

ACCIDENT INVESTIGATION

What is an Accident Investigation?

- Learn why an accident investigation is conducted and how to plan the investigation.
- Importance of gathering information
- · Conducting an effective investigation
- Assembling an investigation kit

Gathering Information

- Learn how to respond to an accident and methods for gathering information.
- Responding to an accident
- When to investigate the scene of an accident
- The primary sources of information regarding an incident

Conducting Interviews

- Learn techniques for conducting effective interviews.
- When to conduct interviews
- What to ask and how to ask it
- The importance of continuing at the witness's pace
- Using proper body language

Analyzing & Corrective Actions

- Learn how to document the investigation's findings, recommend corrective actions, and implement the information for continuous improvement.
- Methods for organizing information
- Identifying the root causes of an incident
- Developing and recommending corrective actions
- Reporting the findings



AERIAL LIFT SAFETY

What is an Aerial Lift?

- Different types of aerial lifts and their uses.
- The purpose of an aerial lift
- Capabilities and limitations of different types of lifts
- Your responsibility as the lift operator

Pre-operation Procedures

- Training requirements for proper use of aerial lifts
- How to conduct a pre-operation inspection of the lift
- What to do if a problem is discovered
- What to look for when checking the work area for potential hazard

Operating Procedures

- What to consider before lifting
- When to use outriggers and blocks
- Working near ground personnel
- Tips for safely driving the lift
- Personal protective equipment that may be required
- Safe Work Practices
- Specific hazards associated with the use of aerial lifts and safe work practices to help eliminate and control these hazards.
- Fall protection systems
- Safely using guardrails
- Working near electrical lines
- Other outdoor hazards



AIR EMISSIONS

What Are Air Emissions

- Why our atmosphere is important
- Sources of air emissions
- The effects of air emissions on the environment

Regulatory Requirements

- Emissions regulated by the EPA
- Major events in the government's anti-pollution efforts
- The use of permits to implement regulations

Plant Control Measures

- Learn about measures to control or eliminate emissions
- Material selection and use
- Production and maintenance procedures
- Engineering controls

Employee Actions

- Your role in controlling emissions
- Recognizing potential problems
- Reducing emissions off the job



ASBESTOS AWARENESS

What is Asbestos?

- What asbestos is
- Uses of asbestos
- Three common types of asbestos
- When asbestos becomes hazardous

Potential Hazards

- What can happen when asbestos fibers become airborne
- Your body's built-in defense mechanisms
- Diseases caused by unprotected asbestos exposure
- Symptoms of diseases
- Smokers are at greater risk

Proper Protective Measures

- What needs to be done before working with asbestos
- When regulated activities must be established
- What personal and area air monitoring is
- The specifics of a medical surveillance program
- Appropriate protective equipment

Methods of Compliance

- How hazards are communicated
- What type of information is included on warning signs and labels
- What information is included in the material safety data sheets
- Prohibited activities in regulated areas
- Safe work practices



BACK INJURY PREVENTION

Back Injuries

- Cumulative Trauma
- Risks and costs of injuries
- What you need to know about back injuries
- How the back works

Bending, Lifting, & Posture

- How improper bending and lifting can damage the back
- How the ten-to-one ratio affects lifting
- Proper sitting, standing and lifting posture
- Risk factors for lifting
- Proper lifting techniques

Best Safety Practices

- Lifting
- Excessive twisting or bending
- Physical condition
- Activities that require high energy demands



BACK SAFETY

Basic Awareness

- You will develop an understanding of back injuries and your role in prevention
- Understand who is at risk for back injuries
- Identify common risk factors
- Explain the causes and effects of back injuries
- Know your role in prevention

How Your Back Works

- Learn how the individual parts of the back come together to form a working unit.
- Identify the key components of the back
- Explain how the parts work together as a whole
- Understand how back injuries can occur

Posture

- Understand why posture is important to the health of your back
- Identify the elements of proper sitting and standing posture
- Explain what is static posture and how to avoid it

Body Mechanics

- Learn the importance of using proper body motions to protect your back from injury.
- Explain what are body mechanics
- Describe how twisting, bending and reaching motions can affect your back
- Identify specific solutions to eliminate these motions

Lifting & Moving Loads

- Learn techniques for lifting, carrying, moving and lowering loads to prevent back injuries
- Identify risk factors that can lead to injury while lifting
- Explain the importance of planning for each lift
- Demonstrate proper lifting and moving techniques
- Recognize poor lifting habits

Physical Condition

- Learn about the importance of a healthy lifestyle in the overall condition of your back.
- Identify the benefits of a healthy diet, rest, and stress management
- Explain the effects of weight gain and smoking on your back
- Demonstrate basic stretches & exercises to prevent injury and promote a strong back



BENZENE SAFETY

What is Benzene?

- Where benzene can be found
- The characteristics of benzene
- How benzene is used today
- Health Risks
- The methods of benzene exposure
- The risks associated with benzene exposure
- First aid for benzene exposure

Safe Work Practices

- How to properly label and store benzene
- · How to maintain a safe work environment
- How to minimize employee risk of exposure
- What to do in case of an accidental benzene leak or spill

Complying With Benzene Standards

- The PEL's associated with benzene
- The warning and labeling requirements for locations that contain benzene
- And the medical testing requirements for persons exposed to benzene



COMPRESSED GAS CYLINDERS

Handling Cylinders

- What to check before using a compressed gas cylinder
- What information you will find on the cylinder label
- The type of PPE that should be worn when using or handling cylinders
- How to secure compressed gas cylinders and why
- Where valves should be positioned and when it should be opened or closed

Inspection and Testing

- How to inspect and test cylinders before use
- How to read pressure gauges
- What to do after testing is complete

Working with Cylinders

- Best safety practices to ensure a safe work environment
- What you should do when a job or shift is completed
- What to do when the cylinder is emptied

Storage and Transportation

- How to store compressed gas cylinders
- Proper storage procedures for incompatible gases
- How to safely transport a compressed gas cylinder
- Practical safety precautions you should follow



CONFINED SPACE ENTRY – PERMIT REQUIRED

Confined Spaces & Their Potential Hazards

- Learn about the differences between confined spaces and permit required confined spaces
- How to identify permit-required confined spaces
- What is considered an entry
- Common types of permit-required confined spaces
- Potential hazards of permit-required confined spaces

Entry Permit Requirements

- When an entry permit is required
- The types of information found on an entry permit
- Proper entry permit procedures

Safe Work Practices

- Learn about basic steps you can take to ensure that safety precautions are taken during confined space entry
- Ventilation is used when needed
- Proper lockout/tagout procedures are followed
- Personal protective equipment is worn when necessary
- Barricades, signs and other warning notices are posted and followed
- Additional safety measures are taken as necessary

Attendant Responsibilities

• Learn about the roles and responsibilities of the attendant during confined space entries

Emergency Response

- Learn how to handle an emergency situation during a permit required confined space entry
- The importance of proper planning
- Requirements for in-house and off-site rescue personnel
- Using respiratory protection
- Training requirements



CONFINED SPACE – EMERGENCY RESCUE

Introduction

- Explain the consequences of poorly planned rescues
- Discuss why training and pre-planning are so important
- Recognize risk factors involved in a confined space rescue

Pre-planning and Training

- Explain the differences between a confined space and a permit-required confined space
- Identify the types of information to collect when evaluating a confined space
- Formulate questions to ask while gathering information
- Understand the minimum training requirements for rescue personnel

Potential Hazards

- Define the differences between atmospheric and physical hazards
- Identify symptoms associated with toxic gas exposure
- Explain when monitoring is necessary
- Determine precautions to take when physical hazards are present

Rescue Procedures

- List the type of information you should collect when pre-planning
- Recognize what each rescue team member's duties should be
- State the kind of information that should be received from the attendant
- Explain the role of the rescue personnel after entering the confined space
- Determine when CPR should be performed on a downed worker



CONSTRUCTION SAFETY ORIENTATION

Accident Prevention

- The importance of safety
- Potential hazards in the work site
- Your role in accident prevention

Ladders & Fall Protection

- Learn safe work practices when using fall protection equipment and ladders
- Types of fall protection
- When fall protection is required
- Proper ladder inspection procedures
- Proper use of extension ladders

Vehicles & Equipment

- Learn safe work practices for using electrical power equipment, as well as moving equipment and vehicles.
- The importance of using ground fault circuit interrupters
- Inspection and storage of extension cords
- Pre-operation inspection of moving equipment and vehicles
- Pedestrian responsibilities
- Proper rigging use, inspection and care

Hazardous Areas & Conditions

- Learn safe work practices associated with excavations and trenching, lockout and tagout, confined space entry, and hazardous chemicals. Hazards associated with trenches
- Excavation and trenching safety procedures
- Purpose of lockout and tagout procedures
- Types of confined spaces
- Forms of communication for hazardous chemicals

Safe Work Practices

- Learn safe work practices and steps you can take to prevent injury.
- The types of personal protective equipment
- How to work safely with compressed gas cylinders
- The elements necessary for a fire to occur
- Good housekeeping practices



DISASTER READINESS

Preparing for Disasters

- Disasters cannot be avoided
- Emergency action plan and what it includes
- Emergency response training is a necessity

Your Role

- It is your site's responsibility to have an emergency action plan in place to deal with a wide variety of emergency and disaster situations. It is your responsibility to implement this plan effectively
- What you need to do to prepare for disaster readiness
- How to prepare to report an emergency
- What to do when reporting an emergency
- How to prepare for evacuation
- What to do during and after evacuation

Responding to an Emergency

- How to evacuate from your site or office
- What to do during and after evacuation
- How to respond to medical emergencies
- How to respond to fires
- How to respond to leaks or spills of hazardous chemicals



ELECTRICAL SAFETY

How Electricity Works

- Potential hazards of electricity
- Ways to prevent hazards such as death and injury
- When electricity becomes hazardous
- How electricity works

Electrical Hazards

- Results of electric shock
- Factors that determine the severity of electrical injury
- Burns caused by electricity
- How water affects electrical flow
- Other electrical hazards found in the workplace

Best Practices with Power Lines

- Danger of overhead power lines
- What conductive objects are
- Best safety practices associated with power lines

GFCIs & Grounding

- What GFCI is
- How GFCI works
- When to use GFCI and how to test it
- How to ground equipment and electrical tools
- Hazards to be aware of when grounding equipment

Extension Cords & Power Tools

- · How to select an extension cord
- Best practices with extension cords
- Best practices with power tools
- How to fight an electrical fire

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ELECTRICAL SAFETY

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General Install Requirements

- Learn installation safety requirements for electrical equipment.
- Factors for judging the safety of equipment
- Clearly identifying electrical equipment
- Preventing contact with live electrical parts
- Using overcurrent protection
- Situations in which equipment must be grounded

Hazardous Locations

- Which areas are considered as hazardous
- How to classify hazardous locations
- Common sources of ignition
- Requirements for using equipment in hazardous locations

Work Practices

- Learn about safety-related work practices to reduce your risk of injury from contact with energized equipment.
- Protective measures for working near electric power circuits
- Locating energized electrical parts, equipment, and circuits
- Identifying equipment that is being worked on
- Guidelines for properly using and maintaining equipment

Flexible Cords & Cables

- Learn work practices for safely using electric power cords on the construction site.
- Acceptable uses of flexible cords and cables
- Types of approved electric cords
- Protecting cords and cables from damage
- Reducing the risk of contacting electrical current

Equipment for General Use

- Learn requirements for safely using common equipment found at the worksite.
- Requirements for lighting
- Grounding portable and vehicle mounted generators
- Handling batteries
- Grounding cranes and hoists
- Disconnecting power to elevators, escalators, and moving walks
- Electric welders
- X-ray equipment



ELECTRICAL SAFETY – HIGH VOLTAGE AWARENESS

Potential Hazards

- The importance of understand and respecting the potential hazards of electricity
- · Common safety and health hazards associated with electricity
- Factors that affect the severity of contact with electricity

Personal Protective Equipment

- Common types of personal protective equipment
- How to select the proper personal protective equipment
- When personal protective equipment is required

Additional Protective Equipment

- Common types of protective equipment
- Working with insulated tools and equipment
- Common mistakes while using protective equipment



ELECTRICAL SAFETY – HIGH VOLTAGE SAFE WORK PRACTICES

Safety Plan

- The importance of following safe practices and avoiding shortcuts
- Developing a safety plan & procedure
- Reducing your exposure to unsafe acts

De-Energizing Equipment

- Proper lockout/tagout procedures
- How to de-energize equipment
- Protecting yourself by using grounds
- Keeping a safe approach distance

Safe Work Practices

- Selecting and using the proper equipment and tools
- Good housekeeping practices
- Procedures for working in permit required confined spaces
- Emergency response procedures



EMPLOYEE SAFETY ORIENTATION

- Your responsibilities for a safe work environment
- Your facility's commitment to an accident free work environment
- General responsibilities and potential hazards you should be aware of

Hazard Communication

- How to identify hazards
- Primary methods for communicating chemical hazards

Protective Measures

- Situations where personal protective equipment may be required
- Purpose of machine guards
- Lockout and Tagout procedures

Safe Work Practices

- Vehicle safety
- Good housekeeping procedures
- Emergency situations and equipment
- Reporting requirements
- Prohibited activities



ENERGIZED ELECTRICAL WORK PERMIT

Preparing for Work

- The requirements of NFPA 70E, the "Standard for Electrical Safety in the Workplace"
- The skills and responsibilities required of the qualified person
- Using the proper personal protective equipment
- The importance of using a job briefing and planning checklist to prepare for the task

The Energized Electrical Work Permit

- Learn about procedures for completing the energized electrical work permit
- When the permit is required
- Information that must be included on the permit
- Who is identified on the permit
- What happens to the permit after it is completed and approved

Additional NFPA 70E Requirements

- Learn about other safe measures to follow before, during, and after work is completed.
- Identifying power sources before beginning work
- Setting, marking, and following the flash protection boundary
- Wearing the proper personal protective equipment
- Warning labels and signs
- What to do when the job is completed



ENVIRONMENTAL AWARENESS

Environmental Regulations

- The goal of the Environmental Protection Agency
- The basic requirements of environmental regulations
- Categories of air regulations and their purpose
- Your role in environmental awareness

Emissions, Discharges & Disposals

- The goal of pollution prevention
- How rain water can pose a serious danger
- Safe practices for container and material handling

Environmental Awareness

- What materials can be recycled
- Which materials require special disposal procedures
- The importance of conservation and keeping equipment in good condition

Safe Work Practices

- The importance of good housekeeping
- What to do in the event of a spill
- General safe work practices



EXCAVATIONS, TRENCHES & SHORING

Excavation Hazards

- Learn about potential hazards involved in excavations.
- Common excavation hazards
- The importance of identifying underground utilities
- Potential hazards associated with overhead utility lines
- Primary causes of cave-ins

Cave-In Protection

- When to use cave-in protection
- The types of protection available
- Requirements & safe practices when using cave-in protection

Safe Work Practices

- Learn general practices to help you work safely around an excavation
- Requirements of entry and exit
- Working in hazardous atmospheres
- Using barricades
- Personal protective equipment and more.



EYE SAFETY

Overview

- How the eye works
- The most common eye hazards
- What you can do to protect your eyes

Eye Hazards

- Learn about common eye hazards, how they can occur, and the injuries they can cause.
- Flying particles
- Dusts, mists and fumes
- Splashing metal
- Hazardous chemicals and vapors
- Ultraviolet and infrared light

Protective Eyewear

- Types of eye protection available
- The hazards each type protects you from
- Proper use and care of your eye protection



FALL PROTECTION

Workplace Falls

- Learn why fall protection is necessary in the workplace and measures you can take to reduce your exposure to fall hazards
- The effects of falls in the workplace
- Types of fall hazards
- Identifying and preventing fall hazards
- Your role in fall protection

Basic Fall Arrest System

- Learn about the components of a personal fall arrest system and how they work together to provide youwith continuous protection from falls
- A full body harness
- Connecting device
- An anchor point

Care & Maintenance

• Steps for properly inspecting, caring for, and maintaining your fall arrest system



FALL PROTECTION – PART 2

Requirements

- Your employer's responsibility for providing a safe work environment
- Training requirements for workers exposed to fall hazards
- Developing and implementing a fall protection plan

Fall Protection Coverage

- The general rule used to determine if fall protection is necessary
- Fall protection requirements for specific areas and activities

Fall Prevention Methods

- Learn about requirements for installing and using fall prevention systems
- Guardrail Systems
- Controlled Access Zones
- Safety Monitoring Systems
- Warning Line Systems
- Covers

Fall Arrest Systems

- Learn about requirements for using and implementing fall protection systems
- Personal Fall Arrest Systems
- Positioning Device Systems
- Safety Net Systems

Falling Objects

- Learn about protective measures used when there is a risk of objects falling from an upper level.
- The use of guardrail systems
- Good housekeeping procedures
- Roofing work
- Canopies
- Using toe boards



FIRE PREVENTION

The Elements of Fire

- Learn about the three elements that can cause fire when they are present together.
- Oxygen
- Fuel
- Heat

Good Housekeeping

- Learn about some common measures to prevent fire from happening in your work area.
- Ignition Sources & Flammables
- Learn how to handle ignition sources and flammables with proper care and procedures to separate fire elements and prevent fire from happening.

Fire Response Procedures

- Learn how to respond to a fire emergency in order to protect yourself and your co-workers.
- Using Fire Extinguishers
- Learn how to safely use fire extinguishers to put out small fires.
- The classifications of fire
- Choosing the correct extinguisher
- How to use a fire extinguisher
- When NOT to fight a fire
- What to do after a fire is put out



FORKLIFT SAFETY

Introduction to Lift Trucks

- The different types of lift trucks
- Differences between lift trucks and automobiles
- Common hazards when operating lift trucks
- Basic controls & features of lift trucks

How Lift Trucks Work

- Basic characteristics of lift trucks
- Operating differences between lift trucks and automobiles
- Principles of load capacity and the stability triangle
- Risky actions to avoid when operating a lift truck
- · Proper load positioning and handling

Pre-operation Inspection

- · How to conduct a pre-operation inspection of your lift truck to ensure it is in good working order
- Visual checks
- Operational checks
- What to do when a lift truck does not pass inspection

Proper Load Handling

- Skills for handling a load
- Steps to take when preparing for the lift
- Proper procedures for lifting a load
- Setting a load
- Traveling with a load

Safe Driving Skills

- To protect your safety and your co-workers while driving a lift truck.
- Hazard awareness
- Safety measures while operating a lift truck
- How to work safely around pedestrians
- Safe driving skills to prevent incidents

Refueling & Battery Recharging

- Basic steps for safely refueling
- Electric trucks
- Gasoline and diesel trucks
- Propane, or LP gas trucks



FORMALDEHYDE

What is Formaldehyde?

- What is formaldehyde
- How it is used
- When formaldehyde becomes a potential hazard
- Symptoms from exposure to formaldehyde

Exposure Levels

- What are the airborne exposure levels
- Specific actions that must take place at each exposure level
- The importance of air monitoring and when it is performed

Reducing Your Exposure

- Learn about engineering controls and personal protective equipment used to reduce exposure to formaldehyde.
- Types of ventilation
- Routes of entry formaldehyde can take into the body
- Proper selection and use of personal protective equipment
- Requirements for using respirators

Safe Work Practices

- Conducting regular visual inspections
- Emergency response and spill cleanup procedures
- What to do if direct contact occurs
- The medical surveillance program
- Other safe work practices to prevent your exposure



HAND & POWER TOOLS

Controlling Hazards

- Recognizing the hazards of hand and power tools
- Ways to prevent contact with hazardous moving parts of tools and equipment
- Wearing personal protective equipment
- Using safety switches
- Basic safety precautions to follow when using tools

Using Hand Tools

- Take a look at safety precautions when using hand tools
- Inspecting tools
- General best safety practices
- Using wrenches, pliers, hammers, and screwdrivers
- Maintenance and storage of hand tools

Types of Power Tools

- Learn about the specific hazards and safety precautions when working tools
- Electric
- Fuel powered
- Pneumatic
- Hydraulic
- Powder-actuated

Using Power Tools – Part 1

- Learn about general safe practices when using power tools, in addition to specific safety measures when using power tools
- Circular Saws
- Portable Drills
- Handheld Sanders
- Pneumatic Nail Guns

Using Power Tools – Part 2

• Learn about safety requirements when using jacks and powered abrasive wheel tools



HAND SAFETY

Hand Injuries & Their Causes

- Learn about common types of hand injuries and the activities and circumstances that can cause them
- Cuts & lacerations
- · Contact with equipment
- Burns
- Chemical related injuries
- Musculoskeletal disorders, or MSDs

Engineering Controls & PPE

- Learn how engineering controls and PPE can protect you from injuries.
- Proper use and inspection of guards and controls
- Types of gloves and their uses
- How to remove contaminated gloves
- When not to wear gloves

Safe Work Practices

- Learn what steps you can take to prevent hand injuries
- Inspection and proper use of tools
- How to safely use cutting devices
- Procedures for cleaning and unjamming machinery
- Good housekeeping practices

First Aid Procedures

- Learn what to do if a hand injury occurs including:
- How to determine what procedures to follow
- The importance of universal precautions
- Reporting injuries
- What to do when a major injury occurs



HAZARD COMMUNICATION

General Awareness

- Learn about the basics of Hazard Communication
- The purpose of Hazard Communication
- The chemical manufacturer's role
- Your employer's role
- Your role

Chemical Hazards

- What is a Hazardous Chemical
- Physical and Health Hazards
- Exposure Routes
- Exposure Symptoms
- Exposure Limits

Container Labels

- The Purpose of Container Labels
- Labeling Requirements
- Labels
- Your Role

Material Safety Data Sheets

- What is a Material Safety Data Sheet
- What do they contain
- How to read an MSDS

Best Safety Practices

- Learn about safety measures to prevent exposure to
- Hazardous chemicals
- Engineering controls
- Personal protective equipment
- Safe work practices
- Emergency situations



HAZARD RECOGNITION

Overview

- What is hazard recognition?
- Why is it important?
- Your responsibilities for hazard recognition

Identifying Potential Hazards

- Learn how to identify the potential hazards that often lead to common causes of injuries and illnesses in the workplace
- · Contact with objects and equipment
- Overexertion, including improper lifting
- Falls
- Harmful substances and environments

Inspecting Your Work Area

- The importance of a workplace inspection
- Skills and techniques for inspecting your work area
- Specific potential hazards to look for during the inspection.

Reporting Hazards

- The importance of reporting hazards
- Reporting and recordkeeping procedures
- Your role and your employer's role in reporting hazards



HAZARDOUS WASTE

Hazardous Waste Identification

- The importance of proper hazardous waste management
- Characteristics of hazardous waste
- Identifying hazardous and non-hazardous waste

Hazardous Waste Containers

- Procedures for disposing batteries
- The importance of choosing the correct container
- Inspecting containers

Hazardous Waste Label

- What must be included on the label
- Dating the label
- Disadvantages of mixing wastes

Safe Work Practices

- What to do in the event of an accidental release
- The importance of safe work practices
- Working safely with hazardous waste



HAZWOPER

Responder's Actions

- Learn the actions as a first level awareness responder
- Keep aware of the deviation from standard operations
- Procedures to identify the materials
- Evacuation procedures
- Notification procedures

Purpose and Response Levels

- The purpose of OSHA's Hazardous Waste Operation and Emergency Response Standard, also known as HAZWOPER
- The different levels of response
- The responsibilities of first responders awareness level



HEARING SAFETY/CONSERVATION

Introduction

- · Learn the importance of taking proactive measures, both on and off the job, to prevent hearing loss
- The Effects of Noise
- How over exposure to noise over a period of time can affect your hearing.
- How your hearing works
- How conditions such as Tinnitus and Sensory Neural Hearing

Loss Occur

- What are Permissible Noise Levels
- How Sound is measured

Hearing Conservation Program

- Audiometric evaluations
- Worker education and training
- Engineering controls
- Personal hearing protection devices

Hearing Protection

• How to properly use and care for personal hearing protection devices such as earplugs and ear muffs



HEAT STRESS

What is Heat Stress?

- Learn about heat stress and the importance of taking proactive measures to prevent its occurrence.
- What is heat stress
- Factors that contribute to heat stress, including the heat index
- Effects of heat stress
- Situations where heat stress can occur

Your Body and Heat

- The different ways the body handles heat
- How the body regulates its internal temperature
- How heat transfer occurs during evaporation, radiation, conduction and convection
- What happens when the body overheats

Health Hazards

- The symptoms and proper treatment measures for major heat related disorders
- Heat cramps
- Heat exhaustion
- Heat stroke

Preventative Measures

 Steps you can take to proactively protect yourself from the effects of heat stress, including using engineering controls, wearing the proper clothing, fluid replacement, and many other important measures.



HEXAVALENT CHROMIUM

What is Hexavalent Chromium?

- Hexavalent chromium is a strong oxidizer that reacts easily with other elements to produce hard coatings.
- More than half a million workers in many different industries and occupations perform jobs that are affected by hexavalent chromium

Air monitoring and medicals

- The permissible exposure limit for hexavalent chromium
- When exposure monitoring is required
- What is medical surveillance & when it is required

Respiratory protection and PPE

- The importance of engineering controls and safe work practices
- When respiratory protection is required
- Safe work practices when using a respirator
- Proper use of PPE to prevent contamination

Safe work Practices

- The purpose of Hazard Communication & the information it conveys
- What are regulated areas and who is authorized to enter
- Hygiene areas and practices
- Good housekeeping



HAZARDOUS MATERIALS TRANSPORTATION - BULK TRANSPORTATION

What is Bulk Packaging?

- The importance of following DOT regulations for transporting hazardous materials
- Types of bulk packaging and their characteristics
- DOT regulations for testing and inspecting bulk packaging before use

Loading/Unloading Bulk Packaging

- Learn about specific procedures to be followed when loading or unloading hazardous materials.
- Monitoring the loading or unloading process
- Preparing to load or unload motor vehicles and railcars
- Inspecting packaging for defects
- Work practices for preventing leaks or spills during loading or unloading

Transporting Bulk Packaging

- Learn about work practices for safely transporting bulk packages
- Inspecting the bulk packaging before leaving your facility
- Ensuring the proper use of placards
- Emergency response procedures to follow in case of a leak or spill



HAZARDOUS MATERIALS TRANSPORTATION – GENERAL AWARENESS

Hazardous Materials Regulations

- Purpose of Hazardous Materials Regulations
- General provisions in the regulations
- When a material is considered hazardous
- Job functions covered by the regulations

Identifying Hazardous Materials

- How to use the Hazardous Materials Table
- Information that must be included in the shipping papers
- Driver responsibilities when transporting hazardous materials

Packaging Hazardous Materials

- The importance of recognizing and identifying hazardous materials
- Factors to consider when selecting packaging
- Packaging requirements

Marking & Labeling Hazardous Materials

- The purpose of markings and labels
- Who uses markings and labels
- Proper placement of markings and labels on a package
- Basic placarding requirements



HAZARDOUS MATERIALS TRANSPORTATION - HANDLING NON BULK PACKAGES

What is Non-Bulk Packaging?

- Basic overview of the regulations for transporting hazardous materials.
- Terms defined by Department of Transportation regulations
- The responsibility of the shipper
- Minimum requirements for complying with hazardous materials regulations

Selecting Non-Bulk Packaging

• Learn how to use the Hazardous Materials Table to select the proper packaging for transporting hazardous materials

Package Markings and Labels

- Learn general requirements for marking and labeling packages containing hazardous materials.
- Information that must be marked on packages
- Where to find marking requirements
- Identifying the proper labels for a package

Transporting Non-Bulk Packages

- Learn about preparing non-bulk packages for transport.
- Properly filling containers of hazardous liquids
- Sealing packages or containers
- The importance of following Department of Transportation regulations



HAZARDOUS MATERIALS TRANSPORTATION – SAFE WORK PRACTICES

Emergency Response

- Information critical for responding properly to a hazardous materials incident
- Ensuring that documentation for the shipment is readily available during transportation
- Alternative sources for emergency response information

Incident Response & Reporting

- Responding to a hazardous material incident when loading, unloading, or in storage
- Cleaning up small spills of hazardous materials
- Responding to an incident when driving a vehicle transporting hazardous materials

Loading & Unloading Procedures

- Learn work practices for eliminating or minimizing the risks associated with loading, unloading, and storing hazardous materials.
- Protecting containers and packages of hazardous materials from damage
- Handling explosives, flammables, oxidizing materials, and incompatible materials
- Keys to protecting your health and safety when handling hazardous materials



HAZARDOUS MATERIALS TRANSPORTATION – SAFETY REQUIREMENTS FOR DRIVERS

Regulations

- Learn about regulations for safely transporting hazardous materials
- Licensing requirements
- Availability of the shipping papers
- Hazardous materials that always require placards

Driving & Parking

- Learn about transporting hazardous materials over public roadways.
- Route limitations and permits
- Rules for attending and parking a motor vehicle
- Fire prevention

Safe Driving Procedures

- Inspecting the vehicle to ensure it is in good condition
- Driving techniques to help maintain safety on the road
- Regulations you must know and follow to safely transport hazardous materials



HAZARDOUS MATERIALS TRANSPORTATION - SECURITY AWARENESS

Overview

- A brief introduction to Department of Transportation requirements for addressing security concerns when handling or transporting hazardous materials.
- Improving transportation security through awareness
- Information that must be included in security plans
- The importance of keeping shipments in sight and under control
- Additional requirements for marine terminals

Identifying Security Risks

- The first step in addressing security concerns
- Improving hazardous materials security
- Specific situations that may be a potential security risk
- Using a security risk assessment to identify potential risks

Security Practices

- Increasing personnel security
- Limiting access to hazardous materials
- Maintaining control of the materials at all times



HAZARDOUS MATERIALS TRANSPORTATION - SHIPPING REQUIREMENTS

What are Shipping Papers?

- The importance of shipping papers
- When shipping papers must be included with a shipment
- Shipper's responsibility in preparing the shipping papers

Preparing the Shipping Papers

- Learn about locating information in the Hazardous Materials Table necessary for the shipping papers.
- Basic description of the hazardous material
- Specific columns where the correct information can be found
- Required information not found in the Hazardous

Materials Table - Information on Shipping Papers

- Learn about information regarding a hazardous material that is not part of its basic description.
- Where additional information should be located on the shipping papers
- Methods for clearly identifying hazardous materials entries from non-regulated materials
- Requirements for including emergency response information
- Certifying the shipment was prepared in accordance with DOT regulation



HOISTS AND SLINGS

Using Hoists

- Learn about the different types of hoists used in the workplace and their respective applications.
- Different types of hoists
- Factors to consider when choosing a hoist
- Safe operation of a hoist
- Proper maintenance of the hoist

Hoist Inspection Procedures

- The importance of performing regular inspections
- Basic inspection procedures
- What to do when equipment does not pass inspection

Use & Care of Slings

- Learn how to use slings safely, including proper care, storage, and inspection.
- The importance of slings
- Different types of slings
- Factors to consider when choosing a sling
- Inspection procedures



HOT WORK PERMIT

What is Hot Work?

- Who and what should be protected from fires and explosions
- What types of activities are considered hot work

Hot Work Permits

- How to properly perform safety checks
- What to be aware of when assessing the work area
- What a hot work permit is
- When hot work is not permitted
- Why fire watch personnel are needed

Personal Protective Equipment

- The proper use of appropriate personal protective equipment
- The type of protective clothing required for hot work
- What kind of eye and face protection is needed
- What kind of respiratory protection is needed

Safe Work Practices

- Appropriate safe work practices
- Hazards associated with working in a wet environment
- When to report injuries and post warnings
- How to ensure a safe work environment



HYDROGEN SULFIDE SAFETY

What is Hydrogen Sulfide?

- Purposes for hydrogen sulfide
- Where it can be found
- Characteristics of hydrogen sulfide

Potential Hazards

- Symptoms of exposure
- Concentration levels and their potential hazards
- The potential for fire or explosion

Detection

- How to safely detect hydrogen sulfide
- Where hydrogen sulfide may be present
- What to do if hydrogen sulfide is detected

Tools & Equipment

- When to wear an air-supplying respirator
- The requirements for using a respirator
- The types of personal protective equipment needed
- Safe work practices when using tools

Emergency Response

- Why training and preparation are important
- Who qualifies as a level one responder
- What to do in the event of a hydrogen sulfide emergency
- Who can perform rescue operations



INCIDENT INVESTIGATION

Purpose of Incident Investigation

- When an incident investigation is conducted and its objectives
- Basic elements of an incident investigation
- The importance of taking immediate action

Gathering Information

- · Learn about the main sources of information concerning an incident
- The scene of the incident
- Documentation
- People

Interviewing Witnesses

- Learn the proper techniques for interviewing people related to an incident investigation
- Who to interview and when to interview them
- The importance of visiting the scene of the incident
- Skills for successfully conducting interviews and asking good questions
- The need for reviewing and documenting information

Analyzing Information

- Learn the basic steps for analyzing the information you gathered about the incident to determine details
- · What were the results of the incident
- What type of incident occurred
- What were the immediate and basic causes of the incident
- What were the system failures

Recommending Corrective Actions

• Learn guidelines for identifying and recommending corrective actions for the immediate causes, basic causes, and system failures – in addition to documenting and presenting the final investigation report



INDUSTRIAL ERGONOMICS

Ergonomics Overview

- Develop a basic understanding of ergonomics in the workplace
- Explain what is ergonomics and its benefits to the workplace
- Identify what is a musculoskeletal disorder
- Know what risk factors can lead to MSDs
- Understand your role in a successful ergonomics program

Ergonomic Risk Factors

- Learn about the contributing causes of musculoskeletal injuries in the work environment.
- Explain what is a risk factor
- Identify common risk factors and provide examples of each
- Understand what factors affect your degree of risk
- Know what is a control measure and identify examples of work practice and engineering

Musculoskeletal Disorders

- Learn about common MSDs and their causes
- The risk factors associated with MSDs
- Signs & symptoms of exposure
- The 3 categories of MSDs

Proper Posture

- Learn about the components of the human body that allow movement and flexibility, and how body movements and posture can contribute to MSDs.
- Identify the importance of proper posture
- Demonstrate your knowledge of the elements of proper posture
- Know your role in maintaining proper posture

Recommended Work Practices

- Learn about specific safe work practices you can implement to eliminate your risk of injury
- Techniques to eliminate hazardous bending, twisting, and reaching motions
- Safe practices when lifting and moving
- Proper selection and use of tools
- And other recommended work practices



INTRODUCTION TO OSHA

The Introduction to the OSH Act & OSHA

- What is the OSH Act and who does it cover?
- OSHA's role and responsibilities in ensuring safe and healthy work environments
- How safety and health standards are developed
- The importance of the General Duty Clause
- The employer's responsibilities in providing a workplace free of hazards
- Your rights and responsibilities as an employee

Inspections

- Who is subject to OSHA inspections
- Who can conduct inspections
- OSHA's priorities in conducting inspections
- What rights your employer has during and after an inspection
- The four main stages of the inspection process

Citations & Penalties

- Requirements for issuing and posting citations
- The types of violations for which citations are issued, and their penalties
- Employee and employer rights regarding citations and penalties

Record Keeping & Reporting

- The importance of keeping injury & illness records
- Who is required to keep & maintain records
- Posting & making records available to employees
- Reporting requirements



JOB SAFETY ANALYSIS

Purpose & Benefits

- What a job safety analysis, or JSA, is
- The benefits of a job safety analysis
- The purpose of JSA
- How to select the job to be analyzed

Defining Job Steps

- What a job step is
- What should be included in the job step
- How to define job steps
- Sources for defining job steps
- How to conduct a direct observation
- How to analyze job steps

Identifying Potential Hazards

- How to identify potential hazards
- What types of things may create potential hazards
- How to record potential hazards

Recommended Procedures & Control Measures

- How to develop recommended procedures and control measures
- Examples of recommended actions
- Questions to ask when developing procedures and control measures
- Ways to limit or reduce hazards that cannot be eliminated



LAB SAFETY

Potential Hazards

- Learn about the various potential hazards such as fire and chemical spills that are commonly found in the laboratory work environment.
- Fire prevention
- Proper fire extinguisher operation
- How to handle a chemical spill



LADDER SAFETY

Ladder Selection Guidelines

- The importance of selecting the correct ladder for the job.
- Understanding the potential hazards in your work area
- · Choosing the correct duty rating
- Determining the maximum working height
- Considering the ladder's ability to conduct electricity

Inspection & Maintenance

- How to properly care for and store your ladder to obtain many years of use.
- Inspection guidelines
- Proper care, storage and transportation of ladders

Setting Up a Ladder

- How to properly set up your ladder.
- Potential hazards to be aware of
- How to properly set-up a ladder
- The proper placement of a ladder
- How to secure the ladder
- What to do if using a ladder on an incline or uneven surface

Safe Work Practices

- Proper techniques to use while on a ladder to prevent potential injuries from happening.
- How to maintain three points of contact
- The proper way to reposition a ladder
- Techniques for safe climbing
- When fall protection is required



LASER SAFETY

How Lasers Work

- Everyday uses for lasers
- The components of a laser
- How lasers function.

Laser Hazard Classifications

- The similarities and differences between white light and laser light
- What is the hazard classification system for lasers
- Characteristics of each hazard classification

Potential Hazards

- Learn about different hazards associated with the use of lasers
- Beam and non-beam hazards
- Fire hazards
- Airborne hazards
- Radiation hazards
- Potential hazards when working with compressed gas cylinders

Controlling the Hazards

- Learn how hazards are controlled, including safe work practices.
- Responsibilities of the Laser Safety Officer
- Training requirements
- The use of engineering controls
- Best work practices for preventing injury



LEAD SAFETY

What is Lead

- What is lead and how it is used
- How lead can enter the body
- What type of damage can occur from overexposure
- Symptoms of lead poisoning

Monitoring Procedures

- The importance of following proper procedures
- What to do if the lead action level is exceeded
- Rules and regulations associated with the hazardous work area
- How the blood's lead level is measured

Personal Protective Equipment

- Respirators and their uses
- Proper personal protective equipment procedures
- Appropriate work procedures
- What to do before and after entering a hazardous work area

Safe Work Practices

- Steps you can take to prevent your exposure to lead
- Using enclosures & vacuums
- Proper personal protective equipment procedures
- Appropriate work procedures
- What to do before and after entering a hazardous work area



LEADERSHIP SKILLS FOR SAFETY

Organizational Role of Safety

- The critical role of the supervisor in the success of your company
- The purpose of safety & health programs
- Benefits of safe and healthy work environments
- The impact of accidents on business operations

Hazard Recognition

- Importance and purpose of a hazard recognition safety observation
- Unsafe conditions and compliance issues
- Common causes of injuries and illnesses
- How to avoid contact with objects and equipment
- Overexertion- its risk factors and how to avoid it
- Trip hazards and sources of falls, and how to prevent falls
- How to handle harmful substances and work in harmful environments
- Use of safety work order

Accident Investigation

- · Accident investigation is a systematic process
- Objective of accident investigation
- Six basic elements involved in effective accident investigation
- Immediate actions when an accident occurs at your site
- Primary information sources when investigating accidents
- Investigation tools to help identify root causes
- Features of a well-written recommendation

Job Safety Analysis

- Characteristics of Job Safety Analysis
- Information Job Safety Analysis provides and its four primary elements
- How to prioritize jobs to be analyzed
- Best information source for Job Safety Analysis and how to identify hazards
- How to develop recommended procedures and control measures

Communication

- The importance of effective communication
- Ways to communicate, in addition to verbal communication
- Communication skills as a supervisor
- Factors that influence behaviors
- As a supervisor, how to reach your safety goal
- When to practice follow-up communication



LOCKOUT/TAGOUT

Overview

- What is Lockout/Tagout?
- When is Lockout/Tagout Required?
- Lockout/Tagout Devices?
- Roles in Lockout/Tagout

Lockout/Tagout Procedures

- Learn the importance of pre-planning and the steps for safely conducting lockout/tagout procedures
- The basic steps of lockout/tagout.

Startup Procedures

• Learn the basic steps for proper startup of equipment and machinery once lockout/tagout procedures are completed

Special Situations

- Learn the proper steps for special lockout and Tagout situations
- Testing or positioning of machines and equipment
- Involving outside personnel
- Group lockout
- Shift or personnel changes
- Using a lock box
- Tagout only



MACHINE GUARDING

Machine Hazards

- The primary types of hazards
- The purpose of machine guards
- Why machine guards are important
- Your role as the machine operator

Purpose & Function

- The purpose of machine guards
- Function of machine guards
- Different categories and types of machine guards

Safe Work Practices

- What to look for when inspecting machine guards
- Additional precautions



MATERIALS HANDLING

Hazard Awareness

- Types of materials handling activities
- Potential hazards
- Common injuries
- Your role in identifying and preventing accidents

Storing, Stacking & Disposal

- Storing materials
- Storage areas
- Stacking materials
- Disposal of materials

Manual Material Handling

- Common risk factors when handling materials
- Safe lifting practices
- When to get help with a lift
- Other measures to prevent injuries

Using Materials Handling Equipment

- · Learn about safe work practices when using mechanical equipment
- Conveyors
- Cranes
- Forklifts
- Dockboards.

Rigging Equipment

- General requirements for rigging equipment
- Types of slings and selection criteria
- Inspection procedures
- Safe use of slings



MOBILE CRANE SAFETY

Introduction to Cranes

- Types of cranes used in construction
- Considerations when selecting the right crane for the job
- Common causes of crane accidents
- Your responsibilities when working with or around cranes

Pre-operation Setup & Inspection

- The importance of proper site preparation & crane setup
- The differences between frequent & periodic inspections
- Pre-operation inspection procedures for mobile cranes

Planning a Lift

- Learn about the importance of taking the time to carefully prepare for each lift
- Things to consider before conducting a lift
- How leverage and the crane's center of gravity affect a lift
- The importance of following the crane's load charts
- Safe practices while lifting a load

Safe Work Practices

- Learn about additional safe work practices you should follow when operating your crane to prevent accidents and injuries
- Communication procedures
- Working near power lines
- Working in enclosed spaces
- Safe operation of the crane



MUSCLE STRAINS & SPRAINS

About Strains & Sprains

- Learn why an understanding of the causes and effects of strains and sprains is so important
- The effects of strains and sprains
- The benefits of prevention
- How your muscles work

Risk Factors & Prevention

- Learn about potential risk factors that can contribute to strains and sprains
- Prevention techniques to help you make the proper decisions to reduce your exposure.
- How strains and sprains occur
- Symptoms of strains and sprains
- Contributing risk factors
- Prevention methods

Stretches

- Learn the importance of regular stretching to prevent strain and sprain injuries
- The benefits of stretching
- When to stretch
- Techniques for stretching
- Sample stretches you can perform



OFF THE JOB SAFETY

Exercise & Physical Activity

- The importance of warming up
- Proper stretching techniques

Boating Safety

- Rules to follow when meeting other boats
- Safe operating procedures

Special Precautions

- Proper use and storage of hazardous substances
- How to safely use fireworks and barbecues
- Preventing sunburns and overexertion



OFFICE ERGONOMICS

Ergonomics Overview

- You will develop a basic understanding of the importance of ergonomics and its goals in the office environment.
- Understand what is ergonomics and how it benefits the workplace
- Explain what is a musculoskeletal disorder, or MSD
- Identify the risk factors that lead to MSDs
- Know your role in preventing MSDs

Risk Factors

- Learn about the contributing causes of musculoskeletal injuries in the office environment.
- Explain what is a risk factor
- Identify the common risk factors and provide examples of each
- Understand what factors affect your degree of risk
- Explain what is a control measure and identify examples of work practice and engineering controls

Musculoskeletal Disorders

- Learn about musculoskeletal disorders, their causes and symptoms.
- Explain what is a musculoskeletal disorder, or MSD
- Identify the cumulative nature of MSDs
- Know the signs and symptoms of MSDs
- Explain what is Carpal Tunnel Syndrome, its causes and symptoms
- Recognize examples of other MSDs

Proper Posture

- Learn how good posture can prevent musculoskeletal disorders.
- Identify the importance of proper posture
- Demonstrate your knowledge of the elements of proper posture
- Explain the importance of varying your posture

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OFFICE ERGONOMICS

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Work Environment

- Learn about making ergonomic adjustments to your work environment to fit your needs.
- Chairs
- Keyboard & Mouse
- Monitors
- Workstation Organization
- Lighting

Control Measures

- Learn what you can do to reduce your risk of musculoskeletal disorders.
- Explain the importance of diet, rest and exercise
- Identify specific additional measures to reduce your risk
- Demonstrate simple stretches to relieve stress and prevent injury
- Office Safety



OFFICE SAFETY

Ergonomic Risk Factors

- What are musculoskeletal disorders
- What is ergonomics and why is it important?
- The leading risk factors for musculoskeletal disorders
- Common symptoms of musculoskeletal disorders

Preventative Measures

- The importance of proper posture
- Proper sitting posture
- How to adjust your work area
- Proper posture while using the mouse and keyboard

Recognizing Hazards

- How to recognize hazards
- Common hazards in the workplace
- Correcting common hazards



OSHA RECORDKEEPING

The Importance of Recordkeeping

- The importance of keeping records
- The purposes of OSHA Forms 300 and 301
- How to determine whether the injury or illness is a new case

Is The Case Work Related?

- How to determine if an incident is work-related
- What the work environment includes
- The nine exceptions
- Traveling on business can also be work-related

Recording Criteria

- What injuries are recordable
- Reporting time frames
- "Restricted work activity"
- Medical treatments versus first-aid

Filling Out the Forms

- What should be done before completing the appropriate forms
- Purposes of OSHA forms and their equivalents
- What to include on the forms
- How to gather information to fill in the forms
- The guides and rules to follow when filling in the forms

Reviewing and Posting Records

- When to review your logs
- How long a log is kept
- What is needed to create a summary
- When to post the summary
- The responsibilities of the OSHA record keeper



PENDANT CONTROLLED CRANE SAFETY

Pre-operation Inspection

- The general terms associated with the crane
- Inspection procedures
- What you should know before operating a crane

Selection & Use of Rigging

- Inspecting rigging
- Proper selection of rigging
- Using slings
- Safe work practice

Safe Crane Operation

- Learn about steps you can take to safely operate a pendant controlled crane
- Pre-planning the lift
- Good housekeeping practices
- Executing a lift
- Moving and setting loads
- Proper storage procedure



PIPELINE SAFETY

Potential Hazards

- Learn the importance of analyzing the work environment to identify potential hazards.
- The importance of following established procedures and practices
- Identifying the existence of potential hazards
- Potential hazards associated with the product being transported

Flammables, Chemical Hazards & Spills

- The types of hazard communication & information they provide
- Safe practices when working near hazardous chemicals
- What to do when a spill occurs

Safe Work Practices

- Types of confined spaces & their requirements
- Purpose of lockout and tagout procedures
- Safety precautions for operating a motorized vehicle
- Pre-planning for an excavation
- And security procedures

Personal Protective Equipment

- How to reduce your exposure to risk factors
- How to select the correct PPE
- Different types of PPE
- The importance of following safety procedures



POWER PRESS SAFETY

Power Press Operations

- Learn the basics about mechanical power presses
- What is a power press
- Types of presses
- How they operate

Potential Hazards

- Working near the point of operation
- The hazards of uncontrolled energy
- Protecting yourself from projectiles
- Safely working in high noise areas
- Wearing the correct personal protective equipment
- What to do if there is a problem with your press

Best Safety Practices

- How to perform a hazard analysis of the work area
- Types of safeguards and how they work
- The importance of keeping the work area free of debris



PERSONAL PROTECTIVE EQUIPMENT [PPE]: CREATE THE BARRIER

Understanding PPE

- The importance of personal protective equipment
- When it is necessary
- Your role in its proper use and maintenance

Hard Hats

- Learn about the importance of wearing the proper hard hat to protect your head from injury
- When a hard hat should be worn
- How hard hats work
- The types and classes of hard hats
- Proper fit, inspection and maintenance

Eye & Hearing Protection

• Learn about the different types of Eye & Hearing Protection, their purpose, when they are required, and basic principles for proper use and care.

Gloves

- Learn how gloves can protect your hands from various types of hazards
- When NOT to wear gloves
- The types of gloves and their purpose
- Proper inspection and care of gloves

Foot & Body Wear

• Basic guidelines for selecting and wearing the proper foot and body wear for the job tasks you perform.



PROCESS SAFETY MANAGEMENT

Overview

- · What is process safety management
- The objective of process safety management
- The elements of process safety management

Participation, Information & Analysis

- Learn about the elements of process safety management
- Employee Participation
- Process Safety Information
- Process Hazard Analysis

Change & Safety Review

- Management of Change
- Pre-startup Safety Review

Procedures, Training & Investigation

- Written operating procedures
- Employee training
- Incident investigation

Mechanical Integrity & Emergencies

- Learn about procedures for mechanical integrity and emergency planning and response
- Requirements for written procedures
- Documentation information required for inspections and tests
- What to do if equipment deficiencies are found
- The emergency action plan
- Handling small releases
- Communicating with outside response teams

Contractor Safety & Audits

- The facility's responsibilities regarding contractor safety
- The contractor's responsibilities for safe work practices, proper training, and hazard notification
- Procedures for conducting effective audits



RADIATION SAFETY

What is Radiation?

- The role radiation plays in our lives
- Types of radiation used in the workplace
- Where radiation naturally occurs

Potential Hazards

- How radiation is measured
- Radiation exposure and its effects
- Safe exposure limits in the workplace

How Industry Uses Radiation

- Types of nuclear gauges used in industry
- Measurements made by nuclear gauges
- How nuclear gauges work

Minimizing Exposure

- The importance of minimizing exposure to radiation
- Methods of minimizing exposure
- Understanding radiation warning signs and lights

Safe Work Practices

- Types of personal monitoring equipment
- The importance of observing lockout/tagout procedures
- Responsibilities of the Radiation Safety Officer



RESOURCE CONSERVATION RECOVERY ACT (RCRA)

The Importance of RCRA

- What is the Resource Conservation and Recovery Act, or RCRA
- The purpose and goal of RCRA
- Fines or penalties associated with RCRA violations

Identifying Hazardous Waste

- What are listed wastes
- The characteristics of hazardous wastes
- How to handle wastes
- The importance of clear identification of hazardous wastes

Your Role in RCRA Management

- The easiest and most cost-effective way to manage any waste
- Why hazardous and non-hazardous wastes should not be mixed
- Restrictions on satellite areas
- How to qualify small and large quantity generators
- How to manage waste containers
- What is the hazardous waste manifest and its purpose

Handling Wastes Safely

- The importance of personal protection equipment
- Storing and transporting waste containers
- How to prevent fires when managing and handling waste
- How to avoid chemical reactions caused by incompatible wastes



RESPIRATORY PROTECTION – AIR PURIFYING

Respiratory Hazards

- Different types of potential respiratory hazards
- Oxygen deficient atmospheres, gases & vapors, and particulate contaminants
- Their possible health effects on your respiratory system
- Medical signs and symptoms of exposure
- When respiratory protection is necessary

How Air-Purifying Respirators Work

- Learn about the different types of air purifying respirators, including their features, capabilities, and limitations.
- This is important to know in selecting the right respirator for the hazards present in your work environment.

Proper Fit

- Learn the steps necessary to ensure you wear a proper fitting respirator, including:
- Completing an initial medical evaluation
- Fit testing procedures
- Performing user seal checks
- And steps to maintain a proper fit

Use & Care

- The measures needed to maintain your respirator in good working order
- Procedures for inspecting the respirator
- Basic safe use practices
- Cleaning and storing your respirator

Dust Masks

- Proper use and care of dust masks
- Their capabilities and limitations
- Proper storage and inspection
- How to obtain the best fit
- Other safe work practices



RESPIRATORY PROTECTION – AIR SUPPLYING

Use & Care

- · Look at the measures needed to maintain your respirator in good working order
- Inspecting the respirator
- Basic safe use practices
- Cleaning and storing your respirator

Respiratory Hazards

- Oxygen deficient atmospheres, gases & vapors, and particulate contaminants
- Their possible health effects on your respiratory system
- Medical signs and symptoms of exposure
- When respiratory protection is necessary

How Air-Supplying Respirators Work

• Different types of air supplying respirators, including their capabilities, and limitations. This is important to know in using the correct respirator for the task.

Proper Fit

- Learn the steps necessary to ensure you wear a proper fitting respirator
- Completing an initial medical evaluation
- Fit testing procedures
- Performing user seal checks
- And steps to maintain a proper fit



RIGGING SAFETY

The Role of the Rigger

- Your responsibilities as the rigger
- Preparing for a lift
- Identifying potential hazards
- The importance of knowing what is being lifted and its weight

Proper Selection & Use

- Types of slings used in the workplace
- Factors to consider when selecting a sling
- What to look for when inspecting slings
- Factors that may affect the load capacity of the sling
- Determining an object's center of gravity

- Learn ways to prevent property damage and injury
- Best rigging practices
- Communication
- Proper Care of slings



SAFE BEHAVIOR

Importance of Safe Behavior

- The benefits of safe behavior
- Who is responsible for safe behavior
- Why safety is important
- Hazard Analysis & Preparation
- Your work environment
- Body mechanics
- Tools and equipment required to perform the task

Communication

- Different ways to communicate
- The importance of communication
- The benefits of positive reinforcement

Importance of Safe Behavior

- The benefits of safe behavior
- Who is responsible for safe behavior
- Why safety is important

Hazard Analysis & Preparation

- Your work environment
- Body mechanics
- Tools and equipment required to perform the task

Communication

- Different ways to communicate
- The importance of communication
- The benefits of positive reinforcement



SAFETY ORIENTATION

Your Responsibility

- You and your company's responsibilities for job safety
- How you can learn safety through work-related activities
- When to report incidents and purposes of incident investigation

Illness, Causes & Prevention

- Information on Ergonomics and ergonomic related injuries
- Cumulative Trauma Disorders (CTDs) and their leading causes
- Best posture and how to prevent CTDs
- The structure of the backbone
- Causes of back injuries and how to prevent them

Preventive Measures

- Good housekeeping procedures that help prevent incidents
- Information communicated by signs, warnings, etc.
- How to obtain information on evacuation route
- Types of personal protective equipment

Hazard Communication

- Container labeling systems
- · Material Safety Data Sheets and their contents
- Topics or situations where additional training is required



SCAFFOLDING SAFETY

Pre-planning & Inspection

• Learn about the steps to take before erecting scaffolding, including evaluating the site and guidelines for properly inspecting scaffolding components.

Erecting Scaffolding – Part 1

- · Learn about the requirements for erecting scaffolding
- The importance of a proper foundation
- Working near power lines
- Load capacity
- Using guys, ties, and braces
- Platform construction

Erecting & Dismantling Scaffolding – Part 2

- Learn about additional requirements for erecting scaffolding and for dismantling
- Access Requirements
- Guardrail Systems
- Toeboards
- Enclosed Scaffolds
- Dismantling Procedures

- Learn about proper procedures to follow to reduce your chances of injury from the three main potential hazards associated with working on scaffolds
- Slips and falls
- Being struck by falling objects
- Electrical hazards



SLIPS, TRIPS & FALLS

Overview

- The importance of preventing slips, trips, and falls.
- Ways to prevent them

Ladders & Fall Protection

- Ladder safety
- Fall protection equipment

Good Housekeeping

- Keeping your work area clean and organized
- Working on different surfaces
- Your role in preventing injuries

Stairway Safety

- Using stairways
- Keeping stairways safe



STAIRWAYS & LADDERS

Ladder Selection Guidelines

- Learn about the importance of selecting the correct ladder for the job.
- Understanding the potential hazards in your work area
- Choosing the correct duty rating
- Determining the maximum working height
- Considering the ladder's ability to conduct electricity

Inspection & Maintenance

- Learn how to properly care for and store your ladder to obtain many years of use.
- Inspection guidelines
- Proper care, storage and transportation of ladders

Setting Up a Ladder

- Learn how to properly set up your ladder.
- Potential hazards to be aware of
- How to properly set-up a ladder
- The proper placement of a ladder
- How to secure the ladder
- What to do if using a ladder on an incline or uneven surface

Safe Work Practices

- Learn proper techniques to use while on a ladder to prevent potential injuries from happening.
- How to maintain three points of contact
- The proper way to reposition a ladder
- Techniques for safe climbing
- When fall protection is required

Construction Requirements

• Learn about specific requirements for temporary job-made ladders and stairways, including the correct materials to use, proper components and dimensions, and methods of construction



STATIC ELECTRICITY

What is Static Electricity?

- Learn about the nature of static electricity
- The costs of uncontrolled static electricity in the work place
- How static electricity occurs
- Factors that influence static electricity
- What causes static sparks

Potential Hazards

- The consequences of static electricity in the work place
- Common tasks with the potential for static charges
- The hazards of static sparking
- How static electricity can contribute to fires and explosions

Controlling Static Electricity

- Factors that affect static charge accumulation
- Methods to control static electricity
- How to determine the best solution
- How grounding & bonding and other methods work

- Learn what you can do to prevent static electricity in your work place
- Proper clothing and personal protective equipment
- Use of tools and equipment
- Working with flammable liquids
- Inspection & maintenance of equipment



STORMWATER MANAGEMENT/SAFETY

Overview

• The importance of storm water management

What is Storm water?

- How water becomes polluted
- Types of pollution
- Factors that affect the extent and severity of pollution

Effects of Storm water Pollution

- Consequences of poor pollution management
- How poor pollution management can affect your company's reputation
- What is threatened by pollution

Best Management Practices

- Sources of storm water pollution
- How to respond to a spill
- What to look for when inspecting storage containers
- Using best management practices off the job



TOXIC SUBSTANCES CONTROL ACT (TSCA)

What is TSCA?

- Why TSCA was created
- The goal of TSCA
- The responsibilities of both you and your employer according to TSCA

The TSCA Inventory

- Where to obtain the TSCA Inventory
- The content of the five volumes of the TSCA Inventory
- Using the TSCA Inventory to find the chemicals used at your facility
- What to do if you are having trouble finding a chemical listing

Reporting and Retaining Information

- Retaining files and reports
- Instances when a report must be completed
- The process of reporting allegations of environmental or health risks
- Your company's responsibilities with regard to TSCA

Recognizing and Respecting Toxic Substances

- How to identify a toxic substance
- How toxic substances are labeled
- The health risks associated with toxic substances

Best Safety Practices

- The importance of wearing PPE in case of possible exposure to hazardous chemicals.
- The different types of PPE required when working with hazardous chemicals
- What to do in case of exposure to hazardous chemicals



VALVE SAFETY

Types of Valves

- Explain why valves are important in everyday life
- Describe how valves work
- Identify the characteristics of different types of valves

Risk Assessment

- Describe the importance of a risk assessment
- Identify the potential consequences of valve incidents
- Identify common valve related injuries
- Specify what to consider when conducting a hazard analysis
- Recognize how the physical location of the valve can contribute to potential hazards

Ergonomic Issues

- Identify risk factors that contribute to strains & sprains
- Demonstrate proper posture
- Use ergonomic solutions to work tasks

Working Safely With Valves

- Selection and use of tools and PPE
- Lockout and tagout requirements
- Good housekeeping practices
- Replacing, inspecting, cleaning and storing valves



WALKING & WORKING SURFACES

Guarding Openings & Holes

- Learn the requirements for proper guarding of floor and wall openings and holes
- Stairway floor openings
- Ladderway floor openings
- Floor holes
- Wall openings
- Open-sided floors, platforms & runways

Ladders

- Learn about safe work practices when working with ladders
- Selecting the correct ladder for the job
- Inspecting the ladder
- Proper placement & setting up the ladder
- Safe practices when climbing & working on ladders

Good Housekeeping

- · Keeping your work area clean and organized
- Working on different surfaces
- Your role in preventing injuries

Stairway Safety

- Using stairways
- Keeping stairways safe

Scaffolding

- Learn about safe measures to prevent slips, trips and falls while working on scaffolds.
- Recognizing the most common hazards when working on scaffolds
- Engineering controls used to protect your safety
- Safe work practices that can prevent injuries



WELDING SAFETY

Potential Hazards

- Learn about the hazards associated with welding that you may encounter at your job site.
- The importance of safety in every welding job
- Types of potential safety and health hazards
- The use of ventilation
- Health effects from exposure to airborne contaminants

Personal Protective Equipment

- Learn about types of PPE and how they protect you from hazards
- Eye & Face Protection
- Hearing Protection
- Protective Clothing

- What you can do to protect yourself and your co-workers from potential hazards
- How to prevent fires
- Hot work requirements
- Good housekeeping practices
- Atmospheric testing
- And other safe practices