

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	3 July 2020
Time	DP4T: 15:06 DP6: 14:36 and 14:45 (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: 18.6 mg/L DP6: 14.0 mg/L DP6 (Duplicate): 14.4 mg/L
Possible reason	<p>DP4T:</p> <p>From the on-site rainfall record of July 2020, rainfall event was recorded on 2 July 2020 before the sampling event on 3 July 2020. On 2 July 2020, muddy surface water overflow from other project site to the sediment trap leading to DP4T was observed. The sample taken at DP4T on the day might not represent the surface water runoff from SENTX and further upstream.</p> <p>In addition, 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. Site runoff discharged to the DP4T channel was treated by the Wetsep prior to discharge. Wetsep near DP4T and sediment trap were functioning properly during the sampling event. Environmental deficiency was not observed during the weekly site inspection on 2 July 2020 morning. The Contractor has complied with the recommendations and conditions outlined in the updated EM&A Manual.</p> <p>Due to presence of the influencing factor other project site and no potential source from the Project-related activities which may lead to SS increase was identified, there is no adequate evidence showing that the SS exceedance at DP4T was 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 DP4T will not cause adverse water quality impact to the Junk Bay Water Control Zone.</p>

	<p>DP6: From the on-site rainfall record of July 2020, rainfall event was recorded on 2 July 2020 before the sampling event on 3 July 2020. On 2 July 2020, muddy surface water overflow from other project site to the temporary drain along southern site boundary leading to DP6 was observed. The sample taken at DP6 on the day might not represent the surface water runoff from SENTX and further upstream.</p> <p>In addition, 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. Site runoff discharged to the DP6 channel was treated by the Wetsep prior to discharge. Wetsep near DP6 was functioning properly during the sampling event. Environmental deficiency was not observed during the weekly site inspection on 2 July 2020 morning. The Contractor has complied with the recommendations and conditions outlined in the updated EM&A Manual.</p> <p>Due to presence of the influencing factor other project site and no potential source from the Project-related activities which may lead to SS increase was identified, there is no adequate evidence showing that the SS exceedance at DP6 was 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 was reminded to discuss the surface water overflow and drainage issues with WSD/ CEDD so that there will be no surface water runoff from other project site to the SENTX boundary.</p>
Remarks	-

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

Investigation Report of Environmental Quality Limit Exceedance

Project	South East New Territories (SENT) Landfill Extension
Date	15 July 2020
Time	DP4T: 14:46 and 15:03 (Duplicate)
Monitoring Location	DP4T
Parameter	Surface Water (Suspended Solids (SS))
Action / Limit Levels	DP4T: Action level: >11.7 mg/L Limit level: >12.7 mg/L
Measured Level	DP4T: 28.2 mg/L DP4T (Duplicate): 27.8 mg/L
Possible reason	<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 on-site investigation. 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 July 2020, no rainfall event was recorded from 9 to 14 July 2020 before the sampling event on 15 July 2020. During the sampling event, no other sources (e.g. upstream or other project sites) was identified in the vicinity of surface water channel leading to DP4T which might cause the SS exceedance at DP4T. Contaminated runoff from the unpaved areas and other construction works 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>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 DP4T will not cause adverse water quality impact to the Junk Bay Water Control Zone.</p>
Action Taken / Action to be Taken	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. In addition, the Contractor is reminded to compact the exposed soil at the site to minimise SS runoff.

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Prepared by: Abbey Lau

Designation: Environmental Team

Date: 23 November 2020

Investigation Report of Environmental Quality Limit Exceedance

Project	South East New Territories (SENT) Landfill Extension
Date	6 August 2020
Time	DP4T: 16:14 DP6: 15:34 and 15:43 (Duplicate)
Monitoring Location	DP4T and DP6
Parameter	Surface Water (Suspended Solids (SS))
Action / Limit Levels	Action level: >11.7 mg/L Limit level: >12.7 mg/L
Measured Level	DP4T: 66.1 mg/L DP6: 420 mg/L DP6 (Duplicate): 432 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, surface water overflow from the sediment trap to the DP4T channel which was not treated by the Wetsep prior to discharge was observed. Environmental deficiencies on maintenance of temporary drains and surface water management were observed during the weekly site inspection in the morning.</p> <p>From the on-site rainfall record of August 2020, heavy rainfall event was recorded on 1, 2, 3 and 5 August 2020 before the sampling event. Amber rainstorm warning signal was also issued by the Hong Kong Observatory on 5 August 2020.</p> <p>During the sampling event, no raining was recorded and no other sources (e.g. other project sites) 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, potential surface water overflow to the DP6 channel was observed. Surface runoff collected at DP6 channel was treated by the Wetsep prior to</p>

	<p>discharge. Environmental deficiencies on maintenance of temporary drains and surface water management were observed during the weekly site inspection in the morning.</p> <p>From the on-site rainfall record of August 2020, heavy rainfall event was recorded on 1, 2, 3 and 5 August 2020 before the sampling event. Amber rainstorm warning signal was also issued by the Hong Kong Observatory on 5 August 2020.</p> <p>During the sampling event, no raining was recorded and no other sources (e.g. Clearwater Bay Country Park, other project sites) 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>
Action Taken / Action to be Taken	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. In addition, the Contractor is reminded to compact the exposed soil at the site to minimise SS runoff.
Remarks	-

Prepared by: Abbey Lau
Designation: Environmental Team
Date: 23 November 2020

Investigation Report of Environmental Quality Limit Exceedance

Project	South East New Territories (SENT) Landfill Extension
Date	13 August 2020
Time	14:25 and 14:34 (Duplicate)
Monitoring Location	DP6
Parameter	Surface Water (Suspended Solids (SS))
Action / Limit Levels	Action level: >11.7 mg/L Limit level: >12.7 mg/L
Measured Level	DP6: 30.9 mg/L DP6 (Duplicate): 30.2 mg/L
Possible reason	<p>From the on-site rainfall record of August 2020, heavy rainfall event was recorded on 12 August 2020 before the sampling event. On 12 August 2020, muddy surface water discharge and overflow from other project site to the temporary drain along southern site boundary leading to DP6 was observed. The sample taken at DP6 on the day might not represent the surface water runoff from SENTX and further upstream.</p> <p>In addition, 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 constructed along the DP6 channel to minimise SS runoff to the channel. Site surface runoff collected at DP6 channel was treated by the Wetsep prior to discharge.</p> <p>Environmental deficiency was not observed during the weekly site inspection on 13 August 2020 morning. The Contractor has implemented the surface water control and mitigation measures recommended in the updated EM&A Manual.</p> <p>Due to presence of the influencing factor other project sites and no potential source from the Project-related activities which may lead to SS increase was identified, there is no adequate evidence showing that 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 was reminded to discuss the surface</p>

	water drainage and overflow issues with WSD/ CEDD so that there will be no surface water runoff from other project site to the SENTX boundary.
Remarks	-

Prepared by: Abbey Lau
Designation: Environmental Team
Date: 23 November 2020

Investigation Report of Environmental Quality Limit Exceedance

Project	South East New Territories (SENT) Landfill Extension
Date	17 September 2020
Time	14:27 and 14:36 (Duplicate)
Monitoring Location	DP6
Parameter	Surface Water (pH)
Action / Limit Levels	Action level: >8.39 Limit level: >8.40
Measured Level	DP6: 8.94 & 8.94 DP6 (Duplicate): 8.87 & 8.89
Possible reason	<p>From the on-site rainfall record of September 2020, heavy rainfall events were recorded on 14 to 17 September 2020 before the sampling event. Amber rainstorm warning signal was also issued by the Hong Kong Observatory on 15 September 2020. On 15 September 2020, muddy surface water discharge and overflow from other project sites to the temporary drain along southern site boundary leading to DP6 was observed. The sample taken at DP6 on the day might not represent the surface water runoff from SENTX and further upstream.</p> <p>In addition, 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 the sampling day based on on-site observations and construction activities described by the Contractor. Site surface runoff collected at DP6 channel was treated by the Wetsep prior to discharge. Wetsep near DP6 was functioning properly during the sampling event.</p> <p>Environmental deficiency was not observed during the weekly site inspection on 17 September 2020 morning before the surface water monitoring. The Contractor has implemented the surface water control and mitigation measures recommended in the updated EM&A Manual.</p> <p>Due to presence of the influencing factor other project site and no potential source from the Project-related activities which may lead to pH increase was identified, there is no adequate evidence showing that the pH exceedance at DP6 was deemed to Project-related activities.</p> <p>It is also noted that the Water Pollution Control Ordinance (WPCO) water discharge licence was obtained by the Contractor for the operation of the Wetsep near DP6 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 Levels.</p> <p>In addition, the Contractor was reminded to discuss the surface water drainage and overflow issues with WSD/ CEDD so that there will be no surface water runoff from other project site to the SENTX boundary.</p>
Remarks	-

Prepared by: Abbey Lau
Designation: Environmental Team
Date: 29 September 2020

Investigation Report of Environmental Quality Limit Exceedance

Project	South East New Territories (SENT) Landfill Extension
Date	17 September 2020
Time	14:27 and 14:36 (Duplicate)
Monitoring Location	DP6
Parameter	Surface Water (Suspended Solids (SS))
Action / Limit Levels	Action level: >11.7 mg/L Limit level: >12.7 mg/L
Measured Level	DP6: 62.9 mg/L DP6 (Duplicate): 62.1 mg/L
Possible reason	<p>From the on-site rainfall record of September 2020, heavy rainfall events were recorded on 14 to 17 September 2020 before the sampling event. Amber rainstorm warning signal was also issued by the Hong Kong Observatory on 15 September 2020. On 15 September 2020, muddy surface water discharge and overflow from other project site to the temporary drain along southern site boundary leading to DP6 was observed. The sample taken at DP6 on the day might not represent the surface water runoff from SENTX and further upstream.</p> <p>In addition, 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. Site surface runoff collected at DP6 channel was treated by the Wetsep prior to discharge.</p> <p>Environmental deficiency was not observed during the weekly site inspection on 17 September 2020 morning. The Contractor has implemented the surface water control and mitigation measures recommended in the updated EM&A Manual.</p> <p>Due to presence of the influencing factor other project sites and no potential source from the Project-related activities which may lead to SS increase was identified, there is no adequate evidence showing that 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 was reminded to discuss the surface water drainage and overflow issues with WSD/ CEDD so that</p>

	there will be no surface water runoff from other project site to the SENTX boundary.
Remarks	-

Prepared by: Abbey Lau
Designation: Environmental Team
Date: 9 October 2020