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PLANNED SHUTDOWNS

1. PURPOSE

To effectively plan and manage shutdown arrangements for EGW's water and sewerage infrastructure, including to:

- Plan and coordinate shutdowns to meet the needs of EGW customers and all relevant internal stakeholders involved.
- Identify and mitigate relevant risks associated with the planned works
- Minimize or eliminate customer supply interruptions or any other impacts on customers, and or environment.
- Facilitate good communications between all parties
- Establish correct handover procedures

2. APPROVAL OF THIS SOP

Managing Director.

3. REFERENCES & FORMS

- Essential Services Commission Water Performance Indicator Definitions (DOC/18/30033).
- POL 045 EGW Customer Charter (DOC/09/41*)
- Customer Charter Standard Operating Procedure SOP 144 (DOC/11/8290*)
- Work Instruction EGW 125 Planned Shutdown Requests
- Form 006 Planned water main shutdowns interruption to supply (DOC/12/24317)
- Form 126 Commissioning of New Water Mains (DOC/18/31872)

4. **DEFINITIONS**

Project Manager – The Project Manager is the approved person responsible for the effective delivery of a project as defined in the EGW Project Management Manual. Noting that shutdowns may arise outside of project delivery (i.e. for operational reasons), for the purposes of this document, the person responsible for coordinating the overall shutdown shall be referred to as the Project Manager.

Contractor – A contractor appointed or approved by EGW to undertake construction/installation of all or part of the works. For operational activities/ works requiring shutdowns, EGW Operations crews undertaking the works are considered Contractors for the purpose of this document.

Superintendent (if applicable) – The authority appointed by EGW to act on it's behalf in performing the administration and supervision of the agreed contract terms (which may be self-performed) where a contract exists.

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Service Delivery Manager - The person(s) responsible for managing the ongoing operation & maintenance of the assets affected by the works. This responsibility may be delegated to one or more EGW **Technical Officers within EGW Operations.**

Planned Shutdown Administrator – The person responsible for the scheduling of EGW Operations resources and the timely distribution of notifications to customers upon request.

5. RESPONSIBILITIES

Project Manager – The Project Manager is responsible for the effective delivery and planning of the Works/ Activity requiring a shutdown. The Project Manager is responsible for ensuring that all alternatives are looked at to determine whether a system shutdown can be avoided and alternative arrangements made, e.g., under pressure tapping, bypass, tank supply etc. If shutdown is the only option, then the Project Manager's responsibilities include:

- Ensuring that EGW and impacted customers are adequately notified of the shutdown in accordance with Work Instruction EGW 125 Planned Shutdown Requests. The Project Manager shall ensure that the formal shutdown request is made at least 10 working days to the Planned Shutdown Administrator prior to the works being undertaken;
- Shall chair a Shutdown Planning and Coordination Meeting including all relevant representatives from EGW and the Contractor. In this meeting tasks, roles and responsibilities shall be agreed and documented (note at the discretion of the Service Delivery Manager, routine operational and maintenance shutdowns may not require a specific coordination meeting).
- Ensuring that any Contractors have completed all preparation work and has sufficient resources to complete the work within the specified time frame, including safety documentation and a Detailed Works Plan for the entire shutdown;
- Ensuring that EGW is informed throughout the shut-down work of any issues that
 arise that may prolong the work or require modification to the intended design or
 installation procedure. This shall include notifying the relevant Manager and EGW
 Communications Manager if it is likely that a shutdown may exceed the notified
 outage period; and
- Ensuring that the work is completed to the required standard (quality as per technical designs and specifications, Contractors Works Plan, HSE Management Plans/Systems, etc.) in liaison with the Superintendent.
- Ensuring that the following forms are completed during the works (where relevant):
 - Form 006 Planned Shutdowns
 - Form 126 Commissioning of New Water Mains

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Contractor - Is responsible for:

- Completing the work within the specified timeframe with minimal disruption to local traffic and EGW customers and the community;
- Generation and submission of a Detailed Works Plan for the planned shutdown for the approval of EGW. The program shall include all key tasks with nominated timeframes and assigned responsibilities.
- The development and maintenance of appropriate safety plans and/or safe work method statements relevant to the works under contract
- Protecting public safety prior, during and after works are completed this includes vehicular and pedestrian traffic management;
- Ensuring that the water main and fittings are capped and stored in such a way that reduces risk of contamination prior to connection to the Corporation's water reticulation system;
- Ensuring that the water main and fittings are flushed and disinfected to the required standard prior to connection to the Corporation's water reticulation system; and
- Backfilling and cleaning up the site works once the works are completed.

Service Delivery Manager (or their nominated Technical Officer - Operations) – is responsible for:

- Providing initial assistance to the Project Manager to plan and scope any required shutdowns;
- Ensuring that any special customer needs, such as water supply for dialysis
 patients, special businesses (e.g. schools, hospitals, etc.) is maintained throughout
 the disruption to supply, as required;
- Reviewing the proposed Detailed Works Plan with the EGW Project Manager and Superintendent to ensure sufficient EGW resources are available to enable the proposed works to be completed within the specified timeframe;
- Pre-trialing and exercising critical valves required for the shutdown prior to works commencing;
- Isolating works from system and drain as required prior to works commencing;
- Ensure that testing has been conducted to confirm that supply is within the required water quality parameters in Form 126; and
- Restore system into operation on completion of Works.

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Superintendent - Is responsible for:

- Ensuring review of any HSE submissions and Detailed Works Plan is adequately completed;
- Ensuring that all works are undertaken in accordance with the agreed contract of works, specifications, HSE submissions etc.;
- Undertaking any other tasks or responsibilities as delegated in the planning of the works.

Planned Shutdown Administrator – is responsible for:

- Confirming EGW Operations resource availability and acceptance for shutdown to proceed;
- Coordinating the process within EGW to administer and distribute notifications to impacted customers in a timely manner.
- Registering impacted customers in Aquatact to ensure appropriate monitoring and reporting of EGW's ESC compliance.

6. OHS HAZARDS AND CONTROLS

- Prior to the commencement of works, the contractor shall undertake an activity specific
 risk assessment and document in an appropriate Job Safety Analysis (JSA) / Safe Work
 Method Statement (SWMS) to the satisfaction of the Superintendent and or Project
 Manager (Refer also to EGW Form 048 Field Work Hazard Identification and Control
 Checklist and relevant work instructions).
- Form 006 Planned Shutdowns shall be reviewed prior and completed during the works
- Shutdown notifications shall be undertaken in accordance with Work Instruction EGW
 125 Planned Shutdown Requests
- Water Quality Management shall be in accordance with Form 126 Commissioning of New Water Mains.

7. PLANNING ESSENTIALS

- Confirm if the shutdown is necessary or can reasonable be avoided.
- The total planned shutdown time is not to exceed 4 hours without prior consultation. Note all notifications shall nominate the maximum allowable shutdown time of 5 hours (or as approved otherwise), regardless of the shutdown duration. The works shall still be bound to a 4 hour maximum period but will provide contingency in the event of unforeseen circumstances. Shutdowns requiring longer than 4 hours shall only be considered on a case by case basis and shall be by written approval of the Service Delivery Manager
- Shutdown times are generally to be between 9:00am and 4:00pm Monday to Thursday unless agreed otherwise.

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- The Detailed Works Plan developed between the Project Manager, EGW Technical Officer, Superintendent (if applicable) and Contractor is to be aimed at minimising the length of the shutdown time and the number of customers affected.
- Allow for contingencies such as fitting failures, HDPE pipe cooling rates, thrust anchorage curing etc.
- EGW has a preference for the use of under pressure tappings and cut-ins for water services, tees, etc. or alternative supplies (i.e. temporary services if cost effective)
- Shutdowns on a Friday and on weekends will only be approved for exceptional circumstances by agreement with the Project Manager and the Service Delivery Manager.
- The shutdown time is inclusive of the time taken to turn of valves, dewater the main (including valve turning) and to test and recharge the system.
- Prior to commencing the shutdown works, the Project Manager shall organise via the Technical Officer for all existing valves required in the shutdown to be exercised, tested and verified as operational.
- Works on Asbestos Cement assets shall be undertaken in accordance with SOP 079.
- Where practical, all pre-cut-in work is to be completed prior to the shutdown. This
 includes fully exposing pipe work and fittings and pre-assembly of new fittings
 where practical
- Any issues that arise on site are to be resolved between the Project Manager, Superintendent and the EGW Technical Officer. The Project Manager shall communicate issues to the relevant internal stakeholders in a timely manner.
- All water mains are to be capped during storage and prior to connection to the Corporation's water reticulation system.
- All water mains and fittings should be stored in such a way that reduces risk of contamination prior to connection to the Corporation's water reticulation system.
- All water mains are to be flushed, pressure tested and disinfected prior to connection to the existing water reticulation system.
- Sufficient records are to be kept for verification of works undertaken on site including the timing of events.
- Tender documentation shall include clauses identifying potential Contractor liability for Guaranteed Service Level (GSL) payments for exceedance of the notified shutdown period if found to have been negligent in causing the exceedance.
- Submissions to the Planned Shutdown Administrator shall include:
 a) a pdf plan showing:
 - the EGW GIS indicating the highlighted extent of network to be impacted,
 - any valves that will need to be closed, or
 - sewers that need to be plugged or diverted.

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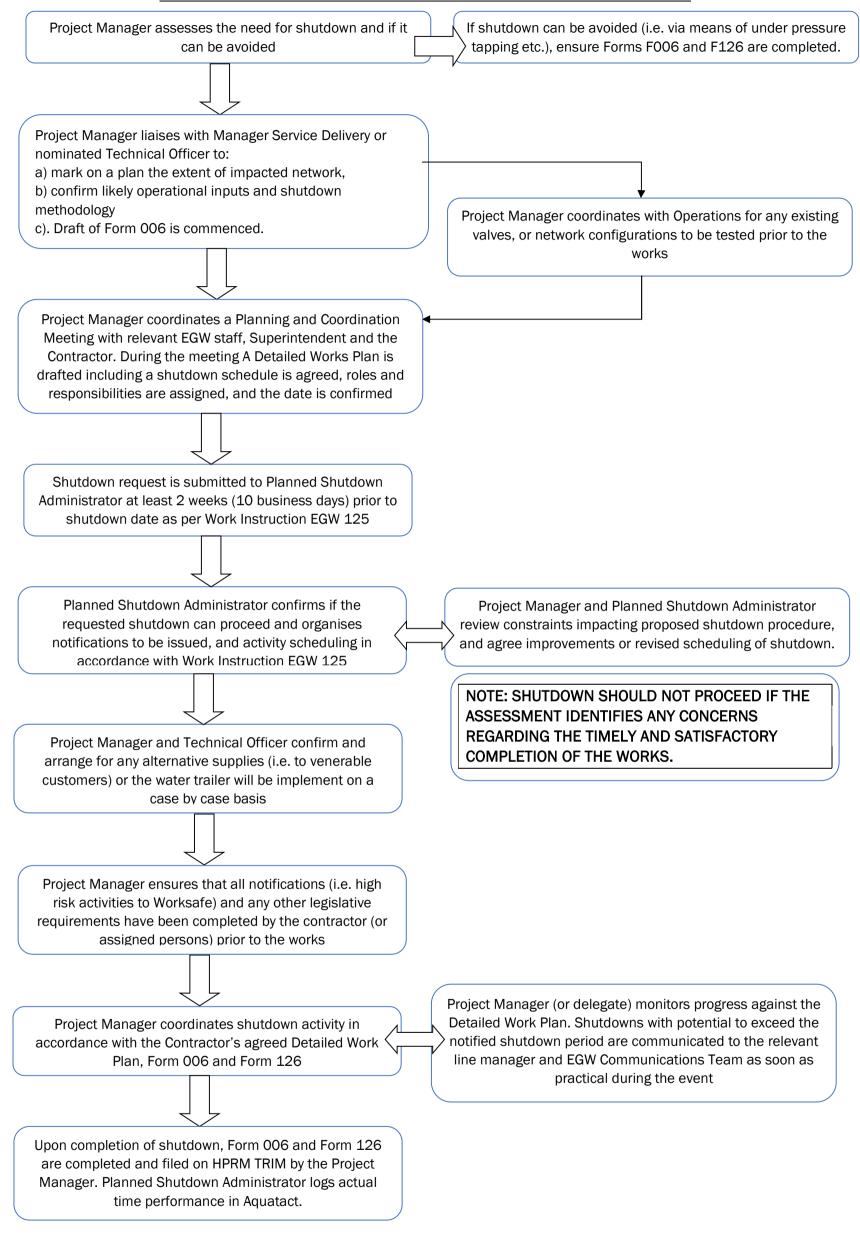
- an aerial photo showing street addresses and adjacent property numbers b) draft version of Form 006
- c) project and contact details including:
- EGW Project Number
- EGW Project Manager, Superintendent, Nominated Operations Member and Contractor
- d) Detailed Work Plan including proposed schedule and dates.
- If the Planned Shutdown Administrator (acting on behalf of the Service Delivery Manager and/or Technical Officer) believes that the shutdown should not proceed, an email is to be returned to the Project Manager and copied to the Superintendent, explaining what requirements have to be satisfied prior to the shutdown proceeding within 2 days of the shutdown request. Once all issues are satisfied, the Project Manager is to submit a new shutdown request.

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ATTACHMENT 1 - PLANNED SHUTDOWN PROCEDURE FLOWCHART



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