Appendix 4-8 Emergency Response Procedures

Emergency Response

General Requirement

The PPSTW operator shall inform DSD, EPD, WSD and LCSD in case of any emergency discharge of untreated or partially treated effluent due to power supply failure or equipment failure in PPSTW. A list of address, email address, phone and fax number of key persons of concerned parties responsible for action should be made available to the PPSTW operators. The PPSTW operator shall be responsible for carrying out marine water quality monitoring within 24 hours when the discharge event occurs. The PPSTW operator shall closely liaise with relevant parties so that the DSD, EPD, WSD and LCSD can be informed promptly of any cases of emergency discharge. The event and action plan under emergency discharge of treated or partially treated effluent are provided in **Table A4-8-1**.

Under emergency discharge, it is recommended that the PPSTW operator should monitor daily quality (i.e. *E.coli* level, pH value, temperature, salinity, turbidity and dissolved oxygen) and quantity of sewage effluent discharged from the PPSTW during the whole water quality monitoring period for data interpretation.

Table A4-8-1 Emergency Response Plan for Discharge of Untreated or Partially Treated Effluent from PPSTW

Event	Action Plan
Failure of main treatment units due to power supply failure or equipment failure	PPSTW operators to investigate the reason of plant failure and to implement appropriate remedial measures as stipulated in the contingency / operation plan for the PPSTW.
	 If emergency discharge is required, PPSTW operators to inform DSD, EPD, WSD and LCSD within 1 hour after the discharge commence.
	 EPD / LCSD to take immediate actions to prevent any bathing and water sports activities at the beaches and secondary contact recreation subzones within the North Western WCZ.
	4. PPSTW operators to instruct the Environmental Team to commence water monitoring within 24 hours after the emergency discharge event occurs.
	5. PPSTW operators to record the effluent flow and effluent quality (i.e. <i>E.coli</i> level, pH value, temperature, salinity, turbidity and dissolved oxygen) during the water monitoring period.
	6. DSD to ensure appropriate remedial measures as stipulated in the contingency / operation plan are implemented.
	7. Environmental Team to conduct daily marine water monitoring (as discussed in Section 3.2.1.24) until the baseline water quality levels are restored or 7 days after the emergency discharge is ceased, whichever is the shortest.
	8. The Independent Environmental Checker shall compare the impact monitoring data with the baseline data to identify the degree of impact caused by the emergency discharge (if any) and to determine when the normal water quality conditions are restored. The findings shall be provided to EPD and LCSD.

The impact monitoring data shall be compared with the baseline data and relevant water quality objectives to identify the degree of impact caused by the emergency discharge. For each emergency discharge event, a Water Quality Monitoring Report shall be submitted to DSD, EPD and LCSD within 10 days after the laboratory testing result for the last sample collected during the monitoring period is available. The findings of the water quality monitoring results including data presentation, statistical analysis, discussion, conclusion and recommendation shall be provided in the Water Quality Monitoring Report.