

15. ENVIRONMENTAL MONITORING & AUDIT AND SCHEDULE OF RECOMMENDED MITIGATION MEASURES

- 15.1.1** In accordance with Section 3.5.15 of the EIA Study Brief for the Comprehensive Feasibility Study for the Revised Scheme of SEKD, this EIA Study identified the need for EM&A and/or environmental management system (EMS) activities for different environmental aspects during the construction and operation phases of the proposed developments. The criteria for the EM&A program are presented in **Table 15.1**.
- 15.1.2** Besides, a project implementation schedule containing all the EIA study recommendations and mitigation measures with reference to the implementation program is prepared as part of this EIA Study.
- 15.1.3** The detailed EM&A requirements and/or EMS requirements are prepared in accordance with the requirements stipulated in Annex 21 of the TM on EIA Process. Together with the implementation schedule, all the material is included in a separate EM&A Manual prepared as part of this EIA Study.

Table 15.1 Criteria for the EM&A Program

Objectives	Possible scenarios for no EM&A programme	Monitoring parameters	Action taken for non-compliance/mitigation measures	Implementation stages			
				Des	C	O	Dec
1. To protect sensitive receivers from environmental impacts	Likely to be prejudicial to the health or well being of people in the following areas: - Construction Dust; - Construction Noise; - Construction Phase Water Quality; - Construction Waste Management; - Landscape and Visual Impact; - Odour.	Total Suspended Particulates (TSP) Concentration	Activate action plan detailed in the EM&A Manual		✓		✓
		Construction noise level in $L_{eq(5min)}$	Activate action plan detailed in the EM&A Manual		✓		✓
		Water quality parameters	Activate action plan detailed in the EM&A Manual		✓		✓
		Site audit on waste management measures	Review and enforce waste management measures		✓		✓
		Review and audit landscape and visual measures	Review of measures	✓	✓	✓	
		Odour level and hydrogen sulphide concentration	Activate action plan detailed in the EM&A Manual		✓		
2. To monitor the effectiveness of mitigation measures which involves a long period to establish	Likely success of the proposed measures, else corrective measures to enhance the protection of the mitigation measures, such as, - Operational Traffic Noise; - Operational Phase Water Quality in Extended Sections of Nullahs and Box Culverts; - Biogas Risk due to Contaminated Sediment.	Traffic noise level in A-weighted L_{10}	Review of the effectiveness of the recommended measures for future reference				✓
		Water quality parameters	Regular maintenance of nullah and box culvert should improve the water quality				✓
		Methane, carbon dioxide, oxygen, pressure, and temperature	Activate action plan detailed in the EM&A Manual		✓		✓
3. To monitor an unproven technology of the project	Potential unforeseeable impacts due to the application of the following technology: - In-situ Treatment of Contaminated Sediment.	Methane, carbon dioxide, oxygen, pressure, and temperature	Activate action plan detailed in the EM&A Manual		✓		✓