

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

Date and Time of Notification:	Friday 17/12/2021 07:58hrs
Person / Company:	Power and Water Corporation (PWC)
Incident:	Discharge of raw sewage from sewerage network (no gross pollutants)

(a) the incident causing or threatening to cause pollution	i. Description of the waste that was discharged. Raw sewage (no gross pollutants) ii. Indicative wastewater quality for the discharge. Inflow data to Ludmilla WWTP was 6.32ML/day, and rainfall leading up to the overflow was 0.4mm for the preceding 3 days (Darwin Airport – 014015), meaning that flows were below average dry weather flows, with no dilution. 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. iii. Volume of the waste that was discharged. The volume of waste discharged is unknown, as the spill occurred upstream of the SPS flowmeter, but is estimated to be <250KL based on typical flows and duration.		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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(b) the place where the incident occurred	i. Description of the PWC asset from which the discharge occurred. Cement lined steel sewer main coming out of the Rapid Creek sewage pumping station, Rapid Creek Road, Rapid Creek. ii. GPS coordinates of the discharge point from the PWC asset, and the final coordinates of the final discharge point. Discharge Point: 130.8633077 E, -12.3807791 S																																	

	Final discharge points: 130.8634301 E, -12.3803118 S & 130.8636526 E, -12.3808750 S <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 by the public was possible, hence the barricading of the entire area to warn and discourage people from entering the area. Hence also why cleaning of the pathways was a priority. The remaining grassed areas will or already have been fenced off for a minimum period of 7 days.
(c) the date and time of the incident	<i>i. The time and date of commencement and cessation of the discharge.</i> The commencement time of the overflow was 03:30hrs 17/12/2021. The overflow was observed at approximately 06:30hrs by PWC staff on 17/12/2021 and the spill was stopped by 07:00hrs 17/12/2021, by diverting all incoming flow to the Lakeside Drive sewage pumping station. <i>ii. How PWC were notified, or became aware of the discharge.</i> A member of the public called PWC System Control, who then notified the on-call water reticulation team, who assessed the spill as being sewage and not water. The sewer headworks team was then notified and attended to the spill. <i>iii. The process by which the discharge occurred.</i> A combination of corrosion and normal deterioration that occurs over time caused a weak point in the pipework, which eventually gave way under the pressure of the sewage pump station's pumping pressure. <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> The site has had warning signage erected and barrier tape put up to alert the public and deter them from entering the affected area, as per Sewage Spills/Overflow Response Work Instruction. <i>ii. Decontamination of the site as appropriate.</i> Clean up consistent with Sewage Spills/Overflow Response Work Instruction as appropriate to the location. Dual use pathways were disinfected and pressure washed as a priority, before barrier tape was erected. The remaining affected grassed areas will be fenced off for a minimum period of 7 days to prevent public access.
(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 – Rapid Creek SPS



Appendix B – Photographs of the erected warning signage and barrier tape, and spill paths.



Figure 1. Warning signage erected, looking NNW along pathway



Figure 2. Warning signage erected, looking SE, from northern side of sewage pumping station.



Figure 3. Warning signage erected, looking NE, from southern side of sewage pumping station.



Figure 4. Sewage spill path to final discharge point (No.2 coordinates on map).



Figure 5. Sewage spill path to final discharge point (No.3 coordinates on map).



Figure 6. Final discharge point (No.3 coordinates on map)