

## Safe Work Instruction - Confined Space and Emergency Response for Porters Creek Dam Tunnel

**DO NOT use this plant\* or complete this task unless you have been inducted in its safe use and operation by an Authorised Experienced Operator**

This SWI may not cover all possible hazards and risks and should be referred to as a control measure in the risk assessment process.  
Additional training may be required for high risk plant. Site and task may change required PPE.

### PERSONAL PROTECTIVE EQUIPMENT



Eye protection must be worn



Personal escape respirator must be carried



Hearing protection must be worn



Foot protection must be worn



Hand protection must be worn



Head protection must be worn



Protective body clothing must be worn



High visibility clothing must be worn



Safety harness must be worn

### POTENTIAL HAZARDS AND RISKS



#### Manual Task Injury

Manual task injury from incorrect manual handling techniques



#### Other

Injury due to fall from heights  
Asphyxiation from Confined Space work  
Exposure to contaminated air  
Injury due to plant malfunction or misuse



#### Slip, Trips, Falls

Slip, trip, fall due to uneven or slippery work surfaces

### PRE-OPERATIONAL SAFETY CHECKS

- ✓ Complete a site-specific risk assessment
- ✓ Refer to Confined Space Procedure P19, complete a Confined Space Risk Assessment Checklist and obtain a Confined Space Permit to Work
- ✓ Complete the appropriate pre-operational plant checklist and inspect confined space equipment for damage or out of date
- ✓ Ensure you are familiar with plant operations and controls
- ✓ Ensure that guards are fitted, secured and functional in accordance with manufacturers guidelines
- ✓ Set up for Confined Space Procedure –
  - The work area is to be secured and sign posted to prevent unauthorised entry
  - No smoking is permitted while doing this class of work
- ✓ Check calibration of gas detector
- ✓ Operators are to wear full body harness, a Rope Positioning Device and a shock absorber to be placed in line with the Rope Positioning Device

### OPERATING PROCEDURES

- ✓ Keep clear of moving plant parts
- ✓ Operate plant to the conditions of the work area
- ✓ Erect railing barrier around vertical shaft of Porters Creek Dam Tunnel

- ✓ Remove the access grate to the vertical shaft of the Porters Creek Dam Tunnel. This requires the use of a vehicle-mounted crane
- ✓ Erect tripod over tunnel with winch/fall arrester. Lower the winch to the bottom of the vertical shaft
- ✓ Ensure a set of Breathing Apparatus is located at the top of the shaft for immediate use if required
- ✓ Lower a gas detector to monitor the air quality in the shaft
- ✓ Ensure the two-way radio system for the tunnel is switched on and the mouthpiece is located at the entrance of the vertical shaft
- ✓ Each worker required to enter the tunnel should put on a full body harness and personal escape respirator. A gas detector shall also be carried by at least one worker
- ✓ Access to the tunnel is via the ladders in the Porters Creek Dam inlet tower. Ensure that the lights are turned on before proceeding down the ladders
- ✓ At the bottom of the tower stairs establish verbal communication with competent worker using the two-way radio. Each worker entering the tunnel should establish communication before proceeding
- ✓ The workers can now continue on down the tunnel to the appropriate point to perform the required maintenance, establishing verbal communication at the other two-way radio checkpoints
- ✓ Tools can be lowered down the shaft, rather than carried by workers entering the tunnel down the

ladders. Tools can be lowered using a rope and the lockable canvas tool bag available

### EMERGENCY RESPONSE PROCEDURE

- ✓ Determine the nature of the situation and notify the worker located at the top of the shaft, pump station or reservoir. Contact should be made by a pre-arranged method i.e. verbal, hand signals, radio/2-way or mobile phone
- ✓ Perform first aid as required
- ✓ Notify the appropriate authorities as to the nature of the situation
- ✓ In emergency situations injured workers should exit the tunnel through the vertical access shaft by attaching to the winch/fall arrester and being winched to the surface by worker located at the top of the shaft

### DO NOT

- ✗ Do not use if plant is faulty. Attach an Out of Service tag and report fault to your supervisor
- ✗ Do not carry down tools when entering the shaft
- ✗ Do not leave plant running unattended
- ✗ Do not wear loose jewellery
- ✗ Do not use mobile phone while operating plant

**\*Plant in this SWI refers to any machinery, equipment, appliance, container, implement and tool.**