

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

Date and Time of Notification:	Thursday 3 rd March 2023, 15:39hrs
Person / Company:	Power and Water Corporation (PWC)
Incident:	Discharge of sewage from sewage network

<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.</p> <p><i>ii. Indicative wastewater quality for the discharge.</i></p> <p>Rainfall up to 14:30hrs 02/03/2023 was only 2.8mm Bureau of Meteorology (Darwin Airport – 014015) and the source of this spill being close to commercial or residential buildings, it is unlikely to be diluted; despite the inflow to Ludmilla WWTP being 36.3ML/day. Therefore based on this information, the spill was undiluted. Please refer to the following table for indicative wastewater quality.</p> <p>Table 1: Inflows to Ludmilla WWTP</p> <table border="1"> <thead> <tr> <th></th> <th>Median Inflow (ML)</th> <th>Median E. coli</th> <th>Median Enterococci</th> <th>Dilution Terminology</th> </tr> </thead> <tbody> <tr> <td>below ADWF</td> <td>11.401</td> <td>14,136,000</td> <td>713,550</td> <td>Undiluted</td> </tr> <tr> <td>>ADWF</td> <td>13.253</td> <td>11,616,000</td> <td>727,000</td> <td>Partially Diluted</td> </tr> <tr> <td>>2xADWF</td> <td>29.629</td> <td>8,164,000</td> <td>323,000</td> <td>Diluted</td> </tr> <tr> <td>>3xADWF</td> <td>44.043</td> <td>6,488,000</td> <td>261,300</td> <td rowspan="3">Highly diluted</td> </tr> <tr> <td>>4xADWF</td> <td>51.048</td> <td>5,634,500</td> <td>238,100</td> </tr> <tr> <td>>5xADWF</td> <td>99.841</td> <td>2,359,000</td> <td>218,700</td> </tr> </tbody> </table> <p>NOTE: Based on 01/01/2018 to 31/12/2020 inflows to Ludmilla WWTP and monitoring events data. Average dry weather inflow being 11.9012 ML/day.</p> <p><i>iii. Volume of the waste that was discharged.</i></p> <p>The volume of wastewater discharged is unknown. No telemetric monitoring occurs at the site of discharge.</p>		Median Inflow (ML)	Median E. coli	Median Enterococci	Dilution Terminology	below ADWF	11.401	14,136,000	713,550	Undiluted	>ADWF	13.253	11,616,000	727,000	Partially Diluted	>2xADWF	29.629	8,164,000	323,000	Diluted	>3xADWF	44.043	6,488,000	261,300	Highly diluted	>4xADWF	51.048	5,634,500	238,100	>5xADWF	99.841	2,359,000	218,700
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<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>Inspection opening, at 266 Trower Road, Casuarina.</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: 130.8832333E, 12.3746843S (approx. location of inspection opening)</p>																																	

	<p>Final Discharge Point: 130.8833862E, 12.3741626S (stormwater drain)</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 by the public was possible prior to Power and Water's field reticulation crew attending site. Since the issue has been resolved, the area has been made safe through cleaning and disinfection as per the Power and Water Sewage Spills/Overflow Response Work Instruction as appropriate to the location, and to minimise risk to the environment. Once the field crew arrived at this location, they would have prevented any potential pedestrians from making contact with the effluent, until the area was safe.</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 overflow is unknown. The overflow was observed at approximately 14:30hrs by Power and Water staff on 02/03/2023, and the spill was stopped by 15:30hrs 02/03/2023.</p> <p><i>ii. How PWC were notified, or became aware of the discharge.</i></p> <p>A member of the public advised Power and Water, who then dispatched a sewer reticulation field crew to initiate repairs and make the area safe.</p> <p><i>iii. The process by which the discharge occurred.</i></p> <p>It is believed that tree roots caused a partial blockage of the sewer main downstream of the inspection opening, which then caused sewage to build up within the sewer line and eventually overflow.</p> <p><i>iv. The reason why the discharge occurred.</i></p> <p>As per (c) iii, Sewerage network infrastructure has been designed to overflow with the best public health and environmental outcomes possible. Design focuses on not overflowing directly inside houses; rather discharge is designed to occur in a controlled manner at locations which can be accessed for infrastructure repair and clean up and with minimal public health or environmental impacts.</p>
(d) how the pollution has occurred, is occurring or may occur	<p>As per (c) iii & (c) iv.</p>
(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>Pedestrian barrier fencing and warning signage was not erected in this instance, as the site was left in a clean and safe state, with public access not being an issue. The scene was made safe with haste.</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</p>

	Environment. Blockage was cleared and upon resolution of the blockage, the site was left in a clean state, free from any gross pollutants and the surrounding surface was cleaned and disinfected.
(f) the identity of the person notifying the NT EPA	Power and Water Environmental Team on behalf of Water Services

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Appendix A – Location Map with co-ordinates of discharge point.



Appendix B – Photographs of the discharge point and travel path to final discharge point (stormwater drain), post clean-up

