

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

|                                       |   |
|---------------------------------------|---|
| <b>Date and Time of Notification:</b> | Thursday 07/11/2019 09:20hrs  |
| <b>Person / Company:</b>              | Power and Water Corporation ( <b>PWC</b> )                          |
| <b>Incident:</b>                      | Discharge of raw sewage from sewerage network (no gross pollutants) |

| <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>Inflow data to Ludmilla WWTP is currently not available, and rainfall leading up to the overflow was 56.6mm for the preceding 3 days (Darwin Airport – 014015), Therefore indicative wastewater quality for this overflow can be assumed to be better than for average dry weather flows, with some dilution to be assumed.</p> <p style="text-align: center;">Table 1: Inflow to Ludmilla Wastewater Treatment Plant</p> <table border="1" data-bbox="619 1256 1414 1429"> <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 (14.5 ML/day)</td> <td>15,274</td> <td>9,804,000</td> <td>22,206</td> <td>17,148,300</td> </tr> <tr> <td>&gt;2x ADWF (29.0 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;3x ADWF (43.5 ML/day)</td> <td>43,629</td> <td>4,611,000</td> <td>50,506</td> <td>12,843,600</td> </tr> <tr> <td>&gt;5x ADWF (72.5 ML/day)</td> <td>71,558</td> <td>5,002,000</td> <td>78,578</td> <td>5,905,200</td> </tr> <tr> <td>&gt;WDL limit (89.5 ML/day)</td> <td>102,445</td> <td>102,445</td> <td>148,575</td> <td>13,704,400</td> </tr> </tbody> </table> <p style="text-align: center;">(ADWF= Average Dry Weather Flow ~14.5 ML/day in 2013/14)</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> | 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 (14.5 ML/day) | 15,274 | 9,804,000 | 22,206 | 17,148,300 | >2x ADWF (29.0 ML/day) | 31,673 | 4,884,000 | 37,166 | 14,385,600 | >3x ADWF (43.5 ML/day) | 43,629 | 4,611,000 | 50,506 | 12,843,600 | >5x ADWF (72.5 ML/day) | 71,558 | 5,002,000 | 78,578 | 5,905,200 | >WDL limit (89.5 ML/day) | 102,445 | 102,445 | 148,575 | 13,704,400 |
|--|---|---------------|---------------------------|------------------------|---------------------------|------------------------|------------|--------|------------|--------|------------|---------------------|--------|-----------|--------|------------|------------------------|--------|-----------|--------|------------|------------------------|--------|-----------|--------|------------|------------------------|--------|-----------|--------|-----------|--------------------------|---------|---------|---------|------------|
| 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 (14.5 ML/day)  | 15,274  | 9,804,000     | 22,206                    | 17,148,300             |                           |                        |            |        |            |        |            |                     |        |           |        |            |                        |        |           |        |            |                        |        |           |        |            |                        |        |           |        |           |                          |         |         |         |            |
| >2x ADWF (29.0 ML/day)   | 31,673  | 4,884,000     | 37,166                    | 14,385,600             |                           |                        |            |        |            |        |            |                     |        |           |        |            |                        |        |           |        |            |                        |        |           |        |            |                        |        |           |        |           |                          |         |         |         |            |
| >3x ADWF (43.5 ML/day)   | 43,629  | 4,611,000     | 50,506                    | 12,843,600             |                           |                        |            |        |            |        |            |                     |        |           |        |            |                        |        |           |        |            |                        |        |           |        |            |                        |        |           |        |           |                          |         |         |         |            |
| >5x ADWF (72.5 ML/day)   | 71,558  | 5,002,000     | 78,578                    | 5,905,200              |                           |                        |            |        |            |        |            |                     |        |           |        |            |                        |        |           |        |            |                        |        |           |        |            |                        |        |           |        |           |                          |         |         |         |            |
| >WDL limit (89.5 ML/day)   | 102,445   | 102,445       | 148,575                   | 13,704,400             |                           |                        |            |        |            |        |            |                     |        |           |        |            |                        |        |           |        |            |                        |        |           |        |            |                        |        |           |        |           |                          |         |         |         |            |
| <p><b>(b) the place where the incident occurred</b></p>                  | <p><i>i. Description of the PWC asset from which the discharge occurred.</i></p> <p>Overflow relief gullies (ORGs) from house number 4 and 6 Harney Street, Ludmilla.</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 at No.4 Harney St: 130.8515632, -12.4104174<br/>         Discharge Point at No.6 Harney St: 130.8515894, -12.4104567</p> <p>Final discharge points are immediately downstream of the above co-ordinates.</p>  |               |                           |                        |                           |                        |            |        |            |        |            |                     |        |           |        |            |                        |        |           |        |            |                        |        |           |        |            |                        |        |           |        |           |                          |         |         |         |            |

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|  | <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 to the general public is not possible, as the ORGs are within private residential properties. Residents and visitors would be the only persons with access. The affected area has been cleaned and barricaded off with signage erected as per the PWC Sewage Spills/Overflow Response Work Instruction</p>  |
| <b>(c) the date and time of the incident</b>   | <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 16:30hrs by PWC staff on 06/11/2019 and the spill stopped by 16450hrs 06/11/2019.</p> <p><i>ii. How PWC were notified, or became aware of the discharge.</i></p> <p>This overflow was reported by one of the residents to the PWC call centre, who then relayed the information to the on-call PWC operations staff. PWC personnel attended the site at approximately 16:30hrs (06/11/19) and undertook action to resolve the situation and make it safe.</p> <p><i>iii. The process by which the discharge occurred.</i></p> <p>The cause of the blockage was not determined, but most likely due to either a fat build-up or vegetation roots.</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> |
| <b>(d) how the pollution has occurred, is occurring or may occur</b>   | As per (c) iii & (c) iv.  |
| <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><i>i. Confirmation signage and fencing has been erected, as appropriate.</i></p> <p>The site has had barricading and warning signage installed to alert the residents and any visitors, as per Sewage Spills/Overflow Response Work Instruction.</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 public health and the environment.</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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