

Oral Testimony
Of the
Pennsylvania Coal Association

Before the
PENNSYLVANIA ENVIRONMENTAL QUALITY BOARD

Regarding

Proposed Amendments to 25 Pa. Code Chapter 123

Standards for Containments; Mercury

36 Pa.B.3185

Saturday, June 24, 2006

By Frank Burke

INDEPENDENT REGULATORY
REVIEW COMMISSION

2006 AUG -2 PM 2:41

RECEIVED

July 25, 2006
DEP Southwest Regional Office
Pittsburgh

Good afternoon. My name is Frank Burke. I am here today representing CONSOL Energy Inc. and am speaking on behalf of the Pennsylvania Coal Association (PCA), of which CONSOL is an active member.

PCA members produce 75 percent of the bituminous coal mined in Pennsylvania, as well as associated companies whose businesses rely on a thriving coal economy.

We thank the Board for this opportunity to provide our perspective on regulating mercury emissions from Pennsylvania's coal-fired power plants. This is a critical issue for PCA members because this regulatory action will significantly affect the major market for Pennsylvania coal.

For the reasons listed below, PCA opposes the proposed regulation and recommends that the Board adopt the federal Clean Air Mercury Rule (CAMR).

Background

Pennsylvania is the fourth largest coal producing state, mining 73 million tons last year with a workforce of 7,000 employees.

Electricity generation is the largest customer for Pennsylvania coal, so preservation of this market is essential to the continued viability of the Pennsylvania coal industry.

PCA supported electricity deregulation in Pennsylvania because we believe competitive favors the lowest cost fuel source, which in any scenario, is coal.

However, competition depends on a level playing field. If Pennsylvania's air quality standards are more onerous than those in other states or nationally, it can make Pennsylvania coal more expensive to use and result in premature closing of Pennsylvania coal-fueled plants, particularly older units, with the loss of a significant portion of the Pennsylvania coal industry's major customer base.

For this reason, PCA supports implementation of the federal Clean Air Mercury Rule (CAMR) and its interstate cap and trade program with one exception – the mercury allowance allocation provision that disadvantages eastern coal.

Essentially, the allocations in CAMR grant extra allowances to units that historically used subbituminous coal and lignite, at the expense of units, such as those in Pennsylvania, that have used exclusively bituminous coal.

To oppose this provision and with the knowledge and encouragement of DEP Secretary Kathleen McGinty, PCA joined with other state coal associations, bituminous coal operators and the UMWA to file a lawsuit narrowly focused on challenging only the allowance allocation adjustment factor of CAMR; it is not designed to overturn the entire rule. PCA consistently has supported CAMR's other provisions, and particularly its program of interstate allowance trading and banking.

Our opposition to DEP's proposed regulation is based on our objective to preserve and expand, to the maximum extent possible, mining jobs and Pennsylvania coal's share of the electric

generation market. Our concerns center on four issues: 1) the proposal's prohibition of allowance trading and banking, 2) its supposed preference for using 100 percent bituminous coal (not exclusively Pennsylvania coal), and 3) the lack of mercury-specific control technology for full-scale commercial use with Pennsylvania's high sulfur bituminous coal to meet the regulation's stringent limits and accelerated compliance deadline, and 4) no demonstration that the additional costs of the state rule will provide public health benefits beyond the federal rule.

Allowance Trading and Banking

Critics of trading and banking are wrong to assert there are no guarantees that Pennsylvania will see any significant reductions in mercury emissions if utilities are allowed to purchase allowances from out of state.

As DEP knows very well, the mercury removal achieved as a cobenefit of SO_x and NO_x control equipment installed for compliance with the companion Clean Air Interstate Rule (CAIR) will result in dramatic mercury emission reductions. According to DEP's own estimates, 90 percent of Pennsylvania's generating capacity will have some type of CAIR control technology by 2015.

Indeed, DEP officials have claimed repeatedly that their proposed state regulation does not mandate any mercury-specific controls, saying utilities will be able to meet the state specific standards without using technology beyond what is used to comply with CAIR.

Electric utilities, who are by far our largest customers, have told us that without a mercury trading and banking program, their options to comply with the state regulatory mandate would be to prematurely retire those older, smaller coal-fueled units in which investments in control technologies would be uneconomic, or switch to coals with a lower mercury content mined outside the state.

The loss of this capacity will obviously disrupt Pennsylvania coal production and jobs and have an impact on retail electricity prices and expenditures across all sectors – residential, industrial and commercial.

100 Percent Bituminous Coal Preference

PCA does not agree with the Department that the preference for use of 100 percent bituminous coal in its proposal will preserve Pennsylvania coal's share of the utility market and protect its mining jobs.

Pennsylvania bituminous coals have on average the highest mercury concentration of all coals in the United States and twice as much on average as bituminous coals produced in West Virginia and Kentucky. The Department's attempt to impose a mercury regulation with a preference for bituminous coal combined with the SO₂ and NO_x emissions reductions required under CAIR, may encourage electric utilities to move towards bituminous coals from neighboring states or to western subbituminous coals.

DEP has criticized PCA for using the "average" mercury content in coal as the basis for the state-by-state comparison of mercury levels, maintaining that the "median" mercury content is "more statistically relevant."

DEP is missing the point – neither the median nor the mean (average) is statistically more relevant in this case. The issue here (which DEP doesn't dispute) is the comparative mercury contents of coals in Pennsylvania and neighboring states, and, compared on the mean or the median, Pennsylvania coals are much higher.

The 100 percent bituminous preference may not even be a meaningful benefit.

That is because the compliance presumption applies only to the emission standard in the rule. However each generator also is required to meet a separate annual emission cap (i.e., ounces of mercury emitted by the facility). If it exceeds its cap but is presumed to be in compliance with the emission standard, the utility may petition DEP for additional mercury allowances from a hypothetical surplus allowance pool managed by the Department.

Without a surplus allowance pool, a facility could be presumed to be in compliance with the state emission standard but still be in violation of the federal cap.

The surplus allowances, if they exist at all, would have to come from facilities that over comply, and would allow emissions above the cap at facilities that fail to comply. This proposal offers no assurance that there will be adequate allowances available in the pool. Unlike the federal cap-and-trade program, the DEP proposal gives generators no incentive to over comply. In fact, there is a disincentive because the overcompliance by a given source could benefit its competitors.

Furthermore, the modeling data used by DEP in assuming the existence of a surplus pool were based on coal samples from only 14 of Pennsylvania's 36 coal-fired power plants, hardly a statistically valid basis, and on emission control measurements at only 7 facilities with CAIR-type controls with results that are inconsistent with extensive data provided to DEP by DOE, PCA and others during the stakeholder process.

We encourage the Board to review the data and methodology used by the Department to support its assumptions to determine if they provide a sound and valid basis for Pennsylvania to proceed with such a rulemaking.

Status of Technology

Mercury specific control technology is still a work in progress. This is clear from information presented by DOE, by the technology vendors and by PCA during the stakeholder meetings. What is of particular concern to PCA is evidence presented by the technology vendors showing that the application of mercury specific technologies to high sulfur eastern bituminous coals, such as those mined in Pennsylvania, may result in emissions reductions substantially poorer than with western subbituminous coals.

DOE, in clarifying its perspective on the status of mercury control technologies said that, "there remain a number of critical technical and cost issues that need to be resolved through additional research before mercury control technologies can be considered commercially available for all U.S. coals and the different coal-fired power plant configurations in operation in the United States." While this concern is being addressed through further research and field tests, only four

out of the 19 full-scale tests to date were conducted using high-sulfur bituminous coal and only two of 15 scheduled tests will use this type of coal.

Cost Benefit Analysis

The federal rule is a stringent rule. It sets a mercury cap that corresponds to 85% control of mercury from Pennsylvania sources in less than 4 years, and 93% mercury control at full implementation. Before the Department adopts this regulation which is more stringent than the corresponding federal standard, it should be required to document a compelling reason for such unilateral action. Therefore, the PCA asks the Board to require that the Department do a quantitative cost-benefit analysis comparing its proposal and the federal CAMR to determine the incremental costs and public health benefits of going beyond the federal rule.

The documentation included in the "Benefits, Costs and Compliance" section of DEP's proposal falls short because it does not demonstrate that there is any public health benefit for the State to go beyond the federal rule in controlling mercury emissions from Pennsylvania sources.

If the state's industry, workforce and ratepayers are being asked to carry a greater share of this regulatory burden than those in other states, they should be convinced that there will be measurable additional public health benefits under the state regulation that justifies any additional costs.

Based on these reasons, PCA respectfully opposes this proposed rule and asks the Board to replace it with the federal rule.

Thank you for the opportunity to provide PCA's comments on this very critical issue. I will be happy to respond to any questions.

Testimony
Of the
Pennsylvania Coal Association

Before the
PENNSYLVANIA ENVIRONMENTAL QUALITY BOARD

Regarding
Proposed Amendments to 25 Pa. Code Chapter 123
Standards for Containments; Mercury
36 Pa.B.3185
Saturday, June 24, 2006

By Frank Burke

RECEIVED
2006 AUG -2 PM 2:41
INDEPENDENT REGULATION
REVIEW COMMISSION

July 25, 2006
DEP Southwest Regional Office
Pittsburgh

Good afternoon. My name is Frank Burke. I am here today representing CONSOL Energy Inc. and am speaking on behalf of the Pennsylvania Coal Association (PCA), of which CONSOL is an active member.

PCA is a trade organization representing bituminous coal operators – both underground and surface – as well as other associated companies whose businesses rely on a thriving coal economy. PCA member companies produce over 75 percent of the bituminous coal annually mined in Pennsylvania.

We thank the Board for this opportunity to provide our perspective on regulating mercury emissions from Pennsylvania's coal-fired power plants. This is a very critical issue for PCA member companies since the outcome of this regulatory action will significantly affect the major market for Pennsylvania coal.

The proposed rulemaking (PRM) would impose mercury emission controls intended to achieve a 90 control level for mercury in emissions by 2015 on Pennsylvania's coal-fired electric generating units (EGUs), which total around 20,000 megawatts of capacity.

For the reasons listed below, PCA opposes the proposed regulation and, as an alternative, recommends that the Board consider adopting the federal Clean Air Mercury Rule (CAMR).

Background

Pennsylvania is the fourth leading coal producing state, mining 72.7 million tons last year with a workforce of almost 7,000 employees. Almost 80 percent of this output came from 46 underground mines and the remainder from 347 surface mining and reprocessing sites.

Coal has been and will continue to be the major fuel of choice for electricity generation. More than fifty percent of the United States' electricity is generated by coal and coal accounted for 56 percent of the total amount of electricity produced in Pennsylvania last year. Persistent high natural gas and oil prices and capacity limitations at nuclear plants will favor greater coal utilization to fuel the projected increases in electricity demand. Simply put, there is no other energy source that can produce electricity in that quantity at such a low cost for many years in the future. If Pennsylvanians are to continue to enjoy a reliable and affordable supply of electricity the Commonwealth must continue its reliance on coal.

In addition, coal is by far the least expensive fossil fuel on a dollar per million Btu basis for electric generation. While natural gas prices have increased 150 percent in just the last four years, coal remained much less expensive and far more reliable. In 2005, the average cost of natural gas was \$8.33 per million Btu. The cost for coal was \$1.54 per million Btu.

As you would expect, the coal market for electricity generation is by far the largest customer for Pennsylvania coal. About 70 percent of Pennsylvania's annual coal production goes to the electric utility sector, principally but not exclusively to PA coal-fired power plants.

Of the 52 million tons of coal consumed by PA's electric utilities in 2003, 34 million tons was mined in PA, about 50 percent of our total production. Clearly, preservation of this market is essential to the continued viability of the PA coal industry.

PCA supported the PA law that deregulated the electric utility industry because we believed that competition would place a premium on cost-effectiveness and reliability. As generation becomes more and more competitive, the future would belong to the lower cost fuel source, which in any scenario, would be coal.

However, competition depends on the existence of a level playing field on which various fuel options can equally compete. Unfortunately, this is not always the case, particularly given the unevenness and uncertainty surrounding air quality regulations.

For example, if PA's air quality standards are more onerous than standards adopted by other states or nationally uniform standards, it can make PA coal more expensive to burn because of compliance costs or impossible to use because of non-compliance with the tougher rules, thereby destroying coal's competitiveness in the "customer choice" electricity market. Of equal concern is a federal rule that unfairly gives one coal rank preference over another.

A utility's options to comply with such unilateral state regulatory action are to switch fuels, buy compliance coal from out-of-state mines or purchase coal based electricity generated in other states. The consequences of any of these actions is the premature closing of PA coal-fired plants, particularly older units, and the potential loss of the PA coal industry's major customer base.

It is therefore essential that, absent a compelling state-specific need, the air quality standards that PA's electric utilities must meet are the same as or substantially equivalent to federal mandates governing all utilities. Anything less will bias a significant part of the steam coal market against Pennsylvania coal.

A case in point is the mercury control issue.

Throughout the development of mercury control regulation and legislation, PCA has worked towards establishing a program that balances public health concerns with economic interests. We believe it is possible to put in place a regulatory program that minimizes the public health risks of mercury exposure while preserving, to the maximum extent possible, the economic competitiveness of Pennsylvania coal as a source of electricity and the jobs of coal miners and other workers employed at mining-related industries.

Given the high content of mercury in Pennsylvania coals and the unavailability of mercury control technology, we recognized that any attempt to curb mercury emissions at coal-fueled power plants, including the federal rule and state regulation, could offer the potential for disrupting coal markets and employment. We, therefore, sought to pursue all appropriate remedies on the federal and state levels to minimize the potential for displacement of Pennsylvania coal and loss of jobs.

In this regard, PCA supported the federal Clean Air Mercury Rule (CAMR) and its cap and trade program with one exception – the mercury allowance allocations provision that disadvantaged eastern coal.

Essentially, the allowance allocations adjustment factor inflates the allowance allocations of electric generating units (EGUs) that use subbituminous or lignite coals. Since EPA combines

all of the allowances for each unit within a state in calculating each state's mercury emissions "budget," states where utilities primarily use subbituminous or lignite coals (e.g., Texas and Wyoming) have substantially higher mercury emission budgets than states like Pennsylvania, where bituminous coal is used by the state's coal-fired EGUs.

Simply put, the provision allows units that burn subbituminous coal to emit more mercury than those burning bituminous coal.

To address this provision and with the knowledge and encouragement of DEP Secretary Kathleen McGinty, PCA joined with six other state coal associations, bituminous coal operators and the UMWA in filing a lawsuit. The lawsuit is narrowly focused on challenging only the allowance allocation adjustment factor; it is not designed to overturn the entire rule.

We remain concerned about the effects of the allowance allocation provision on Pennsylvania coal and jobs. We have always agreed with DEP that this facet of the federal rule - requiring more stringent standards for bituminous coal mined in the east - puts Pennsylvania coal at a competitive disadvantage. However, we strongly believe that we'll prevail in court.

In the meantime, PCA has maintained its support of the federal rule's other provisions, and particularly its program of interstate allowance trading and banking.

PCA has not and does not support the Pennsylvania mercury PRM. Our view sharply differs with the Department's contention that its proposal encourages use of Pennsylvania coal and protects coal jobs.

In trying to justify its assertion, DEP mistakenly uses the phrase "bituminous coal" and "Pennsylvania coal" interchangeably. While Pennsylvania coal is mostly bituminous coal, bituminous coal is much more inclusive in that most of the coal produced east of the Mississippi would qualify under the proposed rule's bituminous preference.

Despite our repeated requests, the Department has not done a detailed analysis of its key assumptions or documented its claim that the rule preserves the state's coal market and jobs and would not lead to the displacement of our coal with its high mercury content with bituminous coal mined in neighboring states with much lower mercury levels.

On the contrary, the ban on trading and banking is a prescription for retirement of aging coal plants and the 100 percent bituminous compliance presumption may, at best, be an illusion and, at worse, an inducement for Pennsylvania's EGUs to burn bituminous coal mined outside the Commonwealth.

Our opposition to DEP's proposed regulation is based on a number of factors, all relating to our objective to preserve, to the maximum extent possible, mining jobs and Pennsylvania coal's share of the electric generation market. These factors include 1) the proposal's prohibition of allowance trading and banking, 2) its preference for using 100 percent bituminous coal (not exclusively Pennsylvania coal and, given the high level of mercury in our coal, a potential inducement to use coal produced in other states), and 3) the fact that mercury control technology using high sulfur bituminous coal is not available for full-scale commercial use to meet the regulation's stringent limits and accelerated compliance deadline.

Trading

Critics of trading are wrong to assert there are no guarantees that Pennsylvania will see any significant reductions in mercury emissions if utilities are allowed to purchase allowances from out of state.

The mercury removal achieved as a cobenefit of SO_x and NO_x control equipment installed for utility compliance with the Clean Air Interstate Rule (CAIR) will result in dramatic mercury emissions reduction. According to DEP's own estimates, 90 percent of Pennsylvania's generating capacity is expected to have some type of CAIR control technology by 2015.

Indeed, DEP officials have claimed repeatedly that their proposed state regulation does not mandate any mercury-specific controls, saying utilities will be able to meet the state specific standards without using technology beyond what is used to comply with CAIR.

Electric utilities, who are by far our largest customers, have told us repeatedly and unequivocally that without a mercury trading and banking program, their options to comply with the state regulatory mandate would be 1) prematurely retire those older, smaller coal-fueled power plants in which investments in control technologies would be uneconomic, and/or 2) switch to bituminous coal with a lower mercury content mined outside the state. Both options, obviously, would result in significant disruptions to coal markets and jobs.

The units that are most at risk to forced shutdowns without trading are less than 250 megawatts in size and have been in service for over forty years. These units represent 4,100 megawatts or about 21 percent of Pennsylvania's total coal-fired capacity.

The loss of this capacity will obviously disrupt Pennsylvania coal production and jobs and have an impact on retail electricity prices and expenditures across all sectors – residential, industrial and commercial.

100 Percent Bituminous Preference

PCA does not agree with the Department that the preference in its proposal for use of 100 percent bituminous coal will preserve Pennsylvania coals' share of the utility market and protect its mining jobs. Instead, because Pennsylvania coals are comparatively high in mercury and recognizing that bituminous coal is not just produced in Pennsylvania but is also mined in about thirteen other states east of the Mississippi, PCA is concerned that the preference could have the unintended consequence of inducing Pennsylvania's EGUs to buy bituminous coal mined outside the state.

Attached to my testimony is a chart that provides a statistical distribution of coal mercury content by state for the major producing states in the east and also some in the west. It shows that Pennsylvania coals have on average the highest mercury concentration measured in pounds per trillion Btu of all coals in the eastern United States and twice as much on average as coals produced in West Virginia and Kentucky.

The Department's attempt to impose its own mercury regulation with a preference for bituminous coal combined with the mandated SO₂ and NO_x emissions required under CAIR, may force electric utilities to move towards bituminous coals that are lower in mercury and sulfur content. Those coals just happen to be plentifully available in West Virginia and eastern Kentucky.

DEP has criticized PCA for using the "average" mercury content in coal as the basis for the state-by-state comparison of mercury levels, maintaining without providing any plausible explanation that the "median" mercury content is "more statistically relevant."

DEP is missing the point – neither the median nor the mean (average) is statistically more relevant in this case. The issue here (which DEP doesn't dispute) is the comparative mercury contents of coals in Pennsylvania and neighboring states, and, whether compared on the mean or the median, Pennsylvania coals will be higher.

What is most troubling about DEP's argument is that the number it uses as the median value of the mercury content in Pennsylvania coal (11 lb./TBtu) is based on sampling at only 40 percent of the coal-fired units in Pennsylvania (14 out of 36). This is more of a statistical problem than the distinction between mean and median.

The 100 percent bituminous preference may not even be a benefit that utilities can use in a meaningful way.

Under the Department's proposal, each EGU is required to meet an annual emission limit or cap (i.e., ounces of mercury emitted by the unit) as well as an emission standard (the 80 and 90 percent mercury reduction requirement).

The compliance presumption applies only to the emission standard – i.e., if the unit burns 100 percent bituminous coal and installs certain control technologies, it is presumed to be in compliance only with the emission standard.

However, the unit must also comply with the emission cap. If it exceeds its cap but is presumed to be in compliance with the emission standard, the utility may petition DEP for additional mercury allowances to meet its cap from a supposed surplus allowance pool managed by the Department. These allowances, if they exist at all, essentially will come from units that overcomply. Allowances are awarded on a priority basis, essentially from a unit with the most "controls" to a unit with the least "controls."

The problem with this scenario is that there is no guarantee that there will be excess allowances available in the pool. The modeling data used by DEP in assuming the existence of a surplus pool was based on samples from only 14 of Pennsylvania's 36 coal-fired power plants, hardly a statistically valid sample, and on emission control assumptions that are at odds with extensive data provided to DEP. Without an allowance pool, an EGU could be presumed to be in compliance with the state emission standard but, by not meeting its cap, be in violation of the federal cap. We encourage the Board to review the data used by the Department to support its assumptions to determine if it's a sound and valid basis for Pennsylvania to proceed with such a rulemaking.

Status of Technology

Mercury specific control technology, particularly its use with high sulfur eastern bituminous coals, is still a work in progress.

Only four out of the 19 full-scale tests to date were conducted using high-sulfur bituminous coal and only two of 15 scheduled tests will use this type of coal. And, the preliminary results of the test cases that used high-sulfur coal found the technology to perform more poorly than with western subbituminous coals.

DOE, in clarifying its perspective on the status of mercury control technologies said that, "there remain a number of critical technical and cost issues that need to be resolved through additional research before mercury control technologies can be considered commercially available for all U.S. coals and the different coal-fired power plant configurations in operation in the United States."

Cost Benefit Analysis

PCA asks the Board to request that the Department do a cost-benefit analysis of its proposal and CAMR to determine the incremental costs and public health benefits of going beyond the federal rule.

If the Department wants to adopt this regulation which is more stringent than the corresponding federal standard and consequently could place the state's economy in a competitive disadvantage with other states, it should at least be required to document a compelling reason for such unilateral action.

The documentation included in the "Benefits, Costs and Compliance" component of this regulatory package to justify the proposal is limited and obviously selective.

If the state's industry, workforce and ratepayers are being asked to carry a greater share of this regulatory burden than those in other states, they should be convinced that there will be measurable additional public health benefits under the state regulation that justifies any additional costs.

Based on these reasons, PCA respectfully opposes this PRM and asks the Board to replace it with the federal rule.

Thank you for the opportunity to provide PCA's comments on this very critical issue. I will be happy to respond to any questions.