



CONTRACTOR SAFETY HANDBOOK

Version 2 - 2024

Safety Commitment

We are committed to Zero Incidents because we care about each other, our families, and the communities where we live, work, and serve our customers. We are committed to a safety culture that delivers top-tier safety performance through individual ownership, operational discipline, shared learning, and prompt action.

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Introduction

At Williams, the protection of people, the environment, and property is our top priority. The focus on health, the environment and safety shall not be compromised to achieve any other business objective. As such, this Contractor Safety Handbook outlines minimum requirements for Contractors performing work onsite for Williams (“the Company”). It is not comprehensive and all OSHA and EPA regulations, as well as Williams Safety Procedures, must be followed. References to Williams internal documents are made throughout this handbook. If you have additional questions about specific Williams requirements, contact your local Williams Representative for access to additional information while working on a Williams facility or project.

While working onsite for Williams, Contractors will:

- Maintain a safe working environment at all times.
- Perform work in compliance with all applicable rules, regulations, orders, standards and laws.
- Contractor shall supply workforce labor appropriately qualified to safely, and competently, carry out job tasks within their Contractual Work scope. Contractor shall have a documented competency assurance process for all tasks.
 - OQ work may be applicable to your job task, visit your local Williams Representative for more details.
 - For operator qualifications (OQ’s) refer to the Company’s Contractor Compliance Provider (CCP) for detailed list.
- Provide and maintain required Personal Protective Equipment (PPE). Train employees on proper use of PPE.
- Be informed of any worksite hazards and emergency preparedness information specific to the worksite.
- Properly protect all individuals on or near the worksite from risks to health or safety.
- Protect assets, property, and the environment from damage or loss.
- Not tolerate any activity or condition that is hazardous, unsafe, unhealthful, or environmentally unsound.
- Understand that Contract employees are subject to random and reasonable inspections and searches on and around William’s worksite. Williams reserves the right to deny access or the use of any equipment or substance brought onsite.

Non-compliance with regulations and requirements will result in the Contractor and associated employees being removed from worksite.

Scope and Applicability

The requirements in this handbook apply to Contractors and their subcontractors performing work onsite for Williams. This includes work performed on property owned, leased, or occupied by the Company.

The primary Contractor is responsible for the health and safety of their employees and subcontractors.



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Worksite-specific requirements may be stricter than the requirements listed within the Contractor Safety Handbook. Always follow site-specific requirements.

Definitions

Term	Definition
Applicable Codes and Standards	Those codes and standards, in their latest issue as of the effective date, specified, attached, or referenced in the applicable Contract which are applicable to the work or any portion thereof. For any part of the work where no such codes and standards are expressly specified, use industry codes, standards, guidelines, and best practices, in their latest issue as of the effective date, generally accepted and followed by reputable and prudent firms experienced in the type of work to be performed under the applicable Contract. Applicable Codes and Standards does not include codes adopted or issued by a Governmental Authority, which are deemed to have the effect of Law.
Brownfield	Any facility or pipeline right of way where hydrocarbons have been or currently exist.
Greenfield	The construction of a new facility, including a pipeline, at a site where no other facility or pipeline is currently located, and no hydrocarbons exist.
Competent Person	A person capable of identifying existing and predicable hazards in the surroundings of working conditions that are unsanitary, hazardous, or dangerous to personnel and who has authorization to take corrective measures to eliminate these hazards. A Competent Person should be able to demonstrate the following: <ul style="list-style-type: none"> • Training, experience, and knowledge of: <ul style="list-style-type: none"> ○ Soil Analysis ○ Use of protective systems and ○ Requirements of Part 1926 Subpart P • Ability to detect: <ul style="list-style-type: none"> ○ Conditions that could result in cave-ins. ○ Failures in protective systems. ○ Hazardous atmospheres and ○ Other hazards including those associated with confined spaces • Authority to take prompt corrective measures to eliminate existing and predictable hazards and to stop work when required.
Contractor	The person identified in the introductory paragraph of the applicable Master Terms; provided, however as to each Contract formed, "Contractor" means the Contractor Group entity executing the Procurement Contracts.
Contractor Primary Authorized Employee (PAE)	A Contractor employee identified for reviewing the work, identifying the isolation points, and leading group LOTO for Contractor Authorized Employees working directly for that company.
Company Provided Resources	Materials, equipment, supplies, utilities, reports, services, or information to be supplied by Company as set forth in the applicable Contract.
Excavation	Any man-made cut, cavity, trench, or depression in an earth surface, formed by earth removal. Digging, blasting, boring, tunneling, drilling or other trenchless



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Term	Definition
	technology, backfilling, removal of above-ground structures by explosive or mechanical means, and any other earth moving operations.
Hot Work	<p>Work task that:</p> <ul style="list-style-type: none"> • Produces or could produce sufficient heat or spark to cause ignition • Generates or could generate static electricity • Uses non-explosion proof or non-intrinsically safe equipment <p>EXAMPLES: Welding, grinding, brazing, abrasive blasting, cutting, use of combustion engine, use of power tools, work on an open electrical panel, spray painting, use of non-intrinsically safe testing equipment, etc.</p>
Incident	An event that involves personal injury or illness, fire, explosion, property damage, vehicle accident, equipment failure, environmental release, atmospheric release, regulatory inspection, regulatory citation, theft or adverse media or political attention.
Hazard Identification (HazID)	An unsafe act or unsafe condition with no event.
Intrinsically Safe Equipment	Equipment tested and rated by approved testing laboratory. Laboratory certifies the equipment is incapable of releasing enough energy to cause ignition of flammable vapors. Must be clearly marked with approved rating.
Job Safety Analysis (JSA)	<p>A field-based tool that provides workers with three main categories of information while performing task specific work.</p> <p>These include:</p> <ul style="list-style-type: none"> • Review process that captures specific steps with each individual job task. • The Sequence of Basic Job Steps – This is the order in which the work will be carried out and brief details of how tasks will be performed. • Potential Hazards – Involves listing hazards that are associated with the task (e.g., falling objects, hot surfaces, overhead powerlines, adjacent work, etc.). • Safety Controls to Reduce or Eliminate the Hazard – Describes the precautions that will be taken to eliminate or safely control the hazard (e.g., engineer out the hazard, eliminate the hazard, administrative steps toward the hazard, wear proper PPE).
Nonessential vehicle	Vehicles that are not being used for company business
Law	All laws, statues, regulations, codes, rules, permits, ordinances, orders, injunctions, writs, decrees, or other requirements of any governmental authority having jurisdiction over the parties, the work or any work site.
Near Miss	An unplanned event that did not result in undesired consequence, including but not limited to injury, illness, or damage, but could have potentially resulted in injury, illness, or damage.
Rescue Service	Qualified employees or Contractors designated to rescue Authorized Entrants from Permit Required Confined Spaces.



Term	Definition
Subcontractor	Any subcontractor, vendor, supplier, manufacturer, consultant or independent contractor, of any and all tiers, that: <ul style="list-style-type: none"> • Performs any part of the work. • Fabricates, manufactures, builds or provides any goods. • Leases, charters, or rents supplies, tools, construction aids and/or equipment in connection with the performance of work. • Provides any services in connection with the work.
Weapon	Weapons include any object or instrument designed to be used or that is used in such a manner as to be threatening or to cause bodily injury or death to another person (e.g., firearms, handguns, ammunition, knives with blades more than 4-inches long, any size switchblade knife or other knife having an automatic spring release device, bombs, etc.).
Work	The services, deliverables, and goods Contractor Group has agreed to provide pursuant to the applicable Contract.
Worksite	Any location where work is performed pursuant to the applicable Contract.

Contractor Worksite Orientation

A Williams orientation must be completed prior to going on site reviewing general safety requirements. A site-specific orientation may also be required depending on the area in which you are working. Both require acknowledgement and could require a knowledge check, depending on the area.

Smoking

Smoking and vaping is permitted only in designated smoking areas. Confirm designated smoking area with Williams representative.

Cell Phone Use

Cell phone use on Company worksites is prohibited unless granted by the Company’s authorized representative.

In addition, the use of cell phones or other electronic devices is prohibited while:

- Operating equipment
- Driving a vehicle
- Performing any activity in which a distraction may cause a potential safety threat

Consult with your Williams Representative for reference to: 02.10.01.04 Hot Work section of this handbook for additional detail on non-intrinsic devices

Housekeeping

Contractors must:

- Keep all work sites free from accumulation of waste material and trash.

- Keep walkways, stairways, and escape routes clear of all obstructions. Never block entries or exits, even temporarily.
- Maintain at least 3 feet of clearance around emergency equipment and electrical disconnects. Do not place or store equipment and or materials within this area.
- Dispose of scraps, trash, and other waste in proper containers. Place oily rags, waste or other combustible material in properly labeled metal containers. Always cover containers used for flammable or hazardous materials. Do not allow combustible materials, lumber, waste, and garbage to accumulate.
- Keep the work area and tools clean. Clear work areas of tools, welding rod ends, and metal shavings. Clean spills as soon as practical.
- Keep all material, tools and equipment tied, stacked, or chocked to prevent falling or rolling. Stack material so it can be accessed safely.

Drug & Alcohol/Contraband

The following policies apply to Contractor employees and subcontractors:

- Drugs and alcohol are not allowed at Williams worksites.
- Individuals are not allowed on the worksite if they are under the influence of alcohol or a controlled substance.
- Prescription drugs must not impair safe work performance and must be used only as directed by physician.
- Williams may conduct or require Contractor to conduct an unannounced inspection of Contractor group members and their property.
- Williams may require random/unannounced D&A tests due to the results of a search or reasonable cause/suspicion, accident, incident, etc.
 - If a Contractor employee or subcontractor refuses any requested D&A test, the individual will not be allowed on Williams' worksites.
- Any Contractor employee found to be in violation of D&A requirements may be prohibited from providing services to Williams or entering any Williams owned or operated worksite.

Workplace Violence

Workplace violence is prohibited. Williams does not tolerate acts or threats of workplace violence. Always report incidents of threats or acts of workplace violence. Examples include:

- Abusive, obscene, or threatening language
- Comments of others advocating violent acts or threats
- Stalking behavior

The Williams Action Line can be reached at 800-324-3606 or online at www.williams.ethicspoint.com

Weapons

Possession or inappropriate use of weapons on Company property is prohibited.

Weapons are not allowed in the following locations:

- Property owned, leased, or occupied by the Company
- In vehicles, aircraft, boats, or parking areas owned or leased by:

- The Company
- An Employee or agent of the Company
- An individual performing services for the Company on a contract or temporary basis

Exceptions:

- Law enforcement personnel on official business
- Use by private armed security as authorized by the Director of Enterprise Security

Weather Hazards

Prior to beginning any outdoor work, check NOAA weather reports (weather.gov). Be aware of potential adverse weather conditions that could affect your work environment and plan accordingly. This can include thunderstorms, tornadoes, lightning, flooding, hail, sleet, snow, high winds and extreme temperatures.

Reference applicable site-specific Severe Weather notification protocols and practices prior to beginning onsite work.

Lightning Safety & Severe Weather Safety

Approaching severe weather including lightning hazards shall be anticipated and monitored based on activity and risk. Utilize tools such as weather apps, the internet, emergency radios, television, and lightning detection to determine if a storm is approaching.

- Review potential weather threats during the daily JSA discussion and determine monitoring protocol.
- Consider postponing activities that cannot be quickly stopped in the event of severe weather.
- Monitor early weather signs of potential severe weather such as high winds, dark clouds or distant thunder or lightning. Utilize active lightning detection tool(s) when hazard is present.
- If a lightning strike occurs within ten (10) miles of the Work location, cease all outdoor activities immediately and direct all employees to a safe location.
- Do not resume Work for a minimum of 30 minutes. If another strike occurs within ten (10) miles within the 30-minute wait period, then the 30 minute clock re-starts.

Additional protocols may be directed based on severe weather events and area specific requirements and/or project requirements and are not limited to lightning strikes.

Driving/Vehicle Operation

All-terrain vehicles (ATVs) are not allowed to be used at Company locations.

Contractors wanting to use UTVs or LSVs at Company locations or projects must receive approval ahead of use.

- LSVs such as golf carts or similar, must only be used on flat paved or packed gravel terrain.
- Impact rated eye protection is required for UTVs, or LSVs. DOT/Snell rated helmets and impact rated goggles or face shield protection is required for snowmobile operation.
- Drivers must possess a valid driver's license for the state in which they live for the class of vehicle being operated.

Operators must be qualified and trained for the equipment they are operating.

Non-essential vehicles shall be parked in designated parking areas.

When operating vehicles and equipment:

- Wear seat belts at all times.
- Observe all designated speed limits on Company or lease roads.
- Turn off all vehicles and equipment while fueling.
- Do not leave running vehicles unattended.

When parking vehicles:

- Manual transmissions:
 - Shift into low gear, turn off the ignition, and set the emergency brake.
- Automatic transmission:
 - Shift into park, turn off the ignition, and if parking on an incline set the emergency brake.
- Emergency brake performance may be negatively affected (freeze in place) by conditions such as ice, mud, and snow. Wheel chocks should be used as an alternate under such conditions.
 - Always chock the wheels of parked trailers, even if they are connected to vehicles.

Parking methods in preferred order:

- Drive in/drive out.
- Back in/drive out.
- Drive in/back out.

Utilization of a spotter in congested areas is recommended.

Consult with your Williams Representative for reference to: 02.10.02.10 – Snowmobile, UTV, and LSV Safety Program and 02.10.02.13 Motor Vehicle Driver Safety for additional information.

Personal Protective Equipment

Contractors must meet minimum PPE requirements when working onsite:

- Flame resistant clothing
- Hearing protection
- Eye protection
- Gloves
- Safety toed boots
- Hard hat
- Additional equipment based on the scope of work, work site requirements, or pre-job plan may be required

PPE Specifications and Standards

Safety Glasses:

Safety glasses shall meet ANSI Z-87+ standards. Side shields shall be worn on prescription safety glasses. In lieu of side shields, eye protection that can be worn over prescription lenses (goggles, face-

shields, etc.) without disturbing the proper position of the prescription lenses may be used. Safety glasses will be worn when goggles or face shields are removed during welding and flame cutting.

Gloves:

Select gloves appropriate for the work task to protect from cuts/lacerations, impacts, chemical or thermal exposure. All Contractors are required to have the appropriate gloves on their person when on a Company jobsite.

Hearing Protection:

Wear hearing protection with a minimum Noise Reduction Rating (NRR) of 25 in areas designated as "hearing protection required," unless the site-specific data indicates a lower NRR is acceptable. Wear earmuffs, in addition to ear plugs, in areas designated as "double hearing protection required." If ambient noise levels are above normal conversation volume, hearing protection must be worn in the area for the duration of the high noise task.

Hard Hat:

Hard hat must meet minimum standard ANSI Type 1, Class E. Class E (Electrical) hard hats are designed to reduce exposure to high voltage conductors and offer dielectric protection up to 20,000 volts. Balaclavas and other hard hat liners must be flame resistant.

Offshore ONLY: Utilization of a hardhat lanyard or chin strap is required.

Safety Toed Boots:

Wear safety toed (steel or composite reinforced) boots, which meet ASTM F2413. No part of the steel or composite toe can be visible from outside of the footwear. Boots must have treaded soles and a defined heel. Non-ankle supported safety shoes and athletic shoes are not permitted. Boots must have toe, heel, and sole puncture protection, as well as spark-resistant soles. Boots and soles must resist liquid penetration to prevent the rapid passage of liquids. Non-sparking ice creepers may be worn.

FRC and Other Garments:

Wear FRC as the outermost layer when on any brownfield Company facility, including ROWs.

Brownfield projects EXCEPTION: FRC is not required to be worn in: Office areas, Vehicles, Break areas (outside of process areas).

Visit with your local Williams Representative on exceptions involving greenfield worksites.

Flame Resistant Clothing (FRC) must meet NFPA 2112 standard for flame resistant clothing for protection of industrial personnel. A minimum CAT 1 rating (4 cal/cm²) is required, except for electrical work, which requires a minimum of CAT 2 rating (8 cal/cm²).

Rainwear must meet the requirements of ASTM F 2733-09 Flame Resistant Rainwear for protection. Rainwear may be worn as the outer layer if it is worn over FRC garments that meet the requirements of NFPA 2112.

Shirts must be long sleeved. Shirts must be worn fully buttoned excluding the collar button. Sleeves must be worn down and buttoned at the wrist. The FRC primary layer shirt may be left untucked when the NFPA 2112 undershirt (short sleeve or long sleeve) is tucked into the pants.

Pants must be full length. Pants must be worn over boots. Exception: Pants may be tucked in or covered by snake boots or muck boots.

Coveralls can be worn in lieu of shirt/pant combination and must be worn fully zipped with sleeves worn down and fastened at the wrist. A statement must be printed legibly on the outerwear product label similar to: MEETS THE REQUIREMENTS OF NFPA 2112.

Wear garments under FRC that are FR clothing or made of natural cotton, wool, or silk fibers. Clothing with high percentage of synthetic or plastic fibers worn under FRC can melt causing injury due to heat transfer.

High Visibility Vests:

When working on any construction project, high visibility vests with the appropriate rating are required. Visit with your local Williams Representative for site specific requirements and exceptions.

Consult with your Williams Representative for reference to: 02.05.00.02 Personal Protective Equipment (PPE) and 02.05.00.06 Respiratory Protection for additional information.

Daily Safety Meeting

Contract employees and subcontractors are required to attend daily safety (“Tailgate”) meetings to discuss safety requirements, work site hazards, tasks, assignments, and review of the JSA.

Work Permitting

This section applies to all personnel performing work at Company sites/facilities and contractors working on brownfield facilities; this does not apply to greenfield projects. Contractor may elect to utilize Williams paperwork in addition to their own.

A Work Permit documents the conditions under which work will be performed and authorizes the work to begin. A Contractor performing work at property owned, leased, or occupied by the Company will be required to have a work permit issued by the company. Exception: A Work Permit is not required when the Contractor will only be conducting incidental services such as janitorial or office-based consulting. Contractor’s signatures on the Work Permit signifies understanding of the permit conditions for the work activity being performed.

Stop work immediately if deviations from the Work Permit, Work Plan or JSA arise and notify the Williams Job Lead to ensure work may continue.

Visit with your Williams Representative on specific local area requirements regarding permitting.

Job Safety Analysis (JSA)

Contractor is required to have a Contractor-specific Job Safety Analysis (JSA) for the work being performed. Exception: A JSA is not required when the Contractor will only be conducting incidental services such as janitorial or office-based consulting.

The JSA:

- Is required for all routine, non-routine, and high-risk work
- Must be completed prior to the job
- Must be thoroughly understood by all personnel working at the jobsite. This may require that the Contractor:
 - Provides copies of the JSA in multiple languages, in addition to English
 - Facilitates discussion and/or questions of the JSA via a translator

The JSA should include:

- Applicable emergency response mitigations
- Steps involved in performing the specific job
- Identification of existing or potential hazards associated with each step
- Recommended actions to reduce or eliminate identified hazards
- 911 address and GPS coordinates of work area, if not documented in other site safety daily paperwork

Consult with your Williams Representative for reference to: 02.10.01.14 – Safe Work Management for additional details.

Fall Protection

Contractors are required to follow their Fall Protection Program when working around unprotected heights of 4ft or greater for general industry and 6ft or greater for construction, per OSHA standards. Consult with your Williams Representative for additional details.

Contractors are required to wear a full body harness or positioning device with a proper anchor point when operating areal lifts.

Mitigations must be in place when working from heights if there is a potential for dropped objects.

Contractors may not utilize body belts as part of a personal fall arrest system. Body belts can only be used as part of positioning systems.

Depending on the task, the Company Job Lead may require additional fall protection during the issuance of a Work Permit.

Consult with your Williams Representative for reference to: 02.10.02.11 Walking/Working Surfaces for additional information.

Incidents & Reporting

Contractor shall verify that injured parties receive immediate and adequate medical care and that the appropriate level of case management (i.e., initial first aid, medical treatment, and follow-up surveillance) has been performed. The Contractor must notify Williams immediately upon discovery of any hazardous, unsafe, unhealthy, or environmentally unsound condition or work practice. For example:

- Incidents which include:
 - Injuries/Illnesses
 - Spills/Releases to the environment
 - Property damage
- Near misses

If an incident occurs on a Company worksite, the Contractor, within 24 hours of becoming aware of an accident, must provide to Williams:

- A copy of an initial incident report which includes the following:
 - Basic facts
 - Preliminary severity classification
 - Immediate and corrective actions

Dependent on the severity classification of the incident or near miss, an investigation may be requested by The Company. Contractor shall utilize a structured root cause analysis methodology. Reports will be made available to the Company.

- At a minimum, an investigation should:
 - Describe what happened, when, and where
 - Determine the actual and potential loss or losses
 - Determine the root cause of the incident
 - Determine the risk of recurrence
 - Develop controls to reduce the risk of recurrence
 - Communicate the lessons learned

Emergency Response Procedures

Always follow the worksite-specific Emergency Action Plan (EAP).

Unless specifically developed (or administered) by Company, Contractor shall develop a Strategic Emergency Preparedness Plan that addresses:

- Emergency Response Organization
- Detailed roles and responsibilities for the Emergency Response Organization
- Identification of potential incidents and associated action plans
- Responder and Non-responder Emergency Response Training
- Required lifesaving equipment and transportation systems
- Muster areas, means to account for Contractor Personnel, and associated procedures
- Alarms
- Training
- Drills
- Notification and reporting
- Emergency evacuations and egress routes
- Internal and external communications
- Incident Command System
- Provision of technical/logistical support to Worksites
- Interface management considerations between Contractor, Subcontractor and Company

Heat Related Illness

Occupational risk factors for heat illness include:

- Heavy physical activity
- Warm or hot environmental conditions
- Lack of acclimatization
- Wearing clothing that holds in body heat
- Personal risk factors, such as:
 - Medical conditions
 - Lack of physical fitness

- Previous episodes of heat-related illness
- Alcohol consumption
- Drug and use of certain medications

Encourage employees to drink fluids and take adequate breaks.

When any heat-related illness symptom is present, promptly provide first aid to the affected worker:

- Take the affected worker to a cooler area
- Cool the worker immediately
- Never leave a worker with heat-related illness alone

Cold Stress

When the body is unable to warm itself, serious cold-related illness and injuries may occur, and permanent tissue damage and death may result. Types of cold stress include trench foot, frostbite, and hypothermia.

In cold weather, make sure employees have appropriate clothing and gear. This may include:

- A hat or hood
- Knit mask to cover the face and mouth
- Insulated gloves to protect the hands
- Insulated and waterproof boots

Outer layer must comply with the PPE requirements noted above.

Fatigue Management

Contractors are required to have a fatigue management program in place which includes normal operations, extended shifts, and outages.

Hours of Services Limit Table

The hours of service listed below are maximum allowable limits and are not intended to be the basis for the design of regular shift schedules.

An extended shift is any shift that is more than 24 hours in duration but is not to exceed 18 hours.

Normal Operations

Total hours (including hand-offs, holdovers, commute time, and overtime) must not exceed:

- 14 hours per shift
- 92 hours per work-set (for straight day assignments, the work-set limits may be extended up to 105 hours)

Extended shifts must only be used to avoid an unplanned open safety critical position or accomplish an unplanned critical task and must be treated as an exception.

A work-set is considered complete when an Employee is off work for at least:

- 34 hours if the work-set did not include four or more night shifts
- 46 hours if the work-set did include four or more night shifts

Outages

Total hours worked (including shift turnovers, holdovers, commute time and overtime) must not exceed:

- 14 hours per shift
- 182 hours per work-set

Extended shifts must only be used to fill unplanned *open shifts* and must be treated as an exception.

A work set is completed when an Employee is off for at least 34 hours after.

Hot Work

Examples of hot work include abrasive blasting, welding, cutting, brazing, grinding, use of a combustion engine, use of cordless or corded power tools, work on an open electrical panel use of non-intrinsically safe equipment.

A Hot Work Permit is required when hot work is performed in a Class 1 Division 1 or Class 1 Division 2 area.

If hot work activities are performed with confirmed LEL levels between 0-10%, the source of the LEL must be identified, mitigated, and continuously monitored to ensure the LEL does not rise above 10%.

In greenfield worksites:

- Contractor will use their own hot work permitting system.

During commissioning and in brownfield locations:

- Contractor must work under an approved Company Hot Work Permit.

If spark-producing tasks are being performed outside of a classified area, but within 35 ft of a flammable or combustible hazard:

- A survey of the work area is required to identify and mitigate or remove fire hazards.
- If unable to mitigate or remove the fire hazard, a fire watch is required.

A fire watch may also be required by the Job Lead for other types of hot work in addition to that described above.

If required by the Hot Work Permit:

- The fire watch must be fully dedicated to monitoring the hot work throughout the job and must stay at least 30 minutes after hot work is completed to continue monitoring for signs of fire.
- Provide fully charged fire extinguishers or other fire suppression equipment dedicated specifically to monitoring the hot work.

Lockout/Tagout (LOTO)

This section applies to contractors performing work in a brownfield worksite whenever LOTO is required:

- A Williams Company Primary Authorized Employee (PAE) will perform the initial isolation. (Their personal energy isolation lock and ID LOTO tag will be the first one on and last one off.)
- Each Contractor company must designate a Contractor PAE for Contractor group LOTO activities. Their personal energy isolation lock and ID LOTO tag will be the first Contractor lock/tag on and the last contractor lock/tag off.

- Each Contractor authorized employee must apply their personal energy isolation lock and ID LOTO tag on the isolation points, hasp, or lockbox.
- Use F02-107-D – Energy Isolation (LOTO) – Section D – Group Lockout Tagout. A separate form for each Contractor group is required.
- Once the task is complete, make sure all Contractor authorized employees remove their personal energy isolation locks and ID LOTO tags from the designated lockbox or group lockout device.

Consult with your Williams Representative for reference to: 02.10.01.06 – Control of Hazardous Energy for additional information.

Spill and Release Management

Contractor is responsible for environmental issues arising from or caused by the work it performs.

Contractor shall be responsible for implementing proactive measures for spills, releases and environmental compliance.

Immediately report to the Company any spills and releases to the environment. See Incident Reporting section for reporting requirements.

In case of a spill:

- Stop the source of the spill, if able to do so without exposing personnel to a hazardous situation.
- Contain the spill with absorbent material.
 - The primary concern is to prevent spilled or released materials from leaving property and entering any waterway.
 - The clean-up procedure will be determined on a case-by-case basis.
- Notify a Williams Representative regarding the substance that was spilled, the location of the spill, and the volume of the spill.
 - All spills must be reported to Williams as soon as possible.
- Assess the impact of the spill to people, animals and land. If necessary, block public access to the area with barrier tape, traffic cones, or vehicles.

The Hazard Communication

Contractors bringing hazardous chemicals on Williams' facilities and rights-of-way must:

- Have a Safety Data Sheet (SDS) for each chemical
- Train their employees on the proper PPE and safeguards
- Store chemicals in proper containers with appropriate labels
- Inform Williams of each chemical brought on-site
- Remove chemicals and their containers when work is complete

Prior to beginning work, a Contractor representative must receive a safety briefing from a Williams employee or representative that includes the hazardous chemicals the contractor may be exposed to during their work activities. Contractors may request from the Williams representative any Safety Data Sheet for a hazardous chemical they may be exposed to.

Always be informed of any worksite hazards and emergency preparedness information specific to the worksite.

Contractors shall conduct their operations in such a manner that they constitute no hazard to Williams employees, equipment and or property, contractor employees, subcontractor and other invitees, the public, or the environment.

Non-Compliance with regulations and requirements will result in the Contractor and associated employees being removed from worksite. Williams reserves the right to conduct random and reasonable suspicion inspections and searches on and around Williams' worksites. Williams reserves the right to deny access or the use of any equipment or substance brought onsite.

Ground Disturbance

To protect underground facilities from damage due to excavation and demolition:

Damage Prevention

- It is a Williams policy for our contractors to follow state One-Call laws when disturbing soil below original grade.
- Work cannot begin until a positive response is received from all companies listed on the current One-Call ticket.
- A copy of the current One-Call ticket must be kept on site at all times for the duration of the excavation project.
- No backhoe/trackhoe bucket or mechanically supported load is allowed to swing over or be above any in-service pipeline.
- A Company Representative must be present whenever heavy equipment is being utilized or work is being done that causes ground disturbance on the right-of-way.

Excavation/ Trenching

Contractor must provide an excavation competent person to be on-site for all excavations. Training records or training certificates of completion for competent persons must be submitted to Williams prior to beginning work and upon additional contractor competent persons being added.

All excavations 4 feet deep or greater (or otherwise determined by the competent person) must be planned, properly evaluated, inspected, and documented by the competent person before entry of any personnel.

Contractor must provide their own atmospheric monitoring equipment and perform atmospheric monitoring of the excavation prior to entry.

To enter the excavation, monitoring results must meet the following:

- Percentage of oxygen between 19.5% - 23.5%
- Percentage of LEL less than 10%
- Less than 10 ppm Hydrogen Sulfide
- Less than 35 ppm Carbon Monoxide
- Other toxins below the Permissible Exposure Limit (PEL)

Atmospheric monitoring will be conducted as often as necessary to confirm safe atmospheric conditions exist.

Consult with your Williams Representative for reference to: 02.10.01.12 – Excavation and Trenching for additional information.

Confined Space

A confined space is any space that:

- Is large enough and so configured that an employee can bodily enter and perform assigned work. (Bodily entry means an employee is able to fit their entire body within the space.)
- Has limited or restricted means for entry or exit.
- Is not designed for continuous employee occupancy.

A Permit Required Confined Space is a confined space that has one or more of the following characteristics:

- Contains or has the potential to contain a hazardous atmosphere.
- Contains a material that has the potential to engulf 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.

For Contractors providing their own rescue service:

- Provide proper documentation (e.g., training records and certification) that a rescue or drill has been completed in the last 12 months for review by a Williams employee.
 - Entry performed by Contractor:
- Contractor must provide a Contractor Permit-Required Confined Space Entry Permit equivalent to Williams permit.
- The Williams Job Lead, in conjunction with the Williams Safety Specialist, must verify the completion of an equivalent entry permit.
- All Entrants, Entry Supervisor, and Attendant must be appropriately trained in accordance with OSHA Confined Space Entry requirements, and proof of completed training must be made available to Williams employees upon request.

Consult with your Williams Representative for reference to: 02.10.01.05 – Confined Space Entry for additional information.

Electrical Safety

Contractors must comply with the requirements of State or local electrical inspection agencies.

Electrical Contractors must be up to date on the NFPA 70E training (Every 3 years) and be deemed a Qualified Electrical Worker (QEW).

Only use hand tools that are double-insulated or used with ground-fault circuit interrupters.

In classified areas, intrinsically safe extension cords are required. Damaged extension cords must be discarded and removed from the work area.

Energized electrical work will only be performed by contractors that are deemed Qualified Electrical Workers (QEW) and will require an Energized Electrical Work Permit from a Williams Representative.

Consult with your Williams Representative for reference to 02.10.01.10 – Electrical Safety for additional information.

Overhead Utilities and Markings:

This section covers guidelines and requirements associated with overhead utilities including, but not limited to electrical powerlines.

When working under or near overhead powerlines, be sure to maintain minimum clearance distances (refer to NFPA 70E for proper distances **(tables below)** and use the following systems:

- Use a system (e.g., flags or goal posts) to help in marking the overhead lines. See additional guidance below.
- Install signage to alert personnel of overhead hazards and install physical barriers to limit access.
- Verify systems used are constructed so that they do not create an additional hazard.

Table A – Minimum Clearance Distances	
Voltage (nominal, kV, alternating current)	Minimum Clearance Distance (feet)
Up to 50	10
Over 50-200	15
Over 200-350	20
Over 350-500	25
Over 500-750	35
Over 750-1,000	45
Over 1,000	As established by the utility owner/operator or registered professional engineer who is a qualified person with respect to electrical power transmission and distribution.

Table B – Minimum Clearance Distances While Traveling With No Load	
Voltage (nominal, kV, alternating current)	While Traveling – Minimum Clearance Distance (feet)
Up to 0.75	4
Over 0.75-50	6
Over 50-345	10
Over 345-750	16
Over 750-1,000	20
Over 1,000	As established by the utility owner/operator or registered professional engineer who is a qualified person with respect to electrical power transmission and distribution.

Additional requirements shall be considered for protection of overhead utilities and employees on facility and pipeline construction and Company facility and right-of-way (ROW) work where applicable and shall include the following guidelines:

- Every overhead structure, power line, telephone line, cable, guide wire, etc., that crosses or encroaches within 25 feet of the ROW, or that crosses a temporary ROW access road, must be clearly marked. Marking system must be installed under these structures at both sides of both ends of the affected ROW, and the markers must be located within two feet of the point directly below the outside edges of the overhead structure unless the structure is an energized power line.
- Goal post markers will be installed before and after overhead power lines at both sides of both ends of the affected ROW at a minimum of 20 feet from directly below the power line. The goal post markers should be located at a distance from the power line that prevents equipment from approaching distances.
- Utility lines that parallel the ROW must be marked every 50 feet until they separate from the pipeline ROW by at least 25 feet. The overhead-structure and utility-line markers must be brightly colored, no less than five feet tall and must have a warning sign affixed to the marker.
- All cranes, aerial lifts, extended boom equipment, and excavation equipment operating within 100 feet of any overhead structure or utility line must have a dedicated spotter. Spotting procedure shall be established and performed by qualified/trained individuals.
- If markers and signs are damaged or removed, Work shall cease in the area until the markers and/or signs are replaced.

When working outdoors, verify locations of any overhead powerlines. If equipment being utilized for non-construction Company right-of-way and facility work can be proven to not have the potential to encroach on the minimum clearance boundary, the above guidelines do not apply.

Cranes:

All Cranes shall be operated only by a Certified Crane Operator.

When a Rigger/Signalperson is needed, they shall be Certified by their employer.

Crane Operator/Foreman shall ensure that the equipment load rating chart is legible and visible at each control station.

Operator/Foreman must provide barricades to prevent unauthorized entry into the danger zone.

The most recent inspection form must be available for review by the Company Representative if requested.

A Functional test must be performed before the use of the crane.

Contractors shall follow the Maximum Load Ratings listed here:

Table 2 – Maximum Load Ratings

Type of Crane Mounting	Maximum Load Ratings (% of Tipping Loads)
Locomotive, without outriggers: Booms 60 feet or less	85*
Booms over 60 feet	85*
Locomotive, using outriggers fully extended	80
Crawler, without outriggers	75
Crawler, using outriggers fully extended	85
Truck and wheel mounted without outriggers or using outriggers fully extended.	85

Type of Crane Mounting	Maximum Load Ratings (% of Tipping Loads)
<i>*Unless this results in less than 30,000 pound-feet net stabilizing moment of the rail, which will be minimum with such booms.</i>	

Offshore ONLY: Table 2 is not applicable for offshore work, refer to manufacturer guidance.

When a Critical or Non-Standard lift is to be performed, the Company Safety Specialist/Safety Representative shall be contacted to provide guidance on complying with the Williams requirements.

A Critical Lift Checklist shall be completed when any of the below criteria is met:

- The load weight is greater than or equal to 75% of the rated capacity of the Crane relative to boom angle.
- The Lift requires the use of more than one Crane or Derrick.
- The Lift will involve lifting over live or business critical piping, equipment, etc.

NOTE: Business critical means that equipment or piping may be determined critical (by the asset owner) to the operations of the asset, and it is important that the lift over that equipment be conducted under an approved lift plan to minimize the risk of a dropped load resulting in damage to piping or equipment.

Consult with Williams Company Representative to determine if the list is considered a Non-Standard lift, which is one that does not meet the Critical Lift definition but requires detailed planning and unusual or additional safety precautions.

- Examples of Non-Standard Lifts include:
 - Irregular loads or loads with unusual weight distribution (unusual center of gravity)
 - A lift out of view of the operator
 - Technically difficult rigging
 - Lifting of hazardous materials
 - Lifting of a submerged load
 - A Lift where no or partial outriggers must be used.
 - A Lift where the flooring material is rubber (potential crane shift)
 - A Lift using any other equipment than a Crane to perform a lift (e.g., a lift using an excavator, forklift, track hoe, etc.)
 - A Lift for the purpose of transferring personnel or a personnel lift
 - Any Lift the Operator feels should be classified as such

For each Critical Lift or Non-Standard Lift, complete the F02-029 – Critical Lift Checklist and obtain reviews and approvals including (brownfield):

- Company Representative
- Qualified Crane Operator
- Qualified Rigger
- Non-Standard lifts may require planning by an engineer or similarly competent person through a Work Plan or F02-029 – Critical Lift Checklist.
- If the work will include multiple critical lifts and lifts that are deemed critical only because the lift will involve lifting over live or business critical piping, equipment, etc., the Manager, Operations may approve using a consolidated F02-029 – Critical Lift Checklist, or equivalent, for multiple consecutive lifts, in conjunction with a Work Plan to outline risks and mitigation

measures (e.g., removing multiple cylinders from a compressor). The critical lift form should document the worst case scenario of the critical lifts covered.

If a Contractor will perform a Critical Lift or Non-Standard Lift, the Contractor must (greenfield):

- Complete a lifting plan equivalent to the F02-029 – Critical Lift Checklist
- Receive approval from designated Contractor personnel
- Submit the lifting plan to the Company Representative for review prior to performing any lift

Slings and Rigging:

- A visual inspection of the slings and other rigging equipment shall be performed prior to use.

Offshore ONLY Crane Operation:

Offshore Crane Operators shall be certified to operate the type of offshore crane used.

Where cranes are positioned in the proximity of helidecks or approach/take-off zones:

- Never operate while a helicopter is landing or taking off.
- Secure the boom to prevent swinging and interference with flight operations.
- Do not remain in the control station during helicopter landing/take-off operations, unless in direct voice communication with the helicopter pilot.

If cranes will be used at night:

- Confirm there is sufficient lighting for safe operation.
- Make sure the load and landing areas are illuminated

When personnel lifts are made over water, personnel must wear approved personal flotation devices.

Make sure personnel riding on net type personnel baskets stand on the outer rim facing inward. For other carrier types, follow the manufacturer's instructions.

For personnel lifts see API Spec 2C and API RP 2D when using cranes to transfer personnel. These cranes must also have an emergency load lowering kit available on the platform.

Consult with your Williams Representative for reference to: Cranes, Rigging, and Signaling for additional information.

Industrial Hygiene (IH)

The Contractor is responsible for all existing IH hazards and compliance with established occupational exposure limits (OEL).

William's official OEL is the Occupational Safety and Health Administration (OSHA) Permissible Exposure Limit (PEL) if one exists.

Wildfire Safety

Contractors are responsible to monitor and mitigate hazards that arise from hazardous air quality conditions that may exist because of wildfires.



- Monitoring the *Air Quality Index (AQI)* for fine particle particulate matter (*PM2.5*) to identify hazardous conditions is required.
- Only essential tasks may be performed by Contractors when the AQI > 150. All non-essential work should be postponed.

Table 1 – AQI Descriptions

Level of Concern	Index Values	Description of Air Quality
Good	0 to 50	Air quality is satisfactory, and air pollution poses little or no risk.
Moderate	51 to 100	Air quality is acceptable. However, there may be a risk for some people, particularly those who are unusually sensitive to air pollution.
Unhealthy for Sensitive Groups	101 to 150	Members of sensitive groups may experience health effects. The general public is less likely to be affected.
Unhealthy	151 to 200	Some members of the general public may experience health effects. Members of sensitive groups may experience more serious health effects.
Very Unhealthy	201 to 300	Health alert: The risk of health effects is increased for everyone.
Hazardous	301 and higher	Health warning of emergency conditions: Everyone is more likely to be affected.

Consult with your Williams Representative for reference to: 02.05.00.08 Wildfire Safety for additional information.

Gas monitoring

Where atmospheric hazards may exist a portable gas monitor may be required (examples include but are not limited to):

- Hydrogen Sulfide (H₂S) - concentrations of 10 parts per million (ppm) or greater
- Carbon Monoxide (CO) - concentrations of 35 ppm or greater
- % Lower Explosive Limit (%LEL) - greater than 10%
- Oxygen (O₂) deficient or enriched atmospheres – less than 19.5% or greater than 23.5%
- Electrical Classified Areas (Class 1, Division 1 and Class 1, Division 2)
- Locations with Inert or Non-Odorized Gas and Odorant Testing
- Locations as determined during a Workplace Hazard Assessment
- Leak repairs and surveys
- Casing vent tests

Consult with your local Williams Representative on site specific requirements.

Hydrogen Sulfide

Workers in a H₂S area are required to have a current H₂S training certification.

Facilities and locations where atmospheric H₂S concentrations are known to exceed 10 ppm will be identified by signage at each entrance stating: "Caution H₂S."

During the worksite orientation, Contract employees will be informed if entering an area, facility, or pipeline right-of-way that has recognized H₂S atmospheric exposures above 10 ppm. If so, Contract employees will be notified of the possible hazards, detection alarms, and escape plans.

When entering areas with H₂S exposure potential:

- Verify that an H₂S monitor is powered on and calibrated per manufacturer's instructions.
- Personal monitors must be located on the outer front clothing surface and within the employee's breathing zone (i.e., 12-inches within the nose and mouth).

While working, if conditions elevate to above 10 ppm:

- Stop work and move to a safe location crosswind and upwind.
- Evaluate source of alarm and corrective measures.
- Clear alarm and peak values and re-establish acceptable conditions.

Naturally Occurring Radioactive Material

Naturally Occurring Radioactive Material (NORM) is a form of low-level radiation. Employees have a low likelihood of significant exposure to elevated levels of NORM. This is due to both the time and distance away from the source of the NORM and the avoidance of radon gas.

Good hygiene practices should significantly reduce the potential for exposure to elevated levels of NORM.

In addition:

- Keep sludge and other contamination off employees and their clothes/boots.
- Wash hands before eating or smoking.
- Wet NORM-contaminated items to avoid airborne particle generation.
- Contact the Company representative for additional questions or guidance.

Hazardous Building Materials:

The Contractor is responsible for complying with all local, state and federal regulations for hazardous substances that may be encountered, including:

- Lead/ Mercury
- Asbestos containing material(s)
- Polychlorinated Biphenyls (PCB's)

Consult with your local Williams Environmental and Safety Specialist.

Storage of Hazardous Materials

- Use only approved containers for storing and handling flammable or combustible liquids.
- Label all indoor storage cabinets, using conspicuous lettering, with "FLAMMABLE – KEEP FIRE AWAY," or equivalent wording.
- Place markings, labels, and signage on all approachable sides of flammable or combustible liquid storage areas.
- Keep containers clean from dirt, grease, acids, etc., which weaken the materials.
- Protect storage areas against tampering or trespassers.

- Store combustible waste and residues in covered metal receptacles and dispose of daily. Do not allow these materials to accumulate in buildings or work areas.
- Maintain a Clear Zone around buildings, fence lines, and unit operating area. Keep this area free of weeds, trash, or other unnecessary combustible materials.
- Limit storage of flammable materials in work areas to only those quantities required for immediate use.

Equipment and Tools

- Make sure all tools are free of defects, in good working order, and used for the job for which they were designed.
- Homemade or fabricated tools are prohibited.
- Any field modification beyond manufacturer specification on tools is strictly prohibited.
- Remove damaged or defective tools from use.
- Do not use impact tools (e.g., drift pin wedges and chisels) with mushroomed heads.
- For tools with wooden handles, make sure the handles are tightly attached and free of splinters or cracks.
- In Class 1 Division 1 areas, only use battery-operated tools that are intrinsically safe.
- In areas where vapors or gases are present or could become present when performing a task:
 - Use spark-resistant tools made from brass, plastic, aluminum, or wood.
 - A Hot Work Permit must be obtained prior to using non-spark-resistant tools.
- Safety devices delivered with tools must be maintained operational for the service life of the tool (e.g., guards, shields, etc.)

Consult with your Williams Representative for reference to: 02.10.02.21 Hand and Power Tools for additional information.