

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

Date and Time of Notification:	Monday 11 March 2024 13:00
Person / Company:	Power and Water Corporation
Incident:	Discharge of very diluted effluent from Ludmilla Sewage Pump Station (SPS), due to wet weather events.

(a) the incident causing or threatening to cause pollution

i. Description of the waste that was discharged.

Very diluted sewage effluent, diluted by stormwater.

ii. Indicative wastewater quality for the discharge.

Indicative wastewater quality for these overflows may be interpreted from Table 1. A high rainfall event occurred in the early hours of Monday 11 March 2024. Rainfall figures as of 11:00am 19/3/2024 are shown in table 2.

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.

Table 2: Recent 24 Hour Rainfall Figures for Darwin Airport (Station 14015)

Darwin Airport Rainfall Figures (Station 14015)	
Date	Rainfall (mm)
11/3/2024	46.4
12/3/2024	33.4
13/3/2024	63.4
14/3/2024	18.8
15/3/2024	7.4
16/3/2024	9.4
17/3/2024	11.8

Source of information: Australian Government Bureau of Meteorology

iii. Volume of the waste that was discharged.

	The volume of wastewater discharged at this location is unknown. No telemetric monitoring occurs at this locations.
(b) the place where the incident occurred	<p><i>ii. Description of the Power & Water asset from which the discharge occurred.</i></p> <p>Ludmilla SPS</p> <p><i>ii. GPS coordinates of the discharge point from the PWC asset, and the final coordinates of the final discharge point.</i></p> <p>1. Discharge point: 12.4144833 S, 130.8503163 E 2. Final point: 12.4144254 S, 130.8458232 E</p> <p><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></p> <p>Public access is possible to the discharge location although due to wet weather conditions present, and the discharge location occurring within mangroves, the likelihood of people visiting these areas is low.</p> <p>Clean up consistent with Sewage Spills/Overflow Response Work Instruction as appropriate to the location, and to minimise risk to the environment.</p>
(c) the date and time of the incident	<p><i>i. The time and date of commencement and cessation of the discharge.</i></p> <p>Started: 1:30am 11/3/2024 Stopped: 7:30pm 17/3/2024</p> <p><i>ii. How Power & Water were notified, or became aware of the discharge.</i></p> <p>High-level alarms alerted operations staff of an overflow having occurred over night.</p> <p><i>iii. The process by which the discharge occurred.</i></p> <p>Due to a high rainfall event occurring in the Darwin catchment, significant quantities of inflow and infiltration of stormwaters has diluted and significantly increased volumes of sewage effluent in the sewerage system. As a result of this, a highly diluted sewage effluent overflow has occurred from the sewerage infrastructure.</p> <p><i>iv. The reason why the discharge occurred.</i></p> <p>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.</p>
(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,	<i>i. Confirmation signage and fencing has been erected, as appropriate.</i>

<p>rectify or clean up the pollution or resultant environmental harm caused or threatening to be caused by the incident</p>	<p>Where appropriate, signage is displayed to alert the public and fencing has been erected to prevent access to the sites where appropriate, as per the Power & Water Sewage Spills/Overflow Response Work Instruction.</p> <p><i>ii. Decontamination of the site as appropriate.</i></p> <p>Clean up consistent with Sewage Spills/Overflow Response Work Instruction as appropriate to the location, and to minimise risk to the environment. Discharge sites inspected for any gross pollutants and removed as required.</p>
<p>(f) the identity of the person notifying the NT EPA</p>	<p>Power and Water Environmental Services team on behalf of Water Services</p>

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Ludmilla SPS





Ludmilla SPS Emergency Discharge Point, Historical Photo dated 21 January 2021