

Annex F

## Investigation Report

**Investigation Report of CEMS Exceedances**

Date	1 - 31 December 2021
Time	Continuous monitoring throughout December 2021
Monitoring Location	Continuous Environmental Monitoring System (CEMS)
Parameter	Various emission parameters of the Cogeneration Units (CHP) and the Ammonia Stripping Plant (ASP)
Exceedance Description	<p>1. Continuous monitoring was carried out at the CAPCS, CHP and ASP throughout the reporting period using the CEMS. According to the EM&amp;A Manual, exceedance is considered if the emission concentration of the concerned pollutants is higher than the emission limits stated in Tables 2.2, 2.3 and 2.5 of the EM&amp;A Manual (Version F) for CAPCS, CHP and ASP respectively. The concentration of the concerned air pollutants were monitored on-line by the CEMS. Exceedances of various emission parameters were recorded on the CEMS including:</p> <ul style="list-style-type: none"> <li>• SO<sub>2</sub> in CHP 3</li> <li>• NO<sub>x</sub>, SO<sub>2</sub>, VOCs and NH<sub>3</sub> in the ASP</li> </ul> <p>2. The Contractor has investigated the cause of the exceedance and identified that</p> <ul style="list-style-type: none"> <li>• SO<sub>2</sub> exceedances from CHP 3 and the ASP were due to blockage of the hot water system of the desulphurisation system.</li> <li>• NO<sub>x</sub>, VOCs and NH<sub>3</sub> exceedances from the ASP were due to system instability caused by blockage of the stripping columns of the ASP.</li> </ul>
Action Taken / Action to be Taken	<p>The Contractor cleaned the blockage of the hot water system of the desulphurisation system immediately to resolve the issue.</p> <p>To ensure stripping efficiency and stable operation of the ASP, the Contractor has arranged acid-cleaning of the column. The Contractor has also arranged packaging cleaning in the next reporting month. The Contractor plans to arrange packaging cleaning in the coming reporting periods.</p>
Remedial Works and Follow-up Actions	<p>The Contractor is recommended to closely monitor the processes, including the modification works and follow-up emission monitoring of the ASP to avoid exceedance.</p> <p>The Contractor should review the routine inspection and maintenance schedule of the ASP and conduct preventative maintenance to avoid similar re-occurrence of the equipment failure.</p>

Prepared by: Angela Yung, MT Representative

Date: 11 January 2022


**Investigation Report of Effluent Discharge Exceedances**

Date	9 December 2021
Monitoring Location	Petrol Interceptor 2 (Stream B)
Parameter	Various discharge parameters of the Petrol Interceptor 2
Exceedance Description	<p>1. According to the EM&amp;A Manual (Rev. F), the monitoring should be carried out in accordance with the Water Pollution Control Ordinance (WPCO) licence. The licence requires the Contactor to carry out bi-monthly sampling and monitoring at the Petrol Interceptors. Sampling is required for this reporting period. Sample collected from Petrol Interceptor 2 showed exceedance of various discharge limits:</p> <ul style="list-style-type: none"> <li>• Suspended Solid</li> <li>• Chemical Oxygen Demand</li> </ul> <p>2. The Contractor has investigated the cause of the exceedance and identified that:</p> <ul style="list-style-type: none"> <li>• Ad-hoc unloading and unpacking of food waste (21 tonnes of egg, 10 tonnes of ginseng, etc.) arranged by EPD near the sampling point between mid-November and early December 2021.</li> <li>• During the period, cleaning water has washed food residue down to the petrol interceptor and might have contaminated the concerned sampling point.</li> <li>• The water level at the sampling point was low during sampling. There were limited water flow as the reporting period was a dry season.</li> </ul>
Action Taken / Action to be Taken	The Contractor has arranged cleaning of the petrol interceptor in January 2022.
Remedial Works and Follow-up Actions	The Contractor will arrange routine cleaning right after ad-hoc works.

Prepared by: Angela Yung, MT Representative

Date 14 January 2022

**Investigation Report of Foam Overflow and Leakage from the Anammox Pilot Plant**

Date	23, 28 and 29 December 2021
Incident Description	<p>Foam overflow from tanks to surface channel from the Anammox Pilot Plant was reported on 23 and 28 December 2021. The Contractor found no discharge to the nearby channel on 23 and 28 December 2021.</p> <p>Wastewater leakage from a loosen flexible pipe of the Anammox Pilot Plant was reported on 29 December 2021.</p>
Action Taken / Action to be Taken	The leakage on 29 December 2021 was intercepted and wastewater was diverted to the wastewater treatment system.
Remedial Works and Follow-up Actions	<p>A containment bund has been constructed around the pilot plant to contain any future spillages. Communication channel between site and plot operator has been established for immediate control actions in the case of spillage.</p> 

Prepared by: Angela Yung, MT Representative

Date 22 August 2022