Northern Territory Environment Protection Authority

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

Date and Time of Notification:	Tuesday 05/11/2019 16:26hrs
Person / Company:	Power and Water Corporation (**PWC**)
Incident:	Discharge of diluted sewage from sewerage network (overflow to Rapid Creek)

(a) the incident causing or threatening to cause pollution

i. Description of the waste that was discharged.

Diluted sewage

ii. Indicative wastewater quality for the discharge.

Although official rainfall figures from the Darwin airport gauge for the preceding few days to the event are minor (1.4mm), localised rainfall in the Alawa/Rapid Creek area during the 4th November were more significant, as reported by the field crews. Therefore the indicative wastewater quality for this overflow is better reflected by an above average dry weather flow; which can be found in Table 1.

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. PWC operations estimate less than 1000 kilolitres overflowed, and not less than 1000 litres as previously reported.

(b) the place where the incident occurred

i. Description of the PWC asset from which the discharge occurred.

Lakeside Drive/ Rapid Creek sewage pumping stations balance pipe emergency overflow point.

ii. GPS coordinates of the discharge point from the PWC asset, and the final coordinates of the final discharge point.

Discharge Point: 130.8656196, -12.3806398

	Final Discharge Point: 130.8656196, -12.3806398 *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 but is believed to be infrequent given the nature of the location, and direct contact is unlikely as the area is not typically used for swimming.
(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 16:45hrs by PWC staff on 04/11/2019 and the spill stopped by 20:30hrs 04/11/2019. *ii. How PWC were notified, or became aware of the discharge.* PWC staff observed the spill, shortly after repair works had been completed on the nearby spill previously reported to DENR, at the corner of Trower Road and Lakeside Drive. *iii. The process by which the discharge occurred.* Whilst the pipe repairs were being conducted at the corner of Lakeside Drive & Trower Rd, as reported earlier, SPS pumps were turned off to allow work on the pressurised 400mm rising main. During these works Lakeside Drive SPS wet well capacity was overwhelmed due to heavy localised rains in the area, the flow was then presumably allowed to overflow to Rapid Creek SPS as a means of back up wet well capacity. Overflow chambers between the two stations have had restoration work carried out with a new divisional gate fitted, which at the time was shut. As this gate was down, separating the stations, it did not allow flow to Rapid Creek SPS, as planned, resulting in an overflow to Rapid Creek. A meeting of relevant PW operations staff is planned for the week of Mon 11th Nov to determine operation of the divisional gate going forward. *iv. The reason why the discharge occurred.* The flow of sewage was not redirected as planned during earlier repair work, as an isolation gate was in the closed position, due to other operational reasons.
(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.* The site has had warning signage installed to alert the public as per Sewage Spills/Overflow Response Work Instruction. *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.
(f) the identity of the person notifying the NT EPA	PWC Environmental Team on behalf of Water Services

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