

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

Date and Time of Notification:	Monday 24 th January 2022, 14:45 hrs
Person / Company:	Power and Water Corporation (PWC)
Incident:	Discharge of diluted sewage from sewerage network, Sewage Pumping Station

<p>(a) the incident causing or threatening to cause pollution</p>	<p><i>i. Description of the waste that was discharged.</i></p> <p>Partially diluted sewage</p> <p><i>ii. Indicative wastewater quality for the discharge.</i></p> <p>For the three hour period between 06:00hrs and 09:00hrs 23/01/2022, rainfall was 16.2mm, with another 1mm falling until 17:00hrs 23/01/2022 (Darwin Airport Weather Station – 014015). Inflow data to Ludmilla WWTP between the hours of 06:00hrs and 17:00hrs 23/01/2022 was on average 1.79ML/hour, which equates to an average of 43.0ML/day. Based on Ludmilla WWTP inflow volumes, which were almost 4x above average dry weather flows, the spill can be assumed to be highly diluted. 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>Lakeside Drive sewage pumping station (SP008), located at 9 (lot 9076) Lakeside Drive, Alawa.</p>																																	

	<p><i>ii. GPS coordinates of the discharge point from the PWC asset, and the final coordinates of the final discharge point.</i> (Ludmilla)</p> <p>Discharge Point: 130.8656139E, -12.3806369S (emergency overflow pipe discharge point) Final Discharge Point: 130.8665271E, -12.3805596S (Rapid Creek)</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 is possible but unlikely, as the discharge point is to Rapid Creek. Due to weather conditions likelihood of people visiting this areas is low.</p>
<p>(c) the date and time of the incident</p>	<p><i>i. The time and date of commencement and cessation of the discharge.</i></p> <p>The Lakeside Drive SPS overflow started at 06:57hrs 23/01/2022 and ceased overflowing 17:17hrs 23/01/2022.</p> <p><i>ii. How PWC were notified, or became aware of the discharge.</i></p> <p>CITECH High-level alarms were triggered due to the high rates of inflow and infiltration and the inability of the pumps to keep up with the combined inflows, raising wet well levels. These alarms notified PWC operations staff of the overflow.</p> <p><i>iii. The process by which the discharge occurred.</i></p> <p>Rainfall events in the previous weeks have saturated the ground and recent monsoonal rainfall events have inundated the sewer systems with stormwater, through a combination of inflow and infiltration. This led to the pump station becoming overwhelmed, as combined inflows exceeded the pumping capacities of the three pumps within the wet well.</p> <p><i>iv. The reason why the discharge occurred.</i></p> <p>As per (c) iii.</p>
<p>(d) how the pollution has occurred, is occurring or may occur</p>	<p>As per (c) iii & (c) iv.</p>
<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>	<p><i>i. Confirmation signage and fencing has been erected, as appropriate.</i></p> <p>No fencing was erected in this instance; as the spills discharged to Rapid Creek.</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. Site was inspected for any wastewater gross pollutants.</p>

**(f) the identity of the person
notifying the NT EPA**

PWC Environmental Team on behalf of Water Services

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Appendix A – Location Map (Lakeside SPS)

