THE STATE OF WYOMING

MIKE SULLIVAN
GOVERNOR

Department of Environmental Quality

Herschler Building • 122 West 25th Street • Cheyenne, WY 82002

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December 22, 1993

Douglas M. Skie, Chief
Air Branch
U.S. EPA Region VIII
999 18th Street Suite 500
Denver, CO 80202-2405

RE: Powder River Basin MOA

Dear Doug:

Please find enclosed two (2) signed original copies of the Powder River Basin MOA which have been revised in accordance with instructions received from Sara Summers. Please replace the two (2) copies in the MOA package submitted under my letter dated December 2, 1993.

I request that one copy of the MOA bearing original signatures be returned upon execution by EPA.

Sincerely,

Chuck

Charles A. Collins
Administrator
Air Quality Division

CAC/ss

MEDICINE BOW
EXHIBIT I
PRE-HRG MEMO

MEMORANDUM OF AGREEMENT ON PROCEDURES FOR PROTECTING PM_{10} NAAQS IN THE POWDER RIVER BASIN

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MEMORANDUM OF AGREEMENT ON PROCEDURES
FOR PROTECTING PM_{10} NAAQS IN THE
POWDER RIVER BASIN

1.0 Purpose

The purpose of this agreement is to document the rationale and procedures to be followed by the State of Wyoming and EPA in protecting the National Ambient Air Quality Standards (NAAQS) for PM_{10} within the Powder River Basin in Wyoming. The approach outlined in this agreement is based on continued ambient air quality monitoring, rather than the implementation of a 30-year life-of-mine modeling study.

2.0 Background

A review of the PM_{10} ambient monitoring data from the Powder River Basin, and of related actions taken by the State and the coal companies, supports EPA's view that these actions have proven successful in maintaining the PM_{10} NAAQS in this region. Other factors that have been taken into account, in support of our position, include: 1) the fact that DEQ is including in all permits explicit language identifying best available work practices (BAWP) to implement in the Powder River Basin coal mines, 2) the DEQ is using necessary enforcement to ensure that BAWP are and will continue to be implemented, and 3) the probability of future PM_{10} NAAQS violations in the area appear to be small.

3.0 Compliance

For these reasons, EPA believes it is appropriate to continue ambient monitoring in place of a 30-year life-of-mine study, provided there are no violations of the PM_{10} NAAQS. In a letter to EPA dated June 30, 1992, DEQ submitted a proposed ambient monitoring network for the Powder River Basin. This letter reflected an agreement reached between the EPA and DEQ in a meeting on May 20, 1992. This agreement remains in effect, except as amended by the procedure outlined below. If a PM_{10} exceedance is monitored, the following procedures would become effective:

Procedure I

In the event of an exceedance of the PM_{10} NAAQS or Prevention of Significant Deterioration (PSD) increment in the Powder River Basin, the State expeditiously uses all necessary compliance tools, including enforcement of Best Available Work Practice (BAWP) requirements in the State permits, to eliminate the likelihood of future exceedances of the PM_{10} NAAQS or PSD increment caused by the contributing source(s).

Procedure II

If, in the opinion of the EPA, the State does not initiate timely and appropriate action to address these exceedances, or if timely State action does not effectively resolve the issue of exceedances (i.e., a violation of the PM_{10} NAAQS results following the timely and successful completion of any corrective action required by the State), the EPA will reevaluate the need for the State to implement a 30-year life-of-mine study.

In order for EPA to pursue this approach, the State must agree in writing to the requirements outlined below for best available work practices at mines, enforcement, and PSD increments, and with the monitoring requirements summarized in Section 4.0 below.

4.0 Ambient Air Monitoring

The State will oversee the ambient monitoring networks operated by the mines in the Powder River Basin. The State will ensure that the items in the State-EPA Agreement pertaining to the State's ambient monitoring requirements will apply to the Powder River Basin ambient monitoring network. Attainment of the primary and secondary NAAQS for PM_{10} in the Powder River Basin will be based on 40 CFR 50.6. The required minimum frequency of sampling for PM_{10} will be based on 40 CFR 58.13. Violations will be determined by the calculation in 40 CFR, Part 50, Appendix K. The ambient monitoring network will be maintained according to the June 30, 1992 DEQ letter to EPA.

5.0 Best Available Work Practices

The State has informed the EPA that each of the mines within the Powder River Basin have incorporated BAWP into their mining permits. In order to take action on the "ambient air" State Implementation Plan (SIP) among other things, EPA will require verification from the State that the mines are in fact employing BAWP; therefore, please provide EPA with the following:

1) a summary of best available work practices for each mine; and
2) a description of what State regulation provides you the authority to require and enforce best available work practices.

6.0 Enforcement

The State must provide a written opinion from the State's Attorney General that the State does have the authority to take enforcement action against mines based upon violations of the PM_{10} NAAQS. The state must provide a description of the enforcement authority and procedures that are available to the State if a violation of the PM_{10} NAAQS is monitored.

7.0 PSD Increments

The issue of increment consumption has been at least temporarily resolved by the establishment of a new Powder River Basin Section 107 baseline area. This designation effectively "untriggers" the minor source baseline date in the Powder River Basin 107 area, and thus, emissions from coal mines and other minor sources are no longer consuming increment. Dispersion modeling of coal mines for tracking PSD increment may be required at some time in the future, if a new or modified major stationary source again triggers the minor source baseline date in the Powder River Basin or by January 1, 1996 (per the State's definition of "minor source baseline date"), whichever comes first.

8.0 Conclusion

Approval of the "ambient air" SIP was proposed on August 26, 1992 and has not yet been finalized. If this MOA is acceptable to the State and you agree to the conditions set forth in this letter, EPA will issue a supplemental notice of proposed rulemaking concerning our decision to allow ambient monitoring in lieu of the 30-year life-of-mine study. We would then initiate the supplemental rulemaking action on the SIP by the end of FY93. Final rulemaking should occur by spring of 1994. In the interim, the procedures currently in place will remain in effect. If the State and EPA do not reach agreement regarding this MOA, the EPA will finalize its August 26, 1992 proposal.

9.0 Signatures

Dennis Hemmer, Director
Department of Environmental Quality Date: 12-22-93

Patricia D. Hull, Director
Air, Radiation and Toxics Division Date: _____

THE STATE OF WYOMING

Attorney General

MIKE SULLIVAN
GOVERNOR

JOSEPH B. MEYER
ATTORNEY GENERAL

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December 3, 1993

Ms. Patricia D. Hull, Director
Air, Radiation & Toxics Division
U.S. EPA Region VIII
999 18th Street--Suite 500
Denver, CO 80202-2466

Re: Enforcement of PM_{10} Ambient Air Quality Standards in the Powder River Basin

Dear Ms. Hull:

The purpose of this letter is to set forth the enforcement authority of the State of Wyoming as required under Section 6 of the Memorandum of Agreement on Procedures for Protecting PM_{10} NAAQS in the Powder River Basin. Based on a review of the Wyoming Air Quality Standards and Regulations ("*WAQSR*") and the Wyoming Environmental Quality Act ("*WEQA*"), it is my opinion that Wyoming has the necessary authority to bring an enforcement action against mines in the Powder River Basin for any violations of the PM_{10} NAAQS.

In general, Section 201 of the WEQA prohibits the "discharge or emission of any air contaminant in any form so as to cause pollution which violates rules, regulations and standards . . . ." W.S. § 35-11-201. Section 3(a) of the WAQSR establishes the ambient standards for particulate matter at 50 micrograms per cubic meter for the annual arithmetic mean and 150 micrograms per cubic meter for a 24-hour average concentration with not more than one expected exceedance per year. The regulation further specifies the use of Appendix K of 40 C.F.R. Part 50 to determine attainment of the standards. WAQSR § 3(a)(iii).

Violations of these ambient standards for particulate matter are enforceable under the WEQA. Section 701 allows the Director of the Department of Environmental Quality to issue a Notice of Violation when he has evidence of a violation of any rule, regulation or standard, such as Section 3 of the WAQSR. W.S. § 35-11-701. Section 901 of the WEQA provides for civil penalties and injunctive relief against "any person who violates . . . any rule, regulation [or] standard . . . ." W.S. § 35-11-901(a). The person is subject

to a penalty of a maximum of ten thousand dollars ($10,000) for each day the violation continues. *Id.* Criminal penalties of up to a maximum of twenty-five thousand ($25,000) for each day of the violation and imprisonment of not more than one (1) year are available against any person "who willfully and knowingly violates" a rule, regulation or standard. W.S. § 35-11-901(j).

In summary, Wyoming law establishes the NAAQS for PM_{10} as enforceable standards through Section 3 of the WAQSR and Section 201 of the WEQA, W.S. § 35-11-201. The WEQA, in turn, provides a range of enforcement options for addressing any violation of the PM_{10} NAAQS caused by a mine in the Powder River Basin. If, however, you have any questions about the authorities discussed above or require additional information regarding Wyoming's ability to enforce the PM_{10} standards, please do not hesitate to contact me.

Sincerely,

Mary A. Throne

Mary A. Throne
Assistant Attorney General

cc: Dennis Hemmer, Director--Wyoming DEQ
Charles A. Collins, Administrator--Wyoming AQD

105TH CONGRESS
1st Session

COMMITTEE PRINT

COMMITTEE PRINT 105-L

COMPILATION OF SELECTED ACTS WITHIN THE JURISDICTION OF THE COMMITTEE ON COMMERCE

As Amended Through December 31, 1996

ENVIRONMENTAL LAW

VOLUME 1

INCLUDING

CLEAN AIR ACT

CLEAN AIR ACT AMENDMENTS OF 1977 (PUBLIC LAW 95–95)

SELECTED PROVISIONS OF THE ENERGY SECURITY ACT (PUBLIC LAW 96–294)

CLEAN AIR ACT AMENDMENTS OF 1990 (PUBLIC LAW 101–549)

SECTION 348 OF THE NATIONAL HIGHWAY SYSTEM DESIGNATION ACT OF 1995 (PUBLIC LAW 104–59)

PREPARED FOR THE USE OF THE

COMMITTEE ON COMMERCE
U.S. HOUSE OF REPRESENTATIVES

APRIL 1997

37–008 cc

U.S. GOVERNMENT PRINTING OFFICE
WASHINGTON : 1997

SEC. 234. FUGITIVE DUST.

(a) Prior to any use of the Industrial Source Complex (ISC) Model using AP–42 Compilation of Air Pollutant Emission Factors to determine the effect on air quality of fugitive particulate emissions from surface coal mines, for purposes of new source review or for purposes of demonstrating compliance with national ambient air quality standards for particulate matter applicable to periods of 24 hours or less, under section 110 or parts C or D of title I of the Clean Air Act, the Administrator shall analyze the accuracy of such model and emission factors and make revisions as may be necessary to eliminate any significant over-prediction of air quality effect of fugitive particulate emissions from such sources. Such revisions shall be completed not later than 3 years after the date of enactment of the Clean Air Act Amendments of 1990. Until such time as the Administrator develops a revised model for surface mine fugitive emissions, the State may use alternative empirical based modeling approaches pursuant to guidelines issued by the Administrator.".

* * * * * * *

SEC. 303. RISK ASSESSMENT AND MANAGEMENT COMMISSION.

(a) ESTABLISHMENT.—There is hereby established a Risk Assessment and Management Commission (hereafter referred to in this section as the "Commission"), which shall commence proceedings not later than 18 months after the date of enactment of the Clean Air Act Amendments of 1990 and which shall make a full investigation of the policy implications and appropriate uses of risk assessment and risk management in regulatory programs under various Federal laws to prevent cancer and other chronic human health effects which may result from exposure to hazardous substances.

(b) CHARGE.—The Commission shall consider—

(1) the report of the National Academy of Sciences authorized by section 112(o) of the Clean Air Act, the use and limitations of risk assessment in establishing emission or effluent standards, ambient standards, exposure standards, acceptable concentration levels, tolerances or other environmental criteria for hazardous substances that present a risk of carcinogenic effects or other chronic health effects and the suitability of risk assessment for such purposes;

(2) the most appropriate methods for measuring and describing cancer risks or risks of other chronic health effects from exposure to hazardous substances considering such alternative approaches as the lifetime risk of cancer or other effects to the individual or individuals most exposed to emissions from a source or sources on both an actual and worst case basis, the range of such risks, the total number of health effects avoided by exposure reductions, effluent standards, ambient standards, exposures standards, acceptable concentration levels, tolerances and other environmental criteria, reductions in the number of persons exposed at various levels of risk, the incidence of cancer, and other public health factors;

(3) methods to reflect uncertainties in measurement and

RJS

STATE OF WYOMING

MIKE SULLIVAN
GOVERNOR

Department of Environmental Quality

Herschler Building • 122 West 25th Street • Cheyenne, Wyoming 82002

Administration	Air Quality Division	Land Quality Division	Solid Waste Management Program	Water Quality Division
(307) 777-7937	(307) 777-7391	(307) 777-7756 FAX (307) 634-0799	(307) 777-7752	(307) 777-7781 FAX (307) 777-5973

June 30, 1992

Douglas M. Skie, Chief
Air Programs Branch
U.S. EPA - Region VIII
One Denver Place
999 18th Street, Suite 500
Denver, Colorado 80202-2405

RE: Powder River Basin Monitoring Network
Final Monitoring Plan

Dear Doug:

The Division will initiate the following changes in the existing Powder River Basin Monitoring network as agreed upon in our May 20, 1992 meeting. It is our understanding that these changes satisfy your concerns for maximum concentration monitoring sites and Quality Assurance (QA) practices in the Powder River Basin. These proposed changes are contingent upon "on the ground" restrictions as determined by on site physical inspections of the proposed monitoring sites. The monitoring site proposals may be altered following inspection of the proposed sites. The siting is detailed in Attachment I.

My understanding of the requirements for quality assurance programs for the TSP/PM10 monitoring and the meteorological monitoring is that your staff will work with Bob Schick to determine the elements that must be addressed in the QA documents. This process has already been completed, and the necessary QA requirements have been transmitted to the mines. A copy of the transmittal letter is enclosed with this letter as Attachment II. The Division and EPA will perform a concurrent review of the documents to determine the acceptabilty of the plans upon receipt of the QA progams from the mines.

As you well know, the PRB monitoring network is not a fixed network given the mobility of the mining operations. As the mining progresses, the monitoring network must change. I trust, following our May 20, 1992 meeting, you and your staff have some confidence in our ability to site monitors in the PRB given the complexity of issues in the Powder River Basin. I will direct Bob Schick to notify the proper EPA personnel of changes in monitoring site locations, however I will not wait for EPA approval of monitoring site changes. These decisions will be made in finality on the State level.

Your staff admitted during the May 20, 1992 meeting, there is nowhere else in this country where EPA is dictating monitor siting requirements as in the Powder River Basin. This has been a long and painful process for me, my staff, and the Wyoming mining community. I will initiate the above described modifications to the PRB monitoring network, but I will only initiate the requirements upon reading the EPA's proposed approval of the "ambient air" SIP in the Federal Register.

Should you have any questions, please feel free to contact this office.

Sincerely,

Charles A. Collins
Administrator
Air Quality Division

cc: Dennis Hemmer
Richard Schrader
Bob Schick
Bernie Dailey

Attachment I

1) Triton Coal Company - Buckskin Mine

The Division will initiate the EPA proposed move of the southern monitoring site to the W½ of Section 33, T52N, R72W. This will involve a redefinition of the "lands necessary to conduct mining" for Triton Coal Company. The remaining monitoring site will continue operation at the existing location.

2) Carter Mining Company - Rawhide Mine

Sites deemed adequate; no moves proposed. The site EPA proposed to move will be retained for historical data base.

3) AMAX Coal Company - Eagle Butte Mine

The Division will initiate the EPA proposed move of the southern monitoring site to a site immediately adjacent to Highway 59, southeast of the mining operations, that will be defined as "ambient air", until such time the Highway is relocated. The remaining monitoring sites will continue operation at the existing locations.

4) Dry Fork Coal Company - Dry Fork Mine

The Division will initiate the EPA proposed move of the northern site to the SW¼ of Section 25, T51N, R71W. This site will serve as a maximum concentration site for both Dry Fork Coal Company and Carter Mining. The remaining monitoring site will continue operation at the existing location.

5) Fort Union Coal Company - Ft. Union Mine

The Division will agree to move monitor from Section 4 to the SW1/4 of Section 34, T51N, R71W. This is a very low priority move because of the existing mining rates. The production rates for 1990 and 1991 were in the range of 50,000 tons of coal. The Division will initiate the requirement to move only when mining reaches a 1 MMTPY rate. The remaining monitoring site will continue operation at the existing location.

6) Wyodak Resources - Wyodak Mine

Sites deemed adequate; no moves proposed.

7) Carter Mining Company - Caballo Mine

Sites deemed adequate; no moves proposed per May 20, 1992 meeting.

8) AMAX Coal Company - Belle Ayr Mine

Sites deemed adequate; no moves proposed per May 20, 1992 meeting.

9) Caballo Rojo Inc. - Caballo Rojo Mine

Sites deemed adequate - no moves proposed per May 20, 1992 meeting.

10) Cordero Mining Company - Cordero Mine

Sites deemed adequate - no moves proposed per May 20, 1992 meeting.

11) Thunder Basin Coal Company - Coal Creek Mine

Sites deemed adequate; no moves proposed

12) Kerr McGee Coal Company - Jacobs Ranch Mine

Sites deemed adequate; no moves proposed

13) Thunder Basin Coal Company - Black Thunder Mine

The Division will initiate moving the Section 36 monitor to move to NW of Section 1, T42N, R70W. The remaining monitoring site will continue operation at the existing locations.

14) Shell Mining Co. - North Rochelle Mine

Sites deemed adequate; no moves proposed. Sites within lease boundary.

15) Powder River Coal Company - Rochelle and North Antelope Mines

Sites deemed adequate; no moves proposed.

16) Antelope Coal Company - Antelope Mine

The Division will initiate the EPA proposed move for the site from Section 21 to Section 3 on ambient air boundary. The remaining monitoring sites will continue operations at the existing locations.

ATTACHMENT II

STATE OF WYOMING

MIKE SULLIVAN
GOVERNOR

Department of Environmental Quality

Herschler Building • 122 West 25th Street • Cheyenne, Wyoming 82002

Administration	Air Quality Division	Land Quality Division	Solid Waste Management Program	Water Quality Division
(307) 777-7937	(307) 777-7391	(307) 777-7756 FAX (307) 634-0799	(307) 777-7752	(307) 777-7781 FAX (307) 777-5973

June 30, 1992

Reference: Quality Assurance Plans for the Powder River Basin Coal Companies Particulate Monitoring Network(s).

Dear :

The Air Quality Division (AQD) is required to submit to the Environmental Protection Agency (EPA) all ambient air monitoring data gathered in the Powder River Basin (PRB) in order to demonstrate compliance with the National Ambient Air Quality Standards (NAAQS) for inhalable particulate matter (PM-10). In addition to the quarterly submittal of all PRB ambient air monitoring data, information concerning the operation of each PRB coal companies particulate monitoring network was also required.

This monitoring network information was provided to EPA in response to their PRB monitoring network concerns on two separate occasions during the past two years. These submittals have addressed and answered most of EPA's PRB ambient air monitoring network concerns. However, before the PRB ambient air monitoring network(s) can be completely approved by EPA, a major quality assurance (QA) deficiency must be addressed.

All ambient air monitoring networks operated by the coal companies in the PRB are recognized by both the AQD and EPA as industrial monitoring networks which are operated in accordance with State and Local Air Monitoring Site (SLAMS) monitoring requirements. One of the SLAMS requirements calls for a written QA Plan. Therefore, each network operator in the PRB will be required to prepare a documented QA Plan.

Each mines QA Plan must document and describe the network activities listed on the enclosure titled - Powder River Basin Coal Mine(s) Air Monitoring and Meteorological Network Quality Assurance Documentation Requirements. As an aid in the preparation of your QA document you will find a copy of the EPA document Guidelines and Specifications for Preparing Quality Assurance Project Plans.

QA Plans are to be submitted to the AQD for review and approval. These plans are also subject to the review and approval of EPA. Both the AQD and EPA review and approval processes will be coordinated in such a manner that they should take place at approximately the same time, provided all of the QA documentation requirements are met.

To complete the QA review process, with our goal being the complete AQD and EPA PRB ambient air monitoring network(s) approval by the end of this year, I am requiring that your air monitoring network QA plan be submitted to the AQD by September 1, 1992.

Should you have any questions or if you need further information on what is required, please contact Robert Schick at 777-7391.

Sincerely,

Charles A. Collins, Administrator
Air Quality Division

CAC/rjs

Enclosures

cc: Richard Schrader - AQD - Sheridan (enclosures)

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION

Memorandum

TO: Powder River Basin Coal Mine Operators

THROUGH: Dan Olson, Administrator, Air Quality Division

FROM: B. Dailey, NSR Program Manager, Air Quality Division

DATE: May 4, 2005

RE: PRB Coal Mine Permitting Guidance

The following guidance is offered for preparation of permit applications for coal mines in the Powder River Basin (PRB). This memo is to provide applicants guidance with respect to the Division's permit application expectations due to increased particulate levels and on going development in the PRB. The information required per this guidance is in addition to the information that has been submitted with previous permit applications. Permit applications for revisions to the existing mines or for new mines in the PRB must address the following items:

Dispersion Modeling:

→ A modeling analysis is required for annual PM_{10} and NO_x with the following considerations:

- ISCLT3 or other EPA guideline model required.
- Meteorological data in the form of a joint frequency distribution (JFD) will be provided by the Division for each group of mines.
- PM_{10} and NO_x modeling analyses will include neighboring/regional sources.
- PM_{10} modeling analysis will consider model receptors on the LNCM border.
- NO_x modeling analysis will consider model receptors on the LNCM border, as well as a general receptor grid, based on applicant's significance area.
- A NO_x significance analysis shall be submitted, which includes emissions from NO_x sources at the mine, including the rail loop(s), to develop the 1 microgram/cubic meter annual NO_x isopleth using a 500-meter resolution (receptor spacing). The receptors which fall inside of the 1 microgram/cubic meter isopleth constitute the general receptor grid.
- Utilize the "Mine A/Mine B" policy for reporting annual PM_{10} and annual NO_x impacts.

- Provide a listing of the concentrations from each group of mines; identify the receptors where the maximum Mine A/Mine B impacts occur in the concentration plots.

➔ Submission of a table of point, area, and volume sources for each mine that were included in the modeling analysis. Related information shall include:

- Emission rates for each modeled pollutant in gram/sec, lb/hr, and ton/year quantities.
- Source locations in Universal Transverse Mercator (UTM) coordinates, including UTM Zone, UTM (X), UTM (Y), and Base Elevation.
- Source release parameters for all operational scenarios in the permit application:

<u>For Modeled Point Sources:</u>

- Source ID Used in Modeling Analysis
- Stack Emission Rate
- Stack Release Height
- Stack Exhaust Temperature
- Stack Release Velocity
- Stack Exit (Inner) Diameter

<u>For Modeled Area and Volume Sources:</u>

- Source ID Used in Modeling Analysis
- Area Source Emission Rate
- Volume Source Emission Rate
- Source Release Height
- Length of Haul Road segments
- Initial Lateral Dimension (sigma-y) *
- Initial Vertical Dimension (sigma-z) *

* Consult the ISCLT3 User's Guide Volumes I and II for procedures to estimate Area and Volume source dimensions.

Additionally, the applicant shall include a plot of the sources being modeled, including rail loops, haul roads, and mainline rail segments; the segments shall be identified on the plot such that they correspond to the Source ID used in the modeling analyses.

Emission Inventories:

➔ The PM_{10} inventory will basically remain as has been previously done. The only revision should be to include dozer and water truck emissions in all inventories. If an emission factor for an activity is not available in the Wyoming emission factors, utilize AP-42 factors.

➔ The NO_x inventory for surrounding mines, mainline railroads, highways, urban sources (towns), and point sources will be obtained from the 2000 NE Wyoming Inventory Database (Excel format). The NO_x source inventory is through 5/1/01, and the emissions included in the spreadsheet under NAAQS 2000 should be utilized for additional sources. Due to the rapid Coal bed Methane (CBM) development in the PRB, applicants will be required to contact the Division for a current CBM NO_x emissions inventory. The NAAQS 2000 emissions inventory represents potential emissions for the mines and point sources, and actual emissions for the mainline rail, rail loop, highway and urban sources.

- The Wyoming Ambient Air Quality Standards (WAAQS) modeling analysis for NO_x will include emissions due to blasting and diesel-fired mobile sources. Initially, the NO_x emissions data for modeling these sources will be based on the NAAQS 2000 inventory database. As new coal mine permits are issued by the Division, applicants will be required to contact the Division to obtain the most current permit for neighboring mines to supplement the emissions inventory contained in the NAAQS 2000 database.

- Initially, the NO_x emissions from each neighboring mine's rail loop(s) shall be modeled based on the NAAQS 2000 inventory. NO_x emissions from the permit applicant's rail loop(s) shall be scaled to the permitted or proposed coal production rate based on the worst-case year(s) to be modeled. Applicants must provide the scaling ratios used in calculating the rail loop emissions.

- After a neighboring mine acquires a new permit that modifies the NO_x emissions from their rail loops, subsequent applicants will be required to incorporate this new information in their modeling analysis, thereby superceding the rail loop emissions provided in the NAAQS 2000 inventory.

- Regional sources to include in the NO_x modeling analysis will be determined using the rectangular source inventory areas, attached as Figure 1; the UTM coordinates for each of the three rectangular areas are also attached. The NO_x inventory can be searched by UTM coordinates to determine the highway, mainline rail, and urban area sources to be incorporated into the modeling analyses. Applicants are required to contact the Division for a current point source emissions inventory.

- The NO_x emissions from all regional power plants (Neil Simpson I and II, Neil Simpson turbines, WYGEN 1 and 2, Two Elk Unit 1, and Wyodak) must be included in the NO_x modeling for any of the three rectangular source inventory areas.

- All permit applications shall contain the annual inventory parameters for NO_x emission estimation and the NO_x emissions estimates for the life of mine of the mine considered in the application.

- For modifications to existing mines, the permit application should contain an actual NO_x inventory for the mine considered in the application based on the previous calender year.

- The applicant shall submit a complete inventory of diesel- or gas-fired generators that are utilized within the mine seeking a permit. The inventory shall include: make, model, size of the generator, annual hours of operation, and type of service that the diesel- or gas-fired generator is employed, (i.e., light plants, water pumps, etc.). NO_x, PM_{10}, and SO_2 emissions from diesel- or gas-fired generators shall be quantified.

- Contact the Air Quality Division for specific guidance on modeling PM_{10} emissions from diesel-fired combustion sources.

- The applicant shall provide the basis for emissions data for each mine represented in the modeling analyses, (i.e., Powder River Coal Company - Rawhide Mine - AQD Permit MD-703, July 2002).

PM_{10} Background Concentration:

➔ Given the ongoing development in the Powder River Basin (PRB), coal mine applicants will need to submit and justify a background PM_{10} concentration with each permit application.

Short-Term Particulate Standards:

➔ A discussion of ambient air quality monitoring data from the applicant's mine is to be included. This discussion shall include a summary of the data for the previous three (3) years, along with accompanying coal and overburden production statistics. A map showing current locations of ambient and meteorological monitoring sites in relation to pit areas, disturbed acreage, overburden spoils, haul roads, the current LNCM boundary, and proposed LNCM boundary (as applicable) are to be included.

➔ The application should contain a discussion of ambient air quality monitoring data from the designated group of neighboring mines for the previous three years. A demonstration shall be provided to show that modifications to the applicant's mining operations will not cause or contribute to ambient violations at neighboring mine's monitoring sites.

- Historical ambient monitored PM_{10} concentrations can be acquired from the AIRS database. If current monitored data is required, or additional monitored data is required that is not in the AIRS database, the applicant should contact Judy Shamley in the Sheridan field office for additional ambient monitored data.

Equipment Description:

➔ The application should contain the following equipment descriptions:

- A complete list of all major mining equipment, including size, that are utilized by the mine at current production rates. A list of the additional equipment necessary to meet the increased or modified permit levels, including size, is required.
- The number and size of water trucks in use for current production levels, and the frequency that water or dust suppressant controls are applied to the haul roads. Discuss normal operating procedures for water trucks (e.g., the mine has a fleet of 5 water trucks, but they only operate 3 and the remaining 2 are backup equipment). Future plans for additional water trucks as part of any production increase should be addressed.

Open Acreage:

➔ The application must include a discussion of the land status for the current year and for the years modeled. In the discussion, include a table that summarizes disturbed acreage as follows:

- Topsoil stripping (include areas stripped for sediment control and diversions)
- Topsoil piles - assume piles from previous year and current year as disturbed

- Reclaimed areas - assume previous and current year reclamation as disturbed acreage
- Overburden stockpile areas
- Mine facility areas (excluding buildings and treated areas)
- All roads in the mine permit area
- Active coal pit areas

→ Maps are to be submitted that delineate the various disturbance areas and the size of the areas should be noted on the maps. (Areas listed in disturbed acreage table should be included on the maps).

BACT:

→ The application must address the BACT requirements of Chapter 6, Section 2(c)(v). The application shall include a discussion of all dust mitigation measures currently employed at the mine with justification that the measures comply with the BACT requirements of the regulations. Future plans for any additional control strategies or revisions to control strategies, as part of any production increase or mine plan change, should be detailed.

→ The application must include a discussion of the dust control program for the previous three years as well as the current dust control program. The discussion should include the amount of water and chemical dust suppressant applied to treated roads, active work areas, stockpiles, or open acreage. The application should contain a description of the chemical dust suppressant used and the manufacturer's description of recommended application rates. Also, a summary of the total length of roads watered and total length of roads treated with chemical dust suppressants for the previous three years shall be included. A map(s) is to be included that details which roads or areas were watered and which roads or areas were treated with chemicals for the current year. Future plans for any additional control strategies, as part of any production increase or mine plan change, should be detailed.

→ The application should address BACT measures to be employed on open acreage. Reclamation procedures and reclamation rates should be addressed. Potential controls from temporary reclamation or treatment of open areas should be addressed. Future plans for any additional control strategies, as part of any production increase or mine plan change, should be detailed.

→ The application must summarize the dust control measures utilized at the coal preparation plant. Any modifications or new coal preparation facilities will require a demonstration that proposed controls represent BACT. Include documentation that emission sources in the prep plant are compliant with existing permit conditions such as stack tests, opacity observations, etc.

Miscellaneous:

→ Submission of an action plan for those mines that have continuous monitors shall be included. The plan should include strategies to follow in case of high readings. The plan shall consider mitigation practices established to go into effect, if hourly

concentrations are greater than X $\mu g/m^3$ or the 24-hr avg. is greater than Y $\mu g/m^3$, for example.

→ The applicant shall submit a map which identifies the locations of ambient and meteorological monitors at the mine seeking a permit; the coordinate locations of the monitors should also be provided, and referenced using UTM and/or latitude/longitude coordinates. Changes in monitor locations shall be provided in future permit applications.

→ Submission of a mitigation plan dealing with coal fires shall be included. The plan shall include notification and record keeping regarding fires, (i.e., the duration of the fire, when the fire started and how long it took to extinguish it, and what actions were taken to suppress the fire.

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION

Memorandum

TO:	Powder River Basin Coal Mine Operators
THROUGH:	David A. Finley, Administrator, Air Quality Division
FROM:	Bernie Dailey, NSR Program Manager, Air Quality Division
DATE:	February 27, 2006
RE:	PRB Coal Mine Permitting Guidance

The following guidance is offered for preparation of permit applications for coal mines in the Powder River Basin (PRB). This memo is to provide applicants guidance with respect to the Division's permit application expectations due to increased particulate levels and on going development in the PRB. The information required per this guidance is in addition to the information that has been submitted with previous permit applications. Permit applications for revisions to the existing mines or for new mines in the PRB must address the following items:

Dispersion Modeling:

- A modeling analysis is required for annual PM_{10} and NO_x with the following considerations:
- ISCLT3 model required. The use of ISCLT3 for surface mining applications has previously been negotiated and approved by EPA, and therefore meets grand fathering provisions [1].
- Meteorological data in the form of a joint frequency distribution (JFD) will be provided by the Division for each group of mines.
- PM_{10} and NO_x modeling analyses will include neighboring/regional sources.
- PM_{10} modeling analysis will consider model receptors on the LNCM border.
- NO_x modeling analysis will consider model receptors on the LNCM border, as well as a general receptor grid, based on applicant's significance area.
- A NO_x significance analysis shall be submitted, which includes emissions from NO_x sources at the mine, including the rail loop(s), to develop the 1 microgram/cubic meter ($\mu g/m^3$) annual NO_x isopleth using a 500-meter resolution (receptor spacing). The receptors which fall inside the one (1) $\mu g/m^3$ isopleth constitute the general receptor grid.
- Utilize the "Mine A/Mine B" policy for reporting annual PM_{10} and annual NO_x impacts.
- Provide a listing of the concentrations from each group of mines; identify the receptors where the maximum Mine A/Mine B impacts occur in the concentration plots.

→ Submission of a table of point, area, and volume sources for each mine that was included in the modeling analysis. Related information shall include:

→ Emission rates for each modeled pollutant in gram/sec and ton/year quantities.
→ Source locations in Universal Transverse Mercator (UTM) coordinates, including UTM Zone, UTM (X), UTM (Y), Datum (i.e., NAD27, NAD83, ...) and Base Elevation.
→ Source release parameters for all operational scenarios in the permit application:

For Modeled Point Sources:

→ Source ID Used in Modeling Analysis
→ Stack Emission Rate
- Stack Release Height
- Stack Exhaust Temperature
- Stack Release Velocity
- Stack Exit (Inner) Diameter

For Modeled Area and Volume Sources:

- Source ID Used in Modeling Analysis
- Area or Volume Source Emission Rate
- Source Release Height
- Length of Haul Road segments
- Initial Lateral Dimension (sigma-y) *
- Initial Vertical Dimension (sigma-z) *

Note: The applicant shall include a plot of sources being modeled, including rail loops, haul roads, and mainline rail segments.

Emission Inventories:

→ The PM_{10} inventory will basically remain as has been previously done. The only revision should be to include dozer and water truck emissions in all inventories. If an emission factor for an activity is not available in the Wyoming emission factors, utilize AP-42 factors.

→ The NO_x inventory for surrounding mines, mainline railroads, highways, urban sources (towns), and point sources will be obtained from the 2000 NE Wyoming Inventory Database (Excel format). The NO_x source inventory is through 5/1/01, and the emissions included in the spreadsheet under NAAQS 2000 should be utilized for additional sources. Due to the rapid Coal bed Methane (CBM) development in the PRB, applicants will be required to contact the Division for a current CBM NO_x emissions inventory. The NAAQS 2000 emissions inventory represents potential emissions for the mines and point sources, and actual emissions for the mainline rail, rail loop, highway and urban sources.

→ The Wyoming Ambient Air Quality Standards (WAAQS) modeling analysis for NO_x will include emissions due to blasting and diesel-fired mobile sources. Initially, the NO_x emissions data for modeling these sources will be based on the NAAQS 2000 inventory database. As new coal mine permits are issued by the Division, applicants will be required to contact the Division to obtain the most current permit for neighboring mines to supplement the emissions inventory contained in the NAAQS 2000 database.

- Initially, the NO_x emissions from each neighboring mine's rail loop(s) shall be modeled based on the NAAQS 2000 inventory. NO_x emissions from the permit applicant's rail loop(s) shall be scaled to the permitted or proposed coal production rate based on the worst-case year(s) to be modeled. Applicants must provide the scaling ratios used in calculating the rail loop emissions.

- After a neighboring mine acquires a new permit that modifies the NO_x emissions from their rail loops, subsequent applicants will be required to incorporate this new information in their modeling analysis, thereby superseding the rail loop emissions provided in the NAAQS 2000 inventory.

- Regional sources to include in the NO_x modeling analysis will be determined using the rectangular source inventory areas, attached as Figure 1; the UTM coordinates for each of the three rectangular areas are also attached. The NO_x inventory can be searched by UTM coordinates to determine the highway, mainline rail, and urban area sources to be incorporated into the modeling analyses. Applicants are required to contact the Division for a current point source emissions inventory.

- The NO_x emissions from all regional power plants (Neil Simpson I and II, Neil Simpson turbines, WYGEN 1 and 2, Two Elk Unit 1, and Wyodak) must be included in the NO_x modeling for any of the three rectangular source inventory areas.

- All permit applications shall contain the annual inventory parameters for NO_x emission estimation and the NO_x emissions estimates for the life of mine of the mine considered in the application.

- For modifications to existing mines, the permit application should contain an actual NO_x inventory for the mine considered in the application based on the previous calender year.

- The applicant shall submit a complete inventory of diesel- or gas-fired generators that are utilized within the mine seeking a permit. The inventory shall include: make, model, size of the generator, annual hours of operation, and type of service that the diesel- or gas-fired generator is employed, (i.e., light plants, water pumps, etc.). NO_x, PM_{10}, and SO_2 emissions from diesel- or gas-fired generators shall be quantified.

- Contact the Air Quality Division for specific guidance on modeling PM_{10} emissions from diesel-fired combustion sources.

- The applicant shall provide the basis for emissions data for each mine represented in the modeling analyses, (i.e., Powder River Coal Co. - Rawhide Mine; Permit MD-703, July 2002).

PM_{10} Background Concentration:

- Given the ongoing development in the Powder River Basin (PRB), coal mine applicants will need to submit and justify a background PM_{10} concentration with each permit application.

Short-Term Particulate Standards:

→ A discussion of ambient air quality monitoring data from the applicant's mine is to be included. This discussion shall include a summary of the data for the previous three (3) years, along with accompanying coal and overburden production statistics. A map showing current locations of ambient and meteorological monitoring sites in relation to pit areas, disturbed acreage, overburden spoils, haul roads, the current LNCM boundary, and proposed LNCM boundary (as applicable) are to be included.

→ The application should contain a discussion of ambient air quality monitoring data from the designated group of neighboring mines for the previous three years. A demonstration shall be provided to show that modifications to the applicant's mining operations will not cause or contribute to ambient violations at neighboring mine's monitoring sites.

→ Historical ambient monitored PM_{10} concentrations can be acquired from the AIRS database. If current monitored data is required, or additional monitored data is required that is not in the AIRS database, the applicant should contact Judy Shamley in the Sheridan field office for additional ambient monitored data.

Equipment Description:

→ The application should contain the following equipment descriptions:

- A complete list of all major mining equipment, including size, that are utilized by the mine at current production rates. A list of the additional equipment necessary to meet the increased or modified permit levels, including size, is required.

- The number and size of water trucks in use for current production levels, and the frequency that water or dust suppressant controls are applied to the haul roads. Discuss normal operating procedures for water trucks (e.g., the mine has a fleet of 5 water trucks, but they only operate 3 and the remaining 2 are backup equipment). Future plans for additional water trucks as part of any production increase should be addressed.

Open Acreage:

→ The application must include a discussion of the land status for the current year and for the years modeled. In the discussion, include a table that summarizes disturbed acreage as follows:

- Topsoil stripping (include areas stripped for sediment control and diversions)
- Topsoil piles - assume piles from previous year and current year as disturbed
- Reclaimed areas - assume previous and current year reclamation as disturbed acreage
- Overburden stockpile areas
- Mine facility areas (excluding buildings and treated areas)
- All roads in the mine permit area
- Active coal pit areas

→ Maps are to be submitted that delineate the various disturbance areas; the size of the areas should be noted on the maps. (Areas listed in disturbed acreage table should be included on the maps).

BACT:

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References:

[1] SUMMARY OF PUBLIC COMMENTS AND EPA RESPONSES - 7TH CONFERENCE ON AIR QUALITY MODELING, JUNE 28 - 29, 2000; Docket A-99-05, Item V-C-01 (http://www.epa.gov/scram001/guidance/guide/response.pdf)

Shatto, Tanner

From: Shamley, Judy
Sent: Monday, June 16, 2008 12:09 PM
To: Shatto, Tanner
Subject: FW: MOA
Attachments: 12-93 PRB MOA.pdf

Keep this one – tis important for future reference.

From: Bocchino, Lori
Sent: Monday, June 16, 2008 11:35 AM
To: Shamley, Judy
Subject: RE: MOA

Yes! I pdf'ed it and meant to email it to you but time got away from me. Thanks for the reminder – here it is ...

From: Shamley, Judy
Sent: Monday, June 16, 2008 10:15 AM
To: Bocchino, Lori
Subject:

Lori – did you and Dave locate EPA's December 1993 MOA? Would you please fax me a copy or send an electronic copy so we can have a copy here for next time??
Thanks

Judy Shamley
Air Quality Engineer
District III Sheridan, WY
PH 307.673.9337
JShaml@wyo.gov

THE STATE OF WYOMING

MIKE SULLIVAN
GOVERNOR

Department of Environmental Quality

Herschler Building • 122 West 25th Street • Cheyenne, WY 82002

ADMINISTRATION	ABANDONED MINES	AIR QUALITY	INDUSTRIAL SITING	LAND QUALITY	SOLID & HAZARDOUS WASTE	WATER QUALITY
(307) 777-7758	(307) 777-6145	(307) 777-7391	(307) 777-7368	(307) 777-7756	(307) 777-7752	(307) 777-7781
FAX 777-7682	FAX 634-0799	FAX 777-5616	FAX 777-6937	FAX 634-0799	FAX 777-5973	FAX 777-5973

December 22, 1993

Douglas M. Skie, Chief
Air Branch
U.S. EPA Region VIII
999 18th Street Suite 500
Denver, CO 80202-2405

RE: Powder River Basin MOA

Dear Doug:

Please find enclosed two (2) signed original copies of the Powder River Basin MOA which have been revised in accordance with instructions received from Sara Summers. Please replace the two (2) copies in the MOA package submitted under my letter dated December 2, 1993.

I request that one copy of the MOA bearing original signatures be returned upon execution by EPA.

Sincerely,

Chuck

Charles A. Collins
Administrator
Air Quality Division

CAC/ss

MEMORANDUM OF AGREEMENT ON PROCEDURES FOR PROTECTING PM_{10} NAAQS IN THE POWDER RIVER BASIN

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MEMORANDUM OF AGREEMENT ON PROCEDURES
FOR PROTECTING PM_{10} NAAQS IN THE
POWDER RIVER BASIN

1.0 Purpose

The purpose of this agreement is to document the rationale and procedures to be followed by the State of Wyoming and EPA in protecting the National Ambient Air Quality Standards (NAAQS) for PM_{10} within the Powder River Basin in Wyoming. The approach outlined in this agreement is based on continued ambient air quality monitoring, rather than the implementation of a 30-year life-of-mine modeling study.

2.0 Background

A review of the PM_{10} ambient monitoring data from the Powder River Basin, and of related actions taken by the State and the coal companies, supports EPA's view that these actions have proven successful in maintaining the PM_{10} NAAQS in this region. Other factors that have been taken into account, in support of our position, include: 1) the fact that DEQ is including in all permits explicit language identifying best available work practices (BAWP) to implement in the Powder River Basin coal mines, 2) the DEQ is using necessary enforcement to ensure that BAWP are and will continue to be implemented, and 3) the probability of future PM_{10} NAAQS violations in the area appear to be small.

3.0 Compliance

For these reasons, EPA believes it is appropriate to continue ambient monitoring in place of a 30-year life-of-mine study, provided there are no violations of the PM_{10} NAAQS. In a letter to EPA dated June 30, 1992, DEQ submitted a proposed ambient monitoring network for the Powder River Basin. This letter reflected an agreement reached between the EPA and DEQ in a meeting on May 20, 1992. This agreement remains in effect, except as amended by the procedure outlined below. If a PM_{10} exceedance is monitored, the following procedures would become effective:

Procedure I

In the event of an exceedance of the PM_{10} NAAQS or Prevention of Significant Deterioration (PSD) increment in the Powder River Basin, the State expeditiously uses all necessary compliance tools, including enforcement of Best Available Work Practice (BAWP) requirements in the State permits, to eliminate the likelihood of future exceedances of the PM_{10} NAAQS or PSD increment caused by the contributing source(s).

Procedure II

If, in the opinion of the EPA, the State does not initiate timely and appropriate action to address these exceedances, or if timely State action does not effectively resolve the issue of exceedances (i.e., a violation of the PM_{10} NAAQS results following the timely and successful completion of any corrective action required by the State), the EPA will reevaluate the need for the State to implement a 30-year life-of-mine study.

In order for EPA to pursue this approach, the State must agree in writing to the requirements outlined below for best available work practices at mines, enforcement, and PSD increments, and with the monitoring requirements summarized in Section 4.0 below.

4.0 Ambient Air Monitoring

The State will oversee the ambient monitoring networks operated by the mines in the Powder River Basin. The State will ensure that the items in the State-EPA Agreement pertaining to the State's ambient monitoring requirements will apply to the Powder River Basin ambient monitoring network. Attainment of the primary and secondary NAAQS for PM_{10} in the Powder River Basin will be based on 40 CFR 50.6. The required minimum frequency of sampling for PM_{10} will be based on 40 CFR 58.13. Violations will be determined by the calculation in 40 CFR, Part 50, Appendix K. The ambient monitoring network will be maintained according to the June 30, 1992 DEQ letter to EPA.

5.0 Best Available Work Practices

The State has informed the EPA that each of the mines within the Powder River Basin have incorporated BAWP into their mining permits. In order to take action on the "ambient air" State Implementation Plan (SIP) among other things, EPA will require verification from the State that the mines are in fact employing BAWP; therefore, please provide EPA with the following:

1) a summary of best available work practices for each mine; and
2) a description of what State regulation provides you the authority to require and enforce best available work practices.

6.0 Enforcement

The State must provide a written opinion from the State's Attorney General that the State does have the authority to take enforcement action against mines based upon violations of the PM_{10} NAAQS. The state must provide a description of the enforcement authority and procedures that are available to the State if a violation of the PM_{10} NAAQS is monitored.

7.0 PSD Increments

The issue of increment consumption has been at least temporarily resolved by the establishment of a new Powder River Basin Section 107 baseline area. This designation effectively "untriggers" the minor source baseline date in the Powder River Basin 107 area, and thus, emissions from coal mines and other minor sources are no longer consuming increment. Dispersion modeling of coal mines for tracking PSD increment may be required at some time in the future, if a new or modified major stationary source again triggers the minor source baseline date in the Powder River Basin or by January 1, 1996 (per the State's definition of "minor source baseline date"), whichever comes first.

8.0 Conclusion

Approval of the "ambient air" SIP was proposed on August 26, 1992 and has not yet been finalized. If this MOA is acceptable to the State and you agree to the conditions set forth in this letter, EPA will issue a supplemental notice of proposed rulemaking concerning our decision to allow ambient monitoring in lieu of the 30-year life-of-mine study. We would then initiate the supplemental rulemaking action on the SIP by the end of FY93. Final rulemaking should occur by spring of 1994. In the interim, the procedures currently in place will remain in effect. If the State and EPA do not reach agreement regarding this MOA, the EPA will finalize its August 26, 1992 proposal.

9.0 Signatures

Dennis Hemmer, Director
Department of Environmental Quality Date: 12-22-93

Patricia D. Hull, Director
Air, Radiation and Toxics Division Date: _____

Present Division policy is to not conduct modeling exercises for fugitive dust emissions to predict compliance of the State's short term PM-10 and TSP standards. Short term model predictions involving fugitive mining emissions have never been endorsed by the Division as a viable tool in estimating 24 hour ambient impacts.

The validity of the short term modeling exercise has recently been investigated by the Division through an independent model validation study (TRC Environmental Consultants, Inc., August, 1991; "Powder River Basin Model Validation Analysis"). Results of this study demonstrate conclusively that existing, state-of-the-art, short term modeling techniques do not produce realistic predictions.

Conversely, ambient air monitoring data collected by the mining community in the Powder River Basin over the past fifteen years is a real world demonstration that compliance of short term ambient standards can be achieved when a mine uses operating practices based on Best Available Control Technology. BACT requirements for mining operations are outlined in Section 21(c)(v) of the regulations as well as being specified in individual permit conditions.

Section 234 of the 1990 Clean Air Act Amendments mandates the Administrator of the Environmental Protection Agency to analyze the accuracy of short term modeling in regard to fugitive particulate emissions from surface coal mines and make necessary revisions to eliminate any significant over-prediction of ambient air quality impacts. Such revisions are to be completed within three years of enactment of the 1990 Amendments. EPA Region VIII Air Director has recently commented to the Division on use of monitored data to evaluate the effect of coal mining on the 24 hour PM-10 standard. In a letter dated June 9, 1993 to the Division, Director Patricia Hull states, "Currently, we are confident that the system of monitors provides real time assurance that we can detect and react to any violations of the health based air quality standard."

THE STATE OF WYOMING

Attorney General

MIKE SULLIVAN
GOVERNOR

JOSEPH B. MEYER
ATTORNEY GENERAL

123 CAPITOL BUILDING
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CONSUMER AFFAIRS 777-6743, 777-7874
CRIMINAL DIVISION 777-6743, 777-7874
NATURAL RESOURCES DIVISION 777-7824, 777-7825

LITIGATION DIVISION 777-6886, 777-6934, 777-5754
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FAX: 307-777-6329

NORTH PLATTE LITIGATION 777-6946
4TH EAST, HERSCHLER BUILDING

December 3, 1993

Ms. Patricia D. Hull, Director
Air, Radiation & Toxics Division
U.S. EPA Region VIII
999 18th Street--Suite 500
Denver, CO 80202-2466

Re: Enforcement of PM_{10} Ambient Air Quality Standards in the Powder River Basin

Dear Ms. Hull:

The purpose of this letter is to set forth the enforcement authority of the State of Wyoming as required under Section 6 of the Memorandum of Agreement on Procedures for Protecting PM_{10} NAAQS in the Powder River Basin. Based on a review of the Wyoming Air Quality Standards and Regulations (*"WAQSR"*) and the Wyoming Environmental Quality Act (*"WEQA"*), it is my opinion that Wyoming has the necessary authority to bring an enforcement action against mines in the Powder River Basin for any violations of the PM_{10} NAAQS.

In general, Section 201 of the WEQA prohibits the "discharge or emission of any air contaminant in any form so as to cause pollution which violates rules, regulations and standards . . . ." W.S. § 35-11-201. Section 3(a) of the WAQSR establishes the ambient standards for particulate matter at 50 micrograms per cubic meter for the annual arithmetic mean and 150 micrograms per cubic meter for a 24-hour average concentration with not more than one expected exceedance per year. The regulation further specifies the use of Appendix K of 40 C.F.R. Part 50 to determine attainment of the standards. WAQSR § 3(a)(iii).

Violations of these ambient standards for particulate matter are enforceable under the WEQA. Section 701 allows the Director of the Department of Environmental Quality to issue a Notice of Violation when he has evidence of a violation of any rule, regulation or standard, such as Section 3 of the WAQSR. W.S. § 35-11-701. Section 901 of the WEQA provides for civil penalties and injunctive relief against "any person who violates . . . any rule, regulation [or] standard . . . ." W.S. § 35-11-901(a). The person is subject

to a penalty of a maximum of ten thousand dollars ($10,000) for each day the violation continues. *Id.* Criminal penalties of up to a maximum of twenty-five thousand ($25,000) for each day of the violation and imprisonment of not more than one (1) year are available against any person "who willfully and knowingly violates" a rule, regulation or standard. W.S. § 35-11-901(j).

In summary, Wyoming law establishes the NAAQS for PM_{10} as enforceable standards through Section 3 of the WAQSR and Section 201 of the WEQA, W.S. § 35-11-201. The WEQA, in turn, provides a range of enforcement options for addressing any violation of the PM_{10} NAAQS caused by a mine in the Powder River Basin. If, however, you have any questions about the authorities discussed above or require additional information regarding Wyoming's ability to enforce the PM_{10} standards, please do not hesitate to contact me.

Sincerely,

Mary A. Throne

Mary A. Throne
Assistant Attorney General

cc: Dennis Hemmer, Director--Wyoming DEQ
Charles A. Collins, Administrator--Wyoming AQD

THE STATE OF WYOMING

MIKE SULLIVAN
GOVERNOR

Department of Environmental Quality

Herschler Building • 122 West 25th Street • Cheyenne, WY 82002

ADMINISTRATION	ABANDONED MINES	AIR QUALITY	INDUSTRIAL SITING	LAND QUALITY	SOLID & HAZARDOUS WASTE	WATER QUALITY
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December 22, 1993

Douglas M. Skie, Chief
Air Branch
U.S. EPA Region VIII
999 18th Street Suite 500
Denver, CO 80202-2405

RE: Powder River Basin MOA

Dear Doug:

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CAC/ss

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3.0 Compliance

For these reasons, EPA believes it is appropriate to continue ambient monitoring in place of a 30-year life-of-mine study, provided there are no violations of the PM_{10} NAAQS. In a letter to EPA dated June 30, 1992, DEQ submitted a proposed ambient monitoring network for the Powder River Basin. This letter reflected an agreement reached between the EPA and DEQ in a meeting on May 20, 1992. This agreement remains in effect, except as amended by the procedure outlined below. If a PM_{10} exceedance is monitored, the following procedures would become effective:

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In order for EPA to pursue this approach, the State must agree in writing to the requirements outlined below for best available work practices at mines, enforcement, and PSD increments, and with the monitoring requirements summarized in Section 4.0 below.

4.0 Ambient Air Monitoring

The State will oversee the ambient monitoring networks operated by the mines in the Powder River Basin. The State will ensure that the items in the State-EPA Agreement pertaining to the State's ambient monitoring requirements will apply to the Powder River Basin ambient monitoring network. Attainment of the primary and secondary NAAQS for PM_{10} in the Powder River Basin will be based on 40 CFR 50.6. The required minimum frequency of sampling for PM_{10} will be based on 40 CFR 58.13. Violations will be determined by the calculation in 40 CFR, Part 50, Appendix K. The ambient monitoring network will be maintained according to the June 30, 1992 DEQ letter to EPA.

5.0 Best Available Work Practices

The State has informed the EPA that each of the mines within the Powder River Basin have incorporated BAWP into their mining permits. In order to take action on the "ambient air" State Implementation Plan (SIP) among other things, EPA will require verification from the State that the mines are in fact employing BAWP; therefore, please provide EPA with the following:

1) a summary of best available work practices for each mine; and
2) a description of what State regulation provides you the authority to require and enforce best available work practices.

6.0 Enforcement

The State must provide a written opinion from the State's Attorney General that the State does have the authority to take enforcement action against mines based upon violations of the PM_{10} NAAQS. The state must provide a description of the enforcement authority and procedures that are available to the State if a violation of the PM_{10} NAAQS is monitored.

7.0 PSD Increments

The issue of increment consumption has been at least temporarily resolved by the establishment of a new Powder River Basin Section 107 baseline area. This designation effectively "untriggers" the minor source baseline date in the Powder River Basin 107 area, and thus, emissions from coal mines and other minor sources are no longer consuming increment. Dispersion modeling of coal mines for tracking PSD increment may be required at some time in the future, if a new or modified major stationary source again triggers the minor source baseline date in the Powder River Basin or by January 1, 1996 (per the State's definition of "minor source baseline date"), whichever comes first.

8.0 Conclusion

Approval of the "ambient air" SIP was proposed on August 26, 1992 and has not yet been finalized. If this MOA is acceptable to the State and you agree to the conditions set forth in this letter, EPA will issue a supplemental notice of proposed rulemaking concerning our decision to allow ambient monitoring in lieu of the 30-year life-of-mine study. We would then initiate the supplemental rulemaking action on the SIP by the end of FY93. Final rulemaking should occur by spring of 1994. In the interim, the procedures currently in place will remain in effect. If the State and EPA do not reach agreement regarding this MOA, the EPA will finalize its August 26, 1992 proposal.

9.0 Signatures

Dennis Hemmer, Director
Department of Environmental Quality Date: 12-22-93

Patricia D. Hull, Director
Air, Radiation and Toxics Division Date: _____