

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

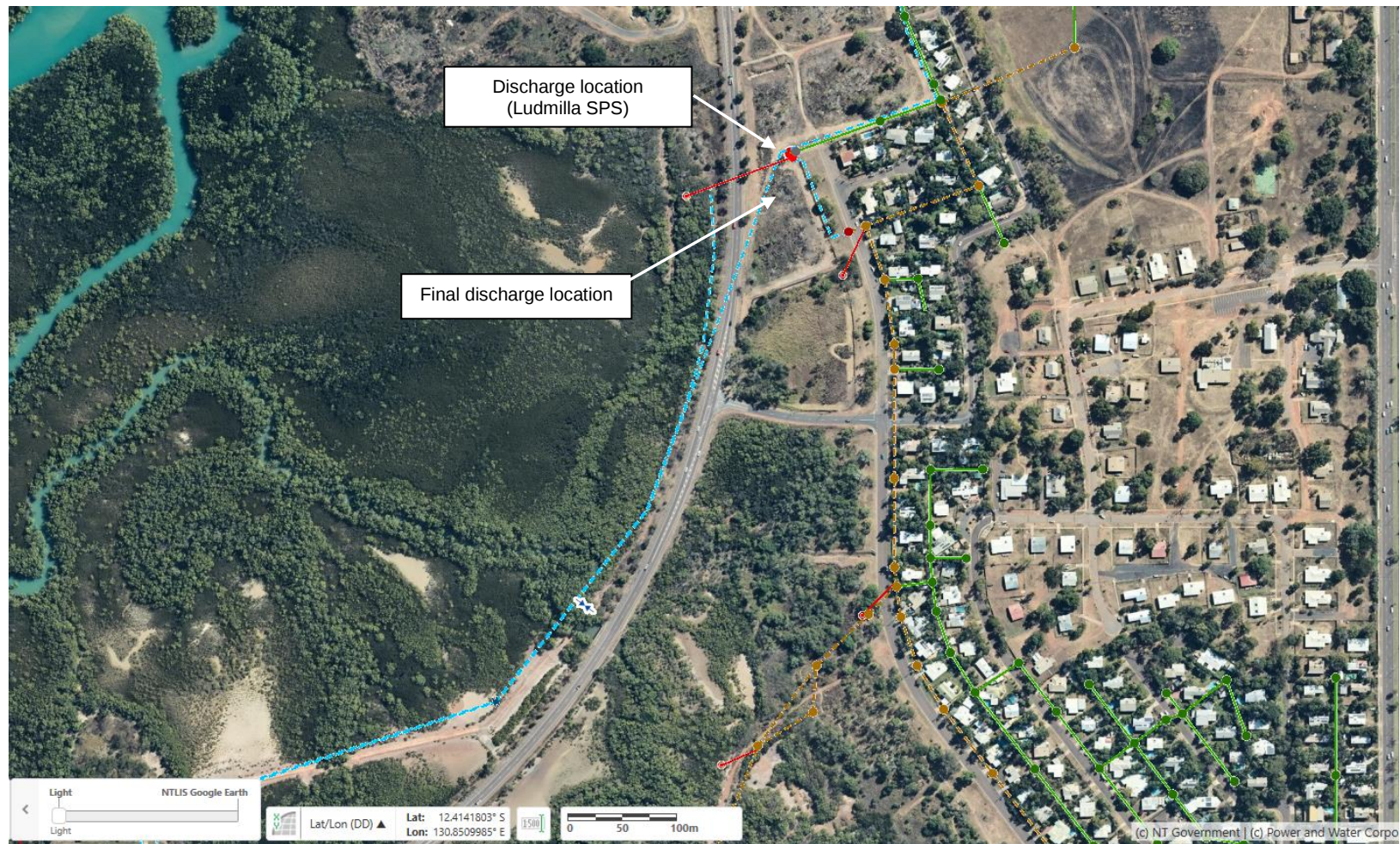
Date and Time of Notification:	Wednesday 23 rd December 2020, 14:26 hrs
Person / Company:	Power and Water Corporation (PWC)
Incident:	Discharge of raw and highly diluted sewage from sewerage network, Sewage Pumping Station, (no gross pollutants)

(a) the incident causing or threatening to cause pollution	<i>i. Description of the waste that was discharged.</i> Raw and highly diluted sewage (no gross pollutants) <i>ii. Indicative wastewater quality for the discharge.</i> Indicative wastewater quality for this overflow can be found in Table 1. Rainfall leading up to the overflow was 151.0mm for the previous 7 days (Darwin Airport Weather Station – 014015), daily inflow of 48.7ML/day at Ludmilla Wastewater Treatment Plant (WWTP), reaching an equivalent of 89ML/day at peak flow periods, which equates to >3x ADWF and at peak flow periods, greater than 5x ADWF, as per Table 1 below. Table 1: Inflow to Ludmilla Wastewater Treatment Plant <table><tr><th>Inflow volume</th><th>median inflow kL</th><th>median E coli</th><th>90th percentile inflow kL</th><th>90th percentile E coli</th></tr><tr><td>below ADWF</td><td>11,040</td><td>11,199,000</td><td>12,925</td><td>15,531,000</td></tr><tr><td>>ADWF (14.5 ML/day)</td><td>15,274</td><td>9,804,000</td><td>22,206</td><td>17,148,300</td></tr><tr><td>>2x ADWF (29.0 ML/day)</td><td>31,673</td><td>4,884,000</td><td>37,166</td><td>14,385,600</td></tr><tr><td>>3x ADWF (43.5 ML/day)</td><td>43,629</td><td>4,611,000</td><td>50,506</td><td>12,843,600</td></tr><tr><td>>5x ADWF (72.5 ML/day)</td><td>71,558</td><td>5,002,000</td><td>78,578</td><td>5,905,200</td></tr><tr><td>>WDL limit (89.5 ML/day)</td><td>102,445</td><td>102,445</td><td>148,575</td><td>13,704,400</td></tr></table> (ADWF= Average Dry Weather Flow ~14.5 ML/day in 2013/14) <i>iii. Volume of the waste that was discharged.</i> The volume of wastewater discharged is unknown. No telemetric monitoring occurs at the site of discharge. Based on visual observations, overflow volume was minimal.	Inflow volume	median inflow kL	median E coli	90th percentile inflow kL	90th percentile E coli	below ADWF	11,040	11,199,000	12,925	15,531,000	>ADWF (14.5 ML/day)	15,274	9,804,000	22,206	17,148,300	>2x ADWF (29.0 ML/day)	31,673	4,884,000	37,166	14,385,600	>3x ADWF (43.5 ML/day)	43,629	4,611,000	50,506	12,843,600	>5x ADWF (72.5 ML/day)	71,558	5,002,000	78,578	5,905,200	>WDL limit (89.5 ML/day)	102,445	102,445	148,575	13,704,400
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(b) the place where the incident occurred	<i>i. Description of the PWC asset from which the discharge occurred.</i> Ludmilla sewage pumping station (SP042), located at the end of Namarluk Drive, Ludmilla. <i>ii. GPS coordinates of the discharge point from the PWC asset, and the final coordinates of the final discharge point.</i> Discharge Point: 130.8509985E, -12.4141803S Approximate Final Discharge Point: 130.8509073E, -12.4142655S																																			

	<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 point is behind a pedestrian fence. Due to weather conditions likelihood of people visiting this area is low. Signs were erected deterring access by the public.
(c) the date and time of the incident	<i>i. The time and date of commencement and cessation of the discharge.</i> The overflow started shortly after 23:45hrs on 22/12/2020 when the high level alarms were triggered. PWC staff first observed the overflow at approximately 10:00am on 23/12/2020, and the overflow stopped at approximately 00:00hrs 24/12/2020 (24hrs, 15min later). High level alarm is currently still activated, but pumps are now keeping up with inflows and no overflows are occurring. <i>ii. How PWC were notified, or became aware of the discharge.</i> High-level alarms from the pump station as well as other system alarms notified PWC operations staff of the overflow. <i>iii. The process by which the discharge occurred.</i> A monsoonal weather event has inundated the sewer system with stormwater through a combination of inflow and infiltration. This led to the pump station becoming overwhelmed, as inflow exceeded the pumping capacity. <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> Signage was erected in this instance; no additional fencing was erected, as the spill occurred behind a fence. <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 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



Appendix B – Photographs of the discharge location, evidencing no gross pollutants

