

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

Date and Time of Notification:	Friday 09 February 2024 13:40hrs
Person / Company:	Power and Water Corporation (PWC)
Incident:	Discharge of diluted sewage from sewerage network via Overflow Relief Gully (ORG) during monsoon event.

(a) the incident causing or threatening to cause pollution	<i>i. Description of the waste that was discharged.</i> Highly diluted sewage <i>ii. Indicative wastewater quality for the discharge.</i> The Tiwi islands area experienced consistent rainfalls over a six day period before, during and after the initial reported discharge on 29 January. During 25 – 30 January rainfall of 179.2mm was reported (Pirlangimpi Airport – BoM rainfall gauge ID 14142). Based on rainfall the overflows can be assumed to be highly diluted. Please refer to the following table for indicative wastewater quality, from the Wurrumiyanga wastewater treatment pond. <i>Table 1. Wurrumiyanga wastewater quality results</i> <table><tr><th colspan="4"></th><th colspan="2">Bacteriological</th></tr><tr><th rowspan="2">Sample Date</th><th rowspan="2">Location</th><th rowspan="2">Description</th><th rowspan="2">Status</th><th>E. coli</th><th>Enterococci</th></tr><tr><th>E. coli (MPN/100 mL)</th><th>Enterococci (MPN/100 mL)</th></tr><tr><td>06/02/2024 07:15:00</td><td>SNG002</td><td>WQ-NGUIU POND 2 INLET</td><td>Valid</td><td>300.0</td><td>100.0</td></tr><tr><td>02/01/2024 07:05:00</td><td>SNG002</td><td>WQ-NGUIU POND 2 INLET</td><td>Valid</td><td>11,910.0</td><td>32,550.0</td></tr><tr><td>05/12/2023 07:35:00</td><td>SNG002</td><td>WQ-NGUIU POND 2 INLET</td><td>Valid</td><td>27,230.0</td><td>3,930.0</td></tr></table>					Bacteriological		Sample Date	Location	Description	Status	E. coli	Enterococci	E. coli (MPN/100 mL)	Enterococci (MPN/100 mL)	06/02/2024 07:15:00	SNG002	WQ-NGUIU POND 2 INLET	Valid	300.0	100.0	02/01/2024 07:05:00	SNG002	WQ-NGUIU POND 2 INLET	Valid	11,910.0	32,550.0	05/12/2023 07:35:00	SNG002	WQ-NGUIU POND 2 INLET	Valid	27,230.0	3,930.0
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	<i>iii. Volume of the waste that was discharged.</i> The volume of wastewater discharged is unknown. No telemetric monitoring of discharge volume occurs at the sites of discharge.																																
(b) the place where the incident occurred	<i>i. Description of the PWC asset from which the discharge occurred.</i> Discharged occurred via ORG at 5 locations within Wurrumiyanga community – lots 452, 453, 454 (listed as 857), 858 and 859. Maps provided at end of report. A pump was used to manage levels in the sewer system mains in order to prevent further discharges within households to prevent health issues. A pump was placed for several days in the manhole front of lot 422 and discharge exited into the bushland and away from homes (map provided)																																

	<i>ii. GPS coordinates of the discharge point from the PWC asset, and the final coordinates of the final discharge point.</i> Wurrumiyanga community noting all discharge points started at the ORG however discharge exited property boundaries due to rainfall runoff. It was impossible to provide an extent of discharges as the areas around homes during this time were impacted by heavy rainfall. Lot 452: 11.7543845 S, 130.6387503 E Lot 453: 11.7542366 S, 130.6385205 E Lot 454 (listed as 857): 11.7540871 S, 130.6383637 E Lot 858: 11.7541697 S, 130.6379597 E Lot 859: 11.7543155 S, 130.6381818 E A temporary pump was placed in a manhole front of lot 422: 1. Discharge Point: 11.7538769 S, 130.6379134 E 2. Final Point: 11.7532375 S, 130.6383626 E <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 was available although due to wet weather conditions, and locations of the discharges (predominately within fenced properties), the likelihood of people visiting these areas was low.						
(c) the date and time of the incident	<i>i. The time and date of commencement and cessation of the discharge.</i> <table><tr><th>Site</th><th>Start</th><th>Stop</th></tr><tr><td>Wurrumiyanga lots 452, 453, 454, 858, 859</td><td>27/01/2024, times unknown</td><td>28/01/2024, times unknown</td></tr></table> <i>ii. How PWC were notified, or became aware of the discharge.</i> PWC staff utilising CITECH online monitoring allowed identification of the overflows, which began on 27 January, and initially reported by the relief utility services contract worker (Power and Water contractor onsite) that ORG discharge was not leaving any properties (reported 28/01/2024 and recalled 31/01/2024). It was discovered that discharges subsequently left fenced properties possibly up until Saturday 3 or Sunday 4 February. Environmental Services were unaware until the returning primary utility Services Contract t worker communicated updates to PWC operational staff. Environmental Services were subsequently informed on Thursday 8 February at 13:02hrs. <i>iii. The process by which the discharge occurred.</i> Recent rainfall events have inundated the sewerage system with stormwater through a combination of inflow and infiltration. This led to the pump stations becoming overwhelmed, as inflow exceeded the pumping capacities. Unobstructed ORG points prevent overflows within households, and manage potential human health/environmental impacts. <i>iv. The reason why the discharge occurred.</i>	Site	Start	Stop	Wurrumiyanga lots 452, 453, 454, 858, 859	27/01/2024, times unknown	28/01/2024, times unknown
Site	Start	Stop					
Wurrumiyanga lots 452, 453, 454, 858, 859	27/01/2024, times unknown	28/01/2024, times unknown					

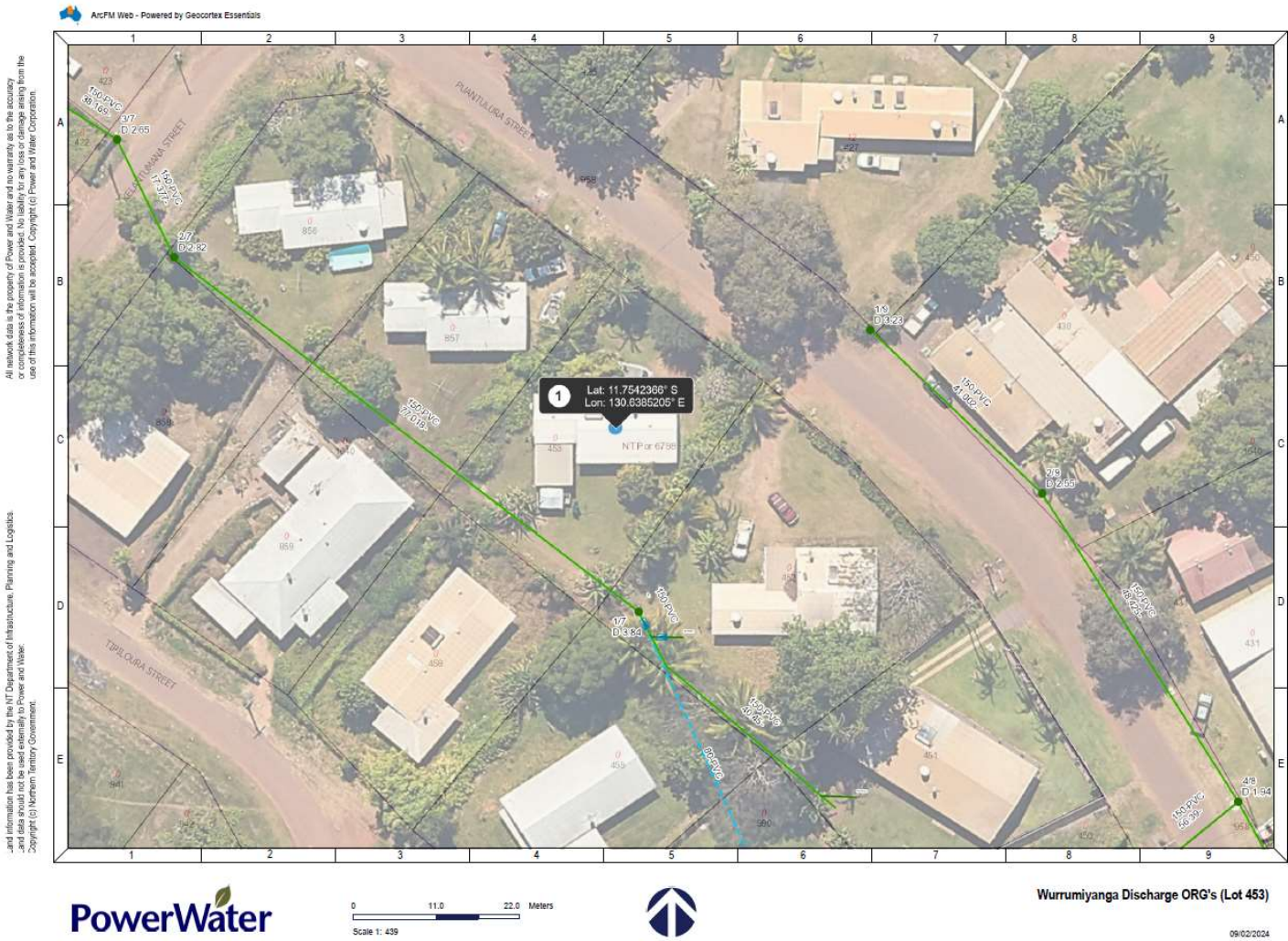
	As per (c) iii. Sewerage network infrastructure has been designed to overflow with the best public health and environmental outcomes possible. Design focuses on not overflowing directly inside houses; rather discharge is designed to occur in a controlled manner at locations which can be accessed for infrastructure repair and clean up and with minimal public health or environmental impacts.
(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> Where appropriate, signage is displayed to alert the public and prevent access to the sites as per Sewage Spills/Overflow Response Work Instruction. As described above access by the public was possible but unlikely. <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. With respect to site limitations, sites were inspected for any gross pollutants, and removed as identified.
(f) the identity of the person notifying the NT EPA	PWC Environmental Team on behalf of Water Services

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Wurrumiyanga ORG discharge - lot 452



Wurrumiyanga ORG discharge - lot 453



Wurrumiyanga ORG discharge - lot 454 (listed as 857)



Wurrumiyanga ORG discharge - lot 858



Wurrumiyanga ORG discharge - lot 859



Pump location temporarily placed in manhole - front of lot 422

