

# Williams Offshore Contractor Safety Handbook



Version 1

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#### Introduction

Contractor Safety Handbook User,

Williams is committed to the continuous improvement of environmental, health and safety performance to protect the public, our employees, Contractors, and the communities where we work and live. Achieving zero injuries and zero incidents is our primary goal.

Williams intends to meet or exceed all applicable environmental, health and safety laws and regulations, and to facilitate full and open discussions to address responsible standards and practices where laws and regulations do not exist.

The safety and health of all workers and the protection of our environment is of utmost importance to Williams. No job is so urgent that it cannot be done safely. Unsafe conditions and/or work practices are not acceptable on Williams' sites and must be resolved before work can continue.

Contractors' safety success can only be accomplished through the committed efforts of Contractors and their employees.

This Handbook is an expression of Williams' understanding and commitment to environmental protection and helping contractors in keeping all contractor workers safe. At Williams, we expect every Williams employee and contractor employee to use the right tools for the job. We hope you will find this handbook a valuable tool.

Brian Perilloux

Senior Vice President Operational Excellence

# **Purpose**

This Handbook provides Williams employees and Contractor employees with a reference to environmental, health and safety requirements that are generally applicable to Williams' engineering and construction work.

Contractors are expected to develop, adopt, maintain and certify the implementation of such health and safety procedures, policies and programs as are necessary to comply with all applicable federal, state and local regulations that may apply to Contractors' work activities to complete the contractual scope of work, including the minimum standards referenced in this handbook.

Contractors are responsible for the development of a project-specific Environmental, Health & Safety (EH&S) Plan specifically for the scope of work to be performed. Contractors shall submit the required EH&S plan to Williams before beginning work.

Should situations arise where doubt exists regarding proper safe work methods, please bring it to the attention of the Williams Authorized Representative.

Williams is continuously looking for ways to improve our EH&S programs. If you have feedback for improvement or changes to this document, please share them with a Williams Representative.

## **Not Exhaustive and Not Legal Advice**

This Handbook is not comprehensive and provides suggested best management practices and guidance to Williams employees and Williams' Contractors regarding contractor work performed on Williams' property including any offshore facility project. All OSHA, EPA standards and Williams Safety Procedures must be followed.

## **Safety is a Condition of Continued Service**

<u>Safety is not an option, it is a requirement.</u> The failure of any contract worker to perform work in a safe manner may result in that worker's removal from Williams' projects or facilities. A Contractor's failure to remove unsafe workers from the project work-site may result in termination of the contract between Williams and that Contractor.

Williams' goal is to achieve "Operational Excellence" for its employees and contractors. In order to achieve "Operational Excellence" we must always, follow safe work practices and regulations, comply with all applicable rules and regulations, encourage and recognize safe work behaviors, ensure safety devices are in place and properly maintained, meet or exceed customer requirements, and make the right safety decisions before performing any work task.

The contents of this handbook must be reviewed, discussed and understood by all contractor personnel before any work is to be performed.

### **Overview of Responsibilities**

<u>Williams' Responsibilities</u> – All Williams employees assigned to a construction project must be familiar with the contents of this handbook and understand the requirements herein. They should ensure that all contractors are aware of the expectations and have a copy of the handbook. Most importantly, they should ensure that all contractors working for Williams are meeting the expectations presented in the handbook.

Williams will conduct periodic audits of contractor's safety programs. The Authorized Williams Representative may ask to review program contents including policies and procedures, training records, Behavior Based Observations (BBS), work permits, work plans and any other parts of the safety program deemed appropriate for offshore construction work.

Contractor employees and Williams employees are encouraged to participate in employee observation and employee coaching program. There are "One Minute Observation" and "One Minute Coaching" programs that stimulate conversations around safe work behaviors. Williams believes participation in such programs should be practiced by all levels of the company.

Contractor Responsibilities – Contractor shall ensure compliance with all applicable rules, regulations, orders, standards and interpretations promulgated under the Occupational Safety and Health Act (1970), SEMS requirements as presented in 30 CFR 250, Subpart S and all other applicable laws, ordinances, rules, regulations and orders of any agency having jurisdiction over safety and health of persons or property or the protections of the same to protect them from injury, illness, damage or loss.

Contractor shall take all possible measures necessary to protect all personnel in the work areas and shall adhere to Company and Industry Standards.

Contractor shall be responsible for providing safety instruction including language translation, and encouraging safe work performance to all employees under contractor supervision through pre-job/new hire safety orientations, and daily safety meetings.

Contractor shall provide experienced and qualified personnel and ensure that all Contractors employees and sub-contractor employees

are trained to do the required job tasks. Contractor shall ensure proper staffing of crews for the safe completion of the work.

Contractor shall designate at least one person to be Contractor's safety and environmental representative for each Company project. The person can have other roles or duties as determined by the Contractor. The Contractor's safety representative(s) must be located on the offshore facility.

Contractor's safety representative shall have sufficient offshore construction safety related experience and knowledge, education and skills necessary to anticipate, identify, evaluate and control worksite hazardous conditions and practices.

Contractor shall be aware that Contractor's safety performance will be continuously evaluated by the Company's Construction Management team. Safety Performance evaluations will include, safe and unsafe work behaviors, recordable incidents, reporting of requested safety related data and the Contractors ability to follow good safety program methods including OSHA and Company guidelines.

Contractor's Foreman or Safety and Environmental Representative shall be responsible for conducting regular safety assessments, safety training, accident investigations/root cause analysis, and enforcement of all environmental, safety, health and accident prevention procedures, including the enforcement of the Contractor's safety program.

Written documentation which includes a copy of the training that has been provided and a list of contractor employees and sub-contractor employees that attended the training shall be provided to the Williams Authorized Representative upon request.

All accidents and near hits must be reported immediately to the Authorized Company representative. All accidents and incidents

requested by Company will be investigated by Contractor to the root cause level, and formally documented by Contractor using either the Company Incident Root Cause Analysis form, or Contractor's equivalent form, provided such form is of acceptable industry standard and acceptable to Company. A copy of the report shall be furnished to the Authorized Williams Representative. Williams may conduct its own Root Cause Investigation if deemed necessary.

## **Reporting Requirements (Metrics)**

Contractor will provide to Company, on a monthly basis, a summary of all accidents and near misses/hits experienced on the project, the total man-hours worked on the project (for Contractor and sub-contractor). Injuries for Contractor and their sub-contractors will be categorized as recordable – lost time, restricted duty, medical case, fatality, or non-recordable – first aid.

Contractor must provide Company with updated records by the 9<sup>th</sup> day of each month, communicating the following safety data as it occurs while performing work on Company projects to include:

- Contact information and project information
- Contractor and Sub-contractor man-hours worked
- Number of employees (Contractor and sub-contractor)
- First Aid cases
- Lost Time Incidents
- Number of no-injury incidents (i.e., damaged equipment, pipeline strikes, power line strikes, near misses/hits)
- Number of Motor Vehicle Accidents (MVAs) related to this project work
- Miles driven (related to project)
- Contractor and sub-contractor Employee Hours Worked

- Contractor and sub-contractor Employee Miles Driven
- Recordable injuries
- Environmental Spills and Releases (reportable and non-reportable)
- NOVs
- Inadvertent Returns

The incidents and man-hour data reported shall include, as a separate report, subcontractor data for work performed, in addition to the incidents and man-hours reported by and for the Contractor.

Safety data shall be submitted electronically, using the ISNetworld reporting tool. Any questions regarding this reporting tool should be directed to the Company Construction Safety Representative.

The contractor is ultimately responsible for their employees and subcontractor employee's safety and for ensuring that they perform their day-to-day work in a safe manner.

The guidelines in this handbook are intended to supplement, not replace, the contractor's safety program. In the event a Williams procedure and the contractor's procedure conflict, the more stringent rule should be followed and the Authorized Williams Representative should be notified.

#### **Professional Conduct**

Williams expects its employees and contractors to conduct themselves in a professional manner. Horseplay, practical jokes, and harassment are not allowed. No form of harassment or fighting will be tolerated while on locations under Williams' control. Depending on the severity, additional repercussions, such as involvement of regulatory agencies and law enforcement, may result.

#### **Definitions**

Contractor A contractor is defined as any company or

individual working for Williams by way of contract, subcontract, or purchase order, performing work or providing services or

equipment to or for Williams

Contractor Supervisor Any individual representing the contractor

company that supervises the work of a contractor, contractors or subcontractors

Authorize Williams

Representative

Any Williams employee responsible for a project(s) (i.e. Project Manager, Construction Chief, and Construction Safety Representative)

In-Service Pipeline, facility, equipment or associated

system that is operational

Incidents An incident is defined as a worker or contractor

near hit/miss, injury or illness, injury of others, Motor Vehicle Accident, fires, property damage or loss, security breach, theft, spill or release or

bomb threat.

# **Short Service Employee Plan**

A short service employee plan must be in place before a short service employee is allowed to work on a Williams project. A short service is any worker with less than 6 months of experience in the same job type or with current employer. All short service workers shall work alongside an experienced worker and never alone.

Contractor employees who quit and return to work for the same employer within a one year period and assigned to the same job type will not be considered a short service employee.

Information regarding the short service employee, including the contractor employees name and type of work qualified to perform will be given to the Authorized Williams Representative at least 24 hours before the short service employee's arrival at the project site. In the event the short service information is not presented to the Williams Authorized Representative, the short service employee may not be permitted to work on the project.

Short service employees must be knowledgeable of the contents of the Williams Onshore Contractor Safety Handbook. A short service employee shall not participate in an unfamiliar task (new task) without a dedicated and competent member of the contractor's employee group being present.

Primary Contractors and subcontractors must have a short service employee plan.

## **Authorization to Stop Work**



William Employees and Contractors are given the authority, and the responsibility, without fear of reprimand or retaliation, to immediately STOP any work activity that is believed to present a danger to themselves, co-workers, contractors, the public or the environment.

William Employees and Contractors are empowered to get involved, to question, and to seek to rectify any situation that is identified as not being in compliance with our safety policies or safe work practices.

William Employees and Contractors have the authority, and the responsibility, to report any unsafe conditions or acts to supervision.

# **Drugs and Alcohol**



Williams supports and enforces standards, policies, and procedures for maintaining a drug-free and alcohol-free workplace.

Contractors must have an approved Drug and Alcohol program as required conforming to 49 CFR Part 40 before performing any work deemed by Williams to be safety sensitive. The Drug and Alcohol program must include random testing and must include a minimum annual testing rate of 25% of the total population of the contractor's personnel.

Consumption of and/or possession of alcoholic beverages on Williams' job sites is prohibited. The possession, transfer, purchase, sale, use, or distribution of unauthorized drugs while on Williams' premises or while engaged in Williams' work is prohibited.

All Williams employees and Contractor employees shall report to work in a fit and proper condition to perform their jobs in a safe, competent manner. Any person under the influence of alcohol or controlled substances is prohibited from entering the premises, engaging in

business, or operating equipment. Violators will be permanently removed from all Williams' worksites.

Williams' Representatives may search those entering, working in, or exiting Williams' locations without prior announcement. This is a condition of entry onto Williams' property or job sites.

Any Williams employee or Contractor employee found to be in violation of the drug and alcohol policy, or test positive on any drug or alcohol test, will not be permitted to work on any Williams' project.

Use of prescription or over-the-counter medication is permitted only if such use does not have side effects that could adversely affect work performance. All Williams employees and Contractor workers should consult with their physicians before taking any medications that might adversely affect their safety and work performance.

Williams recommends that Contractor workers who work in safety sensitive functions, and are using over-the-counter or prescription drugs that include warnings about driving, operation of machinery, or any other potentially dangerous operation, should notify Contractor supervision of the prescription warnings. If a contractor brings prescription drugs onto a Williams project location, the medication must be in the bottle or container in which it was originally dispensed and must be prescribed to the individual. The Authorized Williams Representative must be notified about the medication and the employee using the medication.

Internet prescriptions are not to be used while working on a Williams project and such prescriptions are unacceptable for use according to the Department of Transportation's drug testing regulations as delineated in the "Interpretive guidance to 49 CFR 40.141".

Any incident resulting in property damage of Williams property or the Contractor property will require a drug test of all persons involved.

Williams reserves the right to request an Alcohol and Drug test for those involved in any incident as well as any reasonable suspicions of Alcohol and/or Drug use.

Drug and Alcohol Programs will be evaluated by Williams Authorized Personnel.

# Weapons



Williams prohibits the use, possession, transportation, or sale of unauthorized explosives, unauthorized flammable materials, firearms, or other weapons while on company premises, engaged in company business, or operating company equipment.

# Requirements for Offshore Work and Visitation SafeGulf Certification

All personnel who work a rotational position in the offshore Gulf of Mexico and all personnel that will or may travel offshore are required to be SafeGulf certified.

SafeGulf is a program to ensure that all workers in the Gulf of Mexico area trained to a set of minimum requirements for Health, Safety and Environmental awareness. This training is not intended to take the place of regulatory and company training requirements, and additional training may be required for specialized and regulatory controlled work.

Upon arrival to a Williams land based location, all personnel must present some form of a government-issued picture identification to enter the facility. SafeGulf certification is required for travel to any offshore facility.

Specific details about the content of the SafeGulf training and training providers are available on the SafeGulf website at <a href="http://www.safegulf.com">http://www.safegulf.com</a>.

#### **Transportation Worker Identification Card**

Some Williams facilities are regulated under the Maritime Transportation Security Act (MTSA) of 2002. This act requires Williams to implement Coast Guard-regulated offshore and onshore based security plans for facilities that meet certain oil, gas, or chemical production or transportation thresholds. A Transportation Worker Identification Card (TWIC) is a biometric security credential card) issued to employees, both Williams and contractor, who need unescorted access to offshore and onshore based facilities that are required to implement a U.S. Coast Guard (USCG) Facility Security Plan (FSP).

The following guidance applies to TWIC:

- All contractors who are permanently assigned to an offshore facility that have Coast Guard-approved facility plans, whether it is owned or operated by Williams, and that facility has an approved facility security plan must obtain a TWIC
- All contractors who have the potential to work on or visit Coast Guard-regulated facilities for any purpose and need unescorted access to the facility must obtain a TWIC
- Employees and contractors without a TWIC may still work and visit Williams Coast Guard-regulated securities, but they must obtain permission from the facility person in charge before arriving because an authorized person will be required to escort the employee during the visit. Employees without a TWIC must be escorted by a facility employee who has a TWIC. As a general rule some facilities are not staffed to provide security escorts and may not be able to accommodate visitors.
- Contractor employees and Williams employees without a TWIC
  are required to contact the person in charge before arriving to
  make escort arrangements. This also applies to all pilots,
  including Williams' pilots. If a pilot wants unescorted access to
  these locations, then they must obtain a TWIC

TWICs for these facilities will be checked at the onshore base and heliport during crew changes and at the facilities as personnel arrive.

# **Fishing**

Fishing is strictly prohibited on any Williams owned or Williams operated offshore facility.

# Security

Contractor companies shall be responsible for their own equipment and accountable for controlling the actions of their employees while working at locations under Williams' control. Williams is not responsible for loss

or stolen articles. Williams employees and contractor employees are discouraged from bringing large amounts of cash or other valuables of a financial or personal nature to work sites. If they choose to do so, it is their own responsibility to keep these items adequately secured.

Personnel that are traveling offshore will be required to check in at the land based security checkpoint and present an approved government issued picture identification. The identification number on the ID will be recorded. Please ensure that when traveling to one of the offshore facilities, you have a current identification card or driver's license.

#### Non U.S. Citizens

All contractors who are not U.S. citizens or permanent U.S. –resident aliens possessing an Alien Registration Card (Green Card) will be considered Foreign Nationals (FN) and will have to be cleared by Williams and the U.S. Coast Guard before being allowed to visit a Williams facility or travel offshore. Additional details regarding foreign nationals are available in the Williams procedures.

Prior to a Foreign National (FN) contractor's arrival at any Williams offshore facility, the FN contractor's employer shall notify the Williams Authorized Representative that the contractor employee is a FN.

Before scheduling a trip to a Williams offshore facility, the FN's employer shall obtain a Letter of Determination from the USCG to be submitted to the Williams Authorized Representative.

When the FN contractor arrives at the onshore base or airport to go to the offshore facility, the contractor must possess a passport with a valid U.S. visa and a copy of the Letter of Determination (LOD) issued by the USCG before the Williams Authorized Representative grants approval.

The Williams Authorized Representative shall document the approval of the FN visit and notify the offshore facility supervisor that the FN is approved to visit prior to the FN's arrival

# **Orientation of Visitors for Offshore Facility Visits**

All visitors are required to sign a login sheet when visiting a Williams offshore facility. All visitors will receive a safety orientation that will cover emergency procedures, including the Emergency Evacuation Plan and site-specific information for current activities at the facility.

The visitor orientation shall be documented and retained for one year.

All personnel arriving on the offshore platform, including experienced crewmembers arriving back from leave, will receive a briefing on current operations and any special safety requirements in force before starting the first shift.

## **Short Service Employee Plan**

A short service employee plan must be in place before a short service employee is allowed to work on a Williams offshore operated facility. A short service employee is any contractor employee with fewer than six months of experience in the same job type or with the contractor employee's current employer. Contractor employees who quit and return to work for the same employer within a one year period and assigned to the same job type will not be considered a short service employee.

Information regarding the short service employee, including the contractor employee's name, type of work qualified to performed, name of assigned mentor, and assigned mentor's title will be given to the offshore facility's Authorized Williams Representative at least 24 hours before the short service employee's arrival at the facility. In the event the Short service information is not presented to the Williams

Authorized Representative, the short service employee may be sent back to the shore base at the contractor's expense.

Short service employees must be knowledgeable of the contents of the Williams Offshore Contractor's Handbook. Short service employees should be assigned a mentor and always work with an experienced contractor employee. The short service employee shall not be left alone while performing a work task. A short service employee shall not participate in an unfamiliar task (new task) without a dedicated and competent member of the contractor's employee group being present.

Primary contractors and subcontractors must adhere to this short service employee plan.

# **Safety Meetings**

Contractors will provide safety and site orientation to all contract workers and subcontractors. Written documentation, including the training program synopsis and a list of contract employees and/or subcontract employees that attended the training, will be submitted to a Williams' Representative upon request.

Contractor will communicate to their employees that they are required to attend all safety meetings and safety training programs.

# Pre-Job (Kick-Off) Meetings

Pre-job (Kick-off) meetings are required for all projects. These meetings will include Contractors' Management Team, the Williams Management Team, and possibly other company support teams when necessary.

The meeting purpose is:

- To ensure all parties understand the scope of work to be performed
- To identify and discuss safety hazards associated with the work to be performed

- To discuss mitigation of identified hazards
- To discuss quality initiatives
- To discuss planning that has been done as it relates to environmental, health and safety

# **Environmental, Health & Safety Meetings**



Contractors are responsible for conducting Daily Safety meetings with their workers and subcontractors that will address the specific tasks, assignments, and environmental, health, and safety processes to be followed and completed safely.

Some Safety meetings may address specific tasks such as:

- New job assignments
- Work around above ground or underground utilities
- A critical lift
- Significant operational change
- Pressure testing
- Confined space entry
- Inclement weather
- An incident where lessons learned need to be conveyed

- Environmental concerns (...etc...)
- Protecting Wetlands
- Hazardous material removal
- Recognition
- Observing trends and discussing the corrective actions tied to those trends

# **Job Planning**

Work plans/permits are intended to eliminate incidents, service disruptions, process upsets and abnormal conditions caused by lack of communication, coordination or planning of construction activities.

Contractors are required to provide work plans and discuss those work plans with an authorized Williams Representative.

Work Plans may include but are not limited to the following work activities:

- Non-Routine Work
- Hot Work
- Confined Space
- Isolation of Hazardous Energy
- Electrical Safety
- Lifting and Rigging
- Bypassing Critical Protection
- · Work at Height
- Simultaneous operations

# **Job Safety Analysis**

If the job/project requires a JSA, it will be discussed in either a daily safety meeting or a more formal safety meeting.

Prior to starting any work that has the potential to result in the injury of workers, harm to the environment, or damage to property, the

contractor shall perform and document a JSA. It is recommended that this JSA includes routine, non-routine, and high-risk work. A JSA is a method used to identify, analyze and record:

- The steps involved in performing a specific job
- The existing or potential environmental, safety and health hazards associated with each step
- The recommended actions and/or procedures that will eliminate or reduce these hazards and the risks of a workplace injury or illness

Typically there are ten energy sources to be aware of while at a construction site. The following Energy Sources should be considered during all construction activities.

# **Energy Sources**

TYPE	DESCRIPTION (EXAMPLES)
Gravity	Trips, Slips and Falls
	Falling Object
	Lifts (Critical Lifts)
	Collapsing Temporary Supports
	Other
Motion	Machines
	Walking (be seen on the job site)
and the same of th	Moving Materials/Equipment
	Flowing (gas, water, oil, product, etc.)
	Wind
	Lifting/Lowering
	Position (body/equipment)
	Straining or Bending (human)
	Other

Mechanic al	<ul> <li>Rotating Equipment</li> <li>Compressed Springs/Strained Connections</li> <li>Motors/Pumps</li> <li>Integrity (Maintenance/Wear and Tear/Corrosion/Paint/Etc)</li> <li>Other</li> </ul>
Electrical	<ul> <li>Transformers</li> <li>Static Charges</li> <li>Atmospheric (lightning)</li> <li>Energized Equipment</li> <li>Wiring</li> <li>Batteries</li> <li>Other</li> </ul>

Pressure	<ul> <li>Piping</li> <li>Vessels</li> <li>Tanks</li> <li>Compressed Cylinders</li> <li>Control Lines (instrument Air, etc)</li> <li>Pneumatic and Hydraulic Equipment □</li> <li>Other</li> </ul>
TYPE Temperature	• Ignition Sources (in combustible areas) • Hot or Cold Surfaces • Liquid or Gases • Steam • Friction • Open Flame • Weather Conditions • Other

Chemical	<ul> <li>Flammable/Hazardous Vapors</li> <li>Reactive Materials/Hazards</li> <li>Toxic Compounds or Chemicals</li> <li>Oxygen deficient atmospheres</li> <li>Fumes, Dust and Debris</li> <li>Combustible Materials (grinding, open flame, environment, etc.)</li> <li>Integrity (corrosive, etc.)</li> <li>Other</li> </ul>
Radiant	<ul> <li>Lighting Issues</li> <li>Welding Arc</li> <li>X-Rays</li> <li>Microwaves</li> <li>Solar Rays (e.g. sunburn/skin)</li> <li>Heat (flares/exhaust stacks, etc.)</li> <li>Human environment/ weather (Heat) □</li> </ul> Other
Sound (((	<ul> <li>Equipment Noise</li> <li>Impact Noise and Vibration</li> <li>High Pressure Releases</li> <li>Human environment</li> <li>Noise Impacting Work Communication</li> </ul>
Biological	<ul> <li>Blood Borne Pathogens</li> <li>Bacteria/Viruses</li> <li>Improperly Handled Food</li> <li>Contaminated Water(s)</li> <li>Other</li> </ul>

#### **Safe Work Practices**

Contractors will designate trained Safety Personnel within their organizations to communicate and enforce all safety, health and accident prevention procedures.

Contractors will communicate to all employees that it is each employee's responsibility to perform all work safely.

#### **Hand and Power Tools**

Inspect all tools prior to use to ensure tools are working properly before placing them in service. Maintain all tools in good working condition. Be sure to remove any tool that is not in good working order and any tool that is defective and in need of repair. These tools shall be red tagged and taken out of service until they have been replaced or repaired by a qualified person. Additionally:

- Power tools should be de-energized when not in use
- Use power tools for their intended use only
- · Verify that guards are in place, unaltered, and properly installed

Verify that a ground fault circuit interrupter (GFCI) exists on outlets that are not part of permanent buildings or structures supplying to portable electric tools.

#### **Hot Work Permits**



A Hot Work Permit must be obtained before performing Hot Work in an area where flammable or combustible gases, vapors, mists or solids may be present. Contractors shall conform to 29 CFR 1910.252 (a) when performing Hot Work activities.

The use of non-spark-proof tools and/or non-explosion-proof equipment, and other work involving open flames shall be controlled so as not to cause a fire or explosion hazard.

Hot Work Permits are issued for only the work area listed on the permit. If any other work is required in the area for which the Hot Work permission was issued, a separate permit must be issued for the work not covered under the original permit.

#### **Gas Detection**

Atmospheric testing shall be performed and documented using equipment (combustible gas detectors, LEL monitors, etc.) which have been verifiably calibrated and/or tested immediately prior to use per the manufactures' recommendations. Gas Test readings and the times the readings were taken must be recorded on the Hot Work Permit. If the LEL readings are acceptable ( $\leq$  10% LEL), a Hot Work Permit may be issued.

If Hot Work is to be performed within a Confined Space, the LEL must be 0% and oxygen content must be greater than 19.5% and less than 23.5%

If 0% LEL cannot be obtained, an analysis of the factors affecting the LEL must be performed and written control measures developed that maintain the LEL at or below 10% before proceeding with the Hot Work.

The deviation and the Work Plan must be approved by the Construction Leadership Team member and the Construction Safety Representative.

#### Fire Watch



Fire watchers shall be required whenever welding or cutting is performed in locations where other than a minor fire might develop, or any of the following conditions exist:

- Appreciable combustible material, in building construction or contents, closer than 35 feet (10.7 m) to the point of operation
- Appreciable combustibles are more than 35ft (10.7 m) away but are easily ignited by sparks
- Personnel assigned to "fire watch" duties shall be properly trained and have no other assignments while on fire watch duty.

Fire watch personnel must wear proper PPE.

Fire watchers shall have fire extinguishing equipment readily available and be trained in its use.

They shall be familiar with facilities for sounding an alarm in the event of a fire and shall watch for fires in all exposed areas, trying to extinguish them only when obviously within the capacity of the equipment available, or otherwise sound the alarm. Fire watch personnel must remain on duty for a minimum of 30 minutes

after hot work is completed.

# **Health Management**

Contractors shall meet or exceed the requirement of 29 CFR 1926.50 throughout the performance of the work, and include provisions for health, sanitation and medical facilities and services. Contractor

employees and Williams employees shall be made aware of potential exposures.

## **Hazard Communication Program**

The Contractor's employees and Williams employees are required to observe all posted warning signs.

Contractors shall develop and implement a hazard communication program (HAZCOM) that meets or exceeds the requirements outlined in 29 CFR 1910.1200. This program shall include provisions for container labeling, collection, storage, and availability of Safety Data Sheets, and appropriate training programs.

Up-to-date SDS information shall be made available for every hazardous material brought onto the worksite(s). All SDS information shall be made available to Williams upon request.

Williams facilities may contain asbestos, lead, benzene, and other harmful substances. Contractors shall consult with their Authorized Williams Representative to determine if these substances are present, and develop a mitigation plan for worker exposure. Contractors must immediately notify a Williams Representative if previously unknown harmful substances are identified.

Contractor Personnel must be able to read and understand all labels and posted warning signs.

## **Hazardous Material Transportation**

Department of Transportation Hazardous Materials Regulations (49 CFR Parts 170-179) applies to Williams operations whenever hazardous materials are transported by air, water, or highway. Any person who is responsible for classifying, packaging, marking, labeling, placarding, handling or preparing shipping papers for regulated hazardous

materials must have the required training to perform those job duties. Williams is obligated to report any violations of these regulations.

Before transporting hazardous material you shall:

- Advise the boat captain or aviation dispatcher before transporting any hazardous materials, such as explosives, flammables, compressed gases, or radioactive substances.
- Ensure that all hazardous materials shipments conform to DOT regulations regarding identifications, hazard classification, proper shipping name, packaging, marking, labeling, and manifesting. Document hazardous waste on a Hazardous Waste Manifest, not a Straight Bill of Lading
- Identify any container delivered to the onshore base or heliport that contains dry ice (frozen carbon dioxide) on the manifest or other shipping papers. The amount of dry ice in the container should also be included on the manifest or shipping paper. Dry ice is not a DOT-regulated hazardous material when shipped by highway, but it is regulated when shipped by air or water.

#### **Asbestos**



Asbestos can be dangerous if not handled properly. Breathing asbestos dust is hazardous. Asbestos insulation that is not damaged or friable (hand Pressure can crumble, pulverize, or reduce it to powder when dry)

generally does not produce asbestos fibers at a dangerous level, especially in non-enclosed structures.

To minimize health risks, it is important not to drill, cut, remove, tear, step on, brush against, hammer on, or in any way disturb suspected asbestos.

Contact an Authorized Williams Representative if it is necessary to disturb any suspected asbestos, or if you notice any determination in the conditions of the suspected asbestos. Only trained personnel with proper equipment will disturb or remove asbestos. Additionally, some states require use of a state-certified asbestos contractor, and submission of an advance 10-day written notice, prior to commencement of any asbestos abatement activities.

#### Benzene

Benzene can be found in produced gas, in a gaseous form. Benzene is known to cause cancer in humans, so it is important to limit your exposure to it. To know what benzene concentrations exist and the PPE requirements that apply, you should refer to the SDS for the product information.

Leather gloves or clothing saturated with liquid containing benzene should be removed and cleaned or properly discarded to prevent prolonged skin exposure. Reduced exposure and risks can be accomplished by keeping your work area and your clothing as clean as possible.

#### Lead



Overexposure to lead can result in serious short-term (acute) or longer-term (chronic) health effects. Inorganic lead may be absorbed into the body by ingestion or inhalation. Lead is most commonly found in paints and coatings. Abrasive blasting or burning of painted surfaces probably pose the greatest potential for lead exposure. Check with the Authorized Williams Representative to identify areas that may pose the threat of lead.

#### **Arsine Gas**

Arsine Gas is difficult to detect in normal gas streams. It is believed that Arsine Gas may exist in areas where gas streams become stagnant, primarily at the end-points of some lines. The Authorized Williams Representatives will test for Arsine Gas in areas where the potential for it exists.

## **Hydrogen Sulfide**

Hydrogen sulfide, commonly called H2S, is a highly poisonous gas. It is a colorless, flammable gas with an odor like rotten eggs at low concentrations. It is heavier than air and tends to accumulate in low areas. H2S rapidly deadens the sense of smell; therefore, smell cannot be used to detect its presence.

A determination of the potential H2S hazard should be completed and if the facility is deemed to be at risk for the hazard, then an Emergency Plan must be developed to include training and emergency drills. At a minimum, appropriate detection devices must be in place and properly maintained as an early warning safety measure.

#### **NORM**

Naturally Occurring Radioactive Material (NORM) is low-level radiation which results from concentration of radioactive minerals during extraction of oil and gas from the earth. NORM can be found in piping, tubing, sludge pits, brine, sand filters, salt-water disposal injection wells, and other equipment. When scale or thin film is present, or if NORM contamination is suspected, the contractor shall notify the Authorized Williams Representative to confirm whether NORM exists in the area.

Williams employees and Contractor employees may be exposed to possible external or internal NORM. External NORM can present when radioactive equipment, soil, piping or other contaminated material is disturbed while working in an area. NORM can be an internal hazard when airborne radioactive materials are inhaled, ingested, or enter the skin through open wounds. All exposure to the NORM hazard can be minimized by properly wearing an approved respirator, by practicing good personal hygiene and by protecting wounds and cuts.

NORM contaminated material storage and disposal shall be coordinated through the Authorized Williams Representative.

Only trained personnel may handle piping, equipment, junk iron, or solids containing NORM.

When working at facilities identified to produce NORM contamination, rags, wipes, PPE, and other equipment may be contaminated with NORM. Scale, sand, and sludge from piping and process equipment may also contain NORM. Segregate and contain these materials

separate from other wastes; never mix these materials with ordinary trash. Scan these materials with a NORM meter, and flag them if they contain NORM.

## **Pig Launchers and Traps**

Be aware that NORM may be present and that you should take proper precautions before receiving pigs.

Equip launchers and receivers on in-service pipelines with a pressure gauge. It is recommended the barrel be equipped with a device that ensures the launcher/receiver cannot be opened without verifying that pressure has been released from the barrel.

Consider installing a pressure gauge only during actual launcher/receiver opening operations in potential impact areas, such as crane or wireline operating areas.

Stand to the side opposite the launcher or receiver hinge to prevent injury from trapped pressure.

Be sure to use appropriate drawing when isolating pressure to be certain all potential energy sources are properly contained.

Depressurize the trap after launching or receiving a pig whenever a pig trap is left isolated from the pipeline.

## Welding, Burning, Cutting, Fumes & Ultraviolet Light

An evaluation of PPE shall be completed for each welding and cutting task. These are minimum requirements for protective devices and solutions:

 Hardhats with full-face shields and safety glasses are required for all buffing, chipping and grinding operations

- Helmets with protective ANSI approved shaded lenses, proper gloves, and arm protection shall be used during all arc welding or gas cutting operations
- Goggles or other suitable eye protection with appropriate shade selection shall be used during all gas welding, cutting or brazing operations. See "Eye Protection" section below
- Helpers and personnel in the immediate area shall use proper eye protection. When not engaged in a welding or brazing activity, safety glasses with side shields shall be worn by welders and welders' helpers
- Except when engaged in light work, such as test fitting pieces, all welders should wear flameproof gauntlet gloves
- Mechanical ventilation at a minimum rate of 2,000 cubic feet per welder should be provided when welding is done in the following situations:
  - In a space less than 10,000 cubic feet per welder In a room having a ceiling less than 16 feet
  - Where the welding space contains partitions, balconies or other structural barriers to the extent they significantly obstruct cross ventilation
  - When welding or cutting on galvanized materials o Where the nature of the welding, cutting or brazing work is such that the release of toxic fumes or gases is possible in an enclosed/non-ventilated area. This includes work on stainless steel, zinc,, lead and/or degreasing or cleaning compounds containing hydrocarbons

## **Heat Stress and Fatigue and Cold Weather**

Contractors are expected to have heat and cold weather plans. Williams employees and Contractor employees are to be made aware of heat stress and fatigue management plans, which will address workers' heat stress and fatigue, as well as cold weather work.

Worker fatigue can be a factor in incidents or risks to personnel working on a Williams project. When employees feel fatigued, they should notify their immediate supervisor and handle their fatigue properly. In the event an employee suspects a coworker is working unsafely due to fatigue then the supervisor should be notified immediately and/or the "Stop Work Authority" process should be activated.

The following guidelines should be considered to address or control activities under the contractor's control:

- Workers should be limited to 12 to 14 planned work-hours per day and are not to exceed 16 hours a day, including travel
- After two consecutive, 16 work-hour days, the contractor should allow workers eight hours of an uninterrupted rest/sleep period
- Any deviation to these recommended guidelines should be approved by the Authorized Williams Representative

## Housekeeping



It is the contractor's responsibility to keep their work areas clean, orderly, and in a condition conducive to safe work. Work areas, i.e. exits, aisle space, and emergency equipment, shall be kept clean and free from obstructions and debris.

Work areas should be monitored periodically by employees to prevent unsafe working conditions. Work area should be maintained and

sufficiently cleaned prior to the employee leaving the work area at the close of their shift.

Storing equipment in the path of exits is forbidden.

Do not obstruct stairways, aisles or passageways. Keep equipment rooms clean at all times and do not use them as storage areas.

Keep all work areas, walking surfaces, handrails, equipment, tools, and life saving and firefighting equipment clean and free of obstructions.

Store tools or tie them off, so they do not cause a hazard to people in the surrounding area.

Only use fire-safe solvents for cleaning with a flash point greater than 140 F and below 200 F. Prohibited cleaning agents include, but are not limited to, gasoline, diesel, and methyl ethyl ketone (MEK).

Questions regarding appropriate solvents for cleaning should be directed to the Williams employee that is in charge of the facility.

Segregate waste when necessary, including oily rags from regular trash.

Label all containers, bottles, buckets, etc. with name of substance.

Do not place cords in walkways or areas that impose a tripping hazard.

Use plastic buckets appropriately; they should not contain any hydrocarbons or flammable items.

#### **Personal Electronic Devices**



Personal electronic devices (i.e. phones, pagers, cameras, ipads, ipods, and computers) <u>are ignition sources</u>. These devices may not be used without an approved Hot Work Permit while inside the boundary of an in-service system where hydro-carbons may be present. Any questions related to application of this expectation should be directed to the Williams' Representative on-site.

Flash lights and Communication radios must be appropriately rated for hazard class location.

Cell phone use on construction sites is prohibited unless granted by the Williams Authorized Representative or a designated safe area has been identified for cell phone use.

## **Tools and Equipment**



Williams' employees and Contractors shall ensure that all their equipment and tools are in good condition and meet regulatory and functional requirements. Williams reserves the right to restrict entrance or to have any equipment or materials removed from a site that are in an unsafe condition or are not in compliance with regulations.

All power tools should be de-energized when not in use.

The use of Williams' equipment by Contractors is not permitted unless written authorization from an Authorized Williams Representative is obtained.

## **Compressed Gas Cylinders**



Contractors involved in work that requires the use of compressed gas cylinders, shall ensure that cylinders are handled in accordance with OSHA 29 CFR 1926.350.

Oxygen Cylinders are pressurized to 2,400 pounds-per-square-inchgauge (psig) at  $70\square F$  when full. Oxygen alone will not burn; however, it supports combustion.

Do not lubricate or allow oil or grease to contaminate oxygen connections to prevent spontaneous explosions and fires that may occur when oxygen contacts oil or grease under pressure.

- Separate Oxygen and hydrocarbons
- Do not use oxygen in place of compressed air
- · Separate oxygen cylinders and fuel-gas cylinders
- Acetylene cylinders are to be stored upright to prevent the acetone from draining into the valves or fittings

Do not use acetylene at a hose pressure exceeding 15 psig to reduce the possibility of an explosion. Acetylene is extremely unstable at pressures above 15 psig.

## **Compressed Air Used for Cleaning**

Compressed air used for drying or cleaning can be used on tools and equipment only and must be limited to 30 psig by a pressure regulator

or pressure-reducing nozzle, as specified in OSHA 29 CFR 1910.242 or any successor regulation.

Do not, for any reason, direct compressed air toward a person. Compressed air into the body can cause injury or death. When using compressed air for cleaning in a dry and dusty situation, the contractor must wear, at a minimum, protective eye goggles, gloves, and a dust filter for respiratory protection.

## **Compressors, Engines and Pumps**

When working with compressors, engines and pumps:

- The equipment may start automatically, without warning.
   Personnel should stay away and refrain from leaning on or resting anything against the equipment. Post warning signs on the equipment.
- Some parts of the air compressor may become extremely hot during use. Mark these places on the machine to warn personnel who may come into accidental contact with it.
- Fit rotating parts of pumps, engines, and other machinery, such as fans, belts, chain drives, and clutches, with machine clutches, with machine guards.

## **Personal Protective Equipment**



PPE is never a substitute for engineering, manufacturing or administrative controls or safe work practices.

Contractors shall require and ensure that all its employees wear personal protective equipment when working conditions expose its employees to hazardous conditions as specified in 29 CFR 1926 Subpart E, Personal Protective and Life Saving Equipment; 29 CFR 1926 Subpart M, Fall Protection; and 29 CFR 1910 Subpart I, Personal Protective Equipment (PPE).

Contractor shall provide (at no additional cost to Company) and Contractor's personnel shall be required to wear various types of PPE at times while on the job site.

Minimum PPE requirements for construction sites (excluding office areas and occupant compartments of vehicles) are:

- Hard Hats must be worn at all times. Hard Hats must meet the ANSI Type I standard
  - Class G hard hats will be used by workers not entering the limited approach boundary of Exposed energized electrical conductors or circuit parts

- Class E (Electrical) hard hats will be used by workers entering the limited approach boundary of exposed energized electrical conductors or circuit parts
- Use only hard hat liners or balaclavas that are Flame Resistant
- Inspect the hard hat shell at each use and replace when dents, cracks, nicks, gouges, or any damage due to impact, penetration, abrasions, rough treatment, or wear that might reduce the degree of protection are found; or when thermoplastic degradation is found
- Check elasticity within the hard hat shell at each use and replace when elasticity is not exhibited or cracks appear due to brittleness. Using both hands, compress the shell inward from the sides about one inch and release (avoid dropping the shell). The shell should quickly return to its original shape
- Replace all hard hats at least four years from the date of manufacture, regardless of physical appearance
- Inspect the hard hat suspension at each use and replace when cracks, frayed or cut crown straps, torn headbands, or damaged, torn, or pliable size adjustment slots are found
- Replace the entire hard hat suspension system every 12 months
- Wear the appropriate helmet when operating off-road vehicles such as snowmobiles and All-Terrain Vehicles (ATVs)
- Wear Safety glasses at all times meeting the requirement of:
  - ANSI Z87.1 or
  - o ANSI Z87.1+ (high impact)
  - Incorporate a prescription into safety glasses that meet these requirements, including side shields
  - In lieu of side shields, wear eye protection that can be worn over prescription lenses (goggles, face-shields, etc...) without disturbing the proper position of the prescription lenses

 Safety glasses will be worn when goggles or face shields are removed during welding and flame cutting

Contractor welders are required to wear a hood that meets ANSI Z87.1 standards. While working on Williams' projects, welders are required to wear both Z87.1 safety glasses and a welding hood.

As per industry practice, Contractor employees should follow these guidelines for eye protection in addition to those listed above:

- Tell the Contractor Supervisor when you are wearing contact lenses
- Do not wear contact lenses in area where there is a potential exposure to a welding arc, gas vapors or chemicals
- Have a spare pair of contact lenses or prescription glasses readily available

Personnel should always shield their eyes from the arc's rays, including reflected rays from another surface, such as the water.

Safety eyewear other than safety glasses may be required for certain tasks, according to the following chart:

Welding Tasks	Minimum Shade Requirement	
Torch Soldering	2	
Torch Brazing	3 or 4	
Light Cutting, up to 1 inch	3 or 4	
Medium Cutting, 1 to 6 inches	4 or 5	
Heavy Cutting, over 6 inches	5 or 6	

Gas Welding , up to 1/8 inch	4 or 5
Gas Welding, 1/8 to ½ inch	5 or 6
Gas Welding, over ½ inch	6 or 8
Shielded Metal-Arc welding up to 5/32 inch electrodes	10
Shielded Metal-Arc welding up to 3/16 to ½ inch electrodes	12
Shielded Metal-Arc welding over ¼ inch electrodes	14
O a Matal A a a lating (a a Sana a)	11
Gas Metal Arc welding (nonferrous)  Gas Metal Arc welding (ferrous)	12
Gas Tungsten ARC welding	12
Atomic Hydrogen Welding Carbon ARC Welding	12 14

When performing electric arc welding or acetylene burning, cutting or welding the possible dangers and minimum eye protection is as follows:

- Sparks
- Ultraviolet rays □ Molten metal
- Flying particles

#### Minimum eye protection needed:

- Welding Helmet with appropriate tinted lenses and safety glasses or goggles
- Face shield with tinted-plate lenses and safety glasses or goggles
- Welding goggles, eyecup type, with tinted lenses (Shade V or current OSHAS Standard), lenses, and face shield
- Goggles, cover-spec type with tinted lenses (Shade V or current OSHAS Standard), or tinted-plate lenses, and face shield
- Hearing Protection with a minimum Noise Reduction Rating (NPR) of 30 must be worn in areas designated as "hearing protection required", unless site specific data indicates a lower PR is acceptable. Wear ear muffs, in addition to ear plugs, in areas designated as "double hearing protection required".
  - All areas with hazardous noise levels may not be labeled as hearing protection required, but may be time and task dependent. If ambient noise levels are above normal conversation volume, hearing protection must be worn in the area or for the duration of the high noise task.
- Safety toed boots (steel or composite reinforced) must be worn at all times and:
  - Must meet ASTM F2413 standards
  - No metal protrudes from footwear
  - Must have treaded soles and a defined heel
  - Safety boots must be worn, athletic shoes are not permitted
  - Non-ankle supported safety shoes and athletic shoes are not permitted
  - o Must have toe, heel, and sole puncture protection
  - Must have spark resistant soles
  - Heels must resist liquid penetration
  - Non-sparking ice creepers may be worn

- Must be constructed of a material that prevents the rapid passage of liquids
- Rubber steel toed boots meeting the ASTM F2413 standard may be used
- Safety Footwear which prohibits the rapid passage of liquids is prohibited

Rings (wedding or finger rings, facial rings or posts), necklaces, earring hoops, and other loose jewelry, must not be worn when working in areas where they could catch on moving objects, sharp protrusions, or be exposed to electrical circuits.

## Flame Resistant Clothing (FRC)



Minimum FRC requirements for offshore construction activities (excluding office areas, break areas that are outside of process areas and occupant compartments of vehicles) are:

- Flame Resistant Clothing (FRC) Must be worn as the outermost layer
- FRC will meet all the following requirements
  - NFPA 2113/2112 guidelines for general purpose work (excluding electrical energized work)
  - o A minimum HRC 1 rating
  - o A minimum ATPV value no less than 4
  - A minimum no less than HRC-1 value for outerwear garments, i.e., raincoats and cold weather gear
  - o Rainwear must also meet ASTM F2733 specifications

- A statement similar to the following must be printed legibly on the product label:
   MEETS THE REQUIREMENTS OF NFPA 2112
- Shirts will be long sleeved, fully buttoned excluding collar button, and tucked into pants, with the sleeves rolled down and buttoned at the waist
- o Pants will be full length and worn over boots
- Wear garments under FRC that are FR clothing or made of natural cotton, wool, or silk fibers
- Replace FRC garments when frayed, ripped or torn
- Store FRCs in a manner that prevents physical damage; damage from moisture, dust, or other deteriorating agents; or contamination from flammable or combustible materials
- Clean FRCs prior to their initial use in accordance with manufacture's specifications in order to maintain flame resistance and thermal protection properties. Do not use starch, fabric softener, or bleach
- Make repairs and approved alterations to components that comply with the original FRC specifications and construction.
- Clean, repair, or replace FRC that is contaminated with flammable materials, worn, or damaged to the extent that the protective qualities are impaired
- Additional or more stringent PPE may be required if regulations, working conditions or environment dictate.

The safety of our employees, our contractors and the general public is our greatest concern. While PPE does not prevent an accident from happening, its use can minimize the exposure or reduce the severity of injury or illness. A hazard assessment is to be completed prior to the commencement of work to identify existing or potential hazards to determine if additional or specialized PPE is required. Your support and assistance in implementing this new enterprise-wide standard is greatly appreciated.

## **Personnel Without Appropriate PPE**

If a contractor's employees arrive at a Williams operated offshore facility without the proper PPE for the job, Williams will send the contractor employee back to land to retrieve the appropriate PPE at the Contractor's expense.

## **Pneumatic Testing Pipe**

When conducting an approved pneumatic pressure test of a given system, precautionary measures regarding PPE include the following:

- The minimum PPE requirements for tests less that 50% SMYS shall consist of hard hats, safety glasses, steel-toed shoes, and hearing protection for all individuals designated to enter the testing area to inspect for leaks.
- The minimum PPE requirements for tests exceeding 50% SMYS shall consists of Kevlar body armor, face shields, helmets, safety glasses, steel-toed shoes, and hearing protection for all individuals designated to enter the testing area to inspect for leaks.

#### **Hand Protection**



Appropriate gloves (cloth, cut-resistant, leather or leather-palmed gloves) must be worn when hands are exposed to potential hazards such as burns, cuts, punctures, or abrasions, when handling chemicals or hazardous materials where absorption is a concern (chemical

resistant gloves), and when performing electrical work (certified gloves for electrical work).

Welding specific, flameproof, gauntlet gloves must be worn during all arc welding, gas welding, or gas cutting operations except when engaged in light work such as test-fitting pieces.

## **Respiratory Protection**



Contractors, whose workers perform work that requires respiratory protection, must have a written Respiratory Protection Program that meets, at a minimum, the requirements of 29 CFR 1910.134.

Contractors must ensure that their workers are properly trained, medically cleared, fit-tested, and that the program is properly implemented and documented.

Facial hair can constitute a hazard due to improper seal on a face mask, wicking effects from chemicals and burns from flash fire.

Personnel are to be clean-shaven, including the area immediately below the bottom lip.

Ensure scalp hair is trimmed short enough or contained so that it will not become entangled in rotating equipment or interfere with the effective sealing of respirator protective or resuscitative equipment.

#### **Personal Flotation Devices**

USCG-approved Type I flotation preservers or Type V or Type III/V work vests are required at all times over water locations.

USCG- Type I life preservers are provided by Williams for emergency situations and during emergency drills. Type I life preservers are typically stored in orange boxes at facility muster points and near primary means of egress.

It is the responsibility of the contractor company to provide their employees with U.S. Coast Guard-approved Type V or Type III/V work vests as needed.

All personal flotation devices must be securely fastened, fit snugly, and be in good conditions. Personal flotation devices must be worn during the following activities:

- When transferring to or from any watercraft by swing rope, personnel basket, or gangway
- Outside the cabin or wheelhouse of a watercraft, including barges
- When riding in an open or semi-open watercraft
- When entering the water to perform work, except for diving
- Any other time deemed necessary by the vessel captain or person in charge
- Accessing area below the sump deck
- When working on the boat landing or any level not surrounded by guardrails

Only Federal Aviation Administration (FAA) approved inflatable personal flotation devices are provided in, and shall be worn on all helicopters.

All personnel working on Williams operated or owned offshore facilities will wear appropriate PPE during afterhours if outside the galley and living quarters.

## **Marine Transportation**



Many times Williams personnel, contractor personnel and equipment will be transported by vessels chartered to Williams. These chartered vessels will follow the guidelines below:

- Safe operation of a vessel chartered to Williams is the exclusive duty of the captain and owner of the vessel
- Only properly trained and licensed captains employed by the vessel owner will operate and navigate vessels under charter to Williams, Only qualified personnel who hold the appropriate licenses, if required, will operate all other vessels used in Williams' offshore operations
- The captain of the vessel will refuse to allow any persons not adhering to the personal flotation device rules to board a vessel
- The captain of the vessel will ensure that the cargo is properly
  positioned and secured on the vessel before leaving the
  Williams facilities. Fastening equipment for securing cargo on
  marine vessels will be furnished by the company with which is
  charted. The only acceptable chain binders are the cam-lock

- safety binders or the ratchet-type binders. Single lever, boomer type binders are prohibited. The captain of the vessel has final authority to refuse to transport any cargo not properly secured
- The captain of the vessel has the authority to refuse passage to anyone considered an unsafe passenger
- The captain of the vessel can refuse transportation of any hazardous material that have not been properly identified, classified, named, packaged, marked, labeled and manifested
- The captain of the vessel shall request a JSA on all lifts performed with the lift team
- The captain of the vessel may require that seat belts be worn where available
- Material, equipment, tools, containers, and other items used in the Outer Continental Shelf that are of such shape or configuration that they are likely to snag or damage fishing devices will be handled and marked as follows:
  - All loose material, small tools, and other small objects will be kept in a suitable storage area or a marked container when not in use
  - All cable, chain, or wire segments will be recovered after use and securely stored until suitable disposal is accomplished
  - Skid-mounted equipment, portable containers, spools, reels, and drums will be marked with the owner's name before use or transfer over offshore waters
  - All markings must clearly identify the owner and must be durable enough to resist the effects of the environmental conditions to which they may be exposed
  - Additionally, BOEMRE PINC G-251 stipulates that the above markings cannot be made with chalk, grease pencil, or crayon, marking pens, non –waterproof decals, or water-based paints

- All skid packages, chemical totes, equipment, etc. must be pre-fitted with certified rigging. All lifts must be clearly marked with gross weight markings
- Selective unloading, also known as cherry picking, will be avoided as part of the cargo planning. Selective unloading or cherry picking is when riggers/deck crew climbs on top of lifts (i.e., cargo containers, boxes, containers, etc....) or enter unsafe deck areas (where confinement does not allow easy access to cargo and the opportunity for safe evacuation of this are, i.e., when cargo is secured closely to bulwarks not allowing sufficient access by riggers/deck crew) o In the case of infield movers where the shore base is not involved in the cargo planning, the vessel captain and lift team leader will incorporate into the Pre-Lift JSA a plan t avoid selective unloading (Cherry Picking)
  - When there is a departure from the agreed sequence of deck cargo offload, the "Stop Work Authority" process must be exercised and the Cargo Plan should be revised, discussed and agreed upon with all team members (captain, crane operator, and riggers) and the Authorized person in charge.
  - A JSA which specifically addresses the hazards associated with the revised Cargo Plan must be documented and a copy retained by the vessel crew. The JSA cannot be a checklist and must include an assessment of the current weather, sea conditions, cargo on board, and any other considerations particular to the situation
  - Organize cargo placement to maintain access/egress routes. Personnel should avoid climbing on cargo or walking on tubular

Personnel transfer from boat to boat in open water is not recommended, unless there is no other practical means to transfer.

When such transfers are necessary, they should be performed only after other means of transfer have been evaluated and excluded, the safety of the transfer is deemed acceptable, and a thorough JSA has been completed.

Boat to boat transfers in which neither boat is anchored, moored, or using a dynamic positioning system shall not take place, unless there is an emergency that requires the transfer to save lives. In such case, all efforts must be exhausted to ensure that the transfer does not expose emergency personnel to greater danger.

#### **Personnel Transfers**

Only qualified crane operators can perform unsupervised personnel lifts. On Williams facilities and Williams owned or Contractor owned cranes, personnel designated as Class A crane operators are considered qualified.

Any Williams employee hiring a third-party crane operator to perform personnel transfers must verify that the crane operator is a qualified crane operator and is experienced with personnel lifts.

All personnel crane lifts must follow the recommendation in API Spec 2C and API RP 2D when using cranes to transfer personnel.

Cranes will be classified as personnel handling and identified with a sticker depicting a personnel basket.

Hoist will be equipped with a personnel handling certification tag. The hoist certifications are maintained according to manufacturer's recommendations.

Cranes classified as personnel handling will be equipped with a boom hoist pawl to prevent unintentional lowering of the boom. These cranes also have an emergency load lowering kit available on the platform. For

hydraulic boom cylinders, the crane is equipped with a holding device, such as an integrally mounted check valve.

Hooks on headache balls or on blocks used to transfer personnel will be a type that can be closed and locked (API 2C, 6.5.3.3). When a stringer to transfer personnel, hooks for both the headache ball and block and stinger must be a type that can be closed and locked. Personnel baskets used to transfer people to an d from rigs, platforms and boats must be designed for and in a conditions suitable for the intended purpose as stated in API RP 2D. Each personal basket must contain a stainless steel certification tag provided by the manufacturer. The certification tag should specify the description, pertinent working load limits, size and length of the sling, supplier's name, and the proof test certification number and date.

A tag line must be used on all personnel baskets. The tag line should be attached to the bottom center of the basket, 15 to 20 feet in length, and should be free of any knots or splices. Riggers must not get beneath the basket to retrieve the tag line. If necessary, hooks or other devices should be used to retrieve tag lines.

All personnel transported on a personnel basket must wear a personal floatation device and a hard hat.

For the Billy Pugh collapsible basket, personnel will stand on the outer rim facing in toward the basket; luggage must be positioned in the center of the basket, not stacked, to avoid unexpected shifts.

For the X-904, grab the outer ropes, step onto the basket, and position your feet as indicated by painted footprints on the basket floor.

Do not attach the quick release safety lanyard until you step into the basket.

For the X-904, attach the quick release safety lanyard clip to the upper nylon strap of the personal floatation device work vest between the stitching, not on to the personal floatation device fastener. The safety lanyard serves as a fall restraint and should not be considered fall protection. Pass your arms around the inner rigging ropes and cross them for a secure grip. The deckhand or rigger will signal the crane operator when the riders are properly secured. Personnel baskets will carry no cargo other than personal luggage or small tool bags/boxes.

Personnel baskets should not be on a platform, unless the platform crane is classified for personnel handling. The crane load charts will include the capacity rating for personnel lifts.

Before using personnel baskets, the crane operator or qualified rigger must ensure that the basket is in serviceable condition and certified. At a minimum, personnel should look for frayed or broken nylon ropes, worn or kinked cables, and dry-rotted canvas mat in the center.

#### **Personnel Baskets**



#### Personnel baskets:

- Must be equipped with a proper tag line.
- Should be attached to the bottom center of the basket and should be free of any knots or splices.
- Must be equipped with a stabilizer
- May serve as a temporary floatation device in emergencies
- Shall not exceed the manufacture's recommendation for the number of passengers

The vessel captain may reduce the number of personnel per lift depending on weather and sea conditions.

### **Personnel Basket Inspections**

A cursory inspection shall be completed before each use all load bearing parts of the personnel basket should be inspected by a competent person in accordance with manufacturer's recommendations. If there is any excessive wear or damage, the unit should be removed from service until it can be repaired or replaced.

Every six months, contractors must send a qualified person who meets the relevant American Petroleum Institute's specifications to conduct a thorough inspection of the unit.

Personnel basket slings will be inspected yearly in accordance with the manufacture's recommendation.

Every two years, contractors are responsible for refurbishing personnel baskets and replacing parts as required. All load-bearing lines, hardware, covers, and floatation items should be carefully inspected.

### **Training for Use of Personnel Baskets**

Contractors are responsible for training their employees in proper personnel basket use to include general safety issues and specific transfer procedures. Some general personnel baskets safety guidelines that should address training include:

- Never stand under a personnel basket. Riggers must not get beneath the basket to retrieve the tag line. If necessary, use hooks or other approved devices to retrieve the personnel tag line
- Place small, hand-carried items in the center of the basket
- Carry nothing in your hand, and do not wear gloves
- Wear a properly fastened life preserver or work vest
- Stand in the center of one of the openings in the netting
- Keep knees flexed, with one foot on the ring of the basket and one foot on the deck

- Pass arms through the netting and cross them for a more secure grip
- Be ready for the unexpected
- Balance the load by spacing passengers evenly on the basket
- Should the basket contact the boat a the top of a swell, DO NOT STEP OFF, as you could fall as the boat drops away from you
- Should the basket contact the boat as it is rising on a swell, be prepared for a sudden jar
- The basket should contact the boat at the bottom of a sell. As it does, flex your knees with one foot on the ring of the basket and be ready to place the other on the deck. As slack appears on the basket, step off quickly and get clear of it
- Do not lean inward on landing. You could lose your balance and fall into the basket or be struck by the headache ball
- Heavy material will be transferred in a cargo box or cargo basket
- Hard hat/strap must be worn during transportation
- Stop Work Authority should be used anytime anyone feels the operation is not safe

## **Swing Rope Guidelines**

Preferably, a trained deckhand will be available, wearing the proper personal floatation device, to assist passengers anytime a personnel transfer is made. Factors used to determine when transfers can be safely made include the direction of the sea, wind, and tide, and the physical abilities of the personnel. Anyone involved in the transfer should use the "Stop Work Authorization" anytime they feel conditions are unsafe for transfer. It is not advisable for personnel who are transferring for the first time to use the swing rope without trained personnel available to assist.

Contractors are responsible for training their employees in proper swing rope use to include general safety issues and specific transfer

procedures. Some general swing rope safety guidelines that should be provided in training include:

- When transferring luggage, materials, and equipment from boat to dock, use a materials basket with the crane. If this is not possible, pass the items to the deckhand before transferring to the boat, then have the deckhand pass the material to you when you are on the dock.
- Don't wear gloves
- When transferring from the structure to a boat, time your swing so that your feet land on the boat deck as it completes its rise.
   Before you swing, watch the boat as it rises with the wave, timing your action.
- When transferring from a boat to a structure, time your swing so that you leave the boat just as it dips down from the highest point in the wave.
  - Grab the knotted rope high enough to clear the structure's catwalk when the boat is on top of the swell, in most cases, the appropriate place to grab the rope is just above the middle or at eye level.
  - Release the rope for the next person after landing o
    Be alert and help the next person make a safe landing.
    New timers to the swing rope routine should not be the
    first ones to make the transfer unless there is an
    experience person on the dock to help.

## **Helicopter Safety**



When working around helicopters, it is necessary to adhere to the specific safety guidelines. Personnel should always approach the aircraft with the rotors spinning at a 45 degree angle and only after making eye contact with the pilot and the pilot or HLO grants permission to approach. The rotor spins at such high speeds that it is not visible. The rotor is one of the most severe hazards to personnel working around helicopters, and its danger cannot be overemphasized.

Advise the aviation dispatcher before transporting any hazardous materials, such as explosives, flammables, compressed gases, and radioactive substances. All hazardous materials shipments must conform to Department of Transportation regulations 49 CFR Parts 170-

179, regarding identification, hazard classification, and proper shipping name, packaging, marking, labeling, and manifesting.

It's extremely important for passengers to:

- Use the scales provided to weigh both your person and your luggage accurately for every flight
- Remove and stow any unsecured headgear including hard hats and baseball caps before approaching a helicopter
- Notify the flight dispatcher and pilot if you are a first-time
  passenger. You must complete the Williams Flight Safety and
  Aircraft Safety Orientation program before boarding the aircraft.
  You will also receive extra assistance and guidance during
  boarding and unloading the aircraft
- Inform the pilot if you are unfamiliar with your destination, so that you may be notified when you arrive at your destination. This action reduces confusion, because helipads are marked by their geographical location, which may not be their commonly called name
- Refrain from smoking, chewing tobacco, and using snuff while onboard the aircraft. These activities are strictly prohibited
- Comply with the following guidelines for dress:
  - Long pants are required, no shorts o Shirts must have collars, no tank tops o No petroleum or chemical-saturated clothing or shoes are permitted
  - Proper shoes are required, no thongs, sandals, slippers, Crocs, or flip-flops
- Wear hearing protection; either earplugs or earmuffs are acceptable. Earplugs are provided on each aircraft, or you may provide your own. Please do not discard used earplugs inside the aircraft, on the flight decks, or on the airport ramps. Helicopter rotor wash can pick up such debris and ingest it into the engines

- Securely fasten and wear an inflatable personal floatation device aboard the aircraft as provided by the pilot
- Never inflate the aviation life jacket inside the aircraft

## **Personnel Entry into Water**



Entry into the water shall be permitted only when:

- A diver is to perform specific work pending approval of the Permit to Work and JSA
- An "abandon platform" order is given

If rescuing a person in the water when there are no other reasonable rescue alternatives, personnel performing the rescue shall have their

personal floatation device attached to a lifeline. Other persons should be available to secure the lifeline and retrieve the person in the water.

# Helicopter Underwater Egress Training and Water Survival Training

All personnel who visits or who is assigned to work in the offshore Gulf of Mexico are required to be trained in Helicopter Underwater Egress Training and Water Survival Training (Huet/WST). All such personnel are required to have refresher training at least every three years. Specific details regarding training content and trainer competence will be available from the Authorized Williams Representative.

All William employees assigned to the offshore facility and those who have the potential to travel extensively to the offshore facility shall have the helicopter underwater egress training regardless of how many trips offshore. Refresher training is required every three years.

## **Aviation Emergency Evacuations**

First-aid incidents will be treated at the offshore facility and the injured person will be evacuated on the next available flight as necessary.

Serious medical emergencies may occur and a helicopter evacuation may be needed. All medical emergency evacuations shall be coordinated by the Authorized Williams Representative.

Personnel requiring first-aid treatment may use ground transportation when the aircraft reaches the onshore base. The Contractor company personnel or its representative should meet their injured employee at the base and arrange transportation from that point to a medical facility.

Medical emergencies will be flown to the nearest designated hospital, unless special situations, such as weather or the nature of the emergency dictate otherwise. The medical provider in charge of the injured person will make the call and have the final say as to which medical facility the injured is transported.

During inclement weather, personnel may have to be transported to the onshore base by boat. If severe weather conditions prevent helicopter evacuation, the contractor's company must arrange for ambulance and medical personnel to be at the boat dock.

### **Foreign-Flagged Marine Vessels**

Foreign-flagged vessels require special consideration for use in the U.S. Gulf of Mexico due to specific legal requirements (both statutory and regulatory). Consult with the Authorized Williams Representative before using a foreign-flagged vessel.

If arriving directly from a location outside the United States, all vessels (mobile offshore drilling units, anchor-handling vessels, survey vessels, installation vessels, construction barges, tank barges, etc...) hired by Williams or the Contractor that are registered in a country other than the U.S (foreign-flagged) must comply with the arrival and entry requirements of the U.S Customs and Border Protection before working for Williams on the U.S. Outer Continental Shelf within or beyond the territorial sea. Before departing from a U.S. port or place, foreign-flagged vessels must satisfy any clearance requirements imposed by the Customs and Border Protection agency.

Under no circumstances is a foreign-flagged vessel permitted to load at a U.S. port or place (a coastwise point) any cargo or merchandise intended to be transported to and offloaded at a different coastwise point, including an Outer Continental Shelf facility.

On a case-by-case basis as permitted by the CSB, a foreign-flagged vessel may transfer materials from a U.S. port or place to an OCS location where the vessel itself will perform installation services using the materials. Contact the Authorized Williams Representative for guidance in obtaining proper CBP permission.

A U.S.-flagged, coastwise-endorsed vessel may transport cargo, merchandise, or other equipment from a U.S. port or place to a different coastwise point, including an OCS location, or to a foreign-flagged vessel located at the lease dock where the materials will be used or installed, provided the foreign-flagged vessel does not participate in the transportation. A U.S.-flagged, registry-endorsed vessel may deliver

materials to unattached Mobile Offshore Drilling Units or assist in anchor-handling. Contact the Authorized Williams Representative for guidance eon specific interactions between U.S-flagged and foreign-flagged vessels.

The Authorized Williams Representative will provide guidance to all Williams employees and teams before contracting with a foreign-flagged vessel to work on the OCS.

Foreign-flagged MODUs and construction vessels may load at U.S. ports the equipment necessary for executing their typical work functions at OCS locations. Such equipment is considered to b ship's gear or vessel equipment and is not considered t be merchandise transported between ports or places in the United States. It would be advisable to obtain advance CBP verification that the anticipated activities are permitted. Contact the Authorized Williams Representative to coordinate that effort.

A foreign-flagged vessel is not permitted to conduct salvage operations in the territorial waters of the U.S Gulf of Mexico.

#### **Environmental Practices**

# Waste/Toxic Materials Management, Storage, Handling, Disposal, Clean-Up, And Pollution Prevention



Williams is committed to working to prevent pollution and waste, striving continually to improve environmental performance and limit environmental impact from onshore and offshore operations.

Safety Data Sheets (SDS – formerly known as Material Safety Data Sheets, MSDS) will be reviewed before hazardous or potentially hazardous substances are handled. Williams employees and Contractor employees are responsible for handling, storing, documenting, and disposing of waste in accordance with all applicable laws.

In addition, any waste stored on Williams' worksites must be in compliance with applicable Company policies and requirements.

Contractors shall (and shall require their subcontractors to) maintain their immediate worksites free of harmful spills, emissions, releases, discharges, and other pollutants.

### **Waste Management**

For waste generated by the contractor such as, paint waste from painting the contractor's equipment, or used motor oil resulting from an oil change in the contractor's equipment, it is the contractor's responsibility to handle, document, and dispose of that waste in accordance with all applicable government regulations.

#### **Hazardous Waste Classifications**

Waste will be classified as hazardous if any of the following conditions exist:

- The waste is listed as a hazardous waste in 40 CFR 261 or in applicable state hazardous waste regulations. The lists are generally referred to with respect to Environmental Protection Agency's (EPA's) assigned waste code: F-List, K-List, P-List, or UL-List
- The results of laboratory analysis indicated that the waste meets one of the following criteria specified in the regulations to be classified as characteristically hazardous:
  - Ignitability-D001: flashpoint less than 140 degrees Fahrenheit ○ Corrosiveness-D002: pH <2 or pH> 12.5 ○ Reactivity-D003: is explosive or releases harmful quantities of cyanide or sulfide gas
  - Toxicity-D004 through D043: leaches certain metals, organics, chlorinated organics, pesticides, or herbicides
- Williams requires that the waste be treated as a hazardous waste, even though it is not a regulatory requirement

Some types of waste must be handled and disposed of in accordance with other regulations in addition to the Resource Conservation and Recovery Act (RCRA). Examples of waste included in this category are:

 Asbestos - (regulated in Louisiana by the Louisiana Department of Environmental Quality (LDEQ) Air Quality Division)

- NORM (regulated in Louisiana by the Louisiana DEQ Radiation Protection Division and Louisiana DNR; in Mississippi by the Mississippi Department of Health and Mississippi Oil and Gas Board; and on the OCS by BOEMRE
- PCB waste (regulated under the federal Toxic Substance Control Act (TSCA)

# **Paint and Sandblast Media Discharges**

Maintenance waste, such as removed paint and materials associated with surface preparation and coating applications, must be contained to the maximum extent practicable to prevent discharge. This includes airborne material, such as spent or over-sprayed abrasives, paint chips, and paint overspray. Before conducting sandblasting or similar maintenance activities develop and implement a proper work plan for the containment of waste material.

### Painting guidelines include:

- Complete a JSA for the work activity
- Inform all employees of the painting activity and the area where painting will take place so that they can avoid the area as appropriate
- The paint crew and other employees working on the platform must use PPE when paint related products are mixed or applied, if they are within 50 feet of any work
- Store all paints and thinners in baskets or paint lockers and protect them from their surrounding environment

Contractors are responsible for appropriate disposal of accumulations of waste. Additional guidelines when performing sandblasting operations include:

 Contractors performing sandblasting operations for Williams must have a medical surveillance program in place to monitor employee's blood-level exposure to lead

- Review the potential health risk for abrasive blasting work and ensure all personnel not wearing forced-air breathing equipment must stay clear of the area where blasting is taking place
- Wear approved respiratory and hearing protection
- Wear appropriate eye protection
- Sandblasting sand must be double washed to minimize fires and to minimize exposure to silica dust
- Consider the paint coatings removed from sandblasting operations as lead until proven otherwise
- Check all hoses every day for leaks and signs of wear
- Maintain adequate ventilation, either mechanical or natural, to keep the work atmosphere less than a 10% lower explosive limit (LEL) and the oxygen content greater than 10.5% when working in a confined space
- Bleed or depressurize all lines before disconnecting
- Use a blasting nozzle with a cutoff device (dead-man's switch) in all situations, except underwater grit blasting
- Secure and hobble all high-pressure air hose connections using metal whip checks and cotter pins
- Pin or wire all air hose connectors (crow's feet) to keep them from coming apart
- Post warning signs identifying potential hazards
- Gather waste that has collect over solid decking

The Authorized Williams Representative must advise the onshore base and helicopter pilots when abrasive blasting operations are to take place to protect the helicopter engines from ingesting abrasive particles that could damage them.

The paint crew and platform personnel must remove or secure all loose items in the vicinity of the heliport to prevent items from being picked up in the helicopter blade wash

#### **Pollution Prevention**

Pollution prevention is the responsibility of the contractor and their subcontractors. Williams expects that all contractors and subcontractors comply with all local, state, and federal laws, rules and regulations relative to and concerned with spill prevention and pollution control

If the contractor or sub-contractor encounters, identifies or suspects a potential pollution hazard or spill event occurring during and operation, immediate steps must be taken to eliminate the hazard and/or minimize the effect. The Authorized Williams Representative must be notified immediately.

Contractors and sub-contractors must maintain their immediate work areas and keep them free from harmful spillage, discharge, or other pollutants.

Work involving in-service lines must have the appropriate work-plans and work permits and approved by the Authorized Williams Representative.

The appropriate containment devices will be positioned to catch oil or other types of liquids which may have to be drained or allowed to run out of lines or equipment to allow work to progress. Containment devices must have the appropriate plugs in place.

Contractors shall include a pollution prevention plan all offshore work activities.

# **National Pollutant Discharge Elimination System**

The National Pollutant Discharge Elimination System (NPDES) Process is designed to comply with the monitoring and documentation requirements of the NPDES permits that apply to operations in the Gulf

of Mexico. The process also seeks to prevent non-compliance through process monitoring and continual improvement.

Discharges specifically authorized by the appropriate permits area approved to be discharged into the Gulf of Mexico. All discharges into the GOM must be approved by the Authorized Williams Representative before discharging takes place.

Some examples of discharges covered by this section include, but are not limited to:

- Deck drainage
- Domestic waste
- Hydrostatic test water
- Sanitary waste
- · Uncontaminated bilge water
- Uncontaminated seawater or freshwater

All Authorized Williams Representatives must be trained in the specific NPDES requirements for the area where the offshore operations take place. This training must be specific for their job scope and provide a good reference for permits needed in the area.

Waste generated on Williams' behalf must be handled according to Williams' waste procedures.

#### Prohibited activities include but are not limited to:

- Burning of liquid or solid materials in pits, piles, drums, or other open containers. This also applies to the use of burn baskets on offshore platforms operated by Williams.
- Disposal of liquid waste in landfills
- Disposal of oily wastes in sand, scale, rags, filters, PPE and any other oily material in containers not dedicated to such material

 Disposal of Williams waste in disposal facilities not audited and approved by Williams. Contact your Authorized Williams Representative for information and approved disposal facilities

#### **Banned materials use:**

- Materials containing Ozone-Depleting Substances, as defined by the Montreal Protocol. These are the specific chemicals that have been defined by the Montreal Protocol as having adverse effects on the stratospheric ozone layer. They include chlorofluorocarbons (CFC 11, 12, 13, 111, 112, 1113, 114, 115, 221, 212, 214, 215, 216, and 217); Halon 1211, 1301, and 2402; hydrobromofluorocarbons (HBFCs); carbon tetrachloride, 1, 1, 1-trichloroethane and methyl bromide. Existing equipment containing ODS may be operated and maintained until the end of its normal life cycle.
- All forms of asbestos-containing products, defined as any material containing more than 1% asbestos. While not an exhaustive list, the following products may fall into this category: pipe-covering, insulating cement, insulating block, asbestos cloth, gaskets, packing material, thermal seals, refractory and boiler insulation material, transite board, asbestos, cement pipe, fireproofing spray, joint compound, vinyl floor tile, ceiling tile, mastics, adhesives, coatings, acoustical textures,, duct insulation for heating, ventilation, and air conditioning (HVAC) systems, roofing products, insulated electrical wire and panels, and brake and clutch assemblies.
- PCBs Polychlorinated biphenyls are employed in industry as heat exchange fluids, in electric transformers and capacitors, and as additives in paints, carbonless copy paper, sealants, and plastics. PCB-contaminated materials are defined as materials exceeding 50 mg/kg of PCB oil such as in lead-based paint and leaded-thread compound (pipe dope)

Note: Potentially less harmful alternative materials should be substituted for banned materials whenever possible. In particular, as of the applicable compliance date, existing air conditioning and refrigeration equipment containing Ozone Depleting Substances can be maintained (recharged) only with recycled or reclaimed Ozone-Depleting Substances, or with acceptable alternative refrigerants. Existing inventories and equipment can be used or managed in place as long as the banned materials do not pose a health or environmental concern, and removal is not required by local regulations.

#### At Williams we intend to minimize waste by:

- Reducing the amount of waste at the source by ordering only the amount of chemical or other materials needed to do the job
- Returning unused portions of the chemicals or materials t the vendor when possible
- Reusing a material when possible
- Recycle or regenerate wastes for continued use
- Disposing of waste at a facility audited and approved by Williams

When dealing with waste, it is important to identify the material and use it as intended or to find an alternative user. If the material cannot be used, keep it segregated and obtain guidance from the Authorized Williams Representative on how to identify and dispose of it. Waste transported from offshore or from shorebase locations must be accompanied with the proper paperwork and have the correct markings.

Guidance for handling, storing, documenting, and disposing of waste can be obtained from the Authorized Williams Representative.

### **Smoking**

Smoking (regular cigarettes and E-cigarettes) is permitted only in designated areas. Smoking is not allowed in any common use area, such as galleys, offices, restrooms, and laundry rooms. Smoking is not allowed in common areas such as passenger seating areas, during personnel transport.

Smoking is permitted in the wheelhouse of a vessel as long as the area is well ventilated and the second hand smoke is not circulated throughout the passenger seating areas. More stringent smoking policies may be imposed by the vessel owner/operator.

Use only safety matches or approved 2-stage lighters (Zippo only, no butane lighters allowed) where they are permitted to be carried in process or production areas, drilling/service platforms, or worksite/storages areas containing flammable materials or in classified areas.

While working within the boundaries of a Williams' in-service facility, Contractors will meet the requirements supplied by the onsite Williams Representative.

### **Fire Prevention**



Fire prevention is vital to safe operations and construction activities. Williams and Contractors are responsible for ensuring that a fire prevention plan is in use and that all efforts are made to reduce fire potential.

When working on or near pipelines, piping, or equipment that contains flammable gas or liquids, a Hot Work Permit is required.

Contractor employees should be aware that typical ignition sources are welding arcs, cutting torches, electric power tools (such as drills, sanders, and grinders), dew point testers, and combustible engines (such as vehicles, pumps, bending machines, and lighters).

Pneumatic tools that chip, gouge, grind, or drill are also ignition sources that may require the use of Hot Work Permits. To prevent ignition, the heated surface created by pneumatic tools must be cooled with either cutting oil or water. This requirement must be stated on a non-welding Hot Work Permit.

If there is any doubt about whether or not a piece of equipment can ignite an air-natural gas mixture, contact Williams' Representative for guidance.

Personal electronic devices (phones, pagers, cameras, and computers) are also ignition sources, and a non-welding Hot Work Permit may be required in certain facilities and areas.

Good housekeeping practices are vital to ensuring potential fire hazards are minimized.

# **Confined Space Entry**



Contractors that provide services that require workers to enter a confined space are required to have a written confined space program that meets, at a minimum, the requirements of OSHA Standard 29 CFR 1910.146 for confined spaces.

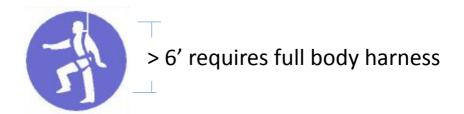
All qualified Contractors who are to perform confined space entry operations must:

- Obtain information regarding confined space hazards and entry operations from Williams when working within the boundaries of any Williams' work site.
- Provide equipment, such as personal protective equipment, fire extinguishers, testing equipment, communications equipment, alarm systems and rescue equipment, meeting compliance for this standard. All equipment must have documented inspection/certification records.
- Coordinate entry operations with Williams, as required within Williams' in-service facilities. Some Williams facilities may require

Contractors to use the site-specific Confined Space Entry Form. Contact the Williams Representative for specific requirements at each facility.

- Review the Contractor's Permit Required Confined Space Program with the Williams Representative
- Provide Williams with a copy of the completed entry permit to be posted on the location where the work is being performed.
- Upon completion of the permitted entry, Contractors shall maintain the completed entry permit at the offices for one year.

# Fall Protection / Working in Elevated Areas



When working at an elevation of six feet or more above grade, floor, or an approved work surface, such as platforms and scaffolds, or when working in an area where a fall potential of greater than six feet exists, Williams employees and Contractor employees must use a full-body harness with a proper means of attachment.

At a minimum, the Contractor's Fall Protection Plans will meet or exceed the requirements of 29 CFR1926.503, and Subpart M Fall Protection standards

Contractors will be responsible for providing affected workers with fall protection equipment, and ensuring that Contractors' employees who must work at heights where safe platforms are not available, will use the equipment provided.

Contractor-owned equipment, such as ladders and scaffolding, must be maintained and used in compliance with 29 CFR 1910.25 through 1910.35.

Regardless of height, other situations that may require fall protection include, but are not limited to the following.

Working above potential hazards, Contractors must wear a full-body harness with 100% tie-off when working in areas that have no handrails or that have an open hole, and are more than six feet above the ground floor, or deck level. The harness must have leg straps and a D-ring in the upper back between the shoulder blades. The harness must be properly attached to an appropriate anchor point.

Extra precautions shall be in place to prevent fall protection equipment from exposure to mechanical equipment, such as wearing fall protection equipment with dangling components that could become tangled in rotating equipment.

#### Ladders

Use the following guideline when working with ladders:

- All ladders must be equipped with anti-slip safety feet
- Do not use ladders as scaffolding components
- Do not use metal ladders when working with electrical equipment
- There should be only one person on a ladder at a time
- Use at a minimum, ladders that have the industrial grade 1-A label
- · Inspect ladders before they are used
- If the ladder is not in a safe operating condition, tag it for maintenance, and remove it from all service

 Tie or fasten single extension ladders at the top to prevent unintentional movement

### **Working Overhead**

Before working overhead, notify all employees that may be working in the vicinity of the work. Additional guidelines include:

- Never throw hand tools or materials to anyone: hand them up or down
- When working at heights, handle tools to prevent them from falling or being dropped
- Contractors will take all precautions to guard against falling objects by properly identifying and mitigating hazards
- Barricades or other suitable safeguards should be placed below overhead work to prevent employees from entering the area below the overhead work

### **Scaffolding Safety**

Scaffolds are temporary elevated platform structures, which must be provided for all work that cannot be done safely from ladders or from permanent or solid construction

Erection and dismantling of scaffolds must be performed under the supervision and direction of a qualified person experienced with or trained in scaffolding erection, dismantling, and use, as well as knowledgeable about the hazards involved.

All scaffolds will be erected, used and dismantled in accordance with 29 CFR 1910.28 or any successor regulation.

# **Manual Lifting**

Williams employees and Contractor employees must not lift loads over 75 pounds. The contractor must determine whether assistance is needed to lift lighter weights.

Before lifting, determine the following:

- Can a mechanical device move the object?
- Is the object bulky? Will it obscure vision? If so, get another person to help carry it.
- Is the object within the contractor's capability to lift?
- Is the walking surface free of obstructions?

### Use proper lifting procedures:

- Bend at the knees. Keep the back nearly vertical. Position the body as close to the object as possible. Place feet apart, but no more that shoulder width.
- Firmly grasp the object and straighten the legs. Keep the back straight and upright.
- Pull the object close to the body, leaning back slightly to keep the center of gravity over the feet.
- Avoid twisting the body when lifting or carrying loads.

When handling material with others, teamwork is important. Agree on who will be the leader, and give signals to indicate instructions. Release the materials only when everyone is ready.

# **Cranes and Rigging**



Contractors are required to provide a copy of their site-specific Crane Safety Plan to the Williams Representative before beginning work if cranes will be used during the course of work on the project. Crane and Rigging Plans must follow the minimum requirements of 29 CFR 1926.1400-1442 "Cranes and Derricks" in the Construction Final Rule.

Only designated personnel, trained and qualified to perform specific duties, are permitted to operate a crane per OSHA 29 CFR 1910.179.

### **Cranes and Weather**

Generally, dynamic load charts are designed using 24-mph wind speeds. Each crane and load must be evaluated to ensure the

manufacturer's recommendations are accounted for regarding safe operating requirements related to wind speed and load dynamics.

Some cranes or crane configurations may have lower wind speed requirements that must be considered. If the wind conditions exceed 24 mph, Contractors should consider consulting with the manufacturer for possible temporary de-rating of the crane's dynamic load capacity.

> 35 mph – STOP WORK

Crane operations must be stopped when wind speeds are at or above 35 mph (or lower wind speeds set by the manufacturer), or when lightning is in the vicinity.

Utilize "Stop Work Authority" when inclement weather exits.

### **Suspended Loads**



A safe distance shall be maintained when a load is suspended in the air.

Workers shall be instructed when not to stand or work under a suspended load.

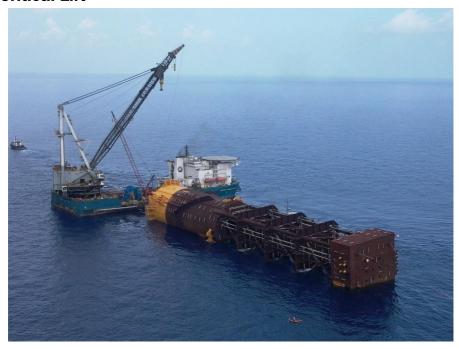
Workers shall be instructed not to go between the load and other objects where they may be trapped or crushed.

Non-conducting tag lines long enough to prevent workers from working under the load shall be used to control a suspended load and shall be attached before a load is lifted. Chains or steel cables are not acceptable.

If tag lines are impractical during final positioning of the load, caution shall be taken to ensure that no part of the person's body who is guiding the load is between the load and any stationary object, creating a pinch point situation.

When lifting a load with a gin-pole truck, a snub line from the load to the truck may be used in lieu of a hand-held tag line. However, a flagman shall be used.

### **Critical Lift**



When a Contractor is required to perform a critical lift, a Critical Lift Plan will be completed and submitted to the Williams Representative.

While working within the boundaries of a Williams' in-service facility, Contractors will meet the requirements supplied by the onsite Williams Representative.

A Critical Lift Plan is required when:

- The load weight is 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 work will be performed when working within ten feet of power lines.
- The power lines must also be de-energized and grounded through coordination with the local power authority.
- The lift is a Blind, Complex, or Complicated lift.
- Any load, (personnel, equipment or material) is suspended or lifted over any existing or in-service equipment, piping, and/or structure.

# Rigging

Contractors shall ensure only trained and qualified persons are performing rigging functions as required in 29 CFR 1926.1400-1442 "Cranes and Derricks" in the Construction Final Rule.

All rigging must be accompanied with up to date certificates. Rigging without up to date certificates will be considered unusable and will be tagged as such. Tagged unusable rigging must be quarantined away from usable rigging or made unusable and discarded.

All rigging slings shall be inspected prior to use following manufacturer's recommendations.

All damaged rigging must be properly disposed of to ensure it is not used during lifting operations.

# **Use of Non-Williams Equipment**

All non-Williams equipment delivered to a Williams offshore location must be pre-strung with slings that meet or exceed the Williams sling and shackle policy.

Be certain to have all non-Williams equipment and materials labeled with the contractor's company name clearly and permanently marked on it.

Ensure that all equipment is inspected for dropped object hazards.

Determine if equipment is fit for purpose and if it has been adequately maintained with necessary documentation.

Ensure that all drain pans are in good conditions and are kept clean and dry with drain plugs wrenched tight.

Engines must have spark arrestors on exhaust, air intake shutdown devices, and low-tension ignition systems. Protect hot surfaces against accidental contact.

Assure all equipment is NORM free.

When operating reciprocating equipment such as compressor, pumps, pumping units etc....:

- Only trained and qualified operators will start and stop operating equipment
- Do not wear jewelry, such as rings, watches, wrist chains, key chains, or loose clothing when working around operating equipment.
- Confine long hair
- Do not make repairs to, service, or alter equipment that is in operation. All equipment must be shutdown using the approved LOTO procedures to prevent accidently starting equipment while work is conducted. Guards and other safe devices will be fit for purchase and in place before equipment is operated.

# **Electrical Safety**



Electrical safety is the responsibility of all workers exposed to this type of work. All employees involved with electrical work activities must be trained and qualified to perform the work requirements.

## **General Electrical Safety**

Contractor employees and Williams employees will not touch electrical equipment while standing in water, on metal floors or ladders, on damp concrete, or on other well-grounded surfaces.

Contractor employees and Williams employees will not operate electrical equipment when their skin surfaces are damp or when they are wearing wet shoes or damp clothing.

Contractors will post caution signs on electrical equipment for voltages 600 volts and below.

Danger signs will be posted on electrical equipment for voltages above 600 volts.

Contractor employees and Williams employees will follow appropriate lockout and tagout procedures when working on any electrical equipment.

### **Electrical Fuse Safety**

Contractor employees and Williams employees:

- Will de-energize circuits by using lockout and tagout procedures before replacing fuses
- Will not bridge fuses or circumvent the normal operation of circuit breakers
- Will not replace blown fuses with fuses having a higher-amperage or lower-voltage rating. To maintain proper circuit protection, have only qualified personnel replace blown fuses.
- Will use a fuse puller to remove cartridge fuses

### **Extension Cords**



Contractor employees and Williams employees:

- Will inspect all extension cords prior to use
- Will remove damaged cords and properly discard them
- Will use extension cords in classified areas that are designed for explosion-proof service
- Will use extension cords only in temporary situations. Use proper construction methods to create permanent electrical connections.
- Will protect cords from contact with oil, hot surfaces, and chemicals
- Will not hang cords over nails or sharp edges. Will not place them where vehicles may run over them.
- Will always connect the non-explosion-proof connection first and disconnect it last when using adapter cords such as pigtails
- Will make and break all connections under zero energy state

- Will tape connections with electrical tape where two cords plug together
- Will not use cords where it may create a tripping hazard

### **Lockout/Tagout (Hazardous Energy Control)**



Contractor employees and Williams employees involved with work that requires isolation of energy sources shall have a written Lockout/Tagout Program that conforms to the requirements of OSHA 29 1910.147.

Contractors must provide documentation ensuring that personnel who will be involved with the lockout/tagout process are properly trained in the specifics of their written equipment-specific lockout/tagout procedures.

All lockout/tagout activity must also conform and be consistent with Williams' lockout/tagout procedures. It is the responsibility of all Contractors to coordinate all lockout/tagout with the Williams Representative on site.

Contractors shall provide and have available their own lockout/tagout equipment including locks, chains, tags, and any other isolation devices that may be necessary during the lockout procedure.

Lockout/Tagout devices, including those installed by Williams or Contractors, are never to be bypassed, ignored, or otherwise defeated.

While working within the boundaries of an in-service system,

Contractors will utilize the site-specific facility Lockout/Tagout Process, obtained from the local Williams' Representative.

# **Incident Management**

# **Emergency Action Plans**



Contractors are required to have an Emergency Action Plan.
Contractors' EAPs will align with the local Williams Emergency Response
Plan when work is associated with a Williams' facility or within a facility
boundary. Contractors should receive a local or facility EAP from
Williams for the particular facility where work is being performed.

Contractors shall post an emergency telephone number list for medical services, Life Flight, police, sheriff, fire department, Williams Pipeline Control, etc., near readily accessible phones associated with each project, or ensure that supervision has access to the applicable emergency phone numbers.

# **Incident Notification and Investigation**



# **Emergency Action Plans**

Contractors are required to have an EAP. The Contractors EAP must align with the local Williams Emergency Response Plan when work is being performed within the boundaries of a Williams facility. Both plans should be reviewed by the Contractor and the Williams Representative.

Contractors shall post an emergency telephone number list for medical services, Life Flight, BOEMRE, appropriate Emergency services, Williams Pipeline Control and any other pertinent phone numbers near readily accessible phones. Supervision should have immediate access to applicable emergency phones numbers. Other components of the plan should include:

- Key contacts for Contractors
- How to handle medical emergencies
- How Contractors Supervision will ensure proper medical care for their workers
- Preferred doctors
- Emergency call sequence and action plan

- Designation of a central assembly area in case of evacuation and/or emergency
- How to secure an emergency site
- The media relations person designated by Williams
- The statement that Contractors or their subcontractors are not authorized to speak or act as an agent or representative on behalf of Williams

The EAP shall be communicated to all of the Contractor's employees.

Some of the Williams facilities will have alert and alarm systems in place at the locations. Contractor's Supervision shall contact the facility's control room to receive information on alarms, which may vary by location.

Contractor shall prepare an emergency medical response plan for electrical shock related injury before working in HVAC areas. The plan shall include adequate CPR response during all work hours.

The EAP shall identify emergency response procedures, First-Aid/CPR Trained employees, location of first –aid supplies and medical evacuation methods. Contractor shall consult with local emergency response agencies to identify all options for medical response, including communication and GPS coordinates.

This notification process is specifically intended to be used for notification of incidents that occur at all Williams' project locations. These notification guidelines are the minimum and of a general nature and are not to be construed as absolute.

# **Incident Investigation/Root Cause Analysis**

Contractor is required to provide someone trained to lead an incident investigation to investigate and identify the causes of incidents so that

systemic causes can be reduced or eliminated and future incidents prevented.

Contractor is required to submit a copy of all incident investigation to the onsite Authorized Williams Representative.

Contractors are also required to have a process in place to report, record and investigate incidents and near misses and correct any deficiencies found.

An incident investigation report is required for:

- Any incident resulting in an injury that requires attention from a medical professional
- All MVAs or equipment damage while doing business for Williams or that takes place on Williams property
- All fires
- Reportable spills, spills of one gallon or more, near misses or minor incidents, which have the potential to result in a serious injury, spill, property loss, as directed by the Williams Representative or Contractor Management
- All incidents that exceed national pollutant discharge elimination system (NPDES) guidelines
- · Any significant financial incident
- Marine vessel operators must provide an incident investigation report and a root cause analysis when there is a casualty as required by 46 CFR 4.05. The incident must be reported to the Coast Guard
- Incidents that occur frequently
- All "Utility" damage including pipeline strikes, or other damage

At a minimum, an investigation and resulting report should: 

Describe what happened, when, and where

Determined the actual and potential loss or losses

- Determine the root cause(s) of the incident
- Determine the risk of recurrence
- Develop controls to reduce the risk of recurrence
- Communicate the lessons learned

In situations where an incident involves multiple contractors and Williams personnel, Williams may lead the incident investigation. The incident investigation team may be comprised of personnel from all affected companies.

If there is not an assigned Williams Representative on site, the Contractor Supervisor must contact the Williams Construction Coordinator or the Williams Project Manager. A Williams Representative will assume the responsibility for all appropriate notifications at that point.

# **Emergency Response Drills**

All personnel working on a Williams facility must participate in an emergency drill at least annually in accordance with all applicable laws, regulations, and Williams policies. To ensure familiarity with the emergency procedures, Williams requires conducting drills as if an actual emergency exists. Contractors are required to participate in all drills.

A documented record of all those who participate in the drills must sign a roster and the record will be kept in accordance with all applicable laws, regulations, and policies.

#### **Hurricane Evacuation Action Plan**

Williams coordinates the safe evacuation of all personnel working on Williams offshore facilities and shorebases. This includes contract employees working on a Williams facility. Williams evacuation procedures and plans are located in the WIMS system.

Contractors are responsible for developing and maintaining plans to safely secure contractor's equipment and/or assets from both, offshore facilities and onshore facilities.

### **Damaged Facility Assessment**

Guidelines exist for assessing offshore facilitates in WIMS for the purpose of regulatory compliance, or other work on platforms and Caissons after storm events or other events that may have:

- compromised the structural integrity of the facility
- restricted access/egress to the facility due to damage to boat landings and swing ropes and/or heliports
- created safety hazards (open holes, missing handrails, damaged vessels, etc...) on the facility
- created hazards by moving or compromising production equipment

No one shall be allowed on any structure identified as being in a noncompliant condition until a hazard mitigation plan has been prepared and approved by the Operations management to maximize the safety and security of our employees an contractor employees who may seek refuge there.

Facilities may not be reopened for normal operations until:

- All damaged or hazardous areas are sufficiently mitigated or isolated
- Significant structural damages have been repaired or deemed safe by an engineering analysis
- · Two function means of egress are present
- All open holes are barricaded
- All missing and damaged handrails have been repaired or replace

- Other hazards such as spills, loose or hanging items have been cleaned and/or secured
- Need approval to return from the Authorized Williams Representative

Damaged and Unsafe facilities shall not be staffed for operation until proper approval has been obtained and shall be properly secured so that no one can occupy the facility by:

- Removing or pulling up and tying off all swing ropes a appropriate (don't leave yourself without a means of egress or without a way to board the facility later)
- Installing locking clamps on all stairways
- Posting the appropriate signage on all stairways

### Before returning to normal operations:

- A Return to Work Plan must be completed and approved
- Verify that it is safe to board the facility by completing a thorough investigation of the facility by air or boat before boarding a facility that may be damaged
- All boarding must be done by two or more authorized employees
- Proper communications shall be maintained
- Obtain approval from the Authorized Williams Representative
- Continue to assess all areas of the offshore facility for any unknown safety issues
- Perform visual verification that it is okay to use stairs and no loose items hanging from above or below work areas
- Tie off and/or barricade any unsafe areas
- Complete the Work Permit form and any necessary safe work practices forms (JSA, HOT Work Permits, Energy Isolation forms, Lifting Plan, Fall Protection and Rescue Plan, etc..) as needed for the scope of work to be performed. Review all plans with any employee before they are permitted to board the platform.

- Review Emergency action plan before boarding a facility that may be damaged
- All manner of documentation must be completed before the work area is deemed safe for normal operations

# Spill and Response (Release) Plan

The Authorized Williams Representative must be notified immediately of any spill of leaks that originate from a Williams offshore platform. The Authorized Williams Representative will coordinate responses for oil or hazardous waste spills to the appropriate government agency(s) and notifying the National Response Center.

Contractors must manage fluids used during the course of activities in a way that minimizes the occurrence of leaks and/or spills, in accordance with the Contractor's spill prevention/response plans.

Contractors are responsible for developing oil and HAZMAT response plans that meet agency regulations for spills that originate from their property, facilities, or assets, including vessels. Contractors are therefore responsible for managing and responding to all oil and hazardous material spills that originate from their property, facilities, vessels, or assets. This includes the National Response Center and other appropriate agencies of oil and hazardous material spills that originate from contractor property or assets, including vessels.

Contractors will immediately report any leak or spill discovered to the Williams Representative.

Contractors will ensure preventative measures are implemented and control measures are regularly inspected.

At the discretion of the Williams Representative, grounds for removing equipment or machinery from the job site Include:

- Excessive maintenance
- · Continually leaks oil or hydraulic fluid
- Leaking fuel system
- Presents a high potential safety concern to personnel
- Inadequate or enabled safety devices

If a Contractor's employee observes or discovers a spill or release, appropriate personnel must take the following steps:

- Safety First. Ensure the safety of all personnel. Anyone who observes the spill or release should act carefully, cautiously, and reasonably
- Immediately notify the Contractor Supervision and the Williams Representative

When feasible, the qualified personnel may shut in the well and/or vessel, Close the surface or subsurface safety devices and actuate the blowout prevention assembly and well control systems.

### **Pre Startup Safety Review**

PSSR shall confirm, as a minimum, that construction, equipment and modifications are in accordance with design specifications and meet the requirements specified by the associated <u>943-1027 - Management of Change Form</u> or <u>CAN-943-1027 - Canada Management of Change Form</u> (where applicable).

Additionally, a PSSR confirms that applicable Procedures are developed or revised and implemented, persons operating or maintaining the asset(s) have been trained on applicable Procedures, the asset is ready for commissioning and/or startup and post startup deliverables are identified and assigned.