



# Job Safety & Environmental Analysis

Memorial University, St. John's, Newfoundland and Labrador, Canada

MATE International ROV Competition 2016, Explorer Class

Task: Pre-Flight Set Up

Analyzed by: \_\_\_\_\_

Date: \_\_\_\_\_

Safety Delegate Signoff: \_\_\_\_\_

**Note:** Please utilize JSEA for Launching/Operating ROV and Recovery/Teardown following any actions past this assigned task. Make reference to Oceaneering Americas Region HSE Employee Handbook, where applicable.

Steps	Hazards	Controls	Action Items	Responsible Employee
Housekeeping	<ul style="list-style-type: none"> <li>- Tripping hazards</li> <li>- Spilled chemicals</li> <li>- Leftover clutter</li> </ul>	<p>Elimination: Remove left over materials from previous station user. Remove unnecessary debris on floor to prevent trips and slips.</p> <p>Personal Protection Equipment: When performing cleanup, wear appropriate safety gloves, safety glasses and CSA Ohmic rated steeled or composite toe footwear. Use MSDS sheets where appropriate.</p> <p>Administrative Controls: Use proper disposal protocols when disposing of un-wanted chemicals.</p>		
Pre-flight Setup	<ul style="list-style-type: none"> <li>- Improper connections leading to electrocution</li> </ul>	<p>Elimination: Insulate all electrical equipment before entering work station. Troubleshoot all un-safe electrical work prior to launch.</p> <p>Engineering Controls: Topsides circuit breaker and TCM circuit breaker to prevent power surges.</p>		



# Job Safety & Environmental Analysis

Memorial University, St. John's, Newfoundland and Labrador, Canada

MATE International ROV Competition 2016, Explorer Class

Task: Launching/Operating ROV

Analyzed by: \_\_\_\_\_

Date: \_\_\_\_\_

Safety Delegate Signoff: \_\_\_\_\_

**Note:** Please utilize JSEA for Recovery/Teardown following any actions past this assigned task. Make reference to Oceaneering Americas Region HSE Employee Handbook, where applicable.

Steps	Hazards	Controls	Action Items	Responsible Employee
Launch	<ul style="list-style-type: none"> <li>- Improper protective barriers surrounding pool</li> <li>- Slipping Hazards</li> <li>- Open Water Hazard</li> <li>- Musculoskeletal strains</li> </ul>	<p>Elimination: Organize tether to prevent tangling during launch.</p> <p>Substitution: Use buddie system when launching ROV into the pool in replacement of protective barrier, preventing employees from falling into water. Ensure one hand of buddy is on the upper body of the deploying employee.</p> <p>Personal Protection Equipment: Use Personal Floatation Device when launching ROV or on deck of the pool.</p> <p>Administrative Controls: Ensure use of proper lifting technique before lifting ROV into the water.</p>		
Flight	<ul style="list-style-type: none"> <li>- Tether tripping hazard</li> <li>- Action Orientated mind-set</li> </ul>	<p>Elimination: Use proper coiling procedures for tether.</p> <p>Administrative Controls: Keep corporate safety mindset in utmost importance. Remind fellow colleagues to do the same when supporting the task at hand.</p>		



# Job Safety & Environmental Analysis

Memorial University, St. John's, Newfoundland and Labrador, Canada

MATE International ROV Competition 2016, Explorer Class

**Task:** Recovery/Teardown of ROV

**Note:** Make reference to Oceaneering Americas Region HSE Employee Handbook, where applicable.

**Analyzed by:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**Safety Delegate Signoff:** \_\_\_\_\_

Steps	Hazards	Controls	Action Items	Responsible Employee
Recovery/Post Flight	<ul style="list-style-type: none"> <li>- Rotational Hazards</li> <li>- Falling Hazards</li> <li>- Tripping Hazards</li> <li>- Musculoskeletal strains</li> </ul>	<p>Elimination: Ensure following Safety Checklist when recovering ROV. Ensure Thrusters are off to prevent injuries involving rotational hazards. Ensure tripping hazards are known and eliminated to the best of the worker's ability. Continue to use buddy system to protect employees falling into the pool.</p> <p>Administrative Controls: Ensure use of proper lifting technique before lifting ROV out of the water.</p>		
Post Flight Teardown	<ul style="list-style-type: none"> <li>- Electrocutation</li> <li>- Un-safe shutdown</li> </ul>	<p>Engineering Controls: Topsides circuit breaker and TCM circuit breaker to prevent power surges.</p> <p>Administrative Controls: Follow Safety Checklist for proper teardown order and insure all hazards are minimized.</p>		