Northern Territory Environment Protection Authority

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

Date and Time of Notification:	Initial notification: Thursday 20 March 2025, 15:00 hrs Final notification: Monday 31 March 2025, 10:30 hrs
Person / Company:	Power and Water Corporation
Incident:	Discharge of highly diluted sewage effluent from sewerage network

(a) the incident causing or threatening to cause pollution

i. Description of the waste that was discharged.

Highly diluted sewage.

ii. Indicative wastewater quality for the discharge.

Inflow data to Ludmilla WWTP peaked prior to the overflow around 09:17hrs, with an inflow of 2.5ML/hr, which equates to 60ML/day. Based on table 1 below, this translates to the effluent being classed as highly diluted.

Table 1: Inflows to Ludmilla WWTP

	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	

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 wastewater discharged is unknown. No telemetric monitoring occurs at the sites of discharge.

(b) the place where the incident occurred

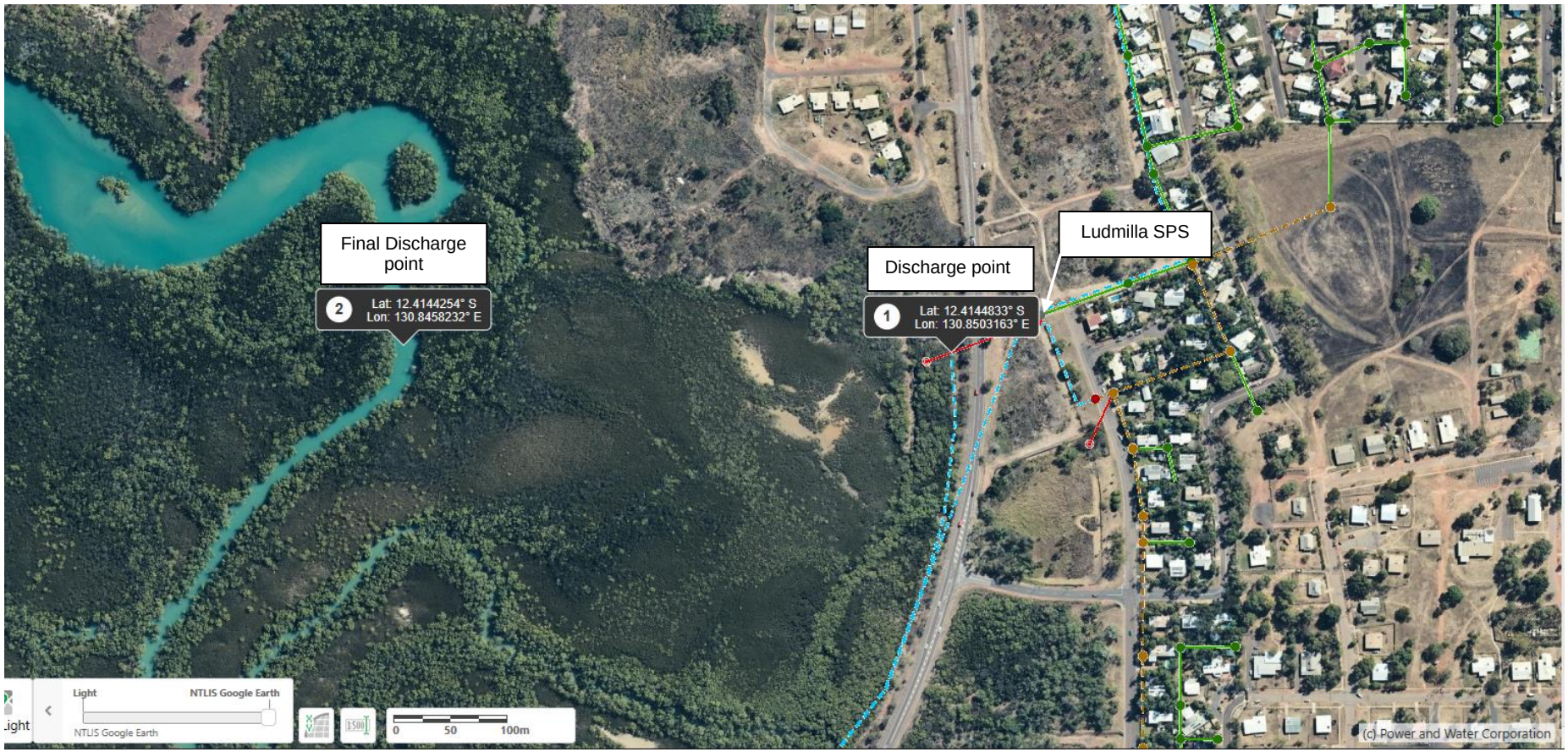
i. Description of the Power & Water asset from which the discharge occurred.

- Ludmilla sewage pumping station (SP042), located at the end of Nemarluk Drive, Ludmilla. The discharge point is at the end of the emergency discharge pipeline that goes under Dickward Drive.

	From there, it disperses across the land and has a final discharge point to Ludmilla Creek. See Appendix A for a map showing the discharge locations. - Lakeside Drive sewage pumping station (SP008), located at 9 Lakeside Drive, Alawa (Lot 9076, Town of Nightcliff). The discharge point is at the emergency overflow pipeline, which then has a final discharge point into Rapid Creek. See Appendix B for a map showing the discharge locations. *ii. GPS coordinates of the discharge point from the Power & Water asset, and the final coordinates of the final discharge point. (Ludmilla)* - Ludmilla sewage pumping station (SP042): Discharge Point: 130.8503163E, -12.4144833S Final Discharge Point: 130.8458232E, -12.4144254S - Lakeside Dr sewage pumping station (SP008): Discharge Point: 130.8656139E, -12.3806369S Final Discharge Point: 130.8665271E, -12.3805596S *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.* Public access to the Ludmilla sewage pumping station (SPS) overflow was possible, but unlikely, as the discharge point is behind a fenced off area not intended for public access. Public access to the Lakeside Dr sewage pumping station (SPS) overflow was possible, but unlikely, as the discharge point is to Rapid Creek. Due to weather conditions at the time, the likelihood of people contacting the Creek's water was low.
(c) the date and time of the incident	*i. The time and date of commencement and cessation of the discharge.* The Ludmilla SPS overflow began at 22:00hrs on 19/03/2025. The overflow ceased completely at 16:30hrs on 29/03/2025. The Lakeside Dr SPS overflow began at 17:00hrs on 19/03/2025. The overflow ceased completely at 18:07hrs on 26/03/2025. *ii. How Power & Water were notified, or became aware of the discharge.* SCADA wet well high-level alarms notified Power & Water operations staff of the overflows. *iii. The process by which the discharge occurred.* Rainfall events in the previous weeks have saturated the ground and a recent intense rainfall event has inundated the sewer systems with stormwater, through a combination of inflow and infiltration. This led to the pump stations becoming overwhelmed, as combined inflows exceeded the pumping capacities of the pump stations.

	iv. The reason why the discharge occurred. 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. Confirmation signage and fencing has been erected, as appropriate.* No signage or fencing was erected in this instance as public access to the overflow points is very unlikely. *ii. Decontamination of the site as appropriate.* Clean up will be consistent with Sewage Spills/Overflow Response Work Instruction as appropriate to the location, and to minimise risk to the Environment.
(f) the identity of the person notifying the NT EPA	Power and Water Environmental Team on behalf of Water Services.

Appendix A – Location Map for Ludmilla SPS



Appendix B – Location Map for Lakeside Dr SPS