Northern Territory Environment Protection Authority

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

Date and Time of Notification:	Monday 29th March 2021, approx. 16:00pm
Person / Company:	Power and Water Corporation (**PWC**)
Incident:	Discharge of raw sewage from sewerage network (Sewer Pumping Station (SPS))

(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 leading up to the overflow was 10.4mm for the previous three days (BOM Weather Station – 014299 – Ngukurr), therefore raw sewage is believed to have overflowed. There is currently no wastewater quality data available for raw sewage from the Numbulwar Community, however for indicative purposes, please find below wastewater quality data for the Ludmilla WWTP (Darwin location).

Table 1: Inflows to Ludmilla WWTP

	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.

iii. Volume of the waste that was discharged.

The volume of waste discharged is unknown. No telemetric monitoring occurs at this SPS. An estimation from the PWC Operations team suggest approximately 300-400 litres has overflowed.

The overflow was notified to PWC by the local Essential Services Operator (ESO). PWC responded to the overflow by organising a contractor to visit site immediately from Groote Eylandt to rectify the situation. An electrical fault associated with the SPS resulted in the pumps not engaging resulting in sewage to backup within the internal wet well until a point when an overflow occurred from the SPS manhole cover. The start time of the overflow is unknown but is believed to have

	occurred this morning (29/03/21) and there is no metered data available for the SPS to determine an exact volume of the overflow. The overflow was resolved shortly (approx. 12:00pm) after attendance to the site by external contractor engaged by PWC. Discharge of raw sewage occurred to land within the SPS compound with some sewage exiting the compound and sitting along the fence-line.
(b) the place where the incident occurred	Lot 142 (SPS 3), Numbulwar – SPS *i. Description of the PWC asset from which the discharge occurred.* SPS located at Lot 142 (SPS 3), Numbulwar – as per map below. *ii. GPS coordinates of the discharge point from the PWC asset, and the final coordinates of the final discharge point.* Discharge Point: 135.7400970, -14.2777970 Final Discharge Point: 135.7400970, -14.2777970 *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.* Public access is not available to the majority of the overflow site, due to it occurring within a fenced and locked PWC compound. However some of the effluent did pool on the outside of the fenced area, therefore this is being contained with temporary fencing and warning signage to prevent the public having contact. The land was checked for gross pollutants of which none were visible, due to the SPS manhole cover trapping them within the sewer system. It was reported that by the time the SPS had been re-instated and electrical issues rectified, that the sewage present had dried up. Nevertheless temporary fence has been erected.
(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 however is believed to have occurred in the morning of 29/03/21. The overflow was observed at approximately 6.30am on 29/03/21 and was stopped at approximately 12:00pm (29/03/21). *ii. How PWC were notified, or became aware of the discharge.* The local ESO located the overflow at 6.30am 29/03/21 and alerted PWC staff, from which an external contractor from Groote Eylandt was engaged to rectify. From this the contractor and ESO resolved the overflow and cleaned the area. *iii. The process by which the discharge occurred.* An electrical fault associated with the SPS resulted in the pumps not engaging resulting in sewage to back-up within the internal wet well until a point when an overflow occurred from the SPS manhole cover. *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; rather discharge is designed to occur in a controlled manner at locations which can be accessed for infrastructure repair and clean up.
(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.* Upon completion of clean-up of the area, fencing and signage has been installed to prevent access by the public. *ii. Decontamination of the site as appropriate.* Clean up undertaken to minimise risk to public health and the environment. Area was inspected for gross pollutants of which none were observed. The area has had chlorine applied to the spill area.
(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*)

Overflow Location Map

Photo 1 – Prior to Clean-up

Photo 2 – Post Clean-up

Note: Report that sewage had dried up by 12:00pm upon re-instatment of the SPS. Water present in photo was from recent rain and is not sewage.