

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

Date and Time of Notification:	Wednesday 23 Rd December 2020, 14:00hrs
Person / Company:	Power and Water Corporation (PWC)
Incident:	Discharge of highly diluted sewage from sewerage network due to wet weather / monsoonal conditions

(a) the incident causing or threatening to cause pollution	i. Description of the waste that was discharged. Highly diluted sewage. ii. Indicative wastewater quality for the discharge. Indicative wastewater quality for this overflow can be found in Table 1. Rainfall leading up to the overflow was 151.0mm for the previous 7 days (Darwin Airport Weather Station – 014015), daily inflow of 48.7ML/day at Ludmilla Wastewater Treatment Plant (WWTP), reaching an equivalent of 89ML/day at peak flow periods, which equates to >3x ADWF and at peak flow periods, greater than 5x ADWF, as per Table 1 below. Table 1: Inflow to Ludmilla Wastewater Treatment Plant <table><tr><th>Inflow volume</th><th>median inflow kL</th><th>median E coli</th><th>90th percentile inflow kL</th><th>90th percentile E coli</th></tr><tr><td>below ADWF</td><td>11,040</td><td>11,199,000</td><td>12,925</td><td>15,531,000</td></tr><tr><td>>ADWF (14.5 ML/day)</td><td>15,274</td><td>9,804,000</td><td>22,206</td><td>17,148,300</td></tr><tr><td>>2x ADWF (29.0 ML/day)</td><td>31,673</td><td>4,884,000</td><td>37,166</td><td>14,385,600</td></tr><tr><td>>3x ADWF (43.5 ML/day)</td><td>43,629</td><td>4,611,000</td><td>50,506</td><td>12,843,600</td></tr><tr><td>>5x ADWF (72.5 ML/day)</td><td>71,558</td><td>5,002,000</td><td>78,578</td><td>5,905,200</td></tr><tr><td>>WDL limit (89.5 ML/day)</td><td>102,445</td><td>102,445</td><td>148,575</td><td>13,704,400</td></tr></table> (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 at each discharge location is unknown. No telemetric monitoring occurs at these locations, with the exception of the sewer relief point located at the corner of Rapid Creek Road and Trower Road. Due to the Christmas holiday period, the data cannot be downloaded currently but can be supplied after the 4th January.	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
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(b) the place where the incident occurred	i. Description of the PWC asset from which the discharge occurred. Sewer Relief Point (SRP) – Corner of Rapid Creek Rd and Trower Rd, Milner. Discharge Point: 130.8649645E, -12.38567441S Sewer Relief Point (SRP) – 24 East Point Rd, Fannie Bay Discharge Point: 130.8379474E, -12.434417S																																			

	<i>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.</i> Public access is available to discharge locations throughout Darwin although due to weather conditions present the likelihood of people visiting these areas is low. Where possible areas impacted by the discharges have been sign posted deterring access by the general public. Clean up was undertaken as per Sewage Spills/Overflow Response Work Instruction.									
(c) the date and time of the incident	<i>i. The time and date of commencement and cessation of the discharge.</i> <table border="1"> <thead> <tr> <th>Location</th><th>Start (23/12/2020)</th><th>Stop</th></tr> </thead> <tbody> <tr> <td>SRP - Cnr Rapid Crk Rd & Trower Rd</td><td>01:00am</td><td>07:30am</td></tr> <tr> <td>SRP - 24 East Point Rd</td><td>00:45am</td><td>07:30am</td></tr> </tbody> </table> <i>ii. How PWC were notified, or became aware of the discharge.</i> Multiple high level alarms were triggered indicating that the sewer system was full and system relief points needed to be opened up. <i>iii. The process by which the discharge occurred.</i> Due to significant rainfall in the Darwin catchment over the past few days, sewage volumes within the sewerage system have increased from inflow and infiltration of stormwater. To prevent sewer overflows within residential properties, Power and Water opened sewer relief points to relieve pressure in the system and manage potential human health/environmental impacts. <i>iv. The reason why the discharge occurred.</i> 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 and with minimal public health or environmental impacts.	Location	Start (23/12/2020)	Stop	SRP - Cnr Rapid Crk Rd & Trower Rd	01:00am	07:30am	SRP - 24 East Point Rd	00:45am	07:30am
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(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>i. Confirmation signage and fencing has been erected, as appropriate.</i> Signage has been installed and displayed at these locations to alert the public and prevent access to the sites as per Sewage Spills/Overflow Response Work Instruction. <i>ii. Decontamination of the site as appropriate.</i> Clean up consistent with Sewage Spills/Overflow Response Work Instruction as appropriate to the location, and to minimise risk to the									

	environment. Locations have been inspected for gross pollutants, of which none were found.
(f) the identity of the person notifying the NT EPA	PWC Environmental Team on behalf of Water Services

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Appendix A – Photographs (Discharge point for SRV at 24 East Point Road, Fannie Bay, showing warning signage)



Appendix B – Photographs (SRV discharge point for corner of Trower Road and Rapid Creek Roads, with no gross pollutants visible)

