



Training and Competency CoW standard

Version	Date	Approver
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Introduction

Training provides the foundation for effective and safe delivery of the Control of Work standards and contributes to workforce competence. Control of Work (CoW) training and competency requirements provided in this standard are designed to provide personnel the information and knowledge required to safely deliver work and prevent serious injuries and fatalities, property damage, and adverse environmental impact.

This CoW Technical standard defines the requirements for Control of Work training and competency verification.

While training is an important component to building proficiency in the workforce, competency needs to be demonstrated to ensure the worker's skill and knowledge to ensure conformance with the Joint Operations Control of Work standards.

Scope

This standard applies to work performed by Joint Operations employees and their delegates and contractors. It also applies to training and competency conducted under the Control of Work Process.

In the event the standard conflicts with applicable law, compliance with legal requirements is mandatory and supersedes the standard.

Requirements

The following sections provide minimum requirements for training and competency development needed to execute CoW standards as well as supporting guidance to clarify the intent of those requirements.

- Requirements of this Standard **shall** be met.

<p>1. Requirement:</p>	<p>Personnel fulfilling CoW roles shall be trained in the discipline they are working. Initial CoW role-specific training shall be completed prior to a worker being authorized to perform the role.</p> <ul style="list-style-type: none"> a. Joint Operations personnel performing a CoW role shall be trained as assigned by the JO as per the relevant CoW standard. b. Contractor personnel performing a CoW role shall be trained as assigned by the JO as per the relevant CoW standard. <p>Contractors operating under an approved Contractor Operational Excellence Management (COEM) Bridging Document shall provide training to their personnel in alignment with the CoW Technical standards.</p>
<p>2. Requirement:</p>	<p>JO shall maintain documented training records for personnel filling CoW roles, including test result, completion date, and the evaluation method used.</p> <ul style="list-style-type: none"> a. Refresher training on CoW standards shall be completed as determined by JO or required by the standard or as required by local laws and regulations. b. Records for training, certifications, etc. shall be available to review upon request. c. Contractors hired for specialty work (e.g., Commercial Divers, Crane Operations including operator and rigger, Electricians, Welders, Heavy Equipment Operators, etc.) shall be trained and certified per applicable regulations and/or industry standards.
<p>3. Requirement:</p>	<ul style="list-style-type: none"> a. JO trainers shall have the technical knowledge to deliver the relevant CoW materials. b. JO CoW training shall meet applicable regulatory requirements and address the minimum competencies requirements of the Enterprise Control of Work standards – See Appendix B. c. JO training and competency assessment materials shall be reviewed and updated at a frequency determined by the JO or as required by local laws and regulations.
<p>4. Requirement:</p> <p>Guidance:</p>	<ul style="list-style-type: none"> a. JO shall determine the required competency level by role for personnel fulfilling CoW roles as defined in Appendix B b. Contractors shall document the required competency level for CoW roles. Worker competency shall be documented (including method of determining worker competency) before assigning CoW roles. <ul style="list-style-type: none"> • Gaining proficiency for CoW roles involves more than the completion of training modules. Competency assessments ensure that personnel achieve the minimum required level of

proficiency for each role. In addition, field verifications should be used to validate worker competency-

- Business Partners may assign a competent mentor responsible to assess the competency of a worker to hold a CoW role.

5. Requirement:	JO Training and competency records shall be retained in accordance with regulatory and/or Joint Operations record retention requirements, whichever is greater.
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Appendix A: Terms and definitions

Term	Definition
Competency	Consistent application of knowledge and skill to the standard of performance required in the workplace.
Proficiency Level	Progression of competency through the four proficiency levels (Awareness, Fundamental, Skilled and Mastery)

General Proficiency Levels			
Awareness	Fundamental Application	Skilled Application	Mastery
<ul style="list-style-type: none"> Performs basic routine tasks with supervision Demonstrates general understanding of concepts New to the position and/or new to the skill as associated tasks 	<ul style="list-style-type: none"> Demonstrates limited proficiency in basic, routine tasks under minimal supervision Can apply knowledge in normal situations Low autonomy with decisions Needs help with complex problem solving 	<ul style="list-style-type: none"> Demonstrates proficiency through regular application of skills in a variety of conditions Solves complex problems; anticipates and mitigates risks Able to mentor others in the skill Some decision autonomy 	<ul style="list-style-type: none"> Extensive experience in the activity. Subject matter expert or recognized authority across the company and the industry Solves complex problems that cross jobs or areas of work Strong influence – may shape processes, tools, or regulations

Appendix B: Competencies by Proficiency Level for CoW Standards

Isolation of Hazardous Energy

General Statement: Have a clear understanding of Joint Operations' Control of Work process, understand key components of hazardous energy and how to implement and follow procedures safely.

Awareness	Fundamental Application	Skilled Application	Mastery
<ul style="list-style-type: none"> • Describe the documentation required and key roles for IHE. • Explain when an isolation is needed and types of equipment that may require isolation. • Describe the types of energy sources and methods used to isolate. • Describe how isolations are locked and tagged, including requirements for personal and group locks. • Explain the process and roles for removing an isolation and closing out documentation. 	<ul style="list-style-type: none"> • Explain how to select the correct isolation type based on equipment. • Explain how to confirm if equipment is de-energized and tested for residual or stored energy. • Explain how to review isolations with work crews and validate isolation points. • Describe process for isolations that extend beyond one shift. • Explain the process to return equipment to normal state prior to re-energization. • Explain how to confirm accuracy of an equipment isolation procedure and isolation plan. 	<ul style="list-style-type: none"> • Coaches others in application of IHE standard and activities designed to identify and address hazards. • Promotes, educates, monitors, and enforces IHE standard. • Supports incident investigations, determines root causes and develops corrective actions for IHE events. • Participates in the development of IHE plans. • Monitors and evaluates the effectiveness and content of training materials related to IHE. • Advises on identification of IHE requirements for new facilities / plants or modifications. • Supports the interface for contractor IHE in SJO or MCP. • Provides contractor oversight and monitoring for IHE work. • Supports SHEERS assurance requirements for IHE in SJO or MCP. 	<ul style="list-style-type: none"> • Develops and guides on IHE requirements and implementation plan across Opcos or the enterprise. • Leads or serves as a major contributor in the development of company IHE standards, guidelines, and programs. • Actively seeks out and implements new technology and projects to improve IHE. • Champions IHE standard within SJO or MCP. • Audit IHE in major organizations and develop recommendations to mitigate risks.

Confined Space Entry

General Statement: Have a clear understanding of Joint Operations' Control of Work process, understand key components of confined space entry and how to implement and follow procedures safely.

Awareness	Fundamental Application	Skilled Application	Mastery
<ul style="list-style-type: none"> • Explain the roles associated with CSE (e.g., entry watch, entrant, qualified gas tester, entry supervisor). • Explain the purpose of a communications plan. • Explain the need for a rescue plan and requirement for all entrants to wear rescue equipment. Explain what is considered a confined space. • Describe what permits/plans a confined space would require. • Explain the requirements for gas testing for CSE. • Explain the general hazards associated with a confined space. (e.g., atmosphere, thermal, engulfment, entrapment, etc.). • Explain access and egress requirements for confined spaces. 	<ul style="list-style-type: none"> • Explain gas testing equipment requirements for calibration/bumping and recording monitoring results. • Demonstrate how to fill out a confined space permit. • Explain the relationship between IHE and CSE • Demonstrate how to properly create a rescue plan. • Describe ventilation requirements. 	<ul style="list-style-type: none"> • Coaches others in application of confined space entry standard and activities designed to identify and address hazards. • Promotes, educates, monitors, and enforces confined space entry standard. • Supports incident investigations, determines root causes and develops corrective actions for confined space entry events. • Participates in the identification of confined space entry hazards. • Monitors and evaluates the effectiveness and content of training materials related to confined space entry. • Review and advise on rescue plans for confined spaces. • Advises on identification of confined space entry requirements for new facilities / plants or modifications. • Supports the interface for contractor undertaking confined space entry in SJO or MCP. • Supports SHEERS assurance requirements for confined space entry in SJO or MCP. • Provide contractor oversight and monitoring for confined space entry work. 	<ul style="list-style-type: none"> • Develops and guides on confined space entry requirements across Opcos or the Enterprise. • Leads or serves as a major contributor in the development of company confined space entry standards, guidelines, and programs. • Actively seeks out and implements new technology and projects to improve confined space entry work. • Champions confined space entry standard within SJO or MCP. • Audit confined space entry in major organizations and develop recommendations to mitigate risks.

Hot Work

General Statement: Have a clear understanding of Joint Operations' Control of Work process, understand key components of hot work and how to implement and follow procedures safely.

Awareness	Fundamental Application	Skilled Application	Mastery
<ul style="list-style-type: none"> • Demonstrate working knowledge of % LEL for flammable gasses and how to apply to gas testing results • Explain when a hot work permit is required. • Define types of hot work (e.g., open flame, grinding, welding, non-open flame) and hazards associated with each. • Explain when a fire watch is needed and their role and responsibilities. 	<ul style="list-style-type: none"> • Demonstrate gas testing methods and log requirements to confirm safe working atmospheres. • Explain electrical classification areas and identify local examples of each. • Explain requirements for conducting open-flame hot work in a classified area. • Explain the requirements and hazards associated with performing Hot Tapping. • Demonstrate how to complete a hot work permit. • Explain how to determine the correct placement of gas monitoring equipment. 	<ul style="list-style-type: none"> • Coaches' others in application of hot work standard and activities designed to identify and address hazards. • Promotes, educates, monitors, and enforces hot work standard. • Supports incident investigations, determines root causes and develops corrective actions for hot work events. • Participates in the identification of hot work hazards. • Monitors and evaluates the effectiveness and content of training materials related to hot work. • Advises on identification of hot work requirements for new facilities / plants or modifications. • Supports the interface for contractor hot work activities in SJO or MCP. • Provides contractor oversight and monitoring for hot work. • Supports SHEERS assurance requirements for hot work in SJO or MCP. 	<ul style="list-style-type: none"> • Develops and guides on hot work requirements and implementation plan across Opcos or the enterprise. • Leads or serves as a major contributor in the development of company hot work standards, guidelines, and programs. • Actively seeks out and implements new technology and projects to improve hot work. • Champions hot work standard within SJO or MCP. • Audit hot work in major organizations and develop recommendations to mitigate risks.

Excavation

General Statement: Have a clear understanding of Joint Operations' Control of Work process, understand key components of excavation and how to implement and follow procedures safely.

Awareness	Fundamental Application	Skilled Application	Mastery
<ul style="list-style-type: none"> • Explain the methods used to identify the hazards associated with underground utilities. • Explain when an excavation permit is required. • Explain common hazards of excavation. • Explain precautions needed for the protection of noninvolved personnel and public during excavation work. • Explain requirements for having a dig plan as part of an excavation permit. 	<ul style="list-style-type: none"> • Explain how an excavation has been evaluated to determine if it is a confined space. • Explain the processes confirming that protective systems are in place to protect people in excavations regarding hazards such as unstable ground or cave-ins. • Explain how to ensure excavating equipment maintains a safe distance from overhead power lines/ describe what conditions define a "safe distance." • Explain the requirements needed when entering excavations deeper than four feet. • Explain why benching and sloping is used in Excavation. 	<ul style="list-style-type: none"> • Coach others in application of excavation standard and activities designed to identify and address hazards. • Promotes, educates, monitors, and enforces excavation standard. • Supports incident investigations, determines root causes and develops corrective actions for excavations. • Participates in the identification of excavation hazards. • Monitors and evaluates the effectiveness and content of training materials related to excavation. • Advises on identification of excavation requirements for new facilities / plants or modifications. • Supports the interface for contractor excavation activities in SJO or MCP. • Provides contractor oversight and monitoring for excavation work. • Supports SHEERS assurance requirements for excavation in SJO or MCP. 	<ul style="list-style-type: none"> • Develops and guides on excavation requirements and implementation plan across Opcos or the enterprise. • Leads or serves as a major contributor in the development of company excavation standards, guidelines, and programs. • Actively seeks out and implements new technology and projects for excavations. • Champions excavation standard within SJO or MCP. • Audit excavation work in major organizations and develop recommendations to mitigate risks.

Working at Heights

General Statement: Have a clear understanding of Joint Operations' Control of Work process, understand key components of working at heights and how to implement and follow procedures safely

Awareness	Fundamental Application	Skilled Application	Mastery
<ul style="list-style-type: none"> • Explain when a work permit is required for work at height. • Explain the differences between Fall Arrest and Fall Restraint. • Explain when a Fall Rescue Plan is needed and what is needed to be in place and/or documented on the plan. • Explain how potential dropped object hazards are mitigated. 	<ul style="list-style-type: none"> • Demonstrate how to confirm that fall protection equipment (fall arrest and fall restraint) is certified, inspected, and rated for the task. • Explain the reason, someone needs to be rescued as quickly as possible after falling. • State the conditions triggering the use of a ladder and duration allowed. • Explain the requirements for working on MEWPs • Explain the requirements for working on scaffolding 	<ul style="list-style-type: none"> • Coaches others in identifying application of working at height standard and activities designed to identify and address hazards. • Promotes, educates, monitors, and enforces working at height standard. • Supports incident investigations, determines root causes and develops corrective actions for working at height events. • Participates in the identification of working at height hazards. • Monitors and evaluates the effectiveness and content of training materials related to working at height. • Advises on identification of working at height requirements for new facilities / plants or modifications. • Supports the interface for contractor working at height in SJO or MCP. • Provides contractor oversight and monitoring for working at heights. • Supports SHEERS assurance requirements for working at height in SJO or MCP. 	<ul style="list-style-type: none"> • Develops and guides on working at height requirements and implementation plan across Opcos or the enterprise. • Leads or serves as a major contributor in the development of company work at height standards, guidelines, and programs. • Actively seeks out and implements new technology and projects for working at heights. • Champions working at height standard within SJO or MCP. • Audit working at heights in major organizations and develop recommendations to mitigate risks.

Lifting and Rigging

General Statement: Have a clear understanding of Joint Operations' Control of Work process, understand key components of lifting & rigging and how to implement and follow procedures safely

Awareness	Fundamental Application	Skilled Application	Mastery
<ul style="list-style-type: none"> • Explain the steps in conducting a lift • Explain different lifts and when a written lift plan is needed. • Explain conditions allowing personal to be directly under the load. • Explain what information is needing to be confirmed prior to a lift. • Explain the importance of an agreed communication plan. • Identify who is involved and who is controlling the lifting operation. • Explain the purpose of and how to identify a line of fire zone. • Explain how to manage dropped objects as part of a lifting operation. • Demonstrate how to identify certified lifting equipment. • Explain what to do if you find homemade / modified lifting equipment. 	<ul style="list-style-type: none"> • Explain how to confirm that pre-use crane / rigging inspections are completed and that lifting equipment safety devices are in place and working. • Explain the safeguards needed when lifting/rigging in proximity of overhead power lines (OPL). • Explain how to identify the weight and center of gravity of an object. • Explain how to establish pick-up and laydown areas and safe path of travel. • Explain the impact of environmental conditions on lifting operations. • Explains the requirements for lifting of personnel. 	<ul style="list-style-type: none"> • Coaches others in identifying application of lifting and rigging standard and activities designed to identify and address hazards. • Supports the development of lifting plans for complex and heavy lifts. • Promotes, educates, monitors, and enforces lifting and rigging standard. • Supports incident investigations, determines root causes and develops corrective actions. • Participates in the identification of lifting and rigging hazards. • Monitors and evaluates the effectiveness and content of training materials related to lifting and rigging. • Advises on lifting and rigging requirements. • Supports the interface for contractor lifting and rigging activities in SJO or MCP. • Provides contractor oversight and monitoring for lifting and rigging activities. • Supports SHEERS assurance requirements for lifting and rigging in SJO or MCP. 	<ul style="list-style-type: none"> • Develops and guides on lifting and rigging requirements and implementation plan across Opcos or the enterprise. • Leads or serves as a major contributor in the development of company lifting and rigging standards, guidelines, and programs. • Actively seeks out and implements new technology and projects for lifting and rigging. • Champions lifting and rigging standard within SJO or MCP. • Audit lifting and rigging in major organizations and develop recommendations to mitigate risks.

Simultaneous Operations (SIMOPs)

General Statement: Have a clear understanding of Joint Operations' Control of Work process, understand key components of SIMOPs and how to implement and follow procedures safely.

Awareness	Fundamental Application	Skilled Application	Mastery
<ul style="list-style-type: none"> • Explain when is a SIMOP's plan required. • Explain the role in the SIMOP's plan as a SIMOP Controller and SIMOP Representative. • Describe how the SIMOP's plan is communicated to all personnel. • Explain how changes in an approved SIMOP's plan scope is managed and communicated. 	<ul style="list-style-type: none"> • Demonstrate how to complete a SIMOP's permit. • Explain the hazards of the concurrent work activities that could cause an incident in each functions work and how they are mitigated. 	<ul style="list-style-type: none"> • Coaches others in application of SIMOPS standard and activities designed to identify and address hazards. • Promotes, educates, monitors, and enforces SIMOPS standard. • Supports incident investigations, determines root causes and develops corrective actions for events involving SIMOPS. • Participates in the identification of SIMOPS. • Monitors and evaluates the effectiveness and content of training materials related to SIMOPS. • Advises on identification of SIMOPS for new facilities / plants or modifications. • Supports the interface for contractor SIMOPS in SJO or MCP. • Supports SHEERS assurance requirements for SIMOPS in SJO or MCP. 	<ul style="list-style-type: none"> • Develops and guides on SIMOPS requirements and implementation plan across Opcos or the enterprise. • Leads or serves as a major contributor in the development of company SIMOPS standards, guidelines, and programs. • Actively seeks out and implements new technology and projects to improve SIMOPS. • Champions SIMOPS standard within SJO or MCP. • Audit SIMOPS in major organizations and develop recommendations to mitigate risks.

Bypassing Critical Protections (BCP)

General Statement: Have a clear understanding of Joint Operations' Control of Work process, understand key components of BCP and how to implement and follow procedures safely.

Awareness	Fundamental Application	Skilled Application	Mastery
<ul style="list-style-type: none"> Describe some of the types of work for which BCP is applicable. Explain the permits and documentation which are required for BCP. Describe process and individuals involved in monitoring BCP, including roles and responsibilities. 	<ul style="list-style-type: none"> Describe BCP Process and describe its relation to workforce health and safety. Explain BCP tagging process and describe the function of the tagging system (physical or electronic flags for software...etc.) of BCP. Describe the role of BCP related to hazard analysis and planning. Demonstrate ability to verify/validate that BCP is in place and functioning. Understand requirement for recording and reviewing bypasses in a Bypass Register. 	<ul style="list-style-type: none"> Coaches others in application of BCP standard and activities designed to identify and address hazards. Promotes, educates, monitors, and enforces BCP standard. Supports incident investigations, determines root causes and develops corrective actions related to BCP. Participates in hazard analysis for BCP s Monitors and evaluates the effectiveness and content of training materials related to BCP. Advises on BCP for new facilities / plants or modifications. Supports the interface for contractor BCP requirements in SJO or MCP. Supports SHEERS assurance requirements for BCP in SJO or MCP. 	<ul style="list-style-type: none"> Develops and guides BCP requirements and implementation plan across Opcos or the enterprise. Leads or serves as a major contributor in the development of BCP company standards, guidelines, and programs. Actively seeks out and implements new technology and projects to improve BCP. Champions BCP standard within SJO or MCP. Audit BCP in major organizations and develop recommendations to mitigate risks.

Electrical Work

General Statement: Have a clear understanding of Joint Operations' Control of Work process, understand key components of electrical work and how to implement and follow procedures safely.

Awareness	Fundamental Application	Skilled Application	Mastery
<ul style="list-style-type: none"> • Explain when an Energized Electrical Work Permit (certificate) is required. • Describe process and individuals involved in electrical work, including roles and responsibilities. • Describe the PPE, testing equipment, tools, etc. required for performing electrical work. • Describe purpose and use of GFCI and RCD's. • Explain conductive and non-conductive equipment and tools. 	<ul style="list-style-type: none"> • Explain the purpose of the Electrical Safe Work standard and local procedures. • Describe the safeguards for work performed on electrical equipment. • Demonstrate understanding of how tools and PPE are rated and classified for work on energized electrical equipment. • Describe each of the boundaries, how they are determined, and the requirements associate with them, including requirements for a standby person. • Confirm understanding of required approach distance to power lines and appropriate mitigations that can be used. • Demonstrate when grounding of equipment is to be performed. • Explain certification requirements for equipment used in hazardous areas. • Confirm understanding of shock and arc flash hazards and how to interpret and apply the requirements from analysis. 	<ul style="list-style-type: none"> • Coaches others in applicable electrical safe work standard and activities designed to identify and address hazards. • Promotes, educates, monitors, and enforces electrical safe work standard. • Supports incident investigations, determines root causes and develops corrective actions related to electrical events. • Participates in hazard analysis for electrical work. • Monitors and evaluates the effectiveness and content of training materials related to electrical safety. • Advises on electrical safety for new facilities / plants or modifications. • Supports the interface for contractor electrical safety in SJO or MCP • Provides contractor oversight and monitoring for electrical work. • Supports SHEERS assurance requirements for electrical safety in SJO or MCP. 	<ul style="list-style-type: none"> • Develops and guides electrical safety requirements and implementation plan across Opcos or the enterprise. • Leads or serves as a major contributor in the development of company standards, guidelines, and programs. • Actively seeks out and implements new technology and projects for electrical work. • Champions electrical safe work standard within SJO or MCP. • Audit electrical work in major organizations and develop recommendations to mitigate risks.

Material Transfer

General Statement: Have a clear understanding of Joint Operations' Control of Work process, understand key components of Material Transfer and how to implement and follow procedures safely.

Awareness	Fundamental Application	Skilled Application	Mastery
<ul style="list-style-type: none"> • Explain when a permit or equivalent document is required. • Describe process and individuals involved in material transfer, including roles and responsibilities. • Describe the PPE, checks, tools, etc. required for performing material transfer. • Describe the hazards from static electricity during material transfer operations. • Explain the importance of using the correct hoses for the material being transferred and bonding continuity requirements. 	<ul style="list-style-type: none"> • Explain the purpose of the Material Transfer standard and local procedures. • Describe the safeguards for work performing material transfer. • Demonstrate understanding of how equipment is rated for material transfer. • Confirm understanding of equipment requirements for inspection and test of material transfer equipment. • Demonstrate the grounding and bonding of equipment is performed. • Explain the test requirements for material transfer equipment. 	<ul style="list-style-type: none"> • Coaches others in application of material transfer standard and activities designed to identify and address hazards. • Promotes, educates, monitors, and enforces material transfer standard. • Supports incident investigations, determines root causes and develops corrective actions for events related to Material Transfer. • Participates in hazard analysis for material transfer. • Monitors and evaluates the effectiveness and content of training materials related to material transfer. • Advises on material transfer requirements for new facilities / plants or modifications. • Supports the interface for contractor material transfer operations in SJO or MCP • Provides contractor oversight and monitoring for material transfer. Supports SHEERS assurance requirements for material transfer in SJO or MCP 	<ul style="list-style-type: none"> • Develops and guides material transfer requirements and implementation plan across Opcos or the enterprise. • Leads or serves as a major contributor in the development of company material transfer standards, guidelines, and programs. • Actively seeks out and implements new technology and projects to improve material transfer. • Champions material transfer standard within SJO or MCP. • Audit material transfer in major organizations and develop recommendations to mitigate risks.

Vacuum Truck

General Statement: Have a clear understanding of Joint Operations' Control of Work process, understand key components of Vacuum Trucks and how to implement and follow procedures safely.

Awareness	Fundamental Application	Skilled Application	Mastery
<ul style="list-style-type: none"> • Explain when a permit or equivalent document is required. • Describe process and individuals involved in vacuum truck operations, including roles and responsibilities. • Describe the PPE, checks, tools, etc. required for performing vacuum truck operations. • Describe the hazards from static electricity during vacuum truck operations. • Explain the importance of using the correct hoses for the material being transferred and bonding continuity requirements. 	<ul style="list-style-type: none"> • Explain the purpose of the vacuum truck standard and local procedures. • Describe the safeguards for performing vacuum truck operations. • Demonstrate understanding of how equipment is suitable for specific vacuum truck operations. • Describe the hazards associated with mixing incompatible materials during vacuum truck operations. • Confirm understanding of equipment requirements for inspection and test of vacuum trucks. • Demonstrate the grounding and bonding of equipment is performed. • Explain the test requirements for vacuum trucks. • Explain the safety features in place for vacuum trucks including vacuum breakers and vents. 	<ul style="list-style-type: none"> • Coaches others in application of vacuum truck operations standard and activities designed to identify and address hazards. • Promotes, educates, monitors, and enforces vacuum truck operations standard. • Supports incident investigations, determines root causes and develops corrective actions for events involving vacuum trucks. • Participates in hazard analysis for vacuum truck operations. • Monitors and evaluates the effectiveness and content of training materials related to vacuum truck operations. • Advises on vacuum truck operations requirements for new facilities / plants or modifications. • Supports the interface for contractor vacuum truck operations in SJO or MCP • Provides contractor oversight and monitoring for vacuum truck operations. Supports SHEERS assurance requirements for vacuum truck operations in SJO or MCP 	<ul style="list-style-type: none"> • Develops and guides material transfer requirements and implementation plan across Opcos or the enterprise. • Leads or serves as a major contributor in the development of company vacuum truck operation standards, guidelines, and programs. • Actively seeks out and implements new technology and projects to improve vacuum truck operations. • Champions vacuum truck operations standard within SJO or MCP. • Audits vacuum truck operations in major organizations and develop recommendations to mitigate risks.

Portable Gas Testing

General Statement: Have a clear understanding of Joint Operations' Control of Work process, understand key components of Portable Gas Testing and how to implement and follow procedures safely.

Awareness	Fundamental Application	Skilled Application	Mastery
<ul style="list-style-type: none"> • Explain when portable gas testing is required and how it is recorded. • Explain the difference between a personal and portable gas detector. • Describe process and individuals involved in portable gas testing, including roles and responsibilities. • Demonstrate how to use a portable gas detector and how to confirm it is working correctly. • Explain the difference between initial, periodic, and continual gas testing. 	<ul style="list-style-type: none"> • Explain the purpose of the portable gas detection standard and local procedures. • Describe the safeguards and equipment, required for performing portable gas testing. • Explain understanding of which type of portable gas detector and accessories should be used to test different locations. • Explain the different techniques that should be used for different types of gases, concentrations, and locations. • Describe how to confirm that a portable gas detector is calibrated and working correctly. • Confirm understanding of permissible test results and actions to take if results are not as expected. • Explain when retest of a location maybe required. • 	<ul style="list-style-type: none"> • Coaches others in application of portable gas detection standards and activities designed to identify and address hazards. • Promotes, educates, monitors, and enforces portable gas detection standard. • Supports incident investigations, determines root causes and develops corrective actions for events related to portable gas testing. • Participates in hazard analysis for portable gas detection. • Monitors and evaluates the effectiveness and content of training materials related to portable gas detection. • Advises on portable gas detection requirements for new facilities / plants or modifications. • Supports the interface for contractor portable gas detection in SJO or MCP • Provides contractor oversight and monitoring for portable gas detection. • Supports SHEERS assurance requirements for portable gas detection in SJO or MCP. 	<ul style="list-style-type: none"> • Develops and guides portable gas detection requirements and implementation plan across Opcos or the enterprise. • Leads or serves as a major contributor in the development of company portable gas detection standards, guidelines, and programs. • Actively seeks out and implements new technology and projects to improve portable gas detection. • Champions portable gas detection standard within SJO or MCP. • Audit portable gas detection in major organizations and develop recommendations to mitigate risks.

Hazardous Analysis

General Statement: Have a clear understanding of Joint Operations' Control of Work process, understand key components of

Awareness	Fundamental Application	Skilled Application	Mastery
<ul style="list-style-type: none"> • Explain the purpose and differences of JSA, Hazard Analysis, Personal Hazard Assessment and understand when each is required. • Explain the use of the hazard wheel to identify types of hazardous energy. • Demonstrate how to complete a hazard analysis including evaluating effectiveness of safeguards. • Explain how to use a completed hazard analysis as part of the task. 	<ul style="list-style-type: none"> • Demonstrated ability to lead a Hazard Analysis. • Discern between high, medium, and low hazard potential and apply the correct hazard analysis method according to the potential. • Explain when to apply the different types of Hazard Analysis methods. • Demonstrate ability to develop solutions to close hazard assessment gaps. • Evaluating strength of safeguards identified in Hazard Analyses to confirm effectiveness. • 	<ul style="list-style-type: none"> • Coaches others in application of hazard analysis standard and activities designed to identify and address hazards. • Promotes, educates, monitors, and enforces hazard analysis standard. • Participates in hazard analysis by reviewing systems, safety in design and human factors issues. • Advises SJO or MCP on HES policies, procedures, and programs for hazard analysis. • Monitors and evaluates the effectiveness and content of training materials related to hazard analysis. • Advises on workforce safety hazards for new facilities / plants or modifications. • Supports SHEERS assurance activities for hazard analysis requirements in SJO or MCP. • Provides contractor oversight and monitoring for hazard analysis. • Supports the interface for contractor hazard analysis in SJO or MCP. 	<ul style="list-style-type: none"> • Develops and guides hazard analysis requirements and implementation plan across Opcos or the enterprise. • Leads or serves as a major contributor in the development of company hazard analysis standards, guidelines, and programs. • Actively seeks out and implements new technology and projects for hazard analysis. • Champions hazard analysis process within SJO or MCP. • Audits hazard analysis in major organizations and develop recommendations to mitigate risks.

Work Authorization (formerly PTW)

General Statement: Have a clear understanding of Joint Operations' Control of Work process, understand key components of Permit to Work and how to implement and follow procedures safely.

Awareness	Fundamental Application	Skilled Application	Mastery
<ul style="list-style-type: none"> • Explain the purpose of having a PTW and the different types of permits. • Describe the PTW process and individuals involved including roles and responsibilities. • Describe PTW requirements from start to finish and what to do if the scope of the work changes. • Explain what to do if an emergency occurs while working under a permit. 	<ul style="list-style-type: none"> • Explain the purpose of the PTW standard and local procedures. • Describe how to develop a PTW and the approval process required. • Explain how PTW, hazard analysis and work activity standards work together. • Explain how to identify which type of permit is required. • Describe how PTW can help identify and manage tasks occurring in the same area. • Explain how a permit is closed after the task is completed and the requirement to keep copies. 	<ul style="list-style-type: none"> • Coaches others in application of PTW standard and activities designed to identify and address hazards. • Promotes, educates, monitors, and enforces PTW standard. • Participates in PTW by reviewing systems, safety in design and human factors issues. • Advises SJO or MCP on HES policies, procedures, and programs for PTW. • Monitors and evaluates the effectiveness and content of training materials for PTW. • Advises on PTW requirements for new facilities / plants or modifications. • Supports SHEERS assurance activities for PTW requirements in SJO or MCP. • Supports the interface for contractor PTW in SJO or MCP. • Provides contractor oversight and monitoring for PTW. 	<ul style="list-style-type: none"> • Develops and guides PTW requirements and implementation plan across Opcos or the enterprise. • Leads or serves as a major contributor in the development of company PTW standards, guidelines, and programs. • Actively seeks out and implements new technology and projects to improve PTW. • Champions PTW process within SJO or MCP. • Audit PTW in major organizations and develop recommendations to mitigate risks.

Commercial Diving

General Statement: Have a clear understanding of Joint Operations' Control of Work process, understand key components of Commercial Diving Projects and how to implement and follow procedures safely.

Awareness	Fundamental Application	Skilled Application	Mastery
<ul style="list-style-type: none"> • Explain where to find the process for diving vessel and/or diving contractor selection. • Explain where to find the current diving SMEs and the SJO's they represent. • Explain the process of finding a diving contractor if your SJO dSHEERSs not have a Commercial Diving SME. • Explain two scenarios where an OVIS vessel request for Commercial diving operations would not be needed. • Describe the four accepted general modes of diving. Which two modes of diving likely result in an immediate fatality if the diver is forced to the surface without decompression? • Describe why underwater JOrning can cause a diver fatality. 	<ul style="list-style-type: none"> • Explain the purpose of the Commercial Diving Safe Work standard and procedures. • Describe the safeguards (Dive Permits, SWC, Guidance and Approval documents) for Commercial Diving modes and tasks. • Demonstrate understanding of DP diving and extended umbilical process. • Describe why each of the diving approval process documents are needed. • Describe which three Start Work Checks divers use most often. • Describe when a deep ditch policy comes into effect. • Explain what minimum two documents a diver must provide for a CVX project. • Explain which additional documents a diver must provide if they are providing their own equipment. • Explain how long a divers fit for duty physical lasts. • Name the two diving contractor associations recognized by CVX • Explain how long a diving audit is good for. • Explain the difference between an HRC, an SPHL and an HRF. 	<ul style="list-style-type: none"> • Coach others in applicable Commercial Diving safe work standard and activities designed to identify and address hazards. • Promotes, educates, monitors, and enforces commercial diving safe work standard. • Supports incident investigations, determines root causes and develops corrective actions related to Commercial events. • Participates in hazard analysis for Commercial Diving work. • Monitors and evaluates the effectiveness and content of guidelines and approval forms. • Advises on Commercial Diving safety for new facilities / plants or modifications. • Supports the interface for Commercial Diving contractor safety in SJO or MCP. • Provides contractor oversight and monitoring for Commercial Diving work. • Supports SHEERS assurance requirements for Commercial Diving safety in SJO or MCP. 	<ul style="list-style-type: none"> • Develops and guides Commercial Diving safety requirements and implementation plan across Opcos or the enterprise. • Leads or serves as a major contributor in the development of company standards, guidelines, and programs. • Actively seeks out and implements new technology and safeguards for Commercial diving work. • Champions Commercial Diving safe work standard within SJO or MCP. • Audit Commercial diving projects in major organizations and develop recommendations to mitigate risks.

