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**MSW Initial/Refresher Training  
Control of Work**



# 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
<ul style="list-style-type: none"> <li>• Incorporate CoW planning phase requirements into the task planning and scheduling process.</li> <li>• Incorporate operational learning in the design of the task.</li> <li>• Assess the task for SIMOPS.</li> <li>• Identify CoW resources required to complete all phases/steps of the task.</li> <li>• Determine the hazard analysis required for the task in accordance with the Enterprise Hazard Analysis Standard.</li> <li>• Determine the work authorization and approvals required for the task in accordance with the Enterprise Work Authorization Standard.</li> </ul>	<ul style="list-style-type: none"> <li>• Conduct start-of-shift discussion to coordinate planned tasks for the upcoming work period.</li> <li>• Authorize work in accordance with the Enterprise Work Authorization Standard.</li> <li>• 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.</li> </ul>	<ul style="list-style-type: none"> <li>• Maintain access to control of work documentation at the task location.</li> <li>• Provide appropriate monitoring of the task to verify the work is being conducted within the approved boundaries/conditions.</li> <li>• Conduct applicable Start Work Checks.</li> <li>• Stop work if approved boundaries/conditions are no longer met.</li> <li>• Return jobsite to a safe condition when left unattended or upon completion of the task.</li> </ul>	<ul style="list-style-type: none"> <li>• Report operational learning opportunities identified throughout the phases/steps of the task.</li> <li>• Close out work authorizations in accordance with Enterprise Work Authorization Standard.</li> </ul>



# 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:**

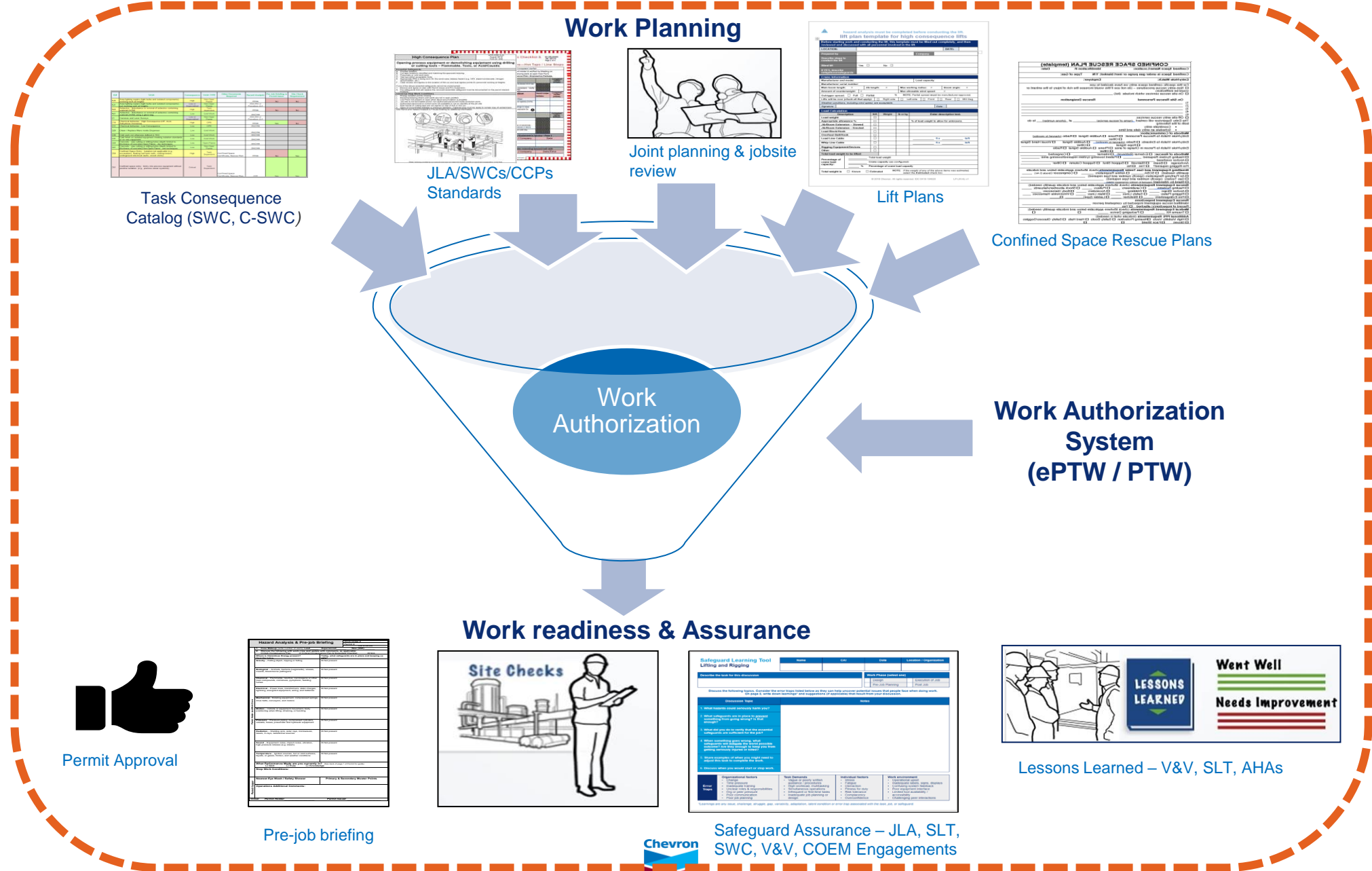
- **Stop / Standardize** – challenge the legacy MSW requirements vs. regulatory & industry practices and align/standardize as one MSW standards
- **Simplify** – define required vs. elective (SME specific) training and align on path & tools going forward
- **Simplify / Standardize** – align on F&L Task 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	SWC	C-SWC	Other
Task 1	High	Low	None
Task 2	Low	High	None
Task 3	Medium	Medium	High

Task Consequence Catalog (SWC, C-SWC)



JLA/SWCs/CCPs Standards



Joint planning & jobsite review

Item	Required	Provided
Lift Plan	Yes	Yes
Permit	Yes	Yes
Training	Yes	Yes

Lift Plans

Area	Requirement	Status
Rescue Team	Available	Yes
Equipment	Ready	Yes
Communication	Established	Yes

Confined Space Rescue Plans

## Work Authorization

Work Authorization System (ePTW / PTW)

## Work readiness & Assurance



Permit Approval

Item	Required	Provided
Pre-job briefing	Yes	Yes
Site Checks	Yes	Yes
Lessons Learned	Yes	Yes

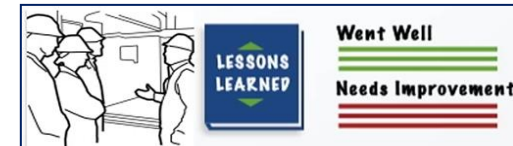
Pre-job briefing



Site Checks

Item	Required	Provided
Safeguard Assurance	Yes	Yes
JLA/SLT/SWC	Yes	Yes
V&V/COEM	Yes	Yes

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



Lessons Learned – V&V, SLT, AHAs





# Control of Work approach based on work consequence

## Low

Low Consequence tasks are unlikely to result in Serious Injuries or Fatalities or major loss of containment.

**Examples:**  
Using hand tools, electric drills, painting, insulation work, pump maintenance

## High

High Consequence tasks have resulted in Serious Injuries or Fatalities or major loss of containment based on industry experience.

**Examples:**  
Open Flame Hot Work, Confined Space Entry, Work at Heights, Hydroblasting

## Critical

Critical Consequence tasks have very few layers of protection preventing Serious Injuries or Fatalities or major loss of containment.

**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-Sub Briefing w/ RBM	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	(EWD) 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					

To be determined by Site Management in alliance with Site SME										
Analysis	Isolation	Isolation w/	Site Check	Approval	CCP Review					
JHA	HA	HA	HA	HA	HA					
HA	Yes	Yes								
HA										
HA										
A11	Drugs and equipment is not removed from service or taken off line	Unpermitted	Cold Work		Procedure / JLA					
A20	Animal control - High Consequence (Cobras, Alligators)	High	Cold Work		PPHA	No	No			
A21	Animal control - Low Consequence (Bats, Birds, Small Animals)	Low or Unpermitted	Cold Work		JSA/JHA or Procedure JLA					
A30	Area lighting repairs (light bulbs and isolated components) - nooking work at heights	High	Non-Open Flame		MFG-EC-3HC available for BU Use	No	No			
A31	Area lighting repairs (light bulbs and isolated components) - not involving work at heights	Low or Unpermitted	Non-Open Flame		JSA/JHA or Procedure JLA					
A40	Asbestos - disturbance or removal of asbestos containing material (ACM)	High	Task dependent		PPHA	No	No			
A41	Asbestos - disturbance or removal of asbestos containing material (ACM) using a glove bag	Low	Cold Work		JSA/JHA					
C1	Camera and Laser Surveys	Low or Unpermitted	Non-Open Flame		JSA/JHA or Procedure JLA					
C30	Chemical deliveries - High Consequence (HF, Acid, Polythionic Ammonial) - Opening & Connecting to Equipment	High	OPE		PPHA	Yes	No			
C20	Clean / Replace filters inside Dispenser	Low	Cold Work		JSA/JHA					
C30	Cold work not otherwise defined in TCC	Low	Cold Work		JSA/JHA					
C31	Cold Work on isolated equipment meeting isolation standards or on new equipment	Low	Cold Work		JSA/JHA					
C40	Concrete - saw cutting or drilling holes (depth limited to thickness of concrete) Open Flame - dry techniques	Low	Open Flame		JSA/JHA					
C41	Concrete - saw cutting or drilling holes (depth limited to thickness of concrete) Non-Open Flame - wet techniques	Low	Non-Open Flame		JSA/JHA					
C50	Confined Space Entry - Isolation not applicable (e.g., excavations, floating roof tank nocks, cooling towers, underground electrical vaults, vessel skids)	High	Task Dependent	Confined Space Permit, Rescue Plan	PPHA	No	Yes			
C51	Confined space entry - Entry into process equipment without positive isolation (e.g., process sewer systems)	Critical	Task Dependent	Confined Space Permit, Rescue Plan	CCP	Yes	Yes	Operations Manager		Safety SME, Engineering SME, Operations Management
C52	Confined space entry - Entry into inert atmosphere	Critical	Task Dependent	Multiple documents defined in Inert Entry Critical Consequence Plans	Inert Confined Space Entry CCP and Essentials Checklist DSC CSE 2	Yes	Yes	Operations Manager		Chevron Company Rep, Chevron Health & Safety Rep, Contract Service Provider SME



# Short Quiz

