Northern Territory Environment Protection Authority

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

Date and Time of Notification:	Tuesday 14/04/2020 10:00hrs
Person / Company:	Power and Water Corporation (**PWC**)
Incident:	Discharge of raw sewage from sewerage network (no gross pollutants)

(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.* Inflow data to Palmerston WWTP was 14.56ML/day , and rainfall leading up to the overflow was 5.6mm for the preceding 3 days (Darwin Airport – 014015), Therefore indicative wastewater quality for this overflow can be assumed to be average dry weather flows, with little to no dilution to be assumed. Table 1: Inflow to Ludmilla Wastewater Treatment Plant (ADWF= Average Dry Weather Flow ~14.5 ML/day in 2013/14) *iii. Volume of the waste that was discharged.* The volume of waste discharged is unknown. No telemetric monitoring occurs at the site of discharge.
(b) the place where the incident occurred	*i. Description of the PWC asset from which the discharge occurred.* Overflow from access chamber in park behind 8 Lucy Court, Driver. *ii. GPS coordinates of the discharge point from the PWC asset, and the final coordinates of the final discharge point.* Discharge Point: 130.9822084, -12.4834181 (manhole cover) Final discharge point: 130.9820093, -12.4836648 (stormwater drain)

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

	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 to the public is possible, as the overflow occurred in parkland. The affected area has been disinfected and barricaded off with signage erected as per the PWC Sewage Spills/Overflow Response Work Instruction.
(c) the date and time of the incident	*i. The time and date of commencement and cessation of the discharge.* The commencement time of the overflow is unknown. The overflow was observed at approximately 08:00hrs by PWC staff on 10/04/2020 and the spill stopped by 08:30hrs 10/04/2020. *ii. How PWC were notified, or became aware of the discharge.* This overflow was reported by one of the residents to the PWC call centre, who then relayed the information to the on-call PWC operations staff. PWC personnel attended the site at 08:00hrs (10/04/20) and undertook action 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 main line, as a result of fat build-up in the gas trap. Fat and other substances have been incorrectly disposed of into the sewer network by customers, resulting in the blockage and the overflow. The fats, oils, meat juices, other substances that are put down the sink or toilet have collected and built up, blocking the vacuum intake line. When fats, oils and meat juices are put 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 the sewage overflows into the environment, households and businesses. Public education about what can be disposed in sewer/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 PWC website and is used as an educational tool for customers. Additionally, PWC has recently been running an educational campaign on social media, print media and radio on the 3P's. *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/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	*i. Confirmation signage and fencing has been erected, as appropriate.* The site has had barricading and warning signage installed to alert the residents and any visitors, as per Sewage Spills/Overflow Response Work Instruction.

or threatening to be caused by the incident	*ii. Decontamination of the site as appropriate.* Clean up consistent with Sewage Spills/Overflow Response Work Instruction - Unsealed land (beaches, parks, open land and gardens) and public footpaths. Application of lime, installation of barrier fencing around any contaminated area (leave in place for 5 days post clean up), installation of advisory signage and then application of 50mm imported topsoil.
(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 – Photograph of spill location