

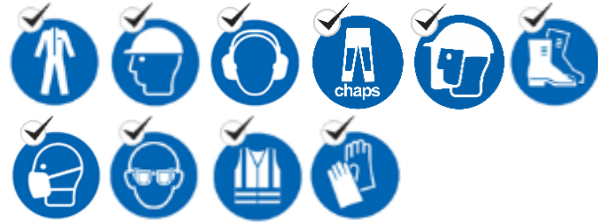
Planned maintenance procedures for inspection and maintenance on Water Treatment Plant - Hoist & Crane.

**Health & Safety and Operational Information**

**Hazard Indicators**



**Personal Protection**



**Health and Safety Information**

- Health and Safety documentation.
- Confined Space Entry

**Operation's & Maintenance Documentation**

- Design drawings
- 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)**

Mechanical Fitter  
 Plant Technician/Operator  
 Electrician  
 Licensed Service Agent  
 Independent Qualified Person (IQP)

**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.
Specialist Equipment	

**Prepare to do the work**

Action	Action Details
Pre Start Process	Complete the Daily Pre Start - Planning Reactive Maintenance <ul style="list-style-type: none"> <li>- Include Hazard ID</li> <li>- Include Pre-Start Tailgate Meeting</li> </ul> Undertake all tasks required in the Generic Planned Maintenance SOP.
Compliance	<b>Compliance Hoist &amp; Crane inspections</b> – All Treatment Plant, Pumping Stations and associated building or structures that have overhead cranes, gantries, hoist and monorails require inspection and maintenance enabling them to be used safely by compliant operators
Compliance	<b>Traffic Management Plan</b> - Where required, TMP to be in place prior to work starting. TMP to be accessible on site. Coned and barriers in place when working overhead inside of buildings
Compliance	<b>LOTO-Lock Out, Tag out</b> when working on powered cranes or hoists.
Compliance	If working overhead, pull the control pendant up to the work site
Compliance	If working at height, use either portable scaffolding, a Scissor Lift or Snorkel Lift, inclusive of harness and lanyards.
Notifications	Notify Relevant Duty Officer or TL & any applicable staff prior to all crane inspections or maintenance.
Notifications	Photograph all aspects of the inspection
Organise Inspection	Organise for internal resources to perform required tasks as per PM
Organise Inspection	Organise for Service Agent to perform inspection as per PM
Organise Maintenance	Organise for Independently Qualified Person (IQP) to perform full service. As per PM

**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; 52 weeks; 208 Weeks

Action	Trade	Action Details
Inspect from Ground level	Mechanical Fitter and/or IQP	<b>All Functional Mechanisms</b> - for maladjustment interfering with proper operation, test crane functions and the controls for speed, smoothness of operation and limits of motion.
Inspect from Ground level	Mechanical Fitter or IQP	<b>Inspect and test Limit Switches</b> - for operation without a load on the hook. Run the gantry the full length of the building ensuring the wheels run free on the rails and that there isn't any crabbing or interference with long travel and cross travel.
Inspect from Ground level	Mechanical Fitter or IQP	<b>Inspect and check that End Buffers, End Stops and Anti-Derailment plates are fixed correctly.</b>
Inspect from Ground level	Mechanical Fitter or IQP	<b>Load Hooks</b> - for deformation and cracks Hoist or Load Attachment Chains - including end connections for excessive wear, twist, distorted or stretched links interfering with proper function.
Inspect from Ground level	Mechanical Fitter or IQP	<b>Wire Ropes and Rope Slings</b> - for excessive wear, broken wires, stretch, kinking, or twisting of ropes and rope slings, including End Stop connections. A torch maybe required for better visibility when looking at end stops overhead.
Inspect from Ground level	Mechanical Fitter or IQP	<b>Check and lubricate chain drives and chain hoists.</b> Chain links must be within a tolerance range for its size-Refer to operator's manual of the particular crane. Check End connections for installed End Stops. A

Action	Trade	Action Details
		torch maybe required for better visibility when looking at end stops overhead.
<b>Inspect at Height</b>	<b>Mechanical Fitter or IQP</b>	<b>Ensure all bolted fixings have been checked with a spanner.</b> Check all structural welds for any sign of fatigue or cracks. Welded braces and supports must be visible for inspection. Notify an Engineer of any corrosion. Scaffolding to suit the site will be required. Height safety gear to be worn and used correctly
<b>Inspect</b>	<b>Licensed Service Agent</b>	<b>Crane Inspection</b> to NZ ACOP and ensure current certification is visible and located on the site
<b>Maintenance</b>	<b>IQP</b>	<b>Crane Servicing</b> Replace Oil in the drive unit gearboxes as per PM or to manufacturers guidelines

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