FREEPORT-
McMoRan

STUDENT GUIDE

SFT FCX2015C

Workplace Examinations for Downstream Processing

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VERSION 1.1

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"We start with looking after our workers' welfare."

Richard C. Adkerson

President and CEO, Freeport-McMoRan[1]

[1] Richard C. Adkerson, "Richard Adkerson CEO Freeport-McMoRan Copper & Gold." *Youtube.com,* May 4 2011, Accessed July 2, 2015. https://www.youtube.com/watch?v=j61aFypdvgE

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LEARNING OBJECTIVES

Learning objectives are provided to establish guidance and focus throughout the course.

MODULE 1: ROLES AND RESPONSIBILITIES

Upon completion of this module, students will be able to:

- Describe the purpose of a workplace examination.
- Discuss the roles and responsibilities of those involved in a workplace examination.

MODULE 2: CONDUCTING A WORKPLACE EXAMINATION

Upon completion of this module, students will be able to:

- Review appropriate procedures and forms for conducting a workplace examination.

MODULE 3: WORKPLACE HAZARDS

Upon completion of this module, students will be able to:

- Identify the hazards associated with a workplace exam and the controls that can be implemented.

COURSE INTRODUCTION

Workplace examinations, also referred to as area inspections, pre-shift inspections, workplace inspections, and workplace exams, are procedures each site creates not only to identify and control physical hazards, but also to evaluate the critical controls already in place that protect employees from fatal risks. Regardless of the regulatory agency that governs your site, the expectation of Freeport-McMoran's Department of Occupational Health and Safety is that workplace exams be performed and documented before beginning any work. They are the first line of defense in protecting Freeport-McMoRan's most valuable asset – you.

The backbone of an effective workplace examination is hazard recognition. Depending on the work area, the hazards to which you are exposed often fall under one or all three of the following categories:

- Chemical (e.g., H_2S, lime, solvents)
- Biological (e.g., bacteria, animal waste, venom)
- Physical (e.g., noise, radiation, impact injuries)

Do not assume you are automatically aware of every hazard around you. Being skilled at recognizing hazards associated with work areas is a lifelong pursuit. Through appropriate training, employees build the skills necessary to identify, avoid, and mitigate hazards.[2]

Fig. 1 A missing cathode creates a hazard. Remain aware of hazards as you work.

[2] "Introduction", *Workplace Examination*, v. 1, (Freeport-McMoRan/Mine Training Institute, 2016), viii.

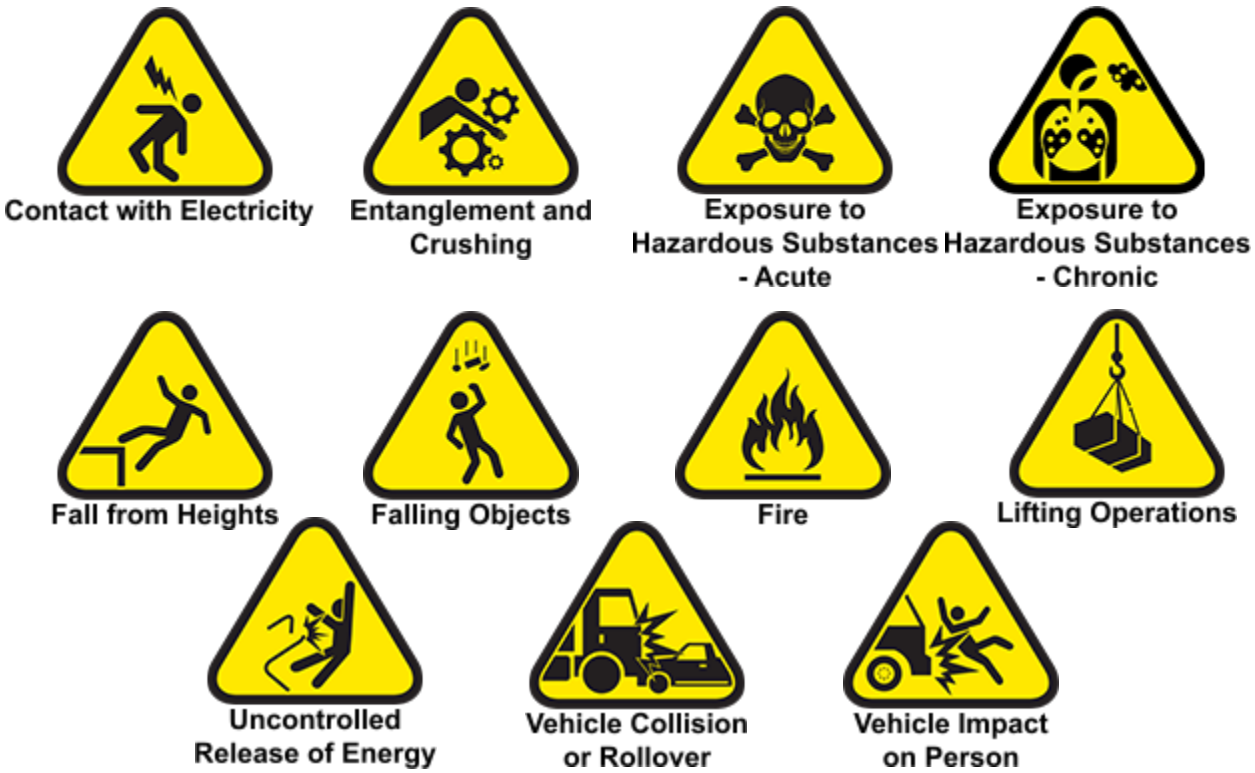
FATAL RISKS AND CRITICAL CONTROLS

Fatal Risk Management is a continuation of the Fatality Prevention Program. Focus is placed on identifying Fatal Risks and Critical Controls in an attempt to standardize how we communicate and control risks to safeguard all employees within the Company. The Fatal Risk Management Program standardizes Fatal Risk communication by implementing Fatal Risk icons, standard definitions, Critical Controls, and Verification Questions for twenty-three Fatal Risks.

Fatal Risks are based on industry data, where specific risk exposure has resulted in catastrophic events such as severe injury or death. While all risks have a degree of danger, Fatal Risks are those risks that, when left uncontrolled, will kill you. After identifying a Fatal Risk, Critical Control(s) are implemented and verified with standard verification questions, to prevent death as a result of the exposure to the Fatal Risk. In the event of an absent or failure of a Critical Control, the job must be stopped as it significantly increases the risk of severe injury or death despite the existence of other controls. In short, Critical Controls help keep you from being killed. The Fatal Risk(s) and Critical Controls relevant to this course are provided below.

FATAL RISKS PRESENT AT ALL SITES

This section includes the Fatal Risks that are present at all sites. Employees should be aware of these in their surroundings and confirm that the relevant Critical Controls are in place.



FATAL RISKS PRESENT AT MANY SITES

The Fatal Risks in this section are found at many sites. Identifying the Critical Controls for each Risk is essential to your safety.


Blasting


Confined Space


Drowning


Ground Failure


Rail Collision


Rail Impact on Person

FATAL RISKS PRESENT AT FEW SITES

Although the Fatal Risks in this section are present at only a few sites, employees must still be aware of their presence, if applicable, and confirm that the appropriate Critical Controls are in place for each.


Aircraft Operation


Contact with Molten Material


Personnel Hoisting


Underground Hazardous Atmosphere


Underground Inrush


Underground Rock Fall

Remember, Fatal Risk Management assists in:

- Identifying the risks that will kill you
- Implementing the controls that will keep you safe
- Verifying that Critical Controls are in place
- Empowering you to stop the job if the Critical Controls are missing or not implemented correctly

It is equally important to evaluate the functionality of the Critical Controls during a workplace examination. If you find during a workplace examination that any of the relevant Critical Controls are not in place, you must immediately stop the job and inform your supervisor or a Health and Safety representative. Continuing with inadequate or non-functioning Critical Controls puts you at greater risk of severe injury or death.

Roles and Responsibilities

MODULE 1

MODULE 1: ROLES AND RESPONSIBILITIES

MODULE 1 LEARNING OBJECTIVES

Upon completion of this module, students will be able to:

- Describe the purpose of a workplace examination.
- Discuss the roles and responsibilities of those involved in a workplace examination.

INTRODUCTION

Every day people are exposed to hazards at home and work. Actions such as merging onto the freeway, turning on the oven, or eating a meal entail some level of risk assessment. The management of the hazards determines whether a risk is posed. Consciously or sub-consciously, people regularly analyze hazards to determine the risk before taking action.[3] Performing workplace exams helps every employee take responsibility for decreasing risk in the workplace.

PURPOSE OF WORKPLACE EXAM

A workplace examination is a resource used to promote safer work areas. The purpose of a workplace examination is to bring the employee's attention to hazards in the work area, so he or she can take immediate action to mitigate or eliminate the risks posed by the hazards. Use this tool to keep safety a priority.[4]

Fig. 1.1 Employees conducting a workplace exam.

[3] "Risk Control", *Fundamentals of Safety*, v. 2, (Freeport-McMoRan/Mine Training Institute, 2017).

[4] "Workplace Examination Compliance", *Workplace Examination*, v. 1, 5.

RESPONSIBLE INDIVIDUALS

Supervision is ultimately responsible for ensuring workplace exams are performed before starting any task. Site procedures often require Supervision to designate an individual to conduct the exam. While some workplace examinations may only be the responsibility of one specified person, such as a supervisor, this does not lessen your responsibility as it relates to safety. Regardless of whether or not supervision designates you to conduct a workplace examination, it is your responsibility to maintain hazard awareness in your workplace and surrounding areas.

EMPLOYEE ACCOUNTABILITY

The keys to an effective workplace examination are strong hazard recognition skills and personal accountability to the task. Someone may be well-versed in the hazards of a job, but if they choose not to perform a proper examination, then the workplace exam becomes ineffective.[5] Each employee is expected to hold himself or herself and all coworkers accountable for working in a safe manner.

Accountability is not viewed from a purely disciplinary perspective. It is about your attitude, actions, and the consequences of your choices. Accountability is about each person setting expectations, checking for understanding, giving feedback, and following through. More than that, it is about expecting others to do the same. All employees are accountable to each other to make Safe Production a reality.[6]

[5] "General Hazard Identification", *Workplace Examination*, v. 1, 13.

[6] "Accountability", *Fatality Prevention*, v. 1, (Freeport-McMoRan/Department of Occupational Health and Safety/Mine Training Institute, 2014), 19.

EMPLOYEE QUALIFICATIONS AND TRAINING

Employees need to have the appropriate training and qualifications as required by their site to conduct a workplace examination. In general, employees must be capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees, and have authorization to take prompt corrective measures to eliminate them.

HAZARD COMMUNICATION TRAINING

Often hazards in a workplace have already been identified, and resources are available to communicate the hazards. Hazard Communication (HazCom) resources include:

- Standard Operating Procedures (SOPs)
- Job Safety Analysis (JSAs)
- Risk assessments
- Chemical labels
- Container labels
- Fire Triangles
- Safety Data Sheets (SDSs)

Fig. 1.2 Training employees to conduct a workplace exam.

Employees must receive proper training on HazCom resources and health hazards such as noise levels, air quality, and chemical exposure before performing a workplace exam. With the proper training, employees become more aware of existing hazards and can better anticipate potential hazards. During a workplace exam, awareness and anticipation are key factors in preventing incidents. If you have any questions regarding your HazCom training, speak with your site Supervisor or Health and Safety Professional before starting a workplace exam.

EXPERIENCE AND LENGTH OF SERVICE

Whether you have been on the job for one month or 25 years, your input is valued and expected. Increased team involvement in workplace examinations is a fundamental component to increased hazard recognition. Freeport-McMoRan employees come from various backgrounds and experience levels. Varied experiences contribute to an increased awareness of hazards as different individuals are trained or experienced in recognizing different hazards. The result is more effective workplace examinations.[7]

[7] "Workplace Examination Compliance", *Workplace Examination*, v. 1, 5.

WORKPLACE EXAM FREQUENCY

While work areas should be inspected at least once every shift, workplace exams are not limited in their frequency. Work areas stay safer when individuals take the initiative to conduct a workplace exam anytime it is deemed appropriate. Exams are formally or informally conducted before, during, or after work, or anytime the work area or task changes.

Fig. 1.3 Employees staying alert to potential hazards during the job.

Daily workplace examinations conducted before beginning any work help maintain a safe work environment. These exams are documented on a workplace exam form and are conducted according to site expectations.

Beyond the formally recorded exam, informal exams are ongoing as employees are expected to be on the lookout for hazards while performing work. Each employee must stay alert to and aware of changing conditions that could affect his or her safety, or the safety of others. Changing environmental conditions such as temperature changes, noise levels, illumination, and weather conditions can significantly alter a work area and, in turn, the associated hazards.[8] Changing the task or location of a task can also alter a work area and the associated hazards.

In the event conditions, the work area, or tasks change, conduct a new workplace exam. The Department of Occupational Health and Safety (DOHS) strongly encourages additional workplace examinations whenever environmental conditions change or when you start a new task.[9]

When work is complete, performing another workplace examination helps establish a safe area for the next shift or others that could enter the area. Continually evaluating the surroundings keeps employees alert to new and potential hazards.

[8] "Introduction", *Workplace Examination*, v. 1, viii.

[9] "Workplace Examination Compliance", *Workplace Examination*, v. 1, 5.

ACTIVITY 2: REFLECTION

Reflect on your personal knowledge of one of the following, then answer the questions. If you cannot answer a question, write "Unknown".

- A workplace examination that **discovered** a hazard and led to a safer work area.
- A workplace examination that **re-evaluated** a hazard and led to a safer work area.
- A workplace examination that **missed** a hazard and **could** have resulted in an incident.
- A workplace examination that **missed** a hazard and **did** result in an incident.
- A time a workplace examination **should have been performed but was not**.

Why did the workplace exam need to occur? (Start of a shift, new task, changing conditions, etc.)

Where did the workplace exam occur?

When was the last time a workplace exam had been conducted in the work area?

What was the job title of the person(s) responsible for conducting the workplace exam?

Was the person trained to conduct a workplace exam?

How many years of experience did the person have?

What was the hazard?

What was the risk associated with the hazard?

How was the hazard mitigated? Or how could the hazard have been mitigated?

MODULE 1 QUIZ

Complete the following quiz.

1. Why are workplace examinations performed?
    a. To check the productivity of the previous shift
    b. To recognize hazards in the work area
    c. To assign fault for missed hazards
    d. To avoid fines

2. Who can conduct and document a workplace examination?
    a. Everyone who is properly trained
    b. A specifically designated individual
    c. The shift supervisor
    d. All of the above

3. Employees with more years of service are more likely to perform a thorough workplace exam than someone new to the job.
    a. True
    b. False

4. When are workplace examinations performed?
    a. At the start of each shift
    b. When environmental conditions change
    c. When a task changes
    d. All of the above

Conducting a Workplace Examination

MODULE 2

MODULE 2: CONDUCTING A WORKPLACE EXAM

MODULE 2 LEARNING OBJECTIVES

Upon completion of this module, students will be able to:

- Review appropriate procedures and forms for conducting a workplace examination.

INTRODUCTION

Completing a workplace examination helps identify hazards in the workplace. Before beginning work and at least once every shift, inspect areas for safety issues. Since working conditions periodically change, frequent exams provide opportunities to assess and minimize risk. Note any changes that occur during the workplace exam and communicate them to oncoming shifts. Careful communication helps employees that work at varying times or have extended periods of time away from work. If anything dangerous is found, immediately stop work to fix the hazard in a safe manner and notify your supervisor.[10]

BEFORE CONDUCTING A WORKPLACE EXAM

Taking the time to plan and evaluate activities in the field helps manage significant risks. The workplace exam is a piece of pre-job planning and evaluating that helps employees:

- Work together
- Employ their senses to identify hazards
- Think about possible consequences
- Review the controls that are/can be put in place
- Remain vigilant for changing conditions[11]

The time it takes to complete an exam varies depending on many factors including the size of the area, the hazards encountered, and the controls needed. Do not rush through an exam because you feel limited by time. Instead, prioritize the safety of all employees by setting aside enough time to conduct a thorough workplace examination.

Fig. 2.1 Area prepped for work.

[10] "Workplace Examinations", *Fundamentals of Safety*, v. 2.

[11] "Pre-job Planning", *Fatality Prevention*, v. 1, 83.

PRE-JOB MEETING

Pre-job meetings, also referred to as pre-task meetings or tailgates, are valuable opportunities to communicate specific focal points for a workplace examination. A primary purpose of the meeting is to discuss significant/high risks to which employees may be exposed when performing the day's tasks.[12] Before conducting your workplace examination, the pre-job meeting helps familiarize employees with the topics in the following table.

Topic	Examples
Existing and potential hazards	• Slips, trips, and falls • Potential energy sources
Hazard controls	• Personal Protective Equipment (PPE) • Lockout/Tagout/Tryout (LOTOTO)
Relevant forms and documents	• Standard Operating Procedures (SOP) • Job Safety Analysis (JSA) • Management of Change (MOC) • Risk assessment tools • Job permits
Previous and potential challenges and successes	• Improvements made since the last time the job was performed • What went well the last time the job was performed
Communication	• Define the work area boundaries • Upstream and downstream communication • Site incident reporting procedures
Emergency evacuation plans	• Identify emergency exits • Locate fire extinguishers • Review department and site muster points
Emergency response and rescue plans	• Safety and Environmental responses • Work area and site expectations • Contact numbers

Fig. 2.2 Pre-job meeting topics

The information relayed during the pre-job meeting applies while conducting the workplace examination. Before starting the workplace exam, be aware of the hazards and don the proper PPE.

[12] "Tailgate Meeting", *Fatality Prevention*, v. 1, 43.

REQUIRED DOCUMENTATION

Note and report defects immediately, and keep records of workplace examinations. A written record of your formal workplace exam is documented on a site-specific workplace exam form and conducted according to site expectations. The records must include the following:

- Date of examination
- Examiner's name
- Work areas examined
- Description of each adverse condition not corrected promptly
- Date when the condition is corrected

Before starting the workplace exam, obtain a site-specific workplace exam form and a functioning writing utensil. Communication is essential for safe and effective workplace examination documentation, so prepare to complete a quality report with legible handwriting and concise but accurate descriptions.

CONDUCTING A WORKPLACE EXAM

As stated earlier, workplace exams are procedures each site creates to identify and control hazards before beginning work and throughout a shift. Consider the following when identifying hazards in your workplace:

1. What could happen if conditions change? For example, it starts to rain or the sun sets.
2. Have you and your coworkers been trained to perform the tasks you have been given? Do not perform tasks on which you have not been trained.
3. Are there hazards that could originate from outside of your work area? For example, dust or gas, like vehicle exhaust, migrate into the work area from somewhere else.
4. Are your activities creating hazards for you and others in the area? For example, working with open holes, welding above people who are walking, or using chemicals that could splash or need specialized gloves or equipment to handle.[13]

OBSERVATION

When conducting a workplace exam, employees often focus on a visual inspection; however, employ all of your senses as you observe the work area. Identify unusual sounds encountered as they may indicate a hazard such as malfunctioning equipment. While you should not intentionally touch equipment to check for motion, gaps, or extreme temperatures, evaluate hazards such as loose handrails or grating as you walk. Some chemicals or particles in the air have noticeable smells or tastes that need to be addressed but, in general, avoid intentionally smelling or tasting as part of your workplace exam. Use specialized equipment instead. There are more opportunities to observe hazards when more people are involved in the exam, so include as many people from your team as possible.

[13] "Risk Control", *Fundamentals of Safety*, v. 2.

SURVEYING THE AREA

Different hazards are noticeable from different vantage points. When conducting a workplace exam, employees must take the time to survey the area from multiple vantage points. Start with a broad view of the area from a safe distance away to inspect for significant hazards. Then follow up with a closer vantage point to look for other hazards.

SURVEY THE WORK AREA FROM A DISTANCE

Sometimes employees focus their attention on the specific task at hand. When you take a step back to view the work area from a broader vantage point, additional hazards such as an open-hole, suspended load, or moving equipment come into view that might otherwise have gone unnoticed. When using a broader perspective, observe the work area from different angles including higher and lower vantage points.

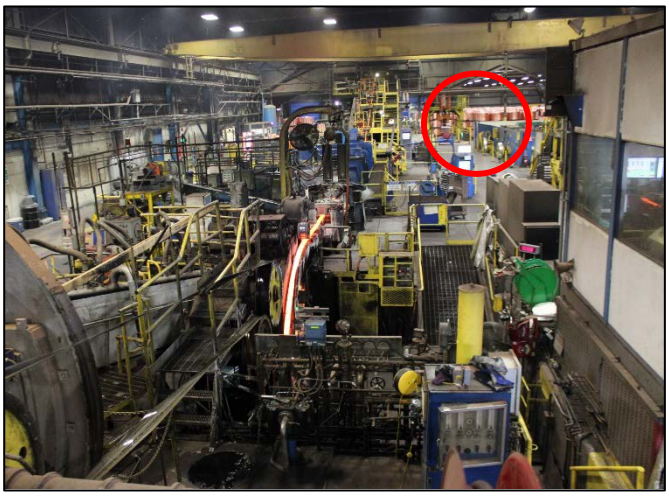


Fig. 2.3 Work area from a distance.

SURVEY THE WORK AREA FROM A CLOSER VANTAGE POINT

As the workplace exam is conducted, talk through the task(s) being performed in the defined work area. As the discussion takes place, hazards may be discovered that might otherwise go unnoticed until the tasks begin. In the discussion, include the specific pieces of equipment relevant to your job and take the time to inspect the equipment closely. Additionally, look for common hazards such as housekeeping issues, tripping hazards, and electrical issues. The next module provides more information on how to inspect common hazards.

Fig. 2.4 Same work area from a closer vantage point.

LEARN FROM OTHERS

On October 21, 2015, an employee was closing a 1000 pound (453 kilograms) door to keep the rain out. In the process, the welds that held the three hinges in place broke causing the door to fall off. The door struck the employee on the back of his hard hat and across his shoulder blade causing him to fall to the ground. He suffered a contusion to the head, shoulder, and knee and was given a return to work release with climbing restrictions.

A thorough workplace examination helps find hazards.

Fig. 2.5 Door that fell.

Fig. 2.6 Another angle of the fallen door.

Read the Learn from Others above. Choose whether a distant survey or close vantage point could have helped identify the issue that led to this incident. Explain your choice.

☐ Survey from a distance ☐ Survey from a closer vantage point

Explain

MITIGATING THE HAZARD

When you identify a hazard, it is your responsibility to take appropriate actions. The specific steps required to initiate hazard control varies depending on your site, the department you are in, and the work performed. However, procedures must include preventing access to the hazard and contacting your Supervisor or Health and Safety Professional.[14]

Fig. 2.7 Slope hazard mitigated with an engineering control (stairs).

QUALIFY THE LEVEL OF RISK

Evaluate the potential of a hazard's risk. In the field, you regularly evaluate risks to determine the best way to control the hazards.[15] When specific tasks are evaluated regarding the probability of a hazard resulting in an incident and the severity of the consequences if the incident occurs, this is called a "risk rating". The FCX Risk Matrix helps determine the risk rating for each task, identifying it as high, medium, or low. The adequacy of existing controls is also taken into account and regularly evaluated to double-check that they are working properly.[16]

[14] "Workplace Examination Compliance", *Workplace Examination,* v. 1, 6.

[15] Freeport-McMoRan Department of Occupational Health & Safety, *Fatality Prevention Guideline*, (2013), 2.

[16] "Risk Control", *Fundamentals of Safety*, v. 2.

MITIGATION PROCEDURES

If a hazardous condition is found while performing an examination, immediate action to resolve the issue must occur. Mitigate the hazard based on the level of the risk. If a hazard is discovered that poses an immediate risk to personnel, stop production until the appropriate controls are in place. Posting a spotter until proper flagging or barricading occurs may also be necessary. Depending on the level of risk, additional training may be required before starting the task. Hazards rated as a high risk are actioned through the Incident Management System (IMS).

When attempting to control a hazard, refer to the Hierarchy of Controls outlined in Fatality Prevention. Elimination, substitution, and engineering controls are more effective than administrative controls and PPE. Whenever possible, apply the controls that keep the employee as safe as possible. [17]

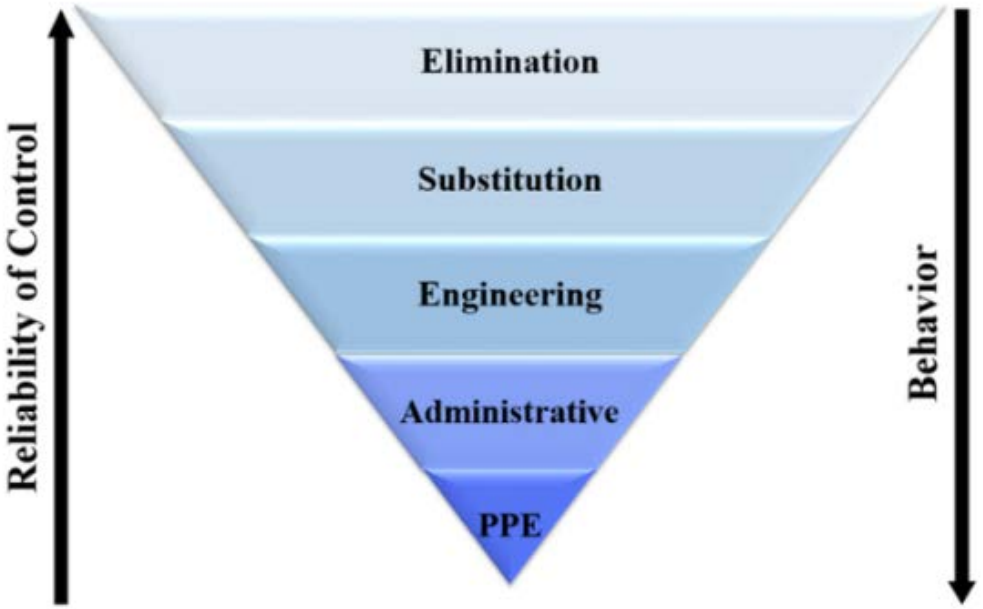


Fig. 2.8 Hierarchy of Controls chart.

[17] "Workplace Examination Compliance", *Workplace Examination*, v. 1, 6.

AFTER COMPLETING A WORKPLACE EXAM

After completing a workplace examination, follow proper procedures for maintaining the appropriate records and ensure deficiencies and hazards are adequately addressed. Supervision reviews the workplace exam forms to aid in this process.

RECORDS RETENTION

Depending on your site and department, the maintenance and storage of examination records varies but must be retained for a minimum of one year. Whenever a workplace examination is conducted, the form is given to a supervisor and filed according to Freeport-McMoRan's Records Retention Policy.

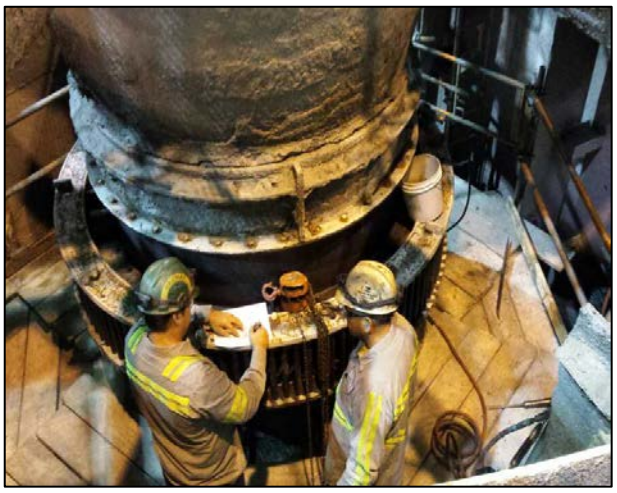


Fig. 2.9 Employees maintaining workplace exam records.

The timing for when a workplace examination form needs to be submitted to supervision usually falls into one of two options. The first option is to submit the form once the examination is completed. The other option is to maintain your workplace examination form as a working document throughout your shift and submit your examination form at the end of your shift. Speak with your site supervisor to determine your department and site expectations.[18]

Explain your site's records retention requirements in the space below.

FOLLOW-UP

The workplace examination form includes a section for listing the corrective actions taken to mitigate/eliminate each hazard found. The individual assigned to the corrective action is ultimately responsible for following up on the action to determine whether or not it is effective. However, everyone aware of the corrective action has some responsibility to confirm the action is carried out and the hazard is mitigated. If the same hazard is found while on the job or during a later workplace exam, speak to your Supervisor or site Health and Safety Professional.

[18] Freeport-McMoRan, *Records Management Policy*, (2010).

ACTIVITY 3: TEAM QUIZ

With your team, use the space below or the flipchart to write three questions about conducting a workplace examination. Write two factual questions with specific correct answers and one open-ended question that could lead to a class discussion. Open-ended questions can be opinion-based with no clear, correct answer. After all teams finish writing three questions, each team presents their questions to the class.

Question Type	Question Examples
Factual	• What forms and documents are often reviewed in a pre-job meeting? • True or False: Workplace examination forms do not need to be stored.
Open-Ended	• Which is more important, surveying a work area from a distance or from a closer vantage point? Why? • Why are workplace examination forms completed and stored?

Factual Question 1

Answer

Factual Question 2

Answer

Open-Ended Question

Answer

MODULE 2 QUIZ

Complete the following quiz.

1. What information is documented on a workplace examination form? (List Freeport-McMoRan's expectations as well as any additional site expectations)
    a. _____
    b. _____
    c. _____
    d. _____
    e. _____

2. Why do you survey the work area from a distance while conducting a workplace exam? (Provide a short answer).

    _____

    _____

    _____

3. When you identify a hazard, it is your responsibility to take appropriate actions.
    a. True
    b. False

4. What two controls are generally least effective for mitigating a hazard?
    a. Substitution and Engineering
    b. Administrative and PPE
    c. Elimination and Substitution
    d. Engineering and PPE

Workplace Hazards

MODULE 3

MODULE 3: WORKPLACE HAZARDS

Continue on next page

MODULE 3 LEARNING OBJECTIVES

Upon completion of this module, students will be able to:

- Identify the hazards associated with a workplace exam and the controls that can be implemented.

INTRODUCTION

Hazard control begins with recognition. Throughout this module, different hazards encountered in the workplace are addressed. Even though there are specific processes in place for risk analysis, every employee must be able to evaluate the risks associated with any given hazard. Being able to recognize hazards helps control risks. With so many hazards in each workplace, it is difficult to be knowledgeable about them all, so ask questions of your coworkers, supervisors, safety professionals, and other area experts.[19]

GENERAL WORKPLACE HAZARDS

This section provides examples of general hazards that exist on Freeport-McMoRan's properties. The hazards presented are not an all-encompassing list of hazards found in your work area. If any hazards are found during a workplace exam, validate that the implemented controls are effective. Refer to your site's Health and Safety Professional or Supervisor for further clarification on site- and department-specific hazards to evaluate.

EQUIPMENT

A wide variety of equipment is used on Freeport-McMoRan properties and includes stationary, mobile, rental, and job-specific equipment, as well as tools. A thorough workplace exam identifies and evaluates all equipment in the workplace for potential hazards. Know the common hazards you may encounter, so you can be safe and mitigate hazards before the job begins. If the workplace examination reveals areas where hazards exist and improvements are possible, contact your Supervisor or Health and Safety Professional.

PRE-OP

A pre-operation inspection (pre-op) is required before operating any vehicle or equipment. If vehicles or equipment are to be used on the job, a workplace exam helps identify what equipment needs to have a pre-op performed. A pre-op is only performed by employees trained to inspect the vehicle/equipment. If defects are found that result in unsafe vehicles or equipment:

- Place a "Do Not Operate" tag on the vehicle/equipment and list the defect on the tag.
- Record defects that limit safe usage.
- Do not operate the vehicle until repaired.

[19] "Risk Control", *Fundamentals of Safety*, v. 2.

LIFTING EQUIPMENT

If lifting equipment is in the work area, determine if the equipment has the potential to cross someone's travel path at any time during the shift. Look for the operator's position in relation to the travel path of the equipment, and determine if the operator can see pedestrians crossing the route.[20] Also, inspect the rigging and slings for wear, tears, and proper use.

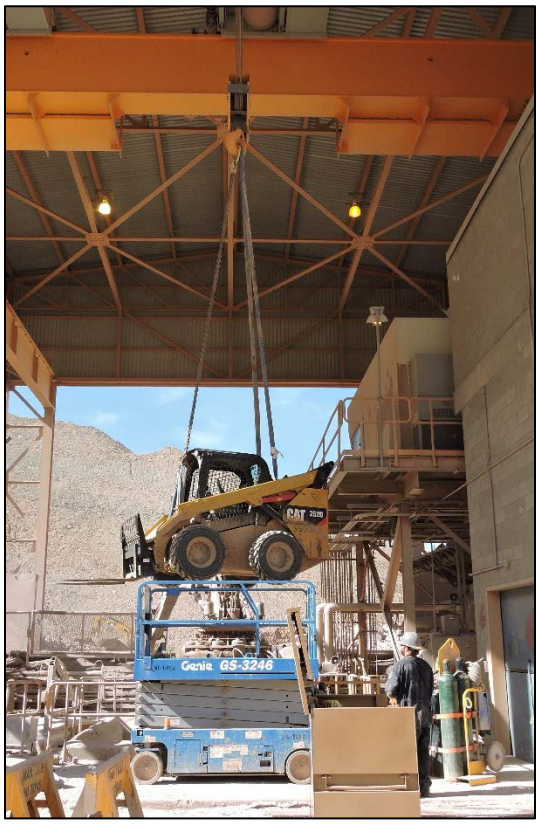


Fig. 3.1 Check travel paths when using lifting equipment.

[20] "General Hazard Identification", *Workplace Examination*, v. 1, 14.

WELDING EQUIPMENT

Welding is the process of fusing two or more metal pieces by bringing them to their melting point. Often maintenance practices require welding. Be aware of your surroundings and watch for indicators of welding in the workplace. When working in an area with welding, determine if any of the following applies and take the necessary precautions:

Fig. 3.2 Welding in a work area.

- The welding equipment is mobile or in a fixed location.
- There is potential to be exposed to spatter.
- All materials (stinger, bottles, or lines) are stored/secured properly.
- Flammable materials stored near the welding equipment.
- The welder utilizes a flash screen.[21]

GRINDING EQUIPMENT

Grinders are found in many workshops or work areas. If grinders are in your work area, use the workplace exam as an opportunity to mitigate the following hazards:

Fig. 3.3 Using a stationary grinder.

- Noise level produced by the grinder that could impact those in the area.
- Sparks generated that could affect a travel way or flammable materials used.

Know the specific requirements of the grinder used, so you know what to look for during a workplace exam.[22]

[21] "General Hazard Identification", *Workplace Examination*, v. 1, 14.

[22] "General Hazard Identification", *Workplace Examination*, v. 1, 15.

MOVING MACHINE PARTS

Mechanical energy is the sum of potential and kinetic energy (the energy of motion) in a working system. When a mechanical object is in motion (kinetic), the hazard is evident. However, there are also risks associated with potential energy. When potential energy is released, it becomes kinetic energy.

Look for moving machine parts during workplace examinations as parts of the body can be pinched (pinch points), crushed, or struck. In extreme circumstances, an employee can be pulled into a piece of equipment. When it is possible for someone to contact a moving machine part, guard the moving parts. If they pose an immediate hazard, flag off the area and notify your supervisor.[23]

GUARDING

Guarding is intended to prevent contact with hazards. Maintain all forms of guarding at all times. When performing a workplace examination, note all areas where guarding needs to be installed including, but not limited to, machinery with exposed moving parts, shielding to protect against chemical contact, heat shielding, and noise dampening. If guarding deficiencies are discovered through a workplace examination, stop working until the guarding is repaired or reinstalled. Unguarded areas must have a spotter until the hazard is mitigated. If the workplace examination reveals areas where guarding needs to be installed, contact your Supervisor or Health and Safety Professional to begin the process.[24]

Fig. 3.4 Proper guarding protects employees from moving parts.

[23] "Energy Control", *Fundamentals of Safety*, v. 2.

[24] "General Hazard Identification", *Workplace Examination*, v. 1, 15.

PINCH POINTS

A pinch point is a place where the body or part of the body can be trapped between objects. While many objects cause pinching some common causes are machine parts, tools, moving materials, container lids, and doors/hinges.

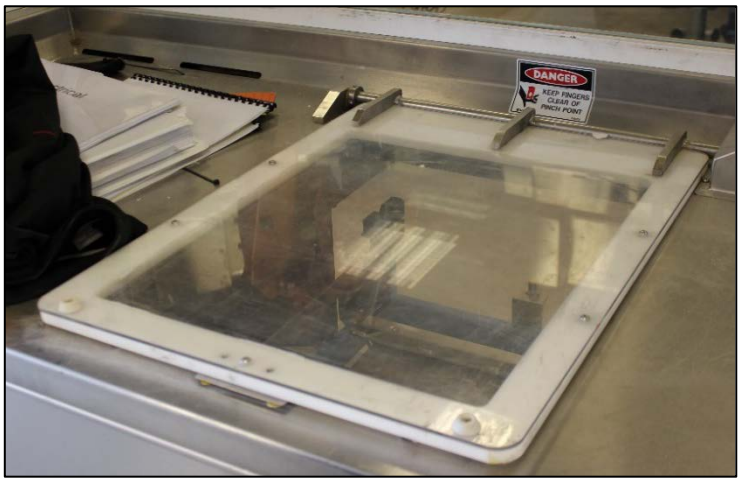


Fig. 3.5 Sign warning of potential pinch points.

A thorough workplace exam identifies possible places where the body or a body part could be pinched and ensures the necessary precautions such as guarding, LOTOTO, or planning the job away from the pinch points are taken to eliminate or mitigate pinching hazards.

OPEN HOLES

The presence of an unguarded/non-barricaded open hole along any travelway or escape route is considered an imminent danger. To be considered an open hole, a person can fall through the opening to a lower level. A horizontal opening must measure 12 inches (30 cm) or more in its least dimension, and a vertical opening must be at least 30 inches (76 cm) tall and 18 inches (46cm) wide. If a person cannot accidentally walk to the hole due to fixed machinery, equipment, or walls, a secure cover that supports at least twice the expected load and leaves no more than 1 inch (2.5cm) openings must be used and labeled “Hole” or “Cover”.

Fig. 3.6 Open-hole.

In the event a workplace examination reveals an open hole, production should immediately stop, Health and Safety Professionals and Supervision should be notified, and proper barricading must be installed. Always consider whether a fall from heights is possible when working around open holes. [25]

[25] “General Hazard Identification”, *Workplace Examination*, v. 1, 25.

ELECTRICAL

The majority of the equipment you find at Freeport-McMoRan sites is powered by electricity. Electricity has long been recognized as a serious workplace hazard, exposing employees to the following:

- Electric shock
- Electrocution
- Burns
- Fires/Explosions[26]

Fig. 3.7 Electrical panels in a work area.

CONDUITS

Electrical conduits are housing for live electrical lines. They are intended to prevent personnel from coming into direct contact with live systems. Broken conduits can lead to exposed wiring, which is a shock/electrocution hazard. While conducting your workplace exam, visually inspect any sections of conduit to which you have access. Pay attention to any junctions or access points along the conduit, as these sections are where wire exposure commonly occurs.[27]

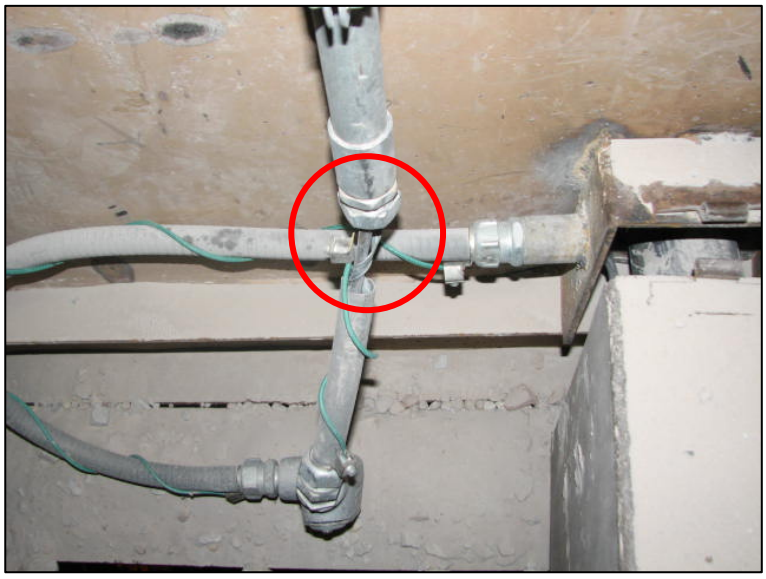


Fig. 3.8 Broken conduit with exposed wiring.

[26] "Energy", *LOTOTO,* v. 1, (Freeport-McMoRan/Mine Training Institute, 2015), 4.

[27] "General Hazard Identification", *Workplace Examination,* v. 1, 19.

CORDS

Electrical cords have insulation to protect users from electricity. A break in an electrical cord's insulation can cause a tool or machine's metal parts to conduct electricity and result in an electrical shock, burn, or electrocution. Noting defects and immediately reporting them when completing a workplace exam helps find hazards before injuries occur.

Before inspecting electrical cords (including extension cords) and the equipment to which they are attached, remove the cord from the power source. As you inspect, immediately remove items posing a risk and contact your supervisor. Check for the following:

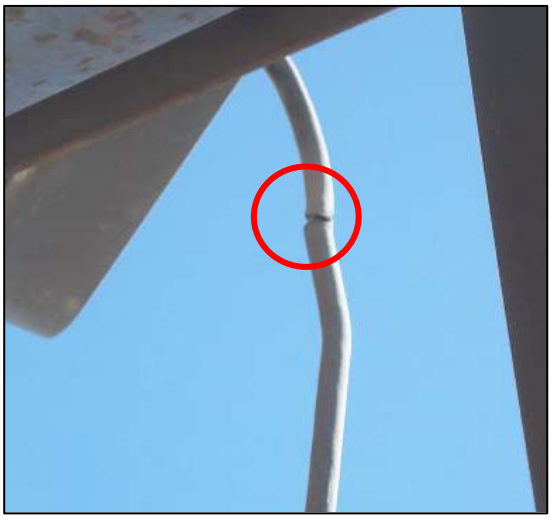


Fig. 3.9 Break in electrical cord insulation.

- Broken or missing prongs
- Exposed wires or other electrical parts
- Physical damage to jackets and conduits
- Worn, frayed, cut, or broken cords
- Damaged, defective, or deformed insulation on electrical tools or appliances
- Exposed electrical terminals in motors, appliances, and electronic equipment
- Appropriate covering on cords running temporarily across the floor
- Tripping hazards created by the cord
- Extension cords used on a temporary basis only[28]

WIRES

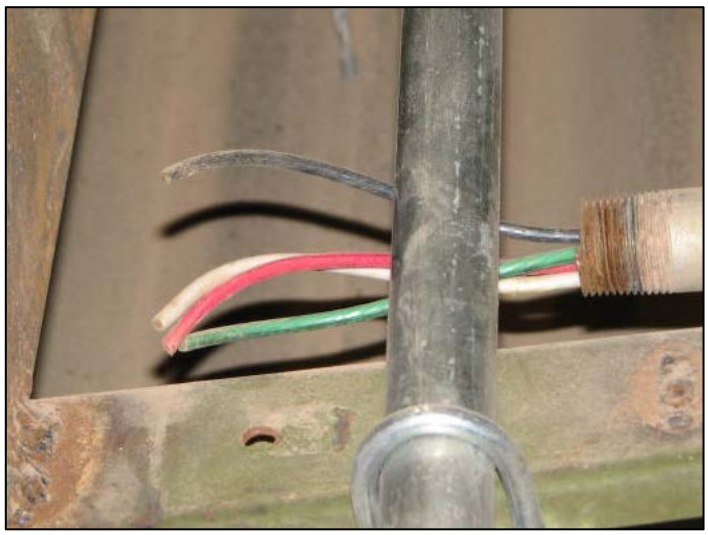


Fig. 3.10 Broken wires in a conduit.

Broken wiring creates shock/electrocution and fire hazards. While conduits and cords are common places to look for broken wiring, inspect other areas for wiring, too. Pay close attention to any worn, frayed, cut, or broken wiring and immediately report any defects to your supervisor.

[28] "Electrical Safety", *Fundamentals of Safety*, v. 2.

KNOCKOUTS

Electrical boxes are designed to allow for either single or multiple conduits. The conduit is attached to the electrical box at small pre-cut holes. These holes are covered with small knockout plugs that are intended to be broken away when the conduit is attached. Whenever an electrical box is modified in a manner that eliminates the need for a conduit, the remaining hole cannot be left open. A new knockout plug is used to mitigate this hazard and confirm no open holes exist in the electrical box.

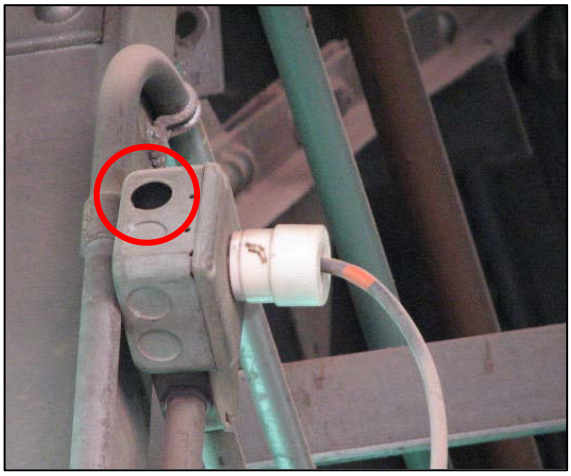


Fig. 3.11 Missing knockout plug.

As you perform your workplace examination, be sure to examine all electrical boxes for broken or missing knockout plugs. If trained, verify all electrical box access doors are working and can be adequately secured. Electrical boxes should be free from any open areas. Do not access an electrical box through an unused opening.[29]

GROUND CHECKS

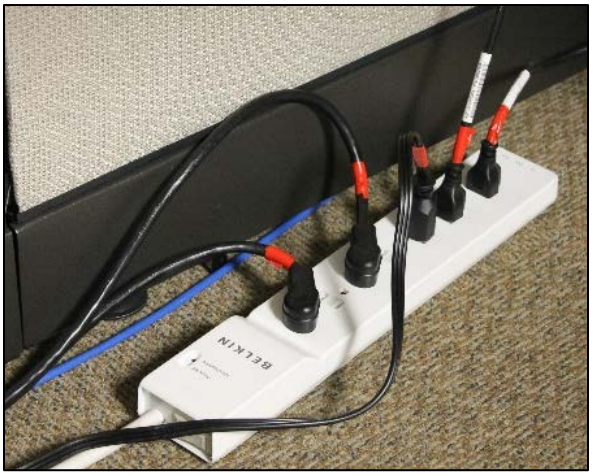


Fig. 3.15 Ground-check color indicates the year tested.

Electrical equipment requires a ground check upon installation and after repairs or modifications. Additionally, some sites require annual ground checks. All of these checks test the continuity and resistance of the grounding system. Some properties use a specific color-coded tape system to allow employees to determine at a glance if the equipment has been inspected or is out of compliance. When performing a workplace examination, establish that all electrical equipment has been tested and is current.[30]

[29] "General Hazard Identification", *Workplace Examination*, v. 1, 19.

[30] "General Hazard Identification", *Workplace Examination*, v. 1, 21.

PANEL LABELING

Proper labeling of all electrical panels is critical to the safety of personnel. Improper or missing labeling can contribute to major injuries or death during maintenance or emergency situations. When inspecting the labeling of electrical panels, verify that all operational circuit breakers are marked appropriately and accurately. If labels are damaged, missing, not legible, or their view is obstructed, the appropriate personnel needs to be notified to implement corrective action. Only authorized and qualified individuals may open panels. Additionally, note whether or not adequate lighting is in place to read all labeling. Any items labeled "spare", or something similar must remain in the open position.[31]

Fig. 3.13 Labeling that is difficult to read.

Fig. 3.14 Clear labeling on the door.

GFCI

Ground-fault circuit interrupters (GFCIs) protect workers from electrocution by tripping (opening the circuit) when electrical equipment is not working correctly. They must be located on all outdoor outlets and any outlets within six feet of a water source. Press the test button to verify the power disconnects. If a GFCI does not pass the test, continues to trip, or is damaged/defective:

- Stop use
- Tag-out
- Contact the Electrical Department[32]

Fig. 3.12 GFCI on an outlet near a sink.

[31] "General Hazard Identification", *Workplace Examination*, v. 1, 20.

[32] "Electrical Safety", *Fundamentals of Safety*, v. 2.

ERGONOMICS

"Ergonomics is the science of designing the job to fit the worker, rather than physically forcing the worker's body to fit the job. Adapting tasks, workstations, tools, and equipment to fit the worker helps reduce physical stress on a worker's body and eliminate many potentially serious, disabling work-related musculoskeletal disorders (MSDs)." [33] Workplace exams offer an opportunity to evaluate a work area for ergonomics-related hazards.

ENGINEERING DESIGN

Poor machine, tool, and workplace design, or the use of improper tools creates physical stress on workers' bodies, which can lead to injury. [34] Use the workplace exam as an opportunity to evaluate the design of the machines, tools, and workplace to determine if hazards can be eliminated or mitigated.

BODY FATIGUE

"MSDs can affect nearly all tissues in the human body: the nerves, tendons, tendon sheaths, and muscles. The most frequently affected areas of the body are the arms and the back." When conducting a workplace exam, check for ways to eliminate awkward and uncomfortable body positions such as:

- Varying tasks
- Repetitive motion tasks
- Working at a slower pace
- Supplying anti-fatigue mats
- Supplying the right tool for the job
- Providing ergonomic chairs or stools
- Adjusting the height of working surfaces
- Providing an increased number of short breaks
- Reducing the weight and size of items to be lifted
- Putting supplies and equipment within easy reach of the worker[35]

[33] Occupational Safety and Health Administration, *Ergonomics: The Study of Work,* (U.S. Department of Labor, 2000), 1.

[34] Occupational Safety and Health Administration, *Ergonomics: The Study of Work,* 1.

[35] Occupational Safety and Health Administration, *Ergonomics: The Study of Work,* 3-5.

INCLEMENT WEATHER

Weather plays a key role in day-to-day operations. A thorough workplace exam includes paying attention to weather-related hazards such as:

- The freeze-thaw cycle (ice and run-off)
- Precipitation (snow and rain)
- High speed winds
- Extreme heat
- Lightning

Fig. 3.16 Snowy conditions require careful planning.

If a possible risk is associated with any of these hazards, report them to your Health and Safety Professional or Supervisor immediately.

EXTREME TEMPERATURES

Environmental factors such as extreme temperatures (heat and cold) alter work areas and hazards while performing tasks. Before beginning work, conduct a workplace exam that pays attention to the unique hazards created by extreme weather conditions such as hot or cold metal surfaces, intensified heat in some PPE, and the need for additional warmth in cold conditions. Prepare for these conditions during a workplace exam. If heat is a factor, confirm plenty of water and a cool area are available for breaks and identify periods of the day when it is safest to perform heavy work. If cold is a factor, confirm warm areas are available for breaks and have changes of clothes available in case clothes get wet.

Fig. 3.17 Take precautions before starting work in hot weather.

PRECIPITATION

Precipitation such as runoff, flooding, and rainy conditions can detrimentally affect walking and driving conditions throughout each site as they result in wet travel ways. Wet travel ways increase the possibility of vehicle accidents and employee slips, trips, and falls. When performing a workplace exam, minimize the hazards of wet weather conditions by checking travel ways for debris, wiping up wet areas, and inspecting vehicles for safety. [36]

Fig. 3.18 Rainy weather creates new hazards.

HOUSEKEEPING

Housekeeping is more than just picking up after yourself. Trash, debris, spills, and miscellaneous equipment/tools become a safety hazard when they obstruct walkways or working surfaces. Fine materials such as sawdust and silica, along with biological hazards such as improperly stored food or animal waste, create a wide array of health hazards. Establish housekeeping habits by cleaning your area while performing a workplace exam and while you work, and encouraging others to do the same.[37]

Fig. 3.19 Proper housekeeping includes eliminating clutter.

[36] "Ground Control", *Fundamentals of Safety*, v. 2.

[37] "General Hazard Identification", *Workplace Examination*, v. 1, 16.

SLIPS, TRIPS, AND FALLS

Fig. 3.20 Material spillage leads to slipping incidents.

As you begin a workplace exam, determine the travel path of the area and identify any conditions that could lead to slips and trips. Slips and trips are caused by a wide variety of conditions including standing liquids, uneven surfaces, hoses, electrical cords, stairs, and ladders. If you happen to see standing liquids or puddles, avoid walking through it, establish appropriate barricading, and contact your Health and Safety Professional or Supervisor.[38]

TRAVEL WAYS

Fig. 3.21 Safe travel way in a tankhouse.

While there are many types of travel ways and escape ways, their purpose is ultimately the same: to allow employees to travel from one area to another. Whether traveled frequently or rarely, they must remain safe routes for all employees at all times.

Safe access along any path traveled for work, repair, or maintenance must be free of debris or obstructions, easily accessible, and well-lit.[39]

[38] "General Hazard Identification", *Workplace Examination*, v. 1, 16.

[39] "General Hazard Identification", *Workplace Examination*, v. 1, 24.

LIGHTING

Whether working at night or in a darkened area during the day, provide adequate lighting in walkways and work areas. As you conduct a workplace exam, ensure there is enough illumination to let you work safely. Both permanent and temporary lighting can be used but either way, the lighting components must be safe for the location and task.

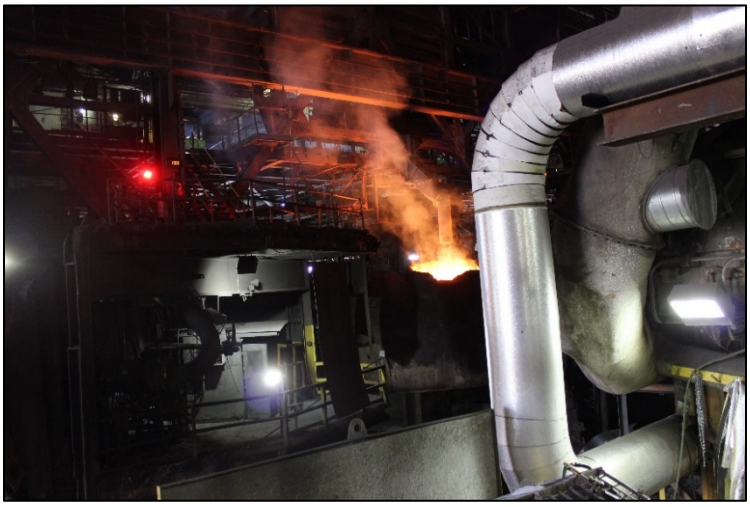


Fig. 3.22 Adequate illumination in a work area.

STORAGE

Improperly stored materials become a hazard when obstructing travel ways. The risk of this hazard increases dramatically in the event of an emergency. When looking around your work area, note if all materials are stored according to Freeport-McMoRan standards as well as manufacturers' instructions. Materials may be stored in the proper containers but, if their weight exceeds the limits of the shelving system, they are improperly stored.[40] If containers are stacked, make sure they are balanced.

Fig. 3.23 Improperly stored materials.

[40] "General Hazard Identification", *Workplace Examination*, v. 1, 17.

EMERGENCY EQUIPMENT

In emergency situations, timing is critical. While signs are posted directing employees to emergency routes, eyewash stations, and safety equipment, proactive measures performed routinely further aid in emergencies.[41] One proactive step is performing a workplace exam that establishes that all emergency equipment is properly labeled and in working order.

EYEWASH STATIONS AND SHOWERS

Emergency eyewash stations and showers are often the difference between life-altering exposure events and a recoverable injury. In situations where eye contamination occurs, the longer you wait for treatment, the worse your condition may become. While skin is much more resistant to damage than eyes, there are still certain exposures that require immediate treatment.

Fig. 3.24 Eyewash station and shower.

Fig. 3.25 Eyewash station with build-up.

Waiting for an event that requires the use of either an emergency eyewash station or shower is not the time to learn where they are located or if they are operational. As you enter your workplace, locate all emergency eyewash stations and showers. Ensure they are functioning, clean, and free from debris. Also, eyewashes and showers must have signage near them, and the area around them must be clear of obstructions.

[41] "General Hazard Identification", *Workplace Examination*, v. 1, 21.

FIRE EXTINGUISHERS

Ensuring you are properly trained on how to use a fire extinguisher is important. However, the skill is of little use if fire extinguisher locations are unknown. When performing your workplace examination, note the location of all fire extinguisher and ensure an identifying sign is posted above each one.

Fig. 3.26 Fire extinguisher in the workplace.

When inspecting a fire extinguisher, ask the following questions:

- Is there any damage to the handle, nozzle, or hose?
- Is the safety pin correctly in place?
- Does the needle in the pressure gauge fall in the "Good" or green range?
- Are the inspection tag and sticker current?
- When was the last time the fire extinguisher was inverted to check for rust on the bottom?
- Is the area three feet around the extinguisher free from obstructions?
- Is it the correct type of extinguisher for the hazards in the area?[42]

FIRST-AID KITS AND AEDS

First-aid kits and automated external defibrillators (AEDs) can be critical during a health emergency. During your workplace exam, pay attention to the location of all first-aid kits and AEDs. Ensure first aid supplies are fully stocked, and any items with an expiration date are current.[43]

Fig. 3.27 First-aid kit and AED.

[42] "General Hazard Identification", *Workplace Examination*, v. 1, 22.

[43] "General Hazard Identification", *Workplace Examination*, v. 1, 22.

EMERGENCY ALARMS

Fig. 3.28 Emergency alarms.

Emergency alarms reduce the severity of incidents by warning employees of a danger and alerting them to follow the proper procedures when the alarm sounds.[44] In the event of an emergency, the alarms need to function properly. During a workplace exam, locate all alarms and check that they were recently tested. Alarms are often tested on a regular basis by sites and may not need to be tested during a workplace exam. Check with your site supervision if you have any questions.

EMERGENCY LIGHTING AND SIGNS

Fig. 3.29 Emergency lighting.

Each work area has a detailed evacuation plan. The success of this plan in an emergency is partially dependent upon emergency lighting and exit signs.

Part of the workplace examination includes locating and testing the emergency lighting, and locating and verifying that all exit signs are illuminated. Test the emergency lighting by pressing the "Test" button or unplugging it and plugging it back in.[45]

[44] "Fire Safety", *Fundamentals of Safety*, v. 2.

[45] "General Hazard Identification", *Workplace Examination*, v. 1, 23.

COMMUNICATION

Freeport-McMoRan sites strive to keep everyone informed throughout the workday by communicating in multiple ways such as signage, flagging, tagging, and blue stake markings. These forms of communication often draw attention to potential hazards when performing a task and must, therefore, be clearly conveyed and precisely understood.[46] Part of a workplace exam entails ensuring the appropriate forms of communication are present, correct, and legible.

SIGNAGE

Signs are classified as administrative controls. When immediate or potential health and safety hazards exist in a work area, warning signs must be posted at all approaches. Recognizing these signs enables you to easily understand the hazards and adhere to proper precautions while working.

Fig. 3.30 Signs must be legible.

For a sign to be effective in a work area, it must be:

- Positioned in an obvious location
- Posted in the common language for that property
- Oriented properly
- Clean and legible

Stopping to focus on a sign that does not meet these standards wastes valuable time in an emergency. During a workplace examination, note signs that do not meet these standards, and take the time to correct the problem, or notify Supervision, so they can resolve the issue.[47]

[46] "Communication", *Fundamentals of Safety*, v. 2.

[47] "General Hazard Identification", *Workplace Examination*, v. 1, 18.

FLAGGING AND TAGGING

Flagging and tagging off areas or equipment serves to indicate that a hazard or unsafe condition exists. The color of the flagging (red or yellow) identifies the level of danger associated with the hazard and the tag describes the nature of the hazard and other pertinent information.[48] During a workplace exam, double-check that all necessary areas are flagged, and the correct color is used. Tag colors vary but must be noticeable and hang from all sides of the perimeter or all access points. Check tags for the following information:

Fig. 3.31 Flagging and tagging in a work area.

- Employee's name that placed the tag
- Employee's supervisor
- Employee's department (or company, if a contractor)
- Hazardous condition/reason for flagging
- Time and date installed
- PPE requirement to enter
- Contact number for responsible person

BLUE STAKE / UTILITY LOCATION MARKINGS

Blue stake/Utility location markings indicate the location and type of buried/hidden utility lines. They are intended to prevent disturbing unseen utilities and keep all employees safe when penetrating more than 1 inch (2.5 cm) into floors, roofs, ceilings, walls, and the earth's surface.[49]

Fig. 3.32 Blue stake markings in a work area.

When inspecting these markings, check that the color is easily identifiable and legible. If markings are faded or damaged, notify the appropriate personnel to have them re-painted. Specific paint colors are used to identify the type of utilities hidden from view. If you see or suspect markings are inaccurately labeled, incorrectly located, or missing, follow the required procedures so that the correct personnel can investigate further. Blue stake/Utility location markings also include temporary markings such as whiskers (small colored, plastic strings that are staked into the ground), or permanent markings such as colored flags or stakes. Ensure all temporary and permanent markings are in good enough condition to communicate the intended message.

[48] Freeport-McMoRan Department of Occupational Health and Safety, *Flagging and Barricading Guideline,* v. 1, (2013), 2.

[49] Freeport-McMoRan Department of Occupational Health and Safety, *Blue Stake Policy FCX-13,* (2013).

HAZARDOUS MATERIAL HANDLING

Many chemicals are used on Freeport-McMoRan properties. Accidents with hazardous chemicals can happen quickly and be quite severe. Before using any chemical, review a Safety Data Sheet (SDS) or other appropriate resource.[50] SDS's direct your attention to the conditions of use that pose a potential hazard and identify controls such as handling requirements and PPE that need to be implemented. Performing a workplace exam offers an opportunity to ensure the Safety Data Sheet (SDS) requirements are sufficient for keeping you and your coworkers as safe as possible.

CONTAINER LABELS

All containers must be labeled. Labels contain immediate warnings about a chemical's most serious hazard and should be the first thing referenced before beginning work. A label is an employee's first source of information about a chemical. As you inspect chemical labels, check your SDS sheets to confirm all containers are labeled appropriately and contain the correct pictogram. The manufacturer's label must be intact and legible. If any chemical delivered to your site is missing a label, or a label is lost or damaged, let your supervisor, global sourcing representative, Environmental Professional, or Health and Safety Professional know immediately so that they can replace the label.

CHEMICAL STORAGE

Understand the expectations of chemical storage before beginning a workplace exam. Evaluate the chemicals and determine whether or not the proper controls are in place. SDS's provide proper storage recommendations and compatibility with other chemicals.

Fig. 3.33 Chemical containers with proper labeling.

If your work area contains liquids stored under pressure, verify the vessels are secured properly and no valves are leaking. If you are storing liquid waste, verify all containers are compatible with the product, free from leaks, labeled (describes contents), and secured. If your work area contains various hazardous or reactive chemicals, confirm that there is no possibility of the chemicals mixing. Store materials in a rated flammable materials safety storage cabinet. All containers stored in a cabinet, regardless of the content, need to be properly labeled. Do not store items such as rags, cardboard containers, paper, or anything else with the potential to become a fuel source for a fire.[51] Make sure all containers are clean and the lids are closed.

[50] "Health and Hazard Communication", *Fundamentals of Safety,* v. 2.

[51] "General Hazard Identification", *Workplace Examination,* v. 1, 17.

WASTE GENERATION AND MANAGEMENT

Before anyone brings a new chemical onto a site, the Health and Safety and Environmental departments need to be notified. These departments evaluate chemical hazards and communicate new chemical hazards introduced in your work area to you and your coworkers. If unknown products, used containers, outdated products, or any contaminated PPE are found during a workplace exam, contact your site's hazardous waste coordinator to ensure the proper disposal method.

PPE

PPE can only be beneficial when in proper working order. PPE can only be beneficial when in proper working order. A thorough workplace exam includes selecting the correct PPE and inspecting it properly, so it can protect you while performing your job. When you have questions about wearing, using, or caring for PPE, ask a supervisor or Health and Safety Professional.[52]

PPE SELECTION

During a workplace exam, verify the correct PPE for the hazard/task is selected and fits properly. Check the JSAs, SOPs, and Safety Data Sheets (SDSs) to identify specific PPE selection for the hazards you may encounter and the tasks you may perform. Also, most PPE comes in different sizes. Any equipment worn must fit employees well enough to prevent dangerous gaps in protection. If PPE does not fit properly, resolve the issue before entering areas where it is required.

When selecting PPE, keep the following guidelines in mind:

Fig. 3.34 Employee wearing PPE.

- Know the hazards and when PPE is needed.
- Select PPE that best protects you from the hazards.
- Understand the useful life and limitations of your PPE.
- Choose correctly fitting PPE. [53]

[52] "Personal Protective Equipment", *Fundamentals of Safety*, v. 2.

[53] "Personal Protective Equipment", *Fundamentals of Safety*, v. 2.

PPE INSPECTION

PPE only protects you when it is in good condition. Before you put on gloves, goggles, clothing, or any piece of PPE, clean and inspect it carefully to ensure it does not have any:

- Rips
- Tears
- Disintegration
- Other damage

When you find damaged equipment:

- Notify your supervisor immediately.
- Dispose of the damaged equipment properly.
- Replace the equipment.
- Get new protective gear.[54]

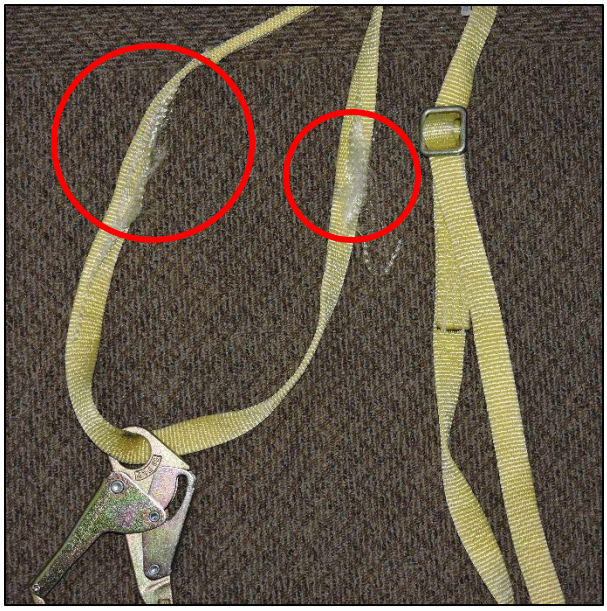


Fig. 3.35 Damaged lanyard.

[54] "Personal Protective Equipment", *Fundamentals of Safety*, v. 2.

ACTIVITY 4: TEACH ME

Write your assigned workplace examination hazard on the line provided. Use your student guide to research answers to the questions provided.

Assigned Hazard: _____

Potential Risks

Controls

How does this topic apply to your work area?

What other information do you think is important to discuss with the class?

ACTIVITY 5: SECURE THE SCENE

Identify the existing/potential hazards in each image. Record the hazards you find, then determine and record controls that can mitigate the hazards.

1.

Existing/Potential Hazards and Controls

2.

Existing/Potential Hazards and Controls

3.

Existing/Potential Hazards and Controls

4.

Existing/Potential Hazards and Controls

5.

Existing/Potential Hazards and Controls

6.

Existing/Potential Hazards and Controls

7.

Existing/Potential Hazards and Controls

8.

Existing/Potential Hazards and Controls

MODULE 3 QUIZ

Complete the following quiz.

1. What is the purpose of guarding?
    a. To prevent access to a hazardous area
    b. To protect equipment from dust and debris
    c. To provide an alternative location for PPE storage
    d. To act as an administrative control against hazards

2. List three electrical hazards and how to mitigate the risks they pose.
    a. _____
    _____
    b. _____
    _____
    c. _____
    _____

3. Travel ways should be:
    a. Free of debris
    b. Easily accessible
    c. Well-lit
    d. All of the above

4. All containers must be labeled.
    a. True
    b. False

COURSE CONCLUSION

Most people have witnessed complacency in the workplace. For some, the behavior resulted in an incident where an injury occurred. For others, perhaps luck was on their side, and no injuries resulted. The work you perform every day does not lend itself to relying on luck. Safety is an actively achieved task that starts with a workplace examination. The importance of a quality workplace examination cannot be understated. It is a continuous process that helps lead to a safe return home.

Good hazard recognition skills, a strong understanding of how to implement critical controls, and knowledge of the processes performed are the backbone of a successful exam. Even the most experienced employee needs to take the examination seriously. Having a proactive approach to your work area or one you are passing through, and taking the time to mitigate hazards, creates a safer workplace for you and those around you.

Fig. 4 Maintain an awareness of hazards while performing work.

Resources

TABLE OF CONTENTS

GLOSSARY

Accountability	An employee's willingness to accept responsibility for working in a safe manner and expecting others to do the same.
Ergonomics	Designing the job to fit the worker, rather than physically forcing the worker's body to fit the job to eliminate many potentially serious, disabling work-related musculoskeletal disorders.
Guarding	An object placed between personnel and hazards. Designed to keep any portion of the body from contact (intentional or inadvertent) with a hazard. Shielded, fenced, or enclosed by covers, casings, shields, troughs, spillways or railings, or guarded by position or location. Examples of guarding methods are guarding by location (positioning hazards so they are inaccessible to employees) and point of operation guarding (using barrier guards, two-hand tripping devices, electronic safety devices, or other such devices).
Hierarchy of Controls	A means of evaluating risks and identifying controls. Those controls designated as more conservative and most effective are at the top of the hierarchy, while the less conservative and least effective are at the bottom.
Housekeeping	The act of maintaining cleanliness and order by removing trash/debris, cleaning up spills, putting away equipment/tools, and keeping walkways or working surfaces free from obstructions.
Mitigate	The act of making a hazard less severe.
Observation	The act of using all of the senses (sight, sound, touch, smell, and taste) to gather information about the surrounding area.
Pre-job meeting	Valuable opportunities to communicate specific focal points for a workplace examination, discuss significant/high risks that employees could be exposed to when performing the day's tasks. Also referred to as pre-task meetings or tailgates.
Spotter	A qualified person, designated by the supervisor, who performs all the observation duties assigned for the task. This individual may be equipped with an emergency communication device, and be outfitted with PPE as required for the task. It is the sole responsibility of this individual to perform only the observation activities that apply to the task, and no other functions or tasks.
Travel way	A path that allows employees to travel on foot from one area to another.
Workplace Examination	Procedures each site creates to identify and control any hazards before beginning work and throughout a shift. Also referred to as area inspections, pre-shift inspections, workplace inspections, and workplace exams

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STUDENT COURSE EVALUATION

Course Title	Site	Date
Your Name (optional)	Facilitator	

Directions: Circle the number that best fits your level of agreement with the statement. Then complete the short answer questions.

	Strongly Disagree	Disagree	Agree	Strongly Agree
1. The course content was relevant to my job.	1	2	3	4
2. The course materials were clear and well written.	1	2	3	4
3. The lecture, discussions, and activities improved the quality of the course.	1	2	3	4
4. The facilitator was knowledgeable about the content.	1	2	3	4
5. The facilitator created an atmosphere that enhanced my learning.	1	2	3	4
6. I am confident I can apply the course content to my job.	1	2	3	4
7. The course met my expectations.	1	2	3	4
8. What did you find valuable in the course?				
9. What can be improved in the course?				
10. Please clarify your responses (questions 1-8) and provide any additional comments.				

Thank you for taking the time to complete this evaluation. We value your feedback.

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