

Inspections



Why are workplace inspections important?

Workplace inspections help prevent injuries, illnesses and death. Through critical examination of the workplace, inspections identify and record hazards for corrective action. The Mine Safety & Health Administration plans, conducts, report and monitor inspections. Regular workplace inspections are an important part of the overall health and safety program.

What is the purpose of inspections?

Compliance Specialists examine the workplace to:

Listen to the concerns of workers and supervisors

Gain further understanding of jobs and tasks

Identify existing and potential hazards

Determine underlying causes of hazards

Monitor hazard controls (personal protective equipment, engineering controls, policies, procedures)

Cite and recommend corrective action

How do you plan for inspections?

Planning is essential for an effective inspection.

INSPECTION PROCESS:

Planning for the inspection by the inspector at MSHA Field Office

Review the mine history and the last inspection reports.

Review the accident and injury rate for the mine.

Review the health sampling records.

Review the mine rescue program if applicable.

Calibrate all pertinent equipment to be used during the inspection.

Conduct a pre-inspection conference with management and miners' representative.

Discuss the purpose and scope of the inspection and any arrangements that need to be made.

The "Walk-Around" inspection.

The Mine Act states that an Authorized Representative of the Secretary shall conduct inspections and investigation as required.

If during the inspection/investigation a violation is found it will be addressed via a citation or order. There is no exception to this mandate. Criminal charges may be filed against the Authorized Representative for failure to act.

The inspector will provide compliance assistance to the mine operator and miners during the inspection process:

sharing of knowledge and experience

discuss "Best Practice"

Provide educational materials

Identify and address specific compliance problem areas

Inspection Process: Evaluation

There are several areas that the inspector has to evaluate

Is there an imminent danger to miners?

Is there a violation?

What standard has been violated?

What is the likelihood of an injury?

What type of injury could be expected?

Is it significant and substantial?

What level of negligence is there?

To determine the likelihood and type of injury that could be reasonably be expected, the inspector considers the following:

The type of hazard that the miner is/was/could be exposed to.

What is the likelihood that if the violation were not corrected, what would happen to the miner's body as a result of the injury(s).

Industry history plays a part in the evaluation.

Negligence Evaluation:

Negligence is defined as "the failure to exercise the degree of care demanded by the circumstances. Negligence is conduct committed or omitted which falls below the standard of care established under the Act. The "Standard of Care". The mine operator owes the miner a high degree of care. The mine operator must be on alert for the hazards and conditions that could affect the miner and take the necessary steps to correct or prevent them.

The greater the degree of danger-the greater degree of care is required.

How the mine operator's action or inaction minimizes or creates greater risk to the miners' safety and/or health is considered.

How long did the condition exist?

Aspects to Examine

Every inspection must examine who, what, where, when and how. Pay particular attention to items most likely to develop unsafe or unhealthy conditions because of stress, wear, impact, vibration, heat, corrosion, chemical reaction or misuse. Inspect the entire workplace area each time. Include areas where no work is done regularly, such as parking lots, rest areas, office storage areas, locker rooms and remote areas.

Compliance Specialist have the responsibility to assure all areas and all equipment are properly inspected.



Each Compliance Specialist shall inspect areas such as yards, warehouses, maintenance, offices, and production lines.

Each Compliance Specialist shall check a separate class of items such as tools, buildings, utilities, materials, and mobile equipment.

The type of inspection used results in reports based on areas in the workplace, equipment or on categories of hazards.

Workplace Elements

Look at all workplace elements - the environment, the equipment and the process. The environment includes such hazards as noise, vibration, lighting, temperature, and ventilation. Equipment includes materials, tools and apparatus for producing a product or a service. The process involves how the worker interacts with the other elements in a series of tasks or operations.

What types of hazards do we look for in a workplace?

Types of workplace hazards include:



Safety hazards; e.g., inadequate machine guards, unsafe workplace conditions, unsafe work practices.

Biological hazards caused by organisms such as viruses, bacteria, fungi and parasites.

Chemical hazards caused by a solid, liquid, vapour, gas, dust, fume or mist.

Ergonomic hazards caused by anatomical, physiological, and psychological demands on the worker, such as repetitive and forceful movements, vibration, temperature extremes, and awkward postures arising from improper work methods and improperly designed workstations, tools, and equipment.

Physical hazards caused by noise, vibration, energy, weather, heat, cold, electricity, radiation and pressure

What type of information do I need to complete an inspection report?

Diagram of Area

Use drawings of workplace layout, or maps and plans to help you draw a diagram. Divide the workplace into areas based on the process. Visualize the activities in the workplace and identify the location of machinery, equipment and materials. Show the movement of material and workers, and the location of air ducts, aisles, stairways, alarms, fire exits or other relevant information.

Use several simple diagrams if the area is large. Concentrate on particular types of hazards in the area. If chemicals are the main concern, make sure the diagram emphasizes chemicals. Do the same for all other hazards, such as noise and lighting. Explain the contents of the diagram in a legend. Describe the steps of each operation. Obtain worker and supervisor comments on the diagram-they know the area better than anyone else.

Equipment Inventory

Know what type of machinery or equipment is present. Review technical safety data sheets, or manufacturers' safety manuals. Read work area records to become familiar with the injury and illness potential of the equipment.



Chemical Inventory

Determine which chemicals are used in the workplace and whether material safety data sheets are available. Find out whether actual and potential sources of chemical exposure are properly controlled. Make sure that all workers have received training in handling chemicals. Check that all chemicals are labeled with pertinent information (such as handling, storage, and waste disposal) according to Haz Com requirements.

Checklists

A checklist helps to clarify inspection responsibilities, controls inspection activities and provides a report of inspection activities. Checklists permit easy on-the-spot recording of findings and comments. Do not allow yourself to become so intent on noting the details listed that you miss other hazardous conditions. Use checklists only as a basic tool. Refer to the related documents for checklists that you can use to develop a checklist for the workplace. Take good Notes. Use the MSHA approved Notes and track your movements throughout the inspection. Take pictures of things that reflect well on the operation as well as things that don't.

Reports

Inspection records are important. Past inspection records show what has been identified. They also show what the Compliance Specialist concentrated on and what areas were inspected. The inspection report can draw attention to possible hazards. Use the inspection report to determine whether previous recommendations were implemented.

Are there other types of inspection reports that may be useful?

The following describes three other types of inspection reports conducted by the company:

Ongoing

Pre-operation

Periodic

Supervisors and workers continually conduct ongoing inspections as part of their job responsibilities. Such inspections identify hazardous conditions and either correct them immediately or report them for corrective action. The frequency of these inspections varies with the amount and conditions of equipment use. Daily checks by users assure that the equipment meets minimum acceptable safety requirements.

Pre-operation checks involve inspections of equipment or processes prior to starting the production shift. These are done before work begins.

Periodic inspections are regular, planned inspections of the critical components of equipment or systems that have a high potential for causing serious injury or illness. The inspections are often part of preventive maintenance procedures or hazard control programs. The law specifies that qualified persons periodically inspect some types of

equipment, such as elevators, boilers, pressure vessels, and fire extinguishers, at regular intervals.

Should Compliance Specialist have special qualifications?

Compliance Specialist should have:

knowledge of previous injuries and illnesses in the workplace

familiarity with the hazards and with the standards, regulations, PPE, and procedures that apply to the area

ability and skills to assess situations requiring corrective action

training in inspection, and in handling personnel and situations

knowledge of the organization's operations, work flow, systems and products

proper attitudes and influence to bring about improvements

How should inspections be scheduled?

Nobody can accurately estimate how long each inspection will take. The time required depends on what is found, how many questions are asked, and how large and complex the work area is. Inspections are ineffective when the inspections are not properly planned .

The purpose of an overall inspection is to keep the workplace free of hazards. The inspection should cover:

when to inspect each area and/or the equipment within the workplace

who accompanies the Compliance Specialist on the inspection

what degree of detail to inspect each area or piece of equipment

To decide how long the inspections should last , consider:

number and size of different work operations

type of equipment and work processes--those that are hazardous or potentially hazardous may require more time during regular inspections

number of shifts--the activity of every shift may vary

new processes or machinery

inspections should not be scheduled at the same time during the same month as it was conducted on a prior inspection .

How are inspections actually done?

Plan the inspection route before undertaking the inspection. Review the previous inspection report and follow the findings of that inspection to plan your inspection. During the inspection, discuss the concerns and proper protection needed before going into noisy areas. This eliminates the need for arm waving, shouting and other unsatisfactory methods of communication among the inspection party.

The Compliance Specialist should have a clipboard or note pad, and checklists for the area or equipment to be inspected. You should proceed at your own pace.

For inspections, wear personal protective equipment (PPE) where required. If you do not have PPE and cannot get any, do not enter the area. List this as a deficiency during the inspection. Re-inspect the area when PPE is provided.

Engineers, maintenance personnel and other specialists should be available to provide information on special equipment or processes. The Compliance Specialist may invite industrial hygienists, union health and safety specialists, and/or workplace managers to join the inspection team to help them in examining certain aspects of a work area and equipment.

Supervisor Involvement

Supervisors are responsible for taking action to prevent accident and injury. Supervisors have an advantage in safety inspections because of familiarity with workers, equipment and environment. This familiarity is also a disadvantage because it can interfere with a supervisor's objectivity. Before inspecting a department , area or piece of equipment, the Compliance Specialist should contact the supervisor in charge. The Compliance Specialist must remain independent and make uninfluenced observations.

If the supervisor of the area does not accompany the inspection team, consult the supervisor before leaving the area. Discuss each recommendation/violation with the supervisor. Report items that the supervisor can immediately correct. Note these on the report as corrected. This keeps the records clear and serves as a reminder to check the condition during the next inspection.

Although a supervisor may interpret violations as a criticism, Compliance Specialist cannot fail to identify and cite hazards. Retain objectivity and maintain an attitude that is firm, fair and consistent. Take the time to discuss violations with the supervisor before leaving the area. Also discuss positive things found in the areas inspected.

Observation

Look for deviations from accepted work practices. Use statements such as, "a worker was observed operating a machine without a guard." Some common poor work practices include:

using machinery or tools without authority

operating at unsafe speeds or in other violation of safe work practice

removing guards or other safety devices, or rendering them ineffective

using defective tools or equipment or using tools or equipment in unsafe ways

using hands or body instead of tools or push sticks

overloading, crowding, or failing to balance materials or handling materials in other unsafe ways, including improper lifting

repairing or adjusting equipment that is in motion, under pressure, or electrically charged

failing to use or maintain, or improperly using, personal protective equipment or safety devices

creating unsafe, unsanitary, or unhealthy conditions by improper personal hygiene, by using compressed air for cleaning clothes, by poor housekeeping, or by smoking in unauthorized areas

standing or working under suspended loads, scaffolds, shafts, or open hatches

Inspection Principles

When conducting inspections, follow these basic principles:

Draw attention to the presence of any immediate danger--take good notes and make sure this is addressed in your notes and final report.

Shut down and "lock out" or barricade and post any hazardous items that cannot be brought to a safe operating standard until repaired.

Do not operate equipment. Ask the operator for a demonstration. If the operator of any piece of equipment does not know what dangers may be present, this is cause for concern. Never ignore any item because you do not have knowledge to make an accurate judgment of safety.

Look up, down, around and inside. Be methodical and thorough. Do not spoil the inspection with a "once-over-lightly" approach.

Clearly describe each hazard and its exact location in your rough notes. Allow "on-the-spot" recording of all findings before they are forgotten. Record what you have or have not examined in case the inspection is interrupted.

Ask questions, but do not unnecessarily disrupt work activities. This may interfere with efficient assessment of the job function and may also create a potentially hazardous situation.

Consider the static (stop position) and dynamic (in motion) conditions of the item you are inspecting. If a machine is shut down, consider postponing the inspection until it is functioning again.

Think about each observance, "Can any problem, hazard or accident generate from this situation when looking at the equipment, the process or the environment?" Determine what corrections or controls are appropriate.

Do not try to detect all hazards simply by relying on your senses or by looking at them during the inspection. You may have to monitor equipment to measure the levels of exposure to chemicals, noise, radiation or biological agents.

Take a photograph if you are unable to clearly describe or sketch a particular situation. Instant developing photographs are especially useful.

Close Out Conference

The Compliance Specialist will review detailed findings with the operator in a close out conference. The operator should learn not only what they need to improve, but also what they were doing right. At that time the Compliance Specialist should discuss problems, possible solutions and additional abatement periods to eliminate or control any serious hazards identified during the inspection. In rare instances, the Compliance Specialist may find an "imminent danger" situation during the inspection. If so, immediate action should have been taken to protect all employees. In certain other situations that would be judged a "serious violation" under MSHA criteria, the operator is required to develop and agree to a reasonable abatement time and to eliminate the violation or develop an acceptable plan to control that hazard. The Compliance Specialist will offer general approaches and options to the operator. They may also suggest other sources for technical assistance.

What should the final report have in it?

To make a report, first fill out all of the required information. Enter the area or equipment inspected, the date and the inspection team's names and titles on top of the page. Number each item consecutively, and fill out the report as the inspection flowed. State exactly what has been detected and accurately identify its location. Instead of stating "machine unguarded," state "guard missing on upper pulley #6 lathe in North Building."

Make management aware of the problems in a concise, factual way. Management should be able to understand and evaluate the problems, assign priorities and quickly reach decisions. Take immediate action as needed. When permanent correction takes time, take any temporary measures you can, such as barricading off the area, tagging out equipment and/or posting warning signs.

Address in your notes after each listed hazard, specify the recommended corrective action and establish a definite correction date.

Assure that your notes and report reflect that a complete and thorough inspection was conducted.

What should I know about follow-up and monitoring?

Review the information obtained from regular inspections to identify where immediate corrective action is needed. Identify trends and obtain timely feedback. Analysis of inspection reports may show the following:

Priorities for corrective action

Need for improving safe work practices

Insight about why accidents are occurring in particular areas

Need for training in certain areas?

Areas and equipment that require more in-depth hazard analysis

The Compliance Specialist should review the progress of the recommendations, especially when they pertain to the education and training of employees. It is also the Compliance Specialist responsibility to study the information from regular inspections. This will help in identifying trends for the maintenance of an effective health and safety program.

Example of Company Workplace Inspection Report

Inspection Location: _____ **Date of Inspection:** _____

Department/Areas Covered: _____ **Time of Inspection:** _____

Observations						For Future Follow-up		
Item and Location	Hazard(s) Observed	Repeat Item Y N		Priority A/B/C	Recommended Action	Responsible Person	Action Taken	Date

Copies to: _____ **Inspected by:** _____

Summary of Inspection Information Requirements

Basic layout plans showing equipment and materials used

Process flow

Information on chemicals

Storage areas

Work force size, shifts and supervision

Workplace rules and regulations

Job procedures and safe work practices

Manufacturer's specifications

Personal Protective Equipment (PPE)

Engineering controls

Emergency procedures - fire, first aid and rescue

Accident and investigation reports

Worker complaint reports regarding particular hazards in the workplace

Recommendations of the health and safety committee

Previous inspections

Maintenance reports, procedures and schedules

Regulator inspection reports or other external audits (insurance, corporate specialist)

Monitoring reports (levels of chemicals, physical or biological hazards)

Reports of unusual operating conditions

