

Annex F3

Investigation Reports of
Environmental Quality
Limit Exceedance

Investigation Report of Environmental Quality Limit Exceedance

Project	South East New Territories (SENT) Landfill Extension
Date	9 April 2020
Time	DP6: 14:23 hrs and 14:34 hrs (Duplicate)
Monitoring Location	DP6
Parameter	Surface Water (pH)
Action / Limit Levels	DP6: Action level: >8.39 Limit level: >8.40
Measured Level	DP6: 9.65 & 9.46 DP6 (Duplicate): 9.60 & 9.62
Possible reason	<p>No works which may lead to potential pH increase (e.g. concreting works) was conducted in the vicinity of surface water channel leading to DP6 on and before the sampling day based on on-site observations and construction activities described by the Contractor. During the sampling event, no potential surface water overflow to the DP6 channel was observed.</p> <p>Berm was constructed along the DP6 channel to collect the surface runoff which was treated by the Wetsep prior to discharge. Yet during the sampling event, it was observed that the Wetsep near DP6 was not functioning properly with reference to the on-site checking of the treated water at the outlet of the Wetsep. The pH display of the Wetsep was found not functioning properly while the pH of the treated water at the Wetsep outlet (i.e. 9.55) exceeded the Action and Limit Level.</p> <p>Based on the above, the pH exceedance at DP6 was deemed to Project-related activities.</p>
Action Taken / Action to be Taken	<p>Examination of environmental performance of the Project will be continued during the weekly inspections. The Contractor is reminded to implement relevant and appropriate mitigation measures according to the updated EM&A Manual to avoid any exceedance of the Action and Limit Level.</p> <p>In addition, the Contractor shall repair the pH display and review the efficiency of the Wetsep at DP6. The Contractor shall also check and monitor the Wetsep operation regularly to ensure it is functioning properly at all times and the quality of the treated water comply with the discharge standard.</p>
Remarks	-

Prepared by: Abbey Lau
 Designation: Environmental Team
 Date: 22 April 2020

Investigation Report of Environmental Quality Limit Exceedance

Project	South East New Territories (SENT) Landfill Extension
Date	9 April 2020
Time	DP6: 14:23 hrs and 14:34 hrs (Duplicate)
Monitoring Location	DP6
Parameter	Surface Water (Suspended Solids (SS))
Action / Limit Levels	DP6: Action level: >11.7 mg/L Limit level: >12.7 mg/L
Measured Level	DP6: 107 mg/L DP6 (Duplicate): 114 mg/L
Possible reason	<p>No works which may lead to potential SS increase was conducted in the vicinity of surface water channel leading to DP6 on and before the sampling day based on on-site observations and construction activities described by the Contractor. During the sampling event, no potential surface water overflow to the DP6 channel was observed.</p> <p>Berm was constructed along the DP6 channel to collect the surface runoff which was treated by the Wetsep prior to discharge. Yet during the sampling event, it was observed that the Wetsep near DP6 was not functioning properly with reference to the on-site checking of the treated water at the outlet of the Wetsep. The treated water was observed to be muddy at the Wetsep outlet.</p> <p>Based on the above, the SS exceedance at DP6 was deemed to Project-related activities.</p>
Action Taken / Action to be Taken	<p>Examination of environmental performance of the Project will be continued during the weekly inspections. The Contractor is reminded to implement relevant and appropriate mitigation measures according to the updated EM&A Manual to avoid any exceedance of the Action and Limit Level.</p> <p>In addition, the Contractor shall review the efficiency of the Wetsep at DP6 and check and monitor the Wetsep operation regularly to ensure it is functioning properly at all times and the quality of the treated water comply with the discharge standard.</p>
Remarks	-

Prepared by: Abbey Lau
 Designation: Environmental Team
 Date: 22 April 2020

Investigation Report of Environmental Quality Limit Exceedance

Project	South East New Territories (SENT) Landfill Extension
Date	28 May 2020
Time	DP4T: 15:13 DP6: 14:48 and 14:57 (Duplicate)
Monitoring Location	DP4T and DP6
Parameter	Surface Water (Suspended Solids (SS))
Action / Limit Levels	DP4T and DP6: Action level: >11.7 mg/L Limit level: >12.7 mg/L
Measured Level	DP4T: 42.2 mg/L DP6: 17.7 mg/L DP6 (Duplicate): 16.4 mg/L
Possible reason	<p>DP4T:</p> <p>No works which may lead to potential SS increase (e.g. active stockpiling and excavation works) was conducted in the vicinity of surface water channel leading to DP4T on the sampling day based on on-site observations and construction activities described by the Contractor. During the sampling event, no potential surface water overflow to the DP4T channel was observed. Surface runoff collected at DP4T channel was treated by the Wetsep prior to discharge. Environmental deficiency was not observed during the weekly site inspection in the morning. The Contractor has taken the necessary control /mitigation measures outlined in the updated EM&A Manual.</p> <p>From the on-site rainfall record of May 2020, heavy rainfall event was recorded on 22, 23, 25 and 26 May 2020. Red rainstorm warning signal was issued by the Hong Kong Observatory on 25 May 2020. No raining was recorded during the sampling event.</p> <p>During the sampling event, no other sources (e.g. existing SENT Landfill and Clearwater Bay Country Park) was identified in the vicinity of surface water channel leading to DP4T which might cause the SS exceedance at DP4T. Contaminated runoff from the haul road and other unpaved areas during the previous rainfall events could be the potential source of SS contributing to the exceedance. The SS exceedance at DP4T was therefore deemed to Project-related activities.</p> <p>DP6:</p> <p>No works which may lead to potential SS increase (e.g. active stockpiling and excavation works) was conducted in the vicinity of surface water channel leading to DP6 on the sampling day based on on-site observations and construction activities described by the Contractor. During the sampling event, no potential surface water overflow to the DP6 channel was observed. Silt fencing was</p>

	<p>constructed along the DP6 channel to minimise SS runoff to the channel. Surface runoff collected at DP6 channel was treated by the Wetsep prior to discharge. Environmental deficiency was not observed during the weekly site inspection in the morning. The Contractor has taken the necessary control /mitigation measures outlined in the updated EM&A Manual.</p> <p>From the on-site rainfall record of May 2020, heavy rainfall event was recorded on 22, 23, 25 and 26 May 2020. Red rainstorm warning signal was also issued by the Hong Kong Observatory on 25 May 2020. During the sampling event, no other sources (e.g. (e.g. Clearwater Bay Country Park) was identified in the vicinity of surface water channel leading to DP6 which might cause the SS exceedance at DP6. Contaminated runoff from the haul road and other unpaved areas during the previous rainfall events could be the potential source of SS contributing to the exceedance. The SS exceedance at DP6 was therefore deemed to Project-related activities.</p> <p>It should be noted that although the measured SS level exceeded the limit level of the EM&A programme, it is still well within the WPCO effluent discharge limit of SS for the Junk Bay Water Control Zone (30 mg/L). The discharge of surface water with this SS level from DP6 will not cause adverse water quality impact to the Junk Bay Water Control Zone.</p>
Action Taken / Action to be Taken	<p>Examination of environmental performance of the Project will be continued during the weekly inspections. The Contractor is reminded to implement relevant and appropriate mitigation measures according to the updated EM&A Manual to avoid any exceedance of the Action and Limit Level.</p> <p>In addition, the Contractor is reminded to compact the exposed soil at the site to minimise SS runoff and review the treatment capacity and the number of the Wetseps to ensure all surface water is treated before discharge at DP4T and DP6.</p>
Remarks	-

Prepared by: Abbey Lau
Designation: Environmental Team
Date: 27 July 2020

Investigation Report of Environmental Quality Limit Exceedance

Project	South East New Territories (SENT) Landfill Extension
Date	4 June 2020
Time	DP4T: 14:35 and 14:46 (Duplicate)
Monitoring Location	DP4T
Parameter	Surface Water (pH)
Action / Limit Levels	DP4T: Action level: >8.39 Limit level: >8.40
Measured Level	DP4T: 8.53 & 8.49 DP4T (Duplicate): 8.45 & 8.45
Possible reason	<p>No works which may lead to potential pH increase (e.g. concreting works) was conducted in the vicinity of surface water channel leading to DP4T on and before the sampling day based on on-site observations and construction activities described by the Contractor. During the sampling event, no potential surface water overflow to the DP4T channel was observed.</p> <p>Surface runoff collected at DP4T channel was treated by the Wetsep prior to discharge. Yet during the sampling event, it was observed that the Wetsep near DP4T was not functioning properly with reference to the on-site checking of the treated water at the outlet of the processing chamber of the Wetsep. The pH display of the Wetsep was found not functioning properly while the pH of the treated water (i.e. 8.53) exceeded the Action and Limit Level.</p> <p>Based on the above, the pH exceedance at DP4T was deemed to Project-related activities. However, it is noted that the Water Pollution Control Ordinance (WPCO) water discharge licence was obtained by the Contractor for the operation of the Wetsep near DP4T and the allowable discharge limit for pH is 6 to 9. The treated water from the Wetsep did not exceed the WPCO discharge limit and cause any adverse water quality impact.</p>
Action Taken / Action to be Taken	<p>Examination of environmental performance of the Project will be continued during the weekly inspections. The Contractor is reminded to implement relevant and appropriate mitigation measures according to the updated EM&A Manual to avoid any exceedance of the Action and Limit Level.</p> <p>In addition, the Contractor shall repair the pH display and review the efficiency of the Wetsep at DP4T. The Contractor shall also check and monitor the Wetsep operation regularly to ensure it is functioning properly at all times and the quality of the treated water comply with the discharge standard.</p>
Remarks	-

Prepared by: Abbey Lau
Designation: Environmental Team
Date: 30 June 2020