

BEFORE THE ENVIRONMENTAL QUALITY COUNCIL
STATE OF WYOMING

IN THE MATTER OF:)
BASIN ELECTRICAL POWER COOPERATIVE)
DRY FORK STATION,) Docket No. 07-2801
AIR PERMIT CT-4631)

**RESPONDENT DEPARTMENT OF ENVIRONMENTAL QUALITY'S
MEMORANDUM IN SUPPORT OF MOTION FOR PARTIAL SUMMARY
JUDGMENT**

Schlichtemeir Affidavit

EXHIBIT C

**WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
STANDARDS AND REGULATIONS
CHAPTER 6
PERMITTING REQUIREMENTS**

Section 1. Introduction to permitting requirements.

(a) Chapter 6 establishes permitting requirements for all sources constructing and/or operating in the State of Wyoming. Section 2 covers general air quality permitting requirements for construction and modification as well as minor source permits to operate. Section 3 is the state operating permit program required under Title V of the Clean Air Act. Section 4 is the prevention of significant deterioration (PSD) program. Section 5 covers permitting requirements for major sources of hazardous air pollutants for which a MACT (maximum achievable control technology) standard has been established under section 112 of the Clean Air Act. Section 6 covers permitting requirements for major sources of hazardous air pollutants for which a MACT standard has not been established under section 112 of the Clean Air Act. Section 7 establishes the terms under which clean air resource allocations expire.

Section 2. Permit requirements for construction, modification, and operation.

(a) (i) Any person who plans to construct any new facility or source, modify any existing facility or source, or to engage in the use of which may cause the issuance of or an increase in the issuance of air contaminants into the air of this state shall obtain a construction permit from the State of Wyoming, Department of Environmental Quality before any actual work is begun on the facility.

(ii) Any facility or source required to obtain a permit for construction or modification under this section must, if subject to the provisions of Chapter 6, Section 3 of these regulations, submit an application to the Division for a Chapter 6, Section 3 operating permit within twelve (12) months of commencing operation.

(iii) Facilities or sources not subject to the provisions of Chapter 6, Section 3 of these regulations shall obtain a Chapter 6, Section 2 operating permit from the Department, pursuant to this section, for operation after a 120-day start-up period.

(iv) A permit to operate is also required for the operation of an existing portable source in each new location. However, a permit to construct is required for each new location that is a new source or facility and for each new or modified portable source or facility.

(v) *Permit Fees:* Persons applying for a permit under this section, or waiver

from permit requirements under Chapter 6, Section 2(k)(viii), shall pay a fee to cover the Department's cost of reviewing and acting on permit applications in accordance with paragraph (o) of this section.

(vi) Facilities or sources subject to the provisions of Chapter 6, Section 5 or Chapter 6, Section 6 shall submit the permit application as required by Chapter 6, Section 5(a)(iii) or by Chapter 6, Section 6(h)(iv) as part of the permit application submitted in accordance with Chapter 6, Section 2(b)(i).

(b) (i) The owner of the facility or the operator of the facility authorized to act for the owner is responsible for applying for and obtaining a permit to construct and/or operate. The application shall be made on forms provided by the Division of Air Quality and each application shall be accompanied by site information, plans descriptions, specifications, and drawings showing the design of the source, the nature and amount of the emissions, and the manner in which it will be operated and controlled. A detailed schedule for the construction or modification of the facility shall be included. A separate application is required for each source. Any additional information, plans, specifications, evidence, or documentation that the Administrator of the Division of Air Quality may require shall be furnished upon request. The applicant shall conduct such continuous Ambient Air Quality monitoring analyses as may be determined by the Administrator to be necessary in order to assure that adequate data are available for purposes of establishing existing concentration levels of all affected pollutants. As a guideline, such data should be gathered continuously over a period of one calendar year preceding the date of application. Upon petition of the applicant, the Administrator will review the proposed monitoring programs and advise the applicant if such is approvable or modifications are required.

(ii) For portable sources or facilities, the Division may authorize the owner or operator to utilize a "self issuance" operating permit system for new locations which are not new sources or facilities. For purposes of this paragraph, a new source or facility is a source or facility for which operation or construction commenced after May 29, 1974, and for which a permit has not previously been issued.

The Division shall provide to authorized owners or operators of portable sources, forms upon which the self-issued permits are to be recorded. The owner or operator shall, at a minimum provide, as appropriate the permit number previously issued to the portable source or facility, the new location for which the permit is issued, the duration of operation of the new location, the production rate at the new location and the production at the new location in addition to any other information that the Administrator may require. Such permit shall be executed and a copy provided to the Air Quality Division prior to operation at the new location.

All conditions previously issued for the operation of the portable facility continue as applicable conditions for operation at subsequent locations.

(c) No approval to construct or modify shall be granted unless the applicant shows, to

the satisfaction of the Administrator of the Division of Air Quality that:

(i) The proposed facility will comply with all rules and regulations of the Wyoming Department of Environmental Quality, Division of Air Quality, and with the intent of the Wyoming Environmental Quality Act.

(ii) The proposed facility will not prevent the attainment or maintenance of any ambient air quality standard.

(A) A facility will be considered to cause or contribute to a violation of an ambient air quality standard if the projected impact of emissions from the facility exceed the following significance levels at any locality that does not or would not meet the applicable standard:

POLLUTANT	AVERAGING TIME (HOURS)				
	ANNUAL ($\mu\text{g}/\text{m}^3$)	24 ($\mu\text{g}/\text{m}^3$)	8 (mg/m^3)	3 ($\mu\text{g}/\text{m}^3$)	1 (mg/m^3)
SO ₂	1.0	5	--	²⁵	--
PM ₁₀	1.0	5	--	--	--
NO _x	1.0	--	--	--	--
CO	--	--	0.5	--	2

(B) Notwithstanding the provisions of Chapter 6, Section 2(c)(ii)(A) above, no facility with the potential to emit 100 tons per year or more of PM₁₀ (including sources of fugitive dust) shall be allowed to construct within the City of Sheridan designated PM₁₀ nonattainment area until such time as the area is redesignated to an attainment area for PM₁₀ ambient standards in accordance with section 107 of the Clean Air Act. In addition, no existing facility with the potential to emit 100 TPY or more of PM₁₀ within the Sheridan designated PM₁₀ nonattainment area shall be allowed to modify operations to increase potential PM₁₀ emissions by 15 tons per year or more (including sources of fugitive dust), until such time as the area is redesignated by EPA as an attainment area for PM₁₀ ambient standards. For the purpose of this paragraph, "potential to emit" shall have the same meaning as in Chapter 6, Section 4.

(iii) The proposed facility will not cause significant deterioration of existing ambient air quality in the Region as defined by any Wyoming standard or regulation that might address significant deterioration.

(iv) The proposed facility will be located in accordance with proper land use planning as determined by the appropriate state or local agency charged with such responsibility.

(v) The proposed facility will utilize the Best Available Control Technology with consideration of the technical practicability and economic reasonableness of reducing or

eliminating the emissions resulting from the facility. For large mining operations, specific measures normally required and to be considered include but are not limited to:

- (A) The paving of access roads;
- (B) The treating of major haul roads with a suitable dust suppressant;
- (C) The treatment of temporary haul roads;
- (D) The use of silos, trough barns, or similar enclosed containers for the storage of large volumes of material awaiting load out and shipment;
- (E) The treatment of active work areas; and
- (F) The treatment of temporary ore stockpiles.

(vi) The proposed facility will have provisions for measuring the emissions of significant air contaminants as determined by the Administrator of the Division of Air Quality.

(vii) The proposed facility will achieve the performance specified in the application for the permit to construct or modify.

(viii) The proposed facility will not emit any air pollutant in amounts which will (i) prevent attainment or maintenance by any other state of any such national primary or secondary Ambient Air Quality Standard or (ii) interfere with measures required by the Federal Clean Air Act to be included in the applicable Implementation Plan for any other state to prevent significant deterioration of air quality or to protect visibility.

(d) In meeting the requirements of Chapter 6, Section 2(c) above pertaining to compliance with an applicable Ambient Air Quality Standard or increment, the degree of emission limitation required shall not be affected by (a) so much of the stack height of any source as exceeds good engineering practice stack height or (b) any other dispersion technique.

(i) For purposes of this requirement, "good engineering practice stack height" means the height equal to or less than:

(A) 30 meters as measured from the ground-level elevation at the base of the stack, or

(B) $H + 1.5L$ where H is the height of nearby structure(s) measured from the ground level elevation at the base of the stack and L is the lesser dimension (height or width) of, the source, or nearby structure, provided that the Administrator may require the use of a field study or fluid model to verify good engineering practice stack height for the source, or

(C) Such other height as is demonstrated by a fluid model or a field study approved by the Administrator, which ensures that emissions from a stack do not result in excessive concentrations in the immediate vicinity of the source as a result of atmospheric downwash, eddies, or wakes which may be created by the source, nearby structures or nearby terrain features.

(ii) For purposes of this requirement, “dispersion technique” means any technique which attempts to affect the concentration of a pollutant in the ambient air by:

(A) Using that portion of a stack which exceeds good engineering practice stack height, or

(B) Varying the rate of emission of a pollutant according to atmospheric conditions or ambient concentrations of that pollutant, or

(C) Increasing the final exhaust gas plume rise by manipulating source process parameters, exhaust gas parameters, stack parameters, or combining exhaust gases from several existing stacks into one stack, or other selective manipulation of exhaust gas streams so as to increase the exhaust gas plume rise.

(iii) For purposes of this requirement, “dispersion technique” does not include:

(A) The reheating of a gas stream, following use of a pollution control system, for the purpose of returning the gas to the temperature at which it was originally discharged from the facility generating the gas stream, or

(B) The merging of exhaust gas streams where the source owner or operator demonstrates that the facility was originally designed and constructed with such merged streams.

(iv) For the purposes of this requirement, “emission limitation” means a requirement established by the Administrator which limits the quantity, rate, or concentration of emissions of air pollutants on a continuous basis, including any requirements which limit the level of opacity, prescribe equipment, set fuel specifications, or prescribe operation or maintenance procedures for a source to assure continuous emission reduction.

(v) “Nearby” as used in Chapter 6, Section 2(d)(i) is defined for a specific structure or terrain feature, and

(A) For purposes of applying the formula provided in Chapter 6, Section 2(d)(i)(B) means that distance up to five times the lesser of the height or the width dimension of a structure, but not greater than one half mile (0.8 km), and

(B) For conducting demonstrations under Chapter 6, Section 2(d)(i)(C) means not greater than one half mile (0.8 km), except that the portion of a terrain feature may be considered to be nearby which falls within a distance of up to 10 times the maximum height of the feature, not to exceed 2 miles if such feature achieves a height one half mile from the stack that is at least 40 percent of the GEP stack height determined by the formula provided in Chapter 6, Section 2(d)(i)(B) or 26 meters, whichever is greater, as measured from the ground-level elevation at the base of the stack. The height of the structure of terrain feature is measured from the ground-level elevation at the base of the stack.

(vi) *“Excessive concentration”* is defined for the purpose of determining good engineering practice stack height under Chapter 6, Section 2(d)(i)(C) and means,

(A) For sources seeking credit for stack height exceeding that established under Chapter 6, Section 2(d)(i)(B), a maximum ground-level concentration due to emissions from a stack due in whole or part to downwash, wakes, and eddy effects produced by nearby structures or nearby terrain features which individually is at least 40 percent in excess of the maximum concentration experienced in the absence of such downwash, wakes, or eddy effects and which contributes to a total concentration due to emissions from all sources that is greater than an ambient air quality standard. For sources subject to the prevention of significant deterioration (Chapter 6, Section 4), an excessive concentration alternatively means a maximum ground-level concentration due to emissions from a stack due in whole or part to downwash, wakes, or eddy effects produced by nearby structures or nearby terrain features which individually is at least 40 percent in excess of the maximum concentration experienced in the absence of such downwash, wakes, or eddy effects and greater than a prevention of significant deterioration increment. The allowable emission rate to be used in making demonstrations under this section shall be prescribed by the new source performance standard that is applicable to the source category unless the owner or operator demonstrates that this emission rate is infeasible. Where such demonstrations are approved by the Administrator, an alternative emission rate shall be established in consultation with the source owner or operator.

(vii) After the Administrator has reached a proposed decision to approve or disapprove a permit application in which the source relies on a good engineering practice stack height that exceeds the height allowed by Chapter 6, Section 2(d)(i)(A) or (B) the Administrator will notify the public of the availability of the demonstration study and provide the opportunity for public hearing. Specific notification of the Administrator’s decision, availability of the demonstration and opportunity for public hearing will be included as part of the public notice required in Chapter 6, Section 2(m) of these regulations.

(e) No permit to operate may be granted until the applicant demonstrates to the satisfaction of the Administrator of the Division of Air Quality that:

(i) The facility is complying with the Wyoming Air Quality Standards and Regulations applicable at the time the permit to construct or modify was granted and with the intent of the Wyoming Environmental Quality Act, 1973.

(ii) The facility has been constructed or modified in accordance with the requirements and conditions contained in the permit to construct or modify.

(f) The Administrator of the Division of Air Quality may impose any reasonable conditions upon an approval to construct, modify, or operate including, but not limited to, conditions requiring the source to be provided with:

(i) Sampling and testing facilities as the Administrator may require;

(ii) Safe access to the sampling facilities;

(iii) Instrumentation to monitor and record emission data; and

(iv) Ambient Air Quality monitoring which, in the judgment of the Administrator, is necessary to determine the effect which emissions from a source may have, or is having, on air quality in any area which may be affected by emissions from such source.

(g) The Administrator will review each application within 30 days and notify the applicant as to whether or not the application is complete. If the application is complete, the Administrator will propose approval, conditional approval or denial and will publish such proposal within 60 days of the determination that the application is complete. If the application is not complete, the application will be considered inactive and additional information as necessary will be requested. A complete application shall include all materials and analyses which the Administrator determines are necessary for the Division to review the facility as a source of air pollution.

(h) A permit to construct or modify shall remain in effect until the permit to operate the facility for which the application was filed is granted or denied or the application is canceled. However, an approval to construct or modify shall become invalid if construction is not commenced within 24 months after receipt of such approval or if construction is discontinued for a period of 24 months or more. The Administrator may extend such time period(s) upon a satisfactory showing that an extension is justified. This provision does not apply to the time period between construction of the approved phases of a phased construction project; however, each phase must commence construction within 24 months of the projected and approved commencement date for such phase. Notwithstanding the above, a permit containing a case-by-case MACT determination pursuant to Chapter 6, Section 6 shall expire if construction or reconstruction has not commenced within 18 months of issuance, unless the Division has granted an extension which shall not exceed an additional 12 months.

(i) Any owner or operator subject to the provisions of this regulation shall furnish the Administrator written notification as follows:

(i) A notification of the anticipated date of initial start-up of each source not

more than 60 days or less than 30 days prior to such date.

(ii) A notification of the actual date of initial start-up of each source within 15 days after such date.

(j) Within 30 days after achieving the maximum design production rate for which the permit is approved and at which each source will be operated, but not later than 90 days after initial start-up of such source, the owner or operator of such source shall conduct a performance test(s) in accordance with methods and under operating conditions approved by the Administrator and furnish the Administrator a written report of the results of each performance test.

(i) Such test shall be at the expense of the owner or operator.

(ii) The Administrator may monitor such test and may also conduct performance tests.

(iii) The owner or operator of a source shall provide the Administrator 15 days prior notice of the performance test to afford the Administrator the opportunity to have an observer present.

(iv) The Administrator may waive the requirement for performance tests if the owner or operator of a source has demonstrated by other means to the Administrator's satisfaction that the source is being operated in compliance with all State and Federal Regulations which are part of the applicable plan.

(v) If the maximum design production rate for which the permit is approved is not achieved within 90 days of initial start-up, testing will be conducted on a schedule to be defined by the Administrator. This schedule may require that the source be tested at the production rate achieved within 90 days of initial start-up and again when maximum design production rate is achieved.

(k) Approval to construct or modify shall not be required for:

(i) The installation or alteration of an air pollutant detector, air pollutants recorder, combustion controller, or combustion shutoff.

(ii) Air conditioning or ventilating systems not designed to remove air pollutants generated by or released from equipment.

(iii) Fuel burning equipment other than a smokehouse generator which has a heat input of not more than 25 million BTU per hour (6.25 billion gm-cal/hr) and burns only gaseous fuel containing not more than 20 grains total sulfur per 100 std. ft³; has a heat input of not more than 10 million BTU/hr (2.5 billion gm-cal/hr) and burns any other fuel.

(iv) Mobile internal combustion engines.

(v) Laboratory equipment used exclusively for chemical or physical analyses.

(vi) The installation of air pollution control equipment which is not a part of a project which requires a construction or modification permit under Chapter 6, Section 2 or 4 of these regulations.

(vii) Gasoline storage tanks at retail establishments.

(viii) Such other minor sources which the Administrator determines to be insignificant in both emission rate and ambient air quality impact.

Notwithstanding the above exemptions, any facility which is a major emitting facility pursuant to the definition in Chapter 6, Section 4 shall comply with the requirements of both Chapter 6, Sections 2 and 4.

(l) Approval to construct or modify shall not relieve any owner or operator of the responsibility to comply with all local, state and federal rules and regulations.

(m) After the Administrator has reached a proposed decision based upon the information presented in the permit application to construct or modify, the Division of Air Quality will advertise such proposed decision in a newspaper of general circulation in the county in which the source is proposed. This advertisement will indicate the general nature of the proposed facility, the proposed approval/disapproval of the permit, and a location in the region where the public might inspect the information submitted in support of the requested permit and the Air Quality Division's analysis of the effect on air quality. A copy of the public notice required above will be sent as appropriate to (a) the applicant, (b) the U.S. EPA, (c) any affected comprehensive regional land use planning agency, (d) affected county commissioners, (e) any state or federal land manager or Indian governing body whose lands may be significantly affected by emissions from the proposed facility. The public notice will include notification of the opportunity for a public hearing and will indicate the anticipated degree of increment consumption if the source is subject to Chapter 6, Section 4 of these Regulations. The public will be afforded a 30-day period in which to make comments and recommendations to the Division of Air Quality. A public hearing may be called if sufficient interest is generated or if any aggrieved party so requests in writing within the 30-day comment period. After considering all comments, including those presented at any hearings held, the Administrator will reach a decision and notify the appropriate parties.

(n) (i) Within 30 days of receipt of a permit application for a new major emitting facility or major modification which is subject to the provisions of Chapter 6, Section 4, but not later than 60 days prior to public notice issued under Chapter 6, Section 2(m) above, the Administrator shall provide written notification to all Federal Class I Area Federal Land Managers of such proposed new major emitting facility or major modification whose emissions may affect the Federal Class I Area or affect visibility in such Area. This

notification must contain a copy of all information relevant to the permit application including an analysis of the anticipated impacts on air quality and visibility in any Federal Class I Area.

(ii) Within 30 days of receipt of advance notification of a permit application for a new source or facility which may be subject to Chapter 6, Section 4, and which may affect visibility in a Federal Class I Area, the Administrator shall notify the affected Federal Land Manager of such advance notification.

(o) A permit fee will be assessed on the owner or operator (applicant), based on the cost to the Department in reviewing and acting on permit applications submitted to the Division under this section.

(i) Fees for Reviewing the Application: The Department shall provide written notice of the fee to the applicant at such time as the Administrator of the Division reaches a proposed decision on the application under paragraph (m) of this section.

(A) The fee shall include all costs incurred by the Department in reviewing the application to this point in the permit process including the costs of advertising such decision and providing public notice.

(B) The fee is due upon receipt of the written notice unless the fee assessment is appealed pursuant to W.S. 35-11-211(d).

(C) Payment of this fee shall be required before the issuance of any permit under this section.

(ii) Fees for Issuing Permit: An additional fee shall be assessed and written notice provided to the applicant for any additional costs incurred by the Department (after the date of public notice) in reaching a final decision, including the costs of holding public hearings, reviewing public comments, and issuing permits.

(iii) Portable sources or facilities shall be assessed a fee of \$100.00 for operation in each new location. This fee shall be submitted with each "self issuance" permit submitted to the Division for operation under Chapter 6, Section 2(a)(iv) and Chapter 6, Section 2(b) of these regulations. For portable sources or facilities which are not authorized to use the "self issuance" permits, the fee assessment shall be \$250.00 for operation at each new location.

Section 3. Operating permits.

(a) Applicability. The following sources are subject to the operating permit requirements of this section:

(i) Any major source;