Northern Territory Environment Protection Authority

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

Date and Time of Notification:	Initial notification: Wednesday 26 March 2025, 15:45 hrs Final notification: Friday 28 March 2025, 14:00 hrs
Person / Company:	Power and Water Corporation
Incident:	Discharge of highly diluted sewage effluent at multiple locations 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 event at around 08:43hrs, with an inflow of 2.2ML/hr, which equates to 52ML/day. Based on table 1 below, this translates to the effluent being classed as highly diluted. **Table 1: Inflows to Ludmilla WWTP** See table below. *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.* 1. Sewer overflow relief point (3H) on the corner of Rapid Creek Road and Trower Road. 2. Sewer overflow relief point (1/10) at 24 East Point Road.

	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.

	3. 2 access chambers (1/7 & 1/6) on the corner of Gregory Street and East Point Road. *ii. GPS coordinates of the discharge point from the Power & Water asset, and the final coordinates of the final discharge point.* 1. Overflow relief point on cnr Rapid Creek/Trower Rds: Discharge Point: -12.385673 S, 130.864963 E Final Discharge Point: -12.385733 S, 130.865954 E 2. Overflow relief point at 24 East Point Rd: Discharge Point: -12.434417 S, 130.8379474 E Final Discharge Point: -12.4336630 S, 130.8358461 E (Vestey's Lagoon) 3. Two access chambers on cnr Gregory St/East Point Rd: Discharge Point: -12.4320022 S, 130.8378083 E and -12.4321384 S, 130.8379457 E Final Discharge Point: 12.4316500 S, 130.8362400 E *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 was possible to the overflow relief point discharge locations, although due to the wet weather conditions at the time, the likelihood of people visiting these areas was low. Signage was utilised to alert the public and deter access to the sites. Temporary fencing was placed around the access chambers to prevent the public from accessing them.
(c) the date and time of the incident	*i. The time and date of commencement and cessation of the discharge.* 1. The emergency overflow relief valve at the corner of Rapid Creek/Trower roads was opened at approximately 20:45hrs on 25/03/2025. The valve was closed at 15:30hrs on 27/03/2025. 2. The emergency overflow relief valve at 24 East Point Rd was opened at approximately 09:00hrs on 26/03/2025. The valve was closed at 11:30hrs on 28/03/2025. 3. The access chambers on the corner of Gregory St/East Point Rd were fenced-off on 26/03/2025. Both access chambers had stopped overflowing by 07:30 hrs on 27/03/2025. *ii. How Power & Water were notified, or became aware of the discharge.* The emergency release valves at the overflow points were opened manually following high level alarms being received. The access chambers were observed to be overflowing during routine checks. *iii. The process by which the discharge occurred.* Due to significant rainfall in the Darwin catchment, and more heavy and intense rainfall forecast, sewage volumes within the sewerage system had increased significantly due to inflow and infiltration of stormwater. Power and Water undertook opening the sewer relief valves to relieve pressure in the system, preventing overflows within households and potential human health/environmental impacts.

	iv. The reason why the discharge occurred. As per (c) iii. Sewerage network infrastructure has been designed to overflow with the best public health and environmental outcomes possible. Design focuses on not overflowing directly inside houses; rather discharge is designed to occur in a controlled manner at locations which can be accessed for infrastructure repair and clean up and with minimal public health or environmental impacts
(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.* Signage was displayed at all locations to alert the public. Temporary fencing was also been placed around the access chambers. *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 Services team on behalf of Water Services.

Appendix A – Location Map and photo for sewer overflow relief point on cnr Rapid Creek Rd & Trower Rd

Indicative photo of the sewer overflow relief point on the corner of Rapid Creek Road and Trower Road. Historical photo from 2020.

Appendix B – Location Map and photo for sewer overflow relief point at 24 East Point Rd

Indicative photo of the sewer overflow relief point at 24 East Point Road. Historical photo from 2021.

Appendix B – Location Map (showing the 2 discharge locations) and photo for the access chambers on cnr Gregory Street and East Point Road.

Indicative photo of the fenced access chambers on the corner of Gregory Street and East Point Road. Historical photo from 2021.