Water Treatment Plant – Tension Belts - Planned Maintenance
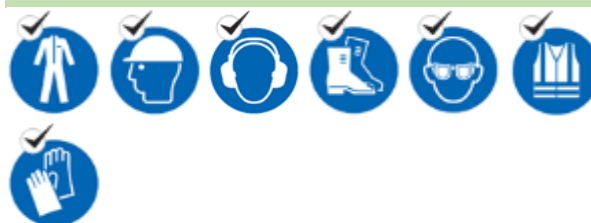
Planned maintenance procedures for inspection and maintenance on Water Treatment Plant – Tension Belts.

Health & Safety and Operational Information

Hazard Indictors

Waste water | Underground services | Open pit | High pressure liquid | fire | Environmental | Electrified service pipework

Deep water | combustible toxic fumes | Chemical | Biological | Atmospheric | Confined space

Personal Protection

Health and Safety Information

- Health and Safety documentation.
- Working at Heights
- LOTO (Lock Out Tag Out)
- Traffic control
- Eye and hand protection compulsory due to high pressure of grease gun

Operation's & Maintenance Documentation

- Design drawings
- Belt Tension table (manufacturers guidelines)

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

- Qualified Mechanical Fitter (maintain by greasing plant)
- Qualified Electrician (LOTO electrical where applicable)
- Qualified IQP (specialist of Belt types and correct replacement)
- Site Safe ID / Construct Safe

Required Skills, Competencies (Qualifications and/or Certifications)

Mechanical Fitter
Plant Technician/Operator
Electrician
Licensed Service Agent (supplier)

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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 Materials & Parts	Ensure you have loaded up all the required parts and materials required to undertake the maintenance work to be completed.
Specialist Equipment	Ensure specialist equipment required is available for utilisation. - Tension tool - Safety Barriers, Safety Cones with Barrier Bar, and Hazard tape.

Prepare to do the work

Action	Action Details
Pre Start Process	Complete the Daily Pre-Start - Planning Reactive Maintenance - Include Hazard ID - Include Pre-Start Tailgate Meeting Undertake all tasks required in the Generic Planned Maintenance SOP.
Maintenance	All moving plant that requires isolation from any power source will need to be isolated
Compliance	LOTO-Lock Out, tag out when working on powered plant
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 maintenance.
Notifications	Photograph all aspects of the inspection
Organise Inspection	Organise for internal resources to perform required tasks as per PM
Organise Maintenance	Traffic Management Plan - Cones and barriers in place when working, including overhead inside of buildings.
Maintenance	Identify the correct tension settings for the various belt types and sizes. Make sure correct belt is available if replacement is required.

Perform the work

Action	Trade	Action Details
Maintenance	Mechanical Fitter	Removed guarding and ensure it is in working order, repair if necessary, ensure running plant cannot be reached when guard is in place. Check all fastenings are present.
Maintenance	Mechanical Fitter	Re-Tension of Belt. Use manufactures recommendation for centres, size and deflection. Check belt for cracking and any fraying. Replace if excessive wear.
Maintenance	Mechanical Fitter	Replacement of belt. Ensure tensioners are located correctly and locked in place.
Maintenance	Mechanical Fitter	Once job is completed, reinstall all guarding. Ensure all fastened correctly