

For Information

District Council Paper Emergency Sewage Discharge Incident at Pillar Point Sewage Treatment Works, Tuen Mun

Purpose

This paper reports on the emergency sewage discharge incident at Pillar Point Sewage Treatment Works (PPSTW) in Tuen Mun from 3:30 p.m. on 25 August to 2:30 a.m. on 26 August 2014 due to equipment breakdown at the PPSTW.

Background

2. Built in 1982, the PPSTW in Tuen Mun was designed for treatment of domestic sewage as well as industrial sewage generated from Tuen Mun district. At present, it provides treatment for some 180 000 m³ of sewage daily. The PPSTW has recently undergone upgrading with its sewage treatment level enhanced to Chemically Enhanced Primary Treatment. Treated effluent is discharged to the Urmston Road Channel off Pillar Point through a submarine outfall. The upgrading works were completed in May this year.

3. Currently, the PPSTW is operated and maintained by the contractor of the Drainage Services Department (DSD).

The incident

4. The incident occurred at about 3:30 p.m. on 25 August 2014 because of the malfunctioned fine screens at the PPSTW. While the contractor was carrying out emergency repair works, about 95 000 m³ of sewage from Tuen Mun catchment could not pass through the fine screens to the downstream treatment facilities of the PPSTW and therefore had to be discharged to the Urmston Road Channel off Pillar Point through an emergency submarine outfall of about 700 m long. Making use of the

strong tidal current with significant dilution effect, such emergency sewage discharge arrangement has much lower environmental impact than immediately discharging off the seawall. At about 9:30 p.m. through continuous efforts in carrying out emergency repair, the fine screening operation was partially resumed thus allowing part of the sewage to be conveyed to the downstream facilities for further treatment. All emergency repairing work was completed at 2:30 a.m. on 26 August and subsequently the PPSTW resumed normal operation.

5. During the incident period on 25 August, DSD notified the Environmental Protection Department (EPD) and the Leisure and Cultural Services Department (LCSD) of the incident. LCSD announced on the same day the temporary closure of 14 beaches in Tuen Mun and Tsuen Wan districts. On 26 August, EPD collected water samples at the 14 beaches for water quality analysis. The analysis results were available on 27 August and showed that the water quality of the beaches concerned was suitable for swimming. LCSD re-opened all 14 beaches on the same day.

Follow-up actions

6. DSD is conducting an investigation into the incident and would scrutinise the incident report submitted by the contractor for review and follow-up actions. Improvement measures would also be put in place to prevent recurrence of similar incidents.

Harbour Area Treatment Scheme Division
Drainage Services Department
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