

Annex F

## Investigation Report

**Investigation Report of CEMS Exceedances**

Date	1 – 30 November 2021
Time	Continuous monitoring throughout November 2021
Monitoring Location	Continuous Environmental Monitoring System (CEMS)
Parameter	Various emission parameters of the Ammonia Stripping Plant (ASP)
Exceedance Description	<ol style="list-style-type: none"> <li>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: <ul style="list-style-type: none"> <li>• NO<sub>x</sub>, VOCs and NH<sub>3</sub> in the ASP</li> </ul> </li> <li>The Contractor has investigated the cause of the exceedance and identified that the exceedances was due to system instability caused by unstable water flow resulted from the malfunctioning of a few equipment (including the hot water circulation pump), leakage of piping and the blockage of the steam generator.</li> </ol>
Action Taken / Action to be Taken	To ensure stripping efficiency and stable operation of the ASP, the Contractor has arranged clearing of the blockage, cleaning of the column and adjustment of the operation parameter since mid-November. The Contractor has also arranged packaging cleaning in the next reporting month.
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>

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Date: 13 December 2021