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COAL INSPECTION AND ENFORCEMENT HANDBOOK

BLM Manual Handbook H-3486-1

U.S. Department of the Interior
Bureau of Land Management

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Table of Contents Page i

Acronyms iv

Chapter 1 Introduction
1.1 Goal 1-1
1.2 Authorities 1-1
1.3 Ultimate Maximum Recovery of Indian Coal 1-1
1.4 Responsibility 1-2
1.5 Coordination 1-2

Chapter 2 Inspector Certification
2.1 Introduction 2-1
2.2 MMI Scope of Work 2-1
2.3 Education and Experience Requirements 2-1
2.4 Mandatory Training Requirements 2-2
2.5 The Certification Process 2-6
2.6 Certification Standards and Requirements 2-7
2.7 Denial of Certification and Re-application 2-7
2.8 Request for Reconsideration 2-8
2.9 Appeals 2-8
2.10 Revocation or Suspension of Certification 2-8
2.11 Annual Reporting 2-9
2.12 MMI Rotation 2-9

Table 2.1 Summary of Education, Safety, amd Experience Requirements . 2-2
Figure 2.1 Example Annual MMI Certification Status Report . . . 2-10

Chapter 3 Personal Safety
3.1 Introduction 3-1
3.2 Mandatory Personal Safety Equipment 3-1
3.3 Mine Entry Policy 3-2
3.4 Hazard Recognition 3-2
3.5 Mine Safety Protocols 3-5
3.6 Hazardous Gases 3-6
3.7 Exploration Safety 3-9
3.8 Reporting of Accidents. 3-10

Table 3.1 Personal Hazards and Mitigation Measures 3-2
Table 3.2 Mine Safety Protocols. 3-5
Table 3.3 Mandatory Withdraw Limits for Coal Mines 3-7
Table 3.4 Inspection Procedures When Noxious Gas or Oxygen Deprivation Are Potential Hazards 3-8
Table 3.5 Accident Reporting Protocols. 3-10

Chapter 4 Inspection Plans and Records

4.1 Inspection Plan 4-1
4.2 Inspection Record 4-5

Figure 4.1 Coal Inspection and Production Verification Plan General Information 4-4
Figure 4.2 Example Inspection Plan Revision Summary . . . 4-6
Figure 4.3 Example Inspection Activity Summary 4-7

Chapter 5 Inspection Procedures
5.1 Introduction 5-1
5.2 Inspection Frequency and Companion. 5-2
5.3 Preparation for an Inspection 5-5
5.4 Exploration Inspections 5-6
5.5 Mining Plan Revision Inspections 5-10
5.6 Mine Operations Inspections 5-10
5.7 Production Verification Inspections 5-12
5.8 Inspection Report 5-12
5.9 Inspection History 5-15

Table 5.1 Summary of Inspection Companion Requirements. . . . 5-2
Table 5.2 Summary of Inspection Frequency Requirements . . . 5-4
Table 5.3 BLM's Exploration Abandonment and Reclamation Responsibilities 5-9
Figure 5.1 Summary of Inspection Objectives Accomplished . . . 5-13

Chapter 6 Inspection Standards
6.1 Exploration: Why Proper Inspection is Necessary 6-1
6.2 Mining Operations 6-3
6.3 Conservation of the Resource 6-14
6.4 Maximum Economic Recovery 6-14
6.5 Ultimate Maximum Recovery 6-14
6.6 Resource Recovery and Protection Plan or BIA Mine Plan Compliance . 6-15
6.7 Reclamation 6-15
6.8 Public Health and Safety 6-15
6.9 Inactive Tracts. 6-16

Table 6.1 Mining Operations Inspection Standards 6-3

Chapter 7 Enforcement
7.1 BLM Responsibilities 7-1
7.2 Lessee, Licensee, or Operator Responsibilities 7-1
7.3 Reportable Conditions 7-1
7.4 Failures of Compliance 7-4
7.5 Notice of Noncompliance 7-12
7.6 Orders 7-13
7.7 Contents of a Notice or Order. 7-14
7.8 Distribution of a Notice or Order 7-15

Table of Contents Page iii

7.9 Follow-up Action of a Notice or Oder 7-15
7.10 Failure to Report 7-16
7.11 False Statements 7-16
7.12 Recordation of Events and Review 7-16

Table 7.1 Corective Actions 7-11
Figure 7.1 Overview of the BLM Coal Program Enforcement Process . . 7-2
Figure 7.2 Example of a Cessation Order 7-17

Chapter 8 Proprietary and Confidential Information
8.1 General Requirements. 8-1
8.2 The Mineral Leasing Act 8-1
8.3 Coal Lease Form (BLM-3400-12) 8-2
8.4 FOIA and Confidential, Proprietary Information. 8-2
8.5 Indian Lands 8-2
8.6 Penalties 8-3
8.7 Security 8-3

Table 8.1 Authorities for Protection of Proprietary and Confidential Information 8-1

Glossary G-1

BIA	Bureau of Indian Affairs, Department of the Interior
BLM	Bureau of Land Management, Department of the Interior
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
DOD	Department of Defense
DSD	BLM Deputy State Director
FOIA	Freedom of Information Act
FWS	Fish and Wildlife Service, Department of the Interior
GIS	Geospatial Information System
GPS	Geographic Positioning System
I&E	Inspection and Enforcement
IB	Information Bulletin
IM	Instruction Memorandum
IP	Inspection Plan
IR	Inspection Report
LMU	Logical Mining Unit
LR2000	Legacy Rehost 2000 System
MER	Maximum Economic Recovery
MIS	Management Information System
MMI	Mineral Mine Inspector
MMS	Minerals Management Service, Department of the Interior (now known as the ONRR)
MOU	Memorandum of Understanding
MSDS	Material Safety Data Sheet
MSHA	Mine Safety and Health Administration, Department of Labor
NEPA	National Environmental Policy Act
NIOSH	National Institute of Occupational Safety and Health
NPS	National Park Service, Department of the Interior
NTC	National Training Center
ONRR	Office of Natural Resources Revenue (formerly a unit of the bureau known as the MMS)
OSHA	Occupational Safety and Health Administration, Department of Labor
OSM	Office of Surface Mining Reclamation and Enforcement, Department of the Interior
PV	Production Verification
SD	BLM State Director
R2P2	Resource Recovery and Protection Plan
SMA	Surface Management Agency
SMCRA	Surface Mining Control and Reclamation Act
SRA	State Regulatory Agency
TLV	Threshold Limit Value
UMR	Ultimate Maximum Recovery
USFS	U.S. Forest Service, Department of Agriculture
USGS	U.S. Geologic Survey, Department of the Interior

1.1 Goal

The Inspection and Enforcement (I&E) program works toward the goal of having operations or activities on Federal and Indian coal leases, licenses, permits, or logical mining units (LMU) conducted in a manner that:

- Will encourage maximum economic recovery (MER) of the Federal coal and ultimate maximum recovery of Indian coal while, to the greatest extent possible, conserving the coal and other natural resources;
- Will be consistent with the terms and conditions of the lease, license, or permit; and
- Will be consistent with all approved operating plans.

A Mineral Mine Inspector (MMI) must encourage effective communication with the lessee, licensee, Indian tribe (Indian lands only), or authorized operating entity to accomplish these goals. The issuance of a Notice of Noncompliance is necessary when an identified instance of noncompliance cannot be resolved through communication with the lessee, licensee, or mine operator within a reasonably short period of time.

The processes and standards for production verification will be addressed in Bureau of Land Management (BLM) Handbook 3486-2, Coal Production Verification.

Nothing in this Handbook in intended to be a regulation or to modify or amend any Federal laws or regulations or create any rights or cause of action or trust obligation enforceable by any person or party through litigation or otherwise against the United States Government or any of its employees. This Handbook is solely intended to aid in the management of the Bureau of Land Management (BLM). To the extent that there is any inconsistency between the provisions of this Handbook and any Federal regulations or laws, the regulations or laws will control.

1.2 Authorities

The BLM's authority to manage coal leasing on Federal lands comes from the Mineral Leasing Act (MLA), as amended, and other laws listed in 43 CFR 3400.0-3. Other authorities include:

a. 43 CFR Part 3400—Coal Management: General and the legislative and statutory authorities cited therein;
b. 43 CFR Part 3450—Management of Existing Leases;
c. 43 CFR Subpart 3465—Surface Management and Protection;
d. 43 CFR Part 3480—Coal Exploration and Mine Operations Rules;
e. 43 CFR Part 3590—Solid Minerals (Other than Coal) Exploration and Mining Operations.

1.3 Ultimate Maximum Recovery of Indian Coal

The Bureau of Indian Affairs (BIA) regulations at 25 CFR 211.4, 212.4, and 225.4, incorporate, through an explicit cross-reference, the BLM regulations at 43 CFR Parts 3480 and 3590. Unless expressly exempted, the provisions contained in 43 CFR Parts 3480 and 3590 apply to Indian coal lands. The BIA regulations equally apply 43 CFR Part 3480 and 3590 to Indian land without restrictions to the type of mineral. However, the BLM regulations at 43 CFR 3480.0-4 further provide that the provisions of Part 3480 relating to advance royalty, diligent development, continued operation, maximum economic recovery (MER), and LMUs do not

apply to Indian lands, leases, and permits. Therefore, for Indian lands, the BLM's regulations for MER (43 CFR 3480.0-5(a)(21)) have been excluded from application to Indian lands. However BLM's ultimate maximum recovery (UMR) regulation (43 CFR 3590.0-5(h)) extends to the oversight of all minerals on Indian lands because 43 CFR 3590.0-7 provides that the 43 CFR Part 3590 regulations "also govern operations for all minerals on Indian tribal lands and allotted Indian lands leased under 25 CFR parts 211 and 212." The MER standard at 43 CFR 3400.0-5(a)(21) for Federal coal and the UMR standard at 43 CFR 3590.0-5(h) achieve similar management objectives. Consistent with BLM's obligations to maximize production under Indian leases, MER or an equivalent concept is important for effective resource management and development of Indian coal. Therefore, to achieve maximum mineral development of coal on Indian lands, BLM manages Indian coal development by applying the UMR regulations found in 43 CFR Part 3590. See 43 CFR 3590.0-5(h); 43 CFR 3590.0-7: 43 CFR 3594.1.

1.4 Responsibility

The BLM works to achieve compliance by lessees, licensees, permittees, and operators with requirements established by:

a. BLM orders;
b. The terms and conditions of leases, licenses, permits, and LMUs;
c. The requirements of approved exploration plans or resource recovery and protection plans (R2P2) for Federal lands;
d. The requirements of approved exploration plans or mining plans for Indian lands; and
e. Statutory and regulatory requirements enforced by BLM.

The Department Manual describes BLM's authorities governing leasing and other land management activities (see 135 DM 1.1). This includes the responsibilities for inspection and enforcement of Federal coal leases that are issued pursuant to the MLA. The BLM responsibility for particular coal oversight functions on Indian lands has been delegated to the BLM by regulation and Secretarial Orders.

1.5 Coordination

There are other agencies that have authorities concerning mining activities on Federal or Indian lands. The BLM, in its role as the Federal mineral resource manager, often interacts with other State and Federal agencies that have regulatory authority related to coal mining activities on federal lands. Examples of these other agencies include, but are not limited to, the following:

a. United States Forest Service, Department of Agriculture (USFS)
b. Bureau of Indian Affairs, Department of the Interior (BIA)
c. National Park Service, Department of the Interior (NPS)
d. Fish and Wildlife Service, Department of the Interior (FWS)
e. Office of Natural Resources Revenue (ONRR) (formerly a unit of the bureau known as the Minerals Management Service (MMS))
f. Office of Surface Mining, Reclamation, and Enforcement, Department of the Interior (OSM)
g. Mine Safety and Health Administration, Department of Labor (MSHA)
h. Occupational Safety and Health Administration, Department of Labor (OSHA) for exploration activity outside of MSHA jurisdiction

i. State regulatory agencies (SRA) related to land, water resources, fish and game, the environment, etc.

For Indian lands, there are specific consultation requirements to consult with the affected Indian land owner as follows:

j. Executive Order 13175 (November 6, 2000);
k. White House Memorandum for the Heads of Executive Departments and Agencies, Tribal Consultation (November 5, 2009);
l. Department of the Interior Secretarial Order 3317 (December 31,2012);
m. The Tribal Consultation Policy of the Department of the Interior;
n. BLM Manual M-8120, Tribal Consultation Under Cultural Resources;
o. Department of the Interior Policy on Consultation with Alaska Native Claims Settlement Corporations, August 10, 2012; and
p. BLM Handbook H-8120-1, General Procedural Guidelines for Native American Consultation.

A Memorandum of Understanding (MOU) or other cooperative interagency agreement, including agreements with State agencies, provide specific coordination protocols between the BLM and another agency or agencies, such as BIA, OSM, USFS or MSHA. Each BLM state office must maintain a current list of all such "local" MOUs that are within its jurisdiction.

In the absence of a MOU or other cooperative agreement, the National Environmental Policy Act (NEPA) coordination procedures could provide a model for interagency coordination.

It is best to involve and coordinate I&E with other agencies at the earliest possible date. Coordination can involve such items as data needs, safety and health requirements, regulatory impacts on resource recovery, markets and economics, environmental requirements, safety, etc.

An MMI must coordinate with other agencies that have regulatory authority related to the activities of the mine. Should the MMI discover a serious situation or hazard such as missing or damaged perimeter fencing, covered or obstructed methane detectors or other safety issues that may be apparent to the MMI, but authority to resolve the situation or hazard is vested in another agency, the MMI must contact the other agency, with the expedience required by the circumstance, for resolution. The MMI must also notify the mine operator. If the MMI is uncertain as to whether a condition at the mine that has been identified poses a physical safety hazard, the MMI should contact MSHA and inform that agency of the identified condition for that agency's further action. Coordination with other agencies must be consistent with protocols established in approved MOUs or interagency agreements.

Joint field inspections with other agencies that have regulatory authority related to the activities of the mine are encouraged. A joint inspection is encouraged if a potential hazard is discovered by the MMI on a Federal or Indian lease, permit, or license that requires input from another agency to correct the hazard. If a joint inspection is completed, the inspection reports (IR) from all other participating agencies should be obtained and made a part of the BLM case file. The BLM mine IR must be provided to all the agencies participating in the inspection.

The BLM requires inspections before an area under a Federal or Indian lease, license, or permit can be permanently abandoned. Abandonment inspections involve coordination with the surface management agency (SMA), private surface owners, affected Indian tribe, if applicable, and the Federal and/or SRA as appropriate. The BLM must inspect prior to abandonment to ensure compliance with abandonment procedures, that reclamation is completed, and that the lease has achieved maximum economic recovery for Federal coal or the ultimate maximum recovery standard as established in the mining plan for Indian coal.

2.1 Introduction

The MMI carries out the BLM's responsibility to inspect and verify production on coal and other solid mineral leases to ensure that the lessees are following approved coal R2P2s or BIA mine plans and that the correct production quantities and qualities are being reported to ONRR. (See Secretary of the Interior Secretarial Order 3299A1 concerning the reorganization of the MMS for royalty payment purposes.) The certification of MMIs represents the agency's determination that, following compliance with the educational and experience standards set by the BLM, the certified MMIs possess and demonstrated the necessary knowledge, skills, and abilities to effectively perform these duties.

The BLM Assistant Director, Energy, Minerals and Realty Management, is responsible for the overall administration of this certification program. The BLM State Directors (SD) are responsible for certifying MMIs in their respective states, and the BLM Deputy State Directors (DSD), in turn, ensure that MMIs who require certification are scheduled to receive the required training, field experience, and continuing education so that the MMIs can be certified within a reasonable time and maintain their certification thereafter.

A promotion panel or selecting official may consider MMI certification when selecting the best applicant for a position, if the position description requires working as a certified MMI. All requirements to become or maintain MMI certification must be completed to obtain or maintain certification as an MMI. An MMI candidate that cannot complete all the requirements to be an MMI will be reassigned to duties that do not include mine inspection or production verification activities. Further, a certified MMI that has not completed the required training to maintain certification will be reassigned to duties that do not include mine inspection or production verification activities.

2.2 MMI Scope of Work

An MMI's scope of work with respect to coal includes regulations at 43 CFR Parts 3400 through 3480 for Federal coal and 43 CFR Part 3590 for Indian coal.

2.3 Education and Experience Requirements

2.3.1 Persons with a Bachelor Degree

The preferred educational background for an MMI is a Bachelor of Science (BS), Master of Science (MS), or Doctoral (PhD) degree from an accredited college or university in mining engineering, geological engineering, civil engineering, or geology. These applicants may be certified as MMIs immediately after they successfully complete all mandatory safety and MMI task training requirements.

Persons with 4-year degrees in related fields of study with similar mathematical and basic science requirements (for example, other engineering disciplines, earth science, or geophysics) may be certified after successfully completing all mandatory safety and MMI task training requirements, and working under the oversight of a certified MMI for at least 6 months concurrent with, or subsequent to, successful completion of those requirements.

Table 2.1 Summary of Education, Safety, and Experience Requirements			
Highest Level of Education Achieved	Completion of Applicable Safety and Certification Courses	Years of Professional Experience in the Mining Industry	Period of Oversight by a Certified MMI
BS, MS or PhD degrees in: Mining Engineering, Geological Engineering, Civil Engineering, or Geology	Yes	None	None
Similar 4-year degrees in related fields of study	Yes	None	Up to 6 Months
Associate Degrees in earth science, construction, or related fields	Yes	2 Years	1 Year
Without a College Degree	Yes	4 Years	1 Year

2.3.2 Persons with an Associate Degree

Persons with Associate Degrees in earth sciences, construction or building technology, mining, or related fields may be certified if they have worked in professional positions in the mining industry for at least 2 years, have successfully completed all mandatory safety and certification training requirements, and have worked under the oversight of a certified MMI for at least 1 year concurrent with, or subsequent to, successful completion of those requirements.

2.3.3 Persons without a College Degree

Persons without college degrees may be certified if they have worked in professional positions in the mining industry for at least 4 years, have successfully completed all mandatory safety and certification training requirements, and have worked under the oversight of a certified MMI for at least 1 year concurrent with, or subsequent to, successful completion of those requirements.

2.4 Mandatory Training Requirements

2.4.1 Mine Safety Training

Safety is always the MMI's first priority. There are significant safety hazards at or within the mines that a MMI will inspect. A MMI must be aware of all safety hazards and how to avoid or mitigate the hazards so that s/he can safely complete an inspection. Therefore, the MMI training requirements have placed strong emphases on safety training and safety refresher training.

A MMI is required by MSHA to complete mine specific hazard training (30 C.F.R. 48.11 or 48.31) at each mine site s/he inspects (see section 2.4.1.5 of this Handbook). In addition, the BLM has determined that persons assigned MMI duties on or after August 14, 2009 will benefit from completing MSHA new miner training (30 U.S.C. 48.5 or 48.25). While a MMI's duties and responsibilities do not met the MSHA regulatory criteria that require him/her to complete MSHA new miner training (see section 2.4.1.2 of this Handbook for greater detail on this requirement), BLM has determined to require MSHA new miner training for persons assigned

MMI duties on or after August, 14, 2009 to provide the greatest possible exposure to mine safety training.

2.4.1.1 Employees with MMI Duties as of August 13, 2009
August 13, 2009, is the initial effective date of the revised BLM mine inspector certification policy. Persons with assigned mine inspector duties on or before August 13, 2009, are not required to complete MSHA new miner training relating to safety requirements.

2.4.1.2 Employees First Assigned MMI Duties On or After August 14, 2009
All persons who are first assigned MMI duties on or after August 14, 2009, must complete MSHA new miner training as soon as possible after being assigned MMI duties. Completion is typically documented by an established MSHA form completed by the instructor.

Typically MSHA new miner training includes approximate 8 hours of training at a mine-site that can include physical labor. It can be difficult for a candidate MMI to complete the physical labor requirements of MSHA new miner training due to potential conflicts of interest (preforming physical labor for a mine that the MMI may later inspect), work scheduling issues, and potential liability concerns of the entity who is presenting the training. Completion of all but the approximately 8-hour physical labor training is adequate for MMI certification with acceptable instructor documentation and upon completion of at least one mine inspection under the supervision of an MMI.

MSHA new miner training may be provided by a variety of sources including the National Training Center (NTC) or other MSHA certified vendors (i.e., private training vendors, local community colleges, some universities, or the mine itself are all acceptable sources of this training). With the exception of 8 hours of mine site training, the new miner training must comply with MSHA standards at 30 CFR Part 48. All training provided by vendors must be approved in advance of the class by the appropriate DSD.

2.4.1.3 Employees Who Have Achieved Experienced Miner Status Under MSHA Regulations
An MMI, regardless of date when s/he is first assigned MMI duties, that has achieved the status of Experienced Miner under MSHA regulations, is not required to repeat new miner training.

2.4.1.4 Annual Safety Refresher Training
Each MMI must annually complete an 8-hour mine safety refresher course. Documentation of completion must be by either an established MSHA form or an alternative method that is at the discretion of the training instructor. The annual mine safety training may be available online or by video and may be tailored to the operations that the MMI currently inspects. The annual mine safety training can be provided by an MSHA-approved instructor or other sources that are approved in advance by the DSD. The annual mine safety training is mandatory to maintain MMI certification and cannot be used to meet the continue education requirement.

2.4.1.5 Mine Specific Hazard Training

Mining companies are required by MSHA to ensure that all persons who do not regularly work at the mine but that will be entering the mine (30 CFR 48.2(a)(2) and 48.22(a)(2)) be trained in mine-specific hazard recognition, self-rescuer equipment use, and special mine-specific safety conditions before being allowed to enter the mine (30 CFR 48.11 and 48.31). A MMI will be required to periodically complete company provided site specific hazard training as a condition of mine entry.

2.4.1.6 Inspection Companion

Safety is always the first priority during an inspection. Therefore, an MMI must never inspect a mining operation alone. An MMI must always be accompanied by a representative of the lessee or another MMI. See Table 5.1 for specific requirements for different types of inspection situations.

2.4.2 Technical Knowledge Management

2.4.2.1 MMI Task Training

The MMI task training, Solid Leasable Minerals Mine Inspector Certification course, is available at DOI Learn (course BLM-TC-3400-02). This is an on-line training course. The complete course is provided in six modules as follows:

- Module 1, Introduction and overview;
- Module 2, Exploration;
- Module 3, Non-energy leasable mineral mining plans;
- Module 4, Coal R2P2 or mining plans on Indian lands;
- Module 5, Inspection and enforcement: and
- Module 6, Production verification.

Prospective MMIs are encouraged to also take the Legal Descriptions and Land Status (BLM Course 2000-01DL) course that is offered by DOILearn. This course can be used to fulfill the continuing professional development requirement.

The student will be trained in the development of mine-specific I&E and PV plans. These plans document step-by-step I&E and PV office and field procedures and timeframes to be followed for each mining operation. The I&E or PV plan should include the most recently approved exploration or mine plan, a map to the operation, emergency MSHA and mine contact information, production flow charts, the locations of stockpiles, scales, points of royalty determination and/or points of sale, and lease-specific requirements. These plans will serve as guides to the MMI to ensure that inspections and PV activities are completed consistently and efficiently.

2.4.2.2 Continuing Professional Development

An MMI is required to continue his or her professional education and training to maintain certification. The professional development requirement can be met by completion of an average of 8 professional development hours (PDH) per year during any 5-consecutive year period. The continued education class must advance the inspector's knowledge of MMI duties. Courses that meet this continued education requirement are available from the NTC or outside sources, in a

classroom or field environment, online, or by video. This requirement is met by completion of 40 PDHs of class work during a rolling 5-year average. For example, completing a 40-PDH training course in year 1 will satisfy the annual refresher training requirement for years 1, 2, 3, 4, and 5. However, additional training is advisable in years 4 or 5 to maintain MMI certification into year 6.

Alternatively, up to 40 hours of professional development within a 5-year period can be attained by providing a review and commentary of inspection activities in another office. Under this alterative, 1 PDH will be provided for each hour of work to review records, procedures and develop a written report of the inspection activities of another office. Written permission from the MMI's supervisor and the manager of the office to be reviewed must be obtained before the review begins. A written report documenting the review, the results of the review, all conclusions of the review, and any recommended corrective actions is required to receive professional development credit. The written report must include the signature of the manager of the office being reviewed to acknowledge receipt of the report, and the signature of the MMI's supervisor to acknowledge completion. Such reviews must be consistent with BLM Manual Section 1240, Evaluation Program.

Each DSD will determine if a specific training course is applicable to meeting this requirement for his or her staff. To this end, each state office may develop a list of acceptable professional development courses that the state office determines to be useful in complementing the professional development requirement. Acceptable training may be offered by the NTC or through DOILearn including courses in solid mineral leasing, post-lease administration, NEPA, land use planning, etc. Outside sources and other government agencies, such as MSHA, National Institute of Occupational Safety and Health, and the USFS, may offer acceptable professional development training. Technical conferences, university courses, and temporary details to perform other duties or to work in a different office are acceptable as long as the course or experience enhances the inspector's knowledge. In all cases the inspector is encouraged to consult with his or her immediate supervisor and/or DSD prior to registration to ensure that the course will be applicable for meeting this requirement.

The inspector should notify his or her DSD in writing each year prior to the anniversary of MMI certification that s/he has completed the required annual refresher training. Certification will automatically become inactive if the inspector does not comply with the refresher training requirements and the MMI will not be permitted to inspect mines or exploration activities until the deficiency is corrected.

2.4.3 Mentoring

As discussed under "2.3 Education and Experience Requirements," some prospective inspectors must work under the oversight or mentoring of an experienced MMI for various periods of time. The goal of mentoring is for the prospective MMI to learn from an experienced MMI, gain the necessary experience, and demonstrate his or her ability to independently perform all MMI duties. This includes on-the-job training of the prospective MMI in the office and in-mine inspections. Reports completed by the prospective MMI will be reviewed and co-signed by the

mentoring MMI. There is no specific training to be an MMI mentor. The only criterion to be an MMI mentor is to be an experienced MMI.

2.4.4 Confined Space

The BLM safety program requires training in confined space entry procedures. Entry into any inactive mine working can only be performed after appropriate training for entry into confined spaces and in compliance with the requirement of BLM Manual 3010, *Underground Mine Entry*. This requirement is in addition to all of the other required training noted above. This requirement applies to all MMIs regardless of experience.

2.4.5 Training Records

The NTC has the responsibility to maintain all official training records for course work completed through NTC. Records of other training must be maintained locally in compliance with all applicable records requirements. The DSD or designated representative must at least annually coordinate with the NTC to ensure that all official NTC training records are current and verify that any training records maintained locally are accurate. Assistance to update the official NTC training records can be obtained from the NTC or the BLM state office Training Officer.

Each MMI is encouraged to periodically review his or her training records to ensure the records are complete and accurate.

2.5 The Certification Process

2.5.1 Submittal of Applications

A prospective MMI must submit a written application for certification as an MMI. The application is a memorandum from the prospective MMI to his or her DSD, or other delegated authority, with a copy provided to his or her direct supervisor. All applications must be accompanied by documentation that all qualifications have been met, that all required training has been completed, a recommendation from the mentoring MMI, as applicable, and a recommendation from the prospective inspector's immediate supervisor. The DSD will review the application for completeness, review the qualifications, and recommend a decision to the SD. If the decision is affirmative, such certification will be noted in the official personnel file of the MMI. DSDs may delegate these responsibilities to the BLM state office Solid Minerals Branch Chief, or a similar position, if appropriate.

2.5.2 Current BLM Mine Inspectors

All BLM employees performing MMI duties as of August 14, 2009, will be certified by their respective SDs if they meet the education and experience requirements. Certification will be maintained thereafter by completing the annual safety training and professional development requirements.

2.5.3 Certification Acknowledgement

Successful applicants will be presented with a letter of acknowledgement signed by the SD. Applicants denied certification should receive a letter from the DSD explaining any deficiencies in the applicant's education, training, or experience, and a detailed description of the further work or training needed to meet the certification requirements.

2.5.4 Records
The DSD will store the applications, copies of letters of certification or denial, correspondence, and other pertinent data in confidential files.

2.6 Certification Standards and Requirements
2.6.1 Knowledge, Skills and Abilities
The MMI must demonstrate adequate knowledge, skills, and abilities in mine inspection practices, mine surveying, mine map reading and comprehension, basic mine geology, mine design principles, equipment capabilities, blasting technology, rock mechanics, processing and refinement, mineral assaying, reserve calculation, mineral economics, and electronic data processing including Geographic Information Systems. The MMI must also be capable of determining whether the lessee or operator is performing in accordance with the terms and conditions of the leases and the conditions of approval of the R2P2 or BIA mine plan and whether the lessee or operator is accurately reporting and tracking mineral production. Knowledge of State, Federal, and BLM regulations and mining industry principles, practices, and techniques is necessary to be able to identify violations.

2.6.2 Certification Decision Based on the Record
The decision to certify an MMI must be based on the record presented in the application. The application should document the prospective MMI's qualifications regarding educational credentials, training, demonstrated ability to satisfactorily complete I&E and PV duties, and exercise of professional judgment concerning recommending approval or modification of mining plans or R2P2s or mining plans.

2.6.3 Certification Limitations
Only personnel certified as an MMI will be assigned independent responsibility for I&E, PV, and recommending approval or modification of R2P2s or mining plans.

Certification as an MMI may be limited to a specific type of mining operation (i.e., underground, surface, in-situ) and/or the mineral commodity being extracted (i.e., coal, phosphate, trona). The DSD has the discretion to recommend limited MMI certification to the SD based on the demonstrated knowledge, skills, and abilities of the prospective MMI. The MMI certificate will prominently note the limitations.

An MMI may apply at any time, through the process established in Section 2.8 of this policy, to amend his or her certification to remove any limitations. The MMI's application must demonstrate sufficient experience and training to merit amendment of his or her MMI certification.

2.7 Denial of Certification and Re-application
A denial of MMI certification does not prejudice the applicant. The DSD or SD must explain in writing to the MMI applicant exactly why his or her MMI application was denied and what actions can be taken to correct or supplement the application. Any applicant denied certification may re-apply at any time s/he believes the MMI minimum requirements have been met and that

specific issues identified in the denial letter have been addressed. The DSD should retain all denied applications with the expectation that the applicant may re-apply in the future.

2.8 Request for Reconsideration

Any applicant denied certification may request reconsideration of his or her application in writing, clearly stating the grounds for the requested reconsideration. This may be appropriate if denials of certification were possibly caused by insufficient or unclear information in the applicant's certification application package.

2.9 Appeals

2.9.1 Appeal Rights

Any applicant denied certification by his or her DSD may appeal to his or her SD. A statement of reasons detailing the specific items of disagreement, either of facts or of procedures, and a copy of the denial letter must be submitted to the SD within 60 days of receiving the decision.

2.9.2 Review of Appeal

The SD will appoint a reviewer, preferably a certified MMI, or a team to review the case file and submit a written report to the SD with findings and recommendations.

2.9.3 Appeal Decision

The SD will issue a written decision to the applicant, with a copy to the DSD. The SD will review the recommendations of the DSD or the review team. The SD will affirm the denial of certification, remand the case for further analysis, or grant certification.

2.10 Revocation or Suspension of Certification

2.10.1 Reasons for Revocation or Suspension

Certification may be revoked or suspended for a fixed period for any of the following causes:

- Failure to adhere to accepted professional and Departmental standards in the performance of inspector duties;
- Perjury in an administrative or court hearing;
- Conflict of interest that interferes with the proper handling of a case; or
- Conduct involving a violation of the public trust, misappropriation of government property, conviction of a felony, or other conduct prohibited to Federal employees.

2.10.2 Procedures

The DSD will require an investigation of the allegations of acts that may require revocation or suspension. If probable cause is found, the DSD will hold a hearing at which the individual in question and other interested parties or their representatives will be allowed to appear and present evidence. For certification revocation or suspension, a preponderance of the evidence must support a determination that a violation of Section 2.10.1 above has taken place. Following the hearing, the DSD will make a determination regarding revocation or suspension of certification. An individual may appeal suspension or revocation according to the procedures described in Section 2.9.

2.11 Annual Reporting

Within 60 days after the end of each fiscal year, the SD or DSD will report to the Assistant Director, Minerals and Realty Management, the certification status of the MMIs that are under their supervision. The report will include the name of the MMI and the percentage of completion each individual has achieved in his or her MMI certification, annual safety training, and professional development requirements. A brief explanation must be provided for individuals that did not achieve the minimum training requirements. A brief description of the professional development activities completed must also be provided in this report. An example format for the annual report is provided in Figure 2-1.

2.12 MMI Rotation

When and where possible, an MMI should be offered reassignment to inspect different mines at least once every 5 years. Rotation of MMI inspection assignments may not be practical or possible if:

a. There are limited inspection requirements at the MMI's current duty station;
b. There is insufficient budget for transfer of duty station or temporary travel; or
c. There are other managerial or personnel barriers to a rotation.

Figure 2.1
Annual MMI Certification Status Report
For Fiscal Year 20__

Name	Office	Percent of Training Completed			Explanation or Remarks
		Certification (%)	Annual Safety (%)	Annual Professional Development (%)	

3.1 Introduction

Each mine and exploration program have specific safety hazards. All BLM personnel must be aware at all times during mine and exploration inspections of site-specific hazards as well as their personal safety, even though they may be accompanied by a company representative. All BLM personnel must avoid places, situations, or acts that can cause injury to them, others, or mine assets.

All BLM personnel will conform to all site-specific safety requirements.

All MMIs must be knowledgeable of and comply with all applicable MSHA safety requirements. When inspecting exploration operations, an MMI must be knowledgeable of and comply with OSHA safety requirements.

Each MMI will ensure that s/he has all the appropriate safety equipment. S/he must be familiar with the use and maintenance requirements of the appropriate safety equipment. In some cases required safety equipment may be provided by the operator of the mine being inspected. Examples of safety equipment that may be provided by the mine include disposable hearing protection, a self-rescuer, and a cap lamp. However, before entering a mine the MMI is responsible to ensure s/he has all required safety equipment, and that all such equipment is functioning and has been properly maintained.

3.2 Mandatory Personal Safety Equipment

All BLM personnel that inspect mines and exploration activities, or that assist in mine or exploration inspection, must have safety equipment that meets the requirements of the particular mine or operation site they will inspect. Depending on where an MMI inspects, s/he will require some or all of the following personal safety equipment:

a. Protective eyewear (commonly referred to as safety glasses or goggles);
b. Protective headwear (commonly referred to as a hard hat);
c. Protective footwear (commonly referred to as steel or hard-toed boots that comply with the safety requirements of the mine or exploration site (including metatarsal protection));
d. Hearing protection;
e. Respiratory protection (Dust mask or respirator with an appropriate filter. A mask or respirator might be provided by the mine operator.);
f. Mine belt (sometimes provided by the mine operator);
g. Reflective markings or vests (sometimes provided by the mine operator);
h. Cap lamp (sometimes provided by the mine operator);
i. MSHA self-rescuers as approved for each particular operation (sometimes provided by the mine operator); and
j. Any other protective clothing or safety devices, in addition to those devices listed above, required by a mine operator, lessee, licensee, permittee, or exploration operator (such as gloves, vehicle chocks, vehicle safety whips or flags, flashing lights, etc.).

If, depending upon the particular circumstances of a mine or operation, necessary safety equipment is required for safe entry and such equipment is not available to the MMI, the MMI must not enter the mine or operation site until s/he has acquired the equipment from the BLM office to which s/he is assigned or the equipment is provided by the mine operator, lessee,

licensee, permittee, or exploration operator.

All regulations and mine specific requirements pertaining to the maintenance, training, and use of self-rescuers must be adhered to as provided by the regulations of MSHA including, but not limited to, those found at 30 CFR 75.1714-3. Protective eyewear and hearing protection must be used according to the mine site policy.

Loose fitting clothes, long hair, rings, and necklaces are potentially dangerous around any moving equipment. Shirttails must be tucked in and hair confined under the hard hat. Protective eyewear, respiratory protection, and hearing protection must be used according to the mine site policy. Rings and necklaces must be removed and securely stored before the MMI enters an area with moving equipment.

3.3 Mine Entry Policy

The BLM Underground Mine Entry Policy, Manual Section 3010, is incorporated in full in this policy. An MMI must never enter an abandoned underground mine.

An MMI may enter a mining operation only as provided by BLM Manual 3010, Section 2.2.2.1 of this Handbook, and BLM safety guidance which may be supplemented, revised, or updated from time to time. If there are conflicting State and national policies for mine entry, the policy that provides greater protective restrictions to mine entry will apply. At no time will a BLM employee enter a mine in contradiction to specific policies or orders of the BLM or of specific policies or orders of other government entities that have specific jurisdiction over the land or mining operation.

3.4 Hazard Recognition

An MMI must always be aware of his or her surroundings. Hazard recognition is a significant component of the required mine safety course noted in chapter 2 of this Handbook. An abbreviated overview of hazard recognition is provided here to emphasize the importance of safety for BLM personnel in completion of inspections of mine and exploration activities. The following list of potential hazards (Table 3.1) is only illustrative and is not an exhaustive list of all hazards that may be encountered during a mine or exploration inspection.

Table 3.1
Personal Hazards and Mitigation Measures

HAZARD	MITIGATION MEASURE
Hazards applicable to underground and surface mines.	
Excessive noise.	Use appropriate protective hearing equipment. The noise of the equipment will diminish the operator's ability to hear warning signals or sounds.
Hazardous gases and dust.	Be aware of mine specific hazardous gas conditions. Be familiar with mine specific emergency procedures including warning signals and evacuation routes. Obey all hazard warning signals. Be aware of procedures for use of appropriate protective respiratory equipment and have such equipment immediately

Table 3.1 Personal Hazards and Mitigation Measures	
HAZARD	**MITIGATION MEASURE**
	available when appropriate. Immediately withdraw from any area when warning signals indicate a potential hazard or if confronted with a new hazard. Refer to Section 3.6 of this Handbook for specific exposure limitations, standards, and protocols.
Tripping hazards.	Make sure of footing. Whenever possible avoid walking on slick areas and places covered with water.
Working near operating machinery including, but not limited to, conveyor belts, crushers, feeder breakers, and chain conveyors.	Keep limbs and clothing away from conveyor belts, drive wheels, idlers, or other moving parts of machinery. Never grab any moving or rotating parts.
Haulage systems and routes.	A machine operator, regardless of the type of mining equipment, has limited visibility and may not notice someone walking towards or standing behind the machine. An MMI must be aware of the routine routes of operating equipment in order to avoid hazardous situations. The MMI must be aware of specific traffic rules (such as a right hand traffic pattern) at each mine to avoid placing themselves in dangerous situations. This can be especially dangerous in slick or pitching conditions. With proper conditions, a crosscut or turn-out may be a place of safety to allow equipment to pass.
Electrical cables and equipment.	Danger of electrocution. Do not touch or handle electrical cables and equipment. Observe all electrical warning signs. If operating a vehicle, never drive over an electrical cable (this is an MSHA violation). Avoid any water that may be charged by an electrical short from a submerged electrical cable.
Areas marked “danger.”	BLM personnel cannot enter, under any circumstance, areas posted as being dangerous or as having a danger.
Blasting.	An MMI must be familiar with the hazards and procedures associated with blasting. Never handle or load any blasting material and never drive into an area that has been or is being prepared for blasting unless authorized and accompanied by a mine representative.
Chemicals and fuel storage.	An MMI must be aware of all chemical and fuel storage areas because the inspector must be able to ensure that these materials have been removed prior to recommending approval of the permanent abandonment of an area. An MMI must obey all company rules regarding these chemicals and areas. An inspector should know what chemicals are used and emergency procedures to be taken if accidentally exposed to or put in contact with them. An inspector should be aware of where the

Table 3.1 Personal Hazards and Mitigation Measures	
HAZARD	**MITIGATION MEASURE**
	mine operator maintains file copies of the Material Safety Data Sheets for all stored chemical or fuel hazards.
Stockpiles.	There is a danger of slipping and falling on stockpiles of unconsolidated material. Unconsolidated stockpile material is comprised of small loose fragments that have not been compacted and that have no connective structure. The unconsolidated stockpile material can easily slide and shift with the added weight of walking, thereby creating a slip and fall hazard. There is a danger that unconsolidated piles of material could have slope failures that could cause a fall and entrapment. Great caution is required when walking on piles of unconsolidated material. If inspection of the unconsolidated pile is required, always have a company representative near that is not on the stockpile that can take emergency action if needed and make sure activation of a draw point or stacking conveyor, crusher, or feeder breaker, is locked-out with your personal lock, consistent with the mine specific lock-out protocols, for the period that you are on the unconsolidated pile. Lock-out will significantly reduce the potential for draw down or continued material stacking while you are on the stockpile. An MMI is strongly encouraged to use alternative measurement methods that avoid having to walk on piles of unconsolidated material that will safely provide equivalent data.
Highwalls, spoil slopes, or stockpiles.	Many mines have established site-specific safety zones that prohibit working within a fixed distance of the crest or toe of a highwall. An MMI must always obey site-specific safety requirements. An MMI must obey the safety protocol of each mine with respect to maintaining a safe distance from a highwall, spoil slope, or unconsolidated stockpile. If closer examination is needed, the MMI must request that the lessee or mine operator first examine the area for safety and only enter the area or approach the highwall, slope, or stockpile after mine operator makes the area safe for work. An MMI is encouraged to investigate all alternative methods of collecting data so as to avoid being to near the crest or toe of a highwall, slope, or stockpile.
Vehicle traffic.	An MMI must know the mine-specific vehicular traffic rules when driving within the mine. Some mines require left-hand traffic for all vehicles on their haulage and secondary access roads while others require right-hand traffic.
Hazards applicable to only underground mines.	
Unstable roof and rib	The MMI must not enter any section of the mine that has not yet

Table 3.1 Personal Hazards and Mitigation Measures	
HAZARD	**MITIGATION MEASURE**
conditions.	been properly supported and inspected for safety by MSHA-qualified mine personnel. The inspector should always be aware of unstable, sloughing sides or ribs, or bad roof conditions. If these conditions are identified, the MMI should quickly note the location of the unsafe condition, leave the unsafe area as quickly as possible, and notify MSHA and the mine operator. If measurements are to be taken against the rib, then ensure the area is safe and has been sufficiently barred-down (sometimes referred to as scaling) such that there is no loose hanging rock over were the MMI will be working. If further investigation is necessary, then the MMI should have the company representative bar-down the area. Under no circumstance will the MMI bar-down the roof or ribs.
Hazards applicable to only surface mines.	
Pit access.	An MMI must honor all routine or temporary vehicular traffic patterns including one-way traffic for pit access.

3.5 Mine Safety Protocols

A MMI is required to follow appropriate mine specific safety protocols. In cases where there are no established protocols, a MMI must follow the minimum BLM safety protocols are provided in Table 3.2. Additional safety protocols may be required by local BLM management for specific local safety concerns.

Table 3.2 Mine Safety Protocols	
ACTIVITY	**BLM PROTOCOL**
Mine Safety Protocols applicable to underground and surface mines.	
Inspection of active and inactive operations.	All BLM personnel must always be escorted by a representative of the mine during inspections.
Notification of inspections.	An MMI is required to notify the authorized representative of the operator or lessee prior to the inspection. All BLM personnel must comply with the mine-specific systems for monitoring the location of personnel.
Smoking.	An MMI will strictly adhere to “No Smoking” signs posted by the operator and as required under MSHA regulations.
Driving.	It is preferable for the MMI to be a vehicle passenger, rather than a driver, during an inspection. If an MMI must drive, s/he must be knowledgeable of any special driving requirements in and around the mine as well as the capabilities and condition of the vehicle s/he is driving. All BLM personnel must be escorted by a representative of the operator when driving in a mine area.
Equipment lock-out.	If the MMI needs to lock-out equipment (including a lock-out

Table 3.2 Mine Safety Protocols	
ACTIVITY	**BLM PROTOCOL**
	hasp that allows multiple locks to be attached to one lock position and a personal keyed paddle lock that is clearly labeled with the BLM and inspector's name and phone number) to ensure his or her safety, s/he must do so in conformance with the lock-out protocol for the specific mine or site. Every effort should be made to safely complete measurements and inspections without having to lockout equipment. Never trust anyone else to lock-out equipment that must be de-energized to assure your personal safety.
Personal Protective Clothing.	An MMI will adhere to the protective clothing requirements of each mine operator.
Mine Safety Protocols applicable to only underground mines.	
Ventilation doors.	When passing through a ventilation door, always make sure the ventilation door is in the same position you found it after you pass through the door.
Cap light.	Avoid shining your cap light in the eyes of other personnel. The light may cause temporary blindness, potentially causing accidents.
Emergency escape way and barricades.	An MMI must be familiar at all times with emergency procedures, designated escape routes, and emergency barricading procedures for each mine inspected or visited. The first duty of an MMI is safety.
Tag-in and tag-out.	All BLM personnel must comply with the mine system for monitoring the location of persons within the mine. An MMI will be required to "tag-in" to the mine and "tag-out" of the mine. An MMI must be accompanied by a qualified mine personnel. Immediately notify appropriate mine staff if you discover that you forget to "tag-out" of the mine.
Signaling devices.	An MMI must be familiar with sending and receiving messages by signaling protocols used at the mine including, but not limited to, cap light signals and other signal devices.

3.6 Hazardous Gases

3.6.1 Training

An MMI is required to complete new miner and annual refresher safety training that is equivalent to that provided to miners working at surface mines, surface areas of underground mines, and underground mines (see chapter 2.4 of the Handbook). The new miner and annual refresher training includes general hazards and requirements including:

a. Hazard recognition and avoidance,
b. Instruction in the use, care, and maintenance of self-rescue and respiratory devices, and
c. Mine gases.

MSHA regulations (30 CFR 48.11 and 30 CFR 48.31) require annual mine specific hazard training for visitors, including MMIs and other BLM employees who enter mining areas. This additional mine-specific training provides information about mine-specific gas hazards. An MMI must question the operator if there is a known potential for harmful gases within the mine that require special care, training, avoidance, and personal protective devices. The mine operator is responsible for the necessary training and appropriate personal protection equipment.

3.6.2 Exposure Limits

During an inspection, an MMI must be aware of the potential for exposure to dangerous concentrations of hazardous gases and must be prepared to take appropriate steps to avoid or mitigate any such exposure.

All BLM staff, including an MMI, will immediately withdraw from an area whenever the gas concentration measurements indicate a concentration that exceeds the MSHA 8-hour threshold limit value (TLV). BLM staff must withdraw immediately upon knowledge of a hazardous concentration regardless of the experienced or anticipated duration of exposure. Therefore, any monitor reading in excess of MSHA's TLV requires BLM staff to immediately withdraw to a safe area. Promptly following such withdrawal, the MMI must notify MSHA of the hazardous concentration reading. In addition to notifying MSHA, the MMI must also notify the mine operator of the hazardous concentration reading. The mine operator is responsible to mitigate an excessive gas concentration. Table 3.3 provides a brief summary of the primary gases of concern and the MSHA TLV values as of December 2012. Always verify the current allowable TLV with MSHA. The most current MSHA TLVs will be applicable as they become effective.

Table 3.3
Mandatory Withdrawal Limits for BLM Staff Inspecting Coal Mines
MSHA TLV values as of December, 2012

Gas	BLM staff must withdraw to safe area when gas concentrations exceed:	BLM staff must withdraw to safe area when gas concentrations are below:
Hydrogen Sulfide (H_2S)	10 parts per million (ppm)	Not applicable
Carbon Monoxide (CO)	50 ppm	Not applicable
Carbon Dioxide (CO_2)	0.5% or 5,000 ppm	Not applicable
Oxides of Nitrogen (NOx)	5 ppm (Nitrogen Dioxide NO_2)	Not applicable
Methane (CH_4)	1%	Not applicable
Oxygen (O_2) Deficiency	Not applicable	19.5%

3.6.3 Inspection Procedures:

The mandatory inspection procedures for mine where noxious gases or oxygen deprivation are a potential are summarized in Table 3-4.

Table 3.4
BLM Inspection Procedures When Noxious Gas or Oxygen Deprivation Are Potential Hazards

	The MMI must:
Before the inspection	Complete initial and annual safety training that includes procedures to follow when encountering oxygen deficiencies or noxious gases in the mining area.
	Be cognizant of any plans concerning mitigation or management of oxygen deficiency or noxious gas, the locations of gas monitoring sensors, the monitoring findings, and procedures to follow when oxygen deficiency or noxious gases are encountered. • For surface mines, be familiar with any required MSHA air sampling, tests, and analysis that are intended to determine concentrations of noxious or poisonous gases, dusts, fumes, mists, and vapors in surface installations and at surface worksites (30 CFR 71.700-30 CFR 71.701). • For underground mines, review the most current MSHA-approved ventilation plan.
	Understand when to use a self-rescuer or other respiratory device. Ensure other BLM employees assisting with an inspection are provided an appropriate self-rescuer or respiratory device and training for the proper use of these devices. • A self-rescuer or respiratory device may be required for specific areas in a surface installation or surface worksite where concentrations of airborne contaminants are in excess of the applicable TLV, permissible exposure limits, or permissible excursions are known by the operator to possibly exist. (30 CFR 71.700-30 CFR 701)
	Request the mine operator to provide hazard training and special ventilation respirators or filter self-rescuers for all BLM employees who are required to inspect areas where airborne contaminants in excess of the applicable TLV are known by the operator to possibly exist.
	Provide appropriate documentation in the I&E Plan for each mine of known occurrences of oxygen deficiencies or noxious gas and appropriate safety precautions.
During the inspection,	Request that the mine operator's representative who is accompanying an MMI on an inspection to frequently monitor the mine atmosphere in areas known for oxygen deficiencies or noxious gases.
	All BLM employees must withdraw from an affected area when the mine operator's representative monitor registers at or above the 8-hour TLV or minimum acceptable level. Make sure to withdraw through openings or entries that have fresh air.
	Do not re-enter the affected area until mitigation has been completed and the mine operator has determined that the hazardous gas level is within acceptable

Table 3.4 BLM Inspection Procedures When Noxious Gas or Oxygen Deprivation Are Potential Hazards	
	The MMI must:
	concentrations in accordance with limits established by the Handbook or MSHA, whichever provides greater personal protection.
	Request immediate medical assistance for yourself or any other person who may be experiencing symptoms of exposure to a noxious gas or oxygen deprivation.
During the inspection closeout meeting and promptly following the inspection	Discuss any safety incident or concern with the mine operator's representative, ask what modifications or actions are being taken to rectify the oxygen deficiency or noxious gases levels, and if a mining plan revision is necessary.
	BLM personnel must notify their immediate supervisor of any exposure to noxious gas or oxygen deprivation.
	BLM personnel must report to the MSHA any hazard, including the location and magnitude of hazardous gases encountered during the mine inspection that may impact the health and safety of miners at coal mines on Federal and Indian lands. • For surface mines, report to the appropriate MSHA Supervisor. • For underground mines, report to the MSHA District Manager as specified in the MSHA/BLM MOU.
	Review, and update as necessary, the oxygen deficiencies or noxious gas administration plan requirements in the mine I&E Plan.

3.7 Exploration Safety

The inspection of exploration activities poses a particular set of hazards of which BLM personnel should be aware. Examples of some hazards include:

a. Driving -- Inspection of exploration activities may involve a great deal of off-road driving and hiking. Personnel responsible for exploration inspections must receive appropriate training on the use of four-wheel drive vehicles. If an exploration site is only accessible by helicopter, appropriate safety training must be completed before boarding a helicopter including assuring the helicopter is certified to carry Federal employees.
b. Safety Equipment -- Personnel must be equipped with any additional safety equipment that may be required (e.g., hydrogen sulfide detectors, methane detectors). Protective eyewear and hearing protection must be used according to the exploration site policy.
c. Drilling Activities -- Be aware of moving support equipment, power sources, drill pipe, slick footing surfaces, chemicals, electrical systems, etc., for possible hazards.
d. Site conditions -- All BLM personnel should ensure they have a thorough knowledge of the area to avoid becoming disoriented. They should check weather projections for the area and be fully prepared for adverse weather, including the ability to safely wait for a storm to pass.
e. Seismic Exploration Activities -- Exercise caution when seismic exploration activity involves the use of explosives and mobile equipment.

3.8 Reporting of Accidents

Any accident involving BLM personnel must be reported immediately. See BLM Handbook H-1112-1, Safety and Health Management for instruction concerning reporting and documentation of accidents.

Table 3.5
Accident Reporting Protocols

If the accident involves….	Then the MMI must
An active or inactive operation site.	Notify the mine personnel and your direct supervisor immediately.
A location other than an active or inactive operation site.	Notify your direct supervisor immediately. Report an auto accident using established BLM procedures.

4.1 Inspection Plan

Each exploration and mining operation that includes a Federal or Indian coal lease, license, or permit, or Federal LMU must have a current Inspection Plan (IP). The IP provides a summary of all the information necessary to complete a mine inspection for a particular lease, license, permit or mining operation. The IP also facilitates continuity of inspections should personnel changes occur. The IP is a living document that must evolve as conditions on the Federal or Indian coal lease, license, permit or LMU change. The IP is a convenient reference for an MMI and other BLM personnel concerning the inspection requirements and history of a lease, license, permit or LMU.

For clarity, there is only one IP for each exploration project or mine. If multiple BLM offices share jurisdiction or oversight responsibility for inspection actions for a specific mining operation, then all affected offices must be consulted in the development of a single, unified IP. Every effort should be made to provide shared electronic access to all BLM offices with an interest in a specific IP. In the event that multiple offices have an interest in a specific IP, one office must be designated as having the primary responsibility for development and maintenance of the IP. Further, the roles and responsibilities of each affected BLM office must be clarified within the IP.

For the purposes of the IP, an exploration or mining operation is established by a single Federal or Indian coal lease, license, permit, several Federal or Indian coal leases, or a LMU. The MMI must establish the boundary of the mining operation based on his or her knowledge of R2P2s for the Federal or Indian coal leases or LMUs. One option for the boundary of a mining operation could be established by the extent of the Surface Mining Control and Reclamation Act (SMCRA) mining permit boundary.

The MMI with responsibility for inspections at a particular exploration or mining operation will prepare and maintain the IP for the same mining operation. The IP must be current and include all materials and results relating to inspections. All IRs must be maintained in the official case file.

4.1.1 Inspection Plan Format

There is not a standard format for an IP. The IP format may change through the life of a mining operation to meet the new or changing information needs. The IP must address the inspection requirements at 43 CFR 3486.1 and the general operator obligations at 43 CFR 3481.1. The IP must describe recordation of inspection data and information into appropriate electronic systems and that a hardcopy of what is contained in the electronic record must also be retained in the official files.

4.1.2 General background and contact information

The inspection plan must include the following general background and contact information:

a. A summary including the exploration project or mine name; lease license, permit, and LMU serial numbers; current lessees, licensees, or permittees of record; name and address of the exploration or mine operator; current lease, license, permit, or LMU status; current lessee, licensee, permittee and operator contact information (name and phone

number); State and Federal mining permit numbers; and Indian lease or permit number, etc. Figure 4.1 is a suggested form to record and maintain contact information for the exploration project, mine, and other agencies.

b. A description of the physical location of the exploration or mining operation including an area map that illustrates the location of the exploration or mining operation and the boundaries of Federal and Indian coal leases, licenses, permits, or LMUs. The description must include driving instructions to get to the mining operation and an anticipated travel time.
c. An estimate of the duration of an average inspection.
d. A summary of active exploration and mining areas, special problems, projected annual development, number or drill holes and sample methods, or other factors of which the MMI should be aware when conducting inspections.
e. A condensed history of inspection issues or problems for each lease, license, permit or LMU, including resolutions (if any). This includes a brief description of the problem as well as a brief description and date of any subsequent corrective or punitive actions.
f. A narrative that describes lease, license, permit, and R2P2 stipulations. A list of applicable regulatory obligations must also be included.
g. Current contact information for all other regulatory agencies and Indian tribes, if applicable, that have an interest in the exploration or mining operation must also be included. This contact information must include, at a minimum, contact person and phone numbers for:
    - The MSHA for mining or OSHA for exploration;
    - The SMA or surface owners representative;
    - The State Department of Natural Resources or equivalent agency;
    - The SRA with primary authority to implement a surface mining program under SMCRA or, if there is no State agency with such authority, OSM; and
    - The SRA, if any, that has State-specific authority for mine safety.
h. A list of MOUs with other State and Federal agencies which affect the performance of I&E activities is also suggested for inclusion.

4.1.3 Description of mining methods

For mining operations the IP must include:

a. A brief narrative on any specific mining accident or other unexpected occurrence encountered at the mine including dates of each event and the respective resolution. An example of such an occurrence would be a spontaneous combustion event.
b. A description of the mining methods, equipment specifications, operations, and mine design parameters (minimum and maximum mining heights, ramp grades, etc.).
c. A description of the coal handling systems including the location of stockpiles, scales, waste facilities, and loadouts.
d. A description of the designated point of sale(s).
e. A chronologic record of all approved R2P2 modifications. This consists of a log sheet showing the approval data, a brief description of the change, and other pertinent information as needed for each modification.
f. Other information the MMI considers pertinent.

4.1.4 Description of exploration methods

For exploration operations the IP must include:

a. A brief narrative on any specific exploration accident or other unexpected occurrence encountered at the mine including dates of each event and the respective resolution. An example of such an occurrence would be a spontaneous combustion event.
b. A description of the exploration methods, equipment specifications, operations, access methods, reclamation methods, etc.
c. A description of the drilling or sampling density and methods, sampling or drilling locations, sample testing methods and desired test results, etc.
d. A chronologic record of all approved exploration plan modifications. This consists of a log sheet showing the approval data, a brief description of the change, and other pertinent information as needed for each modification.
e. Other information the MMI considers pertinent.

4.1.5 Inspection methods and considerations

The IP must provide a narrative of types and frequency of inspections anticipated. The MMI will consider the type of operation, rate of advance or retreat, percentage and amount of production from Federal or Indian lands, and minimum regulatory inspection requirements when establishing an inspection schedule. Section 5.2 provides requirements concerning the frequency of inspections for various general mining scenarios.

4.1.6 Inspection data

The IP must include a description of the method(s) for gathering geologic data during an inspection for use in completion of independent PV. The IP must describe the procedure to update the geologic interpretation and in-place tonnage projections using the new geologic data collected with these procedures.

4.1.7 Record of Revision to the Inspection Plan

The MMI must maintain a record of any revision to the IP that includes the lease serial number, date of the revision, the name of the person who did the revision, the name of the person who checked the revision, and a brief description of the revision. Any other supporting documentation should be noted in the description and included in the official case file. Figure 4.2 can be used to maintain a record of IP revisions.

Figure 4.1
Bureau of Land Management
Coal Inspection and Production Verification Plan General Information
Date:_____

Mine Name: _____Commodity: _____
Mine Contact Person: _____Phone Number: _____
Mine Operator: _____
Mine Address: _____City: _____State: ____Zip: _____
Products Sold: _____
State Lands? Y□ N□ Private Lands? Y□ N□ Tribal Lands? Y□ N□
Commingled Product? Y□ N□
Surface Mining? Y□ N□ Highwall/Auger Mining? Y□ N□ Underground Mining? Y□ N□

Process Facility Contact Person: _____Phone Number: _____
Process Facility Operator: _____
Process Facility Address: _____City: _____State: ____Zip: _____

Name of Tribe or Allottee: _____
Name of Tribal Contact: _____Phone Number:_____
BIA Contact Person: _____Phone Number: _____
SMCRA Permit Number:_____
SMCRA Contact Person: _____Phone Number: _____
MSHA/OSHA Case Number: _____
MSHA/OSHA Contact Person: _____Phone Number: _____

Mineral Mine Inspector: _____Phone Number: _____
Logical Mining Unit (LMU) Name: _____LMU Serial Number: _____

Lease or License Serial Number (1)	**Land Type (2)**	**Lessee, Licensee, or Permittee Name**	**Royalty Rate**	**Surface Management Agency (3)**	**Name of the Surface Owner, Tribe, or Allottee**

(1) Specify all Federal, State, Tribal, and private coal resources that are included in the LMU.
(2) Federal, State, Fee, Tribal, Allottee
(3) USFS, BLM, BIA, Department of Defense (DOD)

4.2 Inspection Record

The MMI must maintain records of completed inspections as a part of the IP as follows:

a. A record of the inspection date(s), results, and corrective actions.
b. A record of the IRs for the previous 12-month period for reference.
c. A chronologic record that summarizes all noncompliance issues that show type, date, description, comments, follow-up, etc.
d. A chronologic record that summarizes all reportable conditions that show type, date, description, comments, follow-up, etc.
e. All electronic recordation of an inspection must be entered into appropriate electronic systems as part of completing an inspection.
f. While these records are envisioned to be maintained in the IP to aid the MMI in the execution of his or her duties, these records are a part of the official case file and are subject to all information requirements that apply to the official case file.

Figure 4.3 offers a format to maintain an ongoing summary of inspections and status of each inspection.

Figure 4.2

Bureau of Land Management
Example Inspection Plan Revision Summary

Exploration or Mine Name: _____Commodity: _____
OSHA or MSHA number: _____
Logical Mining Unit (LMU) Name: _____Serial Number: _____

Lease, License, or Permit Serial Number	Date	Revision By	Revision Checked By	Description of the Revision

Figure 4.3
Bureau of Land Management
Example Inspection Activity Summary

Exploration or Mine Name: _____Commodity: _____
OSHA or MSHA number: _____
Logical Mining Unit (LMU) Name: _____Serial Number: _____

Lease, License, or Permit Serial Number	MMI Name	Date		Comments/Results
		Field Work	Final Report Completed	

5.1 Introduction

The BLM is responsible for inspecting lessee, permittee, licensee, or operator activities on a lease, permit, or license. The BLM inspection procedures are based on exploration or underground and surface coal processes. These procedures apply to any exploration or mining operation on leases, licenses, or permits on Federal or Indian lands.

This Handbook is intentionally general in nature and does not capture every possible circumstance that an MMI might encounter. It is not intended to be a "cookbook" for exploration or mine inspections. An MMI must always use professional skill and judgment when confronted by new or unique circumstances. The inspection procedures for a particular lease, license, or permit should be amended as necessary to document how a unique condition or situation was accommodated.

There are a few general items to consider before initiating any inspection:

a. Review all appropriate background information prior to conducting an inspection.
b. An MMI must always carry and produce proper government identification to verify that s/he is an authorized representative of the BLM.
c. An MMI should wear the agency uniform, if possible, when conducting an inspection.
d. Any violations discovered during an inspection must be documented, the company representative notified, and corrective action initiated as soon as possible.
e. Inspection information must be promptly recorded in applicable automated data systems.
f. An initial draft of a written report documenting what occurred during an inspection must be completed within 2 weeks after completion of the onsite inspection. The lessee, permittee, or licensee must be provided a copy of the IR when finalized.
g. Field notes must be taken with special attention paid to conditions at specific locations, compliance with abandonment requirements, and notation of personnel on the inspection.
h. Always bring all appropriate personal safety equipment (e.g., hard hat, safety boots, and safety glasses) that are required at each location.
i. If an operator, lessee, or other person attempts to hinder, impede, or prevent an MMI from entering a facility or conducting an inspection, the MMI must not attempt to force his or her way in to any facility. The MMI should immediately notify BLM management and Law Enforcement personnel for assistance to enable the MMI to conduct the inspection.
j. In the event that the MMI discovers evidence of criminal activities at mine sites, such as drug laboratories or the storage of weapons, the MMI must immediately report such information to BLM Law Enforcement, SMA Law Enforcement and, as appropriate, other potentially interested regulatory or law enforcement agencies.
k. MMIs are prohibited from carrying firearms or other weapons in the performance of their duties.
l. If an MMI is offered a bribe or other inducement before, during, or following an inspection, or at any time, s/he must immediately report that information to BLM management and Law Enforcement.

5.2 Inspection Companion and Frequency

The MMI will never inspect exploration and mining operations alone as indicated in Table 5-1, Summary of Inspection Companion Requirements. The MMI will inspect exploration and mining operations on the schedule indicated in Table 5-2, Summary of Inspection Frequency Requirements. All inspections must be frequent enough to ensure that approved plans are being followed, mineral resources are not being wasted, trespasses are not occurring, specific requirements of a lease, license, or permit are being met, and compliance with other applicable requirements.

Table 5-1
Summary of Inspection Companion Requirements

	Active Mining Operations	Inactive Mining Operations	Abandoned Mines	Exploration
Definition	An active mining operation: a. Is undergoing development or has mineral production activity; b. Has an identified mine operator; and c. Has a current authorization to perform mining operations from MSHA.	An inactive mining operation: d. Has an identified mine operator; a. Has an operable ventilation system; b. Has works that are free of fallen rock; c. Has ground control systems in place and maintained; and d. Has established escape procedures and maintained escape routes.	An abandoned mine: • Does not have an identified mine operator that actively and regularly maintains the mine works; • Has no records of maintenance of the mine works; • Has no records of inspection by authorized agencies; and • Cannot meet the requirements of an inactive mine.	Exploration activities are characterized by: • Acquisition of samples from areas that have not been mined for purposes of testing the physical or chemical characteristics of the coal, including gathering data regarding the strata below the Federal coal, the overburden, and strata above the coal, and the hydrologic conditions associated with the coal; • Samples can be acquired by drilling, test pits, electronic logs, geophysical survey, channel sample, or other methods; • Samples can be acquired from the surface or from underground openings.

Table 5-1
Summary of Inspection Companion Requirements

	Active Mining Operations	Inactive Mining Operations	Abandoned Mines	Exploration
Inspection Companion	An MMI must be accompanied by the lessee or designated mine operator, or designee, during any inspection.	An MMI will invite the lessee or designated mine operator, or designee, to accompany the inspection.	Because there is no identified mine operator or lessee, there is not a representative to invite for inspection of surface facilities.	An MMI will invite the licensee or designated representative, lessee or designated mine operator or designee, and the SMA or designated representative, to accompany the exploration inspection.
	An MMI will never perform an inspection alone. If an MMI cannot complete arrangements to be accompanied by the licensee, lessee, SMA, or designated operator, during a required inspection, the inspection must be completed consistent with BLM MS-3010, Underground Entry Policies for Solid Minerals, for either underground or surface mining entries. (See Section 2.4.1.6)			

The definition of an active mining operation, for the purposes of BLM personnel entering a mine for inspection, enforcement, or production verification, differs from the definition of "producing" status of a Federal coal lease found at 43 CFR 3400.0-5(rr)(6). The latter definition is designed to address consideration of a lessee's qualifications to obtain additional Federal coal leases under Section 2(a)(2)(A) of the Mineral Leasing Act, 30 U.S.C. 201(a)(2)(A). The definition of an active mining operation in the above chart is consistent with BLM Manual 3010, Underground Entry Policy for Solid Minerals.

The MMI should determine whether there is any evidence of potentially new activities at an abandoned mine site. The MMI should identify and make an initial visual assessment of any physical hazards or adverse environmental conditions at the abandoned mined site to aid in planning further investigation by properly trained personnel.

The inspection frequency for mine operations can be modified as needed depending on the rate of advance or retreat of the pit(s) or working section(s). Consequently, a high production mine may be extracting the mineral at a rate where quarterly inspections would not be sufficient to adequately assess resource conservation or production verification. An example of such a situation could be an underground coal mining operation where longwall mining or pillar extraction will render an area permanently inaccessible for inspection. If this situation exists, a priority system for inspections must be established giving consideration to production, complexity, and size of operations, accessibility, etc.

Table 5.2
Summary of Inspection Frequency Requirements

Type of inspections	Surface mines or surface facilities	Underground mines	Exploration
Active lease, license, permit, or LMU	At least once every 3 months.	At least once every 3 months.	The exploration area must be inspected at least annually. To the extent possible, exploration activities should be inspected in conjunction with coincident or adjoining lease inspections. An inspection must be completed prior to bond release.
Inactive or idle lease, license, permit, or LMU	At least once a year.	At least once a year.	At least once a year.
Abandoned Mines	Surface facilities can be inspected as needed. An MMI will never enter an abandoned surface mine.	An MMI will never enter an abandoned underground mine.	Surface facilities can be inspected as needed. An MMI will never enter an abandoned surface or underground mine.
Conditions that may require more frequent inspections	• General inspection. • Production verification. • R2P2 modification. • Abandonment. • Potential Trespass. • Verify achievement of MER (UMR for Indian lands) and status of pre-relinquishment environmental site audit and whether any hazardous substances as defined by the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) have been released at the site prior	• General inspection. • Production verification. • R2P2 modification. • Abandonment. • Potential Trespass. • Verify achievement of MER (UMR for Indian lands) and status of pre-relinquishment environmental site audit and whether any hazardous substances as defined by CERCLA have been released at the site prior to BLM's approval of full or partial lease or license relinquishment. • Other considerations as required.	• General exploration operations. • Exploration plan modification. • Field examination of data and sample acquisition. • Witness drill-hole plugging and area reclamation. • Abandonment. • Potential Trespass. • Verify status of pre-relinquishment environmental site audit and whether any hazardous substances, as defined by CERCLA, have been released at

Table 5.2 Summary of Inspection Frequency Requirements			
	to BLM's approval of full or partial lease or license relinquishment. • Other considerations as required.		the site prior to BLM's approval of full or partial lease or license relinquishment. • Other considerations as required.

5.3 Preparation for an Inspection

5.3.1 Review Existing Information and Records

Sources of information and office documents that need to be reviewed prior to inspections by the MMI are as follows:

a. The IP, prior inspection records, and inspection requirements of the mine or exploration site must be reviewed.
b. The most recent progress reports or maps and/or aerial photos that are provided by the mine operator (43 CFR 3482.3 and 3485.1) must be reviewed to determine the status of the mining sections, inactive mining areas of an active mine, relative location of mining areas to boundary lines, new surface access activities, exploration drill site locations, etc.
c. The inspections should be designed to verify any change in conditions.
d. Review previous exploration or mine IRs and personal field notes to ensure follow-up concerning any violations or information requests made or noted on the last inspection.
e. Review the permit, license, or lease documents to be familiar with the terms and conditions of the agreement including any special stipulations that would relate to BLM inspection activities.
f. Review the correspondence files pertaining to the permit, license, lease, or LMU for the operation to be inspected. This review will let the MMI know of information requests, mine operation issues, or violations that the company was ordered to correct.
g. Review the Production Verification Plan (see BLM H-3486-2) and records to be familiar with the coal processing steps and flow for the coal from severance to the point of sale.
h. Review applicable land status plats to be familiar with surface and mineral land ownership boundaries of each lease, license, or permit.
i. Review lease, license, or permit files to determine whether operations have been approved and any conditions of the approval.

5.3.2 Advance Notice to Mine Operator

Advance notice of a mine inspection is encouraged but might not always be possible. An MMI is encouraged to coordinate with the exploration or mine operator and other participants from the BLM or other agencies prior to a mine inspection concerning the date and time of the inspection so that as many interested persons as possible can be participate. An attempt should be made to plan a reasonably flexible schedule in case unexpected situations are encountered at the mine.

Clearly establish the purpose and objectives of each inspection. When explaining the purpose of the inspection, identify any data that the operator will need to have available for inspection

purposes.

5.4 Exploration Inspections

5.4.1 Exploration Pre-authorization Inspection

A pre-authorization inspection is a required onsite inspection of the proposed sites that may be disturbed or impacted by exploration activity. If the exploration activities will be within a SMCRA permit, assure that the appropriate authorities under SMCRA are included in the pre-authorization inspection. A pre-authorization inspection is not required if the proposed exploration activities for Federal coal constitute casual use as defined at 43 CFR 3400.0-5(e) and 3482.1(a) (1). The pre-authorization inspection will evaluate the proposed sites for:

a. The scope of the project to enable adequate protection of the environment.
b. Capability to evaluate the resource.
c. Other site-specific special concerns.

Information and observations obtained on the pre-authorization inspection can be used in preparation of the NEPA analysis for the project.

There are many individuals and agencies that must be involved in a pre-authorization inspection:

a. Representatives of the appropriate SMA and the applicant must be present at the pre-authorization inspection.
b. The SRA must be notified of a pre-authorization inspection.
c. As applicable, the SRA must be kept informed of exploration activities on all Federal lands within their boundaries.
d. The SRA will provide recommendations concerning the exploration proposal on lands where mining has already commenced and are within an approved Federal coal area.
e. For exploration proposals that involve split estate lands, the non-Federal surface owners should be contacted and invited to participate in the pre-authorization examination even when the exploration applicant and the surface owner have an established agreement to allow exploration access.
f. For exploration proposals that involve Indian lands, the BIA and affected Indian tribe should be contacted and invited to participate in the pre-authorization examination.
g. The BLM will make every effort to inform any non-Federal surface owner that the BLM will provide surface protection recommendations upon request even when the exploration applicant and the surface owner have an established agreement to allow exploration access. Other BLM specialists should be available as needed to evaluate specific site or area concerns.

A pre-authorization IR is required for the official case file upon completion of a pre-authorization inspection. A detailed summary of all results and observations made during the pre-authorization inspection will be included. The pre-authorization IR must also include a list with names and contact information of all persons who were contacted, participated, or who provided information. The report must contain a summary of all the onsite discussions and agreements. A summary of any information collected or provided must also be included in the IR. Additional information concerning inspection reports is provided in Section 5.8

5.4.2 Exploration Operations Inspection

An MMI must be aware of the progress of exploration activities and adjust inspections to be at the exploration location as critical exploration activities are completed. The frequency for exploration operations inspections is highly variable depending on weather, location, equipment, or other circumstances beyond the control of the exploration operator. Table 5-1, summary of Inspection Frequency and Companion Requirements, describes the general exploration inspection intervals and companion requirements for inspection of exploration activities.

An exploration inspection must determine whether the exploration operations are in compliance with applicable laws, rules, orders, the terms and conditions of the Federal lease or license, and the requirements of the approved exploration plan for abandonment and environmental protection. Each exploration license or plan has unique requirements and circumstances.

Advance notification to the exploration operator of an inspection is encouraged. Periodic conversations with the exploration operator are encouraged to keep informed of the exploration program's progress.

The protection of hydrologic and mineral resources is of great importance. The MMI must witness and verify the plugging of as many drill holes as possible for each exploration program. Drill hole or well plugging must be completed as each drill hole or well is completed in accordance with the applicable State or BLM requirements for plugging, any program-specific requirements, and any site-specific requirements contained in the approved exploration plan.

A sample of some exploration activities that may merit an onsite inspection includes:

a. Areas where special land use planning concerns have been identified (i.e., archaeological sites, threatened and endangered (T&E) species, artesian flows).
b. Areas identified by the BIA or Indian tribe that should be avoided.
c. Reclamation performance for bond release.
d. Compliance with the exploration plan or license requirements including:
    - Drilling locations,
    - Equipment used,
    - Drilling procedures used,
    - Appropriate plugging of the drill holes, and
    - Reclamation of the drilling site and access roads.
e. Data acquisition methods and chain of custody of samples.
f. Proposed changes to an exploration plan.
g. Abandonment of drill holes or other sample gathering locations.
h. Surface-owner satisfaction with reclamation efforts.
i. An MMI should identify and make an initial visual assessment of any physical hazards or adverse environmental conditions at the site for further investigation by properly trained personnel.
j. Submittal of exploration results to the BLM.
k. Other items as required.

After completion of each inspection, an IR must be written to describe observations made onsite.

If any proprietary data is discussed in the report, reasonable security filing procedures must be employed to preserve the confidentiality of proprietary data. Chapter 8, Proprietary and Confidential Information, and BLM Manual 1278, External Access to BLM Information, provide policy information concerning handling confidential or proprietary data.

5.4.2.1 Exploration not within a SMCRA Permit

Comments and recommendations concerning exploration activity from another SMA must be coordinated through the BLM rather than having these agencies making direct operator contact.

5.4.2.2 Exploration within a SMCRA Permit

The OSM or SRA have the following responsibilities:

- The primary regulatory authority under SMCRA for surface disturbances and other environmental issues identified within the SMCRA permit; and
- The authority to make direct contact with the exploration operator to address SMCRA permit reclamation issues.

Efforts should be made by an MMI to coordinate with OSM or the SRA, as the case may be, so that the MMI is aware of any instructions, orders or other contacts between the agency having authority under SMCRA and the exploration operator.

5.4.3 Verification of Sample and Exploration Data

An MMI must make a reasonable effort to verify any exploration data provided to BLM and to assure that the chain of custody of all samples is documented. Verification can be accomplished by:

a. Comparison to other known coal information in BLM possession;
b. Comparison to other known geologic information in BLM possession;
c. Review of the chain of custody of samples and other data;
d. Inspection of all drill core, core storage, and core possession and processing standards;
e. Review of calibration procedures for electronic sample equipment;
f. Retention of a sample split for independent analysis; or
g. Other means that provide verifiable confirmation of the exploration results.

5.4.4 Exploration Abandonment and Reclamation Inspection

Several inspections may be required to ensure all of the drill holes are plugged, marked, and adequately reclaimed; trenches, pits, and excavations filled; and pads leveled and graded. Final inspections for bond release should be scheduled as close as possible to the time period when success of revegetation can be established (i.e., at least one full year growing season, or spring and summer of the year after seeding or planting).

Abandonment and reclamation inspections, when applicable, must be simultaneously performed with the completion of each phase of an exploration program to ensure compliance with the approved exploration plan, and abandonment and reclamation standards. These inspections will verify the success of abandonment and reclamation and will provide justification for release of all or part of the exploration bond or requiring supplemental reclamation work.

The BLM's responsibilities for reclamation and abandonment of exploration activities are shown in Table 5-2.

Table 5.3 BLM's Responsibilities Regarding Exploration Abandonment and Reclamation	
If the exploration activity is….	Then BLM has responsibility
Within an established SMCRA permit area	To assure all drill holes or subsurface disturbances are abandoned in compliance with the approved exploration plan, or applicable State standards if the State standard is more rigorous than standards specified in BLM regulations.
Not within an established SMCRA permit area	To assure that both surface reclamation and abandonment of drill holes or subsurface disturbances are completed in accordance with the approved exploration license or permit, the exploration plan, and applicable BLM regulations.

Prior to the abandonment inspection, all applicable SMAs, BIA, or Indian tribe must be notified to determine if they wish to be present (in some cases as provided in an MOU or regulation) for the final abandonment inspection or elect to independently inspect the site. If the SMA, BIA, or Indian tribe elects to independently inspect the exploration site, they must provide written comments to the BLM within a reasonable time period that is mutually agreed upon in advance. The licensee, permittee, or operator should be contacted to have representatives present for a joint inspection. This will encourage clear communications and save time if a deficiency is found that requires action. Other BLM or SMA specialists or personnel who have skills that can be helpful in determining the success of abandonment or reclamation should also be contacted for their participation in the inspection.

An IR must be completed and automated data systems updated. The written IR is required to include:

a. A discussion of the completeness of the exploration data submittal (without revealing proprietary information).
b. An analysis and discussion concerning the success of abandonment and reclamation operations.
c. Recommendations concerning acceptance, acceptance with conditions, or rejection of final abandonment and reclamation.

Final abandonment and bond release must be approved by the BLM office that approved the exploration plan. A letter must be written to the operator and licensee providing the BLM's final determination concerning abandonment and reclamation success, specifying all supplemental requirements or conditions of approval, and a determination concerning the release of the exploration surety bond.

The BLM functions as if it was the SMA where there is private surface over Federal coal. If a private surface owner and the exploration licensee or permittee are not able to agree concerning the reclamation adequacy, the BLM will determine if the reclamation is adequate or not for release of the reclamation bond.

5.4.5 Underground Exploration Inspection

With the development of techniques to use horizontal drilling to explore for thousands of feet, it is important to inspect any underground exploration activities and receive all the data developed from underground exploration activities. Underground exploration must be completed in conformance with an exploration plan that is a part of an authorized Federal coal lease. An exploration license is required, with advertisement for other participation, whenever the underground exploration extends into Federal lands that are not leased. All underground exploration requires a NEPA evaluation by the BLM and an opportunity for public review and comment. All exploration data must be provided to the BLM. The MMI must witness sampling of the coal and completion of a representative sample of the drill holes.

5.5 Mining Plan Review Inspection

The MMI will provide technical expertise to review proposed mine plans or modifications to approved mine plans. The MMI will recommend that the BLM approve, approve with special conditions, or reject the R2P2 or R2P2 modification for Federal lands. For Indian lands, the MMI will consult with the BIA and the Indian land owner before making a recommendation that the BLM take action to approve, approve with special conditions, or reject the BIA mining plan or BIA mining plan modification.

5.6 Mine Operations Inspections

Inspections will be performed as described in Section 5.2 and 43 CFR 3480.0-6(d)(4). Additional inspections will be performed as necessary to:

a. Investigate reportable conditions or other events;
b. Verify abandonment of mine working;
c. Verify production;
d. Verify justifications of plan modifications;
e. Verify that conditions of concern in a Notice of Noncompliance have been corrected;
f. Verify that all terms and conditions of a lease have been met before lease relinquishment; and/or
g. Inspect other conditions as needed.

The BLM has specific inspection responsibilities for mine responsibilities regarding:

h. Exploration,
i. Compliance with SMCRA requirements,
j. Protection of public health and safety,
k. Protection of mine health and safety,
l. Compliance with the approved R2P2 or BIA mine plan,
m. Witness of scale certification,
n. Discovery and documentation of unauthorized activities,
o. Evaluation of mineral conflicts, and

p. Verification of the quantity and quality of coal sold.

The MMI must comply with any required training and check-in procedures before meeting with the responsible mine representative to visit the underground or surface mine and related surface areas. Preferably one of the mine's line managers or equivalent, who can ensure proper consideration of BLM concerns, will participate in the plan reviews and the inspection if necessary. The MMI must never enter the mine alone.

A meeting should be held with each mine operator at least annually to review the prior year, current mine conditions, planned R2P2 or BIA mine plan modifications, leasing requests, status of diligence and continued operation requirements, etc. If such discussions are accomplished in the normal course of mine inspections, those discussions should be documented in the IR.

Each inspection should include an opening interview with the mine's staff regarding current mine status, progress of the mine's active sections since the last inspection, problems, recent developments, any unresolved undesirable events or Notices of Noncompliance, future goals, and potential plan for lease or LMU modifications.

Before the conclusion of each inspection, an exit interview with appropriate company representatives is required. This interview should discuss the overall status of the mining operation, reportable conditions, potential violations, status of lease-specific diligence and continued operation requirements, and preliminary inspection findings. The MMI should formally request additional data at this time. Open communication is essential between company personnel and the MMI.

A verbal authorization of a minor revision to an R2P2 or BIA mine plan in a specific situation that is time sensitive can be made by an MMI while onsite only after the MMI obtains authorization (by telephone, electronic communication, or in person) from the local BLM authorized officer as established by BLM Manual Section 1203 or similar state office delegation, and contingent on subsequent coordination with OSM, SRA, or BIA, as required. A verbal authorization for an immediate approval of an R2P2 or BIA mine plan modification must be documented with a written account that describes the authorized changes or modifications, the effective date of such changes, and the rationale for all such changes. The document must be signed and dated by both the MMI and the authorized representative of the operator or lessee with copies provided to the OSM, SRA, and if a BIA mine plan, the BIA. The final approval of any BIA mine plan modifications must be coordinated with OSM, BIA, and the tribe. The final approval of any R2P2 modifications must be coordinated with OSM or SRA. In some cases an R2P2 or BIA mine plan modification may be significant enough to merit approval of a new R2P2 or BIA mine plan by the Assistant Secretary for Land and Minerals Management. The SD, together with the BLM Director, and the Assistant Director, Energy, Minerals and Realty Management, will determine if a proposed modification needs to be elevated to the Assistant Secretary for Land and Minerals Management.

5.7 Production Verification Inspection

The MMI will routinely perform production verification (PV), in accordance with BLM Handbook 3486-2, Production Verification, to independently verify the quantity and quality of minerals produced to ensure that lessees or mine operators are accurately reporting production and the quantity on coal sold. BLM Handbook 3486-2, Production Verification, provides the procedures, protocols, and standards for completion of PV.

5.8 Inspection Report

5.8.1 Basic Requirements

Each exploration or mine inspection must be documented by a written report. The MMI must document all observations, requests, notes, violations, verbal authorization of plan modifications including any time-sensitive modifications that were documented on site by the MMI in accordance with Section 5.6 of this Handbook, orders, or other pertinent information that occurred or that were observed during the inspection in an IR.

An IR should be submitted for management review within 14 days after competition of an exploration or mine inspection. The IR is a part of the official case file for the lease, license, permit, or LMU. The documentation of what was observed or violations noted is important to properly monitor exploration or mining operations and establish an administrative record that can, if needed, support administrative or enforcement actions.

Multiple objectives can be accomplished during each mine inspection. Figure 5.1 provides a suggested format to summarize and report for each inspection which inspection objectives were performed and the MMI's conclusions concerning the completed inspection objectives. A completed form, or similar information in an alternate format, must be included in each IR.

The written IR must include all of the following:

a. The date, the name of the mine, and identify the leases, licenses, or LMUs that were inspected.
b. The name(s) and telephone numbers of the mine representative(s) and any other person(s) contacted or present at the inspection.
c. For persons not affiliated with the mine or exploration licensee that attended the inspection, a list of the names, contact information, and who they represent.
d. A summary of the inspection goals accomplished during the inspection.
e. A narrative description of what was done, measured, or seen.
f. A clear statement if the inspection was scheduled with the mine operator or was unannounced.
g. All the MMI's field notes, maps, geologic interpretations, measurements and photographs

Figure 5.1
Summary of Inspection Objectives Accomplished

Mine Name:	Inspection Date:	MMI Name:

Lease, License, Permit or LMU Number	Inspection Objectives Accomplished (Indicate with a check mark all that apply)											
	General Mine Inspection	R2P2 or BIA Mine Plan Compliance	MER or UMR Compliance	Abandonment	Diligent Development	Continued Operation	Reclamation	Production Verification	Exploration	Other _____	Other _____	Comments, Conclusions, and Enforcement Actions

that was collected during the inspection. The MMI's field notes are part of the BLM official record and should never be destroyed.

h. Copies of pertinent records that were obtained from the mine operator with appropriate indication if the mine operator's records are proprietary or confidential.
i. Reference to any other applicable data maintained by the BLM.
j. Any notations by the MMI relating to topics or areas of special concern.
k. A discussion of any issues concerning the status of compliance with any applicable lease, license, LMU, or R2P2-specific stipulations or requirements.
l. A discussion of conditions or issues that were reported to the OSHA, MSHA, or SRA for further investigation and potential action, including the contract information for the OSHA, MSHA, or SRA. As a minimum, the IR must contain a brief description of the issue or concern, the agency to which the issue or concern was referred, the date the other agency was contacted, and the name and phone number of the person contacted at the other agency.
m. A record of formal violations or orders that were issued as a result of conditions discovered during the inspection. The IR must also indicate if no violations or orders were issued.
n. A summary of all corrective actions that need to be verified or reviewed at the next inspection.
o. Any follow-up communications relative to a specific inspection.
p. When possible, a cross reference to the most recent production verification report.

Some information provided by the lessee or operator during an inspection may be proprietary and confidential information. The MMI must clearly annotate all information collected during the inspection that s/he has identified or that the lessee or operator has identified as proprietary of confidential. See Chapter 8 and BLM Manual 3486 for additional information concerning proprietary and confidential information. An IR must clearly segregate and label proprietary information.

The MMI must sign and date each IR. The MMI's direct supervisor must sign and date the original IR once s/he reviewed and concurred with the report. The IR is part of the official case file.

5.8.2 Automated Data Systems

As soon as possible after the completion of the documentation of an inspection, the inspection data must be updated in all applicable automated recordation systems such as the Legacy Rehost 2000 System (LR2000) and the Management Information System (MIS). For Indian lands there is no entry required for LR2000 but MIS data is required. Indian leases are issued by the BIA and the lease numbering system is not compatible with LR2000.

5.8.3 Photographs

The use of photographs as a form of documentation is recommended where photographs can be safely taken and in accordance with all OSHA or MSHA safety regulations and mine practices. The photographic equipment used by the BLM must be in compliance with OSHA, MSHA and the mine operator requirements. Photographs aid in documentation of violations or

noncompliance situations and can supplement, but not substitute for, verbal or narrative descriptions. Photographs should be labeled to describe what is being illustrated, the date and time they were taken, the name of the exploration or mining operations, the particular section or working area of the license, lease or mine, the license or lease number, exploration or mine operator name, etc. It is recommended that all photographs be indexed and illustrated on a map to show the location of the viewer and the direction of view.

5.9 Inspection History

As discussed in Section 4.2, an inspection history must be maintained by the MMI. The inspection history can be used to discover trends or concerns that should be discussed or areas needing focused attention during upcoming inspections. The inspection history can also be used to note other important activities occurring at the mining operation such as production locations or moves, the location and quantity of a measurement obtained in previous inspections, active/inactive mining areas, names of company representatives, etc. The MMI must note in the inspection history all violations or noncompliance situations, the name and position of the company representative with whom the situation was discussed, and the date and time of the discussion. The outcome or conclusion of this discussion must be documented, including follow-up requirements. Section 4.2 of this Handbook provides additional information concerning maintaining an inspection history.

6.1 Exploration: Why Proper Inspection is Necessary

The improper installation or abandonment of a drill hole or well can result in damage to the non-mineral resources, trespass, mineral deposits, and threaten future resource recovery. Improper reclamation after completion of exploration can result in undue or unnecessary degradation of the environment.

6.1.1 Pre-authorization Inspection

The pre-authorization inspection is intended to gather information. Therefore, the inspection is focused on the following considerations or constraints:

a. Compliance with existing land use plans.
b. Site access.
c. Facility construction.
d. Soil and erosion data.
e. Drilling fluid, pit size, location, and fencing.
f. Spacing of drill holes.
g. Proximity to streams or washes.
h. Bonding requirements.
i. Drilling water sources.
j. Hazardous situations (i.e., proximity to pipeline or transmission lines).
k. Previous drilling sites in relation to proposed sites.
l. Wildland fire or spontaneous combustion potential.
m. Completion of wells as water monitoring stations.
n. Requirements imposed by the SMA.
o. Requirements of the private surface owner.

If an identified adverse environmental or physical safety impact can be avoided or mitigated by moving the location, while still providing required geologic data, this should be identified and done at the time of the pre-authorization inspection.

6.1.2 Exploration Operations Inspections

An MMI must ensure that the exploration operator, licensee, lessee, or permittee conducts exploration activities, reclamation, and abandonment pursuant to:

- The performance standards at 43 CFR Part 3480;
- The applicable requirements of OSM's performance standards for coal exploration (30 CFR 815.15) or the exploration standards of an approved State program;
- Any Federal lease or license terms and/or conditions;
- The requirements of the approved exploration plan; and
- Any orders issued by the BLM authorized officer where the exploration occurs without an approved SMRCA permit (43 CFR 3481.1).

For exploration on USFS lands, an exploration plan cannot be approved by the BLM until the USFS determines that the reclamation bond is adequate and concurs with the terms of the exploration plan (43 CFR 3482.2).

Areas of particular interest during a compliance inspection of exploration activities should

include as appropriate:

a. Observations to determine that exploration activities are in compliance with all of the requirements of the lease, license, or permit, and applicable laws and regulations.
b. Discussions with the exploration operator's representative concerning results, observations of progress, and environmental protection and compliance. Discuss all project requirements and whether or not a particular aspect requires modification to achieve the goals of the program.
c. Witnessing coring or sampling of Federal or Indian resources. The BLM must verify that the geologic information and data obtained from the exploration activity is obtained and handled with appropriate safeguards to assure the accuracy and reliability of the geologic information and data. In the absence of federally funded drilling information, company-produced information is all that is available to conduct tract evaluation. If applicable, the MMI or geologist should correlate drilling results with any available drilling results from lands surrounding the exploration tract.
d. Verification that all available geologic exploration data has been provided to the BLM by a designated representative of the company.
e. Observations and documentation of reclamation practices to ensure compliance with approval and regulatory requirements.
f. Verification that all drill holes are correctly located, numbered, and properly marked.
g. Observations or discussions to assure proper handling of all proprietary exploration data.

6.1.3 Abandonment and Reclamation Inspection

Exploration locations and areas of special concern must be inspected prior to reclamation to assure proper abandonment. The final exploration location map submitted with the operator's exploration report (43 CFR 3485.1) should be compared with the approved drilling locations to determine accuracy and compliance. A sample of drill hole locations should be verified using Geographic Positioning System (GPS) technology. Particular attention should be directed to plugging and marking of drill holes, reclamation of drill sites and access roads, filling of trenches, etc. These requirements also apply to holes drilled or contracted by government agencies.

Drill holes, exploration sites, and other associated facilities such as roads cannot be officially vacated until all the reclamation requirements have been met. This includes receipt of all required reports and geologic information by the responsible BLM office and compliance with all applicable requirements. Before an MMI can approve the vacation of an exploration site, all the required logs, core analysis, maps, other drill hole information, and abandonment forms must be satisfactorily filed with the BLM within 30 days after completion of operations or as specified by the approved plan or regulations.

The BLM will promptly advise the BIA in writing when all obligations under an exploration permit on Tribal lands have been fulfilled.

6.1.4 Disclosure of Exploration Data

Exploration data is proprietary information. In the event that exploration data in the possession of the BLM is requested by persons outside of the BLM through the Freedom of Information Act

(FOIA) or other means, the MMI will consult with the Solicitor's Office as to the appropriate response to such requests. Disclosure of proprietary or confidential exploration data can result in criminal or civil penalties and the loss of employment.

6.2 Mining Operations

During an inspection, an MMI must inspect all current and recent developments within the mine. Each inspection must be sufficient to support the MMI's determinations and any BLM enforcement action. During an inspection, an MMI must collect information to support determinations such as:

a. Compliance with the approved R2P2 or BIA mine plan.
b. Compliance with the terms and conditions of each lease.
c. Compliance with diligent development and continued operation requirements of each lease and LMU.
d. The adequacy, accuracy, and contemporaneousness of the lessee's processes, systems, and records that are used to account for and track coal production.
e. Compliance with approved exploration plans.
f. Compliance with SMCRA requirements.
g. Protection of the public health and safety.
h. Discovery or identification of unauthorized activities.

Table 6.1, Mining Operations Inspection Standards, provides a list of inspection elements and standards. Table 6.1 is not intended to be all encompassing, but rather is a guide. If other inspection elements and standards are applied at a site in addition to these, they must be documented in the IP.

Table 6.1
Mining Operations Inspection Standards

Inspection element	Underground mining operation inspection standard	Surface mining operation inspection standard
Authorized mining area (lease, license, LMU, SMCRA permit).	Ensure operations are within the authorized area.	Ensure operations are within the authorized area.
Vertical and horizontal extent of workings.	Ensure that active working sections are within and progressing to the limits of the approved permit in accordance with the approved R2P2 or BIA mine plan. Inspect all current and recent developments within the mine. Activity on non-Federal lands should be inspected when such activities may influence the recovery of Federal and Indian minerals or are part of an LMU.	Ensure that active working sections are within and progressing to the limits of the approved R2P2 or BIA mine plan. Inspect all current and recent developments within the mine. Activity on non-Federal lands should be inspected when such activities may influence the recovery of Federal and Indian minerals or are part of an LMU. Surface observations should be made of

Table 6.1
Mining Operations Inspection Standards

Inspection element	Underground mining operation inspection standard	Surface mining operation inspection standard
	Underground and surface observations should reference established survey monuments (including spads), crosscut numbers on stoppings, or other means to verify the accuracy of mine maps. The operator should provide sufficient survey monuments or reference within the mine and on mine maps to easily establish the location of lease boundaries. The vertical extent of workings is to be inspected to ensure that mining is occurring in seams or zones designated in the approved plan. Compare elevations reported on the mine maps with known elevations of the coal seams if vertical extent is a question.	survey markers, GPS data, or other means to verify the accuracy of mine maps. The operator should establish survey monuments or points within the mine showing where lease boundaries are crossed. The vertical extent of workings is to be inspected to ensure that mining is occurring in seams or zones designated in the approved plan. Compare elevations reported on the mine maps with known elevations of the coal seams if vertical extent is a question.
Abandonment of production areas.	Before a production area is abandoned and made inaccessible, it must be inspected to verify that all of the recoverable resource has been extracted and has been properly recorded on mine maps. Secondary mining or pillaring areas must be frequently inspected to verify recovery rates and the effectiveness of pillaring procedures. Necessary hazardous waste inspections and certifications will be completed prior to final abandonment of an area of the underground mine and the economics should be reviewed. In addition to requiring any hazardous waste inspections and certifications, confirm that no hazardous substances as defined by CERCLA are being or have been released into the environment. The final seals should be inspected for compliance	Before a production area is abandoned and made inaccessible, it must be inspected to verify that all of the recoverable resource has been extracted and has been properly recorded on mine maps. Final pit coal recovery must be inspected and documented. Necessary hazardous waste inspections and certifications will be completed prior to final abandonment of an area of the mine.

Table 6.1
Mining Operations Inspection Standards

Inspection element	Underground mining operation inspection standard	Surface mining operation inspection standard
	with the approved MSHA seal design. Other parties with a material interest in the mine should be invited to attend the final inspections (such as when a State is receiving part of the royalties).	
	If an operator proposes to abandon a working area due to hazardous geologic conditions or because of economic factors, inspect the area and records to confirm the operator's assertion only if such inspection can be conducted consistent with the safety of the MMI and the safety of other persons. Any safety concerns preventing a confirming inspection should be documented in the administrative record maintained with respect to the mine. In instances where maximum recovery conflicts with safety, the MMI should also notify and consult with MSHA. In all cases, safety takes precedence over coal recovery. Abandonments due to quality should be inspected for verification and supported by standard sampling and analysis techniques.	If an operator proposes to abandon a working area due to hazardous geologic conditions or because of economic factors, inspect the area to confirm the operator's assertion. Any determination of another agency concerning unsafe conditions must be incorporated into the case file to document the rational for abandonment. In instances where maximum recovery conflicts with safety, the MMI should also notify and consult with MSHA. In all cases, safety takes precedence over coal recovery. Abandonments due to quality should be inspected for verification and supported by standard sampling and analysis techniques and the economics should be reviewed.
	Developed areas of a mine, which are temporarily idled or inactive but still contain recoverable coal resources, must be periodically inspected to examine ventilation and safety conditions. These areas must not be allowed to deteriorate to the point where recovery of the reserves would be jeopardized. The MMI should be concerned with any idled	Developed areas of a mine, which have been temporarily abandoned but still contain recoverable coal resources, must be periodically inspected to examine existing conditions. The spoil slopes and highwall conditions must not be allowed to deteriorate to the point where recovery of the reserves would be jeopardized. Reasonable

Table 6.1
Mining Operations Inspection Standards

Inspection element	Underground mining operation inspection standard	Surface mining operation inspection standard
	mine development that is projected to stand for an extended length of time.	precautions should be taken to protect the coal from spontaneous combustion or fire. The MMI should be concerned with any idled mine development that is projected to stand for an extended length of time.
Mining dimensions.	Mining heights and widths will be observed for consistency with volumetric reporting and operating practices. Enough measurements must be made to independently verify the quantity of coal mined and the average working dimensions of an area. Record all measurement in inspection notes.	Mining heights and widths will be observed for consistency with volumetric reporting and operating practices. Enough measurements must be made to independently verify the quantity of coal mined and the average working dimensions of an area. Record all measurement in inspection notes.
Top coal-bottom coal.	Inspect mine development for top coal left in excess of that which is needed for primary roof support and is consistent with the R2P2 or BIA mine plan. The amount of top coal left in the mine roof should be minimized and the mine operator should also recover as much bottom coal as safely practical and consistent with the R2P2 or BIA mine plan. Coal recovery must be in compliance with the MSHA approved roof control plan. Document the trends of top and bottom coal thicknesses from test holes or roof bolt holes drilled by the operator. If the trend is to leave increasing amounts of coal, a modification of the mining plan or a new analysis of MER is required. The excess may be justified either for safety purposes or if the coal quality drops below the economic cutoff coal quality.	Inspect mine development for top of seam or floor coal lost in excess of that which is needed for a clean run-of-mine product and consistent with the R2P2 or BIA mine plan. The amount of coal lost as the pit face advances should be minimized. Document the trends of top and bottom coal thicknesses. If the trend is to leave coal in excess of what is left by standard industry operating practices, a modification of the R2P2 or BIA mine plan is required. The excess may be economically justified if the coal quality drops below the cutoff coal quality. Coal fenders can be left only if economically justified and specified in the R2P2 or BIA mine plan. If fenders are authorized, excessive fenders (exceeding 120 percent of the planned fender height) should not be allowed.
Seam thickness.	Total mining height, individual coal	Total mining height, individual coal

Table 6.1 Mining Operations Inspection Standards		
Inspection element	**Underground mining operation inspection standard**	**Surface mining operation inspection standard**
	seam and split thickness, and a description of rock or other splits in the coal along with a description of the roof and the floor rock types should be recorded during each inspection.	seam and split thickness, and a description of rock or other splits in the coal along with a description of the overburden and interburden rock types should be recorded during each inspection.
Resource recovery.	Inspect areas of the mine for confirmation of unavoidable lost mineral resources due to accidents or geologic conditions. Use inspection information to make recommendations to minimize the loss and protect other resources. If the resource loss is avoidable, use inspection information to develop recommendations on how future losses can be avoided and submit an irregularity report in accordance with the PV Handbook. The recoverable coal base will be modified to reflect the loss or increase in recoverable coal.	Inspect areas of the mine for confirmation of unavoidable losses of mineral resources due to accidents or geologic conditions. Use inspection information to make recommendations to minimize the loss and protect other resources. If the resource loss is avoidable, use inspection information to develop recommendations on how future losses can be avoided and submit an irregularity report in accordance with the PV Handbook. The recoverable coal base will be modified to reflect the loss or increase in recoverable coal.
Lost opportunity to mine otherwise recoverable coal (bypass).	The MMI should be aware of situations where a portion of an economically recoverable deposit may be lost if not mined from existing operations. In this case, the BLM and the operator/lessee will attempt to initiate action to obtain the necessary approvals to mine the coal deposit, including potential limited royalty rate reductions. For Indian lands, royalty rate reductions are referred to the BIA and the affected Indian tribe for action.	The MMI should be aware of situations where a portion of an economically recoverable deposit may be lost if not mined from existing operations. In this case, the BLM and the operator/lessee will attempt to initiate action to obtain the necessary approvals to mine the coal deposit, including potential limited royalty rate reductions. For Indian lands, royalty rate reductions are referred to the BIA and the affected Indian tribe for action.
Diligent development-continued operation.	An MMI must reconcile the mine progress map (43 CFR 3482.3) that the lessee or operator provides as a reasonable representation of actual	An MMI must reconcile the mine progress map (43 CFR 3482.3) that the lessee or operator provides as a reasonable representation of actual

Table 6.1
Mining Operations Inspection Standards

Inspection element	Underground mining operation inspection standard	Surface mining operation inspection standard
	mining activity for the reporting period. An MMI must maintain records of sufficient detail such that a determination can be made as to when a lease achieves diligent development (43 CFR 3480.0-5) and thereafter, that the lease is annually maintained in compliance with the requirement of continued operation (43 CFR 3480.0-5). An MMI must review the lessee or operator internal controls and reporting processes for reporting and reconciliation of production, inventory, cleaning, and sales records. Documentation of those processes should be included in the IR.	mining activity for the reporting period. An MMI must maintain records of sufficient detail such that a determination can be made as to when a lease achieves diligent development (43 CFR 3480.0-5) and thereafter, that the lease is annually maintained in compliance with the requirement of continued operation (43 CFR 3480.0-5). An MMI must review the lessee or operator internal controls and reporting processes for reporting and reconciliation of production, inventory, cleaning, and sales records. Documentation of those processes should be included in the IR.
General R2P2 or BIA mine plan factors.	• The general mine layout will provide for the orderly recovery of the coal reserves. • The R2P2 must achieve MER, and the BIA mine plan must achieve greatest ultimate recovery. • The MSHA approved ventilation system should have sufficient capacity or provision for expansion to reach sufficient distance to allow for recovery of all of the coal reserve. • Other service systems, including water handling, should be sufficient to protect the integrity of the coal reserves in case of an inundation or mine fire (in addition to the primary purpose of providing a safe working	• The general mine layout should provide for orderly and complete recovery of the coal reserves. • The mine progression must provide for the maximum economic recovery of the coal reserves. • The mine haul roads should be placed to avoid isolating coal reserves. • Other service systems, including water handling, should be sufficient to protect the integrity of the coal reserves in case of an inundation or mine fire (in addition to the primary purpose of providing a safe working environment for mine personnel).

Table 6.1 Mining Operations Inspection Standards		
Inspection element	**Underground mining operation inspection standard**	**Surface mining operation inspection standard**
	environment for mine personnel).	
Development and sequencing.	Inspect operations to ensure that the development and sequencing schedule is proceeding as approved in the plan. Note number of entries, mining heights and widths, panel design, and other development features to gain familiarity with operating practices.	Inspect operations to ensure that the development and sequencing schedule is proceeding as approved in the plan. Note the timing requirements and actual mine progress in: • Pre-stripping • Box cuts • Installation of haul roads • Maintenance of haul roads • Installation of mine electrical power feeds • Installation of water handling systems • Reclamation progress
Subsidence.	The R2P2 or BIA mine plan must be consistent with the SMCRA subsidence plan and the MSHA roof control plan. An MMI should inspect the working sections to ensure that MSHA-approved mining methods and pillar extraction methods are employed and that the coal recovery is consistent with the R2P2 or BIA mine plan. The MMI should review approved longwall plans and inspect longwall mining practices to ensure effective coal recovery, that there are no excessive subsidence effects on other resources, and that actual mining practice complies with the approved plans. It is important to witness mining operations to gain knowledge of realistic recovery rates for pillar sections and longwall systems within a particular mine for use in	Highwall and Spoil: An MMI should observe highwalls and spoil piles to deduce the stability of spoil, highwalls, and pit floors. The slope setbacks and spoil and highwall cut angles should be included in the R2P2. Any adjustments to highwall or spoil pile specifications must be documented as an R2P2 modification. Highwall Mining: The inspection of a highwall miner or auger system excavations must ensure the pillars and floor/roof coal left are not excessive and that production records adequately and accurately document that coal recovery extended to the greatest extent possible. Any change in slope design must be evaluated and approved by MSHA.

Table 6.1 Mining Operations Inspection Standards		
Inspection element	**Underground mining operation inspection standard**	**Surface mining operation inspection standard**
	PV. For those mine areas where subsidence in not allowed by the approved plan and SMCRA permit, (for example to protect the integrity of surface structures, roads, water, pipelines, canyon escarpments, etc.), ensure that pillars are of the proper dimensions and entries permanently supported to maximize the recovery of the mineral and yet competent enough to prevent subsidence for the long term. Any change in roof control or pillar design must be evaluated and approved by MSHA and may affect the subsidence allowed under the SMCRA permit.	
Multiple seam mining and mining adjacent to old mine workings.	If a lease contains multiple mineable seams, inspect all seams with active development to ensure that mining is progressing in such a manner that recovery of one seam does not jeopardize the recovery of another seam. The mine development plan of one seam may be superimposed onto other seams to help increase mine stability. Properly superimposed mine workings can be verified by comparison of the mine plan with mine surveying data of the mine workings as well as observation of the roof and rib in the active mine workings for indications of instability. If two separate active mines overlay one another, the same MMI should inspect both mines. The mine planning process will be	If a lease contains multiple seams that are mineable using surface mining methods, inspect to ensure that interburden removal and necessary shooting or ripping does not make the lower coal unmineable. Ensure that the lowest economically recoverable coal seam is recovered. Active or abandoned underground mining operations may be near or below an active surface mine. Be aware of possible subsidence or other hazards related to neighboring underground mines.

Table 6.1 Mining Operations Inspection Standards		
Inspection element	**Underground mining operation inspection standard**	**Surface mining operation inspection standard**
	reviewed to ensure the mine personnel are taking full consideration of old adjacent mine workings (both horizontally and vertically). This is important to provide for safe coal recovery and to avoid the loss of coal reserves due to inundations, fires, toxic gases, and ground stress overrides.	
Pillars.	The BLM considers the health and safety of the underground miners to be first priority. The BLM will incorporate requirements of the MSHA roof control plan and the SMCRA subsidence plan into the R2P2 or BIA mine plan. The MSHA has sole authority to approve all pillar designs and modifications, including pillar dimensions and recovery methods. Federal coal regulations require a barrier pillar be left between mine workings and at the outside boundary of a Federal tract. Under certain exceptional conditions, these pillars may be mined. The BLM is responsible for inspecting the advancement of mine workings to ensure there is no unauthorized mining of a barrier pillar. The MMI must be familiar with the property to identify those areas where extraction of the boundary barrier may be authorized and discuss with the mine operator the possibility of mining barrier pillars. Mining of barrier pillars should be discussed as a component of achieving MER in the R2P2 or ultimate maximum recovery for a BIA mine plan.	If essential and approved in the R2P2, coal fenders need to be inspected to ensure they are the within approved dimensions.

Table 6.1 Mining Operations Inspection Standards		
Inspection element	**Underground mining operation inspection standard**	**Surface mining operation inspection standard**
	Barrier pillars can also be located between adjacent production panels or between production panels and main or submain entries. It is of utmost importance that certain entries be protected from the excessive stresses created by caved areas, but some operators are risk adverse and design the size of the protective barriers to be more than adequate. Therefore, the MMI should apply knowledge of rock mechanics and specific mine conditions to assess proposed dimensions of barrier pillars to ensure an appropriate and reasonable balance between safety and mineral recovery. However, MSHA has sole responsibility to approve pillar dimensions. Mineral recovery is always secondary to the health and safety of the underground miner. To the extent that the MMI has any question or uncertainty regarding the potential safety of authorizing the mining of a particular barrier pillar, s/he should consult with his/her supervisor and coordinate with MSHA before authorizing such mining. Observe the roof, rib, and floor conditions of areas in the vicinity of the mine's barrier pillars and apply these observations to the review of proposals for subsequent barriers. A third-party geotechnical analysis can provide valuable information, but MSHA has authority to approve pillar design.	
Ventilation and roof control plans.	The MMI must be familiar with the contents of the ventilation and roof	Not applicable.

Table 6.1 Mining Operations Inspection Standards		
Inspection element	**Underground mining operation inspection standard**	**Surface mining operation inspection standard**
	control plans approved by the MSHA and incorporate the requirements of these MSHA plans into the R2P2 or BIA mine plan. Deviation from the plans may create hazardous situations that could adversely affect resource recovery. In consideration of this potential, ventilation and roof control practices should be observed during an inspection. Hazardous situations identified must be reported to the MMI's supervisors at the BLM, to MSHA, and must be discussed with the operator.	
Equipment capabilities and utilization.	Inspect operations noting the capabilities and utilization of the equipment used in production. For example, design specifications of a continuous miner are important in determining a section's rate of advancement or whether the miner is extracting the full machine height in retreat mining. Direct measurements of voids are preferred in allocating production to leases. Full extraction mining will require alternative measurement methods for production verification.	Inspect operations noting the capabilities and utilization of the equipment used in overburden removal, coal production, and reclamation.
Modification to R2P2 or BIA Mine Plan.	Inspect for compliance with any approved modifications and for conditions that may warrant a change in the approved plan. One of the more common regulatory violations is the failure of the operator/lessee to notify and obtain approval from the BLM in advance of changes to an R2P2 or BIA mine plan.	Inspect for compliance with any approved modifications and for conditions that may warrant a change in the approved plan. One of the more common regulatory violations is the failure of the operator/lessee to notify and obtain approval from the BLM in advance of changes to an R2P2 or BIA mine plan.
Water Handling Plans.	The MMI should be familiar with the contents of any approved water	The MMI should be familiar with the contents of any approved water

Table 6.1 Mining Operations Inspection Standards		
Inspection element	**Underground mining operation inspection standard**	**Surface mining operation inspection standard**
	handling plans or permits and ensure they are being followed.	handling plans or permits and ensure they are being followed.

6.3 Conservation of the Resource

Conservation of the resource addresses both obvious and subtle aspects of a mining operation. Conservation of the resource can include conservation consideration for the mineral and other resources. Specific aspects of conservation of the resource should be addressed in the mine's IP and reviewed by an MMI prior to conducting an inspection of operations.

6.4 Maximum Economic Recovery Requirement for Federal Coal

The regulations concerning MER of Federal coal (43 CFR 3480.0-5) prescribe that, based on standard industry operating practices, all profitable portions of the coal deposit must be mined. To apply this concept to the inspection of operating mines, an MMI must have knowledge of principles of coal geology, mine economics, mine design, coal markets, and mining methods. MER defines the maximum limit or extent of profitable mining. MER is an economic test based on when the direct mining, beneficiating, and royalty and tax costs for producing the next unit of coal into a marketable condition are equal to the value derived from the sale of the same unit of coal. Said another way, the revenue from the sale of each incremental ton of coal must meet or exceed the direct costs to mine, transport, beneficiate, and pay royalty and taxes incurred to produce the next incremental ton of coal mined. There is no consideration for a profit margin, rate of return, or amortization of sunk costs. The MER definition and requirement is restricted to Federal coal and does not apply to Indian lands (43 CFR 3480.0-4).

6.5 Ultimate Maximum Recovery Requirement for Indian Lands

The BIA regulations at 25 CFR 211.4, 212.4, and 225.4 incorporate BLM responsibilities under 43 CFR 3480 and 3590. However, BLM regulations at 43 CFR 3480.0-4 expressly exclude application of MER to Indian lands. There is no similar exclusion for Indian lands concerning the application of the UMR regulatory requirement for solid minerals other than coal at 43 CFR 3590.0-5. The regulation at 43 CFR 3590.0-7, while located in 43 CFR Subpart 3590 which addresses the regulation of solid minerals other than coal, states that the provisions of the 43 CFR Part 3590 govern "operations for all minerals on Indian tribal lands and allotted Indian lands leased under 25 CFR parts 211 and 212." Accordingly, to assure that Indian coal resources are fully developed and consistent with the regulatory language of 43 CFR 3590.0-7, the BLM has adapted the provision of UMR at 43 CFR 3590.0-5 to Indian lands so as to require Indian coal lessees to produce fully the mineral resource for the benefit of Indian owners and to assure that Indian owners are treated in a manner comparable to the Federal Government when the Federal Government is coal lessor.

In accordance with 43 CFR 3590.0-5(h), UMR means that all portions of a leased Indian coal deposit will be mined, based on standard industry operating practices. The requirement to

achieve UMR does not restrict the authorized officer's authority to ensure the conservation of the mineral resource and protection of the other resources.

6.6 R2P2 or BIA Mine Plan Compliance

The MMI must inspect operations to ensure that specifications and stipulations of the lease, and the approved plan, permit, or license are followed. When conducting the actual inspection of operations, keep in mind regulatory requirements as they relate to the R2P2 or BIA mine plan, particularly the performance standards (43 CFR Subpart 3484) regulations. Operations on Indian lands are governed by regulations at 25 CFR Part 216. The MMIs and BLM supervisors should encourage mine operators to certify the accuracy of mine progress plans that are provided to BLM by having a professional mining engineer and, as applicable, a professional geologist certify and attest to the accuracy of each map provided.

6.7 Reclamation

For coal mining operations, OSM or the State regulatory authority with State primacy under SMCRA is responsible for enforcing the requirements of SMCRA. An MMI should identify which SMCRA agency has regulatory oversight authority and coordinate with that agency. On Indian lands, national forest lands, and park service lands, the respective SMA (BIA, USFS, and NPS) and Tribe, if Indian lands, must also be consulted and their surface protection recommendations incorporated into plan approval.

Reclamation on surface mines should proceed contemporaneously with mine development. Depending on the permanency of certain underground and surface mine access roads and support facilities, reclamation in some areas may be delayed. Reclamation of certain surface-disturbed areas for underground and surface mine access (i.e., access roads and surface support facilities) is typically performed at the end of project life.

Specific phases of surface protection and reclamation activities will be inspected by OSM or State personnel that are authorized to inspect such activities. However, MMIs should review the reclamation progress, particularly for surface mines, and discuss any identified irregularities with the applicable SMCRA regulatory authority for the mine site, whether that is OSM or the State Regulatory Authority having primacy within that State.

6.8 Public Health and Safety

The MMI must be aware of public health and safety issues and concerns so that if an emergency situation should arise they would be able to take action as needed. The MMI must make the operator aware of the BLM public health and safety responsibilities under BLM regulations. The BLM will take initial corrective action, to the extent that the BLM's regulatory authorities allow in emergency situations, where the hazard could pose an imminent threat to public health or safety. Other Federal or State agencies that have primary jurisdiction with respect to the hazard must be promptly notified of the hazard and the BLM's action so that they can take further action to respond to the emergency under their authorities. After the BLM has taken initial action to address an immediate emergency, the responsible Federal or State agency with primary responsibility for the hazard will take the lead with respect to any further actions. See 43 CFR 3465.2-2(b).

Public health and safety concerns can include, but are not limited to:

a. Uncontrolled or unmarked access to surface coal mines, entrances to underground workings, and subsidence areas including escarpments;
b. Uncontrolled access to isolated underground and surface entry systems and shafts;
c. Uncontrolled access to mine works and support facilities;
d. Uncontrolled access to power transformers;
e. Haulage trucks, trains, and other mining equipment using or crossing public roads;
f. Dam stability;
g. All mine water discharges including leakage from tailings or refuse ponds;
h. Mine waste dump stability;
i. Fires; and
j. Proper sealing and isolation from public access to abandoned pits, portals, and shafts.

Other agencies (such as MSHA, OSHA, OSM, and the State agencies) may have similar responsibilities. Such concurrent responsibilities are typically resolved in MOUs or cooperative agreements. However, the BLM's responsibilities remain. When an MMI observes a hazard, s/he must promptly notify the responsible agency, making a record of the time and date, contact name and number, and summarizing the communication for BLM's records.

6.9 Inactive Tracts

Inactive Federal and Indian underground and surface coal leases, licenses, and permits and applications (tracts), upon which there is no approved onsite exploration or mining activity, must be inspected at least annually.

For the purpose of this part, inactive coal tracts must have:

a. An identified operator;
b. When applicable, an operable ventilation system;
c. Mine works that are free of fallen rock;
d. Ground control systems in place and maintained; and
e. Established escape procedures and maintained escape routes.

During an inspection an MMI is primarily focused on inspecting activities on active coal tracts. However, the MMI must also consider and observe activities on all Federal and Indian lands with underground and surface coal potential. All BLM personnel, regardless of discipline, should note any unfamiliar mineral-related activity on public lands and immediately report such activity to the responsible BLM law enforcement and minerals personnel, or appropriate BIA official, to investigate if there are any unauthorized mineral-related activities or trespass taking place. Monitoring for unauthorized mineral activities is encouraged during any aerial survey. Further, recent satellite imagery is now more readily available to assist in monitoring. However, on-the-ground inspections are essential.

More frequent inspections of inactive coal tracts are encouraged if mine conditions warrant or if budgets and workloads allow. An annual inspection is a minimum requirement that should be exceeded whenever possible, for example, when BLM personnel are in the vicinity of inactive

tracts while conducting inspections of other active exploration and mining operations. Inactive tract inspections should be conducted at a time of the year when activity would most likely occur (i.e., summer field season).

Preparation for inactive tract inspections should begin by familiarization with tract boundaries, past activities or disturbance, previous IRs, special requirements or stipulations, current market conditions, and any other relevant information. After this review, conduct the actual onsite inspection of the tract(s) and note any on-the-ground conditions. Aside from any special data needs that may be required for a general inspection, compliance with rules and regulations, and the terms and conditions of a lease or license, consider the following:

a. Any unauthorized mining or exploration activities;
b. Unplugged drill holes, subsidence areas, open portals, or other hazards;
c. Coal fires, landslides, or other physiographic changes that may affect development of the inactive or adjoining tracts;
d. Any accumulation of trash; and
e. Areas not reclaimed associated with mineral-related activity.

Where unauthorized mineral-related activity is detected, attempts should be made to identify the party that conducted the activity and appropriate enforcement action initiated.

A brief written report should be prepared and should include notations as to compliance with the terms and conditions applicable to the lease, license, or permit and highlighting areas of concern that require further monitoring or corrective action. Photographs are encouraged to document the conditions discovered during an inspection provided each photograph is properly identified, indexed to their location within the mine, referenced in the written report, and dated or time stamped.

7.1 BLM Responsibilities

The BLM is responsible for the inspection of exploration and mining operations and related production records to determine compliance with the lease, license, permit, LMU, and regulatory requirements.

Figure 7.1 provides an overview concerning how the BLM violation systems works for coal leases and coal-related activity. Additional detail is provided in the following narrative. For lands where the BLM is not the SMA, the BLM must notify the SMA of any violations or enforcement actions that are taken.

7.2 Lessee, Licensee, Permittee, or Operator Responsibilities

The lessee or licensee operator is responsible for conducting operations in accordance with the requirements of the lease, license, permit, LMU, and regulations and is responsible for correction of violations upon being ordered to do so.

7.3 Reportable Conditions

A reportable condition is an event contemplated within the provisions of 43 CFR 3481.1(d), the occurrence of which imposes an obligation upon an operator/lessee to make an immediate report to the BLM.

Conditions or accidents must be immediately reported to the BLM (43 CFR 3481.1(d)) that can cause severe injury or loss of life that could affect mining operations conducted under the R2P2 or BIA mine plan.

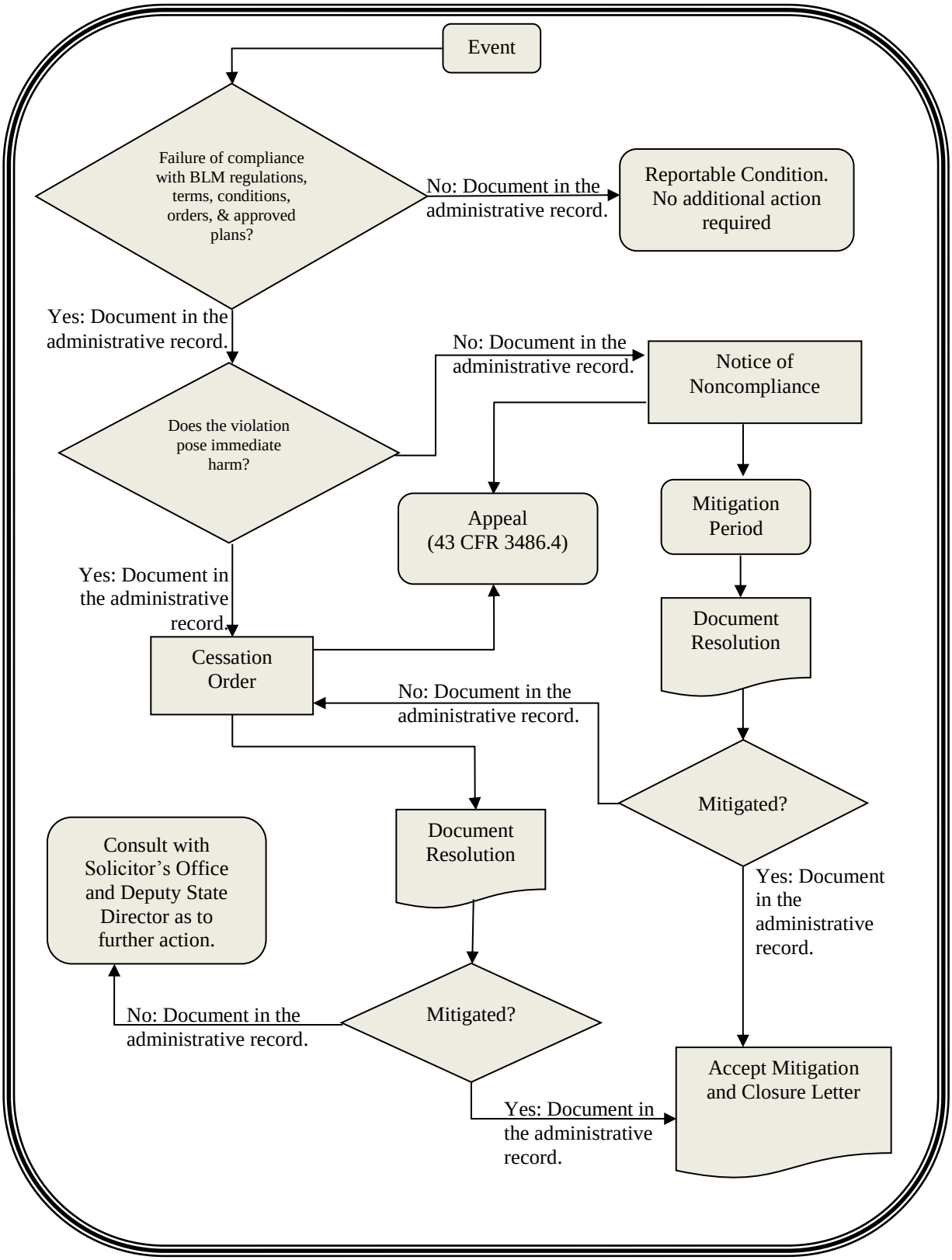
The BLM must be informed of any accidents, hazardous or geologic conditions that may cause or threaten:

- Significant loss of recoverable reserves;
- Damage to the mine; or
- Damage to the lands or other resources.

Examples of reportable conditions that may affect mining operations conducted under the R2P2 or BIA mine plan may include, but are not limited to:

a. Fires (coal, mine, facilities, stockpiles, and exploration);
b. Events which may destabilize pillars, damage ventilation system components, or cause unintentional roof falls or pillar failure such as a bump, squeeze, or bounce;
c. Inundation or flooding of the mine with water;
d. Gas outbursts (in the mine and/or during exploration);
e. Roof falls, pillar failure, slope failures, highwall failures;
f. Drilling fluid pit failure or overflow;
g. Unanticipated coal seam splits that result in a coal split being unmineable;
h. Drill steel lost in bore hole (exploration);
i. Primary production and haulage equipment breakdowns;
j. Any interruptions in the workforce including strikes;

Figure 7.1
Overview of the BLM Coal Program Enforcement Process



k. Track, rail, or belt scale breakdowns (unless coal produced can be properly measured); and
l. The death of wildlife or a threatened and endangered species within area of operations (mine and exploration) that is not attributable to natural causes or hunting authorized by State law.

The occurrence of a reportable condition does not imply that a particular event must necessarily become the basis for a Notice of Noncompliance.

As provided by regulation (43 CFR 3486.3), for a reportable condition to support a Notice of Noncompliance, there must be clear evidence that the event occurred due to the lessee or mine operator's failure to comply with:

- The regulations at 43 CFR Part 3400;
- The terms and conditions of the Federal or Indian lease, license, or permit;
- The requirements of approved exploration plan, R2P2, or BIA mine plan; or
- Orders from the BLM.

The issued Notice of Noncompliance must specify the particular failures of compliance by the lessee or mine operator and the actions that they must take to correct the noncompliance within a specified time period.

Further, a reportable condition can justify issuance of a Notice of Noncompliance if there is not an immediate threat and the event will not cause serious damage to the:

- Mine;
- Deposit being mined;
- Valuable ore-bearing mineral deposits or other resources; or
- Royalty revenue compliance or collection.

Section 7.5 of this Handbook provides additional information concerning a Notice of Noncompliance.

A Cessation Order must be issued if, in the judgment of the MMI and his or her supervisor, an operator or lessee is conducting activities which fail to comply with the terms, conditions, and requirements of the:

- Lease;
- License;
- Approved exploration plan or R2P2; or
- BLM orders;

And/or which are an immediate threat and could cause serious damage to the:

- Mine;
- Deposit being mined; or
- Valuable ore-bearing mineral deposits or other resources.

Additionally, failure of the operator/lessee to take action in accordance with a Notice of Noncompliance within the time limits specified by the BLM is grounds for issuance of a

Cessation Order.

Section 7.6 of this Handbook provides additional information concerning a Cessation Order.

Additionally, a Notice of Noncompliance does not suspend or defer the operator or lessee's obligation to comply with the fees, rents, and royalty provisions of 43 CFR Subpart 3473 or payment obligations contained in any lease or other agreement.

7.4 Failures of Compliance

Failures of compliance by the lessee, licensee, permittee, or operator include, but are not limited to, failures to:

a. Comply with operating regulations.
b. Comply with the terms and conditions of leases, licenses, and permits.
c. Obtain approval of operation plans prior to commencement or changes in operations.
d. Comply with requirements of approved operations plan.
e. Conduct operations within the approved operations limit/boundary.
f. Notify the BLM of a reportable condition.
g. Comply with Notices of Noncompliance.
h. Comply with BLM-issued orders.
i. Submit required information or reports by the specified dates.

As noted above, a failure of compliance is the basis for the issuance of a Notice of Noncompliance (see also Section 7.5 of this Handbook), or, if appropriate, the issuance of a Cessation Order (see Section 7.6) of this Handbook.

7.4.1 Determination of Failure of Compliance

In all cases, the determination of a failure of compliance must be included in the official files. The determination is a written report that provides:

- A detailed description of a failure of compliance;
- An analysis of the circumstances of the failure to comply relative to applicable standards (i.e., regulations, lease terms and conditions, approved R2P2, permit restrictions);
- A conclusion concerning mitigation; and
- Resolution if further administrative or enforcement actions are necessary.

The determination should be prepared in a manner similar to that illustrated in the following examples.

Potential avenues of action upon completing the "determination of a failure of compliance" analysis include:

a. The situation is not a failure of compliance and no further action is required;
b. The situation is not a failure of compliance, but an Order (see Section 7.6 of this Handbook) is issued to the lessee or operator to clarify and establish compliance standards;
c. The situation is a failure of compliance and a Notice of Noncompliance (see Section 7.5 of this Handbook) must be issued to the lessee or operator for the failure to comply; or
d. The situation is a failure of compliance but is of such severity that a Cessation Order (see

Section 7.6 of this Handbook) must be issued to the lessee or operator.

Failure of Compliance Example 1

SITUATION: *An operator does not report that a leased area was mined and, subsequently, also does not report the quantity of coal mined or sold.*

APPLICABLE STANDARDS:
Lease Terms and Condition:
The lack of reporting is clearly a failure of compliance with Section 6 of the lease terms that require such reporting.

CONCLUSION: *This situation is clearly a failure of compliance and a Notice of Noncompliance must be issued as soon as possible.*

NOTE: If, rather than an operator's failure to report mining of a leased area, the situation involved the mining of unleased coal, a Cessation Order must be issued under standards established in accordance with 43 CFR §3486.3. In such a situation, circumstances may also dictate the immediate involvement of the Department of the Interior (DOI) Office of the Solicitor and possibly, BLM Law Enforcement.

Failure of Compliance Example 2

SITUATION: *An operator does not notify the BLM of the scheduled date of a scale certification.*

APPLICABLE STANDARDS:
Lease terms and Condition:
Most leases do not require such notification, and in this example the lease does not include this specific requirement. However, the lease in this case does specify that the mineral be accurately weighed or measured. The requirement of accurate weight and measure is not a requirement that the lessee notify the BLM of scale certification dates. Therefore, the above situation is not a failure to comply with the lease terms and conditions.

Mine plan:
Most mine plans do not require such notification, and in this example the plan does not include this requirement. The plan may specify the location of the scales, but this is not a requirement that the lessee notify the BLM of scale certification dates. Therefore, the above situation is not a failure to comply with the approved plan.

Orders:
In this example, the review of the files showed that no order was issued to the lessee or operator requiring that the BLM be notified of scale certifications. Therefore, the above situation is not a failure to comply with an order or instruction to the lessee or operator.

Regulations:
The regulations (43 CFR Subpart 3480 and 25 CFR Parts 211 -216 [if the operation is located on Indian lands]) do not require (i.e., either under obligations, plan requirements, performance standards, records, maps, reports, royalty) that the BLM be informed of scheduled scale certifications. Therefore, the above situation is not a failure to comply with the applicable regulations.

CONCLUSION: *This situation is not a failure of compliance. If the BLM desires to receive advance notice of scale certifications, the BLM must order the lessee/operator to notify the BLM in advance of scale certification, and thereafter a repeat of the situation would be a failure of compliance due to the lessee/operator's failure to comply with the subsequent BLM order.*

Failure of Compliance Example 3

SITUATION: *A fender of coal (a small ridge of coal that could be left unmined which acts to retain and keep previously mined overburden, known as spoil, that was placed in an adjoining area where the coal was been mined from spilling into the active mining area) is left in a surface coal mine. In this mine, fenders are not routinely left. The BLM was not notified that the fender was left.*

APPLICABLE STANDARDS: *In surface mines, it is common to leave small fenders because of spoil loading on the fender. Consequently, there is the potential for a failure of the spoil pile if the fender is removed. Thus, removing the fender can be a safety hazard. It is difficult for the R2P2 of BIA mine plan to anticipate these occasional fenders. Therefore, a failure of compliance would not exist for an isolated or occasional unintended deviation from the approved plan.*

CONCLUSION: *However, a failure to comply with the regulation (43 CFR 3481.1(d)) exists because the BLM was not notified of "conditions that could affect mining operations or threaten significant loss of recoverable coal reserves." Analysis of the situation may also show that leaving the fender was not justified, which constitutes a noncompliance with MER requirements.*

NOTE: The analysis for Example 3 assumes that mining was conducted in accordance with the plan (e.g., the pit width was as specified in the plan). Had the fender been left because of a deviation from the plan approved by the BLM, such as a significant and deliberate change in the pit width, a violation of the approved plan could exist.

7.4.2 Types of Failures of Compliance

7.4.2.1 Records review

The approved R2P2 and exploration plan should be frequently reviewed and compared to data collected during inspections to identify possible failures of compliance. The mine progress maps should be compared with approved plans to determine if the operation is:

a. Progressing in the approved direction;
b. Progressing in the approved sequence and timing;
c. Progressing with the approved mining methods;
d. In compliance with the approved mine design (e. g., width and number of entries, size of pillars); and
e. Within the approved limits and boundaries.

All applicable records should be reviewed regularly, typically as a part of preparation for a scheduled inspection, to determine if other required reports and information have been submitted in the time period required.

Upon identification of an apparent failure of compliance, formal action must be initiated including verification during a subsequent inspection. Detailed remarks concerning the specific nature of the failures of compliance should be maintained as a part of the official record.

For exploration programs, the remarks should include the drill hole or sample number and location of the failures of compliance. For mining operations, the remarks should include the location within the mine (e.g., panel/entry/cross-cut number, pit number, and location within the pit) of the failures of compliance. The remarks must include all supporting evidence, contributing factors, and actual or potential impacts (e.g., tons of mineral lost, acres of unauthorized disturbance, stream or watershed impacted, and the amount and composition of material entering the stream or watershed). Photographs of the failures of compliance should also be taken during the initial and subsequent inspection.

An identified failure of compliance must be discussed with the operator to obtain sufficient information upon which to identify the factors relating to the occurrence. The discussion should be conducted with a responsible or designated mine official (i.e., mine superintendent, chief engineer) who is knowledgeable of the circumstances of the failure of compliance and has the authority to order corrective or remedial action.

An MMI may not be able to ascertain if the circumstance is actually a failure of compliance. This uncertainty could occur due a lack of the records and documents necessary to support a determination as to whether a failure of compliance exists. However, if an operator fails to comply with required record keeping and documentation in accordance with the operations plan or any applicable regulations, such a failure is in itself a separate failure of compliance.

Additionally, if the operator’s failure to maintain required records prevents an MMI from determining whether the operator complied with substantive operational requirements, that should be noted in any notice of a failure of compliance issued to the operator with respect to the required corrective action and should also be noted in the administrative record maintained for

the operation. Following notices of failure of compliance, repeated, recalcitrant, and continuing failures to maintain necessary records to enable the BLM to assess an operator's compliance may be the basis for a Cessation Order.

Pursuant to 43 CFR 3486.1(b), the operator must provide an MMI with reasonable access to inspect or to investigate operations to confirm compliance. Such access includes, but is not limited to, the physical facilities of the mine and records.

The operator must be informed immediately in situations that appear to be a failure of compliance, but if an MMI determines that the available evidence is insufficient to support a determination of a failure of compliance, the MMI may conduct additional analysis of the potential failure of compliance. The operator will be provided with the BLM determination.

If it is determined that a situation is a failure of compliance, a Notice of Noncompliance must be issued. If the situation is not a failure of compliance, but has an unacceptable impact (for example, if there is an unintended adverse effect on the MER of Federal coal) the BLM will issue an order requiring action by the operator to mitigate or prevent the impact, if such action is possible.

7.4.2.2 Activities outside an authorized area

Initiating an activity outside of the authorized area or extending an authorized activity from an authorized area to an unauthorized area is a trespass. The BLM must determine if the unauthorized activity is a mineral trespass subject to regulations at 43 CFR Part 9230.

Copies of appropriate land status plats or maps should be taken on the inspection to assist in the identification of activities are outside authorized areas. Where possible, GPS coordinates or survey references should be used to determine the location of the lease, license, or permit boundaries. The BLM must notify and consult with any affected SMA if a trespass is suspected.

The corrective action to be taken is dependent on the type of tract that is involved. Table 7-1, Corrective Actions, provides a summary of possible corrective actions based on four common types of coal tracts.

7.4.2.3 Archeological and paleontological resources

In cases where an unauthorized or unapproved activity has impacted the surface, an archaeological and paleontological survey of the site will be required if the area is not covered by an existing survey. If an archaeological and paleontological site has been impacted by unauthorized or unapproved activity, this will be addressed as a possible violation of the preservation requirements of such laws as the National Historic Preservation Act, Antiquities Act of 1906, and Archaeological Resources Protection Act of 1979, as applicable.

If the MMI determines that there is a possible impact to an archeological or paleontological site, the MMI must coordinate with the local BLM archaeological and paleontological staff, BLM Law Enforcement staff, the SMA, the State Historical Preservation Officer, the Tribal Historic Preservation Officer, if any, and the appropriate BIA office for Indian lands. An immediate

Cessation Order must be issued to preserve the impacted archaeological and paleontological resources. Fines can be assessed based on the damage to government property and/or the cost of repair. To the extent that any artifacts, religious or sacred relics, or historical property have been removed by trespassers, the SMA or BLM Law Enforcement staff will address any criminal prosecution issues with the local U.S. Attorney's Office. The MMI will be available to assist BLM Law Enforcement staff upon request.

7.4.2.4 Threatened and Endangered (T&E) species

In cases where an unapproved activity has impacted the surface, a T&E survey will be required if the area is not covered by an existing survey. An MMI will promptly initiate coordination with the FWS and SMA as necessary. The FWS may assess a penalty in accordance with 50 CFR Parts 10 through 17 where unauthorized activities have adversely impacted T&E species. Therefore, upon completion of T&E surveys, the FWS will be notified of adverse impacts.

7.4.2.5 The Surface Mining Control and Reclamation Act of 1977 (SMCRA)

The Federal coal regulations at 43 CFR 3486.3(e) specify that the BLM will enforce SMCRA requirements only if a violation, condition, or practice is determined to be an emergency situation for which an authorized representative of the Secretary is required to act pursuant to 30 CFR 843.11 and 843.12. An MMI should promptly contact the agency within the State having primary SMCRA jurisdiction over the operation when the MMI observe an activity, condition, or practice that may violate SMCRA.

In the event that an identified emergency situation requires immediate action and the agency having primary SMCRA jurisdiction over the operation is unavailable to act, an MMI must take action, such as issuance of a Cessation Order pursuant to 30 CFR 843.11 or notice of violation under 30 CFR 843.12, to address the emergency. These actions are described further below. Any action taken by the BLM in these situations, however, should serve to only address the emergency condition, until the agency having primary SMCRA jurisdiction is available to take further action.

The MOU between the BLM, the former Geological Survey Conservation Division (which was merged with the BLM in 1982), and the Office of Surface Mining and Reclamation and Enforcement (dated October 24, 1979) provides procedures for emergency situations in Article B, Part V.C.

Under these procedures, updated for reorganizations and changes in regulatory text, the BLM will exercise jurisdiction over the area of coal mining operations that would otherwise by the responsibility of OSM or the State regulatory authority (SRA) with primacy under SMCRA only in emergency situations, under OSM or SRA emergency authority, or act on behalf of and under specific instructions from an OSM (or the SRA, if applicable) inspector to issue orders to the operator under the following circumstances and conditions:

a. The emergency situation must be such as to create an imminent danger to the health or safety of the public or is causing or can reasonably be expected to cause significant, imminent environmental harm to land, air, or water resources (see 43 CFR 3486.3(e); 30 CFR 843.11).

b. An OSM (or the SRA, if applicable) representative is not available either onsite or by telephone to take the necessary immediate action.
c. The BLM will issue an order only in accordance with instructions provided for the specific situation pursuant to Section 521(a) of the SMCRA requiring the immediate cessation of the surface mining and reclamation activities responsible for the emergency situation. Such orders will be followed by prompt notification of action taken to OSM (or the applicable SRA) that will exercise jurisdiction to review the order pursuant to Section 521 of the Act to determine immediate remedial action. In the exercise of this authority, an MMI or BLM representative is deemed to be acting as an "authorized representative of the Secretary" pursuant to Section 521 of SMCRA.

Following issuance of an onsite order of cessation in response to the identified emergency, an MMI will promptly contact his or her supervisor to inform him or her of the emergency and the actions taken in response to the emergency. Also, prior to issuance of the order, OSM or the State regulatory authority, as appropriate, should also be contacted, if feasible. However, any emergency situation must be promptly addressed. The OSM or State regulatory authority, upon being notified of the situation and the MMI's actions to address the emergency, is responsible for taking additional action.

In addition, all coal leases obligate the lessee to operate in such a manner as to prevent injury to life and health and damage or degradation to the environment. The regulations of 43 CFR Subpart 3486 provide the BLM with the authority to enforce lease terms. While 43 CFR 3486.3(c) does not explicitly cite situations that threaten public health and safety or damage the environment as a basis for the BLM to order cessation of mining operations, 43 CFR 3486.3(e) authorizes the BLM's enforcement of SMCRA regulations to apply to emergency situations requiring a representative of the Secretary to act pursuant to 30 CFR 843.11 (as described above, the basis for emergency Cessation Orders under SMCRA regulations) and 843.12 (the basis for issuing notices of violation under SMCRA regulations).

A situation posing a risk of injury to life and health, or degradation to the environment may also be a failure of compliance with Part II, Section 7 (Damages To Property And Conduct Of Operations) of the lease (BLM Form 3400-12). If so, BLM must issue a Notice of Noncompliance pursuant to 43 CFR 3486.3(e). The corrective action to be specified in the notice should be the operator's compliance with the:

- Provisions of the notice of violation issued by OSM or the SRA; or
- Terms and conditions required by OSM or the SRA in Cessation Orders that the OSM or the SRA issued with respect to the activities at issue.

In the case of a Cessation Order issued by OSM or the SRA, that agency's termination of the Cessation Order following compliance by the operator would also mean that the operator has met the corrective action requirements of the BLM's separate Notice of Noncompliance for the same activities that were the subject of the OSM Cessation Order.

Table 7.1 Corrective Actions

Federal Lands Leases, Licenses and Permits	Federal Lands Not Under Lease or License	Indian Lands Leases and Permits	Indian Lands Not Under Lease
When an unauthorized activity is identified, it is necessary to determine the individual or company responsible for the unauthorized operations. If the activity is within a lease boundary and conducted by the holder of record or a designated operator, the activity is a noncompliance, not a trespass. If the operation is conducted without the benefit of approved operations plan, the party conducting the operation should be ordered to cease operations. Subsequently, a Notice of Noncompliance must be issued. If the activity is conducted by a party that is not the holder of record or not a designated operator, a trespass may exist. Upon identification of the trespass, trespass proceedings will be initiated by the BLM in accordance with 43 CFR Subpart 9239 and the BLM Manual 9235, *Mineral Trespass*. Initiation of such proceedings will be the responsibility of the State Office Director. If the responsible party is not the tract holder, the tract holder of record must be notified. If the activity is the result of the progression of operations outside of the approved area, an order to cease operations may be in warranted if the activity threatens serious irreparable damage. A Notice of Noncompliance must be issued.	Unauthorized minerals activities, except casual use, conducted on these lands constitute a trespass. Any BLM personnel witnessing such activities must report such activities to BLM Law Enforcement staff who will then accompany an MMI to meet with the trespassers and notify the trespassers of their obligation to cease any unauthorized activities. If such unauthorized activities continue, BLM Law Enforcement will address any further action, including any coordination necessary with the Solicitor's Office and the local U.S. Attorney's Office. Make sure to collect pertinent information such as: a. Location (GPS information is preferable) and date of the violation. b. Name, address, and phone number of companies and persons present. c. Description of the trespass activities. d. Photographs. Immediately initiate trespass proceedings upon return to the BLM office. Reference the trespass regulations at 43 CFR 9239.5 and the trespass manual at BLM Manual 9235.	The procedures on Indian leases and permits are slightly different than on Federal lands. Procedures and responsibilities established in the OSM/BLM/BIA MOU must be followed. Consult the OSM/BLM/BIA MOU and BIA before taking any action of an Indian lease or permit. A Notice of Noncompliance will be issued by the BLM to the holder of record or the designated operator only for violations of the BIA mine plan or exploration plan with which the BLM has responsibility. The BIA superintendent and Indian mineral owner must be sent a copy of the Notice of Noncompliance. For other violations of the lease or permit conditions discovered by the BLM, the BLM should document the violation, notify the BIA superintendent and develop a report of the violation. The BIA has the responsibility of initiating these violation proceedings.	The procedure on Indian Lands not under permit or lease is different than on Federal Lands. An MMI, when discovering unauthorized activities, should document the activity in a manner similar to the Federal situation, notify the BIA superintendent immediately and send the IR to the BIA as soon as possible. The BIA is responsible for initiating trespass proceedings and resolution with the violator.

With respect to coal mining operations on Indian lands, including tribal lands and allotted lands, the provisions of 43 CFR 3486.3 apply in the same manner as they do with respect to Federal coal. The enforcement provisions of 43 CFR Subpart 3486 are incorporated by reference through BIA regulations contained in 25 CFR 211.4 (applicable to coal leasing on tribal lands), 25 CFR 212.4 (applicable to coal leasing on allotted lands), and 25 CFR 225.4 (applicable to mineral agreements entered into under the Indian Mineral Development Act). Therefore, the emergency procedures addressed above with respect to Federal coal should be similarly followed when the BLM conducts lease oversight and enforcement for Indian coal. In addition, consistent with Section 7.4.2.7, BLM should inform BIA other Indian agencies of any emergency actions taken on Indian coal leases.

7.4.2.6 MSHA/OSHA

Mine health and safety comes under the authority of MSHA and the health and safety of exploration crews comes under the authority of OSHA. The MMI shall promptly notify MSHA and the appropriate operation management of any imminent dangers or conditions that could pose a possible safety risk to mine personnel, BLM personnel, or the public. An MMI should follow the MSHA/BLM MOU procedures for communication between the agencies.

7.4.2.7 State and Tribal Agencies (Other Than SRA for SMCRA)

The BLM should contact the appropriate Federal, State, BIA, and Indian agencies when a violation is discovered to discuss mitigation and enforcement measures. All enforcement actions on tribal land must be consistent with established MOU.

7.4.2.8 Plan Modifications

Resolution of a noncompliance may require modification of an exploration plan, R2P2, or BIA mining plan. The regulations authorize the BLM to require the modification of an approved exploration plan, BIA mine plan, or R2P2. The modifications may be required in order that the operation's authorized activities may be adjusted to take into consideration changing conditions, corrections following the BLM's oversight, or to reflect changes in legal requirements. The authority to require plan modifications is provided below:

e. Federal Coal: 43 CFR 3480.0-6(d), 3481.l(a),(b) and 3482.2(b),
f. Indian Coal: 43 CFR 3480.0-6(d)); 25 CFR 211.4; 25 CFR 212.4.

A request to modify a plan should be sent to the operator in the form of an order.

7.5 Notice of Noncompliance

When an MMI determines that there has been a failure of compliance, s/he must inform the operator and a formal Notice of Noncompliance must be issued.

The authority to issue a Notice of Noncompliance is:

g. Federal Coal: 43 CFR 3486.3
h. Indian Coal: 25 CFR 211.4, 212.4, and 225.4 which incorporate by reference the provisions of 43 CFR 3486.3 to Indian lands and 43 CFR 3480.0-4

A Notice of Noncompliance must be signed by a District Manager, Area Manager, Field Office Manager, or Branch Chief for Solid Minerals who is authorized in the BLM Manual to make

such a decision. The person(s) who identified the violation must be acknowledged in the Notice of Noncompliance.

A Notice of Noncompliance should be technically reviewed by the next higher level of BLM management prior to signature and transmittal to the operator.

A Notice of Noncompliance must be issued within 5 working days after it is determined that a violation exists. However, extenuating circumstances may result in a period greater than 5 days. The Notice of Noncompliance can be hand-delivered or mailed certified mail, return receipt requested to the operator's last known address, return receipt requested.

7.6 Orders

7.6.1 General Orders

A general order, issued under the authority of 43 CFR 3480.0-6, will provide the lessee, licensee, permittee, or mine operator with specific future expectations of the BLM and instruction for the lessee, licensee, permittee, or mine operation to comply with BLM expectations. Future violations of a general order are enforceable as a Notice of Noncompliance or a Cessation Order. For Indian lands, the BLM will send a copy of the general order to the BIA and the affected Indian landowner. All orders have appeal rights.

7.6.2 Cessation Orders

A Cessation Order is a formal written order in which the BLM directs a lessee or licensee to immediately cease activities that are not in compliance with BLM orders, regulations, approved exploration plans, R2P2s, and/or which threaten immediate and serious damage to the mine, deposit to be mined, valuable ore-bearing mineral deposits, or regarding exploration, the environment (see 43 CFR 3486.3(c)). Additionally, a Cessation Order will be issued when an operator/lessee has failed to timely comply with a Notice of Noncompliance.

The regulations allow the BLM to issue Cessation Orders when it is necessary to implement the regulations or correct undesirable situations.

i. Federal Coal: 43 CFR 3480.0-6(d) & 348l.l(a),(b)
j. Indian Coal: 25 CFR 211.4 and 212.4 which incorporate by reference the provisions of 43 CFR 3486.3 to Indian lands

A Cessation Order is a four-part document.

k. Part l, Authority to issue order
l. Part 2, Justification for order based on regulatory requirement(s)
m. Part 3, Specific requirement(s)
n. Part 4, Consequences for failure to comply with requirement(s)

An example of a Cessation Order follows. For Indian lands, the BLM will send a copy of the Cessation Order to the BIA and the affected Indian land owner. The example (Figure 7.2 below) is based on the scale situation discussed in Example 1 of this chapter.

7.7 Contents of a Notice or Order

A Notice of Noncompliance or order must contain the information required at 43 CFR 3486.3. This basic content requirement is applicable to writing a Notice of Noncompliance for other mineral authorization located on Federal or Indian land. A Notice of Noncompliance or order must contain at a minimum:

a. Authority to issue the notice or order.
    - 43 CFR Subpart 3486, 3480.0-6(d), or 25 CFR 211.4 and 212.4 which incorporate by reference the provisions of 43 CFR Subpart 3486.
b. Justification for the notice or order based on regulatory requirement(s).
    - Citation(s) of the specific requirement(s) that were not complied with and the reason why the actions of the operator constitute a violation. The specific section or special stipulation of the lease, plan, regulations, or statute should be cited.
    - The date the violation was identified and the person who identified the violation.
    - Any actions contributing to mitigation of the offense(s) by the operator.
c. Specific requirement(s).
    - A statement of the action necessary to correct the violation. If no action is required or feasible, the notice should state so. If a modification to an approved plan is required as a result of the violation, the notice will state that a modification is required and what the modification must address. Note that although there is a requirement that the notice or order specify the action that must be taken to correct the noncompliance, such action need only be described briefly and should only reflect a performance standard. The technical design of the response is the obligation of the lessee or licensee. Do not provide or suggest an engineering, geological or other design as such designs are the exclusive responsibility of the lessee or licensee. An MMI specifies performance and the lessee's or licensee's obligation is to provide a response that meets the performance requirement.
    - The corrective action requirement of the order must briefly describe the action that must be taken to correct the noncompliance. The corrective action should reflect the applicable performance standard and not a designed solution. Never provide or suggest an engineering, geological or other design solution as such designs or solutions are the exclusive responsibility of the lessee or licensee.
    - A statement of the time limits within which the violation must be corrected. (i.e., not to exceed a specified number of days).
d. Consequences for failure to comply with requirement(s).
    - Contain a statement that the lessee, licensee, or operator must provide a written report to the BLM within a specified number of days of the action taken by the lessee/licensee/permittee/operator for correction of the violation.
    - Contain a statement that failure to comply, without just cause, with the requirements of the Notice of Noncompliance may result in an order to cease operations, the initiation of cancellation proceedings (Federal lands), or forfeiture of the bond, or all of the above. For Indian lands, failure to comply will generate a recommendation to the BIA for cessation of operations, or initiation of cancellation proceedings, or forfeiture of the bond, or all of the above.
    - Contain a statement of the right to appeal in accordance with 43 CFR Part 4.

7.8 Distribution of a Notice or Order

The notices and orders will be sent certified mail, return receipt requested, or delivered in person to the operator/lessee or agent.

For violations related to mine or exploration operations, the notice or order is sent to the operator/company official designated (see 43 CFR 3486.2(a)) as the authorized representative of the operator. Copies of all Notices of Noncompliance must also be sent to the lessee or licensee of record.

Other notices or orders are sent directly to the lessee or licensee, with a copy provided to the mine operator. Where more than one entity has direct interest in a tract, it is appropriate to provide copies of the notice to all parties of interest. Where subleases exist, the notices must be sent to all interested parties because, regardless of the agreement with the sub-lessee, the leaseholder of record remains a responsible party. Indian leases cannot be sublet without prior approval of the BIA and affected Indian land owner.

Copies of Notices of Noncompliance or orders must be placed in the official case file for the lease, license, permit, LMU, and I&E Plan and Record. The BIA superintendent should also be provided a copy of the noncompliance notice for violations or orders on Indian lands.

7.9 Follow-up Action of a Notice or Order

The following actions will be taken.

a. Depending on the severity of the violation and the extent of corrective action necessary, follow-up inspections may be warranted, especially if the failure to correct the violation will result in continuing damage to minerals or other resources, environmental degradation, or public health and safety hazards.
b. Depending on severity, the follow-up inspections may be made during the actual correction, immediately upon correction, or during the next routine inspection. If an inspection is necessary to verify the correction, the inspection should be performed shortly after the BLM is notified of the correction.
c. The correction of a Notice of Noncompliance should be monitored via inspections, as appropriate as addressed in this part, and via the monitoring of incoming mail. However, a notice of correction sent by an operator/lessee to the BLM will always be verified by subsequent inspection of the operation to confirm correction. Additional corrective action may be required if the violation is not properly or timely corrected. The BLM will notify the lessee/licensee/operator in a timely manner if the correction is determined to be acceptable or not.
d. If the lessee/licensee/operator fails to report when the violation that was subject of a Notice of Noncompliance is corrected or fails to correct the violation within the time allowed by the notice or in the manner required by the notice, and absent an appeal of the notice, the following action(s) may be taken by the authorized officer for Federal lands:
    - An order to cease operations;
    - Initiation of lease cancellation proceedings pursuant to 43 CFR 3452.2-1; or
    - Initiation of forfeiture of the lease or LMU bond in an amount sufficient to correct the violation pursuant to 43 CFR 3486.3(a).

    For Indian lands, the BLM must coordinate with BIA and consult with the Indian mineral

owner on a further course of action.

e. Upon determining that the corrective action is acceptable, the BLM office that issued the noncompliance will notify the recipient(s) of the Notice of Noncompliance that the correction is acceptable. If the violation was related to mineral activities on Indian lands, a copy of the Notice of Acceptance should be sent to the BIA superintendent. A copy should also be placed in the lease/license/file and I&E Plan and Record.

7.10 Failure to Report

If a lessee, licensee, or operator fails to report an event as required by the regulations or as specified in an order, the failure to report is a violation for which an order reiterating the reporting requirement must be issued.

If the BLM determines that events, other than those required by regulation, should also be reported, an order should be issued to the operator to create such reporting requirements. Such orders, in addition to specifying when and what must be reported, must also explain why it is necessary for the lessee, licensee, or operator to report the event(s).

7.11 False Statements

A lessee, licensee, or operator must always provide the BLM with truthful and accurate information. An MMI should always be seeking independent means to verify information provided by a lessee, licensee, or operator. It is a crime punishable by 5 years imprisonment or a fine, or both, for any person knowingly and willfully to submit or cause to be submitted to any agency of the United States any false or fraudulent statement(s) as to any matter within the agency's jurisdiction (18 U.S.C. 1001). An MMI must consult with BLM Law Enforcement and the Solicitor's Office if there is any suspicion that the BLM has been provided false information.

7.12 Recordation of Events and Review

All reportable conditions will be recorded in the Undesirable Events Record and the lease files.

The corrective actions taken by the operators should be monitored to determine timely and adequate correction. The reportable conditions occurring at each operation should be routinely reviewed to determine if there is a pattern to the events which may necessitate corrective action.

Figure 7.2
Example of a Cessation Order

BLM Letterhead
Certified Mail--Return Receipt Requested month day, year
ORDER

XYZ Mining Company
XYZ Number 1 Mine
Federal Coal Leases….
Attn: T. Boss, Superintendent
P.O. Box abc
Any Town, Your State 00000

Order
Scale Certification and Calibration
Notification Requirements

This order is issued pursuant to the authority vested in the Bureau of Land Management (BLM) by 43 CFR 3480.0-6(d) and 3486.3 and is necessary for the BLM's performance of its production verification responsibilities. You are hereby ordered to immediately cease operations pending your compliance with the terms of this order listed below and the BLM's verification that you have so complied.

Pursuant to this order you must:

- Provide notice to this office 5 days in advance of scheduled scale certification, calibration, routine service, or replacement for any scale used to determine the weight of coal upon which royalty is paid at the XYZ Number 1 Mine;
- Provide notification to this office within 5 working days after any event that requires emergency or unscheduled repair to any scale that you use to determine the weight of coal upon which you pay royalty; and
- Submit to this office a scale certification report within 15 working days after certification or calibration of any scale that you use to determine the weight of coal upon which you pay royalty. The report must describe the work done to calibrate the scale and how any adjustment or calibration may impact the Federal royalties that you have or may pay.

You must comply with this order. If you do not comply with this order without just cause, you are in noncompliance with 43 CFR 3486.3 and your lease will be subject to possible action for cancellation.

cc: Lessee(s) if other than operator

8.1 General Requirements

The BLM office staff must be aware that certain information obtained from operators, lessees, licensees, or permittees on Federal or Indian mineral leases, licenses, and permits is proprietary and confidential, and appropriate security measures must be taken. The MMI and his/her manager must be knowledgeable of and follow the procedures specified by regulations at 43 CFR Part 2 and BLM Manual 1278, External Access to BLM Information. Table 8.1 provides an overview of the various authorities that pertain to obligations for the protection of proprietary and confidential information.

Table 8.1
Authorities for Protection of Proprietary and Confidential Information

Authority	Description	Citation
The Mineral Leasing Act, as amended.	Geologic data and information related to fair market value before a lease sale.	43 C.F.R. Part 2, Appendix B.
Standard Coal Lease Form.	Information collected under the requirements of the lease will generally be closed to inspection by the public in accordance with the FOIA, 5 U.S.C. 552 (b)(4). If a formal request is made for such information under FOIA, the BLM would make a determination whether the information sought qualifies for exemption from release to the requestor in accordance with the provisions of 5 U.S.C. 552(b)(4) and 43 CFR Part 2, Subpart C.	BLM Form 3400-12, Part II, Section 6.
The Trade Secrets Act.	Penalties for disclosure of third party proprietary and confidential information.	18 U.S.C. 1905
Indian Mineral Development Act of 1982.	All of the BLM's information is proprietary and confidential information of the Indian mineral owner.	25 U.S.C. 2101-2108

8.2 The Mineral Leasing Act, as amended

The Mineral Leasing Act, as amended, provides specific protections for confidential information that is collected under, or required by, the Act. Refer to 43 CFR Part 2, Subpart B and Appendix B for specific requirements. The information protected from disclosure under this provision includes:

a. Data from an exploration license;

b. Exploration data acquired from commercial sources under the authority of 30 U.S.C. 208-1 or 30 U.S.C. 351-360;
c. Proprietary information obtained from commercial sources that are not under contract with the United States Government;
d. Proprietary information provided by other Federal agencies under the authority of 30 U.S.C 208-1 or 30 U.S.C. 351-360; and
e. Prior to a lease sale, the BLM's determination of the fair market value of coal to be leased and comments submitted to the BLM by the public with respect to such value that are identified by the public submitter(s) as proprietary or confidential information.

8.3 Coal Lease Form (BLM-3400-12)

Section 6 of Part II of the standard coal lease form (BLM 3400-12) requires the lessee to provide:

- Statements showing the amounts and quality of products removed and sold from the lease, the proceeds therefrom, and amounts used for production purposes or unavoidably lost;
- Access to all premises, books, accounts, maps, and records relative to operations, surveys, or investigation on or under the leased lands; and
- Access to copying of documents reasonably necessary to verify lessee compliance with terms and conditions of the lease.

Section 6 also establishes a contractual obligation for the BLM to maintain information collected under the requirements of this section of the lease and to not allow inspection by the public in accordance with the FOIA (5 U.S.C. 552). See Section 8.4

8.4 FOIA and Confidential, Proprietary Information

The DOI regulations at 43 CFR 2.26 *et seq*. and Appendix B to 43 CFR Part 2 describe information of the type protected from disclosure under FOIA, FOIA, 5 U.S.C. 552(b)(4). This information includes trade secrets and commercial or financial information submitted by a person or entity outside the United States Government are potentially privileged and confidential and exempt from release under the FOIA. The types of material submitted and gathered from operators on Federal mineral leases, licenses, and permits are considered to be trade secrets and commercial or financial information, and are subject to protection from disclosure as proprietary and confidential information in accordance with the above regulations and statutory citations. Note that 43 CFR Part 2 does not address all items that might be considered proprietary. Therefore, caution should be used at all times when handling or storing information that may be proprietary and confidential. The MMI and his/her manager are encouraged to consult with BLM's FOIA specialists and the Office of the Solicitor concerning the status of any document that may have proprietary or confidential content and, thus, subject to potential protection from disclosure to the public.

8.5 Indian Lands

The BLM protects all Indian records concerning minerals under an approved Indian Mineral Development Act Agreement as proprietary and confidential information of the Indian mineral owner. This confidentiality requirement applies even though comparable, non-Indian records

would be considered public information on Federal lands.

8.6 Penalties for the Unauthorized Release of Proprietary or Confidential Business Information and Violation of the Trade Secrets Act

The unauthorized disclosure of information found to be proprietary or confidential information under FOIA, 5 U.S.C. 552(b)(4) and 43 CFR Part 2, Subpart F and Appendix B is prohibited. Potentially, the release of confidential, proprietary information could also be a violation of the Trade Secrets Act (18 U.S.C. 1905)(see 43 CFR 2.36). A violation of the Trade Secrets Act could potentially subject BLM employees to criminal penalties and liability. The Trade Secrets Act states:

> ***Whoever, being an officer or employee of the United States*** *or of any department or agency thereof, any person acting on behalf of the Federal Housing Finance Agency, or agent of the Department of Justice as defined in the Antitrust Civil Process Act (15 U.S.C. 1311–1314), or being an employee of a private sector organization who is or was assigned to an agency under chapter 37 of title 5,* ***publishes, divulges, discloses, or makes known in any manner or to any extent not authorized by law any information*** *coming to him in the course of his employment or official duties or by reason of any examination or investigation made by, or return, report or record made to or filed with, such department or agency or officer or employee thereof,* ***which information concerns or relates to the trade secrets, processes, operations, style of work, or apparatus, or to the identity, confidential statistical data, amount or source of any income, profits, losses, or expenditures of any person, firm, partnership, corporation, or association****; or permits any income return or copy thereof or any book containing any abstract or particulars thereof to be seen or examined by any person except as provided by law;* ***shall be fined under this title, or imprisoned not more than one year, or both; and shall be removed from office or employment.***
>
> (Bold-faced print added)

Both the MMI and the manager may each be potentially, personally liable if proprietary or confidential information subject to protection is found to have been released by them. Therefore, the responsible BLM office must strictly follow the provisions of 43 CFR Part 2, Subpart F and Appendix B, and other applicable BLM guidance when requests for disclosure of potentially confidential or proprietary business information are submitted by the public. The BLM staff should consult with the DOI Office of the Solicitor and BLM FOIA staff in addressing requests for the disclosure of such information.

8.7 Security

A MMI must maintain proper security measures to protect files that contain information that is, or that might be, proprietary or confidential. Proper control over proprietary or confidential information and files can only be accomplished by locating the proprietary or confidential material separately from those material and files traditionally located in “Central Files” (also known as “Lease Case File”), restricting access to the files that contain proprietary or confidential information, and maintaining records of who and when persons have accessed

proprietary and confidential information. This applies to equally to information in paper and electronic formats.

All BLM personnel that support the coal management program must be knowledgeable of and follow procedures for handling correspondence and files that contain, or that may contain, proprietary or confidential information for any lease, lease modification, license, or permit, including those that are pending, authorized, expired, terminated, or relinquished. Applicable file and record retention guidance can be found in BLM MS-1220, Records and Information Management, and in BLM MS-1278, External Access to BLM Information. Always coordinate with the appropriate local FOIA official before releasing any information.

Transmittal of confidential or proprietary records from the BLM office of control to any other office must be accompanied by BLM Form 1273-2a, Information Security Agreement. Records will not be transmitted without signatures from the recipient and a BLM Authorized Official of the office of control. Electronic data must encrypted for transmittal with the password key provided under separate cover. All copies and reproductions of the confidential and proprietary records will be returned to BLM and individuals disclosing this information are subject to penalties under 18 U.S.C. 1905 and BLM Form 1273-2a.

- A -

Avoidable mineral loss	Means the loss of the mineral due to the negligence of the mine operator. An example of an avoidable mineral loss could be, but is not limited to, an unapproved abandonment of recoverable minerals in pillars or fenders.

- B -

Bar-Down	A process by which a miner uses a long metal bar (that resembles a pry or crow bar) that is typically 6 feet on more in length, to manually search for, identify, and remove loose rock that potentially could fall from the rock surrounding a mine opening, entry, or wall. Bar-down is the process that is preformed after rock has been initially severed, such as a rock fall, rock burst, or blast, to avoid unanticipated rock falls, thereby making a work area safe for routine entry.
BIA mine plan	The equivalent of an R2P2 for Indian lands.

- C -

Commingle	Commingle is the mixture of coal production from lands or leases that have different ownership or royalty obligations.

- F -

Fender	A ridge of unmined coal at the bottom of the seam that might not be recovered that is between the open pit and spoil area that can assist in preventing spoil from entering the working area of the open pit or cut.

- L -

Lease	An agreement made under applicable law whereby real property to which the Federal government, an Indian tribe, or an Indian allottee holds title has been made available by the government to someone to occupy or otherwise use for the purpose of mineral extraction and development in return for payment of specified compensation to the Federal government as owner of the property or acting on behalf of the Indian tribe or allottee. This term includes all authorized Federal and Indian underground and surface coal tracts.

Lock-out	"Lock-out" is a safety procedure to disable electrically or mechanically energized machinery or equipment while persons service or work in close proximity to this machinery or equipment. To "lock-out" equipment or machinery, each person that is working in a hazardous area will place their own paddle-lock on the main switch, thereby locking the switch in the off position, to prevent accidental activation until the paddle-lock of each worker is removed by their respective owners when they are no longer in the hazardous area and work is completed.
	-M-
Maximum economic recovery (MER)	Maximum economic recovery (MER) is the standard for coal recovery which requires, based on standard industry operating practices, that all profitable portions of a leased Federal coal deposit must be mined. At the times of MER determinations, consideration will be given to: • Existing proven technology; • Commercially available and economically feasible equipment; • Coal quality, quantity, and marketability; • Safety, exploration, operating, processing, and transportation costs; and • Compliance with applicable laws and regulations. The requirement of MER does not restrict the authority of the authorized officer to ensure the conservation of the recoverable coal reserves and other resources and to prevent the wasting of coal.
	- P -
Primary processing or beneficiation	The crushing, handling, screening, and sizing of the mineral product prior to the sale of the product or the product being transferred to a secondary processing facility.
Production accounting	The systems and procedures used by the lessee or mine operator to track and account for mineral production from the point of severance to the point of royalty determination.
Production losses (shrinkage)	Losses from production as reported in the Solid Minerals Production and Royalty Report form of the ONRR are the losses occurring during primary processing. An example of such loss would be the rejection of oversized material (which is not recycled) during screening. Losses from production do not include minerals left in pillars or fenders or top or bottom mineral left unmined.
Progress maps and reports	These are maps with supportive reports submitted to the BLM by the operator that delineate the area, thickness, quantity, and necessary quality and density of the mineral mined.

Progress map and report period	This is the period, as specified by the BLM (43 CFR 3482.3), covered by the progress maps and reports. This period may be different than the royalty reporting period.
	- R -
Resource Recovery and Protection Plan (R2P2)	The Resource Recovery and Protection Plan (R2P2) is a plan mandated by 43 CFR Subpart 3482 showing that the proposed mining operation meets the requirements of Mineral Leasing Act for: • Development; • Production; • Resource recovery and protection; • Diligent development; • Continued operation; • MER; and • The rules of 43 CFR Part 3480 for the life-of-the-mine. The R2P2 also includes environmental and reclamation requirements which may supplement and incorporate the requirements contained in SMCRA permit for the operation issued by OSM or the State regulatory authority with primacy.
	- S -
Scale calibration	The process of adjusting a scale to meet accuracy standards.
Scale certification (truck and rail scales)	The procedure whereby a scale is tested using a known weight and the accuracy/deviation of the scale determined. Truck scales are usually certified by the State or an entity certified by the State. Rail scales as usually certified by the railroad company. Belt scales may also be certified by the State or a State certified entity.
Scale verification (belt scales and flow meters)	The procedure whereby a scale is tested using a known weight and the accuracy or deviation of the scale determined. A belt scale may also be verified by weighing a quantity of material over the scale, then weighting the same material over on a certified truck or rail scale. The procedure whereby a flow meter is tested by passing a known quantity of material through the meter or checking the meter against another calibrated meter, thereby determining the accuracy or deviation of the meter. Belt scales and flow meters are usually verified by the operator or an independent service.
Secondary processing or beneficiation	The cleaning, washing, concentration, or refining of the mined product. Examples include washing plants, concentration mills, and refineries.

Spad	A surveying monument that is located in the roof of an underground mine is commonly known as a "spad."
State regulatory authority	The State government agency with primary authority to oversee and enforce the provisions of its State coal mining reclamation and enforcement program as approved by OSM under SMCRA. While the State regulatory authority has primary authority over its approved State regulatory program, OSM maintains residual oversight over the State's implementation of the State program.

- T -

Tag-in and Tag-out	The tag-in and tag-out procedure is a method used to track who is in an underground mine. Some mines refer to the "tag" as the "brass" when the tag is made of brass. The tag typically has a unique number on it that identifies the person with the tag. A person is provided a tag when you enter the mine, thereby checking in as being in the mine. The person must keep the tag with their person at all times while in the mine. Upon leaving the mine, the person returns the tag which has been used to check the person out of the mine. If a tag is not at the designated safe central location outside the mine, the person who has been assigned that tag is presumed to be inside the mine.

- U -

Unavoidable mineral loss	The waste or loss of the mineral that is not due to the negligence of the mine operator. Examples include, but are not limited to, slope or pillar failure where necessary precautions to the situation were taken or were no precautionary procedures were available.