



ANNEX D7

INVESTIGATION REPORTS OF
ENVIRONMENTAL QUALITY LIMIT
EXCEEDANCE

Investigation Report of Environmental Quality Limit Exceedance

Project	South East New Territories (SENT) Landfill Extension
Date	16 October 2023
Time	11:41 – 12:11
Monitoring Location	Thermal Oxidiser
Parameter	Sulphur Dioxide (SO ₂)
Limit Levels	>0.07 g/s
Measured Level	0.79 g/s
Possible reason	<p>As confirmed by the Contractor, the thermal oxidiser was under normal operating conditions during the sampling event. The thermal oxidizer stack emission monitoring results (NO₂, CO, Benzene, Vinyl chloride, gas combustion temperature, exhaust temperature and exhaust gas velocity) on 16 October 2023 were well within the respective limit levels. It is possible that the slight exceedance of SO₂ limit level measured on 16 October 2023 could be due to the low desulfurization efficiency of the desulfurization tanks. Hence, the SO₂ exceedance at the thermal oxidizer on 16 October 2023 is considered to be Project related.</p> <p>In accordance with Table 3.8b of the updated EM&A Manual, repeat measurement was conducted on 16 November 2023 (it should be noted that the turnaround time of the laboratory analysis of the flue gas sample is 3 weeks and the results were available on 29 November 2023) to confirm findings. Exceedance of SO₂ Limit Level was recorded at the thermal oxidiser (0.45 g/s) during the sampling event. The thermal oxidiser showed consecutive exceedance of the stack emission limit (SO₂).</p> <p>It should be noted that although the measured SO₂ level exceeded the limit level of the EM&A programme (which was set based on the stack design parameters), the slight exceedance of SO₂ on 16 October 2023 will not cause adverse air quality impact to the identified ASRs as the anticipated SO₂ concentrations at the identified ASRs will still be well below the respective AQO criteria with reference to the findings of the operational air quality impact assessment of the SENTX Environmental Review Report.</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 closely monitoring the operating conditions of the thermal oxidiser to avoid any exceedance of the Limit Levels.</p> <p>The Contractor has arranged inspection and maintenance at the desulfurization tanks in December 2023 to enhance the desulfurization efficiency.</p>

Remarks	-
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Prepared by: Abbey Lau
Designation: Environmental Team
Date: 12 December 2023

Investigation Report of Environmental Quality Limit Exceedance

Project	South East New Territories (SENT) Landfill Extension
Date	16 November 2023
Time	12:19 – 12:49
Monitoring Location	Thermal Oxidiser
Parameter	Sulphur Dioxide (SO ₂)
Limit Levels	>0.07 g/s
Measured Level	0.45 g/s
Possible reason	<p>As confirmed by the Contractor, the thermal oxidiser was under normal operating conditions during the sampling event. The thermal oxidizer stack emission monitoring results (NO₂, CO, Benzene, Vinyl chloride, gas combustion temperature, exhaust temperature and exhaust gas velocity) on 16 November 2023 were well within the respective limit levels. It is possible that the slight exceedance of SO₂ limit level measured on 16 November 2023 was due to low desulfurization efficiency of the desulfurization tanks. Hence, the SO₂ exceedance at the thermal oxidizer on 16 November 2023 is considered Project-related.</p> <p>In accordance with Table 3.8b of the updated EM&A Manual, repeat measurement was conducted on 15 December 2023 (it should be noted that the turnaround time of the laboratory analysis of the flue gas sample is 3 weeks and the results were available on 3 January 2024) to confirm findings. The SO₂ concentration (<0.005 g/s) measured on 15 December 2023 is well below Limit Level. There is no consecutive exceedance of SO₂ concentrations in the flue gas emission of the thermal oxidiser.</p> <p>It should be noted that although the measured SO₂ level exceeded the limit level of the EM&A programme (which was set based on the stack design parameters), the slight exceedance of SO₂ on 16 November 2023 will not cause adverse air quality impact to the identified ASRs as the anticipated SO₂ concentrations at the identified ASRs will still be well below the respective AQO criteria with reference to the findings of the operational air quality impact assessment of the SENTX Environmental Review Report.</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 closely monitoring the operating conditions of the thermal oxidiser to avoid any exceedance of the Limit Levels.</p> <p>The Contractor has arranged inspection and maintenance at the desulfurization tanks in December 2023 to enhance the desulfurization efficiency.</p>

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Prepared by: Abbey Lau

Designation: Environmental Team

Date: 4 January 2024

Investigation Report of Environmental Quality Limit Exceedance

Project	South East New Territories (SENT) Landfill Extension
Date	21 November 2023
Time	8:00 (21 November 2023) – 8:00 (22 November 2023)
Monitoring Location	AM3
Parameter	24-hour Total Suspended Particulates (TSP)
Action / Limit Levels	Action level: >260 µg/ m ³ Limit level: >260 µg/m ³
Measured Level	272 µg /m ³
Possible reason	<p>From the meteorological data obtained from the SENTX on-site meteorological monitoring station, a predominantly northeasterly to southeasterly wind with highest wind speed 1.5 m/s was recorded on 21 and 22 November 2023 during the sampling event.</p> <p>On 21 November 2023, dust emission from the public fill stockpiling areas and active earthworks in vicinity of dust monitoring station AM3 were observed. The sample taken at AM3 on the day might not represent the operation dust emission from SENTX.</p> <p>In addition, no works from SENTX which may lead to potential dust emission was conducted in the vicinity of AM3 on the sampling day based on ET site representative’s on-site observations and construction and operation activities as described by the Contractor. Environmental deficiency was not observed during the weekly site inspection on 23 November 2023. The Contractor has implemented the dust control and mitigation measures recommended in the updated EM&A Manual.</p> <p>In accordance with Table 3.8b of the updated EM&A Manual, repeat measurement was conducted on 27 November 2023 to confirm findings. 24-hour TSP level of 223 µg/m³ (below Action and Limit Levels) was measured during the sampling event, which demonstrate no consecutive dust impact at AM3.</p> <p>Due to presence of the influencing factor from other project site and no potential source from the Project-related activities in the vicinity of AM3 which may lead to the high TSP level was identified, there is no adequate evidence showing that the TSP exceedance at AM3 was 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/Limit Level.

	In addition, the Contractor was reminded to discuss the dust control measures with CEDD, to minimize the dust impact from the other project sites to proximity to the SENTX boundary.
Remarks	-

Prepared by: Abbey Lau
Designation: Environmental Team
Date: 12 December 2023