

SECTION 14 INCIDENT REPORT (*Waste Management and Pollution Control Act*)

Date and Time of Notification:	Friday 31 st 2023, 15:42hrs
Person / Company:	Power and Water Corporation (PWC)
Incident:	Discharge of sewage from sewerage network – Inspection opening

<p>(a) the incident causing or threatening to cause pollution</p>	<p><i>i. Description of the waste that was discharged.</i></p> <p>Raw sewage (no gross pollutants)</p> <p><i>ii. Indicative wastewater quality for the discharge.</i></p> <p>There was no wastewater quality data available for Yarralin’s waste stabilisation ponds inflows. The nearest community with a waste discharge licence that has some data on pond inflow wastewater quality is Kalkarindji, which is 200 kilometres away. See below for indicative wastewater quality data.</p> <table border="1" data-bbox="598 1191 1471 1303"> <thead> <tr> <th>Sample Date</th> <th>Description</th> <th>E. coli (MPN/100 mL)</th> <th>Enterococci (MPN/100 mL)</th> <th>Ammonia Nitrogen (NH₃-N) (mg/L)</th> <th>Nitrate as N (NO₃-N) (mg/L)</th> <th>Nitrate + Nitrite as N (NO_x-N) (mg/L)</th> <th>Nitrite as N (NO₂-N) (mg/L)</th> <th>Organic Nitrogen as N (mg/L)</th> </tr> </thead> <tbody> <tr> <td>17/01/23</td> <td>KALKARINDJI POND 1 INLET</td> <td>27,900.0</td> <td>1,000.0</td> <td>13.0</td> <td>0.1</td> <td>0.1</td> <td>0.1</td> <td>0.4</td> </tr> </tbody> </table> <table border="1" data-bbox="598 1310 1471 1451"> <thead> <tr> <th>Phosphorus - Filterable Reactive as P (mg/L)</th> <th>Phosphorus Total (mg/L)</th> <th>Biochemical Oxygen Demand (mg/L)</th> <th>Dissolved Oxygen (lab) (%sat)</th> <th>Dissolved Oxygen (lab) (mg/L)</th> <th>Total Dissolved Solids (from EC) (mg/L)</th> <th>Electrical Conductivity (Lab) (uS/cm)</th> <th>Total Suspended Solids (mg/L)</th> <th>Volatile Suspended Solids (mg/L)</th> <th>Turbidity (lab) (NTU)</th> <th>pH (lab) (pH units)</th> </tr> </thead> <tbody> <tr> <td>0.9</td> <td>2.9</td> <td>8.5</td> <td>10.0</td> <td>0.3</td> <td>550.0</td> <td>870.0</td> <td>50.0</td> <td>40.0</td> <td>49.0</td> <td>7.92</td> </tr> </tbody> </table>	Sample Date	Description	E. coli (MPN/100 mL)	Enterococci (MPN/100 mL)	Ammonia Nitrogen (NH ₃ -N) (mg/L)	Nitrate as N (NO ₃ -N) (mg/L)	Nitrate + Nitrite as N (NO _x -N) (mg/L)	Nitrite as N (NO ₂ -N) (mg/L)	Organic Nitrogen as N (mg/L)	17/01/23	KALKARINDJI POND 1 INLET	27,900.0	1,000.0	13.0	0.1	0.1	0.1	0.4	Phosphorus - Filterable Reactive as P (mg/L)	Phosphorus Total (mg/L)	Biochemical Oxygen Demand (mg/L)	Dissolved Oxygen (lab) (%sat)	Dissolved Oxygen (lab) (mg/L)	Total Dissolved Solids (from EC) (mg/L)	Electrical Conductivity (Lab) (uS/cm)	Total Suspended Solids (mg/L)	Volatile Suspended Solids (mg/L)	Turbidity (lab) (NTU)	pH (lab) (pH units)	0.9	2.9	8.5	10.0	0.3	550.0	870.0	50.0	40.0	49.0	7.92
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<p><i>iii. Volume of the waste that was discharged.</i></p> <p>The volume of waste discharged is unknown. No telemetric monitoring occurs at this location, it is however estimated to have been approximately 5 to 10 kilolitres, as estimated by the plumbing contractor based on observations and duration of spill.</p>																																									
<p>(b) the place where the incident occurred</p>	<p><i>i. Description of the PWC asset from which the discharge occurred.</i></p> <p>The overflow emanated from a sewerage inspection opening located at lot 74, Yarralin.</p> <p><i>ii. GPS coordinates of the discharge point from the PWC asset, and the final coordinates of the final discharge point.</i></p> <p>Discharge Point: 130.8828980E, 16.4491032S (inspection opening) Final discharge point: 130.8831017E, 16.4491017S (adjacent property)</p>																																								

	<p><i>iii. Indicate any locations nearby to the discharge point where public can gain ready-access, such as public open spaces through which the discharge moves.</i></p> <p>Access to the public was not possible as the spill occurred within a fenced private property and was also contained within two fully fenced residential properties.</p>
(c) the date and time of the incident	<p><i>i. The time and date of commencement and cessation of the discharge.</i></p> <p>The commencement time of the spill is unknown, but was first observed by the Utility Service Contract Worker (USCW), formerly known as ESO at 16:00hrs 30/03/2023. The spill could not be stopped by the USCW, and a plumber was sent to the community on the 31/03/2023, to rectify the issue. This happened at approximately 08:00hrs 01/04/2023, which is also when the inspection opening stopped overflowing.</p> <p><i>ii. How PWC were notified, or became aware of the discharge.</i></p> <p>The spill was initially reported to the Power and Water emergency 1800 number by one of the nearby residents living close to the property, where the inspection opening was overflowing.</p> <p><i>iii. The process by which the discharge occurred.</i></p> <p>A partial blockage of the sewer main (99.454 150-PVC) that was a result of foreign material/s being discarded into the sewerage system, impeding the flow. This resulted in raw sewage backing up in the sewer main and ultimately overflowing from the inspection opening.</p> <p><i>iv. The reason why the discharge occurred.</i></p> <p>As per (c) iii. Foreign objects being incorrectly disposed of into the sewerage system, impeding normal flows resulted in a blockage of the sewer main.</p>
(d) how the pollution has occurred, is occurring or may occur	As per (c) iii & (c) iv.
(e) the attempts made to prevent, reduce, control, rectify or clean up the pollution or resultant environmental harm caused or threatening to be caused by the incident	<p><i>i. Confirmation signage and fencing has been erected, as appropriate.</i></p> <p>The USCW has barricaded the immediate area off as best as he could with materials available to him. Warning signage, including pictograms was also put on display at key locations advising community members to keep away. Residents living close to the affected properties were also verbally advised by the USCW of the spill and to keep away from it. The two affected properties were unoccupied at the time of the incident.</p> <p><i>ii. Decontamination of the site as appropriate.</i></p> <p>Clean up consistent with Sewage Spills/Overflow Response Work Instruction as appropriate to the location, and to minimise risk to the environment. The area was inspected for any gross pollutants and it was confirmed that the inspection opening lid prevented these from being part of the spill. The affected area was treated with lime by the plumbing contractor sent to site to undertake repairs.</p>
(f) the identity of the person notifying the NT EPA	Power and Water's Environmental Team on behalf of Water Services

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Appendix A – Location map.



Appendix B – Location Photographs



Figure 1 - Spill source, barricaded as best as possible with materials available.



Figure 2 - Warning signage on display at affected property boundary entry point.



Figure 3 - Warning signage on display at affected property boundary entry point.