

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

<b>Date and Time of Notification:</b>	Friday 12 <sup>th</sup> July 2019, 8:08am
<b>Person / Company:</b>	Power and Water Corporation ( <b>PWC</b> )
<b>Incident:</b>	Discharge of raw sewage from sewerage network (Manhole)

<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, therefore raw sewage is believed to have overflowed from the manhole – 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 manholes.</p> <p>This overflow was discovered by PWC personnel and action to resolve the situation was undertaken shortly after. The start time of the overflow is unknown and there is no metered data available for manholes to determine a volume of the overflow.</p> <p>Discharge of raw sewage to land beside the manhole was associated with a build-up of items (plumbers bung, rocks, rags etc), blocking the sewer main, resulting in the overflow from the nearby manhole.</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>(b) the place where the incident occurred</b></p>	<p>End of Radford Road (currently under development), Zuccoli – Manhole</p> <p><i>i. Description of the PWC asset from which the discharge occurred.</i></p>																														

	<p>Manhole located at the end of Radford Road (currently under development), Zuccoli – as per map below.</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: 131.012817, -12.517690 Final Discharge Point: 131.012817, -12.517690</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 by the public is restricted due to temporary fencing around the site as this area of Zuccoli is currently under development. The area was checked for gross pollutants of which none were visible, due to the manhole lid trapping them within the sewer system. Clean up was undertaken as per Sewage Spills/Overflow Response Work Instruction.</p>
<p><b>(c) the date and time of the incident</b></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 14:30pm on 11/07/19 and was stopped at approximately 15:00pm (11/07/19).</p> <p><i>ii. How PWC were notified, or became aware of the discharge.</i></p> <p>This overflow was discovered by PWC personnel at approximately 14:30pm 11/07/19 and action to resolve the situation was undertaken shortly after. 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>An investigation of the overflow was undertaken and discovered that the blockage was caused due to a combination of factors. A plumbers bung, rocks and rags were found within the sewer main resulting in the blockage. The plumbers bung was most likely left in the system by a contractor performing works at a private residence within Zuccoli. The rocks were most likely a result of abuse to the system by nearby residents.</p> <p>The plumbers bung and rocks have collected and built up, along with rags and other foreign bodies blocking the sewer main.</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; 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><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. 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 overflow location is currently a restricted site and is fenced off to the public as the area is currently under development. Signage was <u>not</u> installed as the area is a restricted site.</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 manhole, followed by cleaning of the surrounding surface.</p>
<p><b>(f) the identity of the person notifying the NT EPA</b></p>	<p>PWC Environmental Team on behalf of Water Services</p>

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