

Business Name:

Business Address:

ABN/NZBN:

GROUND WATER FLOW TESTING SAFE WORK METHOD STATEMENT (SWMS)












Business Contact:	Phone #:	Principal Contractor (PC):
Responsible person (for monitoring SWMS and work):		PC Address:
Signature:	Date:	PC Phone #: Date SWMS provided to PC:
Contact Phone #:		Job Site Address:

THIS WORK ACTIVITY INVOLVES THE FOLLOWING HAZARDOUS WORK AND ENVIRONMENTAL IMPACTS

- | | | | | |
|--|--|---|--|---|
| <input type="checkbox"/> Electrical equipment | <input type="checkbox"/> Elevated levels | <input type="checkbox"/> Slips, trips and falls | <input type="checkbox"/> Hazardous substances | <input type="checkbox"/> Night work |
| <input type="checkbox"/> Hot Work | <input type="checkbox"/> Hazardous manual tasks | <input type="checkbox"/> Outdoor work | <input type="checkbox"/> Remotely &/or isolated work | <input type="checkbox"/> ? |
| <input type="checkbox"/> Noise and vibration | <input type="checkbox"/> Native vegetation & weeds | <input type="checkbox"/> Air quality | <input type="checkbox"/> Waste | <input type="checkbox"/> Vehicle movement |
| <input type="checkbox"/> Fuels, oils & chemicals | <input type="checkbox"/> Terrestrial fauna | <input type="checkbox"/> Waterways & soils | <input type="checkbox"/> Cultural heritage | <input type="checkbox"/> ? |

THIS WORK ACTIVITY INVOLVES THE FOLLOWING "HIGH-RISK CONSTRUCTION WORK" (HRCW - IDENTIFIED IN THE JOB TASK COLUMN)

- | | | | |
|--|---|---|---|
| <input type="checkbox"/> Confined spaces | <input type="checkbox"/> Mobile plant movement | <input type="checkbox"/> Demolition of a load-bearing structure | <input type="checkbox"/> Asbestos disturbance |
| <input type="checkbox"/> Using explosives | <input type="checkbox"/> Diving work | <input type="checkbox"/> Artificial extremes of temperature | <input type="checkbox"/> Tilt-up or pre-cast concrete |
| <input type="checkbox"/> Pressurised gas distribution mains or piping chemical, fuel or refrigerant lines energised electrical installations or services | | | |
| <input type="checkbox"/> Structures or buildings involving structural alterations or repairs that require temporary support to prevent collapse | | | |
| <input type="checkbox"/> Involves a risk of a person falling from 2m or more, including work on telecommunications towers | | | |
| <input type="checkbox"/> Working at depths greater than 1.5 Metres, including tunnels or mines | <input type="checkbox"/> Work in an area that may have a contaminated or flammable atmosphere | | |
| <input type="checkbox"/> Work carried out adjacent to a road, railway or shipping lane, traffic corridor | <input type="checkbox"/> In or near water or other liquid that involves the risk of drowning | | |

FOOT PROTECTION	HEARING PROTECTION	HIGH VISIBILITY	HEAD PROTECTION	EYE PROTECTION	FACE PROTECTION	HAND PROTECTION	PROTECTIVE CLOTHING	BREATHING PROTECTION	SUN PROTECTION	SAFETY HARNESS	
											Rings, watches, jewellery that may become entangled must not be worn. Long and loose hair must be tied back.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

DOCUMENT #:

VERSION #: 1

DEVELOPED BY:

SIGNATURE:

REVIEW #:

GROUND WATER FLOW TESTING

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ISSUE DATE:

REVISION DATE:

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LIKELIHOOD	INSIGNIFICANT	MINOR	MODERATE	MAJOR	CATASTROPHIC	SCORE	ACTION
ALMOST CERTAIN	3 - HIGH	3 - HIGH	4 - ACUTE	4 - ACUTE	4 - ACUTE		
LIKELY	2 - MODERATE	3 - HIGH	3 - HIGH	4 - ACUTE	4 - ACUTE	4A - ACUTE	DO NOT PROCEED.
POSSIBLE	1 - Low	2 - MODERATE	3 - HIGH	4 - ACUTE	4 - ACUTE	3H - HIGH	Review before commencing work.
UNLIKELY	1 - Low	1 - Low	2 - MODERATE	3 - HIGH	4 - ACUTE	2M - MODERATE	Maintain control measures.
RARE	1 - Low	1 - Low	2 - MODERATE	3 - HIGH	3 - HIGH	1L - Low	Record and monitor.



JOB TASK	HAZARDS	RISK	CONTROL MEASURES	RESPONSIBLE PERSON
1. HRCW Planning	Remote area emergency	4A	<ul style="list-style-type: none"> Prepare a Remote / Isolated Work Plan. A signed copy must be taken by workers to the Remote/Isolated workplace each day, and the responsible supervisor must keep a copy at home base or head office All relevant workers scheduled to work in the remote area supplied with Personal Location Beacons (PLB) All vehicles used to transport crew to remote locations are carrying Emergency Position Indicating Radio Beacon (EPIRB) onboard vehicle: <ul style="list-style-type: none"> Cabin roof marked with a specific identification number (for aerial identification.) Complete a Departure Checklist (refer to Remote / Isolated Work Plan). 	The Organisation will ensure a 'Remote and Isolated Plan' is in place & check the site amenities are in place
	Lack of amenities	3H	<ul style="list-style-type: none"> Ensure that workers have access to workplace amenities: <ul style="list-style-type: none"> Suitable accommodation including but not limited to power, air conditioning, toilets, refrigeration for food and drinks, showers Adequate supplies, including food and water, for the duration of the project. 	
2. HRCW Travel to/from remote worksite	Vehicle failure	3H	<ul style="list-style-type: none"> Vehicle must be registered with the State Road and Traffic Authorities prior to use Inspect the vehicle, as per manufacturers' instructions, before use. <p>⚠ Do not use if any fault/damage/missing parts. Report immediately and follow tag-out/lock-out procedures.</p>	Supervisor and workers to ensure control measures followed
	Vehicle Accident	4A	<ul style="list-style-type: none"> Loss of control: <ul style="list-style-type: none"> Only licensed drivers to drive vehicles Observe road rules at all times Wear seat belts at all times when driving Monitor vehicle constantly for any malfunctions that may affect vehicle performance Drive to the road conditions, i.e. slow down when raining or on gravel roads. 	

JOB TASK	HAZARDS	RISK	CONTROL MEASURES	RESPONSIBLE PERSON
			<ul style="list-style-type: none"> • Use high beam/spotlight at night in rural and remote areas (do not use when following another vehicle or within 200metres of an approaching vehicle) • Ensure vehicle fitted with bulbar in remote areas. 	
	Drowning, immersion when crossing watercourses	4A	<p>⚠ <i>Assess the need to enter the water – take alternative route wherever possible.</i></p> <ul style="list-style-type: none"> • If fording river or stream is necessary: <ul style="list-style-type: none"> ○ Never drive into the water without checking depth and surface condition: <ul style="list-style-type: none"> ▪ <i>Do not exceed the vehicle manufacturer's fording depth</i> ○ Stop vehicle - Always check the depth and force of water at creek crossings and see if any obstructions might damage the vehicle <ul style="list-style-type: none"> ⚠ Never drive into floodwaters. <ol style="list-style-type: none"> 1. Attach snatch straps to recovery points before entering the water in case the vehicle bogs down (roll-up excess strap and tie off to vehicle in an appropriate location). This way the vehicle can be towed forward or backward as appropriate without having to fit straps underwater 2. Put your vehicle in a low gear 3. Proceed slowly but steadily 4. Keep the engine revs up 5. Stay in the centre of the crossing where the surface is likely to be hardest 6. Select a speed that will maintain a bow wave and effectively reduce the depth of water around the vehicle. (Consider a bonnet shroud where necessary) 7. Do not let the engine's fan to come into contact with the water 8. Keep your feet off the clutch and brake 9. After exiting the water, check clutch and brakes for operation before continuing. 	
	Animal attack	3H	<ul style="list-style-type: none"> • If travelling in northern regions use extreme caution and keep a watch for crocodiles • Never enter waterways on foot, e.g. to check depth (if you are not sure of depth do not cross) • Do not attempt to swim across waterways • After crossing do not stop and exit vehicle within 6 metres of water's edge. 	
	Fatigue	3H	<ul style="list-style-type: none"> • Ensure well rested before starting the trip • Avoid driving at the time of night when a person normally sleeps (<i>Schedule rest to coincide with high fatigue risk times, e.g. night and dawn</i>) • Share the driving with another person if possible • Stop for a 15-minute rest break every two hours • Where possible, do not drive more than 10 hours in any 24 hours • Split trip into shorter continuous driving periods wherever possible. 	

JOB TASK	HAZARDS	RISK	CONTROL MEASURES	RESPONSIBLE PERSON
	<ul style="list-style-type: none"> • Fire • Burns • Fatality 		gasoline, flammable solvents or vapours <ul style="list-style-type: none"> ○ Ensure there is a clearance of 600mm (or as per manufacturer's recommendations) on all sides of the generator to allow sufficient ventilation for cooling vents ○ Fire protection equipment accessible as required ○ Spark-arrester muffler installed <ul style="list-style-type: none"> • Follow manufacturer's manual/recommendations for re-fuelling • DO NOT smoke during re-fuelling <p>Diesel: Fire extinguisher – Water, foam, dry chemical powder, CO₂ Unleaded petrol: Fire extinguisher – Dry chemical powder, foam, CO₂. Never use water to extinguish an Unleaded Petrol fire.</p>	
	<ul style="list-style-type: none"> • Exposure to fuel • Inhalation • Ingestion • Eye & skin damage 	4A	<ul style="list-style-type: none"> • Avoid breathing vapours or contact with fuel • Change clothing immediately if splashed with fuel • Do not siphon or swallow fuel as this can be fatal • Wash hands carefully after handling fuel before eating, drinking or smoking • Shower and wash immediately after work • Wash clothes in separate wash from other clothes. 	
	Decreased visibility	3H	<ul style="list-style-type: none"> • Mark tools with fluoro colour so that workers can easily see them • Ensure workers have adequate night vision • Ensure the correct selection of appropriate lighting for night works on-site: <ul style="list-style-type: none"> ○ Task lighting will be required to illuminate the immediate work zone using personal head torches ○ General Site lighting using floodlighting ○ Working roadside lighting: Reduce the glare from work lighting. Avoid blinding motorists passing the work zone by position and aligning lights to keep them aimed toward the work area and not toward traffic • Consideration to be made that when work is carried out that shadows may be cast – portable lighting should be moved or added accordingly to prevent dark areas adjacent to the work area. 	
5. Working outdoors	Snake/spider bite	3H	<ul style="list-style-type: none"> • Always wear safety boots • Check ground before exiting the vehicle • Visually inspect where you are working • Make noise • Use caution when walking in long grass etc. or near water sources • If confronted with a snake: <ul style="list-style-type: none"> ○ Do not approach a snake ○ Do not make sudden movements ○ Do not attack or attempt to harm a snake 	<p>Supervisor to maintain awareness of weather conditions</p> <p>Workers to follow controls</p>

JOB TASK	HAZARDS	RISK	CONTROL MEASURES	RESPONSIBLE PERSON			
			<ul style="list-style-type: none"> undertaking, be properly equipped with emergency equipment, and be capable of undertaking pre-planned rescue or emergency operations where needed and it is safe to do so. Follow the Communication and Call-in Logs and notify the nominated contact person at the main office, depot or contact point when workers: <ul style="list-style-type: none"> Are due to contact the main office, depot or contact point following the frequency of scheduled communication defined within the established procedure Realises that the expected completion time of the task has to be extended Experiences any unexpected difficulties or emergency at the site. 	measures followed			
	Equipment damage	3H	<ul style="list-style-type: none"> Ensure there is a minimum of two workers to lower the equipment down the borehole: <ul style="list-style-type: none"> One to lower the equipment and the other to act as a spotter who observes the equipment going down so it does not hit the walls of the borehole Use a bore wheel Ensure the equipment is secured against falling. 				
	Working with hand & power tools <ul style="list-style-type: none"> Electrocution Injury Tool malfunction Fire 	3H	<ul style="list-style-type: none"> Use tools only for the purpose specified by the manufacturer Pre-inspect and operate tools following the manufacturer's instructions Ensure operations manual is available, read and understood All power tools and leads are Tested and Tagged and are current Use electrical sockets protected by RCD (safety-switches) or use portable RCD devices <ul style="list-style-type: none"> ⚠ Do not use plug top RCD's fitted to power tools as the RCD cannot be tested Ensure switchboards have appropriately rated circuit breaker Always ensure that the tool is switched off and power isolated before a pre-start check, adjusting, changing set-ups or repairing If damaged or unsuitable for the task do not use. Take out of service immediately and apply LOTO procedures. 				
	Falling objects	3H	<ul style="list-style-type: none"> Carry tools and materials in a tool belt. 				
	Fatigue	3H	<ul style="list-style-type: none"> Once a test commences it cannot be interrupted until the specified end of time ie 48hrs, ensure: There are adequate workers to check operations (2 or more) Ensure meal/refresher breaks are taken at regular intervals to maintain energy levels especially if they have worked during part of the day, they will need time to rest & recover sufficiently to work safely into the evening/night. 				
	Heat stress	3H	<ul style="list-style-type: none"> Ensure workers can recognise heat stress symptoms: <table border="0" style="width: 100%;"> <tr> <td style="vertical-align: top;"> <ul style="list-style-type: none"> <u>Mild heat stress:</u> <ul style="list-style-type: none"> Tired/weak Muscle cramps Feeling sick or vomiting </td> <td style="vertical-align: top;"> <ul style="list-style-type: none"> <u>Severe heat stress:</u> <ul style="list-style-type: none"> Headache Rapid pulse Profuse sweating </td> <td style="vertical-align: top;"> <ul style="list-style-type: none"> <u>More severe symptoms</u> can include loss of consciousness </td> </tr> </table> 	<ul style="list-style-type: none"> <u>Mild heat stress:</u> <ul style="list-style-type: none"> Tired/weak Muscle cramps Feeling sick or vomiting 	<ul style="list-style-type: none"> <u>Severe heat stress:</u> <ul style="list-style-type: none"> Headache Rapid pulse Profuse sweating 	<ul style="list-style-type: none"> <u>More severe symptoms</u> can include loss of consciousness 	
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JOB TASK	HAZARDS	RISK	CONTROL MEASURES	RESPONSIBLE PERSON
			to the field team) 4. After emergency services are notified, nearest kin or other listed contacts should be contacted & make them aware of the situation & report on actions that have been taken.	

OVERALL RISK RATING AFTER CONTROLS	<input type="checkbox"/> 1 - Low	<input type="checkbox"/> 2 - MODERATE	<input type="checkbox"/> 3 - HIGH	<input type="checkbox"/> 4 - ACUTE
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PERMITS	<input type="checkbox"/> Not applicable	<input type="checkbox"/> Hot Work	<input type="checkbox"/> Confined Space	<input type="checkbox"/> Local council	<input type="checkbox"/> ?	<input type="checkbox"/> ?
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PLANT & EQUIPMENT		HAZARDOUS SUBSTANCES	SUPERVISORY ARRANGEMENTS
<input type="checkbox"/> Electrical tools and leads	Tested and tagged quarterly	<i>List hazardous substances taken onsite and have the SDS onsite.</i> 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12.	<input type="checkbox"/> Audits <input type="checkbox"/> Spot Checks <input type="checkbox"/> Reporting systems <input type="checkbox"/> Suitably qualified supervisors for job <input type="checkbox"/> Direct on-site supervision <input type="checkbox"/> Remote site: communication systems/schedule
<input type="checkbox"/> Hand tools - Meet AS/NZS	Regular visual inspection		
<input type="checkbox"/> Ladders - Meet AS/NZS	Inspected and tagged out if damaged		
<input type="checkbox"/> Mobile plant- <i>specify</i>	Inspected and tagged out if damaged		
<input type="checkbox"/> ?			
<input type="checkbox"/> ?			
<input type="checkbox"/> ?			
<input type="checkbox"/> ?			
<input type="checkbox"/> ?			
<input type="checkbox"/> ?			
<input type="checkbox"/> ?			

SITE MANAGEMENT PLAN

Is the work associated with a Construction Project? Yes No

If yes – This SWMS must align with requirements of the Site Management Plan in place for the Construction Project.

SWMS SIGN-OFF This SWMS has been developed in consultation and cooperation with workers and relevant organisation representatives. I have read the above SWMS, and I understand its contents. I confirm that I have the skills and training, including relevant certification, to conduct the task as described. I agree to comply with safety requirements within this SWMS, including risk control measures, safe work instructions and PPE described.

WORKERS' NAME	SIGNATURE	JOB ROLE / POSITION E.G. SUPERVISOR, WORKER, TRAINEE	DATE	WORKERS' NAME	SIGNATURE	JOB ROLE / POSITION SUPERVISOR, WORKER, TRAINEE	DATE
E.g. Jack Morris		Supervisor	12/12/2019				