

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

Date and Time of Notification:	Friday 18 th October 2019, 10:15am
Person / Company:	Power and Water Corporation (PWC)
Incident:	Discharge of raw sewage from sewerage network (ruptured rising main)

<p>(a) the incident causing or threatening to cause pollution</p>	<p><i>i. Description of the waste that was discharged.</i></p> <p>Raw sewage (no gross pollutants).</p> <p><i>ii. Indicative wastewater quality for the discharge.</i></p> <p>Indicative wastewater quality for this overflow can be found in Table 1. Rainfall leading up to the overflow was 0.0mm for the previous 7 days (Darwin Airport Weather Station – 014015), therefore raw sewage is believed to have overflowed from the rising main – this is reflected as Average Dry Weather Flows (ADWF) in Table 1 below.</p> <p>Table 1: Inflow to Ludmilla Wastewater Treatment Plant</p> <table border="1"> <thead> <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> </thead> <tbody> <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 (approx. 14.5 L/day)</td> <td>15,274</td> <td>9,804,000</td> <td>22,206</td> <td>17,148,300</td> </tr> <tr> <td>>2xADWF (approx. 29 ML/day)</td> <td>31,673</td> <td>4,884,000</td> <td>37,166</td> <td>14,385,600</td> </tr> <tr> <td>>3xADWF approx. 43.5 L/day)</td> <td>43,629</td> <td>4,611,000</td> <td>50,506</td> <td>12,843,600</td> </tr> <tr> <td>>5xADWF (approx. 72.5 L/day)</td> <td>71,558</td> <td>5,002,000</td> <td>78,578</td> <td>5,905,200</td> </tr> </tbody> </table> <p>(ADWF= Average Dry Weather Flow) 90th percentile inflow: Protection of aquatic food for human consumption</p> <p><i>iii. Volume of the waste that was discharged.</i></p> <p>The volume of waste discharged is unknown. No telemetric monitoring occurs at the site of discharge.</p> <p>This overflow was notified to PWC call centre, from which PWC operations staff responded to the call and noticed an overflow from a suspected ruptured rising main that is privately owned by Darwin port Corporation. The start time of the overflow is unknown and there is no metered data available to determine a volume of the overflow.</p> <p>Discharge of raw sewage to the land beside the manhole was associated with a ruptured rising main, resulting in the overflow. The exact cause of the ruptured rising main is unknown, although it appears during the installation of the main it may have been kinked and has recently given way and ruptured.</p>	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 (approx. 14.5 L/day)	15,274	9,804,000	22,206	17,148,300	>2xADWF (approx. 29 ML/day)	31,673	4,884,000	37,166	14,385,600	>3xADWF approx. 43.5 L/day)	43,629	4,611,000	50,506	12,843,600	>5xADWF (approx. 72.5 L/day)	71,558	5,002,000	78,578	5,905,200
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<p>(b) the place where the incident occurred</p>	<p>780 Berrimah Road, East Arm – Ruptured Rising Main</p> <p><i>i. Description of the PWC asset from which the discharge occurred.</i></p> <p>Rising main located at 780 Berrimah Road, East Arm – as per map below.</p> <p>East Arm is a private sewer system managed by Darwin Port Corporation (DPC). PWC are responsible for maintaining these assets upon request by DPC, as per a Service Level Agreement in place.</p> <p><i>ii. GPS coordinates of the discharge point from the PWC asset, and the final coordinates of the final discharge point.</i></p> <p>Discharge Point: 130.899769, -12.478742 Final Discharge Point: 130.899782, -12.478938</p> <p><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></p> <p>Access was possible by the public, however the area impacted by the discharge on land has been fenced off, preventing access. The area was checked for gross pollutants of which none were visible, due to the overflow seeping through the ground to the surface. Clean up was undertaken as per Sewage Spills/Overflow Response Work Instruction.</p>
<p>(c) the date and time of the incident</p>	<p><i>i. The time and date of commencement and cessation of the discharge.</i></p> <p>The commencement time of the overflow is unknown. The overflow was observed at approximately 17:00pm on 17/10/19 and was stopped at approximately 10.30am (18/10/19).</p> <p><i>ii. How PWC were notified, or became aware of the discharge.</i></p> <p>PWC call centre was notified of the overflow, this was then reported to the on call PWC staff who attended the site at approx. 17:00pm (17/10/19), and the overflow was resolved and area cleaned by 10.30am (18/10/19).</p> <p><i>iii. The process by which the discharge occurred.</i></p> <p>Discharge of raw sewage to the land beside the manhole was associated with a ruptured rising main, resulting in the overflow. The exact cause of the ruptured rising main is unknown, although it appears during the installation of the main it may have been kinked and has recently given way and ruptured.</p> <p><i>iv. The reason why the discharge occurred.</i></p> <p>As per (c) iii.</p>
<p>(d) how the pollution has occurred, is occurring or may occur</p>	<p>As per (c) iii</p>
<p>(e) the attempts made to prevent, reduce, control,</p>	<p>The rupture was fixed by replacing a section of main and the overflow has now stopped. Clean up undertaken as per Sewage Spills/Overflow</p>

<p>rectify or clean up the pollution or resultant environmental harm caused or threatening to be caused by the incident</p>	<p>Response Work Instruction.</p> <p><i>i. Confirmation signage and fencing has been erected, as appropriate.</i></p> <p>The site has been fenced off and warning signage installed to alert the public as per Sewage Spills/Overflow Response Work Instruction (attached).</p> <p><i>ii. Decontamination of the site as appropriate.</i></p> <p>Clean up consistent with Sewage Spills/Overflow Response Work Instruction as appropriate to the location, and to minimise risk to the environment.</p> <p>Site has been limed and will be followed up by removing approx. 100mm of top contaminated soil and replaced with topsoil.</p>
<p>(f) the identity of the person notifying the NT EPA</p>	<p>PWC Environmental Team on behalf of Water Services</p>

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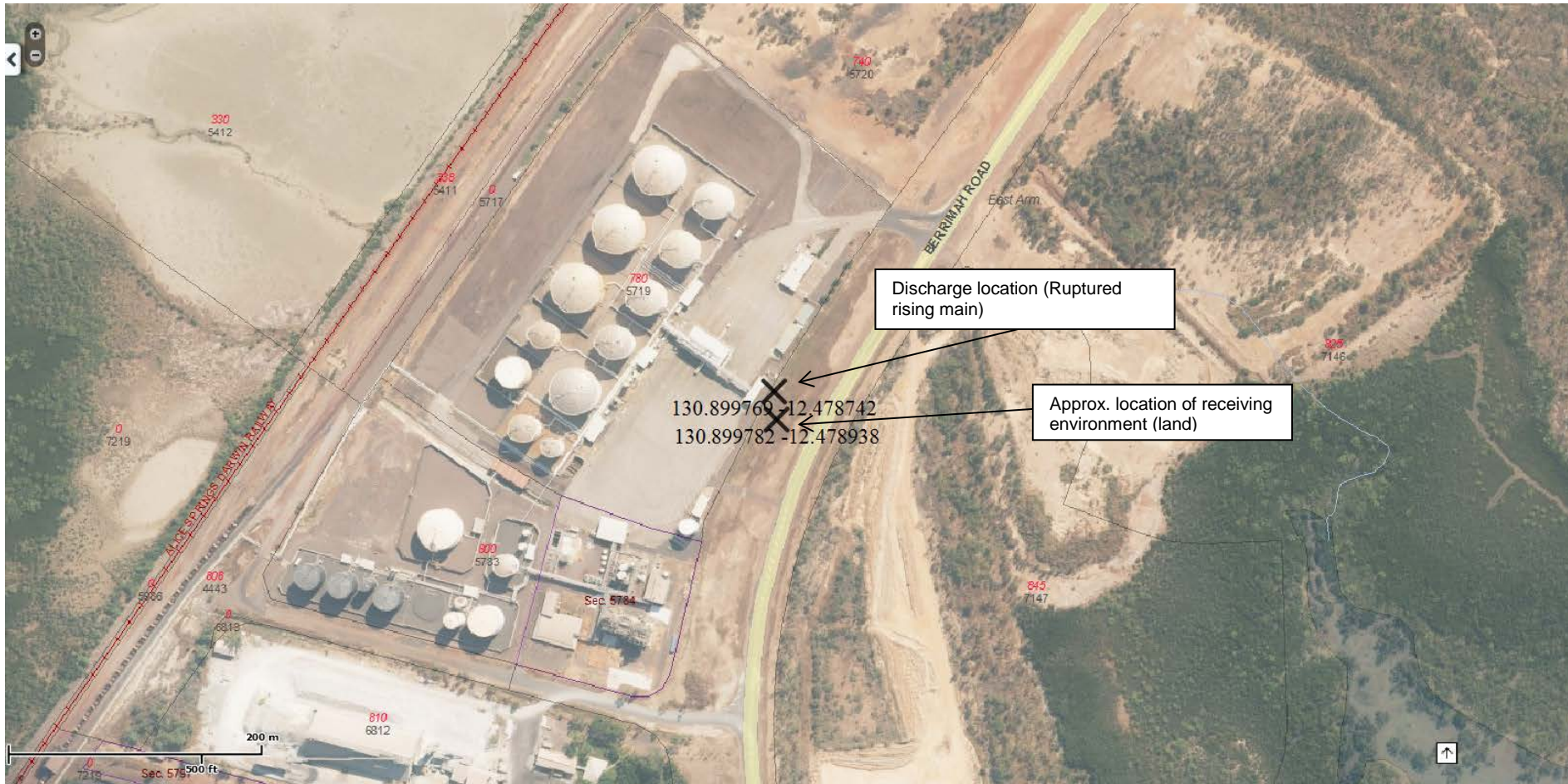


Photo 1 – Repaired sewer rising main



Photo 2 – Fenced and signed area

