

CHAPTER 3

PLANNING AND ENVIRONMENTAL CONTROLS

INTRODUCTION

This chapter describes the planning and environmental controls which bear on coal development.

This chapter is in three parts: (1) a list of legislation and regulations which constrain federal, state, and/or local governments when they consider authorization of coal development; (2) a discussion of land use plans, controls, and constraints; and (3) a summary of federal, state, and local agency interrelationships.

LAWS, REGULATIONS, AND POLICY GUIDANCE

Coal Leasing

Two laws that provide the basic authorities for leasing federal coal are: Mineral Leasing Act of 1920 (41 Stat. 437, as amended; 30 U.S.C. 181 et seq.) and Mineral Leasing Act for Acquired Lands of 1947 (61 Stat. 913; 30 U.S.C. 351-359).

The law that provides the basis for public land and resource management is the Federal Land Policy and Management Act of 1976 (90 Stat. 2743; 43 U.S.C. 1701-1771).

These laws are implemented by the Bureau of Land Management (BLM) and the Geological Survey (GS) under the following regulations:

Title 43 CFR Part 3041 provides procedures to ensure that adequate measures are taken during exploration or surface mining of federal coal (among other minerals) to avoid, minimize, or correct damages to the environment (land, water, and air) and to avoid, minimize, or correct hazards to public health and safety.

Title 43 CFR Part 3500 provides procedures for leasing and subsequent management of federal coal (among other minerals) deposits.

Title 43 CFR Part 2800 establishes procedures for issuing rights-of-way to private individuals and/or companies on public lands.

The Federal Coal Leasing Amendments Act of 1975, which amended the Mineral Leasing Act of 1920, requires that a lease sale cannot occur until the lands to be leased are included in a comprehensive land use plan. The act also provides for the consolidation of leases into logical mining units, and for diligent development, operation, and production of the reserves in a logical mining unit. The act also set the minimum royalty rate at 12½%

for surface-mined coal, permitted the Secretary of the Interior to set a lower rate for underground mined coal, and increased the state share of the royalty revenues from 37½% to 50%.

Coal Development (Mining)

Title 30 CFR Part 211 governs operations for discovery, testing, development, mining, and preparation of federal coal under leases, licenses, and permits pursuant to 43 CFR Part 3500. The purposes of the current regulations in Part 211 (May 1976) are to promote orderly and efficient operations and production practices without waste or avoidable loss of coal or other mineral-bearing formations; to encourage maximum recovery and use of coal resources; to promote operating practices which will avoid, minimize, or correct damage to the environment, including land, water and air, and avoid, minimize, or correct hazards to public health and safety; and to obtain a proper record of all coal produced.

Surface Mining Control and Reclamation Act of 1977 (SMCRA) (30 U.S.C. 1201) regulates the surface mining of all coal deposits and is implemented by the Office of Surface Mining under the regulations in Title 30 CFR Part 700. It is expected that the Secretary of the Interior will reach a decision on the Office of Surface Mining (OSM) permanent regulatory program by February 15, 1979. This program will provide a basis for state programs and result in some changes and modifications of requirements. Such changes should not affect the validity of this environmental statement, however. The permanent regulatory program does not include the federal lands program, which has not yet been promulgated. Many of these regulations are similar to the 43 CFR 3041 and 30 CFR 211 regulations which regulate coal development on federal lands. The new act and regulations provide for:

1. Environmental performance standards for surface coal mining and reclamation operations.
2. Inspection and enforcement procedures, including the assessment of civil penalties.
3. Requirements for state programs.
4. Requirements for the federal lands program.
5. Development of the initial regulatory program to be incorporated into coal mining permits issued under state law and the federal lands program.
6. Requirements and procedures for approval of state mining permits.

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7. Requirements for posting, release, and forfeiture of reclamation performance bonds.

In all cases, pursuant to Section 515 of SMCRA and Title 30 CFR 715.13 (December 1977), coal mining operations will be required, as a minimum, to restore the lands affected to a condition capable of supporting the use which they supported prior to any mining, or higher or better uses of which there is reasonable likelihood. Mining permits will not be approved unless the applicant has demonstrated that reclamation to the proposed post-mining land use can be accomplished under a mining and reclamation plan.

In summary, surface protection and reclamation of lands mined for coal production is provided by various regulations enforced by the Department of the Interior (43 CFR 3041 and 30 CFR 700), as well as regulations enforced by the State of Wyoming (Land Quality Rules and Regulations). Surface protection and reclamation provisions are further covered under a cooperative agreement between the State of Wyoming and the Department of the Interior. The agreement provides for cooperation in review and approval of mining and reclamation plans, as well as cooperation in monitoring and enforcing reclamation standards.

Uranium

The Nuclear Regulatory Commission is responsible for issuing source material licenses (under 10 CFR 51) for the mining, processing, and use of nuclear materials such as uranium. The Wyoming Department of Environmental Quality (DEQ) also regulates uranium mining and milling activities as they relate to air, land, and water quality, and solid waste disposal.

Industrial Siting and Land Use Planning

The Wyoming Industrial Development Information and Siting Act of 1975 requires a siting permit for industrial development costing 50 million dollars or more in 1975 dollars. The act also requires a prospective industry to furnish plans for alleviating socioeconomic impacts and providing other extensive information before a state permit is granted for construction. Control does not apply to public properties except as provided by law. The first two projects to be sited under this act were the Jim Bridger Power Plant (Sweetwater County) and the Missouri Basin Power Plant near Wheatland, Wyoming. The Wyoming Industrial Siting Administration has responsibility for the issuance of siting permits.

The Wyoming Land Use Planning Act requires completion of county land use plans by 1978. These plans could conflict with or modify some energy development proposals.

Air Quality

Specific applicable legislation and regulations relating to air quality include:

1. Clean Air Act of 1970
2. National Ambient Air Quality Standards (NAAQS)
3. New Source Performance Standards
4. Wyoming Environmental Quality Act of 1973
5. Wyoming Ambient Air Quality Regulations
6. Clean Air Act amendments of 1977

The Clean Air Act of 1970 specified that each state would be responsible for ensuring the air quality within its borders and for specifying the way that quality would be achieved and maintained.

On April 30, 1971, the Environmental Protection Agency (EPA) officially announced the primary and secondary NAAQS (*Federal Register*, April 30, 1971). The primary standards were established to protect human health, whereas the secondary standards were established to protect the public welfare from any known or anticipated adverse effects. Standards were put into effect for suspended particulate matter, sulfur oxides, nitrogen oxides, photochemical oxidants, carbon monoxide, and hydrocarbons (see Table R3-1).

The Wyoming ambient air quality standards were put into effect in accordance with the Wyoming Environmental Quality Act. On January 22, 1972, the State of Wyoming adopted air quality regulations that were slightly more stringent with respect to total suspended particulates (TSP) and sulfur dioxide (SO₂) than the NAAQS regulations. Under Article 2 of the act, the Air Quality Division of DEQ is empowered to enforce these air quality standards (see Table R3-1).

The 1970 Clean Air Act also provided the authority to establish "emission standards" (new source performance standards) for new stationary sources and for existing sources in categories for which national standards of performance had been established.

The 1977 Clean Air Act Amendments contain major revisions of the 1970 act with respect to: (1) the setting of primary standard for nitrogen dioxide (NO₂); (2) the identification of regions within individual states that do or do not meet NAAQS; (3) the strengthening of enforcement mechanisms; (4) the establishment of regulations to control criteria pollutants in addition to suspended particulates, NO₂, and SO₂; and (5) the establishment of standards for stationary sources. The 1977 amendments to the Clean Air Act established "maximum allowable increases" which limit future increases of ambient concentrations of TSP and SO₂ above baseline concentrations. Ambient concentrations in calendar year 1974 are nominally the baseline concentrations. The "maximum allowable increases" (or increments) were established for three classes of areas as a function of the desired rise in ambient TSP and SO₂ concentrations. The air quality impacts of the emissions from all "major" stationary sources use up the prevention of significant air quality deterioration (PSD) increments shown in Table R3-2. The baseline concentrations plus the increments cannot exceed the national ambient air quality standards.

The maximum allowable increases (or increments) limit the amount of air pollutant-emitting development. Class I area increments allow very little increase in ambi-

TABLE R3-1

FEDERAL AND WYOMING AIR QUALITY STANDARDS

Pollutant	Averaging Time	Federal Primary Standards*		Federal Secondary Standards*		Wyoming State Standards**	
		$\mu\text{g}/\text{m}^3$	ppm	$\mu\text{g}/\text{m}^3$	ppm	$\mu\text{g}/\text{m}^3$	ppm
Sulfur Dioxide (SO ₂)	Annual (Arithmetic)	80	.03			60	.02
	24-hour	365	.14			260	.10
	3-hour			1,300	.5	1,300	.5
Total Suspended Particulates (TSP)	Annual (Geometric)	75		60		60	
	24-hour	260		150		150	
Carbon Monoxide (CO)	8-hour	10,000	9	10,000	9	10,000	9
	1-hour	40,000	35	40,000	35	40,000	35
Photochemical Oxidant	1-hour	160	.08	160	.08	160	.08
Nonmethane Hydrocarbons***	3-hour (6-9 a.m.)	160	.24	160	.24	160	.24
Nitrogen Dioxide (NO ₂)	Annual	100	.05	100	.05	100	.05

* Title 40 CFR Part 50, National Ambient Air Quality Standards. (Standards for averaging times of less than one year are not to be exceeded more than once a year.)

** Wyoming Ambient Air Quality Regulations, as amended in 1975. (Standards for averaging times of less than one year are not to be exceeded more than once a year.)

*** Standards set as a guide to achieve to photochemical oxidant standards.

TABLE R3-2

MAXIMUM ALLOWABLE INCREASES FOR SO₂ AND TSP FOR
PREVENTION OF SIGNIFICANT AIR QUALITY DETERIORATION

Pollutant	Averaging Time	Maximum Allowable Increases ($\mu\text{g}/\text{m}^3$)		
		Class I	Class II	Class III
Sulfur Dioxide (SO ₂)	Annual Mean	2	20	40
	24-hour*	8	91	182
	3-hour*	25	512	700
Total Suspended Particulates (TSP)	Annual Mean	5	19	37
	24-hour*	10	37	75

Source: 1977 Clean Air Act Amendments

Note: Under the 1977 Amendments to the Clean Air Act all areas are designated Class II except Mandatory Class I areas.

* The 3-hour and 24-hour SO₂ and 24-hour TSP concentrations can be exceeded not more than once per year.

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ent TSP and SO₂ levels. Very little energy-related development is possible in Class I areas. Class II area increments were designed to allow a moderate increase in ambient TSP and SO₂ levels. Class III area increments were designed to allow the maximum increases in ambient TSP and SO₂ concentrations. The highest level of energy-related development is possible in Class III areas. Regulatory measures to prevent significant air quality deterioration for the other criteria pollutants are to be promulgated by EPA in 1979.

Under the 1977 amendments, all areas of the United States were designated Class II, except for "mandatory"-Class I areas. At present, there are no Class III designated areas. In mandatory Class I areas, visibility cannot be impaired nor can the increments be exceeded. No mandatory Class I areas are within the Eastern Powder River Basin. The nearest mandatory Class I areas are Grand Teton and Yellowstone national parks in the northwest corner of Wyoming about 200 miles west of the Eastern Powder River Basin, and the North Cheyenne Indian Reservation in southern Montana, located 80 miles northwest of Gillette. Devil's Tower National Monument, located about 40 miles northeast of Gillette, is presently being studied by the National Park Service for possible Class I status. Class II areas can be reclassified by the state; however, mandatory Class I areas cannot be reclassified.

Under the new PSD review procedure promulgated by the EPA on June 19, 1978, the impact of fugitive dust emissions from surface coal mines are not to be included in the air quality analyses for the PSD increments, nor for national ambient air quality standards. Fugitive dust has been defined by the EPA to be particles of native soil which are uncontaminated by pollutants resulting from industrial activity. Fugitive dust accounts for about 98% to 99% of all particulate emissions from strip mines. Particulate emissions from stationary sources (e.g., crusher) units of surface mines are typically less than 1% to 2% of the total emissions. Because the new PSD procedures were not implemented by EPA prior to the modeling effort, the regional air quality analyses has been prepared using the previous PSD regulations. The previous regulations require the air quality impact of all particulate emissions from a surface mine be analyzed for PSD review.

The EPA has indicated that each mine operator will have to employ the best management practice for fugitive dust control regardless of the predicted concentrations during operations. (EPA interprets best management practice as those procedures or techniques that can be reasonably used to control fugitive dust.) The proposed OSM permanent regulatory program includes a number of specific requirements (known as best available control technology or best management practice) to be followed, as appropriate, by surface mining operations to reduce fugitive dust levels. Thus, each mining plan and the Department of the Interior's approval thereof will stipulate an appropriate combination of the following fugitive dust controls.

1. Pavement or equivalent stabilization of all haul roads used or in place for more than 1 year.

2. Treatment with semipermanent dust suppressants of all haul roads used or in place for less than 1 year and for more than 2 months.

3. Watering of all other roads in advance of and during use whenever sufficient unstabilized material is present to cause excessive fugitive dust.

4. Reduction of fugitive dust at all coal dump (truck to crusher) locations through use of negative pressure bag house or equivalent methods. Inclusion of conveyor and transfer point covering, and spraying, and the use of coal load-out silos.

All mining operations which have the potential to emit more than 250 tons per year of uncontrolled particulates will be required to apply for PSD permits.

Note that the Wyoming DEQ will determine on an individual mine basis the pollutant emission controls that will be required as part of their permitting process.

The 1977 amendments have been passed by the U.S. Congress and are, therefore, law. Specific regulations needed to fulfill the requirements of these amendments are being drafted by the responsible agencies. However, neither the federal agencies nor the states are relieved of the responsibility for meeting the requirements of the Clean Air Act Amendments of 1977.

Water Quality

Specific applicable legislation and regulations include:

1. Federal Water Pollution Control Act (FWPCA), as amended in 1972

2. Wyoming Environmental Quality Act of 1973

3. Water Quality Standards for Wyoming, Wyoming Department of Health and Social Services, June 28, 1973, superseded by Quality Standards for Wyoming Surface Waters, June 6, 1978

National standards to restore and maintain the chemical, physical, and biological integrity of the nation's waters were promulgated by the FWPCA.

The proposed OSM permanent regulatory program contains requirements as to water quality control in the mine permit area during development, mining, and reclamation. These requirements augment water quality protection provided by State of Wyoming and EPA regulations.

Wyoming water quality standards were issued in accordance with the Wyoming Environmental Quality Act of 1973. Under Article 3 of the act, DEQ's Water Quality Division is empowered to enforce these water quality standards. Important prescribed standards include those which specify maximum short-term and long-term concentrations of pollution, minimum permissible concentrations of dissolved oxygen and other matter, and the permissible temperatures of the waters of the state. Effluent standards and limitations specifying the maximum amounts of pollution and waste which may be discharged into state waters are described. Other health and water quality standards pursuant to Section 402(b) of the FWPCA are also described. Water quality standards are generally established on the basis of ultimate water use.

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Thus, standards for municipal water will vary from those for agricultural water use.

Water quality planning required by Section 208 of the FWPCA is in progress in the region. Wyoming has identified Campbell County as falling within a "designated area" having priority planning needs for identification of management practices necessary to maintain or improve water quality. A major emphasis is nonpoint source pollution resulting from surface disturbance such as mining. As a "designated area," Campbell County is included in a recently completed draft water quality plan prepared by a special planning agency, Powder River Area Planning Organization, with consultation with EPA. The draft plan is currently undergoing state certification review.

Converse County falls into the category of an "undesignated area" (one of twelve such counties in Wyoming). DEQ has contracted the preparation of a water quality plan for Converse County with the Wyoming Conservation Commission. The plan will be completed by 1983, as federal funds become available. Energy development impacts will be addressed in great detail.

The State of Wyoming is responsible for setting water quality standards and developing all "208 plans"; however, EPA plays a monitoring and arbitration role in the process.

Water Rights

Wyoming water laws state that priority of appropriation for beneficial use shall be given the better right, and in the order of preferred use that water for drinking purposes for both man and beast shall be first.

Wyoming laws, in part, also provide that whenever a well withdrawing water for beneficial purposes shall interfere unreasonably with an adequate well developed solely for domestic or stock use, the state engineer may, on complaint of the operator of the domestic or stock well, order the interfering appropriator to cease or reduce withdrawals of underground water, unless such appropriator furnish at his expense, sufficient water at the former place of use to meet the need for domestic and stock use.

The laws also provide that private property shall not be taken or damaged for public or private use without just compensation. A water right is private property.

Regulations pursuant to the Surface Mining Control and Reclamation Act provide that a coal mine permittee must replace the water supply of an owner of interest in real property who obtains his water from an underground or surface source, if coal mining operations have adversely affected that water supply.

Solid Waste Disposal

Applicable regulations include the Wyoming Solid Waste Management Rules and Regulations 1975, these provide for submission of solid waste disposal plans to the state by every person or municipality proposing such disposal.

Cultural Resources

Applicable authorities include:

1. Antiquities Act of 1906 (34 Stat. 225; 16 U.S.C. 431-433)
2. Historic Site Act of 1935 (49 Stat. 666)
3. Historic Preservation Act of 1966 (80 Stat. 915; 16 U.S.C. 470)
4. National Environmental Policy Act of 1969 (33 Stat. 852; 42 U.S.C. 4321, et seq.)
5. Reservoir Salvage Act of 1960 (74 Stat. 220)
6. Executive Order 11593
7. Federal Land Policy and Management Act of 1976 (96 Stat. 2743)
8. State laws as appropriate

Both federal and state antiquities acts regulate antiquities excavation and collections, and both protect historical values on public lands. They provide for fines and/or imprisonment for violators of their provisions. The Historic Preservation Act requires that certain federal undertakings be submitted for review to the National Advisory Council on Historic Preservation. Executive Order 11593 requires all federal agencies to cooperate with nonfederal agencies, groups, and individuals to insure that federal plans and programs contribute to the preservation and enhancement of nonfederally-owned historic and cultural values.

In Wyoming, no mining on, or rights-of-way across, public lands will be approved until BLM or the Forest Service (FS), after consultation with GS, has coordinated professional cultural resource surveys with the Wyoming State Historic Preservation Officer and has received his written comments and review. Additional surveys and mitigation may be necessary if surface evidence indicates further evaluation is necessary.

BLM and GS have developed procedures titled "Cooperative Procedures Between the U.S. Geological Survey and the Bureau of Land Management for Protection of Cultural Resources Related to Onshore Mineral Lease Operations Exclusive of Oil, Gas, Geothermal, and Oil Shale," dated July 28, 1977. These procedures have been implemented for coal development within the region.

Water impoundments which would inundate important cultural values can be considered, pending decisions by the State Engineer. If a planned reservoir covers public land surface or mineral estate and its water is designated for another federally approved project, it will first be assessed under the requirements of the National Environmental Policy Act and the Reservoir Salvage Act. If cultural values are located, the "criteria for effect," as explained in detail under Section 106 of the National Historic Preservation Act and Section 2(b) of Executive Order 11593 will be initiated by any federal agency joined in the project.

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Paleontology

Paleontological resources are protected under authorities contained in the Federal Land Policy and Management Act of 1976.

Railroads

The Interstate Commerce Act (49 Stat. 543, 49 U.S.C. 1(18)) requires prior approval from the Interstate Commerce Commission for the extension or new construction of a line of railroad or the abandonment of operation of a line of railroad. Exempted from this authority are spur, industrial team, switching, or side tracks located wholly within one state. Commission certification is based on a balancing of the relevant economic, technical, and environmental factors.

Natural Gas Pipelines

The Natural Gas Act as amended requires that the Federal Energy Regulatory Commission approve comingling of synthetic natural gas (such as that produced in a coal gasification plant) with natural gas in the interstate pipeline system.

Mineral Protection

Oil and gas leases are in effect for much of the region. Priorities for mining or drilling for oil and gas on public lands are established by the Conservation Division of GS. Mining operations approaching wells or bore holes that may liberate oil, gas, water, or other fluid substances must be approved in accordance with 30 CFR 211.17 and 30 CFR 211.63. Impacts of mining on oil and gas areas can be mitigated largely by agreements among operators or by technical methods such as directional drilling, drainage practices, recovery of wells lost, pipeline and flow line relocation, and pillar recovery.

Vegetation and Wildlife

Applicable authorities include:

1. Endangered Species Act of 1973 (87 Stat. 844)
2. Bald Eagle Protection Act of 1969 (16 U.S.C. 668-668c)
3. Fish and Wildlife Coordination Act of 1958 (relates to projects on navigable streams)

The Endangered Species Act provides protection for listed species (both flora and fauna) and their critical habitat. Prior to authorization of any federal action, the Department of the Interior will require that a survey be made to determine if listed species or their habitat may be present. If it is determined that listed species or their habitat may be present and could be affected by the proposed activities, appropriate consultation with the U.S. Fish and Wildlife Service (USFWS) will be carried out.

No activities will be authorized until consultation is completed as per 50 CFR 402 (January 4, 1978).

The Bald Eagle Protection Act of 1969 prohibits molestation of eagles and their nests. Recent amendments to the act authorized the Secretary of the Interior to issue regulations to permit the taking of golden eagle nests which interfere with resource development or recovery operations.

The Fish and Wildlife Coordination Act of 1958 provides that USFWS will be consulted on matters which could affect navigable waters and/or any fish or wildlife resource.

Floodplains Management

Executive Order 11988, May 24, 1977, directs federal agencies to take appropriate actions to avoid, to the extent possible, long- and short-term adverse impacts associated with the occupancy and modification of floodplains. The executive order further states that federal agencies will avoid direct or indirect support of floodplain development wherever there is a practicable alternative.

Protection of Wetlands

Executive Order 11990, May 24, 1977, directs federal agencies to take appropriate actions to avoid, to the extent possible, long- and short-term adverse impacts associated with the destruction or modification of wetlands and to avoid direct or indirect support of new construction in wetlands wherever there is a practicable alternative.

Provisions For Revenue Sharing And Taxation

The state government provides several methods of offset energy development impacts: (1) the infusion of additional revenues to local units of government, (2) the provision of information and technical assistance, and (3) the introduction of state and local influence into the siting of energy facilities. Efforts to increase local revenues have included automatic increases in the distribution of state tax receipts, legislated increases in the distribution of the sales tax, joint powers loans, coal impact tax grants, and the enactment of an optional sales tax. The state has tried to provide information and technical assistance to local governments through the Department of Economic Planning and Development and the Industrial Development Information and Siting Act.

Local Sales Tax

Cities and counties have the option to impose a 1% sales tax.

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Mineral Leasing Royalties

The state receives 50% of the mineral royalties from any mineral leasing projects as provided by the Federal Coal Leasing Amendments Act of 1975. The state divides its share as follows: municipalities 7.5%, counties 2.25%, state highway work in counties affected by resource development (2.25%), the school foundation program (37.50%), the state highway fund (26.25%), capital outlays for higher education (6.75%), public schools capital construction (4%), and other (13.5%).

Severance Taxes

The state receives from operating coal companies 10.1% of the value of gross products extracted from mines. This 10.1% is allocated for the state general fund (2%), the permanent trust fund (2.5%), the water development account (1.5%), a capital facilities revenue fund (1.5%), the state highway fund (1%), and the coal impact fund (1.6%). The proceeds to the coal impact fund will increase to 2.0% in 1979, bringing the total severance tax on coal to 10.5%.

Coal Impact Tax. The state is using its option to tax coal mining companies to furnish a source of revenue to be spent for roads, streets, highways, water, and sewer projects. Limited funds accrued from the coal impact tax may be borrowed by local governments to upgrade certain public facilities.

Ad Valorem Revenues

Property taxes of 3.25 mills are presently collected in Campbell County for the state school equalization fund. Because of its high assessed valuation per pupil, Campbell County School District No. 1 does not receive state school equalization funds. The equalization levy is determined annually by the state and can vary from 0 to 6 mills.

Joint Powers Act

This act allows cities and counties to share revenues, facilities, and services.

LAND USE PLANS, CONTROLS, AND CONSTRAINTS

Land Use Controls

Federal

In the region of analysis, a large number of separate jurisdictional entities exercise certain types of land and resource use controls. The federal sector includes the FS (Thunder Basin National Grasslands) and BLM (public lands and subsurface estate under certain private lands).

Development, management, use, and control of use on public lands has been principally delegated to FS and BLM. Controls are effected through issuance or nonissuance of a variety of leases, permits, licenses, etc. Each authorization to use public lands contains provisions to control that use. Controls exercised by the federal government for the subsurface estate are governed by the statutes authorizing the disposition and use of that estate. Foremost among these statutes is the authority for leasing coal deposits and authority to require, as a condition of such leases, an operation-management plan and a reclamation-restoration plan. Management policy has been extended in greater detail by the National Environmental Policy Act of 1969 and the Federal Land Policy and Management Act of 1976.

In certain situations, there is a joint or multiagency sharing of particular management and control and responsibilities, such as the cooperative agreement between the Department of the Interior and the State of Wyoming for administering and enforcing reclamation operations on federal coal leases in Wyoming. The subsurface estate vested in private or state ownership would normally be governed by applicable State of Wyoming statutes.

State

The Wyoming Commissioner of Public Lands is responsible for the administration, leasing, and management of lands owned by the State of Wyoming. Under State of Wyoming statutes, the state is authorized to perform and administer certain surface land use, planning, and development activities on state, county, municipal, and privately-owned properties. Legislation which has a significant effect on land use are the Wyoming Environmental Quality Act, Wyoming State Land Use Planning Act, and the Industrial Development Information and Siting Act.

The State of Wyoming retains jurisdiction over state lands. Some of these lands were conveyed to the state as part of the act admitting Wyoming to the Union. This legislation granted Sections 16 and 36 of every township to the state for educational purposes. Use and control of these lands (including mineral leasing, rights-of-way, etc.) are governed by Wyoming law.

County

Both Campbell and Converse counties have full time planning staffs, and are developing comprehensive county plans. Under Wyoming statutes, counties have authority to effect a wide variety of controls on state-owned lands in matters not specifically reserved to the state. The authority applies only to those portions of the county that are unincorporated. A county may regulate and restrict location and use of buildings and structures, and use, condition of use, or occupancy of lands for residency, recreation, agriculture, industry, commerce, public use, and other purposes. The authority does not apply to any planning or zoning controls over lands used

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or occupied for the extraction or production of minerals unless reasonably necessary to protect the public good of its citizens.

Less than 1% of the land in the region is actually owned by county governments. Use and control of these lands are governed by state law and county ordinances. Control over mineral uses on these lands is vested in the State of Wyoming under the Wyoming Environmental Quality Act of 1973. This act also authorizes the state to control air quality, water quality, and solid waste management.

Municipal

Three incorporated towns or cities lie within the region. These are Gillette, Douglas, and Glenrock. Municipalities have authority to effect master plans, zoning, and other regulatory controls. The Wyoming Environmental Quality Act of 1973 preempts cities' authority to regulate and control air, water, solid waste, and land quality standards except where specifically delegated to municipalities.

Where a county or city lacks a specific authority, provisions of the Wyoming Joint Powers Act are available to enable joint exercise of power, privilege, or authority. This legislation enables two or more agencies to jointly plan, create, finance, and operate (control) water, sewage, solid waste, fire protection, transportation, and public school facilities.

Land Use Plans

Bureau of Land Management Planning

The Eastern Powder River Basin Management Framework Plan (MFP) was revised in 1977. The revised MFP is designed to serve as a guide for multiple-use management and development of the surface of public lands as well as the federal mineral estate, much of which lies under privately owned surface. The MFP area was selected to correspond with the region analyzed in 1974 (FES 74-55) and in this document. Proposals for coal development and lands of possible interest to the mining industry for potential coal development were addressed in BLM's land use planning process. Environmental costs and tradeoffs are considered in the MFP. An important aspect of the process included consultation with representatives of state government and local governments of Gillette and Douglas. Comments and suggestions received at public meetings also influenced the content of the 1977 revised MFP.

Potential socioeconomic impacts which could result from coal development are a major concern in the region. Some local and state government planners and many citizens have recommended a "go slow" approach when considering possible future coal development in the region. Since other interests, such as the coal industry, have recommended increased development, the 1977 revised MFP attempted to strike a balance between the

recommendations and considered possible development in the vicinity of the new community of Wright in an effort to help reduce impacts to Gillette and Douglas.

Other recommendations and decisions of the MFP relating to coal are as follows:

1. To manage mineral resources for efficient development, giving priority consideration to energy minerals, but at the same time, providing environmental protection and consideration of socioeconomic impacts.

2. To designate areas of potential interest for coal development which are compatible for mining under the multiple-use concept of management, and which contain uncommitted and economic coal reserves that could be developed in conjunction with certain existing operations or mining plan proposals.

3. If the results of the current regional analysis are favorable, the approval of the mining and reclamation plan for the proposed Buckskin Mine would be in accordance with multiple use objectives of the MFP.

4. Future proposed actions in support of coal mining proposals (e.g., rights-of-way) would require analyses of possible impacts. If compatible with other uses of the area and accompanied by necessary environmental stipulations, such actions would serve the multiple-use objectives of the MFP.

5. New energy transmission or transportation facilities must be located within existing corridors wherever possible.

Any future planning surrounding the possibilities of lease phasing, scheduling, or exchange (not addressed in 1977 MFP) could be accomplished only through full involvement of state and local governments' assistance and recommendations.

Forest Service Planning

A portion of Thunder Basin National Grasslands is included within the region. A multiple use plan (MUP) covering this area was updated in December 1971. It establishes overall land use objectives for the grasslands and is the basis for all actions within the grasslands. The overall objectives on the grasslands emanate from the Multiple-Use Sustained-Yield Act of 1960, the Forest and Rangeland Resources Planning Act of 1974, and the National Forest Management Act of 1976.

Two types of federal surface estate are found on the grasslands: acquired lands and public domain lands. Acquired lands were obtained from private ownership, while public domain lands have always been in public ownership. Both of these surface estates are subject to the above acts. The MUP makes both types of lands available for coal leasing subject to certain constraints and direction established by FS. The constraints and direction relate to such issues as maintaining crucial wildlife habitat, maintaining the stability of critical ecosystems, evaluating the reclamation potential of lands to be leased, and weighing of environmental costs and sensitivities.

FS and BLM personnel met during BLM's MFP land use planning process in order to coordinate and prioritize possible future leasing areas within the grasslands.

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Local Planning

In 1968, a joint Gillette/Campbell County Planning Department was formed; it currently employs three planners. The anticipated impacts of new coal mining have had priority consideration since January 1975. The Gillette/Campbell County Planning Department completed a preliminary draft planning program during June 1977. The final comprehensive plan was adopted by both the city and the county in July 1978. Two provisions of the plan which were written as a result of the coal mining near Gillette are as follows: (1) Local government should continue to monitor environmental quality within the limits of "in house" technical constraints. Environmental quality data and analysis should be obtained from public and private sources as it is made available. Sources of such information are encouraged to provide current data. (2) Buffer areas and "transition land uses" may be required between residential areas and new industrial and major commercial developments and between other incompatible land uses. A copy of the approved plan is on file at the BLM Casper District Office.

The Douglas/Converse County Area Planning Office (established in December 1974, and employing two planners in Douglas) serves the municipalities of Douglas, Glenrock, and the balance of Converse County. A comprehensive plan for Douglas, which includes a 3-mile peripheral area, was adopted by the town of Douglas and Converse County in May 1976. A similar plan for Glenrock (including a 2-mile peripheral area) is presently in the draft and review stage; it will be placed before the Converse County Commissioners and the Glenrock Town Council for consideration in the near future.

Peripheral areas ("buffer zones") proposed to surround the above towns would require any commercial or industrial development (except mining) to adhere to the respective land use plans.

Comprehensive local planning will be incorporated into federal land use plans (FS and BLM) as these plans are revised and updated.

INSTITUTIONAL RELATIONSHIPS

Federal

Office of Surface Mining (OSM)

OSM, in consultation with the surface-management agency (BLM or FS), GS, and the state regulatory authority, where applicable, recommends approval or denial of surface coal mining applications (including mining and reclamation plans) to the Assistant Secretary of Energy and Minerals. OSM is the federal regulatory authority responsible for reviewing coal mining permit applications; for enforcement of all environmental protection and reclamation standards included in an approved mining permit; for monitoring of both on and off-site effects of the mining operation; and for monitoring

abandonment operations within the area of operation of a federal lease.

OSM is the principal contact for all coal mining activities within the area of operation. OSM will conduct as many inspections as are deemed necessary but no less than one partial inspection quarterly and at least one complete inspection every 6 months (30 CFR 721.11(c)) (December 1977).

OSM, after consultation with BLM or FS, GS, and the operator, establishes the boundaries of the permit area for the proposed mine and approves the locations of all the mine facilities located within this boundary.

Section 523 of SMCRA requires the federal program for surface coal mining regulation to adopt those state performance standards which the Secretary determines are more stringent than the federal standards. Therefore, the performance standards enforced by OSM on a federal leasehold should be at least as stringent as those required under state law or regulations.

The Department of the Interior negotiated a cooperative agreement pursuant to Section 523(c) of SMCRA with the State of Wyoming. This agreement was signed in October 1978. The OSM functions and responsibilities specified in the agreement have been delegated to the state regulatory authority. Under this agreement, OSM and the state regulatory authority will jointly review and act on mining permit applications and recommend approval or disapproval to the officials authorized to take final action on the application. The Secretary is prohibited by law from delegating his authority to approve mining plans on federal lands.

Bureau of Land Management (BLM)

BLM, after consultation with OSM, GS, the public, and the governor, may offer for competitive lease tracts of lands found potentially valuable for development of coal. This is part of the land use planning process.

BLM formulates special requirements to be included in a lease or mining permit application concerning the management and protection of all resources other than coal and the postmining land use of affected lands.

BLM, after consultation with GS and OSM, is responsible for the authorization of various ancillary facilities such as access roads, power lines, communication lines, and railroad spurs proposed by a mining company on federal lands outside the permit area. Rights-of-way can only be granted pursuant to Title V of the Federal Land Policy and Management Act of 1976. Rights-of-way are approved subject to standard requirements for duration of the grants, right-of-way widths, fees or costs, and bonding to secure obligations imposed by the terms and conditions of the grants. The terms and conditions applicable to rights-of-way are determined by the regulations found in 43 CFR 2800, by the BLM land use plan, and by on-the-ground evaluations.

BLM is the lead agency, in coordination with GS and OSM, for all proposed uses other than coal mining on federal lands within a leasehold.

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Geological Survey (GS)

GS is responsible for reviewing mining plans for development, production, and coal resource recovery requirements on federal leaseholds. GS is responsible for assuring the maximum economic recovery of the federal coal resource and that the federal government receives fair market value for the coal resource.

Forest Service

FS manages the national forests and grasslands under the principles of the Multiple-Use Sustained-Yield Act of 1960 (74 Stat. 2.5, 16 U.S.C. 528-531). Rights-of-way on acquired lands in the national grasslands are granted under authority of the Bankhead-Jones Farm Tenant Act (50 Stat. 525; 7 U.S.C. 1010-1013) and the Federal Land Policy and Management Act of October 21, 1976.

Historically, lands managed by FS have been subject to mineral exploration and mining. Coal leasing development is subject to applicable laws and regulations and constraints developed in multiple-use planning.

A surface mining operation must reclaim the surface sufficiently to achieve a land configuration consistent with the purpose of the Bankhead-Jones Act and the current land use plan for the affected area.

Relationship and Special Requirements of the Federal Land Policy and Management Act, Federal Coal Leasing Amendments Act, and the Surface Mining Control and Reclamation Act (SMCRA)

The Federal Land Policy and Management Act requires development of a comprehensive land use plan prior to lease issuance. The plan must consider all resources and present and future land uses before land use allocations can be determined. Land uses on adjacent lands must also be considered prior to determination of postmining land use.

The Federal Coal Leasing Amendments Act requires that a comprehensive land use plan must be completed prior to lease issuance and that the proposed lease must be compatible with the plan. This act list specific areas which must be classified as unsuitable for surface mining.

Section 523 of SMCRA requires that a federal lands program which includes the requirements of this act be promulgated and implemented no later than August 3, 1978. Until the federal lands program is implemented, the initial regulations as required in Section 502 of SMCRA and published in final form (30 CFR 715 and 716) in the *Federal Register*, December 13, 1977, will apply, as modified, to all federal coal leases. These regulations will be modified under the authority of Sections 523(c) and 702(b) of this act to meet the requirements of the Federal Coal Leasing Amendments Act of 1975 (30 U.S.C. 181 et seq.) and the Federal Lands Policy and Management Act of 1976. The basic changes in the regulations will be that: (1) postmining land use cited in the reclamation plan will be that which is part of the surface-management agency's comprehensive land use plan; (2) permanent roads, dams, power lines, etc., to be constructed on

public lands will meet the design standards of the surface managing agency; and (3) resource data collected in the process of developing the land use plan or lease stipulations will be available for use in developing the reclamation plan.

The following is a discussion of the relationship among specific requirements of the three laws. The specific sections below serve as mitigatory measures. Regulations cited below were published in final form in December 1977.

Surface Owner Consent. Pursuant to Section 714 of SMCRA, where coal owned by the United States falls under private surface, the Secretary of the Interior shall not enter into any lease until the surface owner has given written consent to enter and commence a surface mining operation.

Alluvial Valley Floors West of the 100th Meridian, and Prime Farmland. Soils, geomorphic, biological, and land use information will be utilized to inventory lands to determine whether they should be classified as alluvial valley floors and prime farmland. A mining and reclamation plan which proposes to conduct a surface coal mining operation on or adjacent to alluvial valley floors shall include baseline data and surveys as prescribed in 30 CFR 715.17(j) to establish standards which ensure the preservation of the hydrologic function of these alluvial valley floors. Prior to approval to mine on lands classified as prime farmlands, the operator will have to provide data to demonstrate that his proposed method of reclamation will achieve, within a reasonable time, equivalent or higher levels of yield after mining as existed before mining. If approved, special soils handling and storage stipulations will be included in the mining plan.

Lands Classified as Unsuitable for Surface Coal Mining. Lands proposed for surface mining, as well as lands included in petition applications requesting the designation of coal lands as unsuitable for surface coal mining will be processed through the surface-management agency's land use planning and public involvement procedures. Petition applications should be filed with OSM. Prior to designating lands unsuitable for mining, except those specific tracts of land described in Section 522(e) of SMCRA, the surface-management agency shall prepare a statement on: (1) the potential coal resources of the area; (2) the demand for the coal resources; and (3) the impact of such a designation on the environment, the economy, and the supply of coal. The Federal Land Policy and Management Act also provides for classification of "Areas of Critical Environmental Concern"

Unsuitability Criteria. Once the proposed unsuitability criteria published in the *Federal Register* (December 8, 1978) become final, they will be applied to all lands included in any application for a federal mining and reclamation plan permit. Federal coal lands meeting the unsuitability criteria can be classified as unsuitable for surface mining.

Archeological Historical Sites and Endangered and/or Threatened Species. Inventories will be conducted on

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lands to be impacted by the surface-management agency, and stipulations necessary for the management and protection of these resources will be included in the mining permit.

Federal Lessee Protection. Prior to approval of a mining and reclamation plan, the surface of the public lands will be inventoried for legally installed appurtenances. Agreements with the federal lessee will be reached or bonds will be obtained to ensure that the lessee's investments are protected.

Reclaimability to Present Use. Prior to approval of a mining and reclamation plan, it must be demonstrated that the land can be reclaimed to its premining productive capability. Where the determination is made that certain lands cannot be reclaimed to the approved post-mining land use, surface mining will not be permitted.

Performance Bonds. Surety bonds are required at the time of lease issuance and may be adjusted prior to approval of the reclamation plan. Minimum surety for reclamation is set by SMCRA at \$10,000. In addition, a surety bond will be required to ensure payment to the government for each ton of coal mined.

Use of Explosives. The requirements of 30 CFR 748 will be included as part of any mining and reclamation plan submitted for approval.

Water Rights. The area around the proposed mining area will be inventoried for water uses and water rights. Special requirements will be included in the mining and reclamation plan to protect the water rights of others.

Revegetation. To ensure that the proposed reclamation plan is being developed to meet the objectives of the postmining land use, the composition and density of plants necessary to meet those objectives will be listed in the mining permit application. The surface-management agency will inspect leases and permit areas for compliance with terms, conditions, and stipulations relating to the management and protection of federal lands and resources and postmining land use.

Impoundments. The regulations provide standards and requirements for dams constructed of or impounding waste material. Requirements are also established in the regulations for permanent impoundments.

Public Health and Safety. The authorized representative of OSM has the authority to enter and inspect for compliance with the initial performance standards in 30 CFR 715 and 716. He has the authority to order a cessation of mining or reclamation operations if, in the course of an inspection or investigation, he finds conditions, practices, or violations of the initial performance standards which create an imminent danger to the public health and safety, or conditions or practices which can be expected to cause significant environmental harm.

The Public. Any person who is or may be adversely affected by a surface mining operation may notify the Regional Director of OSM (or his representative responsible for conducting inspections) in writing of any violation of SMCRA which he has reason to believe exists at the surface mine site.

State and County

State of Wyoming

DEQ. The Department of the Interior has negotiated a cooperative agreement with the State of Wyoming pursuant to Section 523(c) of SMCRA. It was signed in October 1978. Since this agreement has been consummated with the state, the OSM functions and responsibilities specified in the agreement has been delegated to the state regulatory authority (DEQ). Under this agreement, OSM and DEQ will jointly review and act on mining permit application and recommend approval or disapproval to the officials authorized to take final action on the plans. The Secretary is prohibited by law from delegating his authority to approve a mining plan on federal lands. Under the terms of the cooperative agreement, DEQ will serve as the authorized representative of OSM in inspection and enforcement of the reclamation provisions of a mining permit.

DEQ has authority relating to air quality, solid wastes, water quality, mining, and mined-land reclamation. Standards for reclamation are determined by DEQ on an individual mine basis, after evaluation of the project and its location. The Land Quality Division issues permits and licenses to mine according to the approved mining and reclamation plans. The Air Quality Division issues permits to construct and operate coal mines after approval of plans for monitoring and controlling air contaminants. The Water Quality Division issues permits to construct settling ponds and waste water systems. They also issue National Pollutant Discharge Elimination System permits for discharging waste water. The Solid Waste Division issues construction fill permits and industrial waste facility permits for solid waste disposal during construction and operation of a coal mine.

Commissioner of Public Lands. Utility lines, roads, and railroad spurs crossing state land require easements from the Commissioner of Public Lands.

Wyoming Highway Department. Relocation of highways and all utility line crossings of state and federal aid highways require authorizations from the Wyoming Highway Department.

Wyoming State Engineer. Use of surface or groundwater for mining and coal processing operations requires a permit from the State Engineer. Water pipelines also require permits from the State Engineer.

Relationships With Private Interests

Interaction between private and federal property interests occurs frequently in the Eastern Powder River Basin, resulting from the historical federal practice of conveying land to private ownership with reservation to the United States of some or all minerals underlying the land. As a result, although 75% to 80% of the land surface is privately owned, 75% to 85% of the mineral rights are retained by the federal government (see Table R3-3). The acts of June 22, 1910 (30 U.S.C. 83-85) and

TABLE R3-3

SURFACE AND MINERAL OWNERSHIP
EASTERN POWDER RIVER BASIN

Campbell County (3,034,614 acres)

Surface Ownership

Private	80.2%
State	7.2%
Federal	<u>12.6%</u>
	100.0%

Mineral Ownership

Private and State	~15%
Federal	<u>~85%</u>
	100%

Converse County (943,946 acres)

Surface Ownership

Private	75.3%
State	12.8%
Federal	11.7%
County	<u>.9%</u>
	100.0%

Mineral Ownership

Private and State	~25%
Federal	<u>~75%</u>
	100%

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July 17, 1914 (30 U.S.C. 121-124) were the earliest federal statutes calling for this reservation. The reservations required by those acts were limited to specific minerals, most commonly oil and gas or coal.

In the case of reservation of coal, the act of June 22, 1910 provides that any person having rights to prospect for or mine the coal may enter and occupy the land for that purpose. He must first pay the surface owner for damages caused by his operation or post a bond to cover those damages.

By far the most common reservation of minerals occurs with lands which passed to private ownership under the Stockraising Homestead Act of December 29, 1916 (39 Stat. 862; 43 U.S.C. 291-302). Section 9 of that act provides that all conveyances of land under its provisions shall contain a reservation to the United States of all minerals, together with the right to prospect for, mine, and remove them. In addition, the law spells out in some detail the relative rights of the surface owner and the holder of mineral rights. Again, there is provision for posting of bond by the holder of any mineral rights (lease) for the benefit of the surface owner if agreement with the surface owner cannot be reached. Liability of the holder of mineral rights is limited to damage to crops (including forage) or other tangible improvements. Damages for reduction in the value of land for grazing can be awarded pursuant to the act of June 21, 1949 (63 Stat. 215; 30 U.S.C. 54).

Bonds posted under the above acts are filed with the BLM. If amounts of the bonds are protested as inad-

equate by the landowner, BLM must decide the proper amount.

In recent years, BLM has further concerned itself with protecting interests of surface landowners when it proposes to issue new coal leases. Protection of facilities critical to ranching operations is of particular concern. BLM consults with the landowners when preparing stipulations for inclusion in coal leases. BLM field offices make similar contacts with landowners when reviewing lessees' proposed mining plans which are submitted to BLM by GS for comment and recommendations. (Surface owner consent for mining is now also required by SMCRA.)

The Wyoming Environmental Quality Act also contains provisions to protect interests of a surface landowner where the surface and mineral estates are split. In such instances, a mining permit may not be issued without consent of the surface owner or the posting of a bond for the surface owner's benefit to secure payment of any damages "to the surface estate, to the crops and forage, or to the tangible improvements" of the landowner. Under both federal and state laws, if the extent of compensable damages cannot be agreed on by the parties, the landowner must sue for damages in court.

Private interests do not have any legal control over location of railroads or other public utility facilities in Wyoming; such utilities are authorized by state law to condemn lands where needed for their purposes, subject only to payment of compensation for the market value of the taking.