

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

Date and Time of Notification:	Wednesday 6 th April 2022
Person / Company:	Power and Water Corporation (PWC)
Incident:	Discharge of diluted sewage from sewerage network, Sewage Pumping Station

(a) the incident causing or threatening to cause pollution	i. Description of the waste that was discharged. Diluted sewage ii. Indicative wastewater quality for the discharge. Inflow data to Ludmilla WWTP, for the time period of 20:00hrs 05/04/22 to 01:00hrs 06/04/2022, was on average 1.47ML/hr, which equates to 35.4ML/day (Darwin Airport Weather Station – 014015). Based on Ludmilla WWTP peak inflow volumes, which were greater than 2 times average dry weather flows, the spill was diluted. Please refer to the following table for indicative wastewater quality. Table 1: Inflows to Ludmilla WWTP <table><tr><th></th><th>Median Inflow (ML)</th><th>Median E. coli</th><th>Median Enterococci</th><th>Dilution Terminology</th></tr><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></table> 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.		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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	iii. Volume of the waste that was discharged. The volume of wastewater discharged is unknown. No telemetric monitoring occurs at the sites of discharge.																																	
(b) the place where the incident occurred	i. Description of the PWC asset from which the discharge occurred. Bullocky Point sewage pumping station (SP062), The Gardens, located at lot 4247, adjacent to Darwin High School.																																	

	<i>ii. GPS coordinates of the discharge point from the PWC asset, and the final coordinates of the final discharge point.</i> (Ludmilla) Discharge Point: 130.8339121E, -12.4405824S (SPS) Final Discharge Point: 130.8322375E, -12.4418871S (Fannie Bay) <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> Access to the public is possible but unlikely, as the discharge flows in a small creek line, underneath a boardwalk running along the foreshore, before it enters Fannie Bay.
(c) the date and time of the incident	<i>i. The time and date of commencement and cessation of the discharge.</i> The Bullocky Point SPS overflow began at 20:13hrs on 05/04/2022 and ceased at 00:58hrs 06/04/2022. <i>ii. How PWC were notified, or became aware of the discharge.</i> Wet well high-level alarms notified PWC operations staff of the overflow. <i>iii. The process by which the discharge occurred.</i> Lightning associated with last night's thunderstorm caused the power supply to the sewage pumping station to trip at a nearby circuit breaker, making the pumps inoperative. <i>iv. The reason why the discharge occurred.</i> As per (c) iii.
(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	<i>i. Confirmation signage and fencing has been erected, as appropriate.</i> No signage or fencing was erected in this instance, as the spill occurred in an area not typically accessed by members of the public. <i>ii. Decontamination of the site as appropriate.</i> 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, of which none were observed.
(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 (Bullocky Point SPS)



Appendix B – Photographs of the Spill Site



Figure 1. Photo of the stormwater drain headwall, looking from within the compound, which is also the emergency overflow point.



Figure 2. Photo of the stormwater and emergency overflow point headwall, with the sewage pumping station in the background.



Figure 3. Photo of the spill's flow path, looking up towards the SPS (behind the tree).



Figure 4. Photo of the spill's flow path, looking downstream.



Figure 5. Approximate locations and directions from where photos were taken from.