Northern Territory Environment Protection Authority

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

Date and Time of Notification:	Sunday 27th December 2020, 16:59hrs
Person / Company:	Power and Water Corporation (**PWC**)
Incident:	Discharge of diluted sewage from sewerage network

(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.* Inflow data to Ludmilla WWTP was 29.6ML/day, and rainfall leading up to the overflow was 47mm for the preceding 3 days (Darwin Airport – 014015), meaning that flows for the day were above twice the average dry weather flows. At 21:00hrs, flow into Ludmilla was 2.63ML/hr, which is equivalent to 63ML/day; therefore there was between 3x and 5x average dry weather flows at the time of the event, meaning a lot of dilution was present. Please refer to the following table for indicative wastewater quality. Table 1: Inflow to Ludmilla Wastewater Treatment Plant 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 (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 relief gully (ORG) at 12 Knowles Street, Jingili. *ii. GPS coordinates of the discharge point from the PWC asset, and the final coordinates of the final discharge point.* Discharge Point: 130.8753799E, -12.3857516S Final Discharge Point: Immediately surrounding ORG

	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. There is no public access to the spill site, as it occurred on private property. All residents at the property have been made aware of the spill and advised to avoid contact with the area.
(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 20:45hrs by PWC staff on 26/12/2020 and the spill stopped by 21:00hrs 26/12/2020. *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 20:45hrs (26/12/2020) 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 nearby main line, caused by a build-up of fat. Fat and other substances have been incorrectly disposed of into the sewer network by customers, resulting in the blockage and the overflow. 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. *iv. The reason why the discharge occurred.* As per (c) iii.
(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.* No signage or fencing was erected in this instance, as the spill occurred at a fenced, private residence. All residents residing there were advised to avoid contact with the area. *ii. Decontamination of the site as appropriate.* Clean up consistent with Sewage Spills/Overflow Response Work Instruction as appropriate to the location, and to minimise risk to the Environment. Site inspected for any gross pollutants, and the area disinfected.

(f) the identity of the person notifying the NT EPA	PWC Environmental Team on behalf of Water Services

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

Appendix A – Location map