7. REGULATORY COMPLIANCE AND PERMIT REQUIREMENTS

Under 40 CFR Part 1502.25, an EIS is required to list all federal permits, licenses, and other entitlements which must be obtained in implementing the proposal. This section lists federal, state, and local regulatory compliance and permit requirements for the proposed facilities.

7.1 FEDERAL REQUIREMENTS

CLEAN AIR ACT (CAA)

- Enacted by the Air Quality Act of 1967, Pub. L. No. 90-148 (codified as amended at 42 USC 7401 et seq.).
- Amended by the Clean Air Act Amendments of 1990, Pub. L. No. 101-549.
- Applicable titles:

  — Title I—Air Pollution Prevention and Control. This Title is the basis for air quality and emission limitations, Prevention of Significant Deterioration (PSD) permitting program, State Implementation Plans, New Source Performance Standards (NSPS), and National Emissions Standards for Hazardous Air Pollutants (NESHAP).

  — Title IV—Acid Deposition Control. This Title establishes limitations on sulfur dioxide and nitrogen oxide emissions, permitting requirements, monitoring programs, reporting and record keeping requirements, and compliance plans for emission sources. This Title requires that emissions of sulfur dioxide from utility sources be limited to the amounts of allowances held by the sources.

  — Title V—Permitting. Although a Title V Operating Permit may not be required, this Title provides the basis for the Operating Permit Program and establishes permit conditions, including monitoring and analysis, inspections, certification, and reporting. Authority for implementation of the permitting program is delegated to authorized states, including Pennsylvania.
- Regulations implementing the Clean Air Act are found in 40 CFR Parts 50–95.

40 CFR Part 68, Chemical Accident Prevention Provisions – This regulation includes the requirements for owners or operators of stationary sources concerning the prevention of accidental releases. Subpart B describes the requirements for a Hazard Assessment and Subpart G describes the requirements of a Risk Management Plan (RMP). The Hazard Assessment that must be incorporated into the RMP is required to address the following topics:

- ***A worst-case release scenario analysis that is estimated to disperse toxic substances from covered processes the greatest distance in any direction from an accidental release.***
- ***A worst-case release scenario analysis that is estimated to disperse flammable substances from covered processes the greatest distance in any direction from an accidental release.***

- ***Additional worst-case release scenarios for a hazard class if a worst-case release from other covered processes potentially affects public receptors different from the previous analyses. This requirement would apply to the nearby Mahanoy State Correctional Institution.***

The worst-case conditions include a wind speed of 1.5 m/s with F-stability with the highest maximum daily temperature from the previous three years and average humidity for the site. The modeled release is to be at ground level, accounting for dense or neutrally buoyant gases and surface roughness. The release quantity is the greatest quantity held in a vessel or pipe. For gases, the modeled accidental release is to occur over 10 minutes, and for liquids, the release is to occur instantaneously. For flammable gases, the release vaporizes and forms a vapor cloud explosion with a yield factor of 10 percent of the energy released.

These analyses are to be documented in the RMP and are to be used to define

- ***the offsite population affected by the worst-case releases, and***
- ***the offsite environmental receptors affected by the worst-case releases***

The offsite consequence analysis is to be updated at least once every five years and is to include an accident history of all accidental releases from covered processes that result in deaths, injuries or property damage either on site or offsite. For accidental offsite releases, the history must also include evacuations, sheltering in place, and environmental damage.

CLEAN WATER ACT (CWA)

Enacted by the Federal Water Pollution Control Act Amendments of 1972, Pub. L. No. 92-500 (codified as amended at 33 USC 1251 et seq.).

- Amended by the Clean Water Act of 1977, Pub. L. No. 95-217, and the Water Quality Act of 1987, Pub. L. No. 100-4.
- Applicable titles:
    - — Title III—Standards and Enforcement.
        - Section 301, Effluent Limitations, is the basis for establishing a set of technology-based effluent standards for specific industries.
        - Section 302, Water Quality Related Effluent Limitations, addresses the development and application of effluent standards based on water quality goals for the waters receiving the effluent.
        - ***Section 303, Water Quality Standards and Implementation Plans, addresses the development of water quality standards based on the designated uses of the waters.***

- ***Section 304, Information and Guidelines, addresses the development of water quality criteria related to the effects of pollutants on health, welfare, and biological communities.***

— Title IV—Permits and Licenses.

- Section 402, National Pollutant Discharge Elimination System (NPDES), regulates the discharge of pollutants to surface waters. Regulations implementing the NPDES program are found in 40 CFR Part 122. ***A facility that intends to discharge into the nation's waters must obtain a permit before initiating a discharge. NPDES permits set forth the conditions and effluent limitations under which a facility may make a discharge. Effluent limitations in specific permits can be based on industry-specific, technology-based standards and/or water-quality-based standards.*** Authority for implementation of the NPDES permit program is delegated to authorized states, including Pennsylvania.
- Section 404, Permits for Dredged or Fill Material, regulates the discharge of dredged or fill material in the jurisdictional wetlands and waters of the United States. The U.S. Army Corps of Engineers has been delegated the responsibility for authorizing these actions.

- ***Federal*** regulations implementing the Clean Water Act are found in 40 CFR Parts 104–140. Regulations that affect the permitting of this project include

  — 40 CFR Part 112—Oil Pollution Prevention. This regulation requires the preparation of a Spill Prevention, Control, and Countermeasure Plan.

  — 40 CFR Part 122—NPDES. This regulation requires the permitting and monitoring of any discharges to waters of the United States.

- ***State regulations implementing the Clean Water Act are discussed in Section 7.2.***

EXECUTIVE ORDERS 11988 AND 11990

Executive Order No. 11988, 42 FR 26951 (May 24, 1977), "Floodplain Management," directs federal agencies to establish procedures to ensure that they consider potential effects of flood hazards and floodplain management for any action undertaken. Agencies are to avoid impacts to floodplains to the extent practical. Executive Order 11990, 3 CFR 121 (1977), 42 FR 26961 (May 24, 1977), "Protection of Wetlands," requires federal agencies to avoid short- and long-term impacts to wetlands if a practical alternative exists. DOE regulation 10 CFR Part 1022 establishes procedures for compliance with these Executive Orders. Where no practical alternatives exist to development in floodplain and wetlands, DOE is required to prepare a floodplain and wetlands assessment discussing the effects on the floodplain and wetlands, and consideration of alternatives. In addition, these regulations require DOE to design or modify its actions to minimize potential damage in floodplains or harm to wetlands. DOE is also required to provide opportunity for public review of any plans or proposals for actions in floodplains and new construction in wetlands under these regulations.

The floodplain and wetlands effects anticipated from this proposed project are provided in the following sections of the EIS: Section 3.5.1 (Floodplains—Existing Environment), Section 3.5.2 (Wetlands—Existing Environment), Section 4.1.5.1 (Floodplains— Environmental Consequences), and Section 4.1.5.2 (Wetlands—Environmental Consequences).

SURFACE MINING CONTROL AND RECLAMATION ACT OF 1977 (SMCRA)

- Enacted by the Surface Mining Control and Reclamation Act of 1977, Pub. L. No. 95-87 (codified as amended at 30 USC 1234 et seq.).
- The Act provides for the federal regulation of surface coal mining operations and the acquisition and reclamation of abandoned mines.
- Applicable title:
    - — Title V— Control of the Environmental Impacts of Surface Coal Mining. This Title authorizes the implementation of and federal funding for state regulatory programs that meet the minimum standards specified by the statute. The Pennsylvania Department of Environmental Protection is authorized to administer the regulatory program under this Act***. See Section 7.2 infra***.
- ***Federal regulations implementing the Surface Mining Control and Reclamation Act of 1977 are found in 30 CFR Parts 700-955.***

RESOURCE CONSERVATION AND RECOVERY ACT OF 1976 (RCRA)

- Enacted as an amendment to the Solid Waste Disposal Act of 1965, RCRA was enacted by the Resource Conservation and Recovery Act of 1976, Pub. L. No. 94-580 (codified as amended at 42 USC 6901 et seq.).
- Amended by the Hazardous and Solid Waste Amendments of 1984 (HSWA), Pub. L. No. 98-616, and the Land Disposal Flexibility Act of 1996, Pub. L. No. 104-119.
- ***Federal regulations implementing Subtitle C of RCRA for hazardous waste management are found in 40 CFR Parts 260-279.***
- Applicable title:

    — Title II—Solid Waste Disposal (the Solid Waste Disposal Act of 1965). This Title regulates the disposal of solid wastes. Title II, Subtitle C—Hazardous Waste Management, provides for a regulatory system to ensure the environmentally sound management of hazardous wastes from the point of origin to the point of final disposal. Pennsylvania has delegated authority to administer most elements of the RCRA Subtitle C program within the state. Title II, Subtitle D—State or Regional Solid Waste Plans, allows states to plan for managing and permitting the disposal of solid wastes and requires each state to develop and implement a regulatory program to ensure that municipal solid waste landfills and other facilities that receive household hazardous waste or conditionally exempt small quantity generator hazardous waste meet federal

minimum standards (40 CFR Part 258) for the location, design, operation, closure, and post-closure care of municipal solid waste landfills.

- Project participants would be required to identify any residues that require management as hazardous waste under RCRA (40 CFR Part 261). For some waste streams, this includes testing waste samples using the toxic characteristic leaching procedure or other procedures that measure hazardous waste characteristics. ***Because the facilities would be expected to generate small quantities of hazardous waste, WMPI would need to apply a for an EPA Identification Number by submitting U.S. Environmental Protection Agency Form No. 8700, "Notification of Regulated Waste Activity."***

ENDANGERED SPECIES ACT OF 1973 (ESA)

- Enacted by the Endangered Species Act of 1973, Pub. L. No. 93-205 (codified as amended at 16 USC 1531 et seq.).
- Applicable title:
  - — Section 7, Interagency Cooperation, [consistency] requires any federal agency authorizing, funding, or carrying out any action to ensure that the action is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of critical habitat of such species. Consequently, the U.S. Fish and Wildlife Service will conduct a consultation, in compliance with Subsection (a)(2) of Section 7 of the Act, with regard to the impacts of the proposed project on threatened and endangered species listed by the U.S. Fish and Wildlife Service and any critical habitat of such species in the vicinity of the proposed facilities.
- ***Regulations implementing Section 7 of the Endangered Species Act are found in 50 CFR Part 402.***

Pursuant to Section 7 of the Act, DOE has consulted with the U.S. Fish and Wildlife Service. *See* Appendix A infra.

NATIONAL HISTORIC PRESERVATION ACT OF 1966 (NHPA)

- Enacted by the National Historic Preservation Act of 1966, Pub. L. No. 89-665, (codified as amended at 16 USC 470 et seq.).
- ***The regulations implementing Section 106 of the National Historic Preservation Act are found in 36 CFR Part 800.***
- Under Section 106, the head of any federal agency having direct or indirect jurisdiction over a proposed federal or federally assisted undertaking in any state and the head of any federal department or independent agency having authority to license any undertaking shall, prior to the approval of the expenditure of any federal funds on the undertaking or prior to the issuance of any license, as the case may be, take into account the effect of the undertaking on any district, site,

building, structure, or object that is included in or eligible for inclusion in the National Register. In accordance with 36 CFR 800, the head of any such federal agency shall afford the state-run Advisory Council on Historic Preservation (ACHP) established under Title II of the Act a reasonable opportunity to comment with regard to such undertaking.

Pursuant to Section 106 of the Act, DOE has consulted with Pennsylvania's State Historic Preservation Officer. *See*Appendix B *infra*.

OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA)

- Enacted by the Occupational Safety and Health Act of 1970, Pub. L. No. 91-596 (codified as amended at 29 USC 300 et seq.).
- ***The Occupational Safety and Health Act is implemented by OSHA Construction Industry Standards (29 CFR Part 1926) and OSHA General Industry Standards (29 CFR Part 1910).***

Occupational Health and Safety Standards under 29 CFR Part 1910 list the necessary requirements for the management of hazardous materials. Subpart H specifically addresses hazardous materials and Subpart Z addresses toxic and hazardous substances. The requirements for specific materials are extensive. For all hazardous materials, 29 CFR 1910.119 addresses Process Safety Management of Highly Hazardous Chemicals, which is applicable to this project. The section contains the requirements for preventing or minimizing the consequences of catastrophic releases of toxic, fire or explosion hazards. The following are requirements:

- ***Hazard evaluation using one or more of the standardized methods;***
- ***Preparation of a Process Hazard Analysis that addresses each of the hazards of the process, the identification of any previous incidents that could lead to catastrophic consequences, engineering and administrative controls, the consequences of failure of engineering and administrative controls, facility siting, human factors, and a qualitative evaluation of a range of the possible safety and health effects of failure of controls on employees in the workplace;***
- ***Preparation of written procedures that address steps for each stage of operations, operating limits for operations, safety and health considerations and safety systems and their functions;***
- ***Training for in-process operations and operating procedures that emphasize specific safety and health hazards and emergency operations;***
- ***Contractor management to ensure contractors are fully informed of potential fire, explosion or toxic release hazards and the emergency action plans for the facility.***

Additional requirements address the pre-startup safety review, mechanical integrity, nonroutine work authorizations, management of change, incident investigation, and emergency planning and response. These requirements focus on worker safety and health. They are

complementary to the Chemical Accident Prevention Provisions in 40 CFR 68 which were promulgated pursuant to the CAA. See p. 7-1 supra.

FEDERAL AVIATION ACT OF 1958 (FAA)

- Enacted by the Federal Aviation Act of 1958, Pub. L. No. 85-726 (codified as amended at 49 USC 1101 et seq.).
- Regulations implementing this Act are found in 14 CFR Part 77 and are enforced by the U.S. Department of Transportation, Federal Aviation Administration.
- These regulations require submittal of a notice identifying any structures that, because of construction or alteration, may be a hazard to air transportation. WMPI would submit to the Federal Aviation Administration Agency Form No. 7460-1, "Notice of Proposed Construction or Alteration."

7.2 STATE REQUIREMENTS

- On March 18, 2005, the Pennsylvania Department of Environmental Protection issued Air Quality Program Permit No. 54-399-034 for the proposed facilities. The permit, which expires on March 31, 2010, establishes maximum allowable limits for total facility emissions during any consecutive 12-month rolling period. *See* Section 4.1.2.2 *supra*.
- ***Earth disturbance activities associated with tree clearing, site preparation, and construction of the proposed facilities would require Pennsylvania Department of Environmental Protection authorization through an NPDES Permit for Stormwater Discharges Associated with Construction Activities, either under General NPDES Permit PAG-2 or individual NPDES permits. Under either type of permit, an Erosion and Sediment Control Plan and a Post-Construction Stormwater Management Plan would be required for the project. The Erosion and Sediment Control Plan must show how land would be protected against accelerated erosion through the use of best management practices such as silt fencing, mulch, and sediment traps and basins. The Post-Construction Stormwater Management Plan would identify best management practices to be implemented to manage storm water discharges to protect water quality after construction. A Preparedness, Prevention, and Contingency Plan may also be required if toxic, hazardous, or other polluting materials would be stored or used during construction. Pennsylvania regulations applicable to stormwater management permits are found at 25 PA. CODE Ch. 92, National Pollutant Discharge Elimination System; 93, Water Quality Standards; and 102, Erosion and Sediment Control.***
- Treated wastewater from the existing Gilberton Power Plant, which is discharged to a tailings pond in the Mahanoy Creek valley, is regulated by Pennsylvania NPDES industrial wastewater discharge permit ***PA0061697,*** issued in 1997. ***DOE expects that*** discharge of treated effluent ***from operation of*** the proposed facilities would also require an NPDES permit issued by the

Pennsylvania Department of Environmental Protection***, whether the discharge is to Mahanoy Creek or to the tailings pond (25 PA. CODE Section 91.51 prohibits the discharge of inadequately treated wastes, except coal fines, into the underground workings of active or abandoned mines).*** A new set of effluent standards would be established for ***discharges from*** the new facilities. ***A Water Quality Management Part II permit would be needed for construction of the wastewater treatment facilities required for the proposed project. WMPI submitted a Water Quality Management Part II permit application on February 17, 2005 (WMPI 2005c), and submitted proposed effluent limits for a discharge permit on October 4, 2005 (Chandran 2005). Pennsylvania State regulations applicable to NPDES and Water Quality Management Part II permitting for the proposed facilities are found at 25 PA. CODE Ch. 16, Water Quality Toxics Management Strategy–Statement of Policy; 91, General Provisions for Water Resources; 92, NPDES Permitting, Monitoring, and Compliance; 93, Water Quality Standards; 95, Wastewater Treatment Requirements; and 96, Water Quality Standards Implementation. In addition, appropriate federal regulations under the Clean Water Act are incorporated by reference. 25 PA. CODE Ch. 92 provides that effluent limitations for discharges are to be based on whichever of the applicable state or Federal water quality standards, treatment requirements, and effluent limitations are most stringent.***

- ***On September 14, 2005, the Susquehanna River Basin Commission approved the withdrawal of up to 7,000,000 gallons per day (30-day average) and consumptive use of up to 3,470,000 gallons per day (peak day use) of water from the Gilberton mine pool for the operation of the proposed facilities (SRBC 2005).*** The Susquehanna River Basin Commission, which was established in 1972 by the Susquehanna River Basin Compact, Pub. L. 91575, 84 Stat. 1509 et seq., is composed of representatives from the federal government and the states of New York, Pennsylvania, and Maryland. Article 11 of the Compact authorizes the river basin commission to regulate and control withdrawals and diversions from surface waters and ground waters of the basin. In Pennsylvania, the river basin commission coordinates actions on specific projects with the Pennsylvania Department of Environmental Protection. The facilities' water use would need to be reported ***annually*** to the river basin commission and the Pennsylvania Department of Environmental Protection, as required by the Pennsylvania Water Resources Planning Act (Act 220 of 2002) and implementing regulations at 25 PA. CODE Ch. 110.
- ***Pennsylvania regulates the installation and operation of aboveground and underground storage tank systems and facilities under 25 PA. CODE Ch. 245, administered by the Pennsylvania Department of Environmental Protection. The regulations require that storage tanks be installed and inspected periodically by certified installers, registered with the Department of Environmental Protection, and subjected to tightness tests after they are installed. In addition, site-specific installation permits are required for installation of some types of underground storage tanks or for aboveground storage tanks with capacity over 21,000 gallons, either in an individual tank or a group of tanks. On January 14, 2005, WMPI applied to the Pennsylvania Department of Environmental Protection for a site-specific installation***

permit for the aboveground storage tanks that would be included in the proposed facilities on Broad Mountain (WMPI 2005a). A similar application for a site-specific installation permit for aboveground storage tanks in the proposed off-site loading area and tank farm in the Mahanoy Valley was submitted on August 10, 2005 (WMPI 2005b). Spill Prevention and Response Plans were included in both permit applications, as required by 25 PA. CODE Ch. 245.

- Beneficial use or disposal of slag, ash, or water and wastewater treatment sludges, including use in mine reclamation, would be subject to the requirements of Pennsylvania's residual waste management regulations at 25 PA. CODE Ch. 287. Chemical ***and physical analyses, leach testing, and other evaluations of the materials would be required to determine allowable uses or disposal requirements. Beneficial reuse would require either a co-product determination under Section 287.8 or a general permit under Subpart H of Chapter 287.*** No permit is needed for use of coal combustion products in concrete manufacture, or for use of slag or bottom ash as a construction aggregate, anti-skid material, or road surface preparation material ***(Sec. 287.661 - 287.665), but to qualify for this exemption project, residues would need to be demonstrated to be chemically and physically similar to a typical coal ash produced in Pennsylvania. Landfill disposal of project residues would require a Form U, "Request to Process or Dispose of Residual Waste," approval from the Pennsylvania Department of Environmental Protection, following characterization of physical properties, chemical composition, and a determination that the material is not a hazardous waste (Subchapter B of Ch. 287).***
- Mining and mine reclamation activities associated with the proposed facilities ***would*** require permits or approvals from the Pennsylvania Department of Environmental Protection under State regulations ***administering the regulatory program of SMRCA. The principal applicable State regulations are found*** at 25 PA. CODE Ch. 86,Surface and Underground Coal Mining: General, and 88, Anthracite Coal. ***Chemical and physical analyses, leach testing, and other evaluations would be required for materials to be used in reclamation, reclamation plans would include specifications for densities and other parameters, and testing and monitoring would be required. If coal were to be*** obtained from refuse material on an abandoned mining property, the Pennsylvania Department of Environmental Protection could waive the permit requirement and sign a government-financed construction contract allowing the acquisition of coal in exchange for land reclamation and abatement of mine drainage. ***Procedures and requirements for government-financed construction contracts are contained in Pennsylvania Department of Environmental Protection Technical Guidance Document 563-2000-001, "Government-Financed Construction Contracts." Although no formal permit is issued for these contracts, contracts must meet regulatory criteria and they require public notice, Pennsylvania Department of Environmental Protection technical review and approval, performance bonding, and monthly inspections.***
- Any ***Pennsylvania*** landfill used for disposal of solid waste generated by the proposed project must have an appropriate license from the Pennsylvania Department of Environmental Protection. Regulations for the siting, design, and operation of municipal solid waste landfills are at 25 PA.

CODE Ch. 273. Regulations for construction/demolition waste landfills are at 25 PA. CODE Ch. 277. Licensed municipal solid waste landfills may receive construction wastes and residual waste in addition to normal municipal refuse, but specific approval from Pennsylvania Department of Environmental Protection would be required for disposal of residual wastes such as sludge or ash. To be approved for disposal in a municipal solid waste landfill, residual waste from the proposed facilities would need to meet several criteria: (1) the waste must be compatible with the liner system and other wastes received by the facility, (2) the leachate generated by the waste must be adequately treated by the landfill's leachate treatment facility, and (3) the physical characteristics of the waste must not cause or contribute to structural instability or other operational problems at the landfill site.

- ***With regard to Pennsylvania transportation requirements (67 PA. CODE Ch. 179),the need for special permits and advanced planning refers to the use of state highways to truck heavier components to the site from the rail siding approximately one mile away. Each component would need to be disassembled to the smallest size that would not destroy the usefulness of the component upon re-assembly at the site. A truck shipment would be considered a super load if (1) the gross weight (including the truck) exceeds 201,000 lb; (2) the total length exceeds 160 ft; or (3) the total width exceeds 16 ft. A super load would require an escort by at least one state trooper. The permitting process for a super load requires two steps. First, a preliminary application must be submitted at least three weeks prior to the anticipated initial move date. The preliminary application must include documentation of a physical route survey performed to ensure that the super load can negotiate all turns on the proposed route. The preliminary approval is valid for 12 months. Second, upon approval of a preliminary application, a final application should be submitted for each move five full working days before each move to allow adequate time for coordinating the state escort.***

7.3 LOCAL REQUIREMENTS

- WMPI would be required to comply with environmental and zoning regulations specified by Mahanoy ***Township*** and Schuylkill County***, including the Schuylkill County Conservation District,*** for construction and operation of the proposed facilities.
  - Building and grading permits would need to be obtained from Mahanoy ***Township*** before commencing ***land clearing and*** construction. ***Under the Township Subdivision and Land Development Ordinance (Ord. No. 06-01, adopted March 15, 2001) the Township Planning Commission would need to approve of site plans prior to land clearing. Site plans would be required to show compliance with relevant standards and include provisions for traffic circulation, drainage, stormwater management, and erosion and*** sediment control. Facility designers would need to verify ***ordinance and*** building code requirements, including requirements related to seismic safety, with ***the Township Supervisors and other*** local permitting agencies before commencing detailed design.

- ***Any*** open burning for disposal of land-clearing debris would be ***subject to the requirements of Township Ordinance 2006-3, known as the Mahanoy Township Burning Ordinance, which regulates and restricts outdoor fires.***
- Construction of an onsite septic system for treatment and disposal of sanitary wastewater would require a permit from Mahanoy ***Township***, as required by the Pennsylvania Sewage Facilities Act (Act 537 of 1966).