

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

<b>Date and Time of Notification:</b>	Monday 15 <sup>th</sup> July 2019, 15:33pm
<b>Person / Company:</b>	Power and Water Corporation ( <b>PWC</b> )
<b>Incident:</b>	Discharge of raw sewage from sewerage network (Broken Riser)

<p><b>(a) the incident causing or threatening to cause pollution</b></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 &gt;30 days (Darwin Airport – 014015), therefore raw sewage is believed to have overflowed from the broken riser – this is reflected as Average Dry Weather Flows (ADWF) in Table 1 below.</p> <p><b>Table 1: Inflow to Ludmilla Wastewater Treatment Plant</b></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>&gt;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>&gt;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>&gt;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>&gt;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) 90<sup>th</sup> 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 risers.</p> <p>This overflow was reported to the PWC Call Centre, which was then reported to on-call staff who attended the site shortly after. The exact start time of the overflow is unknown, and there is no metered data available for risers to determine a volume of the overflow.</p> <p>Discharge of raw sewage to land beside the broken riser was associated with a build-up of items (wet wipes, rags etc), blocking the sewer main, resulting in the overflow from the nearby broken riser. It appears as though the riser inspection cover has been run-over by a mower.</p> <p>No overflows occur from broken risers during normal operation of the</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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sewer main, however when the blockage has occurred it has backed up the sewage resulting in an overflow from the riser.

FYI – Risers are generally used as an inspection or access point, please refer to the picture below as a reference.

**(b) the place where the incident occurred**

7 Waratah Street, Fannie Bay – Broken Riser

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

Broken Riser located at 7 Waratah Street, Fannie Bay – 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: 130.838199, -12.421634  
 Final Discharge Point: 130.838292, -12.421568

*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 restricted as the area of the discharge is a locked, fenced off vacant block, preventing access by the general public. Some gross pollutants were removed from the site (paper, wet wipes etc) during the clean up. Clean up was undertaken as per Sewage Spills/Overflow Response Work Instruction.

**(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 15:30pm on 15/07/19 and was stopped at approximately 15:50pm (15/07/19).

*ii. How PWC were notified, or became aware of the discharge.*

This overflow was discovered by a member of the public and was reported to the PWC call centre, which then relayed the information to the on-call PWC operations staff. PWC personnel attended the site at approximately 15:30pm (15/07/19) to resolve the situation shortly after.

	<p>From this PWC staff resolved the overflow and cleaned the area.</p> <p><i>iii. The process by which the discharge occurred.</i></p> <p>Discharge of raw sewage to land beside the broken riser was associated with a build-up of items (wet wipes, rags etc), blocking the sewer main, resulting in the overflow from the nearby broken riser. It appears as though the riser inspection cover has been run-over by a mower.</p> <p>No overflows occur from broken risers during normal operation of the sewer main, however when the blockage has occurred it has backed up the sewage resulting in an overflow from the riser.</p> <p><i>iv. The reason why the discharge occurred.</i></p> <p>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/businesses; 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.</p> <p>As detailed above this overflow is a result of a blockage in the sewer main due to the incorrect disposal of wet wipes and rags from the surrounding residents.</p> <p>Due to the broken riser an overflow has occurred at this point, however if the broken riser was not present, the overflow would have still occurred but from the nearest manhole, due to the blockage in the system.</p>
<p><b>(d) how the pollution has occurred, is occurring or may occur</b></p>	<p>As per (c) iii &amp; (c) iv.</p>
<p><b>(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</b></p>	<p>The blockage was cleared and the overflow was stopped. The riser was replaced. Clean up undertaken as per Sewage Spills/Overflow Response Work Instruction.</p> <p><i>i. Confirmation signage and fencing has been erected, as appropriate.</i></p> <p>The site is already fenced off and locked to the public. An overflow warning sign was attached to the fence to warn the public of the overflow.</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. Vacuum truck was used to remove the wastewater from the riser, followed by cleaning of the surrounding surface.</p> <p>Public education about what can be disposed in sewer/is flushable:  <a href="https://www.powerwater.com.au/_data/assets/pdf_file/0003/91578/Think_before_you_put_it_down_the_sink.pdf">https://www.powerwater.com.au/_data/assets/pdf_file/0003/91578/Think_before_you_put_it_down_the_sink.pdf</a>  In the aim of prevention this material is available on the PWC website and is used as an educational tool for customers.</p>

<b>(f) the identity of the person notifying the NT EPA</b>	PWC Environmental Team on behalf of Water Services

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