

Annex D6

Investigation Reports of
Environmental Quality
Limit Exceedance

Investigation Report of Environmental Quality Limit Exceedance

Project	South East New Territories (SENT) Landfill Extension
Date	13 December 2021
Time	9:00 (13 December 2021) – 9:00 (14 December 2021)
Monitoring Location	AM4
Parameter	24-hour Total Suspended Particulates (TSP)
Action / Limit Levels	Action level: >260 µg/ m ³ Limit level: >260 µg/m ³
Measured Level	282 µg /m ³
Possible reason	<p>From the meteorological data obtained from the SENTX on-site meteorological monitoring station, a predominantly easterly to east-southeasterly wind with highest wind speed 7.8m/s was recorded on 13 and 14 December 2021 during the sampling event. Occasional westerly to west-northwesterly wind was also recorded during the sampling event</p> <p>On 13 December 2021, dust emission from the public fill stockpiling areas and traffic emission from other project site n vicinity and located at the west of dust monitoring location AM4 were observed. The sample taken at AM4 on the day might not represent the operation dust emission from SENTX.</p> <p>In addition, no works which may lead to potential dust emission was conducted in the vicinity of dust monitoring location AM4 on the sampling day based on on-site observations and construction and operation activities as described by the Contractor. Environmental deficiency was not observed during the weekly site inspection on 9 December 2021. 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 19 December 2021 to confirm findings. 24-hour TSP level of 129 µg/m³ (below Action and Limit Levels) was measured during the sampling event, which demonstrate no consecutive dust impact at AM4.</p> <p>Due to presence of the influencing factor other project sites and no potential source from the Project-related activities in the vicinity of AM4 which may lead to the high TSP level was identified, there is no adequate evidence showing that the TSP exceedance at AM4 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

	<p>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 dust control measures with CEDD to minimize the dust impact from other project site to the SENTX boundary.</p>
Remarks	-

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Designation: Environmental Team
Date: 10 January 2022

Investigation Report of Environmental Quality Limit Exceedance

Project	South East New Territories (SENT) Landfill Extension
Date	17 December 2021
Time	11:00 – 11:30
Monitoring Location	Landfill Gas Flare 2 (F602)
Parameter	Carbon Monoxide (CO)
Limit Levels	>2.43 g/s
Measured Level	2.81 g/s
Possible reason	<p>As confirmed by the Contractor, Landfill Gas Flare 2 (F602) was under normal operating conditions during the sampling event. The landfill gas flare emission monitoring results (NO₂, SO₂, Benzene, Vinyl chloride, gas combustion temperature, exhaust temperature and exhaust gas velocity) at Landfill Gas Flare 2 (F602) on 17 December 2021 were well within the respective limit levels. It is possible that the slight exceedance of CO limit level measured on 17 December 2021 could be due to some short-term system instability (e.g. insufficient air, short gas residence time or ineffective mixing of landfill gas and air during the combustion) during the sampling event. Hence, the CO exceedance at Landfill Gas Flare 2 (F602) on 17 December 2021 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 12 January 2022 (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 11 February 2022) to confirm findings. The CO concentration (0.032 g/s) measured on 12 January 2022 is well below Limit Level. There is no consecutive exceedance of CO concentrations in the flue gas emission of Landfill Gas Flare 2 (F602).</p> <p>It should also be noted that although the measured CO level exceeded the limit level of the EM&A programme (which was set based on the stack design parameters), the slight exceedance of CO on 17 December 2021 will not cause adverse air quality impact to the identified ASRs as the anticipated CO 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	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 flare to avoid any exceedance of the Action and Limit Levels.

Remarks	-
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Date: 22 February 2022