four plants emit more than the proposed limit either during the ICR or SEC measurements.

Fig. 4. Mercury Emission at the Stack from PRB Coal-Fired Units, lb/TBtu



The main points to take away from the retest and new test data (Table 4) are the following:

- With the exception of the Laramie River 1 unit, all of the remaining units had mercury emissions out of the furnace in excess of 5.8 lb Hg/TBtu. This is consistent with the majority of the PRB subbituminous plants tested under the EPA ICR. Again, it is interesting to note that while PRB subbituminous coal has been touted as being "compliance" coal for mercury at the emission levels proposed by EPA, few of the plant tests corroborate that assertion.
- The percentage of mercury removed is not consistent from test to test, and varies significantly. Part of the variation can be explained by the variation in the mercury content of the coal. However, some of the variation must also be variability in the operation of the unit, as well as the precision of the test method.
- The Laramie River 3 unit has a dry scrubber. This configuration gets very low to no mercury capture with a PRB subbituminous coal. The Laramie River 1 unit is wet scrubbed and gets much higher mercury capture, but nowhere near that of a similarly configured bituminous unit. This particular set of test data is important in that it shows how dramatically different the results are with different technologies as evidenced in the species concentration (at the inlet and outlet of the APCDs) plots.
- With subbituminous coal, elemental mercury makes up a significant portion of the overall mercury content of the coal. In most instances, elemental mercury comprises 70%-80% of the total mercury emitted from the furnace. This ratio increases to 80%-90% elemental mercury

measured at the stack. This relationship is critical when determining the mercury adjustment factors under the cap-and-trade program, and will be discussed further.

- With the large variability in coal mercury content and plant/technology performance, a 12-month rolling average to demonstrate compliance is critical.

Adequacy of the ICR Database in Setting A MACT Emission Limit

EPA has one of the most extensive databases ever assembled for setting a MACT standard. However, quantity of data can't be mistaken for quality of data. The National Mining Association (NMA) conducted a review of the EPA ICR database, which was presented to EPA in Research Triangle Park in conjunction with the Mercury MACT Workgroup efforts. The evaluation was conducted using four criteria, including:

- Negative removals (greater than what would be expected statistically)
- Missing critical data
  - Coal-feed rate
  - Coal mercury content
  - Gas flow
  - No inlet mercury data
- Mercury material balance
  - Inlet total Hg (OH)/Inlet total Hg (from coal)
  - $1 \pm 2\sigma$ (95% confidence)
- Data precision

This particular study is included in the docket, so the details will not be discussed in great detail in this set of comments. The bottom line of this analysis is that of the 80 units tested under the ICR, only 15 units passed all four of the data adequacy criteria. Of these remaining 15 units, none of them burn Wyoming Powder River Basin subbituminous coal.

While EPA has amassed a tremendous amount of data from the ICR process, the data is not as robust as one would hope, particularly for Wyoming subbituminous coal. The above discussion argues for accounting for the maximum amount of variability as possible in setting the MACT emission limits for the various coal ranks. This variability must consider not only the variability of coal mercury and chlorine content, but operational and test variability as well. Care must be taken in using the ICR data to set absolute standards, when the quality of the data shows that at best it can only be used to determine if the proposed standards are directionally correct.

Cap and Trade Proposals

The previous discussions demonstrate the need for flexibility in setting a standard. To that end, the SEC supports a well-designed, broad-based market based compliance system, rather than the rigid and unachievable compliance requirement established within

the time frames of the MACT process. Of the two cap-and trade-proposals offered by EPA, the SEC would favor the Section 112 option over the Section 111 alternative. The reason for this recommendation is the concern that not all States will participate in the Section 111 option, as it allows for State participation as an opt-in. The Phase I emissions cap under either cap-and-trade options should be set at the level corresponding to actual mercury "co-benefit" levels associated with the implementation of the Interstate Air Quality Rule.

Mercury Allocation Adjustment Factors

EPA's proposed mercury allocation adjustment factors (1.0 for bituminous; 1.25 for subbituminous; and 3.0 for lignite) represent the subcategorization of the cap-and-trade program. Therefore, to be equitable it is important that EPA set the adjustment factors as fairly as possible between the coal ranks. The adjustment factors must be applied to properly reflect the differences in the ability to capture mercury between the various coal ranks, and in particular, the ability to capture the oxidized and particulate mercury fraction**.**

Page 12406 of the Federal Register notice states "For purposes of this hypothetical allocation of the allowances, each unit's baseline heat input is adjusted to reflect the ranks of coal combusted by the unit during the baseline period. Adjustment factors of 1 for bituminous, 1.25 for subbituminous, and 3 for lignite coals were proposed in the NPR. These adjustment factors and the methodology for determining the State budgets are described in the memorandum "Allocation Adjustment Factors for the Proposed Mercury Trading Rulemaking" in the docket. Alternatively, for purposes of this hypothetical allocation of allowances to Utility Units, which were used to calculate the State budgets, EPA could have used the proposed MACT emission rate proposed in the NPR and the proportionate share of their baseline heat input to total heat input of all affected units. EPA solicits comment on this alternative to calculate State budgets."

If EPA's proposed mercury adjustment factors (1.0; 1.25; 3.0) are used in conjunction with EPA's assumed 34-ton co-benefit level in 2010, a corresponding mercury emission limit can be calculated. Using the assumptions described, the corresponding mercury emission limit would be in the ballpark of:

	EPA Proposed Adjustment Factor	Corresponding Mercury Emission Limit (lb Hg/TBtu)	EPA Proposed MACT Emission Limits (lb Hg/TBtu)
Bituminous	1.0	2.6	2.0
Subbituminous	1.25	3.2	5.8
Lignite	3.0	7.8	9.2

This calculation shows that EPA's proposed mercury adjustment factors represent a dramatically different regulatory scheme than that proposed under the MACT program, as there is relatively little "subcategorization" in the proposed adjustment factors between bituminous and subbituminous coal. As has been previously discussed, there are dramatic differences between Wyoming subbituminous coal and other subbituminous

coals. These differences include higher mercury content than the EPA's "average" subbituminous coal mercury content of 5.74 lb Hg/TBtu, and lower capture rates than some other subbituminous coals largely based on the high elemental to total mercury ratio in the coal (evidenced by the lack of Wyoming PRB plants among the top performing units).

EPA states in the allocation memorandum cited above that "These adjustment factors are considered to be directionally correct based on the test data currently available." The allocation process is critically important to the coal industry, regardless of coal rank. "Directionally correct" is not a sufficient basis on which to set adjustment factors that are so crucial to understanding market implications. For this reason, SEC would support EPA taking the necessary time to determine the accuracy and validity of the data prior to setting the adjustment factors. This approach would allow EPA to better understand the current state of control technology, and how different coal ranks behave with that technology.

If EPA opts not to go this direction, then SEC is forced to support the mercury adjustment factors based upon EPA's proposed MACT emission floor numbers – those being 1.0 for bituminous; 2.9 for subbituminous; and 4.6 for lignite. Further, it is urged that EPA recognize any mercury control projects as being pollution control projects under New Source Review.

New Sources

The SEC is very concerned about the low emission limit proposed for subbituminous coal and urges EPA to set the new plant limits at an achievable level. EPA has proposed a subbituminous emission limit of $20x10^{-6}$ lb/MWh, which translates into roughly a 1.9 lb/TBtu emission limit. The basis for the concern is that the likely configuration for a new PRB-based coal-fired power plant will include a dry scrubber and fabric filter. This is the common configuration for a PRB plant that has been built after 1978, and is the configuration that the ICR plant testing has shown to achieve virtually no mercury reduction due to the high elemental speciation of PRB subbituminous coal. Due to the higher level of particulates that must be managed, use of a wet scrubber creates a host of problems, primarily with the formation of a concrete-like substance. Also, for the arid West, wet scrubbers are more difficult to utilize due to the lack of water. It is recognized that NO_x controls would also be required, and that technology would likely lean toward an SCR. However, none of the PRB plants tested under the ICR has an SCR, so the effectiveness of adding an SCR is completely uncertain at this point. Activated Carbon Injection (ACI) is an emerging technology that is promising. However, there is little data on ACI in subbituminous plants at this point except that from the Pleasant Prairie in Wisconsin. However, this data does not adequately demonstrate long-term performance and does not address performance across the full range of plant configurations and operating conditions. This plant has low NO_x burners and a cold-side ESP. The plant burns compliance coal to meet SO_2 standards, so there is no scrubber. In using ACI, this plant was able to achieve about a 60% reduction in mercury emissions.

When the subject of new coal-fired plants is raised, the first thought is that these plants will be built years down the road. However, due to the strained electricity market in the United States, and the continued high cost of natural gas, there are subbituminous plants that are permitted and nearing construction, and others on the drawing board. The new source emission limit must be based on technology that is available today, not an emerging technology that will take years to prove that it can be effective.

Even if a 50% to 60% mercury reduction can be achieved for PRB coal using ACI (and this has not been demonstrated for any significant number of plant configurations or operating conditions) a very significant proportion of subbituminous coals will be unable to meet the standard. EPA's proposed new source emission rate of 1.9 lb Hg/TBtu means that a plant could not use a PRB coal in excess of 3.8 to 4.7 lb Hg/TBtu on average; and variability effects will reduce these numbers even further. EPA's ICR and SEC's test data showed that most of the units consumed a coal with mercury content far in excess of these limits for new sources. Most of the coals tested in the ICR and SEC tests are in the 7 to 10 lb Hg/TBtu range. This means that new sources would need to get greater than a 73% to 81% reduction – much higher than the tests for ACI have shown to be achievable at this point in time.

The National Mining Association analysis estimates that 41% of subbituminous coals would be displaced for existing sources due to the high variability in mercury content of the coal. For new sources, the amount of subbituminous coal that would be used is estimated to be 92%. These estimates are based on existing or new units that have adopted the best control technologies identified in the ICR database.

Conclusion

EPA needs to proceed carefully under any of the options selected for the regulatory program. It is hoped that these comments clearly demonstrate that the predominant subbituminous coal (PRB) in the United States is different from other subbituminous coals. Further, it is hoped that these comments clearly demonstrate that EPA has under represented Wyoming PRB coal in the setting of proposed MACT emission limits and mercury adjustment factors under the cap-and-trade program. Finally, it is clearly evident that the new source emission limit is simply set too low to allow for utilization in the short- to mid-term time horizon. The SEC stands ready to answer any questions, or provide any additional data that is needed to achieve a workable program.

Sincerely,

Robert M. Boettcher
Chairperson
Subbituminous Energy Coalition