



## SWMS FOR HYDRO EXCAVATIONS

### TASK DETAILS

Principal Contractor:		Date:	
Location:		Start time:	
Site Supervisor & Implementation Responsibility:		Contract Number:	
Task Description:			
High Risk Activities (Reg 291)			
Nominated Plant/ Equipment:		Maintenance of Plant	Attach Prestart Checklist
<b>EMERGENCY CONTACTS</b>	<b>Tony Papandonakis</b>	<b>Power Water</b>	<b>Onsite First Aider</b>
	0417 877 222 (08) 8981 6758	(08) 8947 7015 1800 245 090	Name: Mobile:
		<b>Ambulance, Fire, Police</b>	000
<b>PERMITS</b>		-	N/A <input type="checkbox"/>
IT IS <b>MANDATORY</b> THAT ALL STAFF ARE TO CALL THE SYSTEM CONTROL LINE (08) 8924 6506 TO REPORT ANY ENTRY AND EXIT OF CONFINED SPACE AND SEWAGE PONDS		WATER CONTROL MEASURES TO BE DETAILED ON JSEA CONTROL MEASURE COLUMN	
<input type="checkbox"/> Electrical H/V	<input type="checkbox"/> Confined Space	<input type="checkbox"/> Hot Works	<input type="checkbox"/> Chlorination Disrupted
<input type="checkbox"/> Backflow a risk	<input type="checkbox"/> Potential Water Contamination	<input type="checkbox"/> System Pressure Reduced	<input type="checkbox"/> Potential Water Contamination

### WORK METHODOLOGY

STEP 1	
STEP 2	
STEP 3	
STEP 4	

### HAZARD IDENTIFICATION – Use this list to consider what could go wrong during the task. If the hazard is potential mark **X**

Item	Hazard	Yes	Item	Hazard	Yes	Item	Hazard	Yes
a	Abrasion/ Friction	<input type="checkbox"/>	k	Fire/ Explosion	<input type="checkbox"/>	u	Shearing	<input type="checkbox"/>
b	Cleaning/ Maintenance	<input type="checkbox"/>	l	Guarding/ Access	<input type="checkbox"/>	v	Slip/ Trip/ Fall	<input type="checkbox"/>
c	Contact - Hot/ Cold	<input type="checkbox"/>	m	Hazardous substance	<input type="checkbox"/>	w	Stored energy	<input type="checkbox"/>
d	Crushing	<input type="checkbox"/>	n	Manual handling	<input type="checkbox"/>	y	Striking	<input type="checkbox"/>
e	Cutting	<input type="checkbox"/>	o	Noise	<input type="checkbox"/>	z	Tearing	<input type="checkbox"/>
f	Dust/ Fume/ Vapour/ Gas	<input type="checkbox"/>	p	Operating controls	<input type="checkbox"/>	aa	Uncontrolled movement	<input type="checkbox"/>
g	Electrical	<input type="checkbox"/>	q	Pressure	<input type="checkbox"/>	bb	Vibration	<input type="checkbox"/>
h	Entanglement	<input type="checkbox"/>	r	Puncturing/ Stabbing	<input type="checkbox"/>	cc		<input type="checkbox"/>
i	Ergonomic	<input type="checkbox"/>	s	Radiation	<input type="checkbox"/>	dd		<input type="checkbox"/>
j	Expelled object	<input type="checkbox"/>	t	Risk to others	<input type="checkbox"/>	ee		<input type="checkbox"/>

### RISK ASSESSMENT - Assess each hazard identified and apply risk score based on all controls being implemented.

		LIKELIHOOD					Risk Score	ACTION REQUIRED
		Almost Certain	Very Possible	Possible	Unlikely	Rare		
<b>SEVERITY</b>	Extreme	<b>A1</b>	<b>A2</b>	<b>A3</b>	<b>A4</b>	<b>A5</b>	Catastrophic	Stop work. Do not restart until hazard is controlled.
	Major	<b>B1</b>	<b>B2</b>	<b>B3</b>	<b>B4</b>	<b>B5</b>	High	Action plan to be developed and hazard controlled within one month. Interim controls must be implemented.
	Moderate	<b>C1</b>	<b>C2</b>	<b>C3</b>	<b>C4</b>	<b>C5</b>	Medium	Action plan to be developed, time frame established. Interim controls may be needed.
	Minor	<b>D1</b>	<b>D2</b>	<b>D3</b>	<b>D4</b>	<b>D5</b>	Low	Maintain integrity of existing controls, monitor and review effectiveness.
	Insignificant	<b>E1</b>	<b>E2</b>	<b>E3</b>	<b>E4</b>	<b>E5</b>		
<b>HIERARCHY OF CONTROL</b>								
	ELIM	Elimination						
	SUB	Substitution						
	ISO	Isolation						
	ENG	Engineering						
	ADM	Administrative						
	PPE	Personal Protective Equipment						



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**CONTROL – Break task into steps and record each hazard identified. Record controls to be implements to reduce the risk. Consider the hierarchy of controls always aiming to eliminate where possible.**

STEP	RISK INVOLVED	CONTROL MEASURES USED	Residual risk	PERSON/S
<b>Planning</b>	<ul style="list-style-type: none"> <li>Assess work locations</li> <li>Damage to unknown underground services</li> <li>Contact with Overhead HV/LV aerials</li> <li>Pendent Damage or ineligible</li> <li>Slips Trips and Falls</li> </ul>	<ul style="list-style-type: none"> <li>Only persons trained and deemed competency can operate the hydro-excavator truck</li> <li>Pre-start Inspection of Hydro Excavator and equipment to be completed, recorded and any damages reported to Site Supervisor</li> <li>Inspection of Hoses and coupling for signs of Damage or Wear and Tear</li> <li>Check to ensure that Hydro Vac Truck Extendable Arm will not come in close proximity to LV/HV Overhead Power Lines</li> <li>Communicate to all other works of excavation to being and establish no go zones to prevent splash back and/ or being struck by flying debris</li> <li>Level surfaces where possible</li> <li>Plan laydown area for material, tools equipment</li> </ul>	C5	Supervisor Workers
<b>Personal Protective Equipment (PPE)</b>	<ul style="list-style-type: none"> <li>Personal injury</li> <li>Spray back from High Pressure Water Gun</li> <li>Excessive noise from Hydro Spray and Vac Truck</li> <li>Injury from contact with High Pressure Water</li> <li>Injury when Handling the Vac Hose</li> <li>Blockages</li> <li>Damage to eyes</li> </ul>	<ul style="list-style-type: none"> <li>High pressure water blasting and vacuum operators to wear Long Sleeve Shirts, Pants, Face shield, hearing protection and boots to prevent exposure to contaminated water and debris</li> <li>Hearing protection to be worn and eye protection to be worn by remainder of work crew</li> <li>No worker to be in the high-water pressure jetting area</li> <li>Appropriate manual handling techniques used when holding and moving VAC Hose</li> <li>Ensure Vacuum valve is closed prior to disconnecting hose and two people to remove hose</li> <li>Remove obstruction gloves should be used to prevent hand injuries or contact with sharp objects</li> <li>Manual Handling techniques</li> </ul>	D4	Workers
<b>Pre-Start Work Setting up the Operating Hydro Truck and High-Water Gun</b>	<ul style="list-style-type: none"> <li>Damage to Plant and Vehicle</li> <li>Too close to overhead powerlines or Powerline damage</li> <li>Traffic and Pedestrian in close proximity to truck</li> <li>Incorrect VAC hose used</li> <li>Gas leak/ fire/ explosion</li> <li>Water Service Damage</li> <li>Slips Trips and Falls</li> </ul>	<ul style="list-style-type: none"> <li>Ensure that there is adequate clearance from overhead powerlines particularly if the retractable arm is required</li> <li>Traffic Management to be implemented to manage vehicle and pedestrian movements around work site</li> <li>Ensure that the appropriate hose is used to prevent cross contamination</li> <li>Utilise dial before you dig</li> <li>Service locations have been clearly marked</li> <li>Excavate only in the marked areas</li> <li>Ensure site inspected and checked for underground services</li> <li>Do not walk through areas where mobile plant/vehicles are being operated</li> <li>Never approach mobile plant from behind</li> <li>Stand in the “line of sight” while guiding operator</li> <li>Communicate with operator from safe distance if access to area if required, wait until stopped with attachments lowered before approaching</li> <li>Do not Stand in front or behind or in blind spots of vehicles/ plants</li> </ul>	D4	Supervisor Workers
<b>Completing Hydro Vac Works</b>	<ul style="list-style-type: none"> <li>Personal injury</li> <li>Injection Injury</li> <li>Angry residents</li> <li>Trip hazard from tools and equipment</li> <li>Protentional contamination of hoses</li> <li>Damage to Plant and equipment</li> </ul>	<ul style="list-style-type: none"> <li>Ensure that residential properties where fences, walls, concrete driveways, walkways and vehicles have been cleaned of any splashback</li> <li>Remove all tools to vehicles</li> <li>Disinfect all hoses and tools</li> <li>Remove traffic control devices</li> <li>Inspect site and depart</li> <li>Always check the equipment prior to use for defects such as escaping hydraulic fluid. Note any defects and inform supervisor accordingly.</li> <li>Never point the hose towards any worker</li> <li>Don't use jet to wash hands or body parts. Avoid getting in contact with the jet stream</li> <li>If injured by escaping fluid, obtain medical treatment immediately.</li> <li>Do not use bare hands if searching for hydraulic leaks – use a piece of cardboard, timber etc.to identify location of leak</li> <li>Replace any hydraulic hose immediately that shows signs of swelling, wear, leaks or damage before it bursts</li> <li>The equipment must be isolated prior to cleaning</li> <li>When pressurised air is used for cleaning, wear a protective face shield, protective clothing, and protective shoes</li> <li>The maximum air pressure for cleaning purposes must be below 205 kPa (30 psi)</li> </ul>	C4	Workers



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<b>Completing Manifest</b>	<ul style="list-style-type: none"> <li>Uncontrolled recordings of volume of waste</li> <li>Wrong waste dumped at incorrect locations</li> </ul>	<ul style="list-style-type: none"> <li>Make entries int the Manifest Register</li> <li>Complete manifest report</li> <li>Record litres of waste, start and finish time, location of dumping, operators and type of wastes</li> <li>Communications with team operator/ site representative is unsure of areas to be completed</li> <li>Follow all power water bulk waste agreement</li> <li>Follow all EPL 101 License/ Environmental Protection Agreement</li> </ul>	D5	Supervisor Workers
<b>Dumping of Wastes</b>	<ul style="list-style-type: none"> <li>Uncontrolled Dumping of Contaminated Wastes</li> <li>Harmful Effects to Environment</li> <li>Fines / High Expenses for un-controlled dumping of wastes</li> <li>Non-conformance and Non-compliant to Mike Excavations Pty Ltd operating procedures and operations</li> </ul>	<ul style="list-style-type: none"> <li>Read completed Manifest for Locations of Dumping Waste</li> <li>Power Water Bulk Waste Agreement identifies areas where dumping should take place</li> <li>Recording of Dumping Locations</li> <li>Communications at Toolbox / WHS Meetings in regard to locations of dumping</li> <li>Follow all EPL 101 License / Environment Protection Agreement</li> </ul>	D4	Supervisor Workers
<b>Decontamination of Hydro Unit</b>	<ul style="list-style-type: none"> <li>Cross Contamination of Sewer and Water</li> <li>Sickness causing severity or death</li> <li>Environmental Damage to Community Roads / Infrastructure</li> <li>Wearing on Equipment and Truck</li> <li>High Costs / Expenses</li> <li>Non-conformance and Non-compliant to Mike Excavations Pty Ltd operating procedures and operations</li> </ul>	<ul style="list-style-type: none"> <li>Make sure after each use the Hydro Vacuum Truck is clean from any wastes from previous project of works</li> <li>Make sure that the vehicle is cleaned prior to leaving the dumping locations</li> <li>Make sure that any PPE that is used is disposed of (disposable clothing)</li> <li>Use correct detergents/ disinfectants for decontaminations</li> <li>Communications/ toolbox WHS meetings decontamination discussed</li> </ul>	D5	Supervisor Workers

### PERSONAL PROTECTIVE EQUIPMENT REQUIRED

<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hi-Vis	Boots	Hard Hat	Safety Glasses	Ear Protection	Gloves	Mask	Harness	PFD	Seatbelt
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Suit	Long Sleeve Shirt	Long Pants	Wide Brim Hat	Face Shield	Breathing Apparatus	Portable Light	Rescue Equipment	Two-Way Radio	Meter Safety Kits
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Isolation, Lock, Tags	First Aid Kit	Spill Kit	Fire Extinguisher	Dial Before You Dig	Sunscreen	Drinking Water	Hand Wash Facility	Fans/ Ventilation	Pre-Start Check



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### LEGISLATION/ STANDARDS/ DOCUMENTATION

- |  |   |   |
|--|---|---|
| <ul style="list-style-type: none"> <li>▶ Return to Work Act 2015</li> <li>▶ Return to Work Regulations 2015</li> <li>▶ Work Health and Safety (National Uniform) Act 2011</li> <li>▶ Work Health and Safety (National Uniform) Regulations 2012</li> </ul> | <ul style="list-style-type: none"> <li>▶ Construction Work</li> <li>▶ Managing the Risk of Falls at Workplaces</li> <li>▶ Preventing Falls in Housing Construction</li> <li>▶ Hazardous Manual Tasks</li> <li>▶ Work Health and Safety Consultation, Cooperation and Coordination</li> <li>▶ Managing the Risks of Plant in the Workplace</li> <li>▶ How to Manage Work Health and Safety Risks</li> <li>▶ First Aid in the Workplace</li> <li>▶ Excavation Work</li> </ul> | <ul style="list-style-type: none"> <li>▶ Safety Data Sheets (SDS) –must be available and read before hazardous substances are used</li> <li>▶ DIAL BEFORE YOU DIG</li> </ul> <div style="text-align: center;"> </div> |
|--|---|---|

### TEAM CONSULTATION SIGN OFF – REMEMBER LOOK OUT FOR YOURSELF AND LOOK OUT FOR YOUR MATES

Name	Sign	Name	Sign

### HAZARD REPORT (Where & What is the hazard?)

### CORRECTIVE ACTION REQUIRED

Modify job procedure	<input type="checkbox"/>	Improve engineering controls	<input type="checkbox"/>	Modify workplace layout	<input type="checkbox"/>
Improve equipment maintenance	<input type="checkbox"/>	Increase supervision	<input type="checkbox"/>	Improve personal protection	<input type="checkbox"/>
Improve housekeeping	<input type="checkbox"/>	Amend or introduce safety rules	<input type="checkbox"/>	Discuss hazard at Briefing	<input type="checkbox"/>
Improve hazard inspections	<input type="checkbox"/>	Strict enforcement of safety rules	<input type="checkbox"/>	Other (provide details below)	<input type="checkbox"/>
Increase inspections	<input type="checkbox"/>	Reinstruct person/s involved	<input type="checkbox"/>		<input type="checkbox"/>

Detail corrective action required or taken:

Action taken by	Signed	Date
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