

Safe Work Instruction - Cleaning the Grit Separator at Burrier Pump Station

DO NOT use this plant* 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



Hand protection must be worn



Hearing protection must be worn



Foot protection must be worn

POTENTIAL HAZARDS AND RISKS

- ⓘ Entanglement**
Entanglement in moving parts
- ⓘ Manual Task Injury**
Manual task injury from repetitive movements
Manual task injury from incorrect manual handling techniques
- ⓘ Slip, Trips, Falls**
Slip, trip, fall due to uneven or slippery work surfaces
- ⓘ Other**
Exposure to contaminated air
Injury due to plant malfunction or misuse
Injury due to fall from heights

PRE-OPERATIONAL SAFETY CHECKS

- ✓ Complete site specific risk assessment
- ✓ Complete the appropriate pre-operational plant checklist
- ✓ Ensure you are familiar with plant operations and controls
- ✓ Ensure that guards are fitted, secured and functional in accordance with manufacturers guidelines
- ✓ Turn the main "Pump Control" switch to "OFF", remove the key and stow in pocket to prevent others from starting the pump
- ✓ Ensure to refer to Energy Isolation Procedure P29
- ✓ Ensure to complete a Confined Space Risk Assessment checklist, obtain a Confined Space Permit and refer to Confined Space Procedure
- ✓ Check calibration of gas detector

OPERATING PROCEDURES

- ✓ Keep clear of moving plant parts
- ✓ Operate plant to the conditions of the work area
- ✓ Isolate the pump motorised valves via the adjacent isolation switch or manually shut both of the pumps inlet or outlet valves
- ✓ Isolate the river supply via the penstock valve located in the inlet structure. The valve may have to be partially reopened and closed a number of times to clear the penstock of all rocks and debris
- ✓ Activate the ventilation system for the dry well for at least 15 minutes
- ✓ Lower a gas detector to monitor the air quality in the well
- ✓ Change the supply valves around on the sump pump i.e. shut off the sump suction valve and open the cone suction valve

- ✓ Shut off the backwash valve located on the second landing of the grit separator dry well to prevent the possibility of back siphoning the river
- ✓ Start up the sump pump via the control panel located on the first landing of the grit separator
- ✓ Pump the grit separator as low as possible and open the sump pump suction valve to allow any water from the cone to enter the sump pump in order for the pump to operate automatically via the float switches
- ✓ Using a crane truck remove the grit separator checker plate covers and gatic lid access hatch to aid ventilation and lighting
- ✓ Low voltage lighting may be used to aid visibility in the well, provided it has been checked and tagged by the electricians prior to use
- ✓ Using 2-3 staff, enter the grit separator in order to clean and inspect
- ✓ Cleaning may be carried out using shovels, a crane truck

ENDING OPERATIONS

- ✓ Allow plant to cool before performing any maintenance, refuelling or cleaning
- ✓ Refuel plant at least 3 metres from combustibles
- ✓ Ensure plant is in good working order and stored in the appropriate location

DO NOT

- ✗ Do not use if plant is faulty. Attach a DO NOT OPERATE tag and report fault to your supervisor
- ✗ Do not leave plant running unattended
- ✗ Do not leave keys in machinery whilst 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.