



MSHA HANDBOOK SERIES

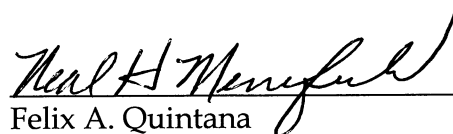
**U. S. Department of Labor
Mine Safety and Health Administration
Metal and Nonmetal Mine Safety and Health
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**Metal and Nonmetal
General Inspection Procedures Handbook**

This handbook sets forth procedures for conducting inspections of metal and nonmetal mines. Previous editions of this handbook and procedural and administrative instructions addressing this subject are superseded by this handbook. Compliance instructions contained in the MSHA Program Policy Manual are not superseded by this handbook. Changes to this handbook must be authorized by the Administrator for Metal and Nonmetal Mine Safety and Health.

The description of responsibilities that follows set forth the steps that mine inspectors take when conducting mine inspections. When the text describes an action which the inspector "shall" do or specifies steps which the inspector "shall" perform in some sequence, then the inspector is to do so consistent with specific conditions at a mine. Any determination not to conduct such action is to be based on his or her sound discretion and that of his or her supervisor. When the action is one which "should" be followed, then the inspector who does them is engaging in best practices for such inspection and should do them consistent with specific conditions at the mine.



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CHAPTER ONE - INTRODUCTION

A. Introduction

Mine Safety and Health Administration (MSHA) inspections and investigations are conducted to assure that a safe and healthy workplace is provided and maintained for miners. Metal and Nonmetal (MNM) mine safety and health inspectors achieve this objective in several ways: (1) by enforcing the provisions of the Federal Mine Safety and Health Act of 1977 (Mine Act) as amended by the Mine Improvement and New Emergency Response Act of 2006 (MINER Act); (2) by conducting safety and health inspections at mines and mills; (3) by issuing citations and orders for violations and imminent dangers; (4) by persuading stakeholders that maintaining a safe and healthy work environment is in their best interest; and (5) by providing information and assistance to the mining industry to aid in reducing and eliminating accidents, injuries, and illnesses in mines or mills.

B. Purpose

This handbook provides procedures for MNM enforcement personnel to follow when conducting inspections of underground and surface mines and mills. The instructions in this handbook supersede previously issued procedural and administrative instructions on this subject.

C. Authority

Section 103(a) of the Mine Act provides Authorized Representatives (AR) of the Secretary of Labor (Secretary) with the authority to conduct inspections and investigations of coal and other mines. Additionally, Section 103(a) provides Authorized Representatives with the right of entry to, upon, and through any coal or other mine. Only persons authorized by the Secretary shall conduct inspections or investigations under the Mine Act.

D. Responsibility

The Administrator for Metal and Nonmetal Mine Safety and Health (Administrator) has overall responsibility for enforcing and implementing provisions of the Mine Act, the MINER Act, and related safety and health regulations at metal and nonmetal mines. Shared responsibility rests with metal and nonmetal mine safety and health inspectors, right of entry personnel, district and assistant district managers, mine safety and health specialists, and field office supervisors.

E. Applicability

This handbook applies to Metal and Nonmetal Authorized Representatives (ARs) and Right of Entry (ROE) personnel. While ROE personnel have not completed training and

are not authorized to conduct inspections, they are "inspectors in training." In that regard, ROE personnel perform virtually the same enforcement activities as journeyman inspectors while they learn how to properly conduct inspections and/or investigations. Therefore, procedures and guidance in this Handbook apply to AR's and ROE personnel for that reason. Further, "Inspectors" and "ARs" are terms used interchangeably throughout this Handbook and apply to Authorized Representatives as well as to Right of Entry personnel.

CHAPTER TWO - PROFESSIONALISM, ETHICS, AND OTHER ACTIVITIES

A. Inspectors are Safety and Health Professionals

MSHA inspectors must demonstrate through their words and actions that they are ethical, honest, knowledgeable, respectful, credible, and professional. They must be committed to protecting the safety and health of our nation's most precious resource - the miner. Inspectors should always rely on the best available information, in conjunction with their training and experience, to reach fact-based, impartial decisions in safety and health matters involving miners.

B. Ethics

MSHA employees represent the Federal Government and are required to act ethically at all times. MSHA employees are to avoid any action that may be construed as an attempt to influence or give preferential treatment to a mine employee, mine operator, industry labor organization, or industry association. Employees should discuss concerns in this area with their supervisor or an MSHA ethics counselor.

C. Providing Information on MSHA Investigations

Agency personnel will not discuss or provide information to anyone outside of MSHA concerning a matter they know to be under investigation by the Agency. Exceptions to this policy may be granted by the Administrator or his designee. Authorized MSHA personnel, such as special investigators, may advise persons being interviewed for the purpose of an investigation and may acknowledge the existence of an open special investigation.

D. Conducting Efficient and Effective Inspections

As federal employees, MSHA personnel are expected and required to utilize their time efficiently and effectively. To accomplish these goals, inspectors should determine if any portion of a mine inspection or on-site enforcement activity can be conducted differently so that redundant, ineffective, or overlapping activities can be reduced or eliminated without compromising the requirements of the Mine Act or miners' safety and health. Methods which could or should be used by inspectors to attain these goals include, but are not limited to:

- Conducting health sampling simultaneously with safety inspections, if practical or appropriate and in compliance with established policies and procedures;

- Inspecting tailings dams, dump sites, and similar locations covering a large area by combining driving and walking while assuring that other activities or locations where miners are exposed to potential safety and health risks are not missed or overlooked;
- Writing the majority of general field notes and citation and order documentation on site during an inspection;
- With supervisory approval, within the confines of DOL and Agency policies, spending an additional amount of time at a mine to complete an inspection so that travel to the mine the next day or week is eliminated; and
- Eliminating or minimizing duplication between general field notes and citation/order note forms.

CHAPTER THREE - HAZARD RECOGNITION AND RISK ASSESSMENT

A. Underlying Safety and Health Hazards

During their on-site activities, MSHA inspectors issue citations and orders of withdrawal (orders) for imminent dangers and violations of mandatory standards, regulations, the Mine Act, and the MINER Act. While the issuance of citations and orders may bring a mine into compliance with safety and health regulations, those actions do not always address underlying causes of violations. To remedy this, inspectors should expand their focus so they can evaluate not easily seen problems or gaps in mine safety or health programs that may lead to fatalities or injuries, particularly at mines with excessive injuries, illnesses, or violations. Every serious incident occurring at a mine or mill, whether or not it results in an injury, illness, or death, is one that inspectors can learn from and share with others in the industry. To that end, during every regular inspection inspectors should:

- Discuss safe work practices, accident prevention, risk assessment, and current accident or illness trends at the mine with miners and mine management;
- Analyze the mine's violation history to identify significant trends and determine root causes so this information can be shared and discussed with miners and mine management; and
- Focus on potentially hazardous work practices, conditions, or procedures in each work area inspected.

B. Risk Assessments While Conducting Enforcement Activities

In addition to looking for violations of mandatory standards, regulations or the Mine Act during inspections, inspectors should continually assess workplace conditions, practices, and mine activities for safety and health hazards that may expose miners to risk. Inspectors should take appropriate action to address these risks even if a violation of the Mine Act or mandatory standard or regulation is not present. Risks identified and steps taken to address them should be documented by inspectors in their notes.

Inspectors should also take every opportunity to discuss risk reduction with miners and mine operators, just as they communicate information regarding violations. Inspectors should always encourage mine operators and miners to work towards continual improvement in workplace safety and health that goes beyond regulatory compliance.

C. Establishing a Culture of Prevention

Despite tremendous improvements in safety and health for miners over the years, the mining environment can be an inherently hazardous workplace. Unseen geologic instabilities, constantly changing terrain, and the presence of large and complex mining equipment are a few of the factors that make maintaining a safe and healthy mining workplace challenging. Given this dynamic, inspectors should be supportive of mine operators initiating proactive programs that assist in reducing or eliminating accidents, illnesses, and injuries.

D. Addressing All Safety and Health Concerns

Safety and health concerns brought to an inspector's attention shall be appropriately documented and addressed in accordance with established Agency policies or procedures. Every effort should be made by inspectors to talk with a reasonable number of miners about safety or health concerns they may have during the course of every inspection or investigation. Inspectors should also have ongoing discussions with mine management throughout the course of on-site activities to determine the effectiveness of the mine's safety and health programs. Inspectors should follow procedures in MSHA's Hazard Complaint Procedures Handbook if they learn of or are informed of a hazardous condition during these conversations.

CHAPTER FOUR - INSPECTION, INVESTIGATION, AND RELATED PROCEDURES OR ACTIVITIES

A. Assault of MSHA Personnel on Official Duty

It is a federal crime to assault, intimidate, or impede MSHA employees assigned to perform investigative, inspection, or law enforcement functions. Thus, any person who assaults, intimidates, or impedes an MSHA inspector while the inspector is engaged in the performance of his or her official duties, is subject to investigation and arrest by the Federal Bureau of Investigation, prosecution by the United States Attorney, and to a fine and/or imprisonment. Inspectors should be familiar with actions that are to be taken when confronted with these types of situations as outlined in MSHA's Program Policy Manual. Inspectors should leave the mine and promptly notify their supervisor when they believe they may be subject to physical harm or assault.

B. Litigation and/or Requests for MSHA Documents or Testimony

Requests from outside MSHA involving litigation, inspection documents, or subpoenas should be forwarded or faxed to the appropriate district office. District management may wish to discuss these requests with the appropriate Office of the Solicitor. Decisions on how to respond to such requests are usually made by the Office of the Solicitor in consultation with the Administrator or appropriate District Manager.

C. Appearance in Formal Hearings, Legal Proceedings, or Trials

MSHA personnel are frequently required to provide formal statements or testify in legal proceedings regarding their inspection or investigation activities. The following guidance applies in those situations.

- **Preparing to Testify**

If the inspector's anticipated testimony concerns Agency inspection or investigation documents, they should be familiar with the material and be able to refer to the records easily and readily. Inspectors should refresh their memory by reviewing applicable Agency documents prior to their testimony. The inspector's testimony must be what he or she recalls from the event, not what someone else remembers. Therefore, inspectors should not talk to others in trying to recall details unless he or she has first discussed this matter with the Office of the Solicitor.

- **Attendance at Trials, Legal Proceedings, or Formal Hearings**

Inspectors should dress in a manner showing respect for the court when attending trials, legal proceedings, or formal hearings. They should also not engage in behavior or conduct that will bring disfavor or reflect poorly on the Agency or themselves.

- **Testifying**

When asked a question, inspectors should talk to members of the jury, if there is one, or to the person asking the question. They should speak clearly and loudly enough so persons farthest away can hear easily and should ask questions to be repeated, if necessary. Inspectors should never answer a question they do not fully understand and should only answer the question that was asked. They should inform their attorney in private if they realize they made an erroneous statement in earlier testimony.

Inspector's conclusions or opinions should not be volunteered unless they are requested. Whenever possible, objective answers should be given to questions that are asked. When presenting facts, inspectors should refrain from saying "I think," or "I believe." Inspectors should say they do not know an answer instead of volunteering an answer they hope is correct.

Inspectors should stop speaking when a judge or attorney interrupts their testimony and should wait to be told to resume. Inspectors should be polite even if others are not behaving in a similar manner.

D. Attempts to Influence MSHA Enforcement Efforts

Inspectors shall inform their supervisor as soon as possible regarding all offers of money, materials, future employment, or similar behavior or actions by any mine operator, labor organization, or miner intending to influence an inspection or investigation.

E. Disputes Between Miners and Mine Management

MSHA inspectors shall not cross established picket lines at mine or mill sites unless directed to do so by their supervisor. Inspectors shall maintain their impartiality at all times towards miners, labor organizations, and management when dealing with these entities. Inspectors shall not get involved with nor take positions when differences of

opinion exist between mine labor and mine management on issues not related to safety and health.

F. Required Mine Inspection or Investigation Supplies and Equipment

Inspectors should be prepared to inspect mines and mills at all times during normal work hours. In that regard, they should always have the equipment and supplies necessary to conduct inspections or accident investigations. Depending on the types of mines or mills in their field office's area of responsibility, items such as, but not limited to, safety harnesses, underground cap lamps, life vests, and self rescuers may not be immediately available because they may be shared among several inspectors.

Excluding the sometimes shared equipment noted above, inspectors should have the following inspection equipment or supplies:

- hard hat, safety-toed boots, safety glasses with side shields, and gloves;
- specialized equipment or clothing, such as disposable coveralls, hoods, boots, etc., (for field offices with mines or mills having harmful chemicals or similar contaminants), foul weather gear (for offices with extreme mining conditions), or other items deemed appropriate by the district office;
- hearing protection;
- reflective coveralls or vests with appropriate reflective tape on hard hat (for field offices with underground mines);
- fit-tested respirator with appropriate filters;
- safety harness and lanyard;
- lamp belt with metal identification tag attached and extra identification tag for check-in and check-out purposes (for field offices with underground mines);
- self-rescuer (for field offices with underground mines);
- electric cap lamp and charger (for field offices with underground mines);
- gas testing kit;
- measuring tape and ruler (wood and/or metal);
- camera with extra batteries;
- laptop computer;
- health sampling equipment;
- 30 Code of Federal Regulations (may be on laptop computer);
- Federal Mine Safety and Health Act of 1977, MINER Act of 2006, appropriate Agency handbooks, policies, procedure letters and bulletins (may be on laptop computer);
- business cards;
- citation, order, and continuation forms (hard copy forms);

- inspection forms, review form cover sheets, general field notes, citation and order notes, accident investigation forms, area or equipment closure tags; and
- current safety and health material for distribution or discussion.

G. Contaminated Inspector Clothing or Equipment

In some cases, mine operators require inspectors and other visitors to wear company-provided clothing or equipment during on site activities; in other cases, MSHA provides inspectors with these items when they inspect sites requiring specialized protection from processes, materials, or the environment. Regardless of who furnishes these items, inspectors should comply with company use policies and procedures to minimize or eliminate contact with hazardous or toxic materials. Inspectors should contact their supervisor for further guidance if company use policies or procedures regarding this clothing interfere with or impede their inspection or investigation activities.

Inspectors should, if possible, leave company-supplied clothing or equipment contaminated with hazardous or toxic materials with the operator for appropriate disposal. If disposal in this manner is not possible, inspectors should contact their supervisor or district industrial hygienist for guidance on properly packaging, transporting, and disposing the contaminated items.

H. Government Leased or Owned Vehicles

The Department of Labor's (DOL) Administrative Procedures Manual (DLMS2 - Administration), MSHA's Administrative Policy and Procedures Manual (Volume II, Chapter 500) and General Services Administration (GSA) regulations and procedures require that government property, such as government-owned or leased vehicles, be used only for official activities. Employees shall follow these procedures and regulations when operating a government-owned or leased vehicle. Additional information on this subject can be found on MSHA's intranet or on the DOL or GSA internet sites.

Federal Property Management regulations provide that no person on government-owned property shall carry firearms, explosives, or other dangerous or deadly weapons, either openly or concealed except for official purposes. MSHA employees are prohibited from carrying or using firearms while on official business. These provisions also apply to motor vehicles used for official business which are construed as government property. Therefore, firearms or other weapons or explosives are not to be transported in government owned or leased vehicles at any time.

As noted in MSHA's Administrative Policy and Procedures Manual (Volume II, Chapter 500 and Volume IV, Chapter 400), Agency employees operating Government owned or leased vehicles are required to:

- Not place the vehicle into motion unless the seat belts of all occupants are properly fastened;
- Maintain a valid State, District of Columbia, or territorial driver's license for the type of vehicle to be driven;
- Complete MSHA Form 1000-133 to report deficient safety equipment with their assigned vehicle when the deficiency is the result of noncompliance with a specification or other requirement;
- Assure that the assigned vehicle and government supplied equipment is secured at all times to prevent theft; and
- Complete Form DL 1-2018, Daily Motor Vehicle Trip Log, every time a government-owned or leased vehicle is used.

I. Self-Rescuer Use, Care, Inspection, Maintenance, and Training

As noted in MSHA's Administrative Policy and Procedures Manual (Volume IV, Chapter 400), inspectors who regularly enter underground mines shall be proficient in the use, care, maintenance, and inspection requirements of each type of self-rescue device they are assigned to use, as well as other types of self-rescue devices provided by MSHA. Accordingly, inspectors who regularly enter underground mines should be trained on appropriate self rescue devices every six (6) months. Training dates should be recorded and maintained by the field office supervisor.

Personnel who do not go underground regularly do not have to receive self-rescuer training every six (6) months. However, if more than six (6) months has elapsed since an inspector received training in the device they are assigned to use, the individual should be provided training on the appropriate device prior to entering an underground mine.

J. Use of Cameras

As necessary, cameras may be used during inspections or investigations of surface and underground metal and nonmetal mines and mills subject to the following restrictions:

- In all underground gassy metal and nonmetal mines, tests for methane will be conducted by inspectors prior to using any camera. If methane is present at or exceeding one percent (1%), only cameras approved for use in gassy mines by MSHA's Approval and Certification Center shall be used;

- The use of cameras is prohibited in all gilsonite mines;
- The use of cameras is prohibited in all explosives storage magazines, loaded explosives vehicles, and explosives loading areas.
Note – This prohibition does not include facilities, magazines, or vehicles storing Ammonium Nitrate Fuel Oil (ANFO).
- In flammable material storage areas including coal handling facilities with limited ventilation, the use of cameras is prohibited.

Inspectors should exercise caution when taking photographs and never expose themselves, or allow others involved with the picture, to potential safety hazards. Photographs may be stored electronically or printed. The Administrator or District Manager may alter these procedures as appropriate.

Relevant photographs (e.g., photographs of violations, accident scenes) taken by inspectors during enforcement activities should be individually mounted on a Photo Mounting Worksheet (MSHA Form 4000-125) and included with the inspection or investigation report. The form should be completed in its entirety for each relevant photograph. Photographs taken during enforcement activities not deemed relevant or not mounted on this form should be included with the applicable report or properly identified and stored on appropriate recording medium. These procedures may be altered by the Administrator or District Manager as appropriate.

K. Use of Testing, Measuring, or Similar Devices or Equipment

Inspectors may utilize a variety of specialized devices or equipment to measure distance, weight, angle, voltage, etc., during their on-site activities. Some of these devices include, but are not limited to:

- Tape measures
- Electric voltage or amperage detectors (e.g., tic-tracers, volt-ohm meters)
- Abney levels
- Electrical circuit testers (e.g., wood-heads, Tic-Tracers™)

District managers have the authority to determine the specialized equipment their inspectors should be issued and utilize during on-site activities. Inspectors should receive appropriate training before using such devices to prevent exposing themselves or others to potential hazards. If appropriate, devices should be calibrated to assure accurate readings prior to being used for enforcement purposes. Further, use of electrical or battery-powered devices in certain mines or mills (e.g., gassy mines, gilsonite mills or mines) may be prohibited or contingent on potential hazards. If electronic or mechanical devices (excluding tape measures or rulers) are used to

reinforce or supplement facts contained in citations or orders, inspectors should document whether these devices were calibrated as required by the manufacturer or in accordance with MSHA's requirements prior to their use.

L. Rotation of Assigned Inspection Travel Areas

Inspection travel areas assigned to inspectors shall be rotated annually so that they can, over time, gain a broad understanding of the mines within their field office's area of responsibility. Inspectors should not have inspection responsibilities for the same mine or mill for more than one year. Exceptions to rotation of travel areas or mine inspection assignments exceeding one year shall be approved by the Assistant District Manager.

M. Assignment of Former Employees to Work At or Inspect a Mine or Mill

At least two years must elapse from the last date of employment at a mine or mill until MSHA personnel may conduct Agency related work at such operation. Further questions on this subject should be directed to the appropriate district office.

N. Weekly Itinerary Completion

Inspectors should complete and submit a Weekly Itinerary Form (MSHA Form 4000-126) each week they do not have work duties in the field office unless directed otherwise by their supervisor.

O. Communications Between Inspectors When Travel Areas Change

As a result of new travel area assignments, inspectors previously assigned to a mine or mill should brief the newly assigned inspector before the new inspector's first regular inspection of the mine. Generally, this briefing occurs at the start of each fiscal year. During that briefing, the following information about mines or mills in the applicable travel area should be communicated:

- Major construction projects
- Special mining conditions
- Health or safety concerns
- Ongoing or long-term compliance problems and/or violation history
- Pending litigation
- Granted or pending petitions for modification
- Actions taken by the former inspector to address negative injury, illness, or enforcement trends
- Other significant information regarding safety and health issues

P. Advance Notice of Mine Inspections

Section 103(a) of the Mine Act prohibits MSHA employees from giving advance notice of inspections. An implied exception to this prohibition against advance notice exists in Section 103(g)(1) of the Mine Act where a representative of the miners or a miner gives notice to MSHA of what he or she believes to be an imminent danger. In these cases, the mine operator or his agent must be notified "forthwith." Such notification will almost always have the effect of indirectly giving notice of an inspection.

The Mine Act does not prohibit advance notice of investigative activities (activities which are not direct enforcement activities). However, notice of investigative activities (e.g., 105(c) and 110(c) investigations) shall only be given when there is a need for such notice. Approval must be obtained from an inspector's supervisor before notice can be given for investigative activities. Other activities where advance notice is not prohibited may include:

- Obtaining information for health and safety research;
- Technical assistance, including field certifications;
- Obtaining information for petitions for modifications, etc.;
- Criminal investigations;
- Education and training;
- Investigation of miner discrimination complaints;
- Accident investigations;
- Preparation for health sampling activities during an ongoing inspection;
- Demonstrations of research or prototype equipment; and
- Investigation of certain hazard complaints.

Approval should be obtained from the inspector's supervisor before notice is given of an activity which allows for preparations essential to completing that activity.

Examples of on-site activities requiring advance notice to mine operators and/or miners representatives are described below:

- If an inspector intends to inspect the second work shift or conduct personal health sampling during his or her on-site activities, it may be necessary to designate a time and meeting place so that representatives of the operator and miners can be given an opportunity to accompany the inspector. Pre-selected meeting sites should not reveal the specific areas to be inspected or sampled. However, it is recognized that the normal progression of an inspection may reveal remaining areas to be inspected.

- When preparations are needed during an inspection for an examination of a mine's power system, the inspector may make arrangements for the inspection of the electrical system during scheduled down time.
- If it is necessary to interrupt an on-site inspection for any cause, the inspector may inform the operator and, if applicable, the miners representative, that the inspection is interrupted and will be resumed at the discretion of the inspector.

An observer could allege that an inspector is providing advance notice if he or she arrives at a mine site, notifies officials that an inspection is starting, conducts a pre-inspection conference, then leaves the site without conducting a physical inspection of any portion of the mine or mill. To avoid this appearance, inspections should be scheduled so that a portion of the mine or mill is physically inspected on the first day an inspector arrives at the site. Prior approval by the inspector's supervisor is required if a physical inspection of some portion of the mine or mill can not be accomplished on the first day of any inspection.

Example: Inspector Jones arrives at the mine early one afternoon to conduct a regular inspection. Jones conducts an opening conference with the mine operator and miners' representative and then inspects the mine shop in its entirety before leaving the site for the day. In this case, Inspector Jones did not provide advance notice of this inspection because he inspected a portion of the mining operation before leaving the mine the first day. On the other hand, if Inspector Jones left the site on the first day of the inspection without inspecting any portion of the mine or mill, it might appear to some that the inspector was giving advance notice that the mine would be inspected the following day.

Q. Denial of Entry

Authorized Representatives of the Secretary of Labor have the right of entry to, upon or through any mine for the purpose of making any inspection or investigation under the provisions of the Mine Act. In the event an inspector is refused entry to a mine, or is threatened or harassed while making an inspection, the inspector should be familiar with the terms, definitions and actions to be taken as outlined in MSHA's Program Policy Manual (PPM), Volume I, and in MSHA's Citation and Order Writing Handbook.

R. Jurisdictional Issues

Questions regarding MSHA's jurisdiction are among the most common situations encountered during an inspector's on site activities. MSHA and the Occupational

Safety and Health Administration (OSHA), for example, have a formal Interagency Agreement to address areas of mutual responsibility and resolve many of these issues. However, even with this agreement and agreements with other entities, situations involving MSHA's jurisdiction regularly occur. These situations are almost always complicated and, as such, normally decided on a case-by-case basis.

Determinations regarding jurisdiction rely on information initially supplied by inspectors. Inspectors should be aware, and be appropriately cautious, that jurisdictional issues may require the participation of several other agencies including the Office of the Solicitor or OSHA. As a result, an extended period of time may pass before these issues are resolved. Areas where these types of issues occur include, but are not limited to:

- Indian Reservations
- US Forest Service property
- US Park Service property
- Navigable waterways or rivers
- Co-located MSHA and OSHA facilities (maintenance or repair shops, power generation plants, etc.)
- Railroad equipment, track beds, personnel, or tracks
- Mine exploration and/or development on abandoned mine sites
- Reclamation activities at closed or non-operating mines or mills
- Mine sites with co-located energy generation facilities
- Public roads to and/or from a mine or mill
- Borrow pits

Four areas where most jurisdictional issues occur are:

- **Borrow Pits**

A "borrow pit" is an area of land where the overburden, consisting of unconsolidated rock, glacial debris, or other earth material overlying bedrock is extracted from the surface. Extraction occurs on a one-time basis or intermittently as need occurs, for use as fill materials by the extracting party in the form in which it is extracted. No milling is involved, except for the use of a scalping screen to remove large rocks, wood and trash. The material is used by the extracting party more for its bulk than its intrinsic qualities on land which is relatively near the borrow pit. Thus, if earth is being extracted from a pit and is used as fill material in basically the same form as it is extracted, the operation is considered to be a "borrow pit" subject to OSHA jurisdiction except those borrow pits located on mine property or related to mining.

- Example: Any borrow pit located on mine property that is operating for the purpose of building a road or constructing a facility on site is subject to MSHA jurisdiction.
- Example: A landowner uses a front-end loader to load bank run material into over-the-road trucks to fill potholes in roads, low places in yards, etc. No milling or processing is involved, except for the use of a scalping screen to remove large rocks, wood, and trash from the material before it was loaded onto various trucks for removal from the site. This operation is a borrow pit subject to OSHA jurisdiction.

- **Mine Roads**

As many jurisdictional issues involve mine roads, the District Manager and Office of the Solicitor should be consulted before a field determination is reached regarding MSHA's jurisdiction over mine roads.

- **MSHA/OSHA Interagency Agreement**

MSHA and OSHA entered into an interagency agreement in 1979 that delineated certain areas of inspection responsibility, provided a procedure for determining general jurisdictional questions, and provided coordination between the two agencies in areas of mutual interest. The agreement notes that MSHA has jurisdiction over operations whose purpose is to extract or to produce a mineral, but does not have jurisdiction where a mineral is extracted incidental to the primary purpose of the activity. Under this circumstance, a mineral may be processed and disposed of, and MSHA will not have jurisdiction since the company is not functioning for the purpose of producing a mineral.

The MSHA/OSHA Interagency Agreement (MSHA/OSHA Agreement) is available on MSHA's web site and in each district office. All inspectors should be familiar with it as most jurisdictional issues involve that agreement. Enforcement personnel should also refer to MSHA's PPM (Volume I, Section 4) or their supervisor for assistance if questions on jurisdiction occur.

- **Railroad Facilities or Equipment on Mine or Mill Sites**

Inspectors should verify that MSHA has jurisdiction over railroad equipment, track beds, locomotives, etc., prior to initiating inspections of that equipment or those facilities. Inspectors shall inspect railroad cars, track beds, locomotives, or other

equipment owned by mine operators when these items are located on mine or mill property during their regular inspections. Safety defects found by inspectors on railroad cars, locomotives, track beds, or other equipment, owned by a railroad company and located on mine property, should be documented and reported to their supervisor so that these issues can be referred to the Division of Safety and Health Chief for resolution.

If the unsafe track bed, railroad cars, locomotives, or other equipment owned by a railroad company presents an imminent danger to miners, a Section 107(a) imminent danger withdrawal order with no underlying violation should be issued to the mine operator. The order should require that miners be removed from and/or prohibited from entering the area or using the equipment until the unsafe conditions or equipment is corrected. If the above procedures have been followed and the hazard(s) continues to exist, a citation or order may be issued to the railroad company requiring that the unsafe equipment or condition be corrected.

S. Complying with Rules or Procedures Established by the Mine Operator

Inspectors should make every effort to comply with state, county, or local government and company safety and health requirements or procedures when conducting mine inspections or investigations except when the requirements conflict with federal standards or interfere with or impede the performance of the inspector's duties. Inspectors should also be ready to and provide MSHA identification (AR or ROE card) when requested by the mine operator.

T. Mine Operator Sign-In Log or Release from Liability Form

MSHA inspectors shall not sign release from liability forms when entering a mine on official duties. However, if requested, inspectors should sign a check-in and check-out book, form, or log located at the guard shack, mine or mill provided that it does not include a release from liability statement.

U. Performing Work or Operating Equipment or Machinery at Mines or Mills

Inspectors shall not assist or direct mine employees or officials in work activities at the mine site unless directed to do so by their supervisor. Inspectors shall not operate mine equipment or machinery unless directed to do so by their supervisor.

V. Limiting or Minimizing Vehicular Travel While On Inspections of Mine Sites

MSHA inspectors, when appropriate and/or possible, should conduct inspections or investigations on foot in all areas of a surface or underground mine or mill. Inspectors may periodically or briefly operate a government vehicle or ride in other vehicles to travel from one location to another while conducting inspections at a site. These trips should be kept to a minimum and only undertaken when they are necessary to conduct an efficient and effective inspection. Inspectors must be alert for hazardous conditions or work activities while riding in or driving a vehicle and make appropriate stops to ensure that safety and health hazards are not present.

Example: Inspector Jones is inspecting a large surface mine and mill that has many miles of haulage roads. For efficiency purposes, Jones inspects the roads and berms while traveling in a mine company pickup accompanied by the mine operator's agent and a miner's representative. This is an acceptable reason to utilize vehicles while conducting an inspection.

Example: Inspector Jones is inspecting an underground mine which has a portal entrance. As travel into and out of the mine by miners and mine management is done in pickups, Inspector Jones also decides to ride into and out of the mine in the same manner. This is not an acceptable reason to utilize a vehicle during a mine inspection. During the trip into and out of the mine, Inspector Jones could not adequately observe ground and other conditions due to his limited vision from the pickup and its speed of travel. In this case, Inspector Jones should have either walked into or out of the mine so that ground conditions that could expose miners to hazards could have been adequately observed, noted, and, if necessary, appropriately acted upon.

W. Submission Times for Inspection Reports

Inspection reports should be completed and submitted not later than the beginning of the work week following the conclusion of the inspection unless extenuating circumstances are present. All notes, photographs, and other documents compiled or obtained during the inspection shall be included with the report. Appropriate forms, for the activity conducted, shall be completed as appropriate and included with the report.

Inspectors should obtain approval from their supervisor when there are circumstances that delay submission of the completed report beyond the time required above. Health sampling reports, including appropriate and completed forms, should be submitted by inspectors not later than the beginning of the work week following receipt of the lab analysis unless prior approval is given by their supervisor.

X. Submission Times for Special Assessment and Possible Knowing and Willful Violation Review Forms

Certain types of violations or orders are required to be reviewed for special assessment or as possible knowing and willful violations. Review forms for these types of violations should be completed by inspectors and submitted in a packet with other required documentation to the district office not more than five work days after issuance of the violation.

Y. Issuing Citations and Orders

Citations and orders of withdrawal shall be written and issued as soon as practical after violations are observed, but no later than the next business day. A best practice is for inspectors to issue citations and orders of withdrawal at mine sites. In most cases, inspectors should issue orders of withdrawal the day they are observed. Exceptions to this guidance should be discussed with the inspector's supervisor; other exceptions can be found in MSHA's Citation and Order Writing Handbook.

Each violation, and its evaluation, shall be discussed with the mine operator and miner's representative at the time it is observed by an inspector. Inspectors should promptly inform the operator and miners representative and make appropriate modifications, if additional information affecting the initial evaluation of a citation or order is later obtained or learned during the inspection.

Z. Citation Termination Times

Inspectors shall give primary consideration to the health and safety of miners in establishing violation abatement times. The termination time and date for a citation must be specific, taking into account the degree of hazard to the miner(s), and provide a reasonable time for the operator to abate the conditions or circumstances which caused issuance of the citation. Citation abatement times shall not be established for the convenience of the mine operator or the inspector. Abatement times should not take into consideration whether the mine operator has filed an appeal with the Federal Mine Safety and Health Review Commission or because the operator has filed a Petition for Modification for the cited standard.

CHAPTER FIVE - REGULAR INSPECTION PROCEDURES

Regular mine safety and health inspections consist of three general phases: activities done by inspectors prior to arriving at the mine, the physical inspection of the mine, and activities conducted after the inspection is completed. The physical inspection of the mine includes inspecting the mine or mill site, all in-service mining equipment, and observing all mining and work cycles. The inspection also includes discussions with appropriate miners and mine management regarding safety and health topics and completion of required documentation.

A. Activities Prior to Conducting Regular Inspections

Activities to be conducted prior to starting a regular inspection of a mine or mill include assembling appropriate documentation, gathering and, if necessary, calibrating certain inspection equipment, and reviewing mine file data. Documentation that an appropriate review was conducted shall be included in an inspector's notes or on the appropriate MSHA form for all enforcement inspections. The off-site documentation review for regular inspections includes, but is not limited to:

- regular mine inspection reports for the previous year
- outstanding citations or orders
- determining whether the mine is on the 104(d) "chain," on a pattern of violations under section 104(e), or whether flagrant violations have been issued
- health sampling data or goals required by the Government Performance and Results Act (GPRA) of 1996
- miner training plans required by 30 CFR Part 46 (if available at the field office) or Part 48
- mine ventilation plans and mine maps (for underground mines, if available)
- escape and evacuation plans including mine rescue arrangements (for underground mines, if available)
- legal identity forms
- injury, illness, accident, and employment reports submitted to MSHA since the last regular inspection
- the mine's injury and illness incidence rate
- determining whether petitions for modification are in effect or have been applied for
- whether notifications of mine opening or closing are on file
- other pertinent safety and health issues (e.g., use or storage of hazardous or toxic materials, use or storage of explosives)

B. Arrival at the Mine Site

Upon arrival at the property, inspectors shall notify representatives of the miners and the mine operator of their intent to conduct an inspection. The extended unavailability of a miners' or operators' representative, or other similar situation, should not delay the start of any inspection.

C. Miners Representatives

Section 103(f) of the Mine Act provides a representative of miners with participation rights during the physical inspection of any coal or other mine made pursuant to the provisions of Section 103(a) of the Mine Act for the purpose of aiding inspections. In addition to providing the representative of the miners with the right to accompany the inspector, Congress guaranteed that the representative would suffer no loss of pay for the time during which the representative exercises this right.

Inspection activities that give rise to participation rights under Section 103(f) are numerous but not unlimited. Section 103(f) contemplates activities where inspectors are present for the purpose of physically observing or monitoring safety and health conditions as part of a direct enforcement activity. These types of activities include but are not limited to:

- regular inspections;
- compliance follow-up inspections;
- hazardous condition complaint inspections;
- accident investigations; and
- inspections at especially hazardous mines (e.g., mines liberating excessive amounts of explosive gases)

Individuals with conflicting claims regarding their status as miners representatives should reconcile those differences among themselves. Inspectors may accept anyone designated by the mine operator as the operator's agent. The size of the inspection party may be controlled by the MSHA inspector to assure an efficient and effective inspection.

One inspector conducting an enforcement activity as noted above may allow more than one representative to accompany him or her; however, only one representative is entitled to suffer no loss of pay for that particular accompaniment. However, when there is more than one inspector at a mine on an enforcement activity and miners' representatives are accompanying each inspector **in different areas of the mine**, each representative should be paid by the operator for that accompaniment.

Miners' representatives wishing to exercise their rights to accompany inspectors during an inspection should meet the notification requirements in 30 CFR Part 40. If there is no designated representative of miners, or if the miners' representative can not be determined, inspectors should discuss safety and health matters at the mine with a reasonable number of miners at various places in the mine during the course of the inspection.

While not mandated by the Mine Act, as a matter of courtesy inspectors should notify designated miners' representatives of their arrival during any other on-site activities that do not involve direct enforcement activities.

D. Pre-Inspection (Opening) Conference

Once notification of the regular inspection has been given, the highest ranking mine official and the designated representative of the miners will be given an opportunity to participate in a **brief** pre-inspection conference to discuss issues relative to the upcoming inspection and other safety and health issues pertinent to the mine. Concerns, questions, or issues raised during the meeting should be discussed and documented at this time. A separate conference can be held if either party chooses not to meet as one group. Independent contractors on site may be included in this conference if appropriate. The pre-inspection conference should be appropriately documented by the inspector.

E. Varying Regular Inspection Starting Points and Inspection Routes

Inspectors are strongly encouraged to vary their inspection routes and starting points at mine or mill sites from one regular inspection to another to prevent predictability and more accurately assess safety and health conditions. Inspectors should also vary their inspection frequency as to the time of or the month of the year a mine is inspected.

Example: In October 2007, MSHA Inspector Jones started a regular inspection of the Smith Mine and Mill by beginning his inspection in the open pit. In May 2008, Inspector Jones begins the second regular inspection of the fiscal year of the Smith Mine and Mill by starting the inspection in the mill.

F. Inspection of Mines, Mills, Equipment, and Machinery

One of the best times for inspectors to get an accurate picture of conditions and work practices at a mine or mill is immediately after arriving at the site. Therefore, inspectors should begin inspecting active mining areas as soon as possible after arriving at the site and concluding their pre-inspection conference. When assembled, the inspection party

should immediately travel to active work areas of the mine or mill. A regular safety and health inspection of a mine in its entirety includes the following areas, equipment, and documentation:

- inspection of the active mine, mill, shops, pump houses, electrical transmission facilities and/or substations, flammable and combustible storage areas, all operating mobile and fixed equipment, etc.;
- inspection of each active mining cycle;
- inspection of all explosives magazines and storage facilities;
- inspection of active haulage and service roads, dumps, stockpiles, warehouses, leaching ponds, impoundments, pipelines, storage tanks, offices, etc.;
- review of work practices and procedures;
- inspection of all work shifts, including non-production (excluding security personnel only shifts) and maintenance shifts;
- inspection of all required documentation (e.g., employment, injuries, illnesses, miner training, HazCom records, hoist personnel physicals)

G. Inspection of All Mining Cycles

Inspectors shall make every effort to observe each phase of all mining cycles during every regular inspection of a mine or mill. The term "mining cycle" includes, but is not limited to: activities such as drilling, blasting, mucking, timbering, scaling, and the transfer and/or haulage of ore or waste. If a phase of the mining cycle, such as blasting, only occurs once in the mine during the course of an inspector's inspection, the inspector will take appropriate steps to observe and note the conditions, procedures, and practices associated with those blasting activities.

At times, however, inspectors may not be able to observe every mining cycle at every working place during a particular inspection. Given this, inspectors must evaluate sufficient conditions and practices and ask enough questions to be reasonably assured that work is being safely conducted for the activities that could not be observed. Mining cycles not observed during an inspection shall be documented in the inspector's general field notes along with any specific observations and conversations regarding observed mining cycles.

H. Inspections of All Work Shifts

Inspectors should inspect all work shifts of a mine or mill during every regular inspection. Inspectors are not required to inspect a second or third (e.g., night, graveyard) work shift where the only employees at the site are security staff. If an inspection is not conducted of a non-work shift, inspectors should assure that mining,

maintenance, or similar activities are not occurring and that personnel at the site during these times are not exposed to potential risk.

I. Inspection of Barricaded or Abandoned Areas

- **Barricaded areas**

MSHA regulations at 30 CFR §§ 56/57.2 defines barricaded areas to mean “obstructed to prevent the passage of persons, vehicles, or flying materials.” Barricaded areas can be found at surface and underground mines. The following procedures apply when inspectors encounter barricaded areas:

- Information should be obtained from miners and the mine operator to determine why barricades are in place, how long they have been in place, and what (if any) hazard they prevent miners from accessing.
- Applicable mine maps, workplace examination records, and other documents should be reviewed to acquire additional knowledge about these areas.
- The areas should be reviewed to determine if they must meet the signage and/or barricade requirements found in 30 CFR Parts 56/57.20011.
- Areas with obvious safety or health hazards should not be inspected unless prior approval of the inspector’s supervisor is obtained.

- **Abandoned workings**

The definition of “abandoned workings” is found at 30 CFR § 57.2 and is applicable only to underground mines and surface areas of underground mines. These areas are defined as “deserted mine areas in which further work is not intended.” The following procedures apply when inspectors encounter abandoned workings at underground mines and surface areas of underground mines:

- Information should be gathered from miners and the mine operator regarding the reasons for the abandonment, how long the area has been abandoned, whether mining will be conducted in the area in the future, and what (if any) hazards may be or are present.
- Applicable mine maps and other documents should be reviewed to learn more about the area in question.

- A determination should be made if these areas meet the signage and/or barricade requirements found in 30 CFR §§ 56/57.20011.
- Areas with obvious safety or health hazards should not be inspected unless prior approval of the inspector's supervisor is obtained.

Facts leading to an inspector's determination that an area is legitimately barricaded or abandoned and should not or cannot be inspected should be noted in his or her general field notes. Further, discussions with miners and mine management concerning these areas should be documented by inspectors including the name(s) of the person(s) with whom the inspector discussed the area.

Appropriate enforcement action will be taken for indirect denial of entry if inspectors determine that a mine operator abandoned or barricaded an area solely to deny inspectors entry to inspect an area. Inspectors may wish to discuss this matter with their supervisor prior to taking enforcement action.

J. Inspection of Mines or Mills Not Operating at Full Capacity or Not Operating

At times, inspectors attempt to conduct regular inspections of mines or mills and find, on arrival, that it is not operating or not operating at full capacity and some equipment or machinery is not in operation. In these cases, regardless of whether the mill or mine is operating or only operating with limited capacity, inspectors shall conduct a regular inspection.

Example: Inspector Jones arrives at ABC mine to conduct a regular inspection. He learns that the mine has not operated for two weeks due to limited demand. All miners on site are performing maintenance, housekeeping, or similar activities. Nonetheless, Inspector Jones conducts a regular inspection and determines: whether miners have been task trained for the task they are performing; whether equipment or machinery being repaired has been properly locked and tagged out, blocked against motion, etc; whether miners are wearing appropriate personal protective equipment, etc. Inspector Jones also reviews all required documentation (e.g., miner training records, workplace examinations, equipment pre-shift inspections). Further, he conducts an inspection of the non-producing or non-active section of the mine or mill to assure that potential hazards or risks to miners do not exist. The inspector documents in his notes that the mine or mill is non-active or non-producing.

K. Inspection of Explosives Magazines and Storage Facilities

MSHA conducts inspections of explosive storage magazines, facilities, and associated records on behalf of the Bureau of Alcohol, Tobacco, and Firearms (BATF) at all mines subject to MSHA jurisdiction as a result of a 1980 Memorandum of Understanding (MOU) between MSHA and the BATF. Since the MOU took effect, statutory enactments by the United States Congress have altered BATF's role. On January 24, 2003, law enforcement functions of the BATF were transferred to the United States Department of Justice from the United States Department of the Treasury. In addition, the agency's name was changed to the Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF) to reflect its new mission in the Department of Justice.

The MOU requires MSHA to enforce safety and security standards found in 27 CFR Part 555, Subpart K, and the recordkeeping requirements in 27 CFR Section 555.127, Subpart G. In the event that ATF standards conflict with MSHA regulations, MSHA is required by the MOU to enforce the regulations or standards which provide for the greater safety or security of persons in and around a mine. Under the MOU, MSHA regulations govern the movement and use of explosive materials taken underground for mining and similar activities.

The MOU requires MSHA inspectors to review records maintained by mine operators when explosive materials are used, transported, or stored at surface and underground mining or milling operations. Inspectors are also required to verify compliance with appropriate MSHA and/or ATF standards regarding the construction and maintenance of magazines and underground storage facilities. Finally, inspectors are required to complete an ATF or other approved form regarding their findings for every explosive magazine and/or storage facility inspected. Inspectors shall note all violations, whether of MSHA or ATF standards, on the ATF or other approved form. The form(s) is to be transmitted to the appropriate ATF office as determined by the District Manager.

Explosives in an underground mine are to be stored in a magazine that complies with appropriate MSHA and ATF regulations or in an appropriately constructed storage facility. Pursuant to 30 CFR §§ 56/57.2, a storage facility is defined, in part, as a structure - "...used to store explosive materials. A storage facility used to store blasting agents corresponds to an ATF Type 4 or 5 storage facility."

MSHA's regulations pertaining to underground storage facilities are usually considered to be substantially equivalent to, and in compliance with, ATF regulations. Regulations regarding the construction of explosives magazines are in 30 CFR §§ 56/57. 6132; conversely, regulations addressing underground storage facilities are at 30 CFR § 57.6160 and 30 CFR § 57.6161.

When violations of either ATF or MSHA regulations cannot be abated during an inspection, inspectors should enter the abatement due date in the space provided on the ATF or other approved form. The abatement due date shall match the citation due date if the condition was cited as an MSHA violation. If there are violations or a situation involving explosive materials that could affect miners or the public's safety, the following guidance applies:

- If explosives are stored in violation of ATF regulations and the condition can not be corrected immediately, the mine operator should be given a reasonable period of time to comply, dependent on the hazard and circumstances present at the time. Inspectors should use good judgment in determining this abatement time and consider all factors (e.g., potentially dangerous combination of explosive materials, possibility of accidental detonation, possibility of theft, etc.), with danger to the miners and public safety being the prime consideration for establishing this termination time.
- It may be necessary to require a mine operator to remove explosive materials immediately if an extreme danger to the public safety exists because of compliance issues with ATF regulations. Unabated violations involving improperly stored explosives that may endanger the public safety shall be immediately referred to the appropriate MSHA District Manager. The district manager should, in turn, review the situation and determine whether to have a local inspector address it or whether an ATF regional office should be contacted.

Finally, the inspector's supervisor shall be notified immediately if it is determined that explosive materials may not be properly accounted for or are missing due to suspected theft or misuse. In these cases, if appropriate, inspectors should take immediate action to assure the safety and health of miners until direction or guidance from their supervisor is received.

L. Inspections of Second Escapeways, Underground Hoisting Facilities, and Refuge Chambers

Metal and Nonmetal mine operators are required to develop and maintain second escapeways from certain underground mines. Fires, ignitions, inundations, ground falls, gas outbursts, and other catastrophic underground events have, in the past, led to deadly entrapments of miners. The more time a second escapeway is not functional or available, the greater the risk miners face from hazards that may block or impede their safe passage through regular travel routes to the surface.

- **Second Escapeways**

The mandatory standard at 30 CFR § 57.11050(a) provides for one of the most fundamental protections available to underground miners – that at least two functional escapeways be provided to the surface once mine production begins. However, as noted in Volume IV of MSHA’s Program Policy Manual:

A second escapeway is recommended, but not required, during the exploration or development of the ore body. In this application, “exploration or development of the ore body” should be used in its narrowest sense i.e., while an ore body is being initially developed, or development or exploration work is being conducted as an extension of a currently producing mine. Where mining occurs along a mineralized zone and production and development are indistinguishable as separate activities, the standard must be applied as it would to a producing mine.

In situations other than exploration or development, a violation of 30 CFR § 57.11050(a) exists and a citation shall be issued whenever fewer than two functional escapeways out of a mine are available to miners working underground. This applies even if the mine operator has started correcting the condition that caused the second escapeway to be nonfunctional. Other than those miners necessary to conduct maintenance or repairs, miners must be removed from the mine within a reasonable time if a disruption of service prevents the miners from having two or more functional escapeways.

A violation of 30 CFR § 57.11050(a) does not occur if, upon having fewer than two functional escapeways, the mine operator immediately initiates a continuous withdrawal of miners to the surface. Such a withdrawal may be terminated if at least two escapeways become functional during the withdrawal.

No violation of 30 CFR § 57.11050(a) occurs when a second escapeway is out of service because of maintenance or repairs, or other interruption of service, **and** the removal from service does not affect the functional ability of the escapeway to enable miners to reach the surface in an emergency. For example, an interruption of service that would not usually affect the functioning of the escapeway would include the lubricating of hoist ropes, adjustment of hoist gates, replacement of bolts on the shaft guides, or the inspection of shafts, adits, or conveyances. In the above example, if the functioning of the escapeway would not be impaired or affected in any way, i.e., if the work being performed or the inspection of the escapeway can be

immediately terminated and the miners can resume using the escapeway, the escapeway is considered to be properly maintained.

A violation of 30 CFR § 57.11050(a) does not occur if a second escapeway is out of service because it is necessary to use the escapeway to lower mining equipment into, or retrieve mining equipment from, the mine and only those miners facilitating the lowering or retrieving of mining equipment remain underground. At some mines, certain mining equipment can be lowered or retrieved only through a second escapeway. If the second escapeway is out of service because it is used to lower or retrieve mining equipment, the escapeway is considered to be properly maintained, and there would be no violation, if only those miners working to lower or retrieve mining equipment remain underground. As in the situation of miners working underground to perform maintenance or repair on the escapeway itself, the escapeway can be rapidly returned to service and only a few miners are stationed underground.

In setting an abatement time for violations described above, inspectors should, at a minimum, consider the following factors:

- potential hazard or hazards to miners;
- the time required to safely evacuate all but the necessary maintenance personnel from the mine;
- the type of self-rescue devices available;
- the time required to notify all miners underground of the unavailability of an escapeway including instructions for use of the remaining escapeway in the case of an emergency;
- the likelihood of a fire, explosion, or other similar event; and
- the time required to return the affected escapeway to operation.

The violation is abated when at least two escapeways are again fully functional or miners are no longer underground.

Inspectors should confirm that the primary and secondary escapeways from an underground mine are properly designated on a mine's escape and evacuation plan required by 30 CFR § 57.11053. The plan, or appropriate portions of it, is required to be posted at all underground shaft stations, shops, lunch rooms, and wherever miners congregate. Inspectors should review this plan during every regular inspection to verify that it is current, accurate, and posted at the required locations. Inspectors should also confirm that the primary and secondary escape routes are regularly inspected by the mine operator or his representative and marked as required by 30 CFR § 57.11051. Inspectors are responsible for traveling all

designated escapeways during every regular inspection to verify that they are passable and can effectively function in a mine emergency.

- **Hoisting Facilities**

Many mines transport personnel to and from underground areas with hoists. Hoists are also used to convey mine supplies and equipment into the mine and remove damaged equipment, waste materials and ore. In most cases, hoists also serve as the primary or secondary escapeway out of the mine. Usually the best time to inspect these facilities is when the facilities are idled for routine maintenance or during a non-production work shift. Examination of hoists and related facilities or items includes but is not limited to:

- shaft(s)
- wire ropes
- conveyance attachments
- conveyance(s)
- hoist house
- signaling and communication systems
- emergency evacuation procedures (e.g., frequency, method)
- hoist operator (yearly physical examination)

- **Methods of Refuge (Refuge Areas or Chambers) and Inspection**

Under 30 CFR § 57.11050(b), a method of refuge must be provided when an underground miner, using the normal travel means, cannot reach the surface within one hour from at least two separate escapeways. These areas are commonly called refuge areas or chambers. Miners working in a mine which is not provided with two separate escapeways must be provided with a refuge area or chamber they can access within thirty minutes of their work place using the normal means of travel.

Inspectors should be aware that thirty minutes travel time from a miner's work place to a refuge area or chamber may take significantly longer in an emergency situation as opposed to travel time in a non-emergency situation. Inspectors should randomly verify travel times from miner's work areas to refuge areas or chambers during regular inspections and inform mine operators and miners' representatives when this time limit is being approached. Travel time(s) between selected work areas and refuge areas or chambers and discussion(s) conducted with all mine personnel regarding this issue should be documented in an inspector's notes.

Refuge areas or chambers are required to be noted on the mine's escape and evacuation plan required by 30 CFR § 57.11053. Refuge chambers or areas are also required to also meet the requirements of 30 CFR § 57.11052.

M. Inspection of Mobile Equipment Parked on Ready Lines

Many mines have areas where mobile or similar equipment is parked and ready for immediate use. These areas are commonly referred to as "ready lines." Inspectors must inspect equipment for safety defects which is parked at ready lines or similar areas unless such equipment is tagged or marked out of service. The tag should list the defect(s) and prohibit further use until the defect(s) is corrected.

Out of service equipment can also be located in a designated area posted for that purpose. Equipment tagged or marked out of service in these areas should not be inspected. Some mobile equipment can not be moved to a designated area as described above due to defects making it incapable of such a move. Inspectors should not inspect equipment like this if it is tagged or marked out of service and the defect is noted. However, if no tag or marking exists, it should be inspected **if it is safe to conduct such inspection.**

N. Inspection of Impoundments or Tailings Dams

During the process of mining and milling ore or aggregate, waste is created which must, in most cases, be disposed properly. As ore or aggregate is washed or treated with water or chemicals, some waste refuse is created. This refuse is classified as either course or fine. Larger materials such as rocks and pieces of ore are defined as course refuse. Slurry, a combination of silt, dust, water, and bits of ore and clay particles, is considered fine refuse. Slurry is the most commonly disposed of material held in an impoundment. Waste materials, consisting of mostly fine and some coarse refuse, are deposited in impoundments or tailings dams on mine sites. Any structure on a mine or mill site is considered to be an impoundment or tailings dam when it contains mine or mill waste and it meets or exceeds the following measurements-

- Equals or exceeds 25 feet in height and exceeds 15 acre-feet in storage;
- Equals or exceeds 50 acre-feet in storage capacity and exceeds 6 feet in height.

Inspectors should inspect all impoundments or tailings dams during every regular inspection. Documentation of these inspections should be on an MSHA Form 400-127a which should be included with the inspection report. Inspectors should also verify that a completed Tailings and Water Impoundment Inspection Form (MSHA Form 4000-127) is on file with the district dam coordinator.

O. Mine Rescue Teams and Equipment

All underground mines are required to have mine rescue teams and store appropriate equipment for their use. Mines are also required to maintain this equipment and provide regular training to rescue teams. 30 CFR Part 49 establishes minimum requirements for mine rescue teams in the following areas: team size and availability; rescue equipment, storage and maintenance; rescue notification plans; and team member experience, health and training. Inspectors shall inspect rescue team equipment, equipment storage areas, maintenance of equipment, and applicable records for equipment maintenance and team training during every regular inspection. Inspectors should also discuss the adequacy and frequency of training, if possible, with random team members.

These regulations also provide for alternative mine rescue capability for mines which are "small and remote" or those having "special mining conditions." Inspectors should refer to 30 CFR Part 49 in Volume III of MSHA's Program Policy Manual for more information. Inspectors will review the alternative plan approved by the District Manager if a mine has been designated as "small and remote" or has "special mining conditions" as defined in 30 CFR Part 49. Inspectors should confirm that required conditions in the district manager's approved plan are in place or in use at the mine.

P. Inspections of Electrical Equipment, Transformer Stations, and/or Electrical Circuits

Metal and Nonmetal inspectors inspect a wide variety of equipment and machinery during their enforcement activities. In some cases, they may encounter equipment or machinery that, while they may have received some training for inspecting it, they may not be totally qualified or adequately trained to safely inspect it. Such equipment or machinery may include, but is not limited to: certain electrical equipment or machinery, transformer stations, transformer enclosures, and major electrical circuit panels.

Unless inspectors are qualified by experience or education, have the appropriate testing equipment, and are equipped with appropriate protective clothing, inspections of electrical circuits, boxes, transformer stations, etc., other than a visual external inspection, **should not** be conducted. Further, MSHA inspectors should never open energized electrical boxes, transformer enclosures, or similar enclosures.

If hazards or violations of mandatory standards appear to exist in electrical equipment or machinery, an electrician selected by the mine operator should be the individual to open electrical boxes, enclosures, or to conduct appropriate functionality or safety tests. Prior to this activity occurring, inspectors should determine if it will put the electrician

or the inspection party in harms way. Opening boxes, testing circuits, or other similar activities should not be done if it is determined that unacceptable risk exists. If an electrician is not available and hazards or violations of mandatory standards appear to exist in electrical equipment or machinery, inspectors should contact their supervisor to arrange for a qualified MSHA employee to inspect the equipment or machinery.

Q. Training or Retraining of Miners (30 CFR Part 46 and Part 48)

All underground and surface hard-rock mines are required to submit and obtain MSHA approval for 30 CFR Part 48 training plans. Aggregate and crushed stone surface mines and mills are required to develop, without MSHA pre-approval, a 30 CFR Part 46 training plan for their miners. Title 30 CFR Part 46 and Part 48 requires that some training must be provided to new miners before they begin working at a mine, experienced miners who are rehired or hired at a mine, or miners that are transferred to a new work location or are given new work tasks or assignments. Finally, all miners are required to receive annual refresher training. Inspectors should refer to Volume III of MSHA's Program Policy Manual for further information on this subject.

R. Hazard Communication (30 CFR Part 47)

MSHA's Hazard Communication (HazCom) standards at 30 CFR Part 47 require mine operators to: evaluate the hazards of chemicals they produce or use and provide information to miners concerning chemical hazards by means of a written hazard communication program; labeling containers of hazardous chemicals; providing access to material safety data sheets (MSDSs); and initial miner training. HazCom is based on two safety and health principles: miners have a right to know about the chemicals hazards where they work and mine operators have the responsibility to be aware of chemical hazards at their mine. More information on HazCom can be found on MSHA's website. During every regular inspection, inspectors should determine whether:

- a written HazCom plan has been or needs to be developed;
- appropriate miner training in HazCom has been conducted;
- miners have been notified of chemical hazards at the mine;
- appropriate MSDS sheets have been obtained;
- appropriate MSDS sheets are available to miners; and
- applicable labeling of chemicals has been done.

S. Independent Contractors

- **MSHA ID Numbers - Independent Contractors**

Any independent contractor that requests an MSHA identification number should receive one. MSHA does not require contractors to have identification numbers as a prerequisite to bidding for work contracts on mine sites. Inspectors should utilize caution when obtaining identification numbers for subsidiary companies when their controlling company already has an MSHA contractor identification number. In these cases, inspectors should consult with their supervisor prior to obtaining identification numbers.

Unless cited by MSHA, only those independent contractors performing, or with contracts to perform work at mine sites having any of the nine types of services or construction listed below, are required to have identification numbers:

- mine development, including shaft and slope sinking;
- construction or reconstruction of mine facilities including building or rebuilding preparation plants and mining equipment, and building additions to existing facilities;
- demolition of mine facilities;
- construction of dams;
- excavation or earthmoving activities involving mobile equipment;
- equipment installation such as crushers and mills;
- equipment service or repair of equipment on mine property for a period exceeding five consecutive days at a particular mine;
- material handling within mine property including haulage of coal, ore, refuse, etc., unless for the sole purpose of direct removal from or delivery to mine property; and
- drilling and blasting

Each independent contractor who has an identification number is required to use this number on all mine sites. In the event of a change in ownership, MSHA may issue a new identification number based on the facts in each case.

- **Independent Contractor Register**

30 CFR § 45.4(a) requires independent contractors to provide mine operators with certain written information. 30 CFR § 45.4(b) requires mine operators to maintain this information at the mine and to make it available to an MSHA inspector upon request. In the event that a contractor refuses to provide the mine operator with the

necessary information, the contractor is subject to being cited for their failure to comply with 30 CFR § 45.4(a). In addition, if a mine operator refuses to make the required information available regarding a contractor to an inspector, the operator is subject to citation for violation of 30 CFR § 45.4(b).

However, there may be instances where the information required by 30 CFR § 45.4 is not immediately available due to an inadvertent omission which can be quickly corrected by the mine operator or contractor. Inspectors should keep in mind that 30 CFR § 45.4 is intended to give MSHA sufficient information so that an efficient inspection of the site can be conducted. If the missing information is promptly made available so that this goal can be accomplished, there is no violation of 30 CFR § 45.4 and a citation cannot be issued.

Example: Contracts are kept at a mine's central or headquarters office which is not located on the mine site. An independent contractor, contracted by the central office, has begun work on the mine without documentation required under 30 CFR § 45.4(a) provided to mine officials. When the missing documentation was discovered by an MSHA inspector, mine officials called the central office and the required documentation was faxed to the site. In this case, since the required documentation was obtained from the mine's central office in a reasonable time, a violation of the standard did not occur.

- **Compliance Responsibility**

Both independent contractors and mine operators are responsible for compliance with all applicable provisions of the Mine Act, standards and regulations. This overlapping compliance responsibility means that there may be circumstances in which it is appropriate for inspectors to issue citations or orders to both the independent contractor and to the mine operator for a single violation. Enforcement action against a mine operator for a violation also involving an independent contractor is normally appropriate in any of the following situations: (a) when the mine operator has contributed by either an act or by an omission to the occurrence of a violation in the course of an independent contractor's work; (b) when the mine operator has contributed by either an act or omission to the continued existence of a violation committed by an independent contractor; (3) when the mine operator's miners are exposed to the hazard; or (4) when the mine operator has control over the condition that needs abatement.

Inspectors should cite independent contractors for violations committed by their company or their employees. Whether particular provisions apply to independent contractors or to the work they are performing will be apparent in most instances.

Questions regarding such matters should be discussed with the inspector's supervisor. Volume III of MSHA's Program Policy Manual has additional information regarding independent contractors and their compliance with 30 CFR Parts 41, 48 and 50.

- **Issuing Citations and Orders to Contractors**

MSHA's policy is to issue citations and, where appropriate, orders to independent contractors for violations of applicable provisions of the Mine Act, standards or regulations. This policy is based on the Mine Act's definition of an "operator" which includes independent contractors performing services or construction at mines. Inspectors should obtain the necessary information and obtain an MSHA identification number for contractors not having an MSHA number that are found in violation of MSHA standards or the Mine Act.

- **Inspecting all Independent Contractor Work Areas or Equipment**

Inspectors shall inspect areas where contractors are working and the equipment or machinery involved in mining or milling activities during each regular inspection unless circumstances do not allow that inspection. Inspectors shall also document that inspection in their general field notes or document why contractors were not inspected.

Example: ABC Mines employs contract drillers to drill their pit benches; however, the drillers are not physically on site at the time of Inspector Jones' regular inspection. Inspector Jones is told that the drillers will be on site the following day so he returns the next day and inspects the driller's activities, their work areas, and equipment.

Example: ABC Mine employs contract drillers to drill their pit benches; however, they are not on site at the time of Inspector Jones' regular inspection. Jones is told by the mine operator that the drillers will not be on site for about four months. Jones documents that absence in his notes and includes a statement that the drillers and their equipment were not inspected.

T. Review of Required Mine Operator and Contractor Documentation

During each regular inspection, inspectors shall review required mine operator and/or contractor documentation regarding mandatory health, training, and safety regulations. Documentation and/or forms which are required to be reviewed and noted by the inspector during every regular inspection include, at a minimum, the items listed on

MSHA's inspection (Form 4000-49) forms. Reviews of required on-site documentation should go back to the previous regular inspection conducted by MSHA. Further, during the course of their inspection, inspectors should observe whether documentation required to be posted on bulletin boards (e.g., petitions for modification) or available for review (e.g., Material Safety Data Sheets) is posted or available for review.

Documentation such as records of workplace examinations and company maintained pre-operational inspections of mobile equipment shall be reviewed during the course of the inspection so any questions concerning those records can be resolved at that time. Other required records can be reviewed at a time determined by the inspector. Training records, and injury, illness, and employment reports shall be verified by inspectors by reviewing on-site documentation and discussing it with random miners and mine management to assure that this documentation is correct. Conversations with miners or mine management regarding significant issues found during this review should also be documented.

Inspectors should also verify that records at the mine or with the contractor match records on file (e.g., legal identity forms, Part 48 training plans) with MSHA. Part of this process includes determining whether the mine is classified correctly (mill, quarry, etc.) and the primary and secondary (if there is one) commodities are appropriately identified in MSHA's databases.

U. Health Sampling Activities

Evaluating miners' exposure to contaminants is a required part of every inspector's regular inspection activities. Metal and nonmetal mines utilize a wide variety of mining and milling techniques and equipment and, as a result, miners are exposed to a diverse group of environmental conditions. In that regard, in conjunction with established Agency health priorities, inspectors must use a strategy to review a variety of potential health hazards at each mine and then, if warranted, select "high risk" occupations for personal sampling. Walk-around observations, reviews of materials mined and/or produced, determination of the chemicals used in the mining or milling process, discussions with miners and mine management, and direct-read area sampling should be used to determine which occupations or areas are "high risk" and, if warranted, should be sampled.

The on-site contaminant assessment, should be accomplished while inspectors are inspecting mine work areas and equipment. Inspectors should carefully document their observations and note why they chose to conduct sampling or elected to not conduct health sampling if they determine that the operator appeared to be in compliance with

applicable health standards. Information on appropriate contaminant sampling procedures is in Metal and Nonmetal's Health Inspection Procedures Handbook.

V. Post-Inspection (Close Out) Conference

A post-inspection conference shall be conducted after the completion of each regular inspection. Representatives of the mine operator and miners shall be given the opportunity to participate in this conference. Depending on circumstances at the time, on-site independent contractors may be included in this conference or, if appropriate, a separate conference may be held. Joint conferences are encouraged; however, inspectors may hold separate conferences when requested by management, labor, or contractor representatives.

All enforcement actions taken during the inspection shall be discussed and documented on MSHA Form 4000-49c during the close-out conference. Inspectors shall also inform conference participants whether special actions (e.g., Special Assessment, Possible Knowing and Willful Violation, Flagrant Violation) will be recommended for any issued citation or order. Other items that should be discussed are conditions at the site relative to safety and health, and root causes of enforcement actions, accidents, injuries, or illnesses. Inspectors **should** highlight positive occurrences of safe or healthful practices or conditions seen during the inspection.

At the conclusion of the close-out conference, inspectors will inform mine operators and/or independent contractors that they may request a safety and health conference with the District Manager or his designee to discuss citations and/or orders issued during the inspection. Documentation of this conference, including relevant comments made by the mine operator, miners' representative, or independent contractor regarding enforcement actions or safety and health issues shall be noted by inspectors on the conference worksheet.

Note: For large mines and mills that take longer than one week to complete an inspection, inspectors may conduct "mini-closeout" conferences with all relevant parties at the end of each week they are on site. These conferences should, to a lesser degree than post-inspection conferences, address relevant safety and health issues and citations and/or orders issued to date. Dates, discussions, findings, and conversations made during these "mini-closeout" conferences shall be documented in the inspector's general field notes or on MSHA Form 4000-49c.

W. Documentation of Inspections

All citations, citation and general field notes, photographs, mine operator or miner supplied documents, MSHA or ATF inspection forms (e.g., impoundments, explosives) shall be included in inspection or investigation reports.

Inspectors should remember that MSHA's Regular Inspection Form (MSHA Form 4000-49B) includes a detailed list of items to be reviewed and completed during a regular inspection. To maximize an inspector's time, documentation contained in an inspector's general field notes **should supplement, not duplicate**, that itemized list.

- **On Site** - Documentation shall be substantially completed by inspectors on general field, health, citation or order notes while they are on mine or mill sites during all enforcement activities. In particular, general field note documentation shall include all areas, equipment, work practices, and other similar activities observed by inspectors during the regular inspection. Inspectors should also document that the mine was inspected in its entirety.

Documentation should detail those portions of a mine that were not inspected (e.g., barricaded areas, abandoned workings) and the specific reason(s) for the non-inspection. Finally, statements made by the mine operator, miners' representative, miners, or independent contractors, concerning enforcement actions or other pertinent safety and health topics should be noted on the inspector's conference worksheet.

- **Off-Site** - Special Assessment Review Forms, Possible Knowing and Willful Review Forms, Flagrant Violation Review Forms, and similar documentation must be completed by inspectors prior to submission of the regular inspection report to their supervisor. Inspection report submissions should not be delayed because health analysis results (e.g., silica dust, welding fume analysis) have not been received. A separate health report is required to be submitted when the sampling analysis is received. More information on completing these forms is in MSHA's Citation and Order Writing Handbook.

CHAPTER SIX - GENERAL PROCEDURES FOR OTHER INSPECTIONS OR INVESTIGATIONS

Inspections other than regular inspections usually address a specific subject or a limited area of a mine or mill, such as hazard complaints, compliance follow-ups, or gassy mine inspections. Metal and Nonmetal inspectors spend the majority of their time every year conducting mandated inspections. However, there are other mine inspections or investigation activities in which inspectors may be involved at any given time. The following procedures should be utilized when these activities are conducted.

A. Compliance Follow-up Inspections

Inspectors should notify mine management of their arrival at the site and then proceed directly to the location of the non-terminated citations or orders. Once inspectors arrive at the site in question, the status of outstanding citations or orders should be determined and appropriate action taken.

B. Section 103(i) Inspections (Gassy Mine Inspections)

Inspectors should notify mine management of their arrival at the site and then proceed directly to an appropriate area underground to take required methane measurements. Inspections of gassy mines are required to be conducted -

- Every 5 working days, at irregular intervals, in mines -
 - liberating more than one million cubic feet of methane or other explosive gas in a 24 hour period; or
 - where a methane or other gas ignition or explosion has occurred in such mine which resulted in death or serious injury at any time during the previous five years; or
 - where some other especially hazardous condition exists.
- Every 10 working days, at irregular intervals, in mines liberating more than 500,000 and up to one million cubic feet of methane or other explosive gas in a 24 hour period.
- Every 15 working days, at irregular intervals, in mines liberating more than 200,000 and up to 500,000 cubic feet of methane or other explosive gas in a 24 hour period.

C. Miscellaneous Inspections or Other Enforcement Activities

Inspectors should proceed directly to the appropriate site in the mine once they have announced their arrival to mine management. Enforcement action may or may not occur during these inspections depending on the circumstances.

D. Compliance Assistance Visits (CAV)

When conducting a CAV, the inspector should proceed directly to the site of the requested visit, after announcing his or her arrival to mine management. Inspectors will issue notices when they observe violations of any mandatory standard in the affected area. Mine operators should be informed that a future regular inspection will be conducted and that these notices will be reviewed at that time to ensure that the items noted during this visit have been corrected. If, during the regular inspection following the CAV, an inspector determines that a noted condition or practice has not been corrected, an appropriate citation or withdrawal order will be issued. Inspectors will not reference previously issued CAV notices in citations or orders.

Note: Even though citations can not be issued in the area of the requested CAV during this visit, enforcement action will be initiated by inspectors should an imminent danger situation be observed during this visit.

E. Other Activities at Mine Sites

These activities are non-enforcement, usually on-site, visits intended to provide information to mine operators and/or miners regarding safe or healthy work practices, conditions, procedures, or accident or illness trends.

F. 30 CFR Part 50 Audits, Employment, Injury, and Illness Reporting and Recordkeeping Requirements

- **When Part 50 Audits Are Required**

A 30 CFR Part 50 audit is required at mines having a chargeable fatality. However, a mine which has been audited within a year preceding the fatality need not be audited again, unless the district manager or Administrator for Metal and Nonmetal determines otherwise. An audit is also required at mines selected as Sentinels of Safety award candidates.

- **Part 50 Audit Procedures**

Inspectors will announce their arrival at the site to mine management and inform them that an audit of their employment, injury, and illness records will be conducted. During this activity, the operator's accident, injury, illness, employment, and hours worked documentation should be reviewed and compared against data reported to MSHA to verify that the information reported to the Agency is correct and has been filed within the required time frames.

Mine operators or contractors may be reluctant to share selected personal information with inspectors regarding employee injuries or illnesses which may make it difficult for inspectors to verify the operator's reporting accuracy. Inspectors should consult with their supervisors prior to taking enforcement actions if mine operators or contractors refuse access to or only grant partial access to such records regardless of the reasons given for this refusal. In addition, inspectors should verify compliance by using other sources including interviews with mine management, miners' representatives, and miners. In some cases, examination and comparison of state workers' compensation records to MSHA reports may be appropriate. Personal information collected during an audit shall be protected from public disclosure as required by the Freedom of Information Act (5 U.S.C. § 552) and the Privacy Act (5 U.S.C. § 552a).

- **Part 50 Documentation Requirements for Independent Contractors**

Independent contractors who perform any of the nine types of services or construction listed in Chapter Five, Section R, of this Handbook must report accidents, injuries and illnesses as required under 30 CFR 50.20. In addition, they must maintain records of those reports under 30 CFR 50.40 and they must file quarterly employment reports under 30 CFR 50.30. Except as otherwise determined by the District Manager, independent contractors not meeting the above mandates are not required to comply with the above regulations. To minimize the burden of quarterly employment reporting, for those contractors required to report, only a single MSHA Form 7000-2 must be completed and filed for any calendar quarter in which a contractor has worked.

In the case of mine operators, information necessary to complete an MSHA Form 7000-2 by an independent contractor is the average number of employees and the total employee hours involved in the work being reported. However, this employment information must be developed separately for surface mines and the underground mines where the work being reported was performed.

In addition, to assure compatibility of MSHA statistics, separate MSHA 7000-2 forms are to be used for work performed by contractors at metal and nonmetal mines and at coal mines. For work performed at underground mines, this information must be separated for work performed underground and for work performed on the surface of underground mines, and then entered on the appropriate line. For work performed at surface mines, employment information must be separated for the several types of surface mines indicated on the form (e.g., strip, open pit, quarry, dredge, etc.), and then entered on the appropriate line. When work being reported on any particular line was performed at more than one site, the required employment information should be computed together.

G. Hazard Complaint Inspections

Inspectors should proceed directly to the site of the alleged hazard(s) once they have announced their arrival at the site to mine management. Inspectors should also refer to MSHA's Hazard Complaints Procedures Handbook when conducting these types of inspections.

H. Accident Investigations

MSHA's accident investigation procedures are designed to result in efficient and orderly collection of all information relevant to a mining accident and to provide guidance for investigators in determining causes. Upon conclusion of the investigation the review and analysis of all relevant information, MSHA issues a report regarding its findings and conclusions. The purpose of the report is to disseminate information to the mining community and others for purposes of accident and illness prevention.

MSHA's accident investigations include determinations of whether violations of mandatory standards, regulations, or the Mine Act contributed to the event. In addition to providing very important information, the findings of these investigations provide a basis for potentially guiding future MSHA health and safety standards, procedures, and policies. Inspectors should be familiar with and follow the procedures in MSHA's Accident/Illness Investigations Procedures Handbook when conducting accident or illness investigations.

I. Petition for Modification Investigations

At times, mine operators or miners' representatives may ask that MSHA modify the application of **any mandatory safety standard**. MSHA may grant this request if it is determined that an alternative method of achieving the result of the standard exists which will guarantee the same measure of protection of the standard or if application of

the standard at the mine will result in a diminution of safety to the miners of that mine. Section 101(c) of the Mine Act **only** allows petitions for modification requests to be filed for relief from application of mandatory safety standards. Procedures for conducting these investigations and submitting the results of those investigations are in MSHA's Coal and Metal and Nonmetal Petition for Modifications Handbook.

As required by 30 C.F.R. § 44.9, mine operators with no representative of miners are required to post a copy of each request for a petition for modification on the mine's bulletin board. This request is required to remain posted until a ruling on the request for a petition becomes final.

The filing of an appeal of a citation or order by a mine operator or contractor with the Federal Mine Safety and Health Review Commission (Commission) or the filing of a petition for modification does not relieve the operator or contractor of the responsibility of complying with the cited mandatory standard by the established due date. These activities are not a basis to extend or terminate any citation unless inspectors are directed otherwise.

CHAPTER SEVEN - INSPECTION NOTES, PHOTOGRAPHS AND OTHER DOCUMENTATION

A. Documentation

Inspectors are responsible for accurately documenting information collected or observed during on-site activities and entering it promptly, if appropriate, into MSHA's database. They are also responsible for assuring that the information they collect which is not entered into MSHA's database (e.g., safety or health field notes) is accurate and represents conditions or activities present at the time the notes were taken. Finally, they are responsible for accurately completing applicable Agency forms relative to the activity conducted.

Inspectors are also responsible for taking clear, concise, detailed, and factual notes in ink for all inspections or investigations, particularly those involving enforcement activities. Enforcement activities include activities where citations and orders could be or will be issued. Examples of these activities include, but are not limited to:

- Regular inspections
- Compliance follow-up (spot) inspections
- Hazard complaint inspections (verbal and written)
- Attempted inspections
- Miscellaneous inspections or other enforcement activities
- Gassy mine inspections (103i)
- Accident investigations
- Part 50 audits

Complete, legible, and factual notes are essential to evaluate and assess enforcement actions, conduct inspection conferences, defend enforcement actions, accurately respond to correspondence, determine what portions of a mine, mill, or equipment were or were not inspected, and facilitate testimony in judicial proceedings. When conducting any enforcement activity, general field notes and citation and order documentation shall be substantially completed while inspectors are on the mine or mill site.

Further, arrival and departure times shall be documented in the inspector's general field notes for each day he or she conducts or is involved with a regular inspection. The lead inspector of a group of inspectors conducting inspections should also take appropriate steps to assure that each inspector's notes are identifiable as coming from a particular inspector.

Example: Inspector Joe Jones was selected as the lead inspector for a group of inspectors assigned to conduct a regular inspection of a large open pit mine. Inspector Jones asked each inspector in the group to place his or her initials on every page of their general field notes so that the inspector generating the notes could be easily identified in the future.

B. Documenting Confidential Communications, Documents, or Trade Secrets

- **From Miners**

There are times when an inspector engages in communications or receives documents from miners related to safety and health issues at a mine. This communication may be verbal or in writing. Inspectors should follow the procedures in MSHA's Hazard Complaint Procedures Handbook if informed by a miner of a hazardous condition at the mine.

MSHA considers these types of communications to be confidential if the miner indicates that he or she did not want the mine operator to know what was said or given to the inspector. In most instances, statements made or documents given to an inspector by a miner outside the presence of a mine management representative are considered confidential.

Notes generated by inspectors as a result of these communications should be written on a separate general field note and marked "**confidential**" so that they are appropriately identified, protected from inappropriate disclosure, and appropriately preserved. Documents or photographs given to inspectors should also be labeled in the same manner with documentation indicating who gave the inspector the material and the date it was given to him or her.

- **From Mine Operators**

Inspectors are sometimes given documentation or photographs from mine operators or miners that detail trade secrets or similar confidential business information. Under the Trade Secrets Act, 18 U.S.C. § 1905, federal employees are required to keep trade secrets information confidential. Inspectors should label this type of material "**confidential.**" A general field note should also be attached to the item(s) identifying the individual (by name and title) who gave the inspector the documents or photographs, why the information should be protected (e.g., trade secret), and the date it was given to the inspector.

- **From Miner's Relatives and/or Non-Miners**

Inspectors also receive verbal or written information about safety, health, and other conditions at a mine from miners' wives, relatives, or other non-miners. Inspectors should follow the procedures outlined in MSHA's Hazard Complaint Procedures Handbook if they are informed by one of these individuals of a hazardous condition at a mine. Unless otherwise indicated by the individual providing the information, notes recorded by the inspector as a result of these communications should be written on a separate MSHA note form and marked "**confidential**" so that they are appropriately identified, protected from inappropriate disclosure, and appropriately preserved. Documents or photographs given to inspectors by these individuals should also be labeled in the same manner with documentation indicating who gave the inspector the material and the date it was given to him or her.

C. Required Documentation

Regular Inspections

Inspectors shall document, at a minimum, the following information in their general field notes:

- Dates of each day spent on site;
- Daily arrival and departure times from the mine or mill site;
- Names and titles of company officials, miners' representatives, and miners who either traveled with the inspection party, attended the pre- or post-conference, or discussed safety and health concerns with the inspector;
- Relevant statements made during pre- and post-inspection conferences;
- Fixed and mobile equipment and areas of the mine that were inspected including equipment and areas of the mine that were not inspected. Inspectors should document with specificity why equipment or areas of the mine or mill were not inspected;
- Explosives storage magazines, facilities, and relevant records inspected;
- Barricaded or abandoned areas of the mine that were inspected including barricaded or abandoned areas of the mine that were not inspected. Inspectors should document with specificity why barricaded or abandoned areas of the mine were not inspected;
- Areas of major construction or new projects;
- Relevant conversations with miners, miners' representatives, and mine operator's representatives regarding issues raised during the inspection and/or safety and health issues at the mine or mill; and

- Other relevant safety and health information.

Inspectors should remember that MSHA's Regular Inspection Form (MSHA Form 4000-49B) includes a detailed list of items required to be reviewed and completed during a regular inspection. To maximize an inspector's time, documentation contained in an inspector's general field notes **should supplement, not duplicate**, that itemized list. Inspectors should follow the requirements of MSHA's Health Inspection Procedures Handbook for documenting health sampling activities conducted during any inspections. Documentation of the above information shall be done on general and health (if appropriate) field notes and it shall be substantially completed while the inspector is on the mine or mill site.

All Other Enforcement Activities

Inspectors shall document, at a minimum, the following information in their general field notes:

- Names of company officials, miners' representatives, and miners who either traveled with the inspection party, attended a pre- or post-conference, or discussed safety and health concerns with the inspector;
- Relevant statements made by miners, miners' representatives, and mine operator's representatives; and
- Specific equipment and/or mine areas that were inspected.

Documentation on general and health (if appropriate) field notes shall be substantially completed while the inspector is on the mine or mill site.

Non-Enforcement Activities

Inspectors shall document, unless instructed otherwise, the following information in their general field notes:

- Purpose of their visit; and
- Name(s) of the individuals contacted during the visit.

Documentation on general and health (if appropriate) field notes shall be substantially completed while the inspector is on the mine or mill site.

D. Required Documentation for Citations and Orders

Section 104(a) of the Mine Act requires that each citation or order be in writing and describe with particularity the nature of the violation, including a reference to the provision of the Mine Act, standard, rule, regulation, or order alleged to have been violated. In addition, the citation is required to fix a reasonable time for the abatement of the violation. "One-line" citation or order narratives or documentation of such violations is not acceptable under any circumstances because they generally do not meet the requirements of Section 104(a) of the Mine Act. To assure that quality citations and orders are issued, inspectors shall document the following information at the time it was observed on their citation and order note forms:

- **Basic violation documentation -**
 - Date;
 - Time;
 - Specific location (if applicable);
 - Diagrams (if applicable);
 - Measurements (if applicable);
 - Statements of affected miners, miners' representatives, and mine management concerning the cited condition or practice;
 - Equipment serial and/or model numbers;
 - Relevant information obtained from manufacturer's manuals or similar materials;
 - Mine operator's policies, procedures, etc., relevant to the violation; and
 - Management's knowledge of, or lack of knowledge of, the violation.
- **Gravity documentation -**
 - Exposure, or lack of exposure, of all miners to the cited condition or practice;
 - Number of miners potentially affected by the violation (assuming continued mining were to occur);
 - Seriousness of the cited condition or practice; and
 - Type or nature of potential injury.
- **Negligence (all items that are applicable to the cited condition or practice)-**
 - Was the cited condition or practice obvious?
 - Was the cited condition or practice extensive rather than isolated?
 - How long had the condition or practice existed?

- How often and how many times did the operator's agent travel or work in the area?
- Was the mine operator's agent told of the condition or practice?
- Did the seriousness of the hazard justify increased attention by the mine operator to prevent or correct it?
- Had the same or similar violations been previously cited at the mine?
- Had the mine operator or a miner inspected the cited area prior to the citation being issued?
- Was the violation the result of a miner's or an agent of the operator's conduct?
- Had the miner or miners received training? Was it effective or adequate?
- Did an agent of the operator participate in or direct the activity leading or contributing to the violation?
- Did mine records or mine management actions indicate an attempt to correct the cited condition or practice?
- Did the mine operator have rules, policies, or procedures to report and correct these types of hazards?
- Did the mine operator enforce those rules, procedures, or policies?
- Did an agent(s) of the operator discuss the violation in meetings?
- Were miners warned or disciplined for acts associated with the violation?
- Was an agent(s) of the operator aware of the requirements of the cited standard?

E. Photographs

An accurate photograph taken at the time a violation was observed enhances an inspector's notes, refreshes memories, and substantiates the evaluation of the violation. Photographs also assist in resolving differences of opinion between mine operators and inspectors as to conditions present at the time. Pictures also benefit both parties by expediting settlement agreements, proposed penalty assessments and administrative review proceedings by providing a pictorial illustration of the area or equipment in question. Inspectors should exercise caution when taking photographs and never expose themselves, or allow others involved with the picture, to potential safety hazards.

- **Taking Photographs**
 - Does the photograph depict the cited area or equipment or other relevant condition or practice?
 - Was more than a single photograph needed to accurately depict the condition?

- Was the photograph taken at the time the condition was observed or at a different time?
- Does the photograph accurately portray the hazard or potential hazard miners may encounter?

- **Documentation of Photographs**

Photographs taken during enforcement activities should be individually mounted on a Photo Mounting Worksheet (MSHA Form 4000-125) and included with the inspection or investigation report. The form should be completed in its entirety for each photograph. Only photographs deemed relevant (e.g., photographs of violations, accident scenes) to enforcement activities should be included with reports. Required information includes:

- MSHA Mine Identification Number
- Event Number
- Citation or Order Number
- Photograph Number
- Inspector's Name

- **Photographs - Other Persons**

On many inspections or investigations, other persons in the inspection party may also take photographs of cited conditions or practices. If this activity occurs, inspectors should document the following information in their general field notes:

- That another person (e.g., mine operator, miners' representative, other person) took a photograph of the condition or equipment that was cited by the inspector;
- If the photograph taken by the mine operator, miners' representative, or other person was taken at the same time as the inspector took his or her photograph;
- Whether the photograph was taken with a digital or film camera or a camera similar to a Polaroid™ camera; and
- The name and title of the person who took the photograph.

F. Completion and Submission of Other Required Documentation

Possible Knowing/Willful Review Violation Form (7000-20)

These forms must detail the facts and circumstances justifying the inspector's recommendation for conducting a possible knowing or willful investigation. Completion and submission of these forms is mandatory for:

- 107(a) orders of withdrawal with 104(a) and 104(d) citations;
- 107(a) orders of withdrawal with 104(d) orders;
- 104(d) citations and orders of withdrawal which are "S&S" with an evaluation of at least "high" for negligence;
- Flagrant violations; and
- Citations issued for working in violation of an order of withdrawal.

The above review requirements may be altered by the Administrator or District Manager.

Once the form has been completed and reviewed by the supervisor, the District Office shall be sent a packet that includes:

- The original Possible Knowing/ Willful Violation Review Form;
- A copy of the mine Legal Identity Report;
- A copy of relevant general field notes, if any;
- A copy of the citation/order notes;
- Appropriate photographs;
- A copy of the inspector's conference worksheet;
- A copy of the relevant citation(s) or order(s); and
- A copy of all citation or order modifications.

Each photograph should be mounted on a completed Photo Mounting Worksheet (MSHA Form 4000-125). The packet shall be submitted to the District Office within five business days following the date the citation(s) or order(s) was issued. Any exceptions to this policy shall be approved in advance by the field office supervisor with concurrence from the District Office.

Special Assessment Review Form (7000-32)

Special assessment is the process for determining an appropriate civil penalty without using the penalty tables in 30 CFR 100.3. **Special assessment is mandatory** for the following types of violations:

- Violations for which the daily penalty has been invoked under Section 110(b) of the Mine Act;
- Violations issued to miners for smoking or carrying smoking materials under Section 110(g) of the Mine Act;
- Flagrant violations as defined in Section B of the Mine Improvement and New Emergency Response Act of 2006 (MINER Act). The SAR form check box shall be marked to identify all flagrant violations identified for special assessment; and
- Violations of 30 CFR 50.10 for failure to provide immediate notification to MSHA of a death of an individual at a mine, or an injury or entrapment of an individual which has reasonable potential to cause death.

The following violations are required to be **reviewed** for special assessment:

- Section 104(a) citations for violations of certain sections of the Mine Act (see the matrix at the end of this section); and
- Violations that contributed to a fatality or serious injury.

However, **special assessment is not mandatory** for those violations as they may involve circumstances for which MSHA determines, in its discretion, that special assessment is not warranted.

Violations involving discrimination under Section 105(c) of the Mine Act and personal liability under Section 110(c) of the Mine Act are not required to be reviewed for special assessment because they are not recommended for assessment by the District Manager. The above review requirements may be altered by the Administrator or District Manager, as appropriate.

Completion of a Special Assessment Review form (MSHA Form 7000-32) is **mandatory** for each violation that is reviewed for special assessment. The completed SAR form must describe the facts and circumstances justifying the recommendation for special assessment. The Office of Assessments will review each recommendation for special assessment and make the final decision, conferring with the Coal or Metal and Nonmetal Mine Safety and Health program areas as necessary.

The following matrix is intended to assist enforcement personnel in determining whether a violation is required to be special assessed or reviewed for special assessment.

**Violations Requiring Submission of an
MSHA Special Assessment Review Form**

Category	Negligence Evaluation				
	None	Low	Moderate	High	Reckless Disregard
Fatality / Serious Injury	Yes	Yes	Yes	Yes	Yes
Section 104(a) citations for violations of the following sections of the Mine Act: 103(a); 103(f); 103(h); 103(j); 103(k); 104(b); 104(d); 104(e); 104(g)(1); 107(a); or 110(j)	Yes	Yes	Yes	Yes	Yes
Flagrant Violations*	N/A	N/A	N/A	Yes	Yes
30 CFR 50.10 Immediate Notification Violations* 1) Death of an individual at a mine 2) Injury of an individual at the mine which has a reasonable potential to cause death 3) Entrapment of an individual at the mine which has a reasonable potential to cause death	Yes	Yes	Yes	Yes	Yes
110(b) Daily Penalty for Failure to Abate*	Yes	Yes	Yes	Yes	Yes
110(g) Smoking or Smoking Materials Violations Cited to Miners*	Yes	Yes	Yes	Yes	Yes
*Special assessment required					

Once the SAR form has been completed by the inspector and reviewed and approved by the supervisor, the District Office shall be sent a package that includes:

- The completed Special Assessment Review Form;
- A copy of the mine Legal Identity Report;
- A copy of relevant general field notes, if any;
- A copy of the citation/order notes;
- Appropriate photographs;
- A copy of the inspector's closeout conference worksheet (if applicable);
- A copy of the relevant citation(s) or order(s); and
- A copy of all citation or order modifications.

Each photograph should be mounted on a completed Photo Mounting Worksheet (MSHA Form 4000-125). The package should be submitted to the appropriate District Office within five business days after completion of the inspection or investigation. Any exceptions to this policy shall be approved by the field office supervisor.

CHAPTER EIGHT - INSPECTOR'S PORTABLE APPLICATION FOR LAPTOPS (IPAL)

A. IPAL Program

IPAL is an MSHA computer program which assists inspectors in maintaining inspection data and follow-up requirements in a Windows™ environment. The program interfaces with MSHA's Standardized Information System (MSIS) and allows a seamless transfer of enforcement and inspector data into and out of the system.

B. Inspector's Responsibilities

Inspectors are responsible for assuring that information they have entered into the IPAL program for inspections and associated activities is transmitted to MSIS on a regular and timely basis so that Agency data is updated appropriately. Information uploaded to the IPAL Data Center is processed into MSIS each night. The inspector's Weekly Activity Reports are also included in the IPAL uploads once 40 hours are accounted for during the week.

Updated download files are usually available twice each week. Inspectors should run the Transaction Generation program prior to importing any new data into their laptops. Transaction Generation marks all uploaded transactions as no longer new. This activity allows the database to be updated with newer information included in the MSIS download.

To help prevent loss of inspection data, it is recommended that inspectors retain the 10 most current IPAL upload files. These files can be kept on the D: drive of the laptop and regularly copied to the H: drive on the network. As a new file is generated, the oldest file may be deleted to maintain a constant ten (10) files. This file retention is helpful when system problems are experienced processing IPAL uploads into MSIS or a laptop malfunctions.

The recommended process for IPAL transactions is for inspectors to perform a data upload upon return to their respective field office. This information will be processed into MSIS. Once the upload is complete, a Transaction Generation should be run in IPAL. Prior to leaving the office for inspection activities, usually Monday morning, an IPAL download should then be done to update the laptop with the most current information in preparation for the week's planned activities.

In addition to downloading data (usually on Monday mornings), inspectors should also remain connected to the network in order to receive the latest updates to the various resource documents, along with any required software patches and anti-virus updates.

C. Inspector Resources Available in IPAL Download

Printed inspection material is available, via the IPAL download, in electronic format on the inspector laptops. Resources available in the IPAL download include the 30 Code of Federal Regulations, Mine Act, MSHA's Program Policy Manual and Program Bulletins, Agency procedures handbooks, and the IPAL User's Guide. This material is kept current and is searchable as needed. These downloads eliminate the need to carry printed manuals and materials in the inspector's car. Links to these electronic documents are found in the Inspector Resources folder on the laptop desktop.

APPENDIX

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Regular Inspection Information

U.S. Department of Labor
Mine Safety and Health Administration



Date(s)		ID No.	Event No.
Inspection No.	Travel Area	Mine Status	Telephone
Company		Mine	City, State

Directions to Operation _____

Mine Type	Mining Method	Product		
No. of Employees	Work Schedule	Hours/Shift	Shifts/Day	Days/Week

MSHA Inspector(s) _____
 Inspection Party _____

Office Files Review

1. Past inspection reports and MIS printouts reviewed? Yes No
2. Number of Health Samples Taken: Noise _____ Dust _____ DPM _____ Other (list) _____
3. Sample following GPRA Goals? Yes _____ No _____
4. 104 (d) series? Initial Action: _____ Date _____ Cit./Ord. No. _____ N/A
5. 104 (e) pattern of violations? Yes No
6. Does this Mine have Equipment/Areas with "P" Codes? Yes No "D" Codes? Yes No
7. Does the Mine have any Petitions for Modification? Yes No Reviewed? Yes No
8. Miner's Representative Meets Requirement of 30 CFR Part 40 Yes No

Other pertinent file information: _____

Pre-inspection Conference

	Date
--	------

Company Attendees _____

Miners Representative _____

Address	Telephone
---------	-----------

Comments/Issues _____

	Issued	Terminated	Extended	Modified	Replaced by Order	Vacated	Outstanding
Citations							
Orders			N/A		N/A		

Number of Special Assessment Reviews Completed _____

Number of Possible Knowing & Willful Reviews Completed _____

Supv. Initial _____

Regular Inspection Information



Recordkeeping				Event No. _____		
Part 41 - Legal ID reviewed with mine operator?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Commodity correct?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Commodity: _____
Part 45 - Ind. contractor list reviewed?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>			
Part 46/48 - Enforceable? Check one	46 <input type="checkbox"/>	48 <input type="checkbox"/>				
Training plan reviewed?	Yes <input type="checkbox"/>	No <input type="checkbox"/>				
Number of Training Forms reviewed:	_____					
Part 47 - Hazard communication program reviewed?	Yes <input type="checkbox"/>	No <input type="checkbox"/>				
MSDS on-site?	Yes <input type="checkbox"/>	No <input type="checkbox"/>				
Part 50 - Reviewed?	Yes <input type="checkbox"/>	No <input type="checkbox"/>				
Comments:	_____					

Part 56 - Review the following records, maps, plans, and logs as well as those items required to be posted on the mine bulletin board

		Reviewed	N/A	Citation Issued	
56.3203	Rock bolt tests & certification	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
56.4201	Firefighting equipment inspection	<input type="checkbox"/>		<input type="checkbox"/>	Date _____
56.4330	Firefighting, evacuation & rescue	<input type="checkbox"/>		<input type="checkbox"/>	
56.12028	Continuity & resistance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Date _____
56.13015	Air receivers/pressure vessels	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
56.13030	Boiler inspection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
56.14100	Equipment safety defects	<input type="checkbox"/>		<input type="checkbox"/>	
56.18002	Examination of working places	<input type="checkbox"/>		<input type="checkbox"/>	
56.18010	First aid training	<input type="checkbox"/>		<input type="checkbox"/>	Date _____
56.18014	Emergency medical service/transportation	<input type="checkbox"/>		<input type="checkbox"/>	
56.19022	Hoist rope measurement	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
56.19023	Hoist rope examination	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
56.19057	Hoist operator physical examination	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
56.19121	Hoist inspection, testing and maintenance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Part 62

62.110(e)	Miner notification	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
62.110(e)	Records of notification	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
62.171(c)	Audiometric test records	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
62.175(b)	Reportable hearing loss	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
62.180(b)	Hearing conservation program training	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Was entire mine inspected? Yes No If not explain: _____

Regular Inspection Information



Recordkeeping

Event No. _____

Part 41 - Legal ID reviewed with mine operator? Yes No Commodity correct? Yes No Commodity: _____

Part 45 - Ind. contractor list reviewed? Yes No N/A

Part 47 - Hazard communication program reviewed? Yes No MSDS on-site? Yes No

Part 48 - Training plan reviewed? Yes No Number of Form 5000-23 reviewed: _____

Part 49 - Mine rescue requirements met?
 Mine rescue compliance statement or alternate plan on file with MSHA? Yes No N/A
 Mine rescue compliance statement or alternate plan posted at mine? Yes No N/A

Part 50 - Reviewed? Yes No Comments: _____

Part 57 - Review the following records, maps, plans, and logs as well as those items required to be posted on the mine bulletin board

	Reviewed	N/A	Citation Issued			
57.3203	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
57.4201	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
57.4330	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Date _____		
57.4361	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Date _____		
57.5040	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
57.5065(a)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
57.5066(b)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
57.5066(c)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
57.5070(b)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
57.5071(c)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
57.5071(d)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
57.8520	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
57.8525	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
57.11053	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
57.12028	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Date _____		
57.13015	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
57.13030	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
57.14100	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
57.15030	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
57.18002	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
57.18010	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
57.18014	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Date _____		
57.19022	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
57.19023	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
57.19057	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	57.22204	Daily fan insp. Class I-A, II-A, III, V-A	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
57.19121	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	57.22229	Weekly testing of class I-A, III, V-A	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
57.5060	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	57.22230	Weekly testing of class II-A gassy mines	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

Part 62

62.110(e)	Miner notification	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
62.110(e)	Records of notification	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
62.171(c)	Audiometric test records	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
62.175(b)	Reportable hearing loss	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
62.180(b)	Hearing conservation program training	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Was entire mine inspected? Yes No If not explain: _____

Regular Inspection Information

U.S. Department of Labor
Mine Safety and Health Administration



Closeout Conference	Date	Event No.
----------------------------	------	-----------

Attendees

Operator/Miners Representative/Inspector Comments

Notified of possible special assessment?	Yes <input type="checkbox"/>	N/A <input type="checkbox"/>
Notified of possible knowing/willful violation?	Yes <input type="checkbox"/>	N/A <input type="checkbox"/>
Notified operator they can request safety & health conference?	Yes <input type="checkbox"/>	N/A <input type="checkbox"/>
Best practices reviewed?	Yes <input type="checkbox"/>	N/A <input type="checkbox"/>

Miscellaneous Inspection Information

U.S. Department of Labor
 Mine Safety and Health Administration



Date(s)	ID No.	Event No.
Inspection Code		Telephone
Company	Mine	

Directions to Operation _____

MSHA Inspector(s) _____

Inspection Party _____

	Issued	Terminated	Extended	Modified	Replaced by Order	Vacated	Outstanding
Citations							
Orders			N/A		N/A		

Number of Health Samples Taken: Noise Dust DPM Other (list)

Inspection Justification/Comments _____

Supv. Initial _____



Mine ID Number: _____ Event Number: _____

Date/Time: _____ Inspector: _____

Citation/Order Number: _____ Photo Number: _____

Location/Photo Description: _____



Note: This form should be completed for all dams classified as having high or significant hazard potential and for low-hazard-potential dams which either are 25 feet or more in height (and can store more than 15 acre-feet) or can store 50 acre-feet or more (and exceed 6 feet in height). For the same Mine ID Number, report each dam that meets any of these criteria on a separate form. Fill out as much information as can be obtained from the operator or directly determined.

MINE ID _____ Inspector _____

Date _____

Mine Name _____

Mining Company _____

Mine Product _____ MSHA District _____

MSHA Field Office _____

Name of Dam or Impoundment _____

Dam ID Number _____

(The Dam ID Number is assigned by the District and is the MSHA Mine ID Number followed by -01, -02, etc. so that individual mines at the mine that meet the hazard potential or size criteria have unique numbers.)

State _____ County _____

Does a state agency regulate this dam? Yes ___ No ___

If So, which State Agency? _____

Type of information provided on this form: New ___ Update ___

Is impoundment currently under construction? Yes ___ No ___

Dam owner's contact person _____ Phone # _____

The dam was designed by _____

IMPOUNDMENT FUNCTION:

_____ Tailings/Mine Waste Disposal _____ Sediment Control
_____ Fresh Water Supply _____ Water Treatment _____ Other

Nearest Downstream Town Name: _____

Distance from the Dam _____ miles

Dam Location (coordinates of center of dam crest or point along dam crest for diked dams):

Longitude (as decimal) _____ (or as ___ Degrees ___ Minutes ___ Seconds)

Latitude (as decimal) _____ (or as ___ Degrees ___ Minutes ___ Seconds)

Note: Longitude or latitude as a decimal equals [(degrees) + (minutes/60) + (seconds/3600)].
Longitude and latitude are input into MSIS as decimal values, with the longitude being negative.



Does the dam have an Emergency Action Plan (EAP)? YES ___ NO ___

HAZARD POTENTIAL CLASSIFICATION: The hazard potential classification depends solely on the consequences of failure of the dam and not on the condition of the dam. Check with the mine operator for what classification has been assigned to the dam. If one has been assigned, determine whether it appears reasonable - classifications can change as downstream conditions change. If it appears reasonable, indicate the classification on this form below. If it does not appear reasonable, or no classification has been assigned, then judge the appropriate hazard potential classification and indicate it below. For uncertain cases, the District Dam Safety Representative can be consulted or further assistance can be requested from Technical Support.)

_____ High: Dams, regardless of their condition or size, whose failure will probably cause loss of life.

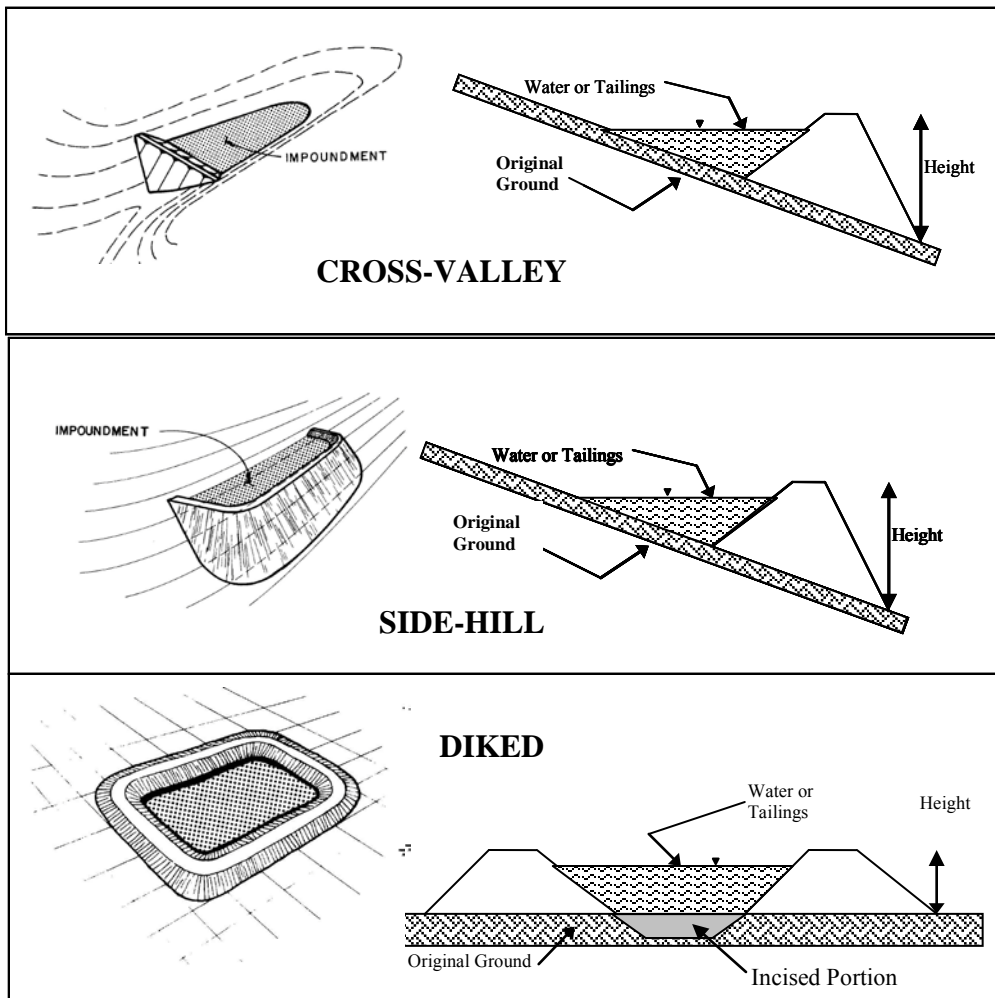
_____ Significant: Dams, regardless of their condition or size, whose failure would result in no probable loss of life but would disrupt important utilities or cause significant economic loss or significant environmental damage.

_____ Low: Dams whose failure would result in no probable loss of life and only slight property damage such as to farm buildings, forest or agricultural land, or minor roads.

DESCRIBE REASONING FOR HAZARD RATING INDICATED:



CONFIGURATION:



Cross-Valley _____ Side-Hill _____ Diked _____

Note that any portion of an impoundment that is "incised," meaning it is excavated below undisturbed natural ground such that release of that portion of the impoundment is precluded, should not be considered in the storage capacity or in the dam height reported on this form.

Type of dam construction: _____ upstream _____ downstream _____ centerline

Dam Height (above downstream toe): _____ feet Dam Crest Length: _____ feet

Reservoir Area: Width _____ feet Length _____ feet or _____ Acres (W x L / 43560)

Current Freeboard: _____ feet Drainage Area: _____ square miles

Normal Storage Capacity: _____ acre-feet Maximum Storage Capacity: _____ acre-feet



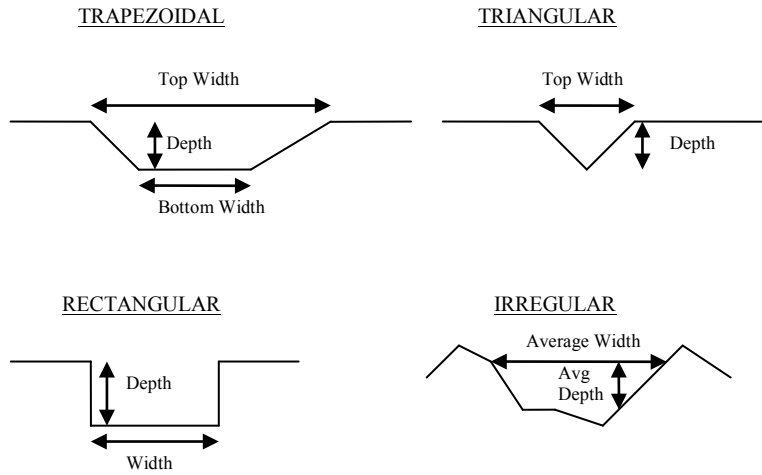
TYPE OF OUTLET: (Mark all that apply)

Open Channel Spillway:

Yes ___ No ___

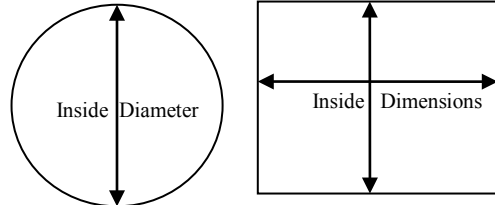
- ___ Trapezoidal
- ___ Triangular
- ___ Rectangular
- ___ Irregular

- ___ Channel Depth
- ___ Bottom (or average) width
- ___ Top width



Decant Conduit: Yes ___ No ___

Size of conduit: Inside diameter: ___ inches
or Width: ___ inches x Height: ___ inches



Conduit Material

- ___ corrugated metal
- ___ welded steel
- ___ concrete
- ___ plastic (HDPE, PVC, etc.)
- ___ other (specify) _____

Is water flowing through the decant? Yes ___ No ___

Other Type of Outlet (specify, e.g. floating pump system) _____

Has the dam been totally removed or breached or has the impoundment been filled in so that the impounding capability has been eliminated? Yes ___ No ___
If "Yes," as of what date? _____



Has there ever been a failure or incident at this site that resulted in a partial or complete loss of the dam or any of its hydraulic components or a partial or complete unintentional release from the reservoir? YES _____ NO _____

If so, when? _____

If so, please describe: _____

Notes to assist with completing form: **Freeboard** is the vertical distance between the pool level and the lowest point on the dam. **Normal Storage Capacity** can be estimated as the Reservoir Area times the Normal Reservoir Depth. **Maximum Storage Capacity** can be estimated as the Reservoir Area times the Maximum Reservoir Depth. **Drainage Area** is the area that contributes runoff into the impoundment – it must be obtained from the operator’s information or a topographic map.



Site Name:	Date:
Mine Name:	Operator's Name:
Mine I.D.:	Hazard Potential Classification: <input type="checkbox"/> High <input type="checkbox"/> Significant <input type="checkbox"/> Low
Inspector's Name:	

Check the appropriate box below. Provide comments when appropriate. If not applicable or not available, record "N/A". Any unusual conditions or construction practices that should be brought to the attention of the field office supervisor or the district dam safety representative should be noted in the comments section. For large diked embankments, separate checklists may be used for different embankment areas. If separate forms are used, identify approximate area that the form applies to in comments.

		<u>Yes</u>	<u>No</u>			<u>Yes</u>	<u>No</u>
1. Frequency of Company's Dam Inspections?				18. Sloughing or bulging on slopes?			
2. Pool elevation (operator records)?				19. Major erosion or slope deterioration?			
3. Decant inlet elevation (operator records)?				20. Decant Pipes:			
4. Open channel spillway elevation (operator records)?				Is water entering inlet, but not exiting outlet?			
5. Lowest dam crest elevation (operator records)?				Is water exiting outlet, but not entering inlet?			
6. If instrumentation is present, are readings recorded (operator records)?				Is water exiting outlet flowing clear?			
7. Is the embankment currently under construction?				21. Seepage (specify location, if seepage carries fines, and approximate seepage rate below):			
8. Foundation preparation (remove vegetation, stumps, topsoil in area where embankment fill will be placed)?				From underdrain?			
9. Trees growing on embankment? (If so, indicate largest diameter below)				At isolated points on embankment slopes?			
10. Cracks or scarps on crest?				At natural hillside in the embankment area?			
11. Is there significant settlement along the crest?				Over widespread areas?			
12. Are decant trashracks clear and in place?				From downstream foundation area?			
13. Depressions or sinkholes in tailings surface or whirlpool in the pool area?				"Boils" beneath stream or ponded water?			
14. Clogged spillways, groin or diversion ditches?				Around the outside of the decant pipe?			
15. Are spillway or ditch linings deteriorated?				22. Surface movements in valley bottom or on hillside?			
16. Are outlets of decant or underdrains blocked?				23. Water against downstream toe?			
17. Cracks or scarps on slopes?				24. Were Photos taken during the dam inspection?			

Major adverse changes in these items could cause instability and should be reported to the District Manager for further evaluation. Adverse conditions noted in these items should normally be described (extent, location, volume, etc.) in the space below and on the back of this sheet.

<u>Inspection Issue #</u>	<u>Comments</u>