

Sewage Overflow Response

Power and Water Work Instruction

This work instruction applies to all instances of sewage overflow whether from pump station failure, sewer pipe blockage, sewer pipe collapse, or inadequate capacity (during high inflows). It does **not** apply to dedicated system overflow points activated as part of Power and Water's Sewer Overflow Management Plan.

Hazards	Personal Protective Equipment	Tools & Equipment
Wet surfaces. Biological agents (ie bacteria, viruses, parasites). Clean up chemicals. Toxic, irritant, asphyxiating or flammable substances.	Safety glasses. Goggles if hosing or using chemicals. Rubber boots. Rubber gloves. Respiratory protection. Impervious coveralls.	Detergent and disinfectant chemicals. Material Safety Data Sheets. Lime. Shovel. Robust plastic bags. Safety barriers and signs. Hoses and nozzles. Traffic control devices.

Contain

1. Arrive on site, control traffic and other immediate dangers associated with establishing a work zone.



2. Demarcate overflow area and work zone using 'witches hats'.
3. Keep unauthorised vehicles, personnel and public at a safe distance from the overflow area and work zone.
4. Investigate the cause of the overflow.
5. If there is any evidence that adjacent water supply pipes are damaged or sewage may have in any way come in contact with or contaminated any water supply infrastructure, **immediately** isolate water infrastructure and contact either;
 - Manager Water Operations (Water Services),
 - Manager Water Facilities (Water Services),
 - Manager Water and Sewerage Operations North (Remote Ops), or
 - Manager Water and Sewerage Operations South (Remote Ops).



2. Where an overflow cannot be immediately controlled, attempt to contain the overflow (using sandbags or a dug drain) and direct into the nearest surface drainage, stormwater system.



Danger



Caution

Tag



Environmental



Permit



Document

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3. If the overflow is causing backup within premises, keep occupants at a safe distance from the overflow area, and open all windows and doors to increase ventilation.



4. If the overflow is causing backup within a confined space, enter only in accordance with the Safe Working in a Confined Space Procedure.



Control

5. If overflow cannot be immediately controlled and is impacting on a significant area, advise the relevant Branch/Section Manager, and engage assistance and specialist equipment as required.
 - Senior Sewerage Coordinator (Water Services),
 - Manager Water Operations (Water Services),
 - Manager Water and Sewerage Operations North (Remote Ops), or
 - Manager Water and Sewerage Operations South (Remote Ops).
6. If required, the Manager Water Operations or Manager Water and Sewerage Operations shall advise and/or engage the assistance of Police, Transport and Works (in the event of road services being impacted), Local Council and Department of Health and Community Services.
7. Overflow control may include:
 - Ceasing pumping operations (in the event of rising main failure);
 - Diversion of sewage flows at upstream manhole using pipe plug and pump out truck,
 - Temporary diversion line,
 - Dedicated overflow point, or
 - Creation of more appropriate temporary overflow point.
8. If overflow cannot be controlled, establish barrier fencing and advisory signage warning including barrier lighting if appropriate around overflow area.

Clean up

9. Commence overflow clean up as soon as practicable after control.
10. Remove any gross contamination, place in a robust plastic bag, and dispose of appropriately.
11. Clean external sealed surfaces (eg paving, concrete or bitumen) with water. **Only use upstream fire hydrants away from any potential contact with overflowed sewage.** Following clean-up, apply diluted sodium hypochlorite (5:1) to sealed surface areas (using a bucket) until the affected area is wet.

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12. In unsealed public areas and where practicable, establish barrier fencing and advisory signage around any contaminated area to restrict access. Leave barriers in place for 5 days after clean-up. In all unsealed areas apply lime until surface ponding is eliminated and then apply 50mm imported topsoil. Advise landholders not to enter upon affected areas for minimum 5 days after clean-up.
13. Clean all equipment and PPE used with detergent then disinfect. If PPE is unfit to be used again, place in a robust plastic bag and dispose of appropriately.

Report

14. Any overflow in a treatment plant, pump station or bunded area which is less than 1000 litres, that has not entered a drain or unsealed area, and has been contained and cleaned up does **not** need to be reported.
15. Report all other overflows to Manager Environmental Services and Manager Quality, Safety and Risk within 24 hours.
16. Report any incidence of overflows causing damage to private property to Manager Water Operations or Manager Water and Sewerage Operations and the Corporate Insurance Officer.
17. Document the reported overflow by completing an Incident Notification Form within 24 hours.



References

Power and Water's Sewer Overflow Management Plan