Northern Territory Environment Protection Authority

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

Date and Time of Notification:	Thursday 16th November 2023, 15:15 hrs
Person / Company:	Power and Water Corporation
Incident:	Discharge of raw sewage from sewerage network

(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.* Rainfall was not a factor impacting wastewater quality on this occasion, hence the quality would be considered to be that of average dry weather flows (ADWF), Please refer to the following table for indicative wastewater quality. **Table 1: Inflows to Ludmilla WWTP** 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 site of discharge. An estimate from the field crew that attended the scene was 5KL.
(b) the place where the incident occurred	i. Description of the PWC asset from which the discharge occurred. Sewer manhole covers (2/28/14 & 3/28/14) and an un-named inspection opening, located at the corners of Knuckey Street and Austin Lane, city of Darwin. ii. GPS coordinates of the discharge point from the PWC asset, and the final coordinates of the final discharge point. Discharge Point 1: 130.8420894E, 12.4624352S (manhole cover)

	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	

	Discharge point 2: 130.8421682E, 12.4625659S (manhole cover) Discharge Point 3: 130.8420247E, 12.4624740S (insp. opening) Final Discharge Point: 130.8420247E, 12.4625186S (stormwater drain) *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.* Access by the public in this area is frequent. Prior to Power & Water's sewer reticulation field crew arriving on the scene, the City of Darwin already had people on site and had arranged for traffic control to secure the area.
(c) the date and time of the incident	*i. The time and date of commencement and cessation of the discharge.* The exact timing of the overflow is unknown, but was first observed by Power & Water staff at approximately 14:00hrs 15/11/2023, The issue was resolved by approximately 14:30hrs 15/11/2023, at which point Power & Water's Environmental Services was notified. *ii. How PWC were notified, or became aware of the discharge.* This overflow was reported by a member of the public to the Power and Water call centre, who then relayed the information to the on-call field operations staff. Power and Water personnel attended the site at ~14:00hrs 15/11/2023 and undertook actions to resolve the situation and make it safe. *iii. The process by which the discharge occurred.* The cause of the spill was due to a blockage in the sewer line, which resulted from a build-up of fats and oils, hence a member of the public reported a grease and oil spill. Fats and oils have been incorrectly disposed of into the sewer network by customers (residential and commercial), resulting in the blockage and subsequent overflow. When fats and oils are poured down the sink it is usually as a liquid, but as it cools it can become more solid and cause build-up, resulting in bad odours and blockages in the sewerage system. This can lead to sewage overflows into the environment, households or businesses. Public education about what can be disposed of into the sewerage system or is flushable: https://www.powerwater.com.au/about/what-we-do/wastewater/sewer-blockages-and-overflows/think-before-you-put-it-down-the-sink In the aim of prevention, this material is available on the Power & Water website and is used as an educational tool for customers. *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 or businesses; 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	The blockage was cleared, and the overflow was stopped. Clean up undertaken as per Power and Water's Sewage Spills/Overflow Response Work Instruction. All visible sewage was vacuumed up and the area was thoroughly cleaned and disinfected, before the scene was declared safe for access again by Power & Water staff. City of Darwin staff were still in control of the scene as the sewer reticulation field crew departed. *i. Confirmation signage and fencing has been erected, as appropriate.* The scene of the overflows was controlled by City of Darwin staff as well as traffic controllers by the time Power & Water staff arrived and was left in their care on departure. *ii. Decontamination of the site as appropriate.* Clean up consistent with Power and Water's Sewage Spills/Overflow Response Work Instruction as appropriate to the location. Site was inspected for any gross pollutants, of which none were observed, and the area was cleaned and disinfected with biodegradable detergent.
(f) the identity of the person notifying the NT EPA	Power and Water's Environmental Services Team on behalf of Water Services

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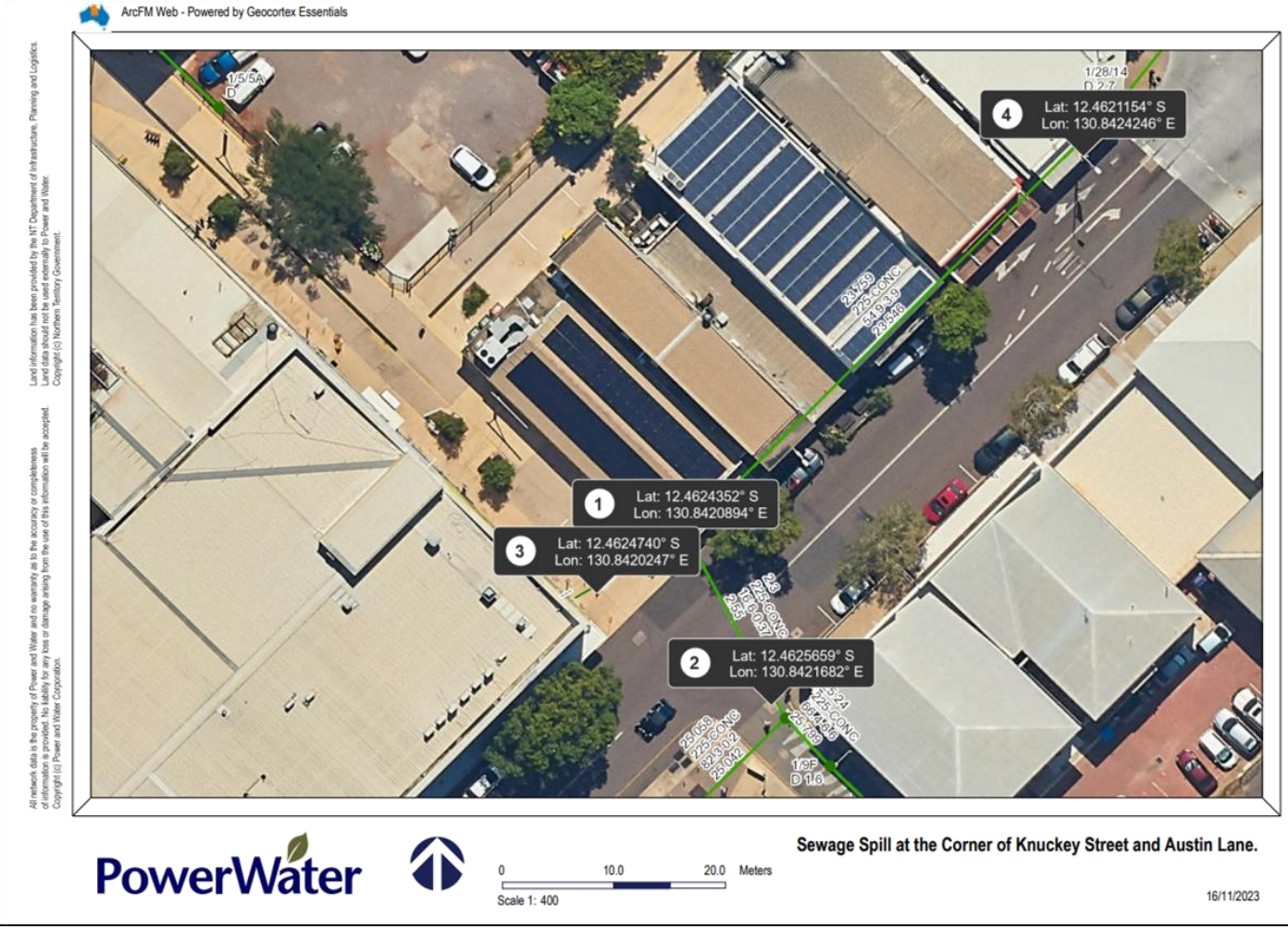
Appendix A – Location Map (corners of Knuckey Street & Austin Lane, Darwin city)



Appendix B – Location Photographs

Figure 1 – Discharge point 1 (3/28/14)

Figure 2 – Discharge point 2 (2/28/14)

Figure 3 – Discharge point 3 (un-named inspection opening)

Figure 4 – Final discharge point (stormwater drain)