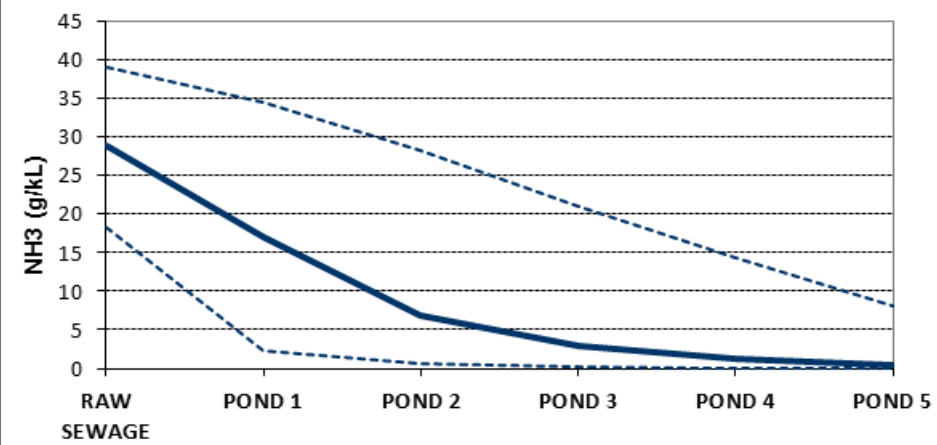
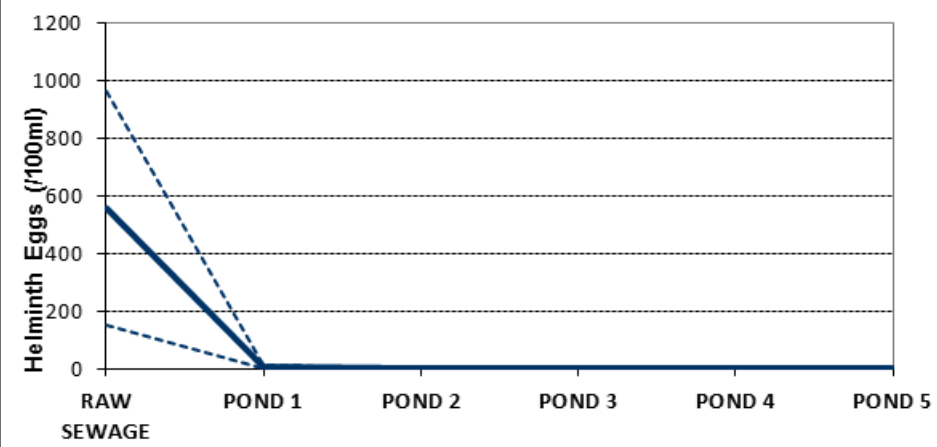
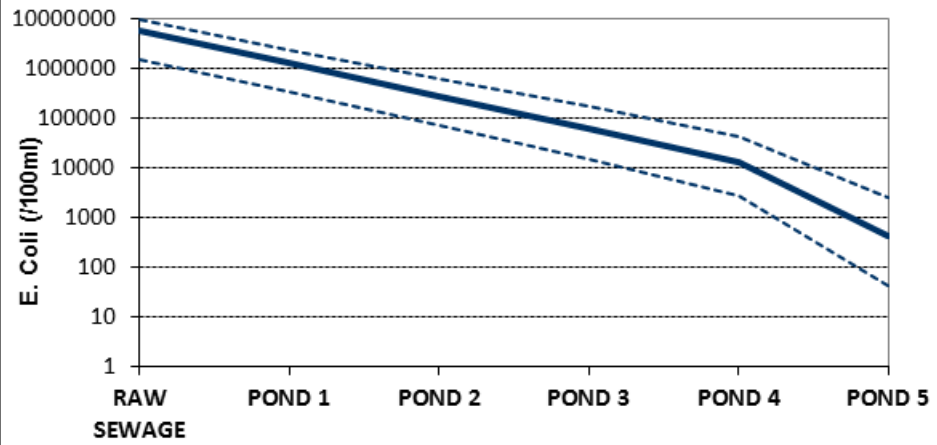
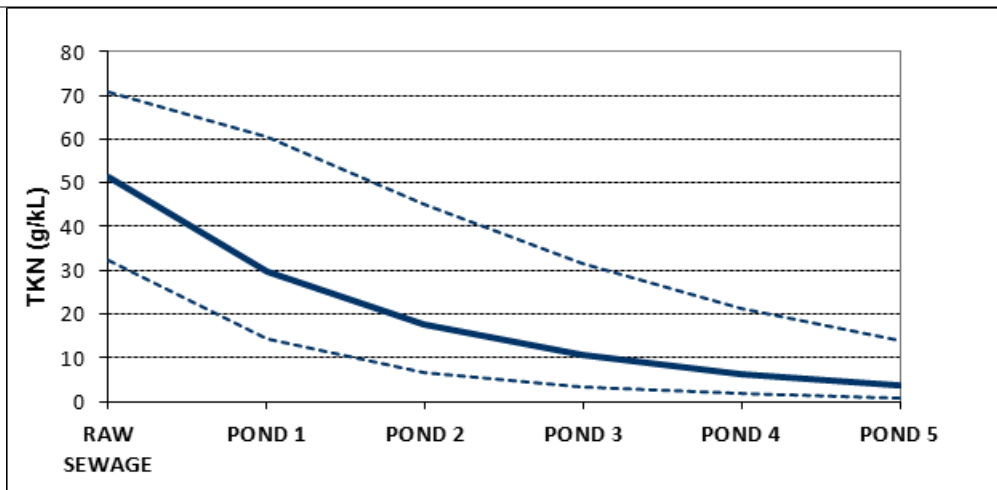


SECTION 14 INCIDENT REPORT (*Waste Management and Pollution Control Act*)

Date and Time of Notification:	Thursday 23rd May 2019, 15:30pm
Person / Company:	Power and Water Corporation (PWC)
Incident:	Controlled discharge of treated effluent from Papunya Waste Stabilisation Ponds (WSPs).

<p>(a) the incident causing or threatening to cause pollution</p>	<p><i>i. Description of the waste that was discharged.</i></p> <p>Treated effluent.</p> <p><i>ii. Indicative wastewater quality for the discharge.</i></p> <p>We do not have any analysis results from the site for treated wastewater quality, estimates from modelling are attached below. However, due to the large amount of dilution of the sewage, treated wastewater quality may be significantly better than these estimates.</p> <p>Indicative wastewater quality for this overflow can be found in the graphs below. This is based off modelled data.</p> <div data-bbox="427 1258 1436 1749" data-label="Figure"> <table border="1"> <caption>Estimated BOD (g/kL) values from the graph</caption> <thead> <tr> <th>Stage</th> <th>Upper Bound (dashed)</th> <th>Lower Bound (dashed)</th> <th>Mean (solid)</th> </tr> </thead> <tbody> <tr> <td>RAW SEWAGE</td> <td>240</td> <td>160</td> <td>200</td> </tr> <tr> <td>POND 1</td> <td>150</td> <td>100</td> <td>125</td> </tr> <tr> <td>POND 2</td> <td>140</td> <td>90</td> <td>115</td> </tr> <tr> <td>POND 3</td> <td>130</td> <td>80</td> <td>105</td> </tr> <tr> <td>POND 4</td> <td>120</td> <td>70</td> <td>95</td> </tr> <tr> <td>POND 5</td> <td>110</td> <td>60</td> <td>85</td> </tr> </tbody> </table> </div>	Stage	Upper Bound (dashed)	Lower Bound (dashed)	Mean (solid)	RAW SEWAGE	240	160	200	POND 1	150	100	125	POND 2	140	90	115	POND 3	130	80	105	POND 4	120	70	95	POND 5	110	60	85
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iii. Volume of the waste that was discharged.

The volume of waste discharged is believed to be approximately four megalitres however the exact volume is unknown. No telemetric monitoring occurs at this site. The discharge will occur from the final (evaporation) pond, and will impact on the area shown in the map (attached). A road closed sign and sewer overflow warning sign will be erected to deter public access.

6/06/19 Update:

As detailed above, the total volume of waste to be discharged is believed to be approximately four megalitres, however the discharge of this effluent is taking longer than originally expected.

21/06/19 Update:

As detailed above, the total volume of waste discharged from the ponds is believed to be approximately four megalitres. The time taken to discharge this amount took longer than expected. Upon investigating the case of the slow discharge rate, several restrictions/partial blockages were discovered within the pipework between each of the ponds in the pond set. These restrictions were removed and the discharge rate improved significantly. As of 9:30am Tuesday 18th June 2019, the discharge was ceased.

(b) the place where the incident occurred

Papunya Waste Stabilisation Ponds (see map below).

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

Papunya Waste Stabilisation Ponds (see map below). The discharge will occur from the final (evaporation) pond, and will impact on the area shown in the map below and attached. A road closed sign and sewer overflow warning sign will be erected to deter public access.

To try and contain the additional treated wastewater while repairs (within community households) are underway, a 450mm riser has been added to increase the normal pond overflow height by 450mm. However, the water is now threatening to overflow the pond banks, and bank damage is occurring. The riser will be removed for a few days from Thursday 30th May 2019, allowing the pond level to return to the normal level.

PWC plan to undertake this discharge of treated wastewater offsite at Papunya as the ponds have been overwhelmed with increased flow. This is not a normal event, but has been caused by the very high volume of wasted water from the community, that we are seeing enter the ponds. To date PWC have conducted housing audits

	<p>but have not been able to enter all properties. Department of Housing and Community Development (DHVD) and other property owners are currently repairing leaks identified in this work, and if this does not result in a major reduction we will be requesting DHCD undertake a full audit of their assets.</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: 131.921077, -23.198881 Final discharge/pooling point: 131.920377, -23.199229</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 available throughout the area due to nearby bushland surrounding the WSP's, however is not believed to occur regularly. A road closed sign and sewer overflow warning sign will also be placed on the only access road to deter access by the public.</p> <p><u>21/06/19 Update:</u> Road closed and sewer overflow warning signs will remain in place until site clean-up is complete. No gross pollutants were discharged.</p>
(c) the date and time of the incident	<p><i>i. The time and date of commencement and cessation of the discharge.</i></p> <p>The commencement time of the controlled overflow is planned for 16:00 Thursday 30th May 2019, and planned cease of discharge is currently unknown, but the discharge is expected to occur for a few days – until normal pond operating level is reached.</p> <p><u>6/06/19 Update:</u> As detailed above, the commencement time of the discharge was 16:00 Thursday 30th May, with the cessation of the discharge expected to be a few days later, however the discharge of the effluent is taking longer than expected and is still commencing – until normal pond operation level is reached. The planned cessation of the discharge is currently unknown.</p> <p><u>21/06/19 Update:</u> The discharge was ceased at 9:30am Tuesday 18th June 2019.</p> <p><i>ii. How PWC were notified, or became aware of the discharge.</i></p> <p>This is a planned discharge as per information contained above. Due to the increased capacity within the WSP's damage is occurring to the pond walls, in order to prevent further damage, and prevent an uncontrolled overflow, the discharge needs to take place to increase the freeboard within the ponds.</p> <p><i>iii. The process by which the discharge occurred.</i></p> <p>A controlled discharge will take place by lowering of the weir gate with a commencement time of 16:00 Thursday 30th May 2019, and planned cease of discharge is currently unknown, but the discharge is expected to occur for a few days – until normal pond operating level is reached.</p> <p><u>6/06/19 Update:</u> As detailed above, the commencement time of the discharge was 16:00 Thursday 30th May, with the cessation of the discharge expected to be a few days later, however the discharge of the effluent is taking longer than expected and is still commencing – until normal pond operation level is reached.. The planned cessation</p>

	<p>of the discharge is currently unknown.</p> <p><u>21/06/19 Update:</u> The discharge was ceased at 9:30am Tuesday 18th June 2019.</p> <p><i>iv. The reason why the discharge occurred.</i></p> <p>PWC plan to undertake this discharge of treated wastewater offsite at Papunya as the ponds have been overwhelmed with increased flow. This is not a normal event, but has been caused by the very high volume of wasted water from the community, that we are seeing enter the ponds. To date PWC have conducted housing audits but have not been able to enter all properties. Department of Housing and Community Development (DHVD) and other property owners are currently repairing leaks identified in this work, and if this does not result in a major reduction we will be requesting DHCD undertake a full audit of their assets.</p> <p>To try and contain the additional treated wastewater while repairs (within community households) are underway, a 450mm riser has been added to increase the normal pond overflow height by 450mm. However, the water is now threatening to overflow the pond banks, and bank damage is occurring. The riser will be removed for four days between 23/5 and 27/5, allowing the pond level to return to the normal overflow level.</p>
<p>(d) how the pollution has occurred, is occurring or may occur</p>	<p>As per (c) iii & (c) iv.</p>
<p>(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>	<p>Prevent/ Rectify: Incident rectification based on reduction of inflow levels from Papunya community. Increased flows are from an unusual increase in wasted water. Repairs are currently underway along with increased consultation with DHCD.</p> <p>Planned long term actions (in order of escalation) is:</p> <ol style="list-style-type: none"> 1. Re-evaluate sewer flows after DHCD have repaired identified issues. 2. If necessary, request DHCD undertake their own audit accessing all public housing, and repair identified issues. 3. If necessary, consider smart metering/ advanced network analysis to better identify locations of high sewer entry (subject to finding). <p>Control: PWC staff will monitor site to manage overflow pathway and collect any solid material (if present).</p> <p>Clean-up: Site will be monitored for gross pollutants and clean up as identified.</p> <p><i>i. Confirmation signage and fencing has been erected, as appropriate.</i></p> <p>The site is not fenced off to the public and due to its large size. A road closed sign and sewer overflow warning sign will be displayed at the only access road to deter public access to the site, and sewer overflow warning signs will also be placed on two other 'bush tracks' leading to site.</p> <p><u>21/06/19 Update:</u> Road closed and sewer overflow warning signs will remain in place until site clean-up is complete. No gross pollutants were discharged.</p> <p><i>ii. Decontamination of the site as appropriate.</i></p>

	Clean up will be consistent with Sewage Spills/Overflow Response Work Instruction as appropriate to the location and to minimise risk to the environment.
(f) the identity of the person notifying the NT EPA	PWC Environmental Team on behalf of Remote Services

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