

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

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| Date and Time of Notification: | Monday 27 th May 2019, 8:37am |
| Person / Company: | Power and Water Corporation (PWC) |
| Incident: | Discharge of raw sewage from sewerage network (Vacuum pit) |

| <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, therefore raw sewage is believed to have overflowed from the vacuum pit – 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 vacuum pits.</p> <p>This overflow was notified to PWC by the resident at 16 Packsaddle Road. PWC responded to the call and noticed the vacuum pit was overflowing. The start time of the overflow is unknown and there is no metered data available for vacuum pits to determine a volume of the overflow.</p> <p>The overflow was resolved shortly after attendance to the site by PWC officers.</p> <p>Discharge of raw sewage to land beside the vacuum pit was associated with a build-up of items (fat, hair, dirt etc), blocking the vacuum intake line of the vacuum pit controller, resulting in the overflow.</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>16 Packsaddle Road, Marlow Lagoon – Vacuum Pit</p> <p><i>i. Description of the PWC asset from which the discharge occurred.</i></p> <p>Vacuum Pit located at 16 Packsaddle Road, Marlow Lagoon – 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: 130.956153, -12.501742 Final Discharge Point: 130.956112, -12.502761</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>Public access is via the public is possible however is not believed to be a regular occurrence due to the nearby train track and thick bushland present. The area was checked for gross pollutants of which none were visible, due to the vacuum pit lid trapping them within the sewer system. 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 3:30pm on 24/05/19 and was stopped at approximately 4:00pm (24/05/19).</p> <p><i>ii. How PWC were notified, or became aware of the discharge.</i></p> <p>PWC were notified by the resident of 16 Packsaddle Road of the overflow. This call was communicated from the call centre to relevant PWC staff who attended the site at 3:30pm 24/05/19 and observed the overflow. From PWC staff resolved the overflow and cleaned the area.</p> <p><i>iii. The process by which the discharge occurred.</i></p> <p>Fat and other substances have been incorrectly disposed of into the sewer network by customers, resulting in the blockage and the overflow.</p> <p>The fats, oils, meat juices, other substances that are put down the sink or toilet have collected and built up, blocking the vacuum intake line.</p> <p>When fats, oils and meat juices are put down the sink it is usually as a liquid, but as it cools it can become more solid and cause build-up, resulting in bad odours and blockages in the sewerage system. This can lead to the sewage overflows into the environment, households and businesses.</p> <p>Other materials such as hair and dirt were also responsible for the blockage of the vacuum pit controller.</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</p> |

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| | 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 | <p>The blockage was cleared, the vacuum pit controller replaced, 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 site was fenced off and signage was 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. Vacuum truck was used to remove the wastewater from the vacuum pit, followed by cleaning of the surrounding surface.</p> <p>Public education about what can be disposed in sewer/is flushable: https://www.powerwater.com.au/__data/assets/pdf_file/0003/91578/Think_before_you_put_it_down_the_sink.pdf In the aim of prevention this material is available on the PWC website and is used as an educational tool for customers.</p> |
| (f) the identity of the person notifying the NT EPA | PWC Environmental Team on behalf of Water Services |

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