

Planned maintenance procedures for pump inspection and maintenance at pump stations.

Health & Safety and Operational Information

Hazard Indicators



Personal Protection



Health and Safety Information

- Health and Safety documentation.
- Generic Traffic Management Plans or site-specific Traffic Management plan.
- Hazardous Waste
- Restricted Space Entry (minimum of two personal at site)
- PPE for waste water environment

Operation's & Maintenance Documentation

- Corridor Access Requests (CAR) and WIP Permits (site specific or generic/global)
- Design drawings & P&ID's
- Site plans

Customer Information (Confidential)

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Priority Customer Categories

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Emergency Procedure / Escalation

Emergency

- Make "Site Safe" and isolate risks to people or property with resources at hand

Escalate if extra resources required or problems occur!

- Escalate to Team Leader and inform of the issues faced and/or expected resources required if necessary.

Additional Documentation

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Required Skills, Competencies (Qualifications and/or Certifications)

Registered Electrician.
Pump station operators

Standard Operating Procedure

Required Equipment

Equipment and Information	Details
Fully Equipped Vehicle	Ensure vehicle, plant, equipment and materials appropriate to the day's work schedule is available.
Specialist Equipment	Ensure specialist equipment required is available for utilisation.
Specialist Materials & Parts	Ensure you have loaded up all the required parts and materials required to undertake the maintenance work to be completed.
Vulnerable & Priority List	<As required – remove row if not required>
Specialist Equipment	Test gear for back flow certification, Water blaster

Prepare to do the work

Action	Action Details
Pre Start Process	<p>Complete the Daily Pre Start - Planning Reactive Maintenance</p> <ul style="list-style-type: none"> - Include Hazard ID - Include Pre-Start Tailgate Meeting <p>Undertake all tasks required in the Generic Planned Maintenance SOP.</p>
Compliance	Traffic Management Plan - Where required, TMP to be in place prior to work starting. TMP to be accessible on site.

Perform the work

Actions are colour coded for the frequency, perform all actions up to the end of the current frequency (i.e perform 4 weeks actions in addition to Annual actions during annual works)

4 weeks; 13 weeks; 26 weeks; 52 weeks;

Action	Trade	Action Details
Inspect	Pump Station Operator	Building has signage Verify that the building signage is present and in good condition. Unless if underground when signage is not required
Inspect	Pump Station Operator	Fire Extinguisher check date on fire extinguisher and renew when required
Inspect	Pump Station Operator	Connections for Generator Check condition of generator switch and available connection
Inspect	Pump Station Operator	Visually checked control panel Check panel surface has no damage or corrosion. Carry out basic remediation of issues and generate new work order for significant works
Inspect	Pump Station Operator	Check lighting verify all lighting is operational if not report status
Inspect / Record	Pump Station Operator	Check bark odour bed. To verify the bark is damp. If bark is dry or soaked verify operation of the sprinkler system. Record differential pressure of the bark bed.
Inspect	Pump Station Operator	Carbon odour filters Check operation of fan and verify that odour is not present at the outlet of the carbon filter device
Inspect	Pump Station Operator	Check Ventilation fan verify all extract fans are operational if not report status
Inspect	Pump Station Operator	Check condition of cabinet/ building. Check for damage and corrosion. Carry out basic remediation of issues and generate new work order for significant works
Maintenance	Pump Station Operator	Building is clean and tidy remove any dirt or rubbish within the building
Inspect	Pump Station Operator	Verify building/cabinet is secure check the cabinet is secured well to the ground by gently pushing cabinet
Inspect	Pump Station Operator	Graffiti on cabinet/ Building. Check building or cabinet for Graffiti and arrange for removal if found
Inspect	Pump Station Operator	Duty Pump, Duty Pump Selection, if required rotate duty with duty pump to next pump
Record	Pump Station Operator	Record pump starts and run hours Carry out basic remediation of issues and generate new work order for significant works
Record	Pump Station Operator	Record pump delivery Pressure and verify wet well level is displayed correctly on side A and B Carry out basic remediation of issues and generate new work order for significant works

Action	Trade	Action Details
Record	Pump Station Operator	Record pump present Flow Rate and flow totals Carry out basic remediation of issues and generate new work order for significant works
Inspect	Pump Station Operator	Check pump vibration/Noise and valve and pipe work Carry out basic remediation of issues and generate new work order for significant works
Inspect	Pump Station Operator	Check corrosion and water leakage not present Carry out basic remediation of issues and generate new work order for significant works
Maintenance	Licensed Operator	Vermin control Check vermin and insect bait stations and refill as necessary.
Maintenance	Pump Station Operator	liquid Disinfection confirm that there is adequate disinfection on site for cleaning when unblocking pumps
Inspect	Pump Station Operator	Building WOF Check, if required and the certificate is current
Inspect	Pump Station Operator	Support beams are certified including block and tackle
Inspect	Pump Station Operator	Check sump pump check pump operates and NRV operates
Maintenance	Pump Station Operator	Wet well condition inspect the wet well condition including picture (not required if TMP required). If required cleaning refer to WWA-RM.002.07.1
Maintenance	Pump Station Operator	Test actuator operation Actuator and Penstock Condition Close and Open Penstock (SWPS only)
Maintenance	Pump Station Operator	Floats and probes Clean Wet well floats and probes as required to enable operation.
Maintenance	Pump Station Operator	Screens Check storm water screens for blockages and remove debris if blocked (for SWPS only)
Maintenance	Contractor	Gas detection instruments Calibrate gas detection system
Maintenance	Pump Station Operator	Floats and probes Check condition and test to verify pump operation
Inspect	Pump Station Operator	Bark odour bed Weed bark bed and turn over bark
Maintenance.	Licensed Operator	Suck out all wet wells and waterblast clean.
Maintenance	Pump Station Operator	Grease if required pump or threaded stem on penstock
Maintenance	Pump Station Operator	Check pipework, bolts and fixing Verify pipework condition and its fixings. Carry out basic remediation of issues and generate new work order for significant works
Maintenance	Pump Station Operator	Pipe work Tapping points verify all pipework tapping are in good condition including the small auxiliary pipework that is utilised
Maintenance	Pump Station Operator	Support beams Arrange certification of support beams including block and tackle
Maintenance	Pump Station Operator	Check Valves check condition and operation of valves. Carry out basic remediation of issues and generate new work order for significant works
Maintenance	Pump Station Operator	Water supply Back flow preventer Certify back flow preventer
Maintenance	Pump Station Operator	Non return valves check condition and operation of reflex valves. Carry out basic remediation of issues and generate new work order for significant works
Maintenance	Pump Station Operator	Check Bellows check condition and operation of bellows. Carry out basic remediation of issues and generate new work order for significant works
Maintenance	Pump Station Operator	Pump information record make, model, serial number take a picture of the name plate
Maintenance	Pump Station Operator	Check Pumps are secure verify that the pumps are securely fixed to the ground Carry out basic remediation of issues and generate new work order for significant works
Maintenance	Pump Station Operator	Pump Check casing wear ring I.D. Record measurement
Maintenance	Pump Station Operator	Pump Check impeller wear ring O.D. Record measurement
Maintenance	Pump Station Operator	Pump Check Impeller Gap Record measurement
Record	Pump Station Operator	Pump Check Oil check

Action	Trade	Action Details
Inspect	Pump Station Operator	Inspect screen check screen for corrosion and damage repair if required (for SWPS only)
Maintenance	Pump Station Operator	Penstocks Actuator and Penstock service (for SWPS only)
Maintenance	Pump Station Operator	Flap gates check Flap gates and service if required (for SWPS only)
Inspect	Pump Station Operator	Concrete structure Report on the condition of the concrete walls of the wet wells
Inspect	Pump Station Operator	Water supply Report on the condition of the water pipework and fittings for the pump station
Maintenance	Pump Station Operator	Pressure transducers remove and inspect, clean all pressure transducers and verify accuracy
Maintenance	Pump Station Operator	Carbon filter Replace carbon if required

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