ntepa Northern Territory Environment Protection Authority

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

Date and Time of Notification:	18 st February 2014
Person / Company:	Power and Water Corporation
Incident:	Discharge of untreated effluent at the Darwin Botanical Gardens
(a) the incident causing or threatening to cause pollution	During a period of significant rainfall (approximately 113mm over a 24 hour period to 9am with the majority falling overnight) a pump failure at the Darwin Botanic Gardens pump station from a local area power outage resulted in approximately 150,000 L (approx. 35 L/sec) of untreated effluent being discharged to an adjacent creek.
	The main serviced by the pump station is a major contributor to Ludmilla Wastewater Treatment Plant. The previous day's inflow volume to LWWTP was 22.9kL, however the inflow during the 24 hours for which this event occurred was 66.6 kL. Approximately three times the normal inflow.
	The heavy rainfall and resultant intrusion of stormwater into the sewer main was a major cause of the discharge, and also served to reduce the environmental and public health risk of the discharge.
(b) the place where the incident occurred	Darwin Botanic Gardens pump station with sewage overflowing into an adjacent creek.
	The creek is adjacent to the Botanic Gardens sewage pumping station and flows into Darwin Harbour at northern end of Mindil Beach.
(c) the date and time of the incident	18 th of February 2014. Discharge from the site occurred between 12:40am and 01:50am.
(d) how the pollution has occurred, is occurring or may occur	Sewage was discharged directly into the creek due to the local power outage and subsequent

issues getting the Pumping station back on line.
A significant factor in the pump station failure is the high volume of effluent due to stormwater ingress resulting from the significant rainfall event. The combination of stormwater ingress and the surface runoff from the rainfall event means the discharged effluent was likely to be highly diluted and once released from the station overflow would have been further diluted by the surface water runoff.

(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	Due to significant rainfall occurring which caused localised flooding and high inflows to the sewer pump station, effluent was unable to be removed by vacuum truck. As the discharge event occurred in the early hours of the morning and there was no direct impact on the public, PWC primary concern was to rectify the issue with the pump so the uncontrolled discharge could stop. As such PWC did not implement our standard clean up "Sewage Spills/Overflows Response" procedure.
	A visual inspection conducted by PWC staff the following morning found no gross contaminates present, nor were any sealed surfaces affected. Liming was not undertaken as no areas of ponding were present.
	PWC has an ongoing project currently being undertaken to reduce storm water inflow and infiltration and an ongiong reline program across the PWC network. These initiatives will help prevent large quantities of stormwater entering the network therefore reducing the frequency and duration of similar events.
	Following an assessment of all possible impacts PWC does not consider this event to have resulted in material environmental harm of a high impact or on a wide scale, as the site is located away from residential areas and as the event occurred during the early hours of the morning. The discharge was highly diluted due to the significant quantity and duration of the rain leading up to and following the event.
(f) the identity of the person notifying the NT EPA	Laura Haycock Environmental Officer Environmental Services Power and Water Corporation