the human energy company™

MSW Initial/Refresher Training

Control of Work

human energy®

Control of Work Process

Process Overview - Control of Work

Purpose: to manage workplace safety and health hazards to prevent workforce serious injuries and fatalities.

Scope: applies to work performed by Chevron employees, their delegates, contractors, and subcontractors.

Objectives:

- Control all work, not just permitted work
- Define a fit-for-purpose framework to plan, prepare, deliver, and learn from work
- Align safeguards regardless of asset class or business segment
- Ensure representation of persons performing work in all four phases of the work cycle
- Set minimum enterprise requirements for Control of Work

Control of Work process – System requirements

- **Implement and maintain a documented system to control work** that meets the requirements of the Control of Work Process and supporting standards.
- The **workforce shall meet training and competency requirements that apply to their roles** in accordance with the Training and Competency Standard.
- The **authority and responsibility to "Stop Work" without personal consequence shall be communicated** to all members of the workforce and reinforced by leaders.
- **Contractor CoW standards to be utilized shall be evaluated in accordance with the enterprise COEM process** and align with the intent of enterprise CoW requirements.
- **Implement and maintain CoW record retention** requirements that meet local regulatory requirements, and Enterprise Policy 566 – Information Retention, or for at least 6 months (whichever is greater).
- **Define expectations for leaders to support SIF prevention by engaging with the workforce** where work is being conducted.
- **Implement a verification program to assess CoW activities** and assure controls are in place and functioning.
- **Exceptions to requirements of the CoW process and standards shall be managed in accordance with the HSE Functional Governance document.**

Control of Work process - Phases requirements

Plan	Prepare	Deliver	Learn
• Incorporate CoW planning phase requirements into the task planning and scheduling process. • Incorporate operational learning in the design of the task. • Assess the task for SIMOPS. • Identify CoW resources required to complete all phases/steps of the task. • Determine the hazard analysis required for the task in accordance with the Enterprise Hazard Analysis Standard. • Determine the work authorization and approvals required for the task in accordance with the Enterprise Work Authorization Standard.	• Conduct start-of-shift discussion to coordinate planned tasks for the upcoming work period. • Authorize work in accordance with the Enterprise Work Authorization Standard. • Conduct pre-job brief with persons performing work to review the task and approved boundaries/conditions and verify safeguards are in place and functioning immediately before work starts.	• Maintain access to control of work documentation at the task location. • Provide appropriate monitoring of the task to verify the work is being conducted within the approved boundaries/ conditions. • Conduct applicable Start Work Checks. • Stop work if approved boundaries/conditions are no longer met. • Return jobsite to a safe condition when left unattended or upon completion of the task.	• Report operational learning opportunities identified throughout the phases/steps of the task. • Close out work authorizations in accordance with Enterprise Work Authorization Standard.

Procedures & Standards

The Control of Work process governs the application of the following standards:

- Hazard Analysis
- Work Authorization
- Hot Work Standard
- Confined Space Entry
- Excavation
- Portable Gas Detection
- Isolation of Hazardous Energy
- Electrical Safe Work
- Work at Heights
- Lifting and Rigging
- Bypassing Critical Protections
- Commercial Diving
- Material Transfer
- Vacuum Truck Operations

F&L 3S Approach to Control of Work

- **Our Vision:**
  - Apply the 3S principle (Stop, Simplify & Standardize) to F&L MSW Standards & training model, other work planning and safeguard assurance tools to ensure a fit-for-risk approach to how we control work

- **Our Approach:**
  - **Stop / Standardize –** challenge the legacy MSW requirements vs. regulatory & industry practices and align/standardize as one MSW standards
  - **Simplify –** define required vs. elective (SME specific) training and align on path & tools going forward
  - **Simplify / Standardize –** align on F&L Task Consequence Catalog (TCC) and include links to applicable documents for ease of use
  - **Simplify / Standardize –** transition to ePTW as the Control of Work (COW) tool for ensuring consistent planning, authorization and execution of work
  - **Simplify –** work with ePTW team to consider cluster sites vs. individual locations
  - **Simplify –** providing flexibility of safeguard assurance using various tools (SWC, SLT, V&V activities, etc.)

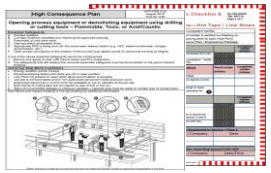
Control of Work – the framework

MSW Initial Training

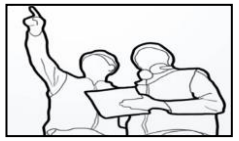
MSW Refresher Training

Work Planning

Task Consequence Catalog (SWC, C-SWC)



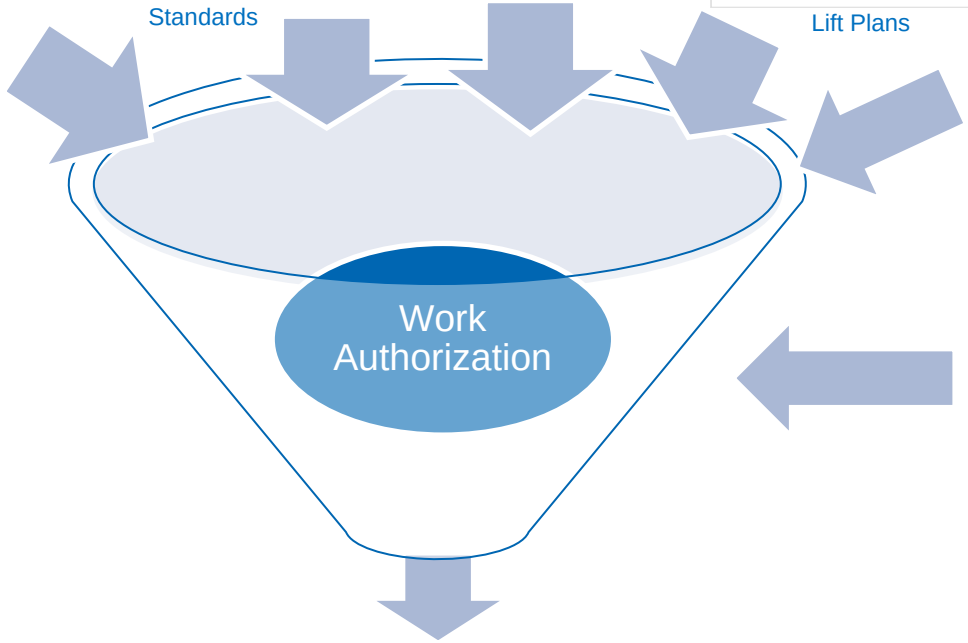
JLA/SWCs/CCPs Standards



Joint planning & jobsite review

Lift Plans

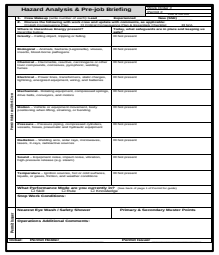
Confined Space Rescue Plans



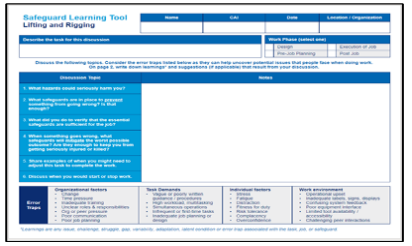
Work Authorization System (ePTW / PTW)

Work readiness & Assurance

Permit Approval



Pre-job briefing



Safeguard Assurance – JLA, SLT, SWC, V&V, COEM Engagements

Lessons Learned – V&V, SLT, AHAs

Control of Work approach based on work consequence

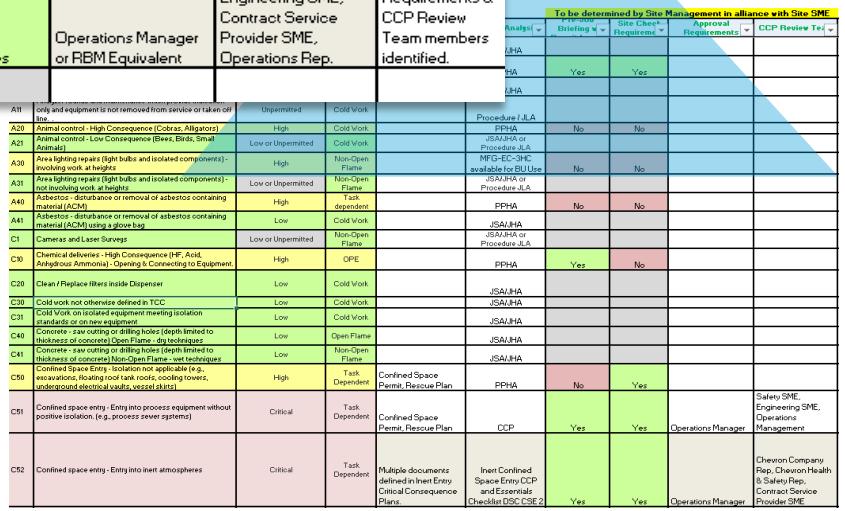
Low	High	Critical
Low Consequence tasks are unlikely to result in Serious Injuries or Fatalities or major loss of containment.	High Consequence tasks have resulted in Serious Injuries or Fatalities or major loss of containment based on industry experience.	Critical Consequence tasks have very few layers of protection preventing Serious Injuries or Fatalities or major loss of containment.
Examples: Using hand tools, electric drills, painting, insulation work, pump maintenance	**Examples:** Open Flame Hot Work, Confined Space Entry, Work at Heights, Hydroblasting	**Examples:** Inert Confined Space Entry, Critical Lifts, Hot Taps and TLR on critical streams

Task Consequence Catalog

Backbone of the Planning Process

- Comprehensive listing of tasks that occur in a location
- Common Language & Roadmap for planning work
- Describe work authorization requirements whether the work is permitted or unpermitted

ID#	TASK	Consequence	TASK TYPE	Other Documents Required	Hazard Analysis	Pre-Job Briefing	Site Check Requirement	Approval Requirements	CCP Review Team	Notes
H20	Hot Work - Non-Open Flame - not otherwise noted in TCC	Low	Non-Open Flame		JSA/JHA					
H21	Hot Work - Open Flame - in a restricted area that meets Isolation Standard	High	Open Flame		MFG-EC-3HC & EC-HW-M1 available for BU Use	Yes	Yes			
H22	Hot Work - Open Flame - in Designated Fabrication Areas	Low	Open Flame		JSA/JHA					
H23	Hot Work - Open Flame - on steam and utility systems that are in service or has not been isolated, depressured & drained.	High	Open Flame		MFG-EC-3HC & EC-HW-M1 available for BU Use	Yes	Yes			
H24	Hot Work - Open Flame - on all systems (EXCEPT steam and utility systems noted above) that are in service or has not been isolated, depressured & drained.	Critical	Open Flame	(EWO) Drawings & field measurements/ calculations, Inspection Results, Operations Contingency Plan for Task	Welding on Equipment in Service, Hot Tap & Line Stop CCP and Essentials Checklist DSC HW 2	Yes	Yes	Operations Manager or RBM Equivalent	Engineering SME, Contract Service Provider SME, Operations Rep.	Minimum Documents, Approval Requirements & CCP Review Team members identified.
H25	Hot Work (NOF or OF) in Designated Safe Hot Work Area	Unpermitted	Task Dependent		Procedure / JLA					



Short Quiz