

Annex F

Investigation Report

Investigation Report of CEMS Exceedances

Date	1 - 30 November 2023
Time	Continuous monitoring throughout November 2023
Monitoring Location	Continuous Environmental Monitoring System (CEMS)
Parameter	Various emission parameters of Cogeneration Units (CHPs) and 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&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&A Manual (Version F) for CAPCS, CHPs and ASP respectively. The concentrations 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"> • NO_x, SO₂, and HCl from CHP1; • NO_x, SO₂, and HCl from CHP2; • NO_x and SO₂ from CHP3; and • NO_x, SO₂, NH₃, and HCl from ASP. <p>2. The Contractor has investigated the cause of the exceedances and identified that:</p> <ul style="list-style-type: none"> • The exceedances of NO_x, SO₂, and HCl from the CHPs, as well as the exceedances of NO_x, SO₂, NH₃, and HCl from ASP occurred due to system instability.
Action Taken / Action to be Taken	The Contractor investigated the reason for the exceedances and arranged Remedial Works and Follow-up Actions (see below).
Remedial Works and Follow-up Actions	The Contractor had arranged the CHP supplier to inspect, analyse and improve CHP and ASP performance in December 2023 based on final reports of the quality assurance level 2 test (QAL) for the CEMS calibration. This QAL2 evaluation is still ongoing, and improvement recommendation will be provided once the final report is received.

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Date: 8 December 2023