Northern Territory Environment Protection Authority

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

Date and Time of Notification:	Wednesday 10th August 2022, 13:10hrs
Person / Company:	Power and Water Corporation (**PWC**)
Incident:	Discharge of sewage from sewerage network (ORG) & Inside residence

(a) the incident causing or threatening to cause pollution	*i. Description of the waste that was discharged.* Raw sewage *ii. Indicative wastewater quality for the discharge.* There was zero rainfall recorded in the previous 24hr period, therefore the wastewater quality can be assumed to be that of average dry weather flows or undiluted sewage, refer to the table below for indicative wastewater quality data. **Table 1: Inflows to Ludmilla WWTP** See table below. *iii. Volume of the waste that was discharged.* The volume of waste discharged is unknown. No telemetric monitoring occurs at the sites of discharge.
(b) the place where the incident occurred	*i. Description of the PWC asset from which the discharge occurred.* PWC Sewer main line (11.637, 150-CONC, 97.6-6.2, 11.028) connected to private property infrastructure - overflow relief gully (ORG) and floor waste drains in bathrooms at both 22 Tiwi Gardens Road, and 6 Calvert Street, Tiwi. These are back-to-back properties. *ii. GPS coordinates of the discharge point from the PWC asset, and the final coordinates of the final discharge point.*

	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.

	Approximate locations are as follows; *22 Tiwi Gardens Road, Tiwi:* 1) Discharge Point: 130.8756809E, -12.3637348S (ORG) 2) Second Discharge Point: 130.8756198E, -12.3637279S (bathroom) Un-numbered) Final discharge point: 130.8755656E, -12.3638570S (garden) 6 Calvert Street, Tiwi; 4) Discharge Point: 130.8756255E, -12.3640886S (ORG) 5) Second Discharge Point: 130.8756071E, -12.3639342S (bathroom) *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 not possible as both overflows occurred on fenced private properties. The residents of both properties were made aware of the hazard, and kept away until all areas were thoroughly cleaned and disinfected.
(c) the date and time of the incident	*i. The time and date of commencement and cessation of the discharge.* 6 Calvert Street - The commencement time of the overflow was approximately 08:00hrs and it ceased at approximately 09:00hrs, 09/08/2022. 22 Tiwi Gardens Road - This overflow was observed at 14:30hrs by PWC staff 09/008/2022, and was stopped a short time later. *ii. How PWC were notified, or became aware of the discharge.* The residents of both properties called the PWC call centre, who then relayed the information to the PWC sewer reticulation team that attended the properties at around 08:00 and 14:30hrs 09/08/2022 and undertook action to resolve the situation and make it safe. *iii. The process by which the discharge occurred.* The cause of the overflows was due to multiple blockages in the sewer line, which resulted from a build-up of what most likely was fats. Fat and other non-disintegrating items like wet wipes and kitchen paper towels have been incorrectly disposed of into the sewer network by customers, resulting in the blockage and these overflows. When fats and oils are poured down the sink it is usually as a liquid, but as they cool they become more solid and 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. PWC provides ongoing periodic public education campaigns through various media, to remind residents of the three P's, in the aim of reducing these types of events. *iv. The reason why the discharge occurred.* As per (c) iii. Sewerage network infrastructure is 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, such as property ORGs; this reduces public health or environmental impacts. In this instance however, both properties have had recent renovations to their bathrooms, in which the levels of the floor level drains in relation to the ORGs were not installed as per design; hence the sewerage overflowed from both the ORG and inside the bathrooms at both properties.
(d) how the pollution has occurred, is occurring or may occur	As per (c) iii & (c) iv, or blocking the overflow relief gully (ORG).
(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.* Fencing and signage was not erected in this instance, as the spill was contained within the property boundaries of the private residence, which is fenced off. *ii. Decontamination of the site as appropriate.* Clean up consistent with Sewage Spills/Overflow Response Work Instruction as appropriate to the location. Blockages were cleared, and upon resolution of the blockages, the site was left in a clean state; free from any gross pollutants, and all surrounding surfaces were thoroughly cleaned and disinfected.
(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 – Photographs of both property's ORGs.

Appendix C – Photographs of overflow inside the buildings.