COTERRA

Environmental, Health and Safety Handbook

MAY 31, 2024

Incident Reporting Quick Reference

In Radar - Add New Incident

- The **date** and **time** will automatically populate. It can be changed; enter the date and time of the incident to the best of your knowledge.
- Enter the **Incident type** from answering the questions below and enter the **Department** for the activity that had the incident.
  - Was a person injured or exposed to a workplace material that could be harmful? Type is **Injury or Illness**
  - Was there a fire, explosion, electrical arc or evidence that one had occurred? Type is **Fire/Explosion**
  - Was any utility (pipeline, cable, etc.) unintentionally struck? Type is **Line Strike**
  - Was a motorized vehicle in motion involved in an incident? Type is **Motor Vehicle Incident**
  - Was a liquid of any type spilled onto the ground, onto other equipment, or into containment? Type is **Spill**
  - Was a gas or vapor released to the atmosphere? If the gas was H_2S, the Type is H_2S Release; otherwise the type is **Emission Event**
  - Was Coterra equipment or property damaged due to an incident? Type is **Equipment or Property Damage**
  - Was Coterra equipment stolen from anywhere or was contractor's equipment stolen from a Coterra location? Type is **Theft**
  - Was wildlife adversely affected on a Coterra location? Type is **Wildlife**
  - Was there an incident that occurred on a Coterra location or involving Coterra assets/personnel, but none of the above apply? **Near Miss**
  - Any other incidents should be entered as **Non-work related Injury/Illness** or **Information**, **Report Only**-whichever best applies.

Basic Information

- Enter the **Operation Type** that best fits what was happening at the time of the incident.
- **Describe the Incident:** explain what was happening at the time of the incident, what was impacted by the incident, how was the incident contained or managed, what other actions are currently being implemented for the incident.
- **Was ES&H notified immediately:** Yes, No or Unknown. If yes, enter the ES&H person that was notified.
- **Reported To:** Identity who you first notified about the incident.
- **Comments:** Enter any additional facts that should be captured about this incident.

Location

- Enter the **Location Type** that best matches the location of the incident.
- Enter other location information that you know.

Contractor

- If the impacted employee was a contractor or consultant, enter yes. If the impacted employee works for Coterra, enter no.
- If yes, enter the name of the contractor that best matches from the list. If the vendor is not found – add it in the blank at the bottom.

Weather

- Enter the weather information at the time of the incident.

This Handbook is for use by Coterra employees and contractors. The material contained within this handbook is meant to serve as a summary and a guide.

This Handbook does not provide all the details a responsible individual may need to fulfill his or her responsibilities. The intent of this Handbook is to provide high level guidance for workers when addressing an EHS issue.

Coterra has other written materials related to EHS that go into greater detail on appropriate work practices or response actions. You should always contact your supervisor or local EHS representative when there are questions concerning a specific requirement or when additional support is needed.

A special thanks goes out to all the Coterra employees that assisted in the development of the safety standards on which this handbook is based:

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Purpose & Scope

Ensuring that every individual makes it home safely at the end of the day and that the environment is not negatively impacted by our operations is the primary responsibility of all Coterra employees and contractors. Coterra's Environmental, Health and Safety (EHS) Handbook (Handbook) emphasizes Coterra's commitment to safe and environmentally prudent operations. Coterra expects every employee and contractor to support this commitment.

This Handbook is intended to serve as a reference resource. This Handbook does **not** provide all the details an individual may need to fulfill his or her responsibilities. The intent of this Handbook is to provide high-level guidance to an employee or contractor when addressing an EHS issue. Coterra has various EHS Standards that go into greater detail on appropriate work practices or response actions. You should always contact your supervisor or local EHS representative when there are questions concerning a specific EHS Standard or when additional support is needed.

1. Leadership & Organizational Effectiveness

1.1 Message from Leadership

Responsible environmental, health and safety ("EHS") performance is Coterra's top priority. Coterra is committed to providing a safe, healthy, and environmentally conscious workplace to protect our employees, our contractors, the public and the environment.

In furtherance of these goals, it is the responsibility of all personnel to protect themselves, their fellow workers, the public, and the environment. You are urged to become familiar with all sections of this Handbook, refer to it frequently, and comply with all the guidance contained herein.

1.2 Stop Work Authority (SWA) [EHS 1.05]

The SWA program is a critical program that demonstrates Coterra's commitment to safe operations. This program gives anyone (Coterra employee, contractor, or other) the authority and the obligation to stop any operation whenever they observe a potentially unsafe condition or someone in the process of performing an unsafe act.

All employees and contractors are required to create a culture where SWA is exercised freely, stop work requests are honored and respected, concerns are resolved before operations resume, proactive participation is recognized and that all stop work actions are properly reported.

1.3 New Hire or Rehire Orientation

All new employees must receive at least the minimum annual required training for the position for which they are assuming prior to performing designated tasks. This requirement also applies to employees that are rehired or returning to work after leave of absence. Contractors are responsible for providing all necessary training to their respective personnel.

All contractor personnel must undergo a field safety orientation. During this orientation, they will be provided the base expectations for personnel to work for Coterra. The employee will be issued a card and must have this card available whenever on a Coterra location.

1.4 General Rules For Safe Practices [EHS 1.12]

Coterra's general rules for safe work practices are designed to promote and sustain a safe and reliable work environment where everyone goes home safely at the end of their workday. These rules are intended to protect all workers. Coterra expects you to follow the general rules and to coach and hold personnel accountable when a rule is not being adhered to.

1.4.1 Communication

- Observe and obey all warning signs.
- Immediately report all injuries, incidents, or near misses to your supervisor.
- Notify your supervisor about any unsafe work condition or practices.
- Whenever a safety device is removed from service, the device should be tagged, associated equipment removed from service, and the action documented.

1.4.2 Personal Action

- Utilize and support SWA.
- No one should operate any equipment or perform any task if they are not properly trained.
- Horseplay, fighting, and reckless conduct are prohibited.
- Use proper lifting techniques when lifting. Obtain assistance or use a mechanical lifting device if the load is too heavy, bulky, awkward, or expected to shift.
- Be aware of your physical limitations and ensure that you are fit for work.

1.4.3 Personal Protective Equipment (PPE)

- Hard hats, safety boots, safety glasses, and flame-resistant clothing are required at all Coterra field locations (excluding office locations).
- Additional PPE may be required due to additional site hazards.

1.4.4 Driving

- Get out and look (GOAL) - Walk around the vehicle before moving to ensure there are no obstacles and that the vehicle is in good working condition.
- The driver and all passengers shall wear seat belts while in a Coterra vehicle.
- When parking a Coterra vehicle, ensure that the vehicle is parked in a safe location and utilize first move forward unless it is not feasible.

1.4.5 Equipment

- Use only proper tools and equipment that are maintained in good working condition.
- Tools should be inspected before use and defective tools shall be removed from service.
- Emergency response equipment must be readily accessible, in an unobstructed location, in good condition, and inspected regularly.
- While transferring flammable liquids, only use metal containers that are grounded by metal-to-metal contact or grounding straps.
- Under normal operations, all operating machinery and electrical switchgear must have all safety guards, switches, and alarms in place and be functional.

1.4.6 Work-Specific Activities

- Erect barricades around known potential hazards such as holes in decking/ floors, overhead activities, trenches, etc.
- No person shall enter a permit required confined space or toxic gas cloud, without first obtaining the necessary work permits.

- Safety harnesses shall be used when working at heights greater than 4 feet.
- Review any hazards identified in the SDS and take the proper precautions, e.g., eye and face protection, rubber gloves, etc., before handling chemicals.

1.5 Alcohol and Controlled Substances [EHS 1.13 AND 1.14]

Personnel who are under the influence of alcohol or controlled substances during a commute or while on a Coterra location is a safety hazard and is strictly prohibited.

1.5.1 Prohibited Activities

All individuals are prohibited from:

- Being under the influence of alcohol or a controlled substance.
- Use or consumption of alcohol or a controlled substance.
- Possession of alcohol or a controlled substance.

1.5.2 Searches, Inspections and Testing

Coterra has the right to perform searches, inspections, and tests to determine if a prohibited activity is occurring:

- All individuals and vehicles on a Coterra location.
- Coterra owned, leased, or rented vehicles at any location.
- Any search, inspection, and/or test will meet the following requirements:
    - Written consent is obtained (non-consent will result in removal from the Coterra location and disciplinary action, up to and including termination).
    - Whenever possible, a witness should be present.
    - Any suspected unauthorized material found will be confiscated.
    - Coterra employees will not involuntarily detain any individual; however, such individuals will not be permitted to drive a Coterra vehicle.
- Additional alcohol and controlled substance tests are required for individuals involved in commercial driving and regulated pipeline operation. Those additional tests include:
    - historical employment records review
    - pre-employment, transfer, and promotion
    - random
    - reasonable suspicion
    - post-accident.

Notify your supervisor or human resources if you are taking prescription and/or over-the-counter drugs that could affect work performance, or if you have any medical conditions that may require specialized treatment (e.g., epilepsy, diabetes, known allergies that may cause anaphylactic shock, etc.).

2. Stakeholder Engagement

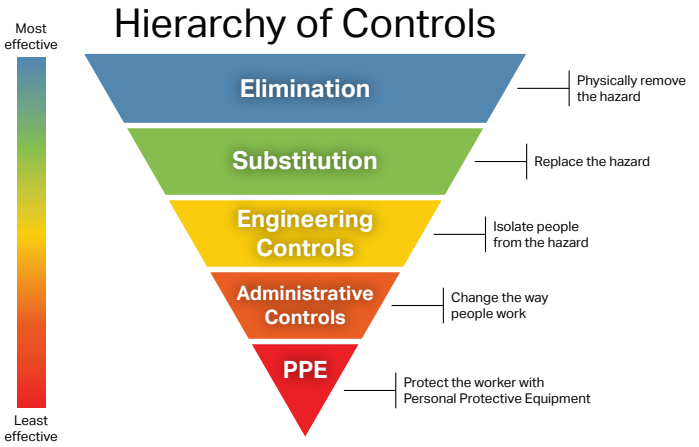
2.1 EHS Responsibilities

Ensuring that every individual makes it home safely at the end of the day and that the environment is not negatively impacted by our operations is the primary responsibility of all Coterra employees and contractors.

2.1.1 Coterra Leadership

Coterra recognizes its responsibility to conduct its business lawfully, ethically, and in a socially responsible manner. In the areas where we operate, we are committed to:

- Ensuring operations that protect the health and safety of employees, contractors, and the public.
- Ensuring operations that are environmentally prudent and strive to achieve excellence in environmental stewardship.
- Promoting incident prevention through the hierarchy of controls model.



- Clearly identifying individual safety and environmental stewardship are priority over other operational factors.
- Ensuring appropriate and timely response to emergency situations.

The functional responsibility for the safety of personnel, facilities, and the environment rests with operational supervisors and the contractors working on Coterra's behalf; however, EVERYONE has the responsibility to work safely and in an environmentally sound manner. Your participation is required to achieve our safety and environmental objectives, ensure a safe working environment, reduce exposure to hazards, and ensure a productive operation.

2.1.2 Employee EHS Responsibilities

As an employee of Coterra, I commit to:

- Using Stop Work Authority.
- Respecting Stop Work Authority.
- Prioritizing taking time to evaluate safety hazards.
- Not proceeding if safety hazards cannot be mitigated.
- Not allowing teammates to perform unsafe actions.
- Stopping teammates and share my concern for their safety.
- Following safe work procedures and safety standards.
- Ensuring I am fit for work, if not, notify my supervisor.
- Only performing tasks for which I am properly trained and capable of completing safely.
- Acknowledging my own limitations and the limitations of my teammates.
- Prioritizing safety over “getting the job done”.
- Being a safety leader.

2.2 Contractors’ EHS Responsibilities

Each contractor will have its own environmental, health and safety program that meets or exceeds the requirements outlined in the Coterra’s EHS Standards, and such program will comply with all applicable federal, state, or local laws and regulations. Any contractor who subcontracts work out will ensure subcontractor compliance with all responsibilities required of the contractor.

Contractors’ EHS Responsibilities include:

- Coordinating all activities, including the use of subcontractors, to complete contracted work or services with the designated Coterra representative.
- Implementing and maintaining a safety program addressing the safety risks associated with the work or services performed.
- Ensuring that all safety measures are carried out by its employees and subcontractors.
- Ensuring personnel receive an onsite safety orientation to become familiar with this Handbook, incident reporting and emergency procedures.
- Ensuring that all personnel are provided appropriate safety equipment and are trained and qualified to perform the contracted services.
- Providing direct supervision to their employees and subcontractors.

- Maintaining all equipment and tools to ensure a safe and environmentally protective operation.
- Reporting all actual or potential (near miss) incidents, spills, and releases immediately to the appropriate Coterra representative.
- Providing the time and resources required to enable safe completion of the work.
- Complying with all obligations set forth in the Master Services Agreement or other agreements between Coterra and contractor.
- Ensuring that the following ISNetworld ("ISN") membership requirements are complied with:
  - Provide all required documentation.
  - Have and maintain EHS programs as approved through ISN Review and Verification Services ("RAVS").
  - Ensure that their employees comply with the EHS programs set forth by their companies demonstrated by Training RAVS ("TRAVS").
- Any contractor that utilizes a subcontractor will provide an executed waiver of lien as outlined in the Master Services Agreement.
- Attend and participate in Coterra sponsored safety discussions and meetings.

2.3 Media Interaction

Coterra's External Affairs Department coordinates interaction with the media. Employees should be mindful of their signed nondisclosure agreements and confidentiality obligations and use discretion in all media interactions, e.g., social media posting of incidents, speculation of incidents via email/text message, discussing Coterra with the media, and external mass communication organizations.

In certain situations, it may be necessary for employees to interact with the media. General requirements for media interaction are as follows:

- Do not ignore the media if they approach you.
- Always treat the media with respect and courtesy.
- Refer media to the proper Coterra spokesperson.
- Always provide accurate information and never speculate.
- Questions or inquiries by the media should be directed to the External Affairs Department.

2.4 Social Media

Employees should exercise discretion with social media use. Incident information should never be posted on personal social media. Posting photographs of Coterra facilities and personnel is strictly prohibited.

2.5 Safety Councils

Coterra has established Safety Councils to communicate safety needs and address safety topics across the company through Coterra's Executive Safety Council (ESC), Leadership Safety Council (LSC), and Field Safety Council (FSC).

Each Coterra Business Unit will assign personnel to the LSC and FSC to communicate safety needs and address safety matters within their areas. The LSC and FSC will meet periodically with the ESC to discuss safety performance and proposed enhancements.

2.6 Safety Meetings

Safety Meetings are an effective means for communicating EHS requirements across the entire organization. Field leadership, EHS personnel and Corporate Leaders shall attend these meetings and lead them where possible.

Coterra shall employ the following types of EHS engagements to create a strong safety culture:

- Monthly Safety Meetings – For EHS Training
- Pre-Job Safety Meetings (Tailgate) – Safety meetings before a job is started to ensure all workers are aware of the scope of work hazards and risks. Typically, a Job Safety Analysis (JSA) will be completed and reviewed during this meeting.
- Safety Stand Down – Often done after a major near miss or a major incident. Intended to reinforce safe and reliable work behaviors.
- Contractor Safety Meetings – Safety meetings focused on contractor activities and ensuring consistency in the application of EHS Standards and programs.

3. Hazard Identification and Risk Management

3.1 Back Injury Prevention [EHS 3.1]

Before attempting to lift any object/material, consider the following:

- Determine if there is a better way of transporting the load that does not require physically carrying it. Use mechanical means of lifting and transporting loads whenever possible.
- Ensure that walkways are not obstructed and are in good condition.
- Ensure that your vision is not obstructed by the load.
- Before beginning a lift, evaluate the load for cut hazards (slivers, burrs, etc.), weight (guideline is no more than 50 pounds per person), and load size, shape, and manageability concerns.

- If the lift requires more than one person, ensure the team lift is planned. This should include the path of the lift and clearing any obstacles and identifying any lift transfer points.
- When in doubt, ask for help or get a mechanical lifting device.

When executing the lift use the eight commandments of lifting:

3.2 Hazard Communication With Globally Harmonized System (GHS)

Hazards of any chemical in the workplace will be communicated to all employees, so that employees will know how to properly handle those chemicals and protect themselves from the potential hazards. A full-size GHS is available in the resources section of this handbook.

Coterra has the potential to maintain an inventory of chemicals at any location. Any new chemical introduced into the workplace and their related chemical hazards will be reviewed and approved by the EHS Representative and Area/ Location Supervisor prior to usage. Coterra and contractors are responsible for mitigating employee exposure to hazardous chemicals by:

- Labeling all chemical containers with the GHS labeling system.
- Ensuring that Safety Data Sheets (SDS) are readily accessible for employees at each Coterra District Office for chemicals present in that district.
- Proper use of the hierarchy of controls to reduce the risk associated with the chemical.
- Implementing Personal Protective Equipment (PPE) requirements which can reduce the exposure but does not alleviate the problem.

- Implementing Personal Hygiene protocols, e.g., washing hands before eating, smoking, applying make-up, etc. are examples.
- Chemical containers received in the workplace are properly labeled with the manufacturer's label and understood by personnel.
- Container labels remain legible and intact. In cases where the label is damaged, lost, or destroyed, a substitute label is immediately applied that contains the minimum requirements for GHS labeling.
- If the container lacks the proper GHS labeling, personnel should immediately notify supervision and, as directed, return the container to its point of origin.

GHS Pictograms

Health Hazard

- Carcinogen
- Mutagenicity
- Reproductive Toxicity
- Respiratory Sensitizer
- Target Organ Toxicity
- Aspiration Toxicity

Flame

- Flammables
- Pyrophorics
- Self-Heating
- Emits Flammable Gas
- Self-Reactives
- Organic Peroxides

Exclamation Mark

- Irritant (skin and eye)
- Skin Sensitizer
- Acute Toxicity
- Narcotic Effects
- Respiratory Tract Irritant
- Hazardous to Ozone Layer (Non-Mandatory)

Gas Cylinder

- Gases Under Pressure

Corrosion

- Skin Corrosion / Burns
- Eye Damage
- Corrosive to Metals

Exploding Bomb

- Explosives
- Self-Reactives
- Organic Peroxides

Flame Over Circle

- Oxidizers

Environment

- Aquatic Toxicity

Skull and Crossbones

- Acute Toxicity (fatal or toxic)

A larger version of this information is available in the resources section.

3.3 Hearing Conservation

Hearing protection shall be worn by employees when they are exposed to noise levels at or above 85 dBA. Coterra will make hearing protection available to all employees. Employees shall be given the opportunity to select from approved PPE for hearing protection.

- As a minimum, two types of plugs should be made available to each employee and muffs should be made available on request.
- Employees shall be given the option of utilizing the protector that is most comfortable if the attenuation value is not compromised.

3.4 Job Safety Analysis (JSA)

JSAs are designed to protect employees, the environment and property by identifying and mitigating hazards prior to beginning a task. An effective JSA should:

- Involve all workers involved in the task.
- Clearly identify the tasks covered by the JSA.
- Break the tasks down into job steps.
- Identify hazards that exist for each job step.
- Identify hazards associated with Simultaneous Operations (SIMOPS).
- Identify mitigative measures for each identified hazard.

JSAs can be completed for any job task, but they are required for job tasks that:

- Are not routine or do not have a written operating procedure or accepted best practice.
- Has been identified to have a potential for a Significant Injury or Fatality (SIF).
- A job location that has SIMOPS being performed.

3.5 Naturally Occurring Radioactive Material (NORM)

Naturally Occurring Radioactive Material (NORM) originates in subsurface formations where radioactive isotopes dissolve and are brought to the surface in produced fluids (usually water). NORM is often encountered in equipment when pipe scale accumulates on production tubulars, where pressure differences make crusting or scaling possible, such as in mud or water pumps, and in certain devices, such as heater treaters, water knockouts, liquid product tanks, separators, filters, and water transfer pumps. Examples of surface equipment that may contain NORM include tubulars, heater treaters, wellheads, separators, and produced water tanks.

3.5.1 NORM Requirements

Due to the potential for working on NORM-contaminated equipment and encountering NORM-contaminated material, Coterra has established the following requirements for all NORM encountered by Coterra employees.
General requirements for NORM:

- Because NORM is not visually identifiable in equipment, a NORM survey should be conducted on lease equipment prior to disposal, disposition, or when exposure to NORM could occur.
- Equipment registering above 50 micro-Roentgens per hours (μR/hr.) with a gamma survey meter, may be required to be labeled as NORM-contaminated equipment. Scale removal and decontamination of NORM-contaminated equipment can only be performed by someone specifically licensed to do the work.
- NORM-contaminated equipment that is being sent to a recycler or disposal may require a lower μR/hr level.
- NORM-contaminated equipment and materials in which the NORM cannot be removed must be segregated and labeled if stored and not in use.
- All NORM contaminated equipment or materials that cannot be reused or recycled must be properly disposed of as NORM waste in compliance with State regulations.
- Land (soil, aggregate material, etc.) can become contaminated if NORM accumulates on the ground. Soil exceeding NORM standards must be excavated and disposed of as NORM waste.

3.5.2 NORM Wastes

Wastes resulting from NORM-contaminated equipment cleaning and other NORM-contaminated materials shall be segregated from other wastes as instructed by the EHS Department. These wastes include scale, sludge, and rinsate.

- Such wastes shall be properly contained and labeled to meet state and Department of Transportation (DOT) requirements.
- Every effort should be made to segregate NORM waste from other waste.
- Contaminated gloves, respirators, coveralls, and rags must also be containerized and labeled.
- Drum lids shall be placed on containers and secured. Pipe and other equipment shall be sealed by duct taping the ends and covering with plastic or equivalent actions prior to or at the time of placement into a designated storage area.
- All wastes will be properly manifested for shipping to a permitted disposal facility. An EHS representative will assist with the shipping and disposal of NORM waste.

3.5.3 State-Specific Requirements

Regulation of NORM varies from state to state. Please visit with your EHS representative for additional information.

3.6 Respiratory Protection [EHS 3.7]

Coterra's EHS Department coordinates and manages the Respiratory Protection Plan (RPP), which establishes the expectations, conditions, and procedures applicable to using respiratory protection at all Coterra operated facilities.

- The RPP has been developed to ensure that respirators are properly selected, fitted, used, and maintained to protect the health of the employee.
- This program applies to work performed by Coterra employees when respirators are required to perform assigned duties.
- Respiratory protection is required when exposure to respiratory hazards cannot be controlled by either engineering or administrative controls.
- Affected employees must wear respirators in accordance with this RPP. Coterra supplies training, medical evaluations, fit test, and respirators at no cost to the employee.

3.7 Risk Matrix

The risk matrix is a tool to help identify risk based on the probability of an event and the severity/consequence if an event occurs. The risk matrix should be utilized when determining the correct mitigative measures to implement to reduce the overall risk of an activity.

		Probability				
		A	B	C	D	E
Severity	5	2	3	4	4	4
	4	1	2	3	4	4
	3	1	2	2	3	4
	2	1	1	2	2	3
	1	1	1	1	1	2

Probability		
A	Unlikely	Historical or expected occurrence less than once every 10 years at 1 of 1000 similar facilities (<1/10,000; <0.01%)
B	Seldom	Historical or expected occurrence of once a year at one of 1000 similar facilities (<1/1,000; <0.1%)
C	Occasional	Historical or expected occurrence of once a year at 1 of 100 similar facilities. (<1/100; <1%)
D	Likely	Historical or expected occurrence of once per year at 1 of 10 similar facilities (<1/10; <10%)
E	Frequent	Historical or expected occurrence of more than once per year at each similar facility. (>1/10; >10%)

	Severity/Consequence				
	1	2	3	4	5
	Insignificant	Low	Medium	High	Severe
People	First Aid Incident	Recordable Injury	Lost time injury, restricted work or transfer due to injury	Significant Injury or Fatality (SIF)	Multiple SIF Injuries
Environment	Unreportable incident with no mitigation required.	Minor environmental damage, effects confined to immediate site of incident and limited remediation required.	Moderate environmental damage with remediation to occur within the short term.	Severe short term environmental damage with long-term remediation requirements.	Severe long term environmental damage with multi-year remediation requirements.
Asset/Financial	Near miss or event with minimal impact to operations. Impact of <$10K.	Near miss or operational upset that is brought under control relatively quickly. Impact of $10K-$100K.	Event leading to an operational shutdown. Unit quickly returned to operation. Impact of $100K-1MM.	Event leading to an extended or extensive operational shutdown. Unit quickly returned to operation. Impact of $1-10MM.	Event leading to a system wide or regional operational shutdown. Impact of >$10MM.
Reputation	Internal attention only.	Company wide attention, low-level regulatory attention, or brief local area attention.	Prolonged local area attention, upper-level regulatory attention, or brief regional attention.	Prolonged regional attention, governmental attention beyond the regulatory body, or brief national attention.	Prolonged national attention or high-level governmental attention.

4. Operational Control (Conduct of Operation)

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5. Incident and Emergency Management

5.1 Crisis Management Plan

The Crisis Management Plan exists to provide guidance for the Crisis Management Team (CMT) to understand, communicate and support the operations of an Incident Management Team during a significant event.

5.2 Emergency Response Plans (ERPS)

The ERPs exists to facilitate an efficient response to an emergency event. They provide guidance on establishing an Incident Management Team (IMT) and incident management processes. Coterra has Business Unit specific ERPs and in addition to the ERPs, there are regional Tactical Response Plans available.

5.3 Incident Investigation Methodology

All incidents will require an investigation to understand the factors and events that lead to the incident. Higher severity incidents and incidents with a potential for SIF injuries should consider utilizing the TapRoot© incident investigation methodology.

5.4 Incident Reporting

In the event of an incident, the top priority is ensuring the safety of all personnel, the public and the environment. Once safety precautions have been implemented, internal notifications should be conducted. Employees must report all incidents to their immediate supervisor as soon as possible. The supervisor will ensure that additional required notifications are made.

All incidents should be documented using Coterra's current incident reporting protocol. When completing an incident report, provide detailed facts but do not speculate. EHS personnel will assist in determining incident severity levels and will make any required regulatory notifications.

5.5 Medical Case Management

For life threatening and emergency injuries call 911 or other local emergency responders.

For non-life threating injury or illness, contact **AXIOM at 877.502.9466**. Axiom personnel will provide medical care guidance. Use of the Axiom hotline provides medical expertise easily and quickly. Axiom will provide:

- field treatment recommendations,
- additional treatment recommendations,
- monitoring of the injured person and follow-up recommendations.

5.6 Internal Notification Guide

Internal notifications requirements are based on incident severity level. If in doubt of the severity level, use the higher of the severity levels being considered. The table below should provide guidance on incident classification and incident level determination. A full-size version of the table is available in the resources section.

High — Severity of Incident — Low

Incident Type Ranking: Higher → Lower

Incident Type	Level 3	Level 2	Level 1
Injury / Illness	OSHA Serious or Coterra Significant Injury Fatality	Recordable Injury - DART	Recordable Medical Injury
Exposure	> IDLH	> PEL or unknown	< PEL
First Aid	Medical visit required	Major cut or injury with swelling	Minor cut, scrape, or bump (Band-aid)
Fire/Explosion/Electrical Arc	Not immediately controlled	Extinguished by fire extinguisher	Self Extinguished
Line Strike	Pipelines > 500 psig or pipe failure Electric lines >220V	Pipelines 25 psig to 500 psig Electric lines <220V	Pipelines < 25 psig Communication and automation lines
MVI	>40 MPH; Multiple vehicles are a "total loss"	10 - 40 MPH; Vehicle unable to be driven from location	<10 MPH; Vehicle can be driven from incident safely
Release - Spill Event	Waterway Impact or >1000 BBL inside containment or >100 BBL outside containment	State Reportable or 10 - 100 BBL inside containment or <100 BBL outside containment	Not State Reportable or < 10 BBL inside containment
Emission Event	Release > 3 MMscf or reportable to CSB	Agency Reportable	Non-reportable Event
Equipment or Property Damage	> $122,000	$50,000 - $122,000	< $50,000
Theft	> $122,000	$50,000 - $122,000	< $50,000
Water Complaint	Coterra affected	Within presumption	Outside presumption
Wildlife	Threatened or endangered	Reasonably assumed due to Coterra Operations	Not due to Coterra Operations
Notification Protocol	CEO, VP, BU Manager, Manager, Super, EHS, Foreman	VP, BU Manager, Manager, Super, EHS, Foreman	Manager, Super, EHS, Foreman, BU Manager

Notification Requirements

Level	Foreman / EHS	Super-intendent	Manager	BU Manager	VP	CEO
3	Immediately	Immediately	Immediately	Immediately	Immediately	Immediately
2	Immediately	2 Hours	2 Hours	4 Hours	4 Hours	
1	Immediately	2 Hours	2 Hours			

6. Safe Work Practices

All personnel are responsible for strictly adhering to safe work practices. Prior to beginning work, the individual overseeing the work shall take the time to assure themselves that all reasonable precautions have been taken to prepare the work area to mitigate or remove hazards, that work scope and methods are understood, and otherwise ensure that conditions are safe to proceed with the work.

Contractors are responsible for implementing and maintaining safe work practices that address the safety risks associated with the work or services contracted to be performed. Contractors are also responsible to provide the appropriate safety equipment and training to its employees (including subcontractors) for the safety risks associated with the work or services.

If a hazard or danger develops while work is in progress, personnel in the area must cease all operations, secure the work area, and report the hazard to their work supervisor.

The following sections go into greater detail of the safe work requirements. The EHS Standard is referenced in each section and should be thoroughly reviewed prior to commencing work. This Handbook is designed to provide high level guidance but does not replace the requirement to review the EHS Standard.

6.1 Bloodborne Pathogens [EHS 6.01]

The Bloodborne Pathogens Standard was established to eliminate or minimize infections in the workplace. This awareness program provides control measures and procedures to be followed at Coterra locations to prevent occupational exposure to bloodborne pathogens and other potentially infectious materials.

- Besides Hepatitis B Virus (“HBV”) and Human Immunodeficiency Viruses (“HIV”), bloodborne pathogens include any pathogenic microorganism that is present in human blood and can infect and cause disease in persons who are exposed to blood containing the pathogen. Other examples include Hepatitis C, malaria, syphilis, and Viral Hemorrhagic Fever.
- This awareness program covers all Coterra employees who may at some time render aid as a “Good Samaritan” in an emergency.
- Coterra does not require that any employee respond to a medical emergency.
- It is important that an employee be aware of the hazards associated with responding to an emergency.

6.1.1 Personal Protective Equipment (PPE)

Employees providing first aid should assume that all individuals might be infectious and should wear the appropriate PPE. Proper PPE should be available in all Coterra vehicles and in first aid kits.

- latex or vinyl gloves,
- mouth shields,
- protective eyewear.
- If possible, some type of protective body clothing impervious to fluids, such as gowns, aprons, or Tyvek coveralls, should be worn while responding.

6.1.2 Waste Handling and Labels

Masks in combination with eye protection devices, such as goggles or glasses with solid side shields or chin length face shields, should be worn while disposing of any medical waste. All waste should be disposed of properly and documentation should be kept.

Warning labels shall be affixed to containers of bodily waste or potentially infectious material. Labels for containers of potentially infectious material shall include the appropriate biohazard logo. The labels shall be fluorescent orange or orange-red, with lettering or symbols in a contrasting color, similar to the label shown below. Individual containers of blood or Other Potentially Infectious Materials ("OPIM") placed in a labeled container during storage, transport, shipment, or disposal do not need to be labeled.

6.1.3 Housekeeping

Any exposed surfaces should be cleaned of all material and fluids, and then wiped with an appropriate disinfectant/germicide. Any contaminated clothing should be handled with care. Employees who handle any type of contaminated clothing or equipment should wear gloves.

6.1.4 First Aid Care Incident

Report incidents where employees render first aid assistance in any situation involving the presence of blood or OPIM to the EHS Department, regardless of whether an exposure occurred.

6.2 Chainsaws, Lawnmowers And String Trimmers [EHS 6.02]

6.2.1 Chainsaws

Operators of chainsaws shall:

- Conduct a pre-use inspection of the chainsaw which should include:
  - looking for missing or loose parts,
  - signs of wear,
  - checking fluid levels and looking for leaks,
  - the guide bar is tight,
  - adjust the chain so it is snug and is not binding,
  - proper lubrication of moving parts,
  - the chain brake is operating properly.
- Wear proper PPE, which includes:
  - double eye protection,
  - hearing protection,
  - cut resistant clothing and boots,
  - leather or anti-vibration gloves with ballistic nylon reinforcement on the back.
- Chainsaw Operation
  - Ensure that you are trained on the safe operation of the chainsaw make and model.
  - Maintain both feet on the ground and two hands on the chainsaw while in operation.
  - Keep chain sharp and well lubricated.
  - Only fuel chainsaws when the engine is cool and in a well-ventilated area.

6.2.2 Lawnmowers and string trimmers

Operators of lawnmowers and string trimmers will:

- Conduct a pre-use inspection which should include:
  - Ensure all guards are in place.
  - Check fluid levels and top off, as needed.
  - Ensure area to be mowed or trimmed are free of obstacles and debris.

- Wear proper PPE, which includes:
  - double eye protection,
  - long sleeve shirts and pants,
  - safety toed boots,
  - leather gloves.
- Lawnmower and String Trimmer Operation
  - Ensure to operate the equipment as directed by the manufacturer.
  - Never disengage or nullify a safety system.

6.3 Compressed Gas Cylinders [EHS 6.03]

Special care should be taken in the handling, storage, use, and inspection of compressed gas cylinders and associated equipment. The following requirements apply to compressed gas cylinders, regulators and gauges:

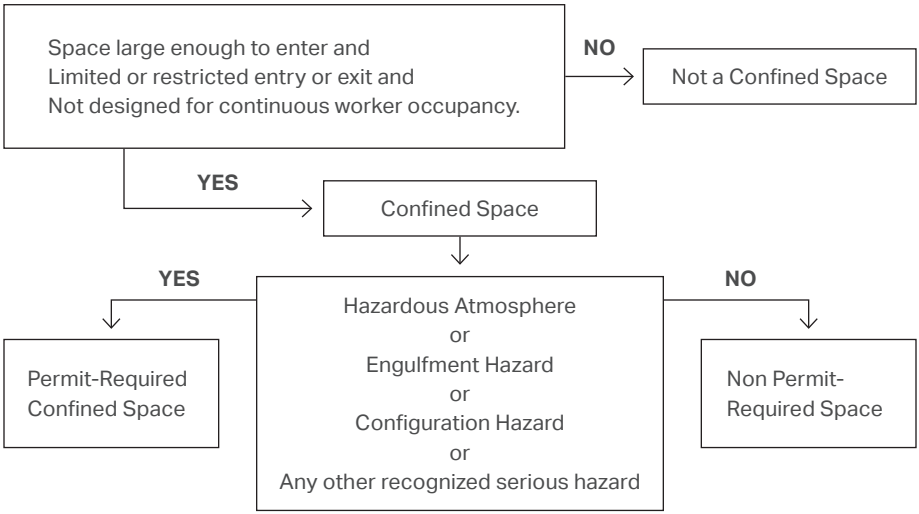
- A cart or other mechanical device should be used to move compressed gas cylinders. Cylinders may also be rolled on the bottom, but never dragged. Dropped or allowed to strike each other.
- Cylinders shall be marked and labeled according to DOT regulations. Empty cylinders must be marked “EMPTY”.
- Cylinders to be transported must be loaded and secured in an upright position and valves must be tightly closed, and the valve protector caps in place.
- Do not allow flames, sparks, electric current or excessive heat contact compressed gas cylinders or attachments.
- Use only manufacturers’ approved pressure-reducing regulators. Ensure arrestors are in place on oxygen and fuel systems.
- Use only manufactured hoses that are in good working condition. Hoses should never have cuts, cracks, or been spliced.
- Compressed gas cylinders should be stored upright, in a properly designated storage area with valve caps in place.

6.4 Confined Space Entry [EHS 6.04]

6.4.1 Confined Space Determination

Entry into confined spaces presents potential hazards to personnel, even though the work itself might not ordinarily be hazardous. Entry into a confined space requires training, planning and preparedness. Confined spaces that are classified as being a permit-required confined space pose special hazards and will not be entered by Coterra employees. Only qualified contractors will be used in projects requiring entry into permit-required confined spaces. For detailed information, refer to the EHS Standard 6.04 Confined Space Entry.

- "Permit Required" means it meets criteria established by OSHA and needs additional hazards addressed.
- A confined space is a space that meets all three of the following criteria:
  - large enough for personnel to enter,
  - has limited or restricted means of entry or exit (For clarification this means an area that requires the use of hands for support or contortion of the body to enter or exit.)
  - and is not designed for continuous occupancy.
- A permit-required confined space is a confined space that may include any one or more of the following characteristics:
  - Contains or has the potential to contain a hazardous atmosphere.
  - Contains a material that has the potential for engulfing an entrant.
  - Has an internal configuration such that an entrant could be trapped or asphyxiated by inwardly converging walls or by a floor which slopes downward and tapers to a smaller cross-section.
  - Contains any other recognized serious safety or health hazard.



- Confined space entry is defined as the action by which any body part passes through an opening into a permit required confined space.
  - Entries that occur in openings that are not configured for bodily entry (thief hatch as an example); those entries will not be considered permit required confined space entries.
- Additional information on common types of confined space entries is available in the Reference Section.

6.4.2 Confined Space Entry Safety Equipment

To ensure safe entry conditions, the work site should provide, maintain, and properly use the following equipment if required:

- Gas testing equipment for (a) oxygen content, (b) flammable gases and vapor, and (c) potential toxic contaminants that might be present in the permit space.
- Any required PPE such as a self-contained breathing apparatus (SCBA).
- Barriers and shields as necessary to protect workers from external hazards.
- Adequate rescue and emergency equipment to conduct a rescue and offer immediate First Aid and CPR.
- Authorized entrants shall use a chest or full body harness, with a retrieval line attached at the center of the entrant's back near shoulder level, above the entrant's head, or at another point the employer can establish presents a profile small enough for the successful removal of the entrant.
    - An appropriate mechanical rescue device shall be available and ready for use to retrieve personnel from vertical type permit spaces which are more than 5 feet deep.
- Any other equipment which is necessary for safe entry into and rescue from permit spaces.

6.5 Lockout/Tagout (LOTO) Program [EHS STANDARD 6.05]

The unexpected activation or sudden release of stored energy or inadvertent contact with energized equipment may result in injury or equipment damage. The control of hazardous energy ensures that personnel are protected from hazardous energy sources before performing work.

6.5.1 Covered LOTO Activities

Activities or operations covered under the Control of Hazardous Energy standard (referred to as Lockout/Tagout or LOTO) include:

- maintenance
- inspection
- construction
- repair.
- Other work activities which potentially expose employees to hazards from the unexpected start-up of equipment or a sudden release of hazardous energy.
- LOTO is required for all covered activities unless the employee has exclusive control over all energy sources.
    - Exclusive Control is defined as the authorized employee has the authority to and is continuously in a position to prevent (exclude) other individuals from re-energizing the machine or equipment during the work activity.

6.5.2 Energy Sources

A thorough hazard analysis should be performed to ensure all energy sources are identified and isolated.

- This may involve opening electrical switches, closing, or disconnecting valves and lines, unplugging cords, hoses, etc.
- The authorized employee ensures all previously identified potential energy sources are isolated and ensures the equipment or process is completely isolated from the energy sources.
- The authorized employee will complete a review to verify that all potential energy sources have been identified.
- Forms of Hazardous Energy include, but are not limited to:
    - electrical
    - mechanical
    - hydraulic
    - pneumatic
    - chemical
    - thermal
    - kinetic
    - potential energy – stored in vessels, gas tanks, hydraulic or pneumatic systems, and springs (potential energy can be released as hazardous kinetic energy).

6.5.3 Contractors and Contractor's Equipment

Coterra employees are not authorized to perform work on Contractor's equipment.

- Responsibility for LOTO of Contractor's equipment will be the responsibility of the Contractor.
- If the Contractor's equipment is interconnected with Coterra's facilities and Coterra facilities are included in the LOTO plan; the plan will be treated as a group LOTO and both Coterra and Contractor personnel will participate in the LOTO.
    - An exemption from the requirement for Coterra participation in the LOTO associated with Contractor Equipment above can be granted by the Manager responsible for the Coterra facility if the Contractor:
        - Demonstrates a sound knowledge of the facility operation and knowledge in the facility to adequately isolate the energy sources from the Contractors Equipment and
        - The Contractor has a written operating or maintenance procedure that specifies the energy isolation requirements of the Coterra facility and the Contractor's equipment to be worked on.

The following table summarizes the LOTO process:

1. Prepare for Shutdown	Understand equipment hazards before equipment or machine is turned off. The authorized employee must know the type and magnitude of the energy, the hazards, and the means to control it.
2. Shutdown Equipment	Use normal shutdown procedures. Turn all switches to OFF/Neutral.
3. Isolate all Energy Sources	Use energy isolation devices to prevent transmission or release of energy. Forms of hazardous energy include electrical, chemical, mechanical, thermal, pneumatic, kinetic, and hydraulic. Potential energy is stored in vessels, gas tanks, hydraulic or pneumatic systems and springs (potential energy can be released as hazardous kinetic energy).
4. Release or Block All Stored Energy	1. Block/disconnect lines 2. Block/release springs 3. Block/lower parts 4. Relieve system pressure 5. Drain fluids 6. Vent gases 7. Allow system to cool (or use PPE)
5. Apply Locks and Tags	Apply Locks and Tags to: 1. Valves 2. Breakers/Electrical Disconnects 3. Mechanical Blocks 4. Any energy isolation device
6. Verify Equipment Isolation (Try)	1. Always check that other workers are clear of hazards 2. Always check that all locking devices are secure 3. Attempt Normal Startup 4. Return control to Off/Neutral
7. Perform the Task	Perform service or maintenance
8. Release from Lockout	1. Ensure equipment/machinery is properly assembled and all tools are removed 2. Ensure that all employees are outside the danger zones and are notified that devices are being removed 3. Remove LOTO devices – Note: LOTO devices must be removed by the Authorized Employee who applied them.

6.5.4 LOTO Removal

The authorized/affected employee who applied the LOTO device is the only individual approved to remove the LOTO device.

- If there are extenuating circumstances and the authorized/affected employee is no longer on site or is unavailable for lock removal, the lock may be removed only after approval of the Department Manager.

6.6 Safe Motor Vehicle Operation [EHS 6.06]

Driving is one of the most hazardous activities that individuals are exposed to on a daily basis. The requirements in this section apply to Coterra employees, but contractors are encouraged to adopt similar practices. A Coterra vehicle is intended to mean a Coterra owned, leased, or rented vehicle used for company business.

6.6.1 General Driving Requirements

All Coterra employees who operate a motor vehicle while conducting Coterra business shall:

- Possess a valid driver's license of the appropriate class from the state in which they reside.
- Report all incidents or unsafe conditions to immediate supervisor.
- Maintain control and security of vehicle.
- Ensure vehicle is in proper working condition.
- Comply with the Vehicle Assignment Agreement.
- Maintain an acceptable driving record.
    - Prior to your hire date and thereafter, your motor vehicle record may be reviewed by the Coterra.
- It is the employee's duty to report any traffic violations, as well as more serious infractions of the law immediately to their supervisor, who will report the violation to the EHS Department. Violations and infractions must be reported whether they occur during work or personal time; regardless if the violation occurred in a Coterra vehicle or a personal vehicle.
- Any new or change in driver's license must be reported to their supervisor.
- A restricted license will be reviewed to determine if the driver may continue to drive for Coterra.

6.6.2 Safe Driving Requirements

Coterra employees are expected to operate vehicles in a safe manner, use them only for the purpose(s) authorized, and wear and ensure that passengers wear available seat belts any time the vehicle is moving. These requirements apply when operating a Coterra vehicle (we always encourage these behaviors).

- Observe all traffic laws. You will be personally responsible for all parking or moving violations while operating a Coterra vehicle.

- Drivers are expected to be alert and drive proactively. To support driving safety, Coterra will provide regular safety driving courses.
  - Driving safety courses will be required if an employee frequently operates a Coterra vehicle as part of their regular job responsibilities. Courses will be provided for employees at least every two years.
  - New employees are expected to take a driving safety course within 3 months of starting employment with Coterra.
- Drivers are expected to arrange for proper maintenance in accordance with the manufacturer's recommendations and keep the vehicle in safe operating condition.
- Check for possible obstructions or unfavorable conditions before initiating vehicle movement.
  - Utilize Get Out and Look (GOAL) by walking around the vehicle.
  - Coterra encourages the use of magnetic flags, cones, or other indicators to remind drivers of Coterra's Get Out and Look (GOAL) program.
- Be self-aware of any signs of fatigue or other conditions that may affect your ability to drive or work safely and modify work plans accordingly.
- Avoid potential distractions, including but not limited to:
  - Mobile phones, eating or drinking, interacting with passengers, in-vehicle information systems, etc.
  - Employees are encouraged to engage the "Focus App" while operating a vehicle to prevent common distractions.
- Employees are encouraged to avoid vehicle backing (reverse operation). When backing is required, it is also encouraged to execute the backing upon arrival rather than when preparing to depart.
  - When available, use a spotter when backing up.
- Complete monthly Driver Vehicle Inspections Reports (KPA Form) and daily vehicle checks prior to use.
  - Supervisors are required to review the vehicle inspection forms with the employee monthly.
- Park the vehicle in such a manner or place that it will not be a hazard to other traffic and that it is free of nearby obstacles.
- Employees should park in designated parking areas only. These areas should be at least 20' away from a Coterra asset or barrier.
- If an operation requires parking within 20' of a Coterra asset or barrier, Coterra requires that:
  - First move forward is utilized, if feasible.
  - Get no closer than the job requires.
  - Approach equipment from the driver's side, when possible.

- Tools or equipment shall not be left loose in the vehicles.
- Chemicals, pesticides, and flammable or combustible liquids shall be carried in safe containers outside the cab compartment.
- Employees should be considerate of, and courteous to, the traveling public and/or pedestrians and should yield the right-of-way if necessary to avoid accidents.
    - Avoid following too closely.
- Always drive with sufficient space around your vehicle to see conflicts arising, to react, and to stop.

6.6.3 Prohibited Actions While Driving

- Using electronic devices such as smartphones, radios, cameras, laptops, or similar equipment is prohibited while driving a Coterra vehicle.
    - Use of these devices is only allowed when the vehicle is parked in a safe location.
    - Exception, the use of a phone while driving is allowed when a hands-free connection is utilized.
    - Be mindful that telephone conversations may cause distraction and it is recommended to keep necessary conversation to a minimum.
- Having firearms of any kind in a Coterra vehicle.
- Possessing, transporting, or using controlled substances, illegal drugs, intoxicating beverages, fireworks, or explosives in any Coterra vehicle.
- Allowing non-employees of Coterra or any employee who is not permitted to drive a Coterra vehicle.
- Using a Coterra vehicle for personal travel unless authorized by supervisor.
- Operating a vehicle in a negligent or reckless manner.
- No passengers are allowed in pickup beds while the vehicle is moving.
- No pets are allowed in Coterra vehicles.

6.7 Electrical Safety [EHS 6.07]

Employees and contractors must be trained in basic electrical safety. Work on electrical equipment and systems, which includes troubleshooting and repair, must be performed only by qualified persons. Work on exposed electrical equipment shall only be performed by employees that are qualified by experience, training, and/or license for the level of electrical equipment (AC/DC, 12V, 480V., etc.) being worked on and are authorized to perform the work.

6.7.1 General Electrical Safe Work Practices

To help prevent injuries and incidents while working on, near, or operating electrical equipment, employees should consider the following safe work practices:

- Insulation – should be inspected regularly and any damaged insulation should be repaired by a qualified person.
- Guarding – Exposed energized parts must be de-energized until proper guarding has been properly engineered and installed.
- Grounding – All permanent and hardwired temporary equipment must be properly grounded.
- De-energized Parts – Exposed electrical parts should be locked out and tagged out and given adequate time to de-energize.
    - A qualified employee must use test equipment to test the exposed circuit elements and electrical parts of equipment and verify complete de-energization.
- Energized Parts – If the exposed live parts are not de-energized, work practices must be used to protect the exposed employees. These include:
    - Energized Electrical Work Permit
    - Only qualified persons wearing required personal protective equipment may perform the work.
    - In the case of overhead lines, guarding, isolating, or insulating materials must be used to prevent employees from direct contact with their body or indirect contact with tools, equipment, or any other conductive materials.
    - Illumination must be provided to enable safe work.
    - Protective shields, barriers, or insulating materials must be used to avoid inadvertent contact with energized parts in confined spaces such as manholes or vaults. Doors, hinged panels, etc., must also be secured to prevent their swinging into an employee.
    - Conducting materials in contact with the employee must be handled appropriately to prevent them from contacting energized parts.
- Overhead Power Lines –
    - All elevated equipment and people working near power lines must follow safe clearance working distances.
    - Material handling and equipment relocation should use goal posts and spotters to ensure that contact with energized powerlines is avoided.
    - Employees and the longest conductive object that can be contacted cannot come closer to any unguarded, energized overhead line than the following distances: for voltages to ground up to 50 kV > 10 feet plus four inches for every 10 kV over 50 kV.

- Opening and Closing Switches – opening or closing circuit breakers and switches will only be performed with the door or protective cover in place. The employee shall stand to the side and away from the equipment and use a non-conductive object to throw the switch.
- Extension Cords - extension cords are designed for and will be used for temporary use only. All other electrical connections will be made permanent by proper construction methods.

6.7.2 Personal Protective Equipment

- Specific Personal Protective Equipment should be identified on the electrical label and appropriate for the arc flash potential of the equipment.
- Properly Arc-rated clothing (ATPV) is required at all times while working on energized electrical components.
- Class E hard hats are required if there is the potential for electrical components to contact the head.
- Inspection of all electrically required PPE must have recertification documentation.
- Certified electrical rubber gloves or sleeves must be worn while working with or on energized electrical components of 50 volts or greater.

6.8 Excavating and Trenching Operations [EHS 6.08]

An excavation is defined as any man-made cut, cavity, trench, or depression in any earth surface formed by earth removal. A trench is an excavation that is deeper than it is wide. All excavating and trenching activities must comply with the EHS Standard 6.08 to ensure safety of personnel involved in the excavation.

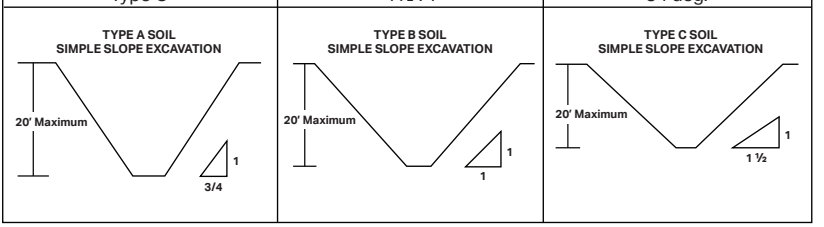
General excavation and trench safety precautions:

- Barricades will be applied to all excavations that are:
  - left unattended,
  - near roadways,
  - bell-hole and pot-hole excavations.
  - Barricades should consist of orange safety fence and be set back at least 2 feet from the excavation.
- Pipeline trench excavations should be configured to minimize impact to livestock.
- Excavations greater than 20 feet deep must be designed by a professional engineer.
- Temporary excavations should be backfilled as soon as possible.

For excavations greater than 4 feet in depth, prior to personnel entering the excavation or trench:

- Coterra requires all excavations to be inspected by a Competent Person (defined in EHS 6.08). The inspection should be conducted at least once per shift and whenever an event has occurred that could change the stability of the excavation (rain, vibration, cracks/slides, etc.). The inspection should be documented on Daily Excavation Safety Inspection checklist. Contractors shall complete their own daily inspections.
- The Competent Person will ensure that proper protective systems are in place.
  - Most commonly, the protective system is slopping of the excavation; however other protective systems are allowed.
- All soil is considered to be type "C" soil unless the Competent Person performs and documents soil analysis that determines the soil to be a type other than type "C".
  - Excavations must be sloped in accordance with the following diagram:

Soil Type	Height/Depth Ratio	Slope Angle
Stable Rock	Vertical	90 deg.
Type A	¾ : 1	53 deg.
Type B	1 : 1	45 deg.
Type C	1½ : 1	34 deg.



- Egress points consisting of stairs, ladders or ramps will be provided to ensure ease of egress from the excavation. No point in the excavation or trench will be more than 25 feet from an egress point. Spoil piles, other material and equipment must be at least 2 feet from the edge of the excavation.

6.9 Fall Protection And Walking / Working Surfaces [EHS 6.09]

6.9.1 Walking – Working Surface

- Keep all work areas, stairways, doorways, and walkways free of trash, tools, debris, and other objects.
- Releases onto the floor should be cleaned up when they occur.
- Take extra precautions and time when areas are wet, icy, or oily.
  - Coterra will provide additional anti-slip PPE for increased traction on icy surfaces.
- Slip-resistant footwear with adequate tread should be worn.

- Materials and equipment should be placed to reduce tripping hazards.
- When ascending and descending stairs, maintain 3 points of contact.
- A walk-through gate or steps should be installed to allow employees to cross over berms, fences, etc.

6.9.2 Fall Protection

Fall protection is required when anyone is exposed to a potential fall of 4 feet or greater. Circumstances where fall protection is required include, but are not limited to:

- Working at heights of 4 feet or greater
- Manlift baskets
- Elevated piping or pipe racks (A horizontal lifeline system is recommended)
- Tank roof without OSHA guardrail system
- Open access ways for hoist area
- Building roofs without a 42-inch continuous parapet wall
- Unprotected roofs of cooling towers or cooling fan structures
- Basket on bucket truck

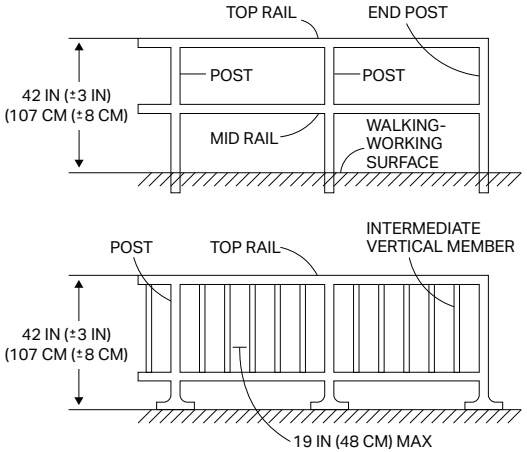
6.9.3 Fall Arrest Systems

When fall hazards cannot be eliminated by other means, fall arrest systems will be used by all personnel exposed to a fall hazard. Proper training on the fall arrest system is required prior to use. General requirements for fall arrest systems are:

- Be designed to ensure:
  - a free fall distance of 6 feet or less
  - a deceleration distance of 3.5 feet or less
  - allow for an unobstructed fall
  - a limited swing fall hazard.
- Be an approved fall arrest system and must be worn as designated and as intended by the manufacturer.
- Visually inspect the personal fall arrest system components prior to each use.
  - Defective components must be immediately removed from service and tagged out of service.
- Be properly secured to an anchor point capable of withstanding a static load of 5,000 pounds per person attached.
- The full body harness is the most common fall protection system and consists of the harness, lanyard, energy shock absorber, and self-locking snap hook.
- A retractable lifeline can be utilized in a fall arrest system to automatically stop a person's descent in a short distance after the onset of a fall and are typically used for work performed at greater heights.

6.9.4 Guardrail System

A guardrail system is a barrier erected along an unprotected or exposed side, edge, or other area of a walking-working surface to prevent employees from falling to a lower level. Guardrails should be erected in compliance with the following diagram.



6.10 Fatigue Management [EHS 6.10]

Fatigue management is designed to prevent injuries and illnesses by setting requirements for employees exposed to potential fatigue causing situations and to ensure that employees are fit for service. The fatigue management program applies to individuals working rotating shifts and commuting daily from a residence to Coterra operated locations. Fatigue risk concerns will be communicated to all employees and contractors and fatigue awareness training will be required.

6.10.1 Signs of Fatigue and Fatigue Assessment

It is important that all personnel be aware of the indications of fatigue and to use Stop Work Authority when there is a concern that they or a co-worker are experiencing symptoms of fatigue. Common indications of fatigue include:

- Physical indications: excessive yawning, lack of energy, heavy eyelids, eye rubbing, head drooping, napping, reduced eye hand coordination, drowsiness, headaches, dizziness, blurred vision, and impaired visual perception.
- Mental indications: difficulty concentrating, lapses in attention, difficulty remembering, failure to communicate important information, failure to anticipate, and making accidental errors or omissions.
- Emotional indications: quiet or withdrawn, lacking motivation, irritability, emotional outbursts, repeatedly late to work and frequent unexplained absences.

Work environment can contribute to an increase in workplace fatigue. When adverse work environments exist, ensure that mitigative actions such as increased hydration, more frequent breaks, and periodic stretching are implemented. Examples of adverse work environments include:

- PPE requirements that are heavy, trap body heat or require respiratory protection.
- Repetitive, monotonous activities
- Environments that induce eye strain (dim lighting, glare, bright lights, etc.)
- Extreme weather conditions (heat, cold, humidity, etc.)

If signs of fatigue are present, the individual's supervisor should be made aware – just like any other workplace hazard. The supervisor is responsible for assessing the fatigue hazard and mitigation.

A fatigue assessment should be included in incident investigations.

6.10.2 Employee Hours of Service

Coterra has adopted the following Hours of Service (HOS) for employees. HOS should not exceed the recommendation presented in the table below. If a deviation from the HOS is required, the manager must determine an appropriate fatigue risk mitigation plan and complete a Fatigue Risk Management Deviation Form. It is encouraged that contractors implement the HOS requirements when feasible.

Coterra Hours of Service Requirements			
Work and Operations Situation	**12-Hour Shift**	**10-Hour Shift**	**8-Hour Shift**
Maximum Consecutive Shifts (Day or Night) In a Work set			
a) Normal Operations	7 shifts	9 shifts	12 shifts
b) Open Shift Coverage, Outages, and Unplanned Downtime	14 shifts	16 shifts	19 shifts
c) Minimum time off after a Work Set	48 Hours		
Extended Shifts			
a) Maximum shift duration	18 hours	16 hours	14 hours
b) Maximum number of consecutive extended shifts in a Work Set	1	2	2
c) Time off after an extended shift up to 16 hours	8 hours		
d) Time off after an extended shift 16 hours or longer	10 hours		

6.11 Fire Protection [EHS 6.11]

Employees and contractors should adopt safe practices to prevent injuries and minimize property damage due to fire emergencies. Employees and contractors should be trained in causes and types of fires and the correct use and selection of fire extinguishers.

Individuals who have received training on the use of portable fire extinguishers have authorization to extinguish incipient fires only. As a reminder, when using a fire extinguisher, the PASS method should be used:

General guidelines for fire extinguisher management:

- Portable hand type extinguishers will be placed along normal paths of travel so that they are immediately available in the event of a fire. Access to portable extinguishers should not be blocked.
- Fire extinguishers may be rated for one or more classes of fires. Extinguishers for trucks and automobiles shall be for Class A, B, and C fires, and shall be conveniently installed on the vehicle. Field trucks should be provided with a 20-pound multipurpose fire extinguisher, unless operations require something larger/different.
- Fire extinguishers must be inspected monthly.
- Fire extinguishers, if used, will be recharged, and returned to their original location. If recharging is required, temporarily install a spare extinguisher in place during the period the regular extinguisher is absent from its location.

Action	What to Do (PASS)
	Pull the pin. Hold the extinguisher with the nozzle pointing away from you and release the locking mechanism.
	Aim low. Point the extinguisher nozzle at the base of the fire.
	Squeeze the lever slowly and evenly while directing the chemical stream at the base of the flames.
	Sweep the nozzle from side-to-side across the base of the flames.

6.12 Hand and Power Tools [EHS 6.12]

Hand and power tools use often triggers the need for a Hot Work Permit. Please reference section 6.15 for more information.

6.12.1 General Requirements

- Select the right tool for the job. Do not use tools for purposes other than their designed use.
- Wear appropriate PPE (correct gloves and correct eye protection should be evaluated).
- Inspect all tools prior to and during use.
  - Broken or defective tools must be removed from service, including tools with damaged handles.
  - Tools with missing guards must be taken out of service.
- Safe tool handling includes:
  - Hand tools should always be held firmly and be kept under control by the user.
  - Transport and store tools in a toolbox, trailer or bag as provided.
  - Carry and store tools with sharp points or edges down and away from the body whenever possible. Use protective covers if available.
  - Do not throw tools or drop tools from overhead work areas.
  - Keep your tools out of aisles and walkways.
  - Do not leave tools in places where they can fall.
    - Hand tools must be tied off when appropriate.
  - Keep all hand tools free from oil or dirt to prevent the tool from becoming slippery or unmanageable.
- Safety guards, switches, and other safety devices should never be removed while a tool is in use.
- When working in a potentially dangerous atmosphere, use only tools that do not produce a spark.

6.12.2 Specific Tool Requirements

- Cheater bars
  - should be specifically designed for that use by the manufacturer and no longer than twice the length of the tool it is being applied upon.
  - should be used as a last resort.
  - should not be used on chain binders (boomers).

- Hammers, Chisels and Punches
  - Mushroomed heads of chisels and punches must be maintained to a minimum and should be maintained with a hand file.
  - Never hammer with any tool except a hammer.
  - Never use a hammer that is mushroomed, chipped, cracked, dented, or shows excessive wear.
  - Only strike other tools that are specifically designed for that purpose.
- Wrenches
  - Always grip a wrench such that hands will not strike adjacent objects when the bolt loosens.
  - Never use a hand socket with a power or impact wrench.
- Screwdrivers
  - Ensure proper fit.
  - Do not hammer on screwdrivers or use them for purposes other than their intended purpose.
- Pliers should not be used in place of a wrench to loosen nuts or bolts.
- Jacks
  - When using jacks, on wheeled pieces of equipment, ensure jack is on a flat solid surface and wheels are chocked.
  - When using jacks, block up the object being raised with jack stands as it is raised.
  - Do not exceed the capacity or travel limit indicated on the jack.
  - Remove jack handles when the jack is not being raised or lowered.

6.12.3 Power Tool Safety

Portable power tools are divided into five primary groups according to the power source: electric, pneumatic, gasoline, hydraulic and explosive (powder activated). A portable power tool presents similar hazards as a stationary machine of the same kind, but because of the mobility of portable power tools, they can more easily encounter the user's body.

- General Requirements
  - Make sure you are trained in the operation of any power tool before using it.
  - Do not remove or circumvent power tool safety guards.
  - Avoid laying air hoses and electric cords where people walk.
  - A tool should not be left in an overhead place where there is a chance that the cord or hose, if pulled, will cause the tool to fall.

    - Cords should be kept away from oil, hot surfaces, and chemicals.
    - Where there is a danger of explosion or fire, pneumatic (air-operated) power tools should be used.
    - Before repairing, servicing, or changing components on any power tool disconnect the power source. If a gasoline engine drives the tool, precautions should be taken to prevent the accidental starting of the engine, such as disconnecting the spark plug.
    - All tools should be professionally manufactured; field made tools are not allowed.
- Electric Power Tools
    - Electric power tools and equipment showing excessive wear or having deteriorated or inadequate insulation on the power cord, shall be tagged and removed from service until replaced or repaired.
    - Electrically operated tools must not be used on tanks, lines, or vessels, in compressor stations or in other areas where flammable gases may be present until these areas have been checked with a gas detector and determined to be gas free.
    - If you ever experience an electrical sensation, discontinue tool use, and tag it until the cause can be identified and corrected.
- Pneumatic Tools
    - Wire hose couplings together to prevent accidental disconnecting on pneumatic tools.
    - Check your source of supply before connecting air-powered tools. Make sure the air is at the desired pressure.
- Gasoline tools should be allowed to thoroughly cool off prior to fueling.
- Hydraulic tools should always use the designated hydraulic fluid and have hoses and connections checked to confirm they are secure and free from damage.
- Explosive tools should always be used in accordance with the manufacturer's recommendation.

Portable and stationary grinders are frequently used and pose specific hazards. Whenever performing grinding operations, ensure:

- the use of both approved safety glasses with side shields and a full-face shield shall be the minimum PPE requirement for all grinding operations.
- to be aware of personnel around you and where your sparks will travel to while grinding.
- loose clothing is not worn during grinding operations.

- all guards are securely in place.
- all wheels and discs are inspected and are:
  - not damaged
  - the proper size and rating for the grinder
  - manufactured for the intended use.
- Do not overreach; always keep proper footing and balance.

6.13 Heavy Equipment Operations [EHS 6.13]

Heavy equipment is used extensively in Coterra operations. It is important that the operation of heavy equipment is monitored and that safe work practices are followed.

6.13.1 Operator Qualification

Only employees who have demonstrated the ability to safely operate the equipment are permitted to operate heavy equipment. The demonstration of safe operation can be accomplished by:

- Having a valid Operator Qualification certification (preferred).
- Demonstrating the ability to safely operate the equipment to the satisfaction of on-site supervision before beginning any work.

6.13.2 Heavy Equipment General Requirements

- Heavy equipment shall have a rollover protection structure and be equipped with seat belts.
- Parking brakes shall be set when the equipment is parked. Equipment parked on inclines shall have the parking brake set and the wheels chocked.
- Tracked equipment when parked on inclines, the blade or bucket shall be placed on the ground.
- Equipment left unattended at night and adjacent to a roadway, shall have appropriate lights or reflectors, or barricades equipped with appropriate lights or reflectors.
- It is recommended that all heavy equipment have a reverse alarm signal. It is required that heavy equipment with an obstructed view to the rear shall have a reverse alarm signal.
- Equipment should be maintained in good working condition and be maintained in accordance with manufacturer's recommendation.
- Operator must have a clear view of the work and direction of travel, or a signalman must be present and visible to the operator.
- Only the operator shall be on the equipment while it is in operation or traveling.
- The operator shall be seated and using the seat belt.

- No person shall mount or dismount the equipment while it is in motion.
- Regardless of the size or weight of the load, outriggers or stabilizers must be used and locked in position, when lifting.

6.13.3 Specific Operations

- Lifting and Loading Operations
  - Ensure the load and rigging are within the manufacturer's load capacity of the equipment.
  - Tag lines must be used to minimize load swing or rotation that would present a hazard. Personnel should never have hands directly on a load.
  - Loads for which taglines are not practical (high lifts, lifts over equipment, etc.) must be approved by on-site supervision.
  - Riding a load is prohibited.
  - Load must not obstruct the view in the direction of travel.
- Suspended Loads
  - The operator must never leave the controls while a load is suspended.
  - Never carry a load over the heads of personnel.
  - Never allow anyone to work under a suspended load unless the load is mechanically supported, and a supervisor approves the operation.
  - Ensure the surface from which the equipment operates is stable.
- Spotter Requirements
  - Use of a spotter is required whenever the operator of the equipment is uncertain of the surroundings or other work activities in the area. Special consideration should be given to the use of a spotter when:
    - Work is being conducted in a congested area.
    - There are other simultaneous operations going on at the work location.
    - Loads are being lifted and transported.
    - The planned path of the equipment poses a threat to personnel, equipment, or vehicles.
    - When in doubt, choose to use a spotter.
  - A spotter is not required if the operation is being conducted in an area that has been properly marked and clearly delineated to prevent personnel from entering.
- Load Rigging
  - Keep all parts of the body, especially hands, away from cable sheaves and other working parts.
  - Keep hands away from pinch points as slack is taken up.
  - Ensure safe body placement while preparing rigging and hoisting operations.

- Transportation of Equipment
  - Ensure the outriggers are locked in the traveling position before moving mobile equipment.
  - The equipment must be securely shackled to the transportation vehicle to prevent movement.
  - In addition to setting swing brakes and locks, the upper works must be cross-chained to prevent rotation.
  - Secure all loose parts.
  - Check clearances under bridges and overhead wires.
  - Heavy equipment should be inspected for damage and an operations check performed immediately after being transported and before use.

6.14 Hoisting and Rigging Safety [EHS 6.14]

Material is often delivered by flatbed tractor trailer or hot shot trailers. Loads associated with this type of delivery pose a hazard due to the potential for loads to shift during transport. Special care should be taken when the straps or chains used to secure the load are loosened and removed.

When using mechanical equipment to move material, employees must stay clear of loads including when the load is picked up, moved, and set down. Employees must not stand or pass under loads at any time. When moving material, be aware of pinch points and always have a planned escape route if the material shifts in your direction. Use of taglines are required if a load has the potential to shift or rotate.

Standard hand signals shall be used for consistent communication when handling material. A full-size version of the table is available in the resources section.

Hand Signal	Description	Hand Signal	Description	Hand Signal	Description
	**Extend Boom -** Both fists in front of body with thumbs pointing outward (used for telescoping booms).		**Travel the Crane or Bridge -** Arm extended forward hand open and slightly raised making a pushing motion in the direction of travel.		**Retract Boom -** Both fists in front of body with thumbs pointing inward (used for telescoping booms).
	**Routine Stop -** Arm extended, palm down, move arm back and forth horizontally.		**Emergency Stop -** Arms extended, palm down, move hand rapidly right and left.		**Travel the Trolley -** Palm up, fingers closed with thumb pointing in direction of motion, jerking hand horizontally.
	**Raise Boom and Lower the Load-** With arm extended, thumb pointing up, flex fingers as long as load movement is desired.		**Lower Boom and Raise the Load -** With arm extended, thumb pointing down, flex fingers as long as load movement is desired.		**Move Slowly -** Use one hand to give motion signal and keep other hand motionless, placed in front of hand giving motion signal. Example is Hoist Slowly.
	**Raise Boom -** Arm extended, fingers closed, thumb pointing upward.		**Lower Boom -** Arm extended, fingers closed, thumb pointing downward.		**Rotate -** Arm extended, point with finger in direction of swing boom.
	**Hoist -** With forearm vertical and forefinger pointing up move hand in small horizontal circles.		**Lower -** With forearm extended and forefinger pointing downward, move hand in small horizontal circles.		**Dog Everything -** Clasp hands in front of body.
	**Use Main Hoist-** Tap fist on head, then use regular signals to hoist or lower.		**Use Auxiliary Hoist -** Tap elbow with one hand, then use regular signals to hoist or lower.		**Signalman Transfer -** Two sides of helmet with both fists then point to new signalman; repeat until confirmed by operator.

6.14.1 Rigging/Slings

Employees shall ensure that safe lifting and rigging practices are performed during material-handling activities including, but not limited to crane, forklift, and pole truck operations. General safety considerations include:

- Personnel performing these operations must be trained and competent.
- Prior to use, slings, chains, fittings, fasteners, and shackles must be visually inspected for evidence of overloading, excessive wear, kinks, twists, or damage.
- Slings must be equipped with tags that specify the load rating of the sling. If the tag is missing, the sling must be immediately taken out of service and destroyed.
- Slings or shackles found to be defective must be marked out of service and removed from service/destroyed. Sharp bends or knots must not be permitted in the slings. Slings should be protected from sharp edges.
- Taglines must be used as warranted.
- No personnel shall work under a suspended load.
- Exclusion zones should be used to prevent personnel from entering the lift area.
- Equipment operator will verify the load is properly rigged.

6.14.2 Suspended loads

The following are the requirements for suspended loads:

- An exclusion zone and load path must be pre-established and communicated with personnel to minimize the possibility of injury should the material handling equipment fail.
- Loads moved with material handling equipment that passes over personnel are never allowed. Ensure a safe swing path to ensure no personnel are under the proposed swing path prior to making lift.
- A suspended load must never be left unattended.
- The load must be lowered to the floor, the working surface, or onto cribbing, and the material handling equipment secured before leaving the load unattended.
- Suspended loads shall not be worked on.

6.14.3 Inspection and Testing

Lifting equipment should be inspected prior to each use.

- Any defective equipment must be immediately removed from service and discarded.
- The lifting capacity for devices should be clearly identifiable.
- All equipment inspection and testing must meet or exceed the manufacturer's recommendation.

6.15 Hot Work [EHS 6.15]

Safety precautions are required in any operation that can produce a spark or flame or other energy source having sufficient energy to cause ignition (Hot Work), where the potential for flammable vapors, gases or dusts exists or when in an Electrically Classified Location (Class 1, Division 1 and 2). Employees performing the Hot Work at a location must be trained on the EHS Standard 6.15 Hot Work. The table below identifies various Hot Work activities and the Hot Work requirements for each. EHS Manager and Operational Manager must agree prior to identifying an area as a "designated safe hot work area".

A full-size version of the table is available in the Reference Section.

Coterra Hot Work Requirement Matrix

Work Area	Type of Hot Work	Open Flame	Non-Open Flame	Mobile Devices	Intrinsically Safe[4] Devices
	Examples:	Welding, cutting, grinding, torching, abrasive blasting, or device that produces visible sparks.	Cordless drills, impact wrenches, hydraulic tools, portable internal combustion engines, vehicles.	Camera, cell phone, laptop, tablet, smart watch.	Device must be labeled, and manufacturer approved for Class 1 Div. 1 use.
	Class 1 Div. 1 or 2 Classified Area[1].	• Hot Work Permit • Continuous Gas Testing • Fire Watch	• Hot Work Permit • Initial Gas Testing • Continuous Gas Testing[5]	• Initial Gas Testing when in exclusion zones[3]	• None
	Outside of: Div. 1 or 2 but not in a designated safe hot work area.	• Hot Work Permit • Initial Gas Testing • Continuous Gas Testing[5] • Fire Watch[2]	• None	• None	• None
	Designated safe hot work area.	• None	• None	• None	• None

[1] Any work within 10 feet of a Class 1 Div. 1 and 2 area. Examples may be, but not limited to, flanged piping, relief valves, rupture disks, vents, etc.
[2] Unless combustibles are drenched, covered, or removed greater than 35 feet from open flame hot work.
[3] Exclusion Zone:
- Within 10 feet of an oil storage truck while it is being loaded, walkways at the rooftops of hydrocarbon storage tanks or on top of tank roofs, in wellhead cellars or below grade trenches in hydrocarbon producing areas.
- 10-foot radius around well center from substructure to rig floor, within 10 feet of mud tanks, trip/return tanks, and shakers.
- Inside storage tanks or other vessels until cleaned and hydrocarbon free.
- In enclosed buildings with hydrocarbon containing production equipment inside.
- In any other location with a known hazardous atmosphere present (e.g., pulling a casing head off a compressor, pulling a flow line, etc.).

[4] A device which is termed "intrinsically safe" has been designed to be incapable of producing heat or spark sufficient to ignite an explosive atmosphere, even if the device has experienced deterioration or has been damaged. Intrinsically safe covers must be labeled as such and are acceptable.
[5] If Permit Approver deems area has potential hazards that may require continuous gas testing.

6.16 Housekeeping [EHS 6.16]

Maintaining a clean and organized working space for employees and visitors is important to reduce the likelihood of injuries. Benefits of good housekeeping are:

- Reduces fire hazards due to control of combustible materials and ensures unrestricted access to fire protection equipment.
- Prevents incidents, such as slips, trips, falls, collisions with objects, and inadvertent exposure to chemicals.
- Improves traffic flow for people and equipment, especially in tight spaces, hallways, offices, or areas that require material-handling equipment such as powered industrial trucks, e.g., forklifts, man lift, etc.

6.17 Hydrogen Sulfide (H_2S) [EHS 6.17]

Hydrogen Sulfide (H_2S) is a naturally occurring, highly toxic gas which can be present in oil and gas facilities. Sulfur Dioxide (SO_2) is an associated gas that is formed when H_2S is combusted. Coterra EHS Department, along with the field supervisors, will be responsible for implementation and enforcement of the H_2S safety program.

6.17.1 Overview of H2S Precautions

- Each field or plant location where employee exposures to H_2S may exceed 10 parts per million ("ppm") by volume is considered to be "sour" and shall have an H_2S safety program to govern Coterra field activities. All SWD facilities are considered "sour" facilities.
- No person shall enter an area where high concentrations of H_2S are known or suspected to be greater than 10 ppm by volume without wearing proper respiratory protective equipment.
- Approved and maintained personal H_2S monitors are to be worn 6-9" below the nose, in the breathing zone at all times.
- Coterra employees and contractors shall be H_2S trained.
- All personnel who work in or may be required to work in an H_2S area shall complete a training course in H_2S safety annually and be clean shaven.

6.17.2 Properties of H_2S and SO_2

Property	H_2S	SO_2
Color	Colorless	Colorless
Odor	Rotten eggs in lower concentrations; odorless in higher concentrations	Strong suffocating pungent
Vapor Density	1.189 (Air = 1.0) H2S is heavier than air	2.264 (Air = 1.0) SO_2 is heavier than air
Flammability	Forms explosive mixtures	None
Explosive Limits	4.3 to 46 percent by volume in air	None
Ignition Temp.	500 °F. (Cigarette burns at 1,400 °F)	None
Liquid Soluble	Yes (4 volumes gas to 1 volume H2S at 32 °F)	Yes (in alcohol and water)

6.17.3 Toxicity Levels and Physical Effects of H_2S Exposure

Concentration		
Percent (%)	**PPM**	**Physical Effects**
0.0001	1	Minimal perceptible odor.
0.001	10	Eye irritation. Obvious, unpleasant odor. NIOSH REL.
0.002	20	OSHA Ceiling Limit Value.
0.01	100	IDLH - Sense of smell lost in 3 to 15 minutes. May irritate eyes and throat.
0.02	200	Immediate loss of smell. Burns eyes and throat.
0.05	500	Dizziness. Respiratory disturbances in 2 to 5 minutes.
0.07	700	Quick unconsciousness. Breathing will stop.
0.10	1000	Immediate unconsciousness. Death within minutes.

6.17.4 H_2S Safe Work Practices

- At all locations where the potential for H_2S exists:
  - Employees should be aware of the wind direction and approach the equipment from upwind or crosswind.
  - Precautions should be taken when approaching low areas such as ditches, ravines, inside firewalls, etc. as H_2S and SO_2 tend to collect in such places.
  - Precautions must be taken when working around the vents and thief hatches of tanks containing sour crude oil, condensate and/or produced water.
  - Remember that H_2S can be released from a liquid or porous material, e.g., produced water, crude oil, tank bottoms, and vessel cleanouts, when heated or agitated.
- In addition, at all known sour facilities the following apply:
  - A windsock or other wind direction indicator shall be prominently displayed and be readily visible.
  - Muster areas must be established and communicated to all onsite workers during the JSA meeting and kept fully accessible for all personnel; any personnel that arrive after the fact should be made aware of their locations.
  - Third-party safety personnel must be physically on location as a safeguard prior to starting work.
  - A headcount must be maintained, to aid in accounting for all personnel in the event of an emergency H_2S or otherwise.
  - No tank, line, valve, flange, etc. shall be opened to the atmosphere unless proper respiratory protection is worn.
  - While nipple up/down processes are underway on sour wellheads work line units must be used for the duration of the process from the time the wellbore becomes exposed until it is again secure with no exceptions even if utilizing gas control well intervention methods.
  - Breathing air equipment and trained back-up personnel (buddy system) must be used if employees are exposed to H_2S concentrations over 10 ppm. Respiratory protection shall be NIOSH certified self-contained breathing apparatus (SCBA) or airline respirator (working line unit – WLU) with escape SCBA for emergencies.

6.17.5 H_2S Detection Equipment

Fixed H_2S detection systems shall be considered for areas that may experience H_2S leaks where employees are present daily or where the locations are near residences or other public buildings. The system shall activate a distinctive alarm.

- Sensors should be set to annunciate at H_2S levels of 10 ppm for a low alarm and at 100 ppm for a high alarm on fixed systems.
- The system should have visual and audible alarms and be calibrated at least every 90 days.
- All H_2S alarms that are activated shall be treated as an actual gas release.
- H_2S alarms shall be distinctive from all other alarms and shall be consistent throughout the facility.

6.17.6 Regulatory Requirements

- Texas Railroad Commission requires any release that has a concentration of H_2S of 100ppm or greater be reported within 24 hrs.
- Additional regulatory requirements can be found in the EHS Standard.

6.17.7 H_2S Emergencies

- If an H_2S alarm goes off, all employees shall evacuate the area, account for personnel, secure the area, and isolate the source if it is safe to do so.
- Field or plant employees should not respond to an H_2S alarm/leak alone.
- The buddy system must always be used in response to H_2S emergency situations.
- In the event that personnel are believed to have been overcome by H_2S the following rescue and first aid treatment plan should be implemented:
    1. Sound the alarm and contact emergency responders.
    2. Only properly trained personnel should attempt to extract injured personnel.
        i. Appropriate respiratory protection must be worn.
        ii. The buddy system must be utilized.
        iii. The injured individual should be removed to an upwind location.
    3. Administer first aid as appropriate.
        i. Be aware that H_2S can be absorbed in clothing, skin and inhaled – ensure that H_2S monitors are in use.
        ii. CPR should be administered utilizing a bag valve mask or compressions only – do not perform mouth to mouth.
    4. Evacuate personnel to appropriate medical care facility.

6.18 Ladders and Stairways [EHS 6.18]

It is important to use safe work practices while using ladders and stairways to prevent injuries.

6.18.1 Ladders

General Ladder requirements include:

- Ladders should be visually inspected prior to each use.
- Ladders should have a documented inspection each year.
- If a ladder is found to be defective or damaged it should be tagged out of service and removed from the job location and discarded.
- Never use a metal ladder while working near electrical equipment or electrical lines.
- Always face the ladder and always maintain three points of contact.
- Only one employee is allowed on a ladder at a time.
- Both feet and hips should be always kept between the rails of the ladder.
- Verify the duty rating of the ladder prior to use. Be sure and include the weight of any tools or equipment in addition to the individual's weight in determining the required ladder duty. Wooden ladders are prohibited.
- When working from a ladder, tools should be carried in a tool belt or raised and lowered by use of a rope, basket, or sack.
- Never leave tools or materials unattended on top of ladders.
- Portable, fixed and extension ladders should be adequately slanted to maintain safe ladder position (1' from the wall for every 4' of ladder height).
- Ensure all ladder rungs are clean and dry and that footwear, hands and gloves are free from greasy or slippery material.
- Ensure that the feet of the ladder are non-skid and are on level ground.

Specific requirements by ladder type:

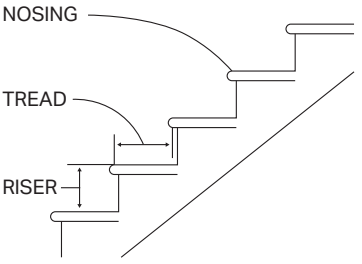
- Fixed ladders
  - Additional requirements, please reference the full Standard for these design requirements.
- Straight and Extension Ladders
  - Ladders should be secured at the top.
- Step and A-frame Ladders
  - Never use the top step of the ladder.
  - Should not be used as a straight ladder.
  - Ensure that the spreaders are open and locked.

6.18.2 Stairways

General stairway requirements include:

- Stairways should be provided when daily access is required to elevated equipment.
- Stair treads should be slip resistant and provide a safe work platform.
- Stairways should always be kept clear of tools and trash and free from any greasy or slippery material.
- Stairs should be constructed in conjunction with this diagram:

Angle to Horizontal	Rise (in inches)	Tread Run (in inches)
30 deg. 35′	6 1/2	11
32 deg. 08′	6 3/4	10 3/4
33 deg. 41′	7	10 1/2
35 deg. 16′	7 1/4	10 1/4
36 deg. 52′	7 1/2	10
38 deg. 29′	7 3/4	9 3/4
40 deg. 08′	8	9 1/2
41 deg. 44′	8 1/4	9 1/4
43 deg. 22′	8 1/2	9
45 deg. 00′	8 3/4	8 3/4
46 deg. 38′	9	8 1/2
48 deg. 16′	9 1/4	8 1/4
49 deg. 54′	9 1/2	8



MINIMUM TREAD WIDTH 22 IN (56 CM)
MINIMUM TREAD DEPTH 9.5 IN (24CM)
MAXIMUM RISER HEIGHT 9.5 IN (24CM)

- All stairways or landing that poses a fall hazard of 4′ or greater will have guardrail or stair rail system.
- Handrails must be installed on stairways with more than 3 steps.

6.19 Machine Guarding [EHS 6.19]

All hand tools, power tools, and similar equipment, whether furnished by Coterra, contractor, or employee shall be maintained with proper guarding.

Moving machine parts have the potential to cause severe workplace injuries. Machine guarding is intended to isolate potential hazards.

Guards shall be installed if the following hazards exist:

- Rotating parts
- Moving gears
- Reciprocating parts
- Chains or belts
- Shafts or couplings
- Blades or sharp edges

Machinery or equipment that lacks proper guarding against the above-mentioned hazards shall be reported to the employee's Supervisor or EHS Representative immediately. The Supervisor, or their designee, will mark the machinery, tool, or equipment out of service, using proper LOTO procedures, and schedule repairs.

6.20 Office Safety [EHS 6.20]

Coterra has requirements to prevent occupational injuries and illnesses associated with office hazards such as ergonomic and lifting hazards, slips and trips, fall hazards from stairs and ladders, electrical hazards, fire hazards, chemicals, indoor air contaminants, and bloodborne pathogens.

- Doorways, walkways, and stairs
  - Open doors into offices and hallways carefully; someone may be on the other side.
  - Approach doors that open toward you from the side, so that you will not be in the path of the door's swing.
  - Use handrails when ascending or descending stairs or using escalators.
  - Doors, hallways, and exits shall remain unobstructed.
- File cabinets
  - File cabinets should be arranged side by side and fastened together to prevent a cabinet from toppling forward when one of the higher drawers is opened.
  - Where there is a single file cabinet, care should be taken to prevent toppling when a higher drawer is opened. If practical, lower drawers should bear the heaviest load.
  - Never leave an open file draw unattended.
- Electrical equipment
  - Electrical outlets should not be overloaded, e.g., multiple surge protectors, multiple extension cords, etc.
  - Personal appliances are prohibited unless approved by management (this includes equipment such as heaters, coffee pots, refrigerators, and microwaves).
- Fire safety
  - Know the location of the closest fire extinguisher.
  - Be aware of the planned escape route in case of a fire; never use the elevator.

- Lifting safety precautions:
  - Know your strength. When in doubt make it a two-person job or use a dolly.
  - Make sure that there is a place identified to set the heavy object down, that all doors are opened, and that obstacles are out of the way.
  - Always make sure adequate footing can be maintained.
  - Use the arm and leg muscles, not the back muscles, to lift objects. Keep the back straight and the load close to the body.
  - Grasp objects firmly. Hold it so your fingers will not be pinched if the load shifts.
  - Have plenty of light and ensure there is visibility to look over the load being carried.
  - Set the object down using arm and leg muscles. If it is a box, rest in one corner first so your hands do not get caught underneath.
- Avoiding falls
  - Keep electrical cords wrapped up and out of the way or securely taped down.
  - Do not read or use personal electronic devices while walking.
  - Clean up spilled fluids as soon as possible.
- Step stools and ladders
  - Use a step ladder, not a chair or drawer, when reaching for something high.
  - Always face toward the front of the ladder when going up or coming down.
  - When using a ladder, make sure the spreader is open and locked.
  - Move the ladder rather than reaching out to one side.
  - Ensure the ladder feet are level on the ground.

6.21 Personal Protection Equipment (PPE) [EHS 6.21]

PPE is intended to shield or isolate personnel from chemical and physical hazards. For employees, PPE should be procured and approved by the EHS Department or your office administrator. All employees and contractors are required to wear appropriate PPE to protect against hazards that exist or have the potential to exist. All protective equipment shall fit properly, be maintained in a clean and reliable condition, and be stored in such a manner as to keep it clean and in good condition.

At a minimum, Coterra requires head protection, eye protection, protective footwear (steel or composite toes), and flame-resistant clothing (FRC) when on field locations/worksites. Hearing and respiratory protection are required in designated areas or during designated operations.

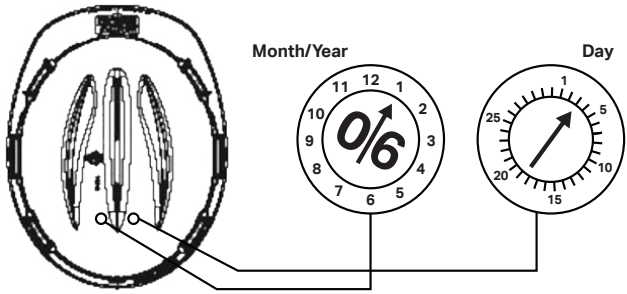
A hazard assessment should be undertaken prior to any operations to determine the correct PPE.

6.21.1 Head Protection

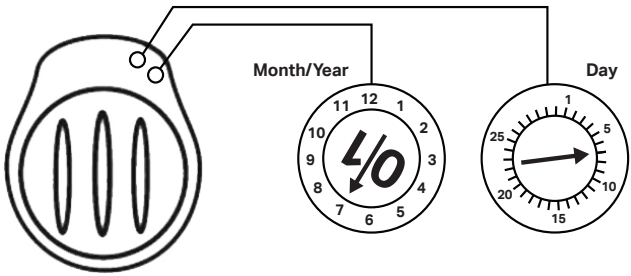
Protective helmets shall comply with the American National Standards Institute (ANSI) Standard Z89.1 Type 1 (impact protection) and Z89.1 Class E (electrical protection) requirements and be worn in all designated work areas. Hard hats are not required to be worn while inside Coterra vehicles.

- Hard hats are designed for protection from falling objects, swinging objects and for raising your head up into an object.
  - No other headgear may be worn under the hard hat unless it is designed for such application.
  - Hard hats shall not be altered by drilling or cutting holes in them, by substituting the suspension from another type of hard hat, or in any other fashion not approved by the manufacturer.
  - Hard hats shall not be worn backwards, or in any other manner that is not consistent with the manufacturers' recommendations.
  - All hard hats, including the suspension system, shall be inspected prior to each use for cuts, nicks, cracks, or tears. Replace the hard hat if it is found to be defective during inspection.
  - Hard hats should be replaced if they are defective, damaged, or expired. A hard hat is considered expired if it is more than 5 years old.

Location #1: This example shows a cap that was molded on January 3, 2006.



Location #2: This example shows a cap that was molded on July 7, 2001.



- Hard hat color code recommendations:

Hard Hat Color	Personnel
Green	Employees with 60 days or less on the job. The immediate supervisor may issue a white hard hat after 60 days when the new employee exhibits full knowledge of Coterra's EHS programs.
White or Blue	Full-time Coterra employees or resident consultant
Orange	Visitors

- Helmets are designed for protection from collisions with moving or stationary objects.

6.21.2 Foot Protection

Foot protection shall be worn by employees in work areas outside of an office, quarters, or vehicle. Protective safety toed boots must be:

- in compliance with ASTM F2412-2011 and F2413-2011
- composite or steel toes,
- be no less than 6" in height from the bottom of the heal to the top of the boot,
- oil resistant, slip resistant and chemical resistant soles,
- have a defined heel.
- Ice cleats should be worn when conditions have the potential to produce icy surfaces.

6.21.3 Hand Protection

Employees shall use hand protection when performing jobs that expose the hands to absorption of harmful substances, severe cuts or lacerations, severe abrasions, punctures, chemical burns, thermal burns, and harmful temperature extremes. Selection of hand protection shall be based on hazard assessment of each task being performed.

Specialty gloves such as chemical, electrical, and thermal protection shall be used when hazards warrant.

Protect With	Protect From What	Protect When
	(Includes but is not limited to)	
Leather Gloves	Production Equipment, Production Fluids, Minor Impacts	Light lifting, moving boxes, handling light material
Impact Resistant and or Cut Resistant Gloves	Major Impacts, Dropped Objects	Handling material, hammering, using wrenches, impact prone activities, exposure to sharp edges and when using cutting equipment.
Rubber Gloves	Production Fluids, Chemicals	Spill Cleanup, Chemical, Handling, Steam Cleaning
Insulated, Thermal Protection Gloves	Burns, Frost Bite	Hot surfaces, molten metal, low temperatures, cold materials.

6.21.4 Eye and Face Protection

Employees are responsible for ensuring that the appropriate eyewear protection is worn during jobs where eye hazards exist. A Hazard Assessment including an SDS review will be performed to determine proper eye and face protection.

6.21.4.1 General Eye Protection

- Safety glasses will meet the requirements and have identification that they are compliant with Z87.1.
- Employees are responsible for keeping eye protection clean and in good repair.
- Employees who normally wear corrective lenses should wear prescription safety glasses (Z87.1 compliant) with detachable side shields. Industrial safety glasses or coverall goggles over regular prescription glasses may be worn instead of prescription safety glasses, as long as they do not prevent the proper location of the prescription glasses.
- Clear lenses must be worn when working in reduced light.
- Eyewash provisions should be available for immediate emergency use at locations where hazardous chemicals are used. Eyewash stations must be clearly marked and inspected periodically.

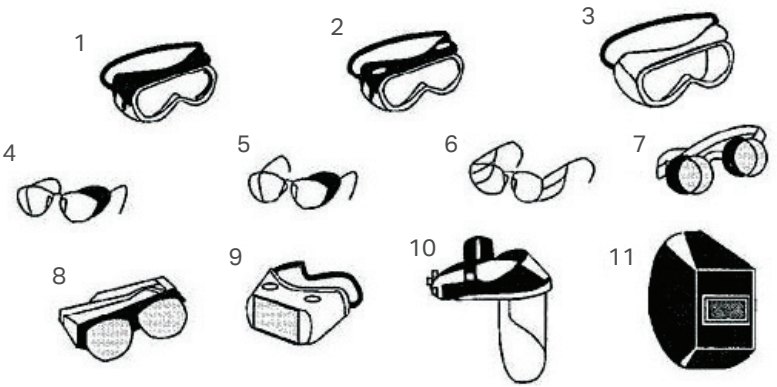
6.21.4.2 Eye Protection for Welding

- Eye protection from light radiation is required when performing any welding and cutting activities.
- Number 5 or 6 shade lenses must be worn when cutting material with acetylene gas. Helpers engaged in such work must wear number 4 shade lenses or equivalent.

- Electric arc welding requires the use of a welding helmet fitted with shaded lenses. Helpers must wear shaded lenses to prevent flash burns to the eyes.
- Welding filter lens shades shall meet the requirements of OSHA regulations.

6.21.4.3 Face Protection

- Whenever face shields are used, primary protection such as safety glasses or chemical goggles must also be worn.
- Face protection is required when the following activities are being performed:
  - Grinding
  - Chipping of metal or welding slag
  - Handling hot or molten materials
  - Handling corrosive or toxic chemicals
  - Hydro Excavation (Hydrovac)
  - Pressure washing
  - Steaming
  - Weed eating and chainsaw operations



Eye and face protectors are identified below by number and type.

1. Goggles, flexible fitting, regular ventilation
2. Goggles, flexible fitting, hooded ventilation
3. Goggles, cushioned fitting, rigid body
4. Spectacles, metal frame, with side shields*
5. Spectacles, plastic frame, with side shields*
6. Spectacles, metal-plastic frame, with flatfold side shields*
7. Welding Goggles, eyecup type, tinted lenses

7A. Chipping Goggles, eyecup type, clear safety lenses (not illustrated)

8. Welding Goggles, coverspec type, tinted lens

8A. Chipping Goggles, coverspec type, clear safety lenses (not illustrated)

9. Welding Goggles, coverspec type, tinted plate lens
10. Face Shield (available with plastic or mesh window, tinted/transparent)
11. Welding Helmets

Source: 29 CFR 1926.102 (a)(5) Table E-1.
**These are also available without side shields for limited use requiring only frontal protection.*

6.21.5 Hearing Protection Devices

- Hearing protection and training will be furnished to employees who are exposed to areas where the noise level is 85 dBA or higher. Common locations/activities which require hearing protection include:
  a. Blowing down equipment, pipelines, and wells
  b. Compression equipment
  c. Gas engine powered equipment such as mowers, string trimmers and chainsaws
  d. Diesel engine powered equipment such as pumps, tractors, and dozers.
- Warning of high noise areas of 85 dBA or greater may be accomplished through posting signs, noise surveys or notification.
- Different types of hearing protection, including earmuffs and plugs, are available for employee selection.

6.21.6 Body Protection

Coterra requires body protection to encompass fire protection, fall protection, vehicular protection, and respiratory protection. The table at the end of this section outlines the various types of body protection.

6.21.6.1 Flame Resistant Clothing ("FRC")

- FRCs shall adhere to the NFPA 2112 or HRC2 requirements or higher.
- FRC garments shall be long-sleeved and worn in a manner that will completely cover exposed areas such as the torso, arms, and legs.
- Sleeves shall be rolled down and fastened at the wrist.
- Shirts shall be tucked into pants.
- Shirts, coveralls, and jackets shall be fully zipped and/or buttoned and closed at the neck.
- Garments should fit properly such that they do not interfere with work tasks.
- FRC shall always be worn as the outermost layer.
- Only natural fibers such as 100% cotton or wool are to be worn under FRC. Personnel shall not wear synthetic blends such as nylon, polyester, rayon, or polyethylene under FRC.
- Personnel are responsible for the proper laundering, maintenance, and upkeep of their FRC. FRC must be laundered as per the manufacturer's instructions and recommendations. Failure to do so can result in the loss of the FRC's protective properties.
- Do not wear any FRC that has been contaminated with flammable liquids until adequately and appropriately laundered.

Protect With	Protect From What	Protect When
	(Includes but is not limited to)	
Flame Resistant Clothing (FRC): • Pants. • Shirts. • Overalls. • Coveralls.	Flash fire. Electrical arc. Chemicals. Insects. Weather elements	At all times when on a Coterra field location.
FRC Slicker Suit	Production fluids. Chemicals. Rain.	Spill Cleanup. Chemical Handling. Steam Cleaning.
Lower Leg Chaps	Snake Bites. Chain Kick Back. Flying Objects.	If Snake Presence is Likely Operating Chain Saw.
High Visibility Vest	Vehicles	Working in a congested area or near roadways
Full Body Harness, Lifelines and Lanyards.	Falls. Exposure. Asphyxiation.	Exposed to falls greater than 4 feet. Entering confined spaces.
Air-Purifying	Chemical Fumes. Dust. Particles.	Painting. Chemical Handling. Welding.
SCBA and Supplied Air Systems	IDLH Atmosphere: • Toxic Gases / Vapors. • O2 Deficient Atmosphere.	Emergency Rescue. Hot Zone Work. Confined Space Entry.

6.24 Pressure Washing and Steam Cleaning [EHS 6.24]

The following exposures are the most hazardous when cleaning with pressure washers, hot water, and steam:

- High temperatures (scalds). Note temperature and time range:
  - 120°F water can lead to burns in 5 to 10 minutes.
  - ~140°F can cause burns in 3 to 5 seconds.
  - >160° F High-temperature water or steam is very dangerous and can cause second and third-degree burns upon contact.
- Low temperatures - Frostbite
- Slips trips and falls associated with slippery surfaces.
- High pressure in steam generating equipment (explosions).
- High pressure in hose (bursting).
- Uncontrolled hose (scalds, body blows).
- Cuts and injections from high pressure water.
- Contact of water with electrical conductors (shock, damage to equipment).
- Static electricity (sparking from buildup in tanks where gas may be present).

The following precautions will help in reducing exposure to the hazards of using pressure washing, hot water, and steam for cleaning or other purposes:

- Proper PPE is required for all operations involving pressure washing and steaming. Specialized PPE including, but not limited to, face shields and slicker suits shall be evaluated for use in each operation.
- All steam and water lines should be equipped with a check valve to prevent pressure from backing up into the cold-water system.
- All water heaters or steam generators must be equipped with safety valves of the temperature-pressure type in accordance with the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code.
- Hose to pipe connections should always point downward and be installed as low as possible. Whip check device shall be installed.
- Only a high-pressure armored or wire-reinforced steam hose should be used.
- Hose connections should be kept in good working condition.
- Nozzles should have insulating grips to minimize exposure.
- Pressure wands shall be equipped with a “dead man” trigger handle.
  - Never use a strap or zip tie to lock pressure wand trigger in “On“ position.
- Operators should always lead the hose out in a large loop so that there are no turns or kinks in it.

- If the use of hot water or steam is near electrical equipment, the equipment should be completely covered if it is not moisture or weatherproof.
  - Always avoid steam and hot water contact with electrically energized equipment. Electrical equipment should be completely covered if it is not moisture or weatherproof.
  - Ensure that the heater/steamer equipment is outside of hazardous atmospheres. Ensure the hot work zone is respected.
- Avoid running hoses over energized electrical cables.
- To help prevent static electricity and spark generation when flammable vapors may be present, the nozzle should be grounded to the tank or container being cleaned.
- Maintain a sufficient buffer zone to protect people and equipment from flying debris buffer zone from pressure washer and\or steamer operation. Operator shall always maintain positive control of discharge end to avoid contact with personnel. Never operate discharge end within 12 inches of operator's or other personnel's body.

6.27 Snowmobiles, ATVs And UTVs [EHS 6.27]

Coterra has established this requirement to prevent injuries while operating Snowmobiles, ATVs, and UTVs. Two and three wheeled vehicles and all personally owned vehicles are prohibited in support of Coterra operations.

- These non-traditional vehicles will be provided as transportation tools to remote facilities where traditional vehicle transportation is not practical.
- Applicable employees are required to complete a vehicle operator education course, including refresher courses, and use safety equipment that is recommended by the manufacturer.

To help prevent the loss of control when operating these non-traditional vehicles, the driver should practice and apply the following:

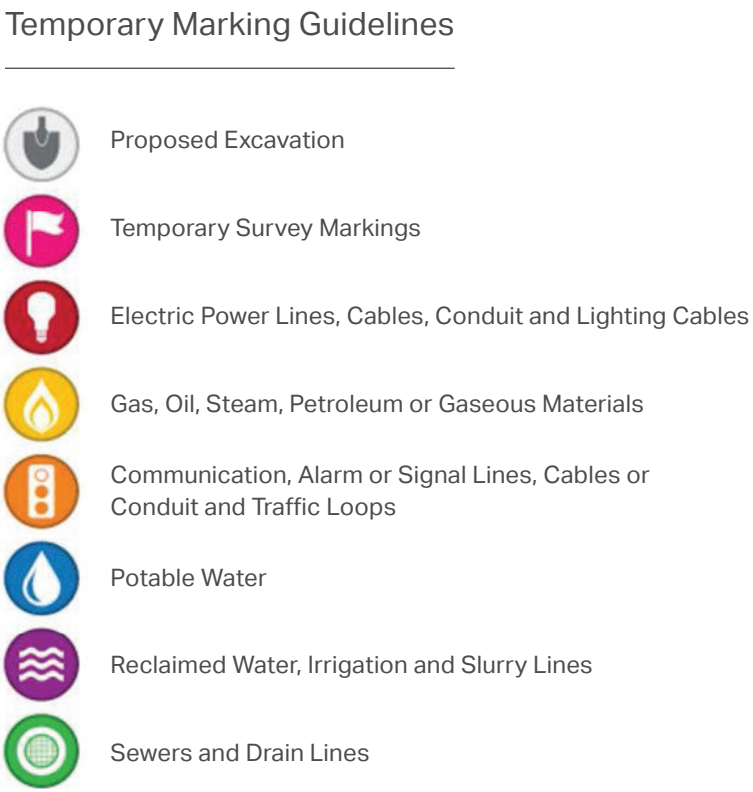
- Use of appropriate PPE:
  - Head protection (shall meet manufacturer and state law requirements)
  - Wear seat belts
  - Eye protection.
- Do not get in a hurry; ensure that a safe speed is maintained.
- Do not drive too fast for the conditions.
- Know the limits and abilities of the machine and yourself.
- Always be alert to changing conditions and situations.
- Have the foresight to anticipate and prepare for the situations ahead.
- Make good judgments knowing that there are always alternatives.

6.28 Buried Utility Damage Prevention [EHS 6.28]

An excavation is defined as any man-made cut, cavity, trench, or depression in an earth surface, formed by earth removal. Prior to any such initial soil removal, the area to be disturbed shall be investigated to determine whether any buried utilities are present. These underground objects could be Coterra or non-Coterra controlled property.

The Buried Utility Damage Prevention Standard has been developed to protect employees from safety hazards that may be encountered by the unplanned striking of a buried utility. This procedure consists of the following key elements:

- The Ground Disturbance and Excavation Checklist acts as a work permit for conducting excavation activities. The checklist must be completed prior to beginning any excavation activity.
- One Call – Prior to construction, a utility locate (One Call) must be performed. State laws require that buried utilities are registered with the state one call centers. For clarification, the image below provides the standard one call color coding.



- Confirmation of Buried Utility - The location of buried utilities that may be encountered during excavation work that were identified in the One Call procedure must be marked appropriately prior to any excavation activities. Arrangements shall be made as necessary by Coterra supervision or their designated representative with the appropriate operator of a buried utility for the protection, removal, shutdown, or relocation of underground installations.
  - All identified buried utilities identified by line locating shall be confirmed by hand digging or soft digging (potholing).
  - In areas where parallel below ground utilities that are close together exist where excavation will be taking place, a minimum of 12" wide perpendicular pothole with a minimum of 2' below ground centered on that utility every 10'-15' apart between excavation potholes is required to identify any encroaching, or direction changes of that buried utility.
    - The site supervisor can allow the pot-holing activity to stop short of the 2 feet below or the 15 feet on either side requirement if consolidated rock or other ground characteristic is encountered indicating that the area was not previously disturbed.
  - Before mechanically digging within 50 feet of a buried utility (from either side), a Coterra supervisor or Coterra authorized representative will verify that all buried utility locations have been identified and confirmed. Special care should be taken when excavating around existing Coterra locations. If there are any buried utilities identified and their location cannot be confirmed – that utility and or facility should be de-energized.
  - Any buried utilities indicated in the operations documentation that are not identified through the line locating process indicate the potential for an unmarked buried utility. No mechanical excavation should commence until the buried utility is located and confirmed or confirmed that the operations documentation is inaccurate. In these situations, the buried utilities should be deenergized until excavation activities are completed.
  - All mechanical excavation operations shall be done in a manner that does not endanger the underground installations or the employees engaged in the work. A required minimum distance of 24 inches must be maintained between the utility and any part of the mechanical excavation equipment.
- Emergency one call notifications and excavations should only be completed if an emergency is immediately dangerous to life and health, the environment, or there is a risk of significant property damage. Only an Operational Manager can authorize an emergency one-call and an emergency excavation.
- One call is required for blasting activities and are not permitted within 200 feet of a Coterra buried utility. Owners of buried utilities may require a distance greater than 200 feet based on the nature of the buried utility.

7. Regulatory Compliance

7.1 Air Quality Management

7.1.1 Purpose

The U.S. Congress passed the Clean Air Act and a 1990 amendment, which requires certain stationary sources to obtain (a) a permit to construct equipment that will be an air emission source, and (b) once constructed, an "operating" permit that allows emissions based on certain limitations, including but not limited to installation of controls to reduce emissions. Permits are required for processes which can produce emissions, as listed below.

7.1.2 Emissions Permits

An air permit evaluation shall be conducted by the EHS Department for every new, modified, or reconstructed facility. This includes well recompletions, well add-ons, equipment additions, removals and/or replacements. The EHS Department will prepare and submit an application for an air permit to the appropriate regulatory agency. Facility personnel will be trained on the requirements of the permit and will be supplied with an Air Compliance Summary Sheet.

7.1.3 Equipment Replacement, Addition, or Removal

Any time any of the following equipment or sources are planned to be initially installed, modified, replaced, added, or removed, an EHS Air Quality representative must be notified BEFORE any changes take place:

- production storage tanks
- chemical tanks
- separators and flash tanks
- fired vessels
- glycol dehydration units
- engines and turbines
- compressors
- generators
- flares
- truck loading
- fugitive leaks
- vapor recovery towers ("VRTs")
- vapor recovery units ("VRUs").

In addition to equipment changes, an EHS Air Quality representative MUST be notified PRIOR to any of the following events:

- new well additions to existing facilities
- new completions on existing wells
- new hydraulic fracs on existing wells
- workovers that might increase facility production or increased venting or flaring, i.e. emissions, on existing wells.

All Coterra facilities shall notify the EHS Air Quality representative prior to making any change which could result in an increase or decrease in emissions. After approval by an EHS Air Quality representative, all equipment changes MUST be updated in Coterra's equipment inventory system by operations field personnel.

7.1.4 Operating Practices and Emission Controls

Equipment shall be properly maintained and operated according to the manufacturer's recommendations and regulatory requirements in such a manner as to limit emissions. Emission control equipment shall be properly used and maintained according to manufacturer's recommendations. Examples of emissions control equipment are VRU, flare, combustor, BTEX condenser, and engine catalyst. Facility Process Equipment Management Program (O&M Program) document outlines specific requirements and practices for all equipment operated at Coterra locations. This can be accessed under the resources section in KPA.

Approval must be obtained from Coterra's EHS Department before emission control equipment is altered in any way. Removing emission control equipment without EHS approval may incur a regulatory violation and be penalized by state and/or federal environmental agencies.

7.1.5 New Construction or Major Reconstruction or Modification

Emission control equipment and/or emission-reducing techniques shall be utilized when required by law. Emission control equipment and/or emission reducing techniques shall be considered in the design, purchase, and construction of new facilities or existing facilities that have major modifications to emission sources.

7.1.6 Permit/Field Test Analysis

Air quality regulations and permits require testing, monitoring, and inspections on applicable equipment. The EHS Department will coordinate and notify production operations field personnel prior to EHS technicians, testing vendors and/or consultants arriving at a facility to perform stack testing where applicable.

7.2 Migratory Birds, Wildlife Protection, and Rehabilitation

Coterra personnel will take appropriate measures to protect migratory birds and other wildlife. In the event a spill affects any birds or other wildlife, wildlife rehabilitation procedures will be implemented.

7.2.1 Facilities Requiring Migratory Bird/Wildlife Protection

Open top tanks, skimming pits, chemical secondary containment, or other open vessels shall be netted, covered, screened, or otherwise protected to prevent wildlife and migratory birds from becoming contaminated by fluids (primarily oil) or chemicals.

7.2.2 Actions to Take if a Spill or Coterra Operation Affects Wildlife

- Follow the spill reporting guidelines provided in the Spill Reporting section of this Handbook.
- Activate spill control measures as described in the Spill Reporting section of this Handbook.
- Immediately notify an EHS representative. Notification should include:
  - Type of fish, animals, or birds impacted.
  - Number affected or killed.
  - Potential for further damage.
- DO NOT attempt to clean any affected bird or other wildlife. Injured/oiled birds and/or other wildlife can be dangerous if approached. Keep a safe distance from all affected birds and other wildlife. Attempt to keep affected birds and other wildlife under watch and plot their location on a map.
- The EHS representative will arrange for an approved wildlife rehabilitator to capture and clean birds and other wildlife. In addition, the EHS representative will notify the appropriate federal and/or state agencies.

7.3 National Pollution Discharge Elimination System (NPDES)

7.3.1 Regulatory Authority

The EPA has jurisdiction over the discharge of all fluids and solids into waters of the U.S. State agencies typically have authority to issue permits for all discharges into their state waters. Coterra must maintain compliance with both state and federal requirements.

NPDES permits enumerate the requirements imposed on Coterra to maintain water quality. Each facility that discharges liquids to surface water is required to have an NPDES (or state equivalent) permit authorizing the discharge.

7.3.2 Discharge Monitoring and Reporting

Each NPDES permit identifies the frequency that samples must be collected, the analyses that must be performed on discharge samples, and the concentration limits for each contaminant listed in the site-specific permit. Facility personnel or EHS representative are responsible for the collection, shipping, and analysis (if performed on site) of discharge samples in accordance with the permit.

Most permits require daily or weekly observations. These observations, including the date and time, must be recorded on a Discharge Monitoring Report ("DMR") by facility personnel.

Analytical results for discharge samples are reported on DMRs, which vary from state to state. DMRs are to be submitted at the frequency identified in the NPDES permit. DMRs report both the average and maximum concentration and mass of each compound discharged during the reporting period and self-identify any violation of permit limits.

DMRs are completed by the EHS Department and are signed by the Coterra Director of EHS or a Vice President.

7.3.3 Sampling

Water samples shall be collected at the point of discharge, not from an impoundment, tank, or other source of liquid yet to be discharged. Samples shall be submitted to a state-certified and Coterra-approved laboratory for analysis in accordance with permit requirements.

7.3.4 Exceptional Conditions

A bypass occurs when wastewater is diverted to surface water without going through the permitted wastewater discharge process. A bypass may be intentional, such as opening a valve which should be closed, or unintentional, such as a release of drilling fluid during a blowout. Should a bypass occur, the bypass shall be reported to an EHS representative. The EHS representative shall notify the state and/or federal agency of the bypass. Facility personnel will work together with the Coterra EHS representative to investigate the cause of the bypass and take action to prevent future bypasses.

If a permit limit is exceeded or a permit condition is violated, the Coterra Supervisor shall report the exceedance immediately to the Coterra EHS representative. All exceedances will be reported to the applicable agency by the EHS Department. Facility personnel will work together with the EHS representative to investigate the cause of the exceedance and take action to prevent future exceedances. The Coterra EHS Department will make any required agency notifications.

7.4 Safety Data Sheets (SDS)

Each Coterra District Office will ensure copies of all SDS for chemicals present are readily accessible for employees.

- Managers or their designee(s) will ensure that chemicals brought to a wellsite or other off-site work location will:
  - Communicate chemicals, quantities, and duration of use to the EPCRA coordinator, and
  - Provide up to date SDS to site personnel while the chemicals are onsite.
- Employees traveling to multiple work sites during a work shift will be able to access the SDS's in case of an emergency.
- Employees receiving a chemical that is not accompanied by an SDS must immediately notify their supervisor.
  - The supervisor will determine whether to return the chemical or accept it with the understanding that a SDS is forthcoming.
  - It may require notifying the shipper of the container to immediately send the SDS.
- If a chemical is no longer in use, the SDS shall not be thrown away. SDS are considered employee exposure records and must be maintained on file.

7.5 Spill Prevention Control and Countermeasures (SPCC)

Federal and State laws have strict requirements, including timeframes in which to report a spill that threatens or has reached water. These laws require advance planning in order to quickly respond to any spill to soil or water, as well as specific reporting obligations.

7.5.1 Applicability

SPCC regulations apply to any facility that is drilling, producing, gathering, or storing oil or oil products which could be released to the environment, unless either the total aboveground storage capacity of the facility is less than 1,320 gallons (about 31 barrels) or the release from the facility could not reasonably be expected to impact navigable waters of the U.S.

7.5.2 SPCC Plan Requirements

- A facility subject to SPCC regulations must prepare and implement a Spill Prevention, Control, and Countermeasures Plan ("SPCC Plan"). A copy of the SPCC Plan must be kept at the nearest facility or office that is manned at least 4 hours per day. The SPCC Plan includes the following information:
  - The layout of the facility.
  - Each container's capacity and product in each container.
  - How the products could be discharged from the container(s).
  - Measures and controls to prevent spills, such as handling procedures.
  - Countermeasures to respond to a spill.
  - Contact information to report spills.
  - Inspections and other records that must be maintained.
- If the facility has a SPCC Plan, annual training is required for all personnel who handle oil products at the facility.
- Each SPCC Plan facility must have an employee designated as the responsible party for preventing or reporting discharges of oil products.
- If the storage capacity of the facility changes, the SPCC Plan must be revised and recertified by a Professional Engineer within 6 months of the change. Contact an EHS representative to complete this task.

7.5.3 Reporting Oil Impacting Waters of the U.S. or a Wetland

- If a spill to soil or surface water exceeds 1,000 gallons (about 24 barrels) in a single event or if two discharges to soil or surface water exceed 42 gallons (1 barrel) within a year, the spill must be reported in writing to the U.S. Environmental Protection Agency ("EPA") within 30 days (in addition to any other spill reporting requirement that may apply). An EHS representative will submit the required written reports.
- Any quantity of oil or oil products that reach(es) water must be reported immediately to the National Response Center ("NRC") by the Coterra EHS Department. In general, if any release of oil results in a sheen on a defined waterbody (ditch, creek, river, pond, lake), it must be reported to the NRC.

7.5.4 Other Chemical Spills

If a chemical spill occurs, contact an EHS representative to determine the reporting requirements that apply to the spill.

7.6 Stormwater Management

7.6.1 General Stormwater Permits

EPA issued stormwater regulations that require Coterra to file a Notice of Intent ("NOI") to be covered by a general stormwater permit when its operations may affect the quality of stormwater runoff. Two types of permits are required: construction permits and production permits.

7.6.2 Construction Permit

Federal stormwater construction permits are required by the EPA for non-E&P construction activities that disturb one or more acres (e.g., construction of a field office building, warehouse, or pipe yard). A construction permit is required when soil is moved, ditched, or if vegetation is cleared.

Non-E&P sites requiring a federal stormwater construction permit must:

- Develop a Storm Water Pollution Prevention Plan ("SWPPP") prior to filing a NOI.
- File a NOI with the EPA at least 48 hours prior to beginning construction activities.
- Implement Best Management Practices ("BMPs") to control stormwater runoff. Potential BMPs include silt fences, rock filter dams, hay bales and wattles, or natural riprap or geotextile coverings.
- After construction is complete and the site is 70% stabilized, a Notice of Termination ("NOT") must be filed with EPA.

EPA exempted E&P activities including well sites, drill pads, gathering line systems, storage tanks, oil-water separators, midstream processing plant, gas and oil treatment, gas processing plants, etc., are exempted from stormwater construction permitting requirements. However, E&P and pipeline operations lose the exemption if there is a discharge at the site that contributes to a reportable quantity ("RQ") of oil, grease, or hazardous substances to waters of the U.S. or a violation of a water quality standard. No SWPPP is required for construction on exempted E&P sites. However, the use of BMPs good housekeeping, visual inspections, secondary containment, prompt cleanup of leaks and spills, erosion, and sediment control, etc. is recommended during construction of E&P and pipeline sites.

Some states have stormwater construction permitting regulations that include E&P and pipeline operations that disturb one or more acres, such as a new well location, a gas or oil pipeline, a compressor station installation, a tank battery or a SWD installation (including roads). Contact your Coterra EHS representative for more details.

Small projects (less than one acre) that would not cause any erosion and/or sedimentation problems may be exempt. Please contact your EHS representative for assistance in determining if construction is exempt.

7.6.3 Production Permit

A production permit applies when any spill occurs that is reportable to the U.S. Coast Guard or NRC on a producing property/plant. A NOI to be covered by the Production Permit and a SWPPP are required to be filed immediately after a reportable spill occurs. An EHS representative will prepare both the NOI and the SWPPP.

7.6.4 Developing A Stormwater Pollution Prevention Plan ("SWPPP")

An EHS representative will complete and submit the NOI to either the appropriate state agency (if the state has primacy) or to the EPA. Employees and contractors will forward a copy of the completed NOI and the SWPPP to the appropriate Coterra Supervisor. The SWPPP shall be kept on site or at the nearest field office. All Coterra facility personnel and required contractors will be trained and/or briefed on the SWPPP by the Coterra Field Supervisor. A "required contractor" includes anyone conducting work on a location or road that may disturb any soil by moving, ditching, fluid dumping, or other means.

7.6.5 Project Termination

When a SWPPP was required for any site, upon completion of the project, a copy of the SWPPP Contractor Certification sheet will be filled out by the Coterra Supervisor and forwarded to an EHS representative. For all sites for which an NOI was filed, a NOT will be filed by the EHS representative.

If additional work is conducted after a NOT is filed, the additional work shall be treated as a new project. A new NOI and new SWPPP will be required.

7.7 Waste Management

Material should be considered a waste if it can no longer be used at other Coterra locations or returned to the vendor. To minimize or eliminate waste, order only the amount of material needed, and either use all the material or return the surplus to the vendor. Waste of any specific type, i.e. a "waste stream", should be stored in its own container with appropriate labeling; separate each waste stream from all other waste and material. All field personnel and appropriate office personnel will receive waste management training annually.

7.7.1 Facility Responsibility

Each facility is responsible for separating each waste stream generated at that facility into one of five categories. The five categories are:

- Ordinary Solid or Municipal Waste
- Exploration and Production Waste
- Special Waste
- Nonhazardous Industrial Waste
- Hazardous Waste

Check the Waste Guidance Sheets in Appendix A of the Coterra Environmental Manual to determine which category applies to a particular waste stream. Waste Guidance Sheets describe the waste category or possible categories for each waste, opportunities to minimize generation of the waste, how to manage and/or dispose of the waste, and what records are needed to document the management and/or disposition of the waste.

7.7.2 Ordinary Solid / Municipal Waste

Examples of ordinary solid or municipal waste are office trash, empty bags, cardboard boxes, empty plastic bottles/jugs, scrap metal, and pallets. For this category of waste:

- On-site disposal of waste is prohibited.
- On-site storage of waste may not exceed one year.
- Waste may not be directed into any wastewater, sanitary water, or stormwater drains or ditches.
- No open burning of waste is allowed without applicable written agency authorizations and/or permits.

7.7.3 Exploration and Production Waste

Waste that is unique to the exploration and production industry is typically designated as E&P waste. Examples of E&P waste are spent acid, blowout preventer test fluid, used drilling fluid and cuttings, produced sand and water, and tank bottoms. NORM is a special category of E&P waste. For E&P waste:

- Store in a rigid container compatible with the waste and suitable for transportation.
- Shipping and disposal are arranged by Operations. If the waste is ignitable, reactive, corrosive, radioactive (“NORM”), or contains poisons/toxins, contact an EHS representative for proper shipping and disposal.
- Retain shipment records for at least one year.

7.7.4 Special Waste

This category applies to specific wastes, including asbestos, fluorescent light bulbs, oil filters, waste tires, and used oil. For this category of waste (Appendix A in the Coterra Environmental Manual):

- Return unused product to the vendor when possible.
- Waste-specific authorizations are required; contact an EHS representative for assistance.
- Greater than 5,000 pounds cannot be stored on site.
- Employees must be informed of the waste.
- U.S. Department of Transportation ("DOT") specific packaging is needed for storage and shipping; contact an EHS representative for assistance.
- Disposal or recycling must be arranged through an EHS representative (an EPA-permitted disposal/recycling facility is required).
- Special labeling is required, if stored for any period of time.
- Retain shipping records and waste manifest for at least 5 years.

7.7.5 Nonhazardous Industrial Waste

Nonhazardous industrial waste is contaminated waste material that is neither a "listed" or "characteristic" hazardous waste. Examples of nonhazardous industrial waste are excess unused barite, excess unused cement, and used filters. For this category of waste:

- Store in a rigid container compatible with the waste and suitable for transportation.
- Special labeling, shipping and disposal are required; contact an EHS representative for assistance as necessary.
- Retain shipment records for at least 3 years (longer if required by local codes).

7.7.6 Hazardous Waste

Waste is considered hazardous if it is specifically listed as such (due to the process that generated the waste) or if it has certain characteristics (e.g., corrosive, toxic, reactive, or ignitable). Examples of waste that may be considered hazardous include methanol, used pipe dope, oil-based paints, and solvents. For this category of waste:

- Waste-specific authorizations are required; contact an EHS representative for assistance.
- Initial and annual refresher training is required to handle this type of waste.
- Do not generate 220 pounds or more per month without first contacting an EHS representative regarding additional requirements.

- DOT specific packaging is needed to store and ship hazardous waste; contact an EHS representative for assistance.
- Special labeling is also required; contact an EHS representative for assistance.
- Hazardous waste containers must be stored in a designated area, which must be maintained in good condition, properly labeled, and inspected weekly. A weekly hazardous waste inspection log must be maintained at the facility.
- The following information must be posted at the district office if hazardous waste is stored on site:
  - Name and telephone number of the emergency coordinator.
  - Telephone number of the nearest fire department.
  - Locations of fire extinguishers, spill control equipment, and fire alarms.
- Disposal must be arranged through the EHS representative (requires EPA permitted disposal facility).
- Retain shipping records and waste manifests as required by the applicable regulations and Coterra protocol.

7.7.7 Waste Manifest

When shipping wastes, most wastes require some sort of shipping manifest, delivery ticket, or sundry notice.

Wastes classified as Hazardous may require specific Hazardous Waste Manifests. Contact the EHS Department for assistance with waste classification and manifest requirements.

ORDINARY	E & P	SPECIAL	NON- HAZARDOUS	HAZARDOUS
• Office Trash • Empty Bags • Cardboard Boxes • Empty Plastic Jugs & Bottles • Scrap Metal • Pallets	• Spent Acid • Blowout Preventer Test Fluid • Drilling Fluid • Cuttings • Produced Sand/Water • Tank Bottoms	• Asbestos • Fluorescent Light Bulbs • Oil Filters • Waste Tires • Used Oil	• Excess Unused Barite • Excess Unused Cement • Used Filters	• Used Absorbent Material • Antifreeze • Surplus Chemicals • Used Pipe Dope • Oil-Based Paints • Solvents

7.8 Spill Management

Coterra employees and contractors are responsible for preventing the release of any product that could impact the environment. A release must be considered a spill whenever the product leaves the container intended to hold it, regardless of the type of container, e.g., package, drum, tank, piping, piece of equipment, or pit.

7.8.1 Initial Response

The first concern in an emergency situation is to ensure the safety of all people at the work site. Once their safety is established, spill control and post-control procedures shall be implemented.

7.8.2 Internal Spill Reporting Procedures

- Clearly and immediately mark the location of a spill to assist with remediation.
- All spills shall be verbally reported by whomever observes the spill to the Coterra supervisor. The Coterra supervisor then will report the spill to an EHS representative within 2 hours. A spill must be reported regardless of whether it has left the location, even if the spill has been contained.
- Spill reports must be completed and submitted via Coterra's incident management system.

7.8.3 Regulatory Agency Spill Reporting Procedures

- All regulatory agency reportable spills will be verbally reported by an EHS representative to the appropriate state and federal agencies.
- Written reports required by state or federal regulations will be filed by the EHS Department.
    - A copy of all agency reports will be kept on file at the local Coterra field office.
    - All correspondence with agencies will be prepared and submitted by the EHS Department.
- The Coterra supervisor shall immediately notify an EHS representative of any regulatory agency action (written or verbal) or known agency field review regarding any spill or incident.
- Any spill which exceeds its reportable quantity (RQ) shown in Section 5.6.7 must be reported immediately to the appropriate state or federal agency, regardless of whether it reaches surface water.

7.8.4 Information Required for Notification

- Name of person making notification and phone number for return calls.
- Name and location (including directions) of site where spill occurred, including GPS coordinates when possible.
- Name of owner/operator of location or site.
- Date and time the spill began and ended (estimated time of continuation).
- Extent of any injuries and identification of any known hazards that response agencies may encounter.

- Description of spilled/discharged products, including type and estimated volume amount.
- Brief description of incident, including the cause of the spill if known (do not speculate).
- Areal extent of spill.
- Description of any actions that have been taken, are being taken, and will be taken to contain and respond to the spill.
- Location of spill with respect to the nearest fresh and usable water resources, or other sensitive area.
- Amount of product or waste recovered.

7.8.5 State-Specific Spill Reporting Requirements for Spills to Land

Section 5.6.7 shows state-specific reporting requirements for spills that occur on land.

7.8.6 Federal Spill Reporting

If a spill has reached or is expected to reach waters of the U.S. or any wetland or has created a sheen on a defined waterbody as noted above, the spill must be reported immediately to the NRC. For the purpose of reporting spills, "immediately" is generally understood to be within 2 hours of the discovery of the spill.

All reporting will be done by an EHS representative, so employees and contractors must notify the EHS Department immediately.

7.8.7 Spill Reporting Matrix (Full size version available in the Reference Section)

Spills to Land	Bureau of Land Management	Texas	Oklahoma	New Mexico	Pennsylvania	Louisiana	Michigan
Oil & Condensate	≥10 bbls liquid >50 MCF gas	5 bbls RRC	≥10 bbls OCC	"Minor Release" >5 bbls up to 25 bbls "Major Release" > 25 bbls NMEMNRD (OCD)	>5 gallons/PADEP	≥1 bbls LOSCO	Any amount unless < 1 bbl, release occurs while authorized representative is on site, and spill is completely contained and cleaned up within 1 hour / MDEQ OOGM
Produced Water	≥ 10 bbls liquid ≥ 50 MCF gas	>250 bbls RRC courtesy call	≥10 bbls OCC	"Minor Release" >5 bbls up to 25 bbls "Major Release" > 25 bbls NMEMNRD (OCD)		≥1 bbls LOSCO	
Diesel & Gasoline	≥ 10 bbls liquid	25 gals RRC & TCEQ	Any amount ODEQ (Immediately) & OCC	Any amount NMED (Immediately)		Any amount LDEQ (DPS) & LOSCO (Immediately)	
Hazardous Chemicals	RQ on SDS or Table 302.4 BLM, NRC	RQ on SDS or Table 302.4 RRC, TCEQ, NRC	RQ on SDS or Table 302.4 OCC, ODEQ, NRC	RQ on SDS or Table 302.4 NMED, NRC	RQ on SDS or Table 302.4 PADEP	RQ on SDS or Table 302.4 LDEQ (DPS), LOSCO, NRC	RQ on SDS or Table 302.4 LEPC, SERC, NRC
Remediation	Interim reports as appropriate C-141 form	360 days - RRC 90 days - TCEQ	CTRA will comply with remediation time requirements per agency	ASAP	ASAP	ASAP	ASAP
Initial Notification	BLM - Oral or email within 24 hrs NRC - Immediately	RRC, TCEQ, SERC - 24 hr NRC - Immediately	OCC - 24 hrs ODEQ & NRC - Immediately	"Minor Release" OCD - 15 days "Major Release" OCD - 24 hrs NRC - Immediately	2 hours - PADEP NRC - Immediately	LDEQ (DPS) - 1 hr LOSCO (OEC) - 24 hrs NRC - Immediately	MDEQ (Immediately) NRC - Immediately
Written Notification	BLM - Within 15 days of the event	RRC=5 bbls Crude Oil Form H-9 and Final report upon completion of cleanup TCEQ/RRC	OCC/ Written or oral report with District Office within 10 days	NMEMNRD (OCD)/ Form C-141 (15 days) All Releases	15 days/ PADEP	LDEQ (DPS)/ 7 days	MDEQ / 10 days
Emergency Notification (Imminent threat to the health and safety of the public, environment, or property)	Immediately BLM	Immediate! Local Authorities and RRC	Immediately ODEQ	Immediately Constitutes "Major Release" (OCD)	Immediately NRC/PFBC 2 Hours/PADEP	1 hr DPS 24-Hour Louisiana Emergency Hazardous Materials Hotline	Immediately MDEQ
Land Owner Notification	Immediately	Within 24 hours	Immediately	N/A	N/A	N/A	N/A
Agency Reporting Numbers	BLM - 307-352-0237 NRC - 800-424-8802	SERC - 900-832-8224 TCEQ - 512-463-7727 or 512-239-2507 RRC - 512-463-6788 432-684-5581 NRC - 800-424-8802	DEQ - 800-522-0206 OCC - (Main Office) 405-521-2302, (Bristow District) 918-367-3395, (Kingfisher District) 405-375-5570 NRC - 800-424-8802	NMED - 866-428-6535 or (Emergency) 505-827-9329 NMEMNRD (OCD) - (Main Office 505-476-3440) (Artesia 575-626-0857) (Hobbs 575-393-6161) NRC - 800-424-8802	PADEP - 800-424-7362/717-651-2001 NRC - 800-424-8802 PFBC - 570-477-5717	LDEQ - DPS 24-Hour Louisiana Emergency Hazardous Materials Hotline# 225-925-6595 LOSCO (OEC) - 225-763-3908 or 225-342-1234 NRC- 800-424-8802	MDEQ OOGM - District Office PEAS - 800-292-4706 NRC - 800-424-8802

Information on Notification
- Name of person making notification and phone number for return calls
- Name and location (directional) of facility or site where discharge occurred
- Name of owner/operator of location or site
- Date and time the incident began and ended (Est, time of continuation)
- Extent of any injuries and identification of known hazards response agencies may face
- Description of spilled/discharged materials, including type and amount
- Brief description of incident
- Areal extent of spill or discharge
- Description of any actions that have been taken, are being taken, and will be taken to contain and respond to the discharge
- Location of spill with respect to the nearest fresh and usable water resources
- Amount of material recovered

Acronyms

NRC - National Response Center
ODEQ - Oklahoma Department of Environmental Quality
OCC - OKlahoma Corporation Commission
CEPR - Commission on Emergency Planning and Response
LEPC - Local Emergency Planning Committees
SERC - State Emergency Response Commission
TCEQ - Texas Commission on Environmental Quality
RRC - The Railroad Commission of Texas
PFBC - Pennsylvania Fish and Boat Commission
PADEP - Pennsylvania Department of Environmental Protection
DPS (Contact for LDEQ) - Department of Public Safety
LDEQ - Louisiana Department of Environmental Quality
LOSCO - Louisiana Oil Spill Coordinator's Office
OEC - Office of Environmental Compliance
MDEQ - Michigan Department of Environmental Quality
NMED - New Mexico Environment Department
NMEMNRD - New Mexico Energy, Minerals and Natural Resources Dept.
OCD - Oil Conservation Division

7.9 Wetlands and Waterways

The Clean Water Act addresses the disturbance of wetlands/waterways, which are regulated by the U.S. Army Corps of Engineers ("USACE"). Prior to disturbing wetlands/waterways, a federal 404 permit must be obtained from the USACE. If wetlands/waterways are encountered (or may be encountered), stop all work in the area. Coterra personnel should notify an EHS representative immediately so a determination can be made as to whether a wetland is present and whether a permit is required.

7.9.1 What Makes a Wetland?

A wetland may have one or more of the following characteristics:

- Soil is classified as "hydric" (water saturated) per the Soil Conservation Service, and displays characteristics of anaerobic conditions, like grayish soil and rotten egg odor.
- Over half of the existing plants in the area are not "upland" species and can grow in wetland conditions. Wetland plants are present that can live in water, e.g., willows, cattails, bullrush and lilies.
- The area exhibits wetland hydrology, whether containing water or not, such as drainage patterns, gulleys, swamp-type areas, debris lines, sediment deposits and watermarks.
- The area is supplied with water by either groundwater or surface water. The Soil Conservation Service usually classifies these areas as known or probable wetlands or will note that the area has seasonal high ground water.

If Coterra personnel suspect that an area may be a wetland, contact an EHS representative for support in determining if wetland regulations and permit requirements apply.

7.9.2 Wetlands and Pre-Construction Procedures

A wetlands review of the construction site (e.g., drilling, pipelines, or tank batteries) should be completed prior to commencing work. Any site that is determined to be a wetland must be permitted prior to the start of construction.

7.9.3 Guidelines for Working In or Near a Wetland

- A federal 404 permit or exemption is required prior to construction. All Coterra operations personnel working in the area must be familiar with and follow all permit requirements.
- Any release of oil or other regulated substance to a wetland must be treated as a release to surface water.
- Utilize best management practices ("BMPs") per the applicable Stormwater Pollution Prevention Plan ("SWPPP") to ensure potential or verified wetlands are protected.

7.9.4 Potentially Impacted Waterways

A federal 404 permit may be required for construction in a floodplain, crossing a navigable or intermittent waterway, or working within a USACE easement.

- A review of the construction site (e.g., roads, drilling, pipelines, or tank batteries) should be conducted to determine applicability.
- Any site that is determined to be in a regulated area must be permitted or be determined to be exempt prior to the start of construction.

A county or state permit may also be required for construction in a floodplain or crossing a navigable or intermittent waterway. Permits must also be updated when the main footprint of the location is changed.

7.10 Field Audits And Inspections

From time to time, representatives of federal and state agencies may conduct inspections of Coterra facilities. You should take the following steps:

- Verify and document the credentials, including obtaining all contact information, of any individual who identifies themselves as an inspector before allowing an inspection or visit at Coterra locations.
- Notify your supervisor and the EHS Department as soon as possible. If possible, request the inspection be postponed for a reasonable time until the superintendent, division manager, and/or the EHS Department arrives to accompany the inspector. The inspector must comply with Coterra safety requirements when on at a Coterra location, including all required PPE.
- Accompany the inspector at all times. A designated employee should maintain a detailed record of the inspector's activities.
- Do not guess or speculate in answering questions.
- The inspector is permitted to review documents that are relevant to the inspection. Keep copies of anything released.
- If the inspector takes air, soil, or water samples, request split samples, or obtain duplicate samples, if possible.
- Do not sign any documents prepared by the inspector.
- Make a list of any documentation given to the inspector and provide the list to Coterra's Legal and EHS Departments as soon as possible.

The EHS representative for the local plant/field location where the inspection occurred will prepare a comprehensive memorandum as soon as the inspection has been completed.

Coterra has a variety of legal and operational resources both to ensure your compliance with federal, state, and local laws and to provide support and advice to you at any time. You should not try to interpret rules and regulations beyond the materials presented in this Handbook, but instead seek advice from the EHS Department.

8. First Aid

Training

All field and plant employees who do not work near a medical facility are to receive first aid and CPR training and maintain a valid completion card. Employees who may be required to work as a supervisor or attendant during confined space entry must be trained in CPR.

Coterra employees are not required to render first aid or CPR unless the performance of first aid responsibilities is part of an employee's designated job duty, or the employee is participating in a special emergency medical response organization. If an employee is required to render medical assistance as part of their duties, they must receive training on bloodborne pathogen exposure control (See Bloodborne Pathogens Exposure Control section of this Handbook for additional information).

Office employees whose work location is not near the nearest hospital or medical facility shall receive first aid training. Medic First Aid, American Heart Association, EMS Safety Services, and American Red Cross training classes are the approved training courses for each field or district office. All training shall be documented.

The Coterra EHS Department and or the field/plant supervisor shall coordinate or conduct CPR and first aid training so that employees receive valid cards and adequate refresher training according to training course requirements.

First Aid Materials

- First aid kits shall be located for easy access and all employees shall be familiar with their location.
- First aid kits should be stocked as needed and should include the appropriate PPE for bloodborne pathogens.
- First aid kits/supplies shall be routinely inspected to ensure they are adequately stocked. It is suggested that the inspection be documented.
- Where the eyes or body of any worker may be exposed to injurious corrosive materials, eyewash stations for quick drenching or flushing of the eyes and body shall be provided within the work area for immediate emergency use.
- Automatic External Defibrillators (AED) will be available at all Coterra manned facilities.

Dangerous Pests

Stinging insects and poisonous spiders are frequently found around meter houses, under tank stairways, and near other installations. Employees should check for these dangerous pests when working around production facilities.

Snakes, rodents, and other animals are common in some field locations. Avoid contact with these animals. Care should be taken when walking in brush or any area where ground visibility is poor or obstructed. Snakebite kits and chaps may be provided when determined appropriate in areas where poisonous snakes may be encountered. If bitten by a snake:

- Seek medical attention as soon as possible. Dial 911 or contact local medical emergency services.
- Try to remember the color and shape of the snake. This can help with the treatment of the snakebite.
- Remain calm and still. Avoid activity that increases blood circulation (i.e., increases heart rate). This can slow the spread of venom.
- Inform your supervisor.
- Apply first aid if you cannot get to a hospital right away.
- Lay or sit down with the bite below the level of the heart.
- Wash the bite with soap and water.
- Cover the bite with a clean, dry dressing.

Ticks

Ticks are another insect that can be found in some areas of Coterra's field facilities. Ticks are most active during warmer months, but it is a good idea to take preventative measures year-round. Avoid wooded and brushy areas with high grass and walk in the center of trails. Repellants containing DEET or Permethrin should be used. Other recommendations are:

- Bathe or shower immediately after coming indoors to wash off and find ticks that are crawling on you.
- Conduct a full-body tick check.
- Examine gear and equipment for ticks, as ticks can stay on equipment and then attach to a person later.

Pets

Employee pets are prohibited at Coterra locations and in Coterra-owned vehicles to prevent distractions and to avoid animal bites to employees, contractors, or visitors.

Poison Ivy, Poison Oak, and Sumac

Poison ivy, poison oak and sumac may be found in some areas of Coterra's field operations. Employees should familiarize themselves with the differences between the three types of plants and avoid contact. When the plants are damaged, an oil is released, which is what causes symptoms. Symptoms may include rashes or blistering and can take up to 72 hours to develop. The following actions are recommended to treat symptoms:

- Immediately rinse your skin with lukewarm, soapy water. Ideally, you should wash your skin immediately after touching poison ivy, poison oak or sumac.
- Wash any clothing that you were wearing when you encountered the poisonous plant.
- Wash everything that may have oil from the poisonous plant on its surface.
- Do not scratch rashes, blisters or other areas of your skin that may have been exposed.
- Take short, lukewarm baths.
- Consider calamine lotion or hydrocortisone cream for itching.
- Apply cool compresses to the itchy skin.

Heat Stress

Employees can become overheated while working in hot conditions. Frequent breaks, plenty of water and proper work management assists with the control of potential heat exposure. Employees should know the signs and symptoms and first aid measures for heat cramps, heat exhaustion and heat stroke. Some guidelines are:

- Start hydrating the night before you will be working in hot conditions.
- Drink cool water. Anyone working in a hot environment should drink small amounts of cool water frequently – one cup every twenty minutes.
- Avoid alcohol, coffee, tea, and caffeinated soft drinks, which cause dehydration.
- Use sunscreen and wear a hat when working outdoors. Avoid getting sunburned.
- Use cooling trailers, if available. Some locations require cooling trailers at sustained temperatures above 100°.
- Work less and rest more. Supervisors should assign a lighter workload and longer rest periods during days of intense heat. Short, frequent work-rest cycles are best. Longer rest periods should be held in a cooler area, and heavy work should be scheduled for cooler parts of the day.
- Notify your supervisor if you have experienced a heat-stress related incident in the past.

Cold Stress

When the body is unable to warm itself, serious cold-related illnesses and injuries may occur, and permanent tissue damage and death may result. Our best defense against cold related injuries is to prioritize and limit outside work during temperature and wind chill extremes, and to use the correct PPE for any outside work. Pay special attention to protection of the face, head, hands, wrists, and feet. Types of cold stress include trench foot, frostbite, and hypothermia.

Environmental factors that can cause or contribute to cold stress are:

- air temperature,
- wind speed,
- wet environments,
- wetness/dampness

Hypothermia is the lowering of the body core temperature to the point where it is no longer functioning properly. Symptoms include intense shivering, poor coordination, stumbling, loss of memory, thickness of speech and drowsiness. Hypothermia is insidious, and left untreated, may result in collapse and death. It is important to note that most hypothermia cases are reported during cool weather. You should treat victims to prevent further heat loss, contact emergency services, and transport as soon as possible as directed to a medical facility.

Dehydration, or the loss of body fluids, occurs gradually in the cold environment and may increase the susceptibility of workers to cold injury due to a significant change in blood flow to the extremities. Warm, sweet drinks and soups should be taken to the work site to provide caloric intake and fluid volume.

9. Reference Section

GHS Pictograms

Health Hazard

- Carcinogen
- Mutagenicity
- Reproductive Toxicity
- Respiratory Sensitizer
- Target Organ Toxicity
- Aspiration Toxicity

Flame

- Flammables
- Pyrophorics
- Self-Heating
- Emits Flammable Gas
- Self-Reactives
- Organic Peroxides

Exclamation Mark

- Irritant (skin and eye)
- Skin Sensitizer
- Acute Toxicity
- Narcotic Effects
- Respiratory Tract Irritant
- Hazardous to Ozone Layer (Non-Mandatory)

Gas Cylinder

- Gases Under Pressure

Corrosion

- Skin Corrosion / Burns
- Eye Damage
- Corrosive to Metals

Exploding Bomb

- Explosives
- Self-Reactives
- Organic Peroxides

Flame Over Circle

- Oxidizers

Environment

- Aquatic Toxicity

Skull and Crossbones

- Acute Toxicity (fatal or toxic)

Spills to Land	Bureau of Land Management	Texas	Oklahoma	New Mexico	Pennsylvania	Louisiana	Michigan
Oil & Condensate	≥10 bbls liquid >50 MCF gas	5 bbls RRC	≥10 bbls OCC	"Minor Release" >5 bbls up to 25 bbls "Major Release" - > 25 bbls NMEMNRD (OCD)	>5 gallons/PADEP	≥1 bbls LOSCO	Any amount unless < 1 bbl, release occurs while authorized representative is on site, and spill is completely contained and cleaned up within 1 hour / MDEQ OOGM
Produced Water	≥ 10 bbls liquid ≥ 50 MCF gas	>250 bbls RRC courtesy call	≥10 bbls OCC	"Minor Release" >5 bbls up to 25 bbls "Major Release" - > 25 bbls NMEMNRD (OCD)		≥1 bbls LOSCO	
Diesel & Gasoline	≥ 10 bbls liquid	25 gals RRC & TCEQ	Any amount ODEQ (Immediately) & OCC	Any amount NMED (Immediately)		Any amount LDEQ (DPS) & LOSCO (Immediately)	
Hazardous Chemicals	RQ on SDS or Table 302.4 BLM, NRC	RQ on SDS or Table 302.4 RRC, TCEQ, NRC	RQ on SDS or Table 302.4 OCC, ODEQ, NRC	RQ on SDS or Table 302.4 NMED, NRC	RQ on SDS or Table 302.4 PADEP	RQ on SDS or Table 302.4 LDEQ (DPS), LOSCO, NRC	RQ on SDS or Table 302.4 LEPC, SERC, NRC
Remediation	Interim reports as appropriate C-141 form	360 days - RRC 30 days - TCEQ	CTRA will comply with remediation time requirements per agency	ASAP	ASAP	ASAP	ASAP
Initial Notification	BLM - Oral or email within 24 hrs NRC - Immediately	RRC, TCEQ, SERC - 24 hr NRC - Immediately	OCC - 24 hrs ODEQ & NRC - Immediately	"Minor Release" OCD - 15 days "Major Release" OCD - 24 hrs NRC - Immediately	2 hours - PADEP NRC - Immediately	LDEQ (DPS) - 1 hr LOSCO (OEC) - 24 hrs NRC - Immediately	MDEQ (Immediately) NRC - Immediately
Written Notification	BLM - Within 15 days of the event	RRC>5 bbls Crude Oil Form H-8 and Final report upon completion of cleanup TCEQ/RRC	OCC/ Written or oral report with District Office within 10 days	NMEMRD (OCD)/ Form C-141 (15 days) All Releases	15 days/ PADEP	LDEQ (DPS)/ 7 days	MDEQ / 10 days
Emergency Notification (Imminent threat to the health and safety of the public, environment, or property)	Immediately BLM	Immediatel Local Authorities and RRC	Immediately ODEQ	Immediately Constitutes "Major Release" (OCD)	Immediately NRC/PFBC 2 Hours/PADEP	1 hr DPS 24-Hour Louisiana Emergency Hazardous Materials Hotline	Immediately MDEQ
Land Owner Notification	Immediately	Within 24 hours	Immediately	N/A	N/A	N/A	N/A
Agency Reporting Numbers	BLM - 307-352-0237 NRC - 800-424-8802	SERC - 800-832-8224 TCEQ - 512-463-7727 or 512-239-2507 RRC - 519-463-6788 432-684-5581 NRC - 800-424-8802	DEQ - 800-522-0206 OCC - (Main Office) 405-521-2302, (Bristow District) 918-367-3396, (Kingfisher District) 405-375-5570 NRC - 800-424-8802	NMED - 866-428-6535 or (Emergency) 505-827-9329 NMEMNRD (OCD) - (Main Office 505-476-3440) (Artesia 575-626-0857) (Hobbs 575-393-6161) NRC - 800-424-8802	PADEP - 800-424-7362/717-651-2001 NRC - 800-424-8802 PFBC - 570-477-5717	LDEQ - DPS 24-Hour Louisiana Emergency Hazardous Materials Hotline/ 225-925-6595 LOSCO (OEC) - 225-763-3908 or 225-342-1234 NRC- 800-424-8802	MDEQ OOGM - District Office PEAS - 800-292-4706 NRC - 800-424-8802

Information on Notification

- Name of person making notification and phone number for return calls
- Name and location (directions) of facility or site where discharge occurred
- Name of owner/operator of location or site
- Date and time the incident began and ended (Est. time of continuation)
- Extent of any injuries and identification of known hazards response agencies may face
- Description of spilled/discharged materials, including type and amount
- Brief description of incident
- Areal extent of spill or discharge
- Description of any actions that have been taken, are being taken, and will be taken to contain and respond to the discharge
- Location of spill with respect to the nearest fresh and usable water resources
- Amount of material recovered

Acronyms

NRC - National Response Center
ODEQ - Oklahoma Department of Environmental Quality
OCC - Oklahoma Corporation Commission
CEPR - Commission on Emergency Planning and Response
LEPC - Local Emergency Planning Committees
SERC - State Emergency Response Commission
TCEQ - Texas Commission on Environmental Quality
RRC - The Railroad Commission of Texas
PFBC - Pennsylvania Fish and Boat Commission
PADEP - Pennsylvania Department of EnvironmentalProtection
DPS (Contact for LDEQ) - Department of Public Safety
LDEQ - Louisiana Department of Environmental Quality
LOSCO - Louisiana Oil Spill Coordinator's Office
OEC - Office of Environmental Compliance
MDEQ - Michigan Department of Environmental Quality
NMED - New Mexico Environment Department
NMEMNRD - New Mexico Energy, Minerals and Natural Resources Dept.
OCD - Oil Conservation Division

Severity	Probability				
	A	B	C	D	E
5	2	3	4	4	4
4	1	2	3	4	4
3	1	2	2	3	4
2	1	1	2	2	3
1	1	1	1	1	2

Probability		
A	Unlikely	Historical or expected occurrence less than once every 10 years at 1 of 1000 similar facilities (<1/10,000; <0.01%)
B	Seldom	Historical or expected occurrence of once a year at one of 1000 similar facilities (<1/1,000; <0.1%)
C	Occasional	Historical or expected occurrence of once a year at 1 of 100 similar facilities, (<1/100; <1%)
D	Likely	Historical or expected occurrence of once per year at 1 of 10 similar facilities (<1/10; <10%)
E	Frequent	Historical or expected occurrence of more than once per year at each similar facility. (>1/10; >10%)

	Severity/Consequence				
	1	2	3	4	5
	Insignificant	**Low**	**Medium**	**High**	**Severe**
People	First Aid Incident	Recordable Injury	Lost time injury, restricted work or transfer due to injury	Significant Injury or Fatality (SIF)	Multiple SIF Injuries
Environment	Unreportable incident with no mitigation required.	Minor environmental damage, effects confined to immediate site of incident and limited remediation required.	Moderate environmental damage with remediation to occur within the short term.	Severe short term environmental damage with long-term remediation requirements.	Severe long term environmental damage with multi-year remediation requirements.
Asset/Financial	Near miss or event with minimal impact to operations. Impact of <$10K.	Near miss or operational upset that is brought under control relatively quickly. Impact of $10K-$100K.	Event leading to an operational shutdown. Unit quickly returned to operation. Impact of $100K-1MM.	Event leading to an extended or extensive operational shutdown. Unit quickly returned to operation. Impact of $1-10MM.	Event leading to a system wide or regional operational shutdown. Impact of >$10MM.
Reputation	Internal attention only.	Company wide attention, low-level regulatory attention, or brief local area attention.	Prolonged local area attention, upper-level regulatory attention, or brief regional attention.	Prolonged regional attention, governmental attention beyond the regulatory body, or brief national attention.	Prolonged national attention or high-level governmental attention.

High — **Severity of Incident** — Low

Higher — **Incident Type Ranking** — Lower

Incident Type	Level 3	Level 2	Level 1
Injury / Illness	OSHA Serious or Coterra Significant Injury Fatality	Recordable Injury - DART	Recordable Medical Injury
Exposure	> IDLH	> PEL or unknown	< PEL
First Aid	Medical visit required	Major cut or injury with swelling	Minor cut, scrape, or bump (Band-aid)
Fire/Explosion/Electrical Arc	Not immediately controlled	Extinguished by fire extinguisher	Self Extinguished
Line Strike	Pipelines > 500 psig or pipe failure Electric lines >220V	Pipelines 25 psig to 500 psig Electric lines <220V	Pipelines < 25 psig Communication and automation lines
MVI	>40 MPH; Multiple vehicles are a "total loss"	10 - 40 MPH; Vehicle unable to be driven from location	<10 MPH; Vehicle can be driven from incident safely
Release - Spill Event	Waterway Impact or >1000 BBL inside containment or >100 BBL outside containment	State Reportable or 10 - 100 BBL inside containment or <100 BBL outside containment	Not State Reportable or < 10 BBL inside containment
Emission Event	Release > 3 MMscf or reportable to CSB	Agency Reportable	Non-reportable Event
Equipment or Property Damage	> $122,000	$50,000 - $122,000	< $50,000
Theft	> $122,000	$50,000 - $122,000	< $50,000
Water Complaint	Coterra affected	Within presumption	Outside presumption
Wildlife	Threatened or endangered	Reasonably assumed due to Coterra Operations	Not due to Coterra Operations
Notification Protocol	CEO, VP, BU Manager, Manager, Super, EHS, Foreman	VP, BU Manager, Manager, Super, EHS, Foreman	Manager, Super, EHS, Foreman, BU Manager

This document does not address all confined spaces and all potential situations for the confined spaces listed. If you have questions, contact your EHS representative.
If there are simultaneous operations (SIMOPS); special considerations will need to be evaluated.

In Operation							
	Likely Hazards						
Confined Space	Hazardous Atmosphere	Engulfment	Converging Walls	Other Serious Hazard	Permit Required Confined Space?	Rescue Type	Comments
Frac Tanks (manway)	Yes	Yes	No	No	Yes	Retrieval	
Frac Tanks (hatch)	Yes	No	No	No	No	N/A	No potential for bodily entry
Production Tanks (manway)	Yes	No	No	No	Yes	Retrieval	
Production Tanks (non-manway)	Yes	No	No	No	No	N/A	No potential for bodily entry
Pressure Vessels (manway)	Yes	No	No	No	Yes	Retrieval	
Pressure Vessels (non-manway)	Yes	No	No	No	No	N/A	No potential for bodily entry
Cooler / Chiller (doorway)	Yes	No	No	Mechanical	Yes	Retrieval	
Cooler / Chiller (non-doorway)	Yes	No	No	Mechanical	No	N/A	No potential for bodily entry
Well Cellar < 5' (uncovered)	Yes	No	No	Overhead	Yes	Retrieval	
Well Cellar > 5' (uncovered)	Yes	No	No	Overhead	Yes	Mechanical	
Well Cellar (covered)	Yes	No	No	No	No	N/A	No potential for bodily entry
Bell Hole > 4' (active pipeline)	Yes	No	No	Cave-in	Yes	Retrieval	Properly sloped bell holes are not considered confined spaces
Bell Hole < 4' (active pipeline)	Yes	No	No	No	No	N/A	Properly sloped bell holes are not considered confined spaces
Bell Hole > 4' (inactive pipeline)	No	No	No	Cave-in	Yes	Retrieval	Properly sloped bell holes are not considered confined spaces
Bell Hole < 4' (inactive pipeline)	No	No	No	No	No	N/A	Properly sloped bell holes are not considered confined spaces
Mud Pit	Yes	Yes	No	Overhead	Yes	Retrieval	

Coterra Hot Work Requirement Matrix					
	Type of Hot Work	**Open Flame**	**Non-Open Flame**	**Mobile Devices**	**Intrinsically Safe[4] Devices**
	Examples:	Welding, cutting, grinding, torching, abrasive blasting, or device that produces visible sparks.	Cordless drills, impact wrenches, hydraulic tools, portable internal combustion engines, vehicles.	Camera, cell phone, laptop, tablet, smart watch.	Device must be labeled, and manufacturer approved for Class 1 Div. 1 use.
Work Area	Class 1 Div. 1 or 2 Classified Area[1].	• Hot Work Permit • Continuous Gas Testing • Fire Watch	• Hot Work Permit • Initial Gas Testing • Continuous Gas Testing[5]	• Initial Gas Testing when in exclusion zones[3]	• None
	Outside of: Div. 1 or 2 but not in a designated safe hot work area.	• Hot Work Permit • Initial Gas Testing • Continuous Gas Testing[5] • Fire Watch[2]	• None	• None	• None
	Designated safe hot work area.	• None	• None	• None	• None

[1] Any work within 10 feet of a Class 1 Div. 1 and 2 area. Examples may be, but not limited to, flanged piping, relief valves, rupture disks, vents, etc.

[2] Unless combustibles are drenched, covered, or removed greater than 35 feet from open flame hot work.

[3] Exclusion Zone:

- Within 10 feet of an oil storage truck while it is being loaded, walkways at the rooftops of hydrocarbon storage tanks or on top of tank roofs, in wellhead cellars or below grade trenches in hydrocarbon producing areas.
- 10-foot radius around well center from substructure to rig floor, within 10 feet of mud tanks, trip/return tanks, and shakers.
- Inside storage tanks or other vessels until cleaned and hydrocarbon free.
- In enclosed buildings with hydrocarbon containing production equipment inside.
- In any other location with a known hazardous atmosphere present (e.g., pulling a casing head off a compressor, pulling a flow line, etc.).

[4] A device which is termed "intrinsically safe" has been designed to be incapable of producing heat or spark sufficient to ignite an explosive atmosphere, even if the device has experienced deterioration or has been damaged. Intrinsically safe covers must be labeled as such and are acceptable.

[5] If Permit Approver deems area has potential hazards that may require continuous gas testing.

Hand Signal	Description	Hand Signal	Description	Hand Signal	Description
	**Extend Boom -** Both fists in front of body with thumbs pointing outward (used for telescoping booms).		**Travel the Crane or Bridge -** Arm extended forward hand open and slightly raised making a pushing motion in the direction of travel.		**Retract Boom -** Both fists in front of body with thumbs pointing inward (used for telescoping boom).
	**Routine Stop -** Arm extended, palm down, move arm back and forth horizontally.		**Emergency Stop -** Arms extended, palm down, move hand rapidly right and left.		**Travel the Trolley -** Palm up, fingers closed with thumb pointing in direction of motion, jerking hand horizontally.
	**Raise Boom and Lower the Load-** With arm extended, thumb pointing up, flex fingers as long as load movement is desired.		**Lower Boom and Raise the Load -** With arm extended, thumb pointing down, flex fingers as long as load movement is desired.		**Move Slowly -** Use one hand to give motion signal and keep other hand motionless, placed in front of hand giving motion signal. Example is Hoist Slowly.
	**Raise Boom -** Arm extended, fingers closed, thumb pointing upward.		**Lower Boom -** Arm extended, fingers closed, thumb pointing downward.		**Rotate -** Arm extended, point with finger in direction of swing boom.
	**Hoist -** With forearm vertical and forefinger pointing up move hand in small horizontal circles.		**Lower -** With forearm extended and forefinger pointing downward, move hand in small horizontal circles.		**Dog Everything -** Clasp hands in front of body.
	**Use Main Hoist-** Tap fist on head, then use regular signals to hoist or lower.		**Use Auxiliary Hoist -** Tap elbow with one hand, then use regular signals to hoist or lower.		**Signalman Transfer -** Two sides of helmet with both fists then point to new signalman; repeat until confirmed by operator.

Action	What to Do (PASS)
	Pull the pin. Hold the extinguisher with the nozzle pointing away from you and release the locking mechanism.
	Aim low. Point the extinguisher nozzle at the base of the fire.
	Squeeze the lever slowly and evenly while directing the chemical stream at the base of the flames.
	Sweep the nozzle from side-to-side across the base of the flames.

Safety

Production