



UNIQUE MEGHNATH
POWER LIMITED

3rd Construction Phase E&S Monitoring Report - 584 MW Gas Fired Combined Cycle Power Project in Sonargaon, Narayanganj, Bangladesh

Draft Report

14 July 2023

Project No.: 0575406

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ERM India Private Limited

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Acronyms and Abbreviations

AAQ	Ambient Air Quality
AI	Aspect Impact
AIIB	Asian Infrastructure Investment Bank
AoI	Area of Influence
ARIPA	Acquisition and Requisition of Immovable Property Act
BCPA	Bangladesh Crop Protection Association
BECR	Bangladesh Environmental Conservation Rules
BIWTA	Bangladesh Inland Water Transport Authority
BLA	Bangladesh Labour Act
BLR	Bangladesh Labour Rules
BOD	Biochemical Oxygen Demand
BPDB	Bangladesh Power Development Board
BWA	Bangladesh Water Act
BWR	Bangladesh Water Rule
CAAB	Civil Aviation Authority of Bangladesh
CAR	Corrective Action Request
CCGT	Combined Cycle gas Turbine
CCPP	Combined Cycle Power Plant
CEMS	Continuous Emission Monitoring System
CIA	Cumulative Impact Assessment
CL	Casual Leave
CMB	Common Monitoring Basin
CO ₂	Carbon di oxide
CoC	Cycle of Concentration
COD	Commercial Operation Date
COVID	Corona Virus Disease
CSR	Corporate Social Responsibility
CW	Cooling Water
DEG	Deutsche Entwicklungs- und Investitionsgesellschaft
DG	Diesel Generator
DIFE	Department of Inspection for Factories and Establishments
DoE	Department of Environment
DWP	Demineralized Water Plant
E&S	Environment & Social
ECA	Environmental Conservation Act
ECA	Ecologically Critical Area
ECC	Environmental Clearance Certificate

EHS	Environment, Health and Safety
EIA	Environmental Impact Assessment
EL	Earned Leave
EMF	Electric and magnetic Field
EMP	Environmental Management Plan
EPC	Engineering, Procurement and Construction
ERM	Environmental Resources Management
ESDD	Environmental and Social Due Diligence
ESIA	Environmental and Social Impact Assessment
ESMP	Environmental and Social Management Plan
ESMS	Environment and Social Management System
ETP	Effluent Treatment Plant
FGD	Flue gas Desulphurization
FGL	Finished Grade Level
FNTP	Full Notice to Proceed
GBV	Gender Based Violence
GE	General Electric
GHG	Green House Gas
GIIP	Good International Industry Practice
GIS	Gas Insulated Switchyard
GLC	Ground Level Concentration
GoB	Government of Bangladesh
GRM	Grievance Response Mechanism
GSA	Gas Supply Agreement
GT	Gas Turbine
GW	Ground Water
H ₂ S	Hydrogen Sulphide
HAZOP	Hazard and Operability
HDD	Horizontal Directional Drilling
HFL	High Flood Level
HIRA	Hazard identification and Risk Register
HP Steam	High pressure Steam
HR	Human Resource
HRSG	Heat Recovery Steam Generator
HSD	High Speed Diesel
IDCT	Induced draft-cooling tower
IEC	Installation, Erection and Commissioning
IEE	Initial Environmental Examination
IFC	International Finance Corporation

ILO	International Labour organization
Km/Hr	Kilometre/Hour
KPI	Key Performance Indicator
kV	kilovolt
LESA	Lenders' Environmental and Social Advisor
LGED	Local Government Engineering Department
LoI	Letter of Intent
LOTO	Lock Out Tag Out
LP Steam	Low Pressure Steam
LPG	Liquefied petroleum Gas
LRP	Livelihood Restoration Plan
MPEMR	Ministry of Power, Energy and Mineral Resources
MPR	Monthly Progress Report
MSDS	Material Safety Data Sheet
MW	Megawatt
NAAQS	National Ambient Air Quality Standards
NEPC	Northeast No.1 Electric Power Construction Co Ltd
NFPA	National Fire Protection Association
NG	Natural Gas
NOC	No Objection Certificate
NOx	Nitrogen Oxides
OCC	Optimised for Cycling and Constructability
OPEC	OPEC Fund for International Development
P&ID	Piping and Instrumentation Diagram
PAH	Poly Aromatic Hydrocarbons
PAP	Project Affected Person
PCB	Poly Chlorinated Biphenyls
PEL	Permissible Exposure Limit
PGCB	Power Grid Company of Bangladesh
PLF	Plant Load Factor
PPA	Power Purchase Agreement
PPE	Personal Protective Equipment
PS	Performance Standard
PUC	Pollution Under Control
PVC	Poly Vinyl Chloride
PWD	Public Works Department
RAP	Rehabilitation Action Plan
RCC	Reinforced Cement Concrete
RMS	Regulatory Metering Station

RoW	Right of Way
SCB	Standard Chartered Bank
SE	Socio Economic
SEAH	Sexual Exploitation, Abuse and Harassment
SEP	Stakeholder Engagement Plan
SFL	Strategic Finance limited
SO ₂	Oxides of Sulphur
SPM	Suspended Particulate Matter
ST	Steam Turbine
STP	Sewage Treatment Plant
SWAS	Steam and Water Analysis System
TDS	Total Dissolved Solids
TGTDCL	Titas Gas Transmission and Distribution Company Ltd
TL	Transmission Line
TSS	Total Suspended Solids
UHRL	Unique Hotel and Resorts Limited
UMPL	Unique Meghnaghat Power Limited
USP	Unsolicited Proposal
WARPO	Water Resources & Planning Organisation
WHO	World Health Organization
WMP	Waste Management Plan
WTP	Water Treatment Plant

1. INTRODUCTION

1.1 Background

ERM India Pvt. Ltd. (ERM) was commissioned by Deutsche Entwicklungs- und Investitionsgesellschaft ("DEG"), and Asian Infrastructure Investment Bank (AIIB) (hereinafter collectively referred to as "Lenders") to conduct an independent Environmental and Social Due Diligence (ESDD) for proposed 584 MW gas fired combined power cycle project located in Sonargaon, Narayanganj, Bangladesh (hereinafter referred to as "Project"). Unique Hotel & Resorts Limited (UHRL) is the major sponsor of the project with 51% shareholding. A consortium led by UHRL named "Unique Meghnaghat Power Ltd" (hereinafter referred to as "UMPL" or "Company"), is developing this project. It is understood that Lenders are evaluating opportunity of equity investment in the project and have appointed ERM as Lenders' E&S Advisor (LESA) to support their due diligence prior to financial close as well as for periodic monitoring during the investment period.

1.2 Objectives

As Lenders' environmental and Social Advisor (LESA), ERM's overall role is to support Lenders investment decision and follow-up approach by independently assessing the Company's operations and activities (existing and planned) against the Assessment Framework (see Section 1.3). ERM is required to identify gaps, describe necessary mitigation and management measures, assist the finalization of the ESIA report in accordance with the lenders' environmental and social safeguard policies and follow-up actions. This will be followed by periodic Environmental and Social (E&S) Monitoring i.e. quarterly during construction phase, quarterly for 1st year of operations and annually during operation for the following 2 years to verify compliance within assessment framework (Refer Section 1.4).

1.3 Work Scope – Periodic E&S Monitoring

The E&S Monitoring will be undertaken during both construction and operational phases in order to verify compliance within the assessment framework stipulated, which will include verifying the following:

- adequacy of the Company's E&S monitoring report;
- adequacy of the Company and contractor staffing and expertise to properly execute and monitor the E&S aspects of the operational activities;
- implementation status of the contractually agreed Environmental and Social Action Plan (ESAP) and all related processes and documents, as well as any deviations;
- adequacy of the Environmental and Social Management System;
- the implementation status of the Environmental and Social Management & Monitoring Program (ESMP) under special consideration of CO2 emissions (considering use of gas / HFO);
- general site condition and cleanliness, and work execution;
- any known contractual problems with sub-contractors;
- any changes in the original operational plan and their impact;
- any indications for concerns with regard to the relation with local communities, former land owners (or users) or workers;
- any impacts on livelihoods;
- effectiveness and efficiency of stakeholder engagement and GRM.

1.4 Applicable Reference Framework

The E&S Monitoring was carried out against the following the Assessment Framework

- Applicable local, national, international environmental, social (including occupational health and safety) legislation, and guidelines.
- ILO conventions covering core labour standards and the basic terms and conditions of employment.
- DEG Exclusion List;
- AIIBs ESP, ESSs and ES Exclusion List
- IFC Performance Standards (PS) 1–8, January 2012;
- World Bank Group General Environmental, Health and Safety (EHS) Guidelines, April 2007;
- World Bank Group General Environmental, Health and Safety (EHS) Guideline for Thermal Power Plants;
- World Bank Group General Environmental, Health and Safety (EHS) Guideline for Transmission Lines;
- World Bank Group General Environmental, Health and Safety (EHS) Guideline for Gas Distribution System;
- IFC's Stakeholder Engagement Handbook;
- Good Practice Handbook on Cumulative Impact Assessment and Management: Guidance for the Private Sector in Emerging Markets; and
- Recommendation of the Council on Common Approaches for Officially Supported Export Credits and Environmental and Social Due Diligence.

1.5 ERM Team

A three-member ERM team had conducted the physical site walk around and consultations from 29-31 May 2023 as part of the 3rd E&S monitoring exercise undertaken for the project construction phase. The composition of the ERM team were as follows:

- **Subhradeb Pramanik (Health and Safety Specialist):** Subhradeb Pramanik holds a Master Degree in Environmental Science and is presently working as a Principal Consultant at ERM India in Kolkata office. He has over 16 years of experience in field of EHS audits, due-diligence, site assessment and environmental impact assessments (EIAs) studies. Over the years he has played a key role in managing numerous projects in oil & gas, roads, mining, chemical, manufacturing, power and transmission sector. His primary focus and experience lies in the development and implementation of management systems, compliance monitoring, regulator reviews and EHSS performance audits. Apart from this he has also worked as a key EHS auditor for both Inogen Group and ARCADIS SENES India to support the implementation of their Due Diligence and Phase I & 2 programs for nearly 50 projects for key multinational clients in textile, metallurgical, chemicals and building sector.
- **Tufail Khan (Social Specialist):** Tufail Khan is a Senior Consultant with the Impact Assessment & Planning Practice at ERM India Pvt Limited. Over his 14 years of experience, Tufail have worked with SENES Consultants India Pvt (A Canadian Environment Consultancy firm), THDC India Ltd (A Mini Ratna PSU in Hydro power generation projects) and currently with ERM India Pvt Ltd at Gurgaon. Carrying out studies related to Social Impact Assessment and Resettlement & Rehabilitation have been his core functional areas throughout his total experience. Construction projects, Hydro power project, Thermal power projects, Wind power projects, solar power projects, mining projects etc. are the sectors wherein he has been

actively involved and worked. Tufail has also long experience of implementing Resettlement & Rehabilitation action plan and working with communities at very grass root level.

1.6 Approach to the E&S Monitoring

The approach to the E&S Monitoring was broadly divided into the following tasks:

- Kick of Meeting
- Desktop based documentation review;
- Physical visit to the site and consultation with UMPL and EPC representatives; stakeholders such as workers and affected communities.
- Reporting

1.6.1 Kick-Off Meeting

The site visit began with a kick off meeting with the E&S management representative of UMPL and GE-NEPC consortium at the UMPL site office. The kick off meeting helped in developing understanding on the current status of the Project implementation and developments at the site. The ERM team also explained the purpose of the assignment as well as shared the approach and key activities that were planned in the course of the monitoring.

1.6.2 Desktop Documentation Review

A virtual Data Room (VDR) was created before commencement of the review wherein UMPL had uploaded the relevant documents, as shared through an information request list. The relevant Project documents pertaining to the EHS and social compliances identified in the ESAP and ESMMP were reviewed at the site. This was aimed at understanding the ongoing implementation, record maintenance, internal monitoring and reporting and mandatory regulatory compliances required for the project. The list of documents reviewed as part of the E&S monitoring exercise has been furnished under **Appendix B**.

1.6.3 Site Visits & Consultations

The ERM team accompanied by the representatives of the Project team undertook site visits of the key Project components to assess the status and compliance with respect to EHS and social/labour issues and legal obligations. During the site visit the team made physical and visual inspection/verification of the construction phase activities and on-site management of EHS and labour issues. This was followed by visits to the worker camps and the consultations with the project affected communities and worker groups. Key activities undertaken during the course of the E&S monitoring visit is presented in **Table 1.1** below.

Table 1-1: Site Visit/Interviews – Key Activities Performed

S. No	Date	Activities
1.	29 May 2023	■ Opening Meeting with UMPL Management at corporate office ■ Discussion on current progress of construction phase of the project and key points for detailed assessment at site
2.	30 May 2023	■ Opening Meeting with UMPL site team and GE senior Management. ■ Discussed current progress of construction phase of the project ■ Review of site-specific EHS Procedures and checklist, existing permits, licenses and associated records, Discussion

S. No	Date	Activities
		on ESMP implementation status with NEPC and GE EHS Team. ■ Review of stakeholder engagement records, GRM records and discussion on progress of hiring LRP implementation and Monitoring Agency. ■ Review and detailed discussion on documentary evidence of other HR and labour compliance related pending actions items as per the ESAP;
3.	31 May 2023	■ Walkthrough at Work area belonging to NEPC sub contractors (Man is Power, Meghna Enterprises), Occupational Health Centre, Jetty area, Batching Plant Area etc in the construction site. ■ Detailed walkthrough at Camp site, peripheral walk around camp site and discussion with housekeeping team, drivers security personnel (Elite Security). ■ Community Consultation with on-site workers at Camp site, ■ Consultation with local community at Doodhghata village; ■ Discussion with local fisheries department officer and joint visit of river side area of the Doodhghata village ■ Discussion with NEPC HR Team and with site representatives of the two-manpower supply agency (i.e. Meghna Enterprise and 'Man is Power') ■ Closing meeting with UMPL, GE and NEPC site EHS team

1.6.4 Reporting

Information from various sources and direct observations made by ERM have been collated and compared against the reference framework components along with status of the compliance with respect to project ESAP, ESMMP and legal requirements.

1.7 Limitations & Assumptions

While this assessment has endeavoured to provide a comprehensive review against the requirements of the Applicable Standards, however, there remain certain limitations to the assessment that should be considered:

- This report is based on the site walkthrough, stakeholder consultations and review of information made available to ERM till date. Note that the findings in this report are subject to change depending upon other information that may come up in future. We cannot guarantee that these activities will necessarily yield complete information.
- The independent review is a high-level assessment of environmental and social risks/issues and should not be construed as a detailed legal compliance review to the conditions stipulated by enforcement agencies in the regulatory approvals and limited to the environmental and social approvals already accorded to the Project and shared with ERM.
- The findings and observations made herein are based on application of professional judgement. The findings should be viewed in the context of the applicable scope and objectives of the study and the limitation on time and resources made available to the consultants for the successful completion of the study. Kindly also note that the scope of work did not include any sampling, analysis of environmental media, collection of primary data, engineering design or development of technical specifications or cost estimates among others.

1.8 Use of the Report

ERM is not engaged in consulting or reporting for the purpose of advertising, sales promotion, or endorsement of any client interests, including raising investment capital, recommending investment decisions, or other publicity purposes. Client acknowledges that this report has been prepared for their exclusive use and agrees that ERM reports, or correspondence will not be used or reproduced in full or in part for such purposes, and may not be used or relied upon in any prospectus or offering circular. Client also agrees that none of its advertising, sales promotion, or other publicity matter containing information obtained from this assessment and report will mention or imply the name of ERM.

Nothing contained in this report shall be construed as a warranty or affirmation by ERM that the site and property described in the report are suitable collateral for any loan or that acquisition of such property by any lender through foreclosure proceedings or otherwise will not expose the lender to potential environmental or social liability.

ERM may grant other financial institutions involved in the financing of the Project ("Other Parties") the right to rely on Services or work product generated by or for ERM pursuant to the Contract ("Work Product"), provided that each Reliant Party is specifically identified by name, any agreed consideration is paid, and that these Other Parties deliver to ERM, a signed copy of ERM's standard reliance letter. The reliance letter shall govern the Other Parties' right to rely on the Work Product.

1.9 Lay Out of the Report

The draft report is structured as under:

Section 1 (This Section):	Introduction
Section 2:	Project Appreciation and Current Status of the Project
Section 3:	ESAP & ESMMP – Compliance Status
Appendix A:	Photo Documentation
Appendix B:	List of Documents/Information Reviewed

2. PROJECT APPRECIATION AND CURRENT STATUS OF THE PROJECT

2.1 The Project

Unique Meghnaghat Power Limited (UMPL), a Joint Venture Company constituted by the consortium consists of Unique Hotel & Resorts Limited (UHRL), GE Capital Global Energy Investments BV and Strategic Finance Limited (SFL), has been incorporated in the year 2018 for development of 600-Megawatt (MW) Gas based Combined Cycle Power Plant (CCPP) project with net output of 588.31 at Dudhghata mauza in Pirojpur union of Sonargaon upazila under Narayanganj district, Bangladesh. The consortium of UHRL, GE and SFL has been selected by Bangladesh Power Development Board (BPDB), Government of Bangladesh (GoB) through Unsolicited Proposal (USP) basis. The Lol (Letter of Intent) was issued by BPDB on 25th June 2018. GE has made a consortium with NEPC for project construction and commissioning activity. Corresponding agreements like Power Purchase Agreement (PPA) with BPDB, Gas Supply Agreement (GSA) with Titas Gas Transmission and Distribution Company Limited (TGTDCL), Implementation Agreement (IA) with Power Division, Ministry of Power, Energy and Mineral Resources (MPEMR), GoB and Power Grid Company of Bangladesh (PGCB) have also been executed. The proposed site is located in 21.07 acres of land to the South-west of the Dhaka-Chittagong Highway and right bank of branch channel of Meghna River. This project is expected to be funded by Asian Infrastructure Investment Bank (AIIB), DEG and OPEC Fund for International Development (OPEC Fund) under financial advisory of Standard Chartered Bank (SCB). Summary of the project is presented below:

Table 2-1: Project Details - Snapshot

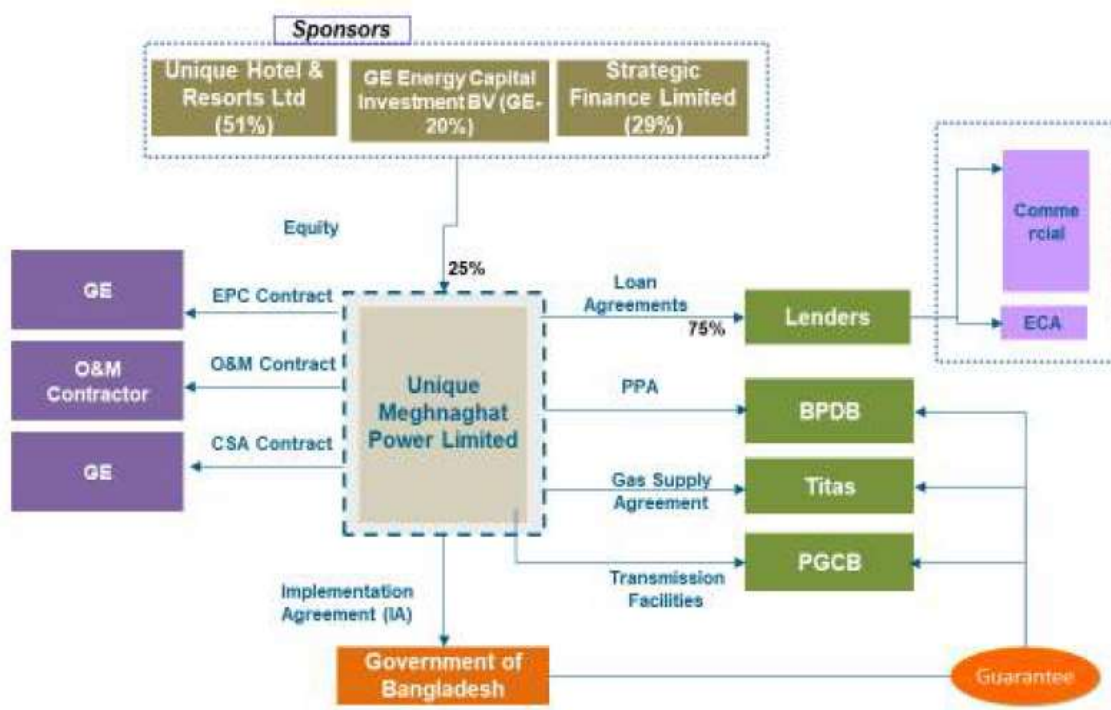
UMPL 584MW Gas Fired Power Project	
Location	Dudhghata Mouza of Pirojpur union, Sonargaon upazila, Narayanganj district, Bangladesh
Project owner	Unique Meghnaghat Power limited (UMPL)
EPC Contractor	General Electric Global Services (GmbH)
Area of Land proposed	21.07 acres
Government Land/Private Land	Private Land from 343 landowners
Plant Load Factor	84.6% with minimum availability of 90%
Electricity Generation	584 MW, however EPC Contractor has guaranteed 588.31 MW
Unit Configuration	Power block of 600 MW with HRSG, one steam turbine and two generators
Fuel Type	Natural Gas (NG)
Gas Supply	Titans Gas Transmission and Distribution Company Limited (TGTDCL) through 20-inch diameter subsurface pipeline across the Meghna river
Electricity Off-take	Grid substation of PGCB through 400 kV Single Circuit (S/C) line.
Grid Connection	Nearest Grid Substation of PGCB which is to be located around 800 meter from the project site across the Meghna river near Summit Meghnaghat power project

2.1.1 Project Owner/Company

Unique Meghnaghat Power Limited (UMPL) would be the proponent of the proposed power plant. U MPL has been duly incorporated under the Laws of People Republic of Bangladesh in the year 2018 as a Limited company to develop, design, finance, build, own, operate and maintain the proposed power plant. U MPL is a joint venture company of Unique Hotel and Resorts Limited with 51% ownership, which is a Sister Concern of Unique Group and GE Capital Global Energy Investment BV with 20% ownership and Strategic Finance Limited with 29% ownership. Project is expected to be

funded by AIIB, DEG and OPEC Fund for International Development (OPEC Fund) executed through EPC contractor. Project contractual structure is presented in **Figure 2.1**.

Figure 2-1: Project Contractual Structure



Source: UMPL

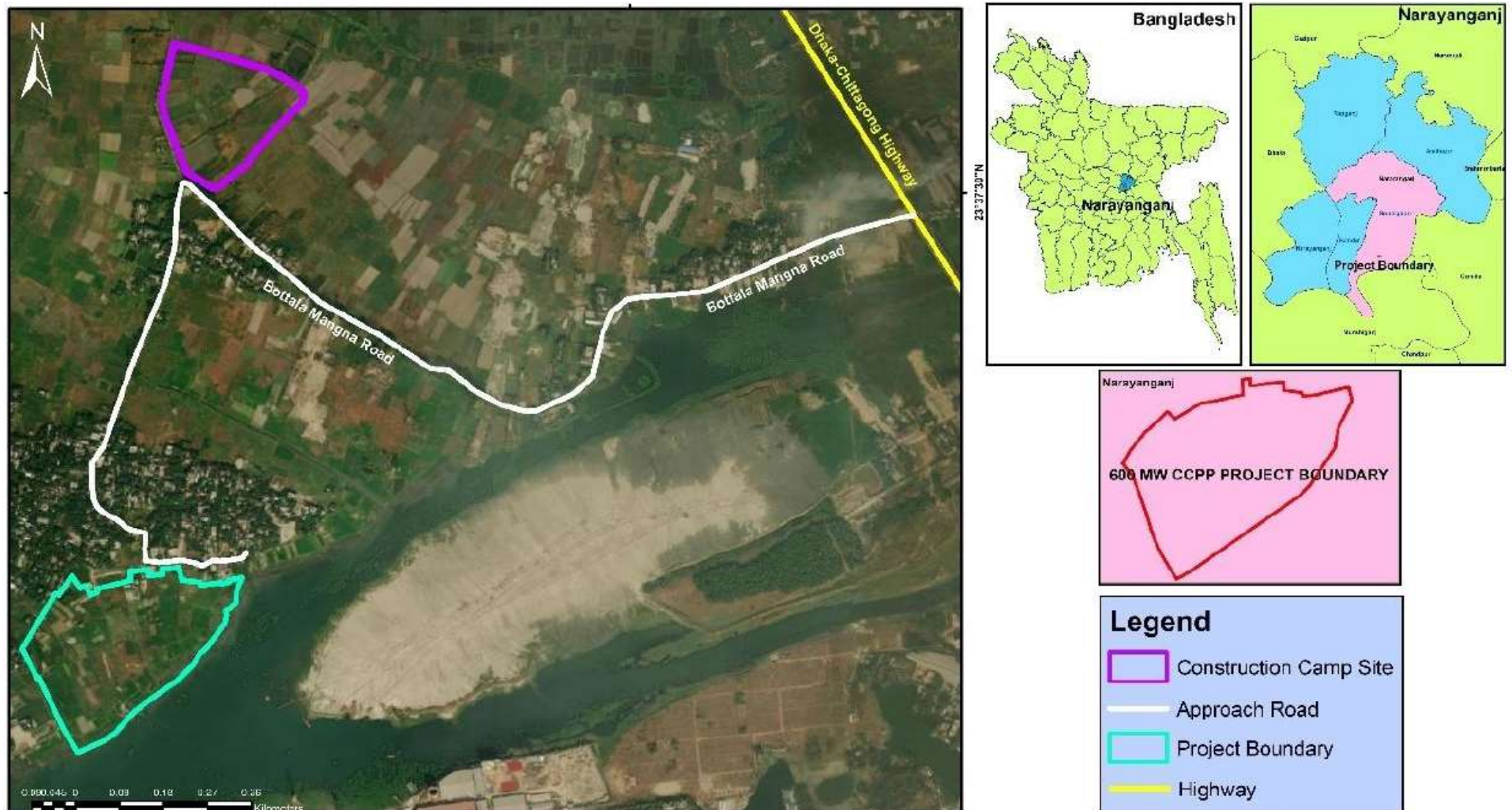
2.1.2 Project Location

The proposed project site for 584 MW gas fired Combined Cycle Power Plant (CCPP) by UMPL is located in Dudhghata Mouza of Pirojpur union, Sonargaon upazila, Narayanganj district, Bangladesh. The site is about 1.46 km from Dhaka-Chattogram highway to the south-west, about 3.49 km south-west of the Sonargaon upazila headquarter and about 3.28 km away from Mograpara bus stand by road. The project site is situated on the right bank of the branch channel of Meghna River. The location of the proposed project site lies, geographically between 23°37'4.57"N; 90°35'19.23"E and 23°36'53.20"N; 90°35'34.55"E. The project location on satellite imagery is presented in **Figure 2.2**.

2.1.3 Plant Layout

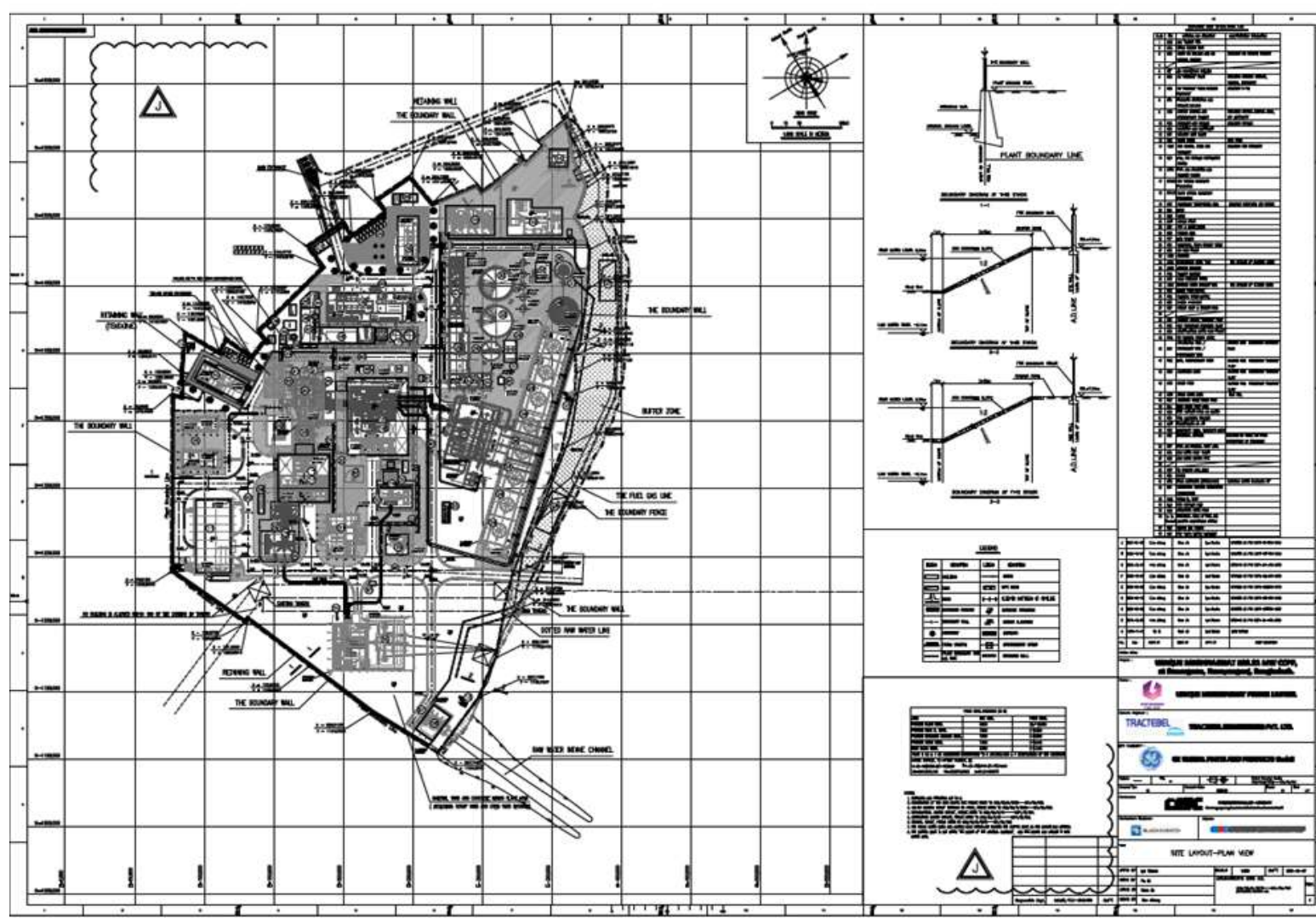
The proposed power plant would be consisting of main block area and auxiliary area. The main block would be comprising of gas turbine hall, HRSG, steam turbine hall, main transformer, and HV unit auxiliary transformer. The auxiliary area will include boiler make-up water treatment plant, industrial waste water treatment plant, chemical dosing room, mechanical draft counter flow cooling tower, C.W. pump house, mechanical accelerated clarifier, raw water intake pump house, comprehensive water pump house, service & firefighting water basin, raw water basin and potable water basin, filter and sanitary waste water treatment plant. A site layout map is presented in **Figure 2.3**.

Figure 2-2: Project Location – Satellite Imagery Snapshot



Source: UMPL Project Final ESIA dated 18 Sep 2022

Figure 2-3: Project Site Layout



Source: UMPL

2.1.4 Key Project Components

ERM has the following understanding of the Project, key project facilities and specific requirements for the project operations:

2.1.4.1 Major System in the Power Plant

Single flow open circuit type gas turbine controlled by Local Control Cubicle and the Central Control Room;

Heat Recovery Steam Generator (HRSG) at downstream of gas turbine and auxiliaries;

Steam Turbine Generator plant and auxiliaries;

Feed water system for delivering feed water from low pressure drum to the HRSG economizer inlet header and supplies spray water of HP steam system, HP bypass system and reheat steam system;

Condensate system to deliver condensate accumulated into condenser hot well to the LP steam drum of HRSG via the condensate extraction pumps;

Cooling water system to supply make-up water for demineralised cooling water for gas turbine oil coolers, gas turbine generator hydrogen coolers, steam turbine oil coolers, steam turbine generator air coolers, pumps, steam and water samplers, air compressors, and any other equipment requiring cooling water and to reject the waste heat to the auxiliary cooling water via the closed cooling water coolers;

Plant Water System to draw water from the Meghna River by 2 X 100% raw water make-up pumps located in the intake water pump house. A closed cooling water system employing Induced draft-cooling tower (IDCT) has been envisaged for each proposed unit to minimize the plant water intake requirement;

Wastewater Treatment System wherein the wastewater from De-mineralised Water plant and other service area will be treated in the neutralising pit and effluent treatment plant to the required degree. The total effluent available after treatment from effluent Treatment Plant will be utilised partially for plantation and the balance effluent shall be routed to the outfall.

A 400kV Gas Insulated Switchyard (GIS) for evacuation of power, import of power for start-up / shut down / station auxiliary power through Unit Transformers.

2.1.5 Key Project Facilities

2.1.5.1 Natural Gas Supply

As indicated in the ESIA Report daily requirement of Natural Gas would be approximately 96192 million standard cubic foot (mscf). The gas will be supplied by Titas Gas Transmission and Distribution Company Limited (TGTDCL), which is at distance of 500-700 m across the Meghna Branch Channel. Gas Supply Agreement (GSA) has already been signed between TGTDCL and UMPL. Reportedly and as observed the site has already laid 20inch dia X ~600m pipeline across the Meghna River using horizontal directional drilling (HDD). Leak test of the pipeline has also been completed and the same communicated to the Department of Explosives, Bangladesh.

Figure 2-4: Gas Pipeline Final Route Map



Source: UMPL Project Final ESIA Report dated 18 September 2022

2.1.5.2 Temporary Jetty

Two (02) temporary river jetty has been constructed with the following details:

- One (01) temporary jetty (40m X 20m) has been constructed for unloading of construction material, heavy equipment and machinery brought to the site using Meghna waterways. UMPL has obtained permission from Bangladesh Inland Water Transport Authority for use of foreshore waterfront of Meghna River for construction of temporary Jetty, water pipeline & pump house and RCC guide wall.
- In addition to this, Site is constructing another temporary jetty of approximate dimension of 55m X 12m-16m having 600 MT material handling capacity, for unloading of engines. However, permission for BIWTA for the second jetty is awaiting as on the date of assessment.

2.1.5.3 Power Evacuation Line

Power generated from the proposed power plant will be evacuated to the nearest grid substation of PGCB through 400 kV Single Circuit (S/C) overhead transmission line. 400kV grid sub-station belonging to PGCB will be located around 800 m from the project site. Evacuation of power from the proposed power plant will be done at 400 kV level. The 400-kV single circuit transmission lines between power plant 400 kV substation and PGCB grid sub-station, for this purpose, will be under the scope of this project. Further detailed interconnection plan with PGCB nearest grid substation along with Load flow, short circuit and transient stability with due consideration of capacity addition of proposed 584 MW project will have to be carried out by UMPL in coordination with PGCB.

2.1.5.4 Construction Camp/Laydown Area

A total of 12 acres land in Dudhghata mouza has been taken on temporary lease for three years from Hamdard Laboratories (WAQF), a Bangladeshi Company for setting up construction camp/laydown area. The land was filled up by UMPL by using river sand up to the road level for constructing temporary construction campsite. The construction camp/laydown area presently comprise of the following:

- Office area and living area for UMPL, GE and NEPC.
- Provision of warehouses comprising of shed warehouse as well as Class A & Class B warehouses.
- Provision of material storage in open storage yards.

2.1.5.5 Sewage Treatment Plant (STP) & Discharge Pipeline

Sewage generated from the site is currently being treated through a modular STP. The STP would consist of Biological Oxidation tank, secondary sedimentation tank, sludge tank and disinfection tank. The treated effluent is being discharged to a public sewage channel through a 105 m long discharge pipeline.

2.1.6 Project Associated Facilities

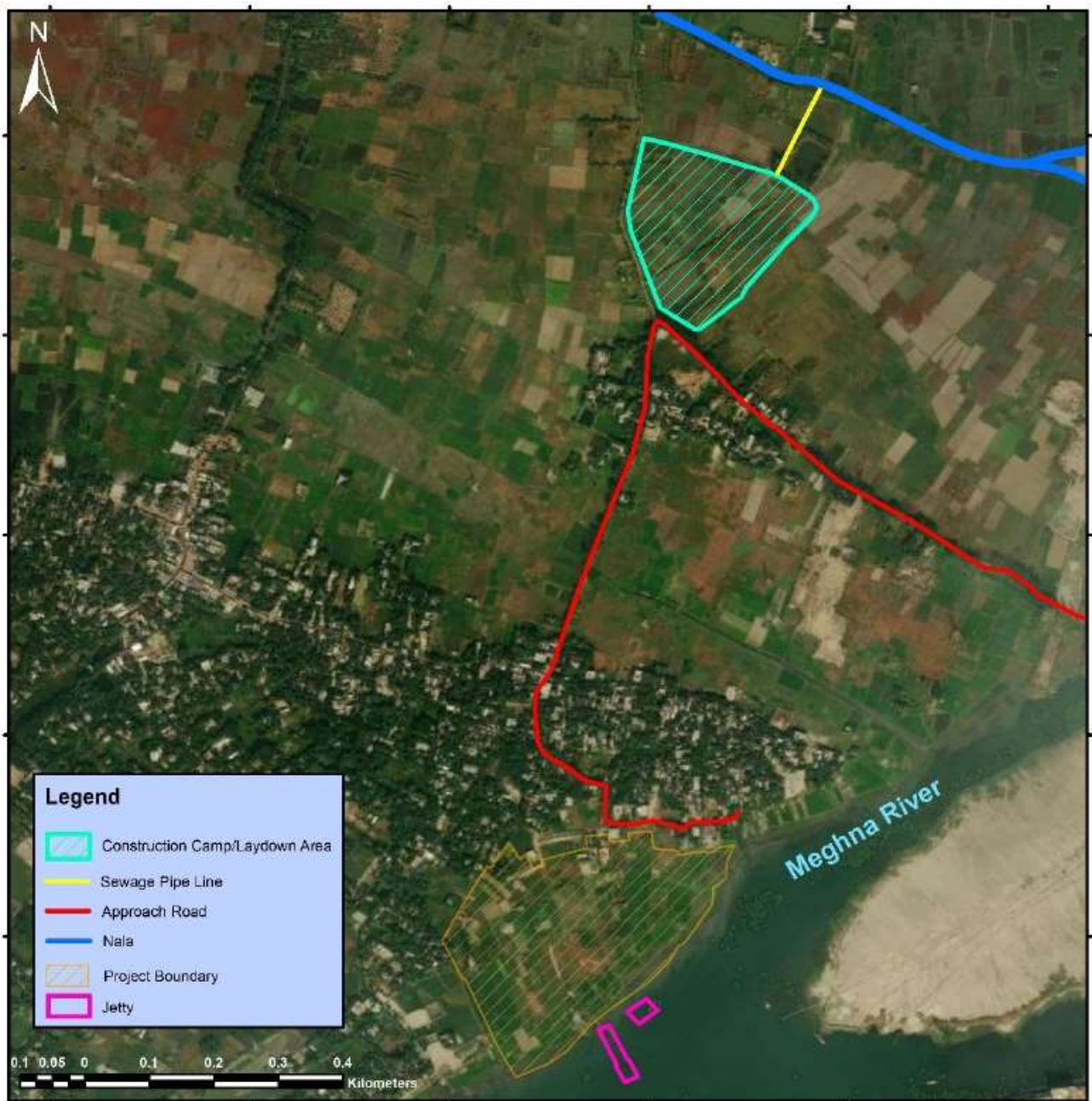
2.1.6.1 Access Road:

The Project location will be accessed through an earthen branch road coming out from Dhaka-Chittagong Highway. The distance between Highway and project site is approximately 1.5 km. There is no alternate access road available for connecting the site.

ERM consider access road widening work as part of associated facility of the project in view of the fact that UMPL requires an access road to connect site location for viability of the project, especially during construction phase for material transportation.

ESIA report mention that 0.1664 acres (0.0673 Hectare) from 27 landowners were procured along the existing village road between Battala Bazar to Plant Gate for widening and strengthening of existing village road that will also be used as access road for the project. As observed during the site visit, the access road is currently being widened by Local Government Engineering Department (LGED) under the Rural and Culvert Maintenance Program.

Figure 2-5: Layout of Project Facilities



Source: UMPL Project Final ESIA Report dated 18 September 2022

2.1.7 Current Project Status

The Engineering, Procurement and Construction (EPC) Contract is awarded to M/S General Electric Global Services (GmbH) whereas M/S Tractebel Engineering Pvt. Ltd. has been identified as the owner's engineer. The EPC Contractor has made consortium with NEPC and have commenced site construction activities. Review of the Monthly Progress Report (MPR) shared by UMPL for May 2023 indicated the construction progress status as stated below:

- Multiple shipment UN77-001& UN77-002 shipments delivered to site ~ 298 CMB; Cable pulling completed 694 kms.
- Cable termination completed 11884 sets; Piping welding DI completed 110341 DI
- Lube oil flushing and restoration completed.

- GSUT and UAT standalone testing and commissioning completed
- Filter water tank #1 hydro test completed and blasting/painting work in progress
- 64 Nos. Sub-system walkdown completed.

2.1.8 Status of E&S Indicators

The status of E&S indicators as obtained from the project MPR for May 2023 is presented in Table below:

Table 2-2: Project E&S Dashboard – May 2023

SL #	Indicators	May 2023	Cumulative
A	Health & Safety		
1.	Fatality	0	0
2.	Significant/Major Injury	0	0
3	Lost Time Incident (LTIs)	0	0
4	Near Miss	1	12
5	Medical Treatment Case	0	1
6	First Aid Case	1	19
7	Potential Severe Event	0	0
8	Fire/Explosion	0	0
9	Stop Work – EHS	14	227
10	Warning letter issued	15	187
11	Safety Rewards	80	1069
12	Training Hours	965	40426
13	EHS Inspections	08	297
14	Emergency Drill	2	15
15	Toolbox Talks	31	1197
16	Monthly Manhours	413704	8151400
B	Environment		
1.	Spillage	0	0
2.	Contaminated soil (m3)	0	0
3	Contaminated concrete (m3)	0	0
4	Scrap Metals (tonne)	6.5	107.25
5	Wooden Palette (tonne)	5	129.7.7
6	Plastic Packaging (m3)	3	28.49
7	Domestic food waste (bins)	105	1580
8	Used oil (litres)	120	1830
9.	Contaminated Rags (kgs)	5	27.5
C	Social		
1.	Grievance Recorded	2	12

Source: GE-NEPC MPR May 2023

2.1.9 Project Manpower Requirement

The present workforce strength at ongoing construction site as observed during ERM's visit is presented in Table 2.2 & 2.3 below.

Table 2-3: Current Manpower involved at site

SL #	Employer	Manpower size
1.	UMPL Employees	56(30 corporate management staff + 12 site management staff + 26 Support)
2.	GE employees	70 (49 Officers + 21 Support)
3	NEPC Management staff employee	101(51 Chinese + 50 Bangladeshi)
4	NEPC workers (Chinese)	350
5	NEPC Subcontractor Workforce (total of 4 subcontractors engaged)	1159
	Total	1742

Manpower break-up of the sub-contractors engaged by NEPC is presented below.

Table 2-4: Manpower details of sub-contractors engaged by NEPC

S. No	Sub-contractors	Scope of work	Manpower size
1	Man is Power corporation	Main Plant & Lay down	950
2	Meghna Enterprise	Main Plant & Lay down	120
3	Sazzad	Main Plant & Lay down	76
4	Brownfield Engineering	Main Plant & Lay down	13
5	NASBO	Paint work at	3
6	Elite Force (Security)	Main plant and lay down	47
	Total		1209

Source: UMPL

2.1.10 Project Schedule

The proposed schedule for the project has been presented in the Table below.

Table 2-5: Proposed Project Schedule

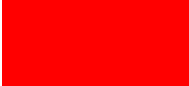
SL#	Project Component	Proposed Timeline
1.	Signing of EPC Contract between GE and UMPL	29 August 2019
2.	Full Notice to Proceed (FNTP)	23 October 2019
3.	Clear and Unhindered access to site	01 December 2019
4.	GT on Foundation	22 January 2022

SL#	Project Component	Proposed Timeline
5.	HRSG OCC Modules (Installation Started)	04 September 2022
6.	GT Generator on Foundation	22 January 2022
7.	ST Generator on Foundation	12 March 2022
8.	Commencement of Cold Commissioning	20 March 2023
9.	Completion of Back Energization	15 June 2023
10.	GT First Firing in Simple Cycle	31 July 2023
11.	Completion of 1st Synchronization	9 August 2023
12.	Completion of Steam Blowing	5 September 2023
13.	First Steam to Turbine	10 September 2023
14.	Completion of Trial Operation	25 October 2023
15.	Completion of Performance Test	5 November 2023

Source: UMPL

3. COMPLIANCE STATUS – ESAP, ESMMP, LRP, SEP & GRM IMPLEMENTATION

The compliance status based on the site visit and review of documents as on 29-31 May 2023 has been presented in **Table 3.1** and relevant sub-sections. In order to define the status of various action items, colour coding has been used for easy referencing, which is as follows:

	Action Item Closed/ Complied		Satisfactory Progress
	Partially Complied		Not Complied/ Delay
	To be assessed during Operations/Decommissioning		Document Pending

3.1 ESAP, ESMMP & Regulatory Compliance Status

The observations made by the ERM audit team with respect to the project EHS aspects as outlined in the ESAP, EMMP and applicable local and national regulations have been presented in **Table 3.1** below.

Table 3-1: ESAP & EMMP - Compliance Status

S. No	Action item	Reference in ESDD Report	Responsibility	Deliverable	Suggested Timeline for completion	ERM Observations (29-31 May 2023)	Progress Status	Recommendations
1.	EHSS Regulatory Permitting/Compliance							
1.1	Develop and implement a plan for 100% wastewater recycling for project operations. Update the green belt development plan to ensure 33% coverage of the project area.	S. No 1.1, Table 3.1 o	UMPL	Copy of wastewater recycling plan Copy of greenbelt development plan	6 months prior to COD	Review of the site clearance conditions requires UMPL to develop and implement a plan to facilitate 100% wastewater recycling during operations. However, discussion with EPC consortium reveals that as per the design both Effluent Treatment Plant (ETP) and Sewage Treatment Plant (STP) to be installed and operated will be having two separate outfalls with no provision for provision for wastewater recycling. Also, as per the aforesaid clearance condition, UMPL is required to maintain 33% green belt within the project area. Presently as per the design and Green Belt Development plant, the site has ~29% area demarcated as green belt.		Develop and implement a plan for 100% wastewater recycling for project operations. Update the green belt development plan to ensure 33% coverage of the project area.
1.2	Update the BIWTA clearance to cover both stormwater outfall lines as depicted in the project operations drainage layout.	S. No 1.2, Table 3.1	UMPL	Copy application seeking amendment Copy of BIWTA approval	Immediately, prior to first disbursement Within six (6) to eight (8) months from application date	Per the storm water drainage lay out plan shared for the main plant site, reveals the presence of two stormwater outfall lines. In line with the earlier recommendation, UMPL has now included the aforesaid storm water outfall lines (2 X 350 ft length) in the renewed BIWTA clearance which is found to be valid till 31 Aug 2023.		<i>Action closed as per the Oct-Dec 2022 E&S monitoring report</i>
1.3	Coordinate with WARPO to obtain approval for ground water sourcing from all the onsite bore wells on a fast-track basis.	S. No 1.3, Table 3.1	UMPL	Copy of communication with WARPO	Immediately, prior to first disbursement	Documentation review indicates that UMPL has obtained permission from WARPO vide letter dated 11 Aug 2022 for abstraction of 450 KLD of ground water to meet construction requirements and 14000 KLD of surface water from Meghna		<i>Action closed as per the Oct-Dec 2022 E&S monitoring report</i>

S. No	Action item	Reference in ESDD Report	Responsibility	Deliverable	Suggested Timeline for completion	ERM Observations (29-31 May 2023)	Progress Status	Recommendations
						River branch channel. The permit is found to be valid for a period of 2 years i.e. Aug 2024.		
						As discussed with UMPL representatives, site is yet to demonstrate compliance with the below observations made during the last monitoring undertaken: ■ As per the ESIA, the total makeup freshwater requirement for the project is estimated to be 676.22 m3/hr or ~16300 KLD to be sourced from Meghna River while WARPO permission is limited to only 14000 KLD. Reportedly, total water requirement for operations will be <14000 KLD, however no supporting evidence has been shared for review and validation. ■ Coverage of worker camp operating borewell could not be established from the permit issued. ■ Compliance to the permit conditions with respect to installation of monitoring well to measure groundwater levels; daily measurement and reporting of groundwater level and extraction volume to WARPO; comprehensive study on water resources availability and impact due to abstraction and use is yet to be demonstrated. Furthermore, the permit limits the daily water consumption at 450 KLD for use in construction activities such as batching plant etc. However, no flow meters were found to be installed at the construction site to be monitor the ground water consumption. The flow meters installed at the		Update the water abstraction permit to encompass coverage of the design water requirement for project operations. Share copy of the WARPO application to review and validate coverage of the ground water wells installed and operated at the worker camp Demonstrate compliance to the water abstraction permit conditions as applicable for the construction phase of the project. Install and operate flow meter at the construction site ground water well to assess compliance with the water abstraction limit specified in the permit issue. Ensure functionality of the worker camp groundwater well flowmeters at all times.

S. No	Action item	Reference in ESDD Report	Responsibility	Deliverable	Suggested Timeline for completion	ERM Observations (29-31 May 2023)	Progress Status	Recommendations
						ground water well at the worker camp is found to be non-functional.		
1.4	Follow up with WARPO seeking status on the clearance/permission on the riverbank protection for the project..	S. No 1.4, Table 3.1	UMPL	Copy of communication with WARPO	Immediately, prior to first disbursement	Documentation review reveals indicates that UMPL has obtained permission from WARPO vide letter dated 27 ep 2022 for setting up riverbank protection and temporary Jetty at the branch of Meghna River for the proposed project. The permit is found to be valid for a period of 2 years i.e. Sep 2024.		
						As noted during the monitoring visit, UMPL is yet to demonstrate compliance to the following WARPO permit conditions ■ Submission of water resource availability study and impact of construction of riverbank protection and temporary jetty to WARPO by Mar 2023 ■ Submission of detailed design depicting the location of the riverbank protection and temporary jetty to WARPO.		Demonstrate compliance to the conditions specified in the WARPO permission for construction of riverbank protection and temporary jetty.
1.5	Install indication mark for the pipeline crossing the Meghna River at both sides as per applicable regulatory requirements.	S. No 1.5, Table 3.1	UMPL	Photographic evidence of installed indication mark	Immediately, prior to first disbursement	In consistent with the Natural Gas Safety Rules, 1991, UMPL has applied for and obtained necessary approval for laying of the natural gas pipeline (20" X 600m) vide Department of Explosives, Bangladesh vide letter dated 30 May 2021. In this regard, UMPL has notified the Chief Inspector of Explosives of the pipeline leak testing with the same being undertaken on 23 April 2022 and relevant test documentation being maintained as per the aforesaid Rules. As noted during the site walkthrough, UMPL is have noted indication mark of the pipeline		<i>Action closed as per the Oct-Dec 2022 E&S monitoring report</i>

S. No	Action item	Reference in ESDD Report	Responsibility	Deliverable	Suggested Timeline for completion	ERM Observations (29-31 May 2023)	Progress Status	Recommendations
						passing across the Meghna River at the crossing point of both sides.		
1.6	Follow with up Deputy Commissioner office to seek update on the approval status of LPG storage. Post approval, apply for LPG cylinder storage license to the Department of Explosives, Bangladesh	S. No 1.6, Table 3.1	EPC	Copy of evidence of communication with Deputy Commissioner Copy of communication with Department of Explosives, Bangladesh	Immediately, prior to first disbursement	Documentation review indicates that UMPL is yet to obtain design approval for the LPG cylinder storage (2000 kg at the project site and 2000 kg at the construction laydown area) from Narayanganj District Collector. In this regard, a follow up communication has been initiated by UMPL vide letter dated 8 May 2022. Post receipt of layout plan approval by Deputy Commissioner, UMPL will be required to seek storage permission/license from Department of Explosives, Bangladesh.		Continue to follow up with up Deputy Commissioner office to seek site layout plan approval for LPG storage. Post layout plan approval, apply for LPG storage license from Department of Explosives, Bangladesh.
1.7	Seek approval of layout plan of hydrogen plant under construction from Department of Explosives on a fast-track basis.	S. No 1.7, Table 3.1	UMPL	Copy of approved lay out plan	3 months prior to COD	The project involves the installation and operation of hydrogen plant, with the hydrogen to be used for filling up of high-pressure hydrogen cylinders, which in turn is required for generator initial fill up and regular make-up for generator rotor cooling. However as mentioned in the Oct-Dec quarterly monitoring report, UMPL is yet to obtain necessary approval from Department of Explosives, Bangladesh for the under-construction hydrogen plant building in consistent with the relevant provisions of the Gas Cylinder Rules, 1991.		Seek approval of layout plan of hydrogen plant under construction from Department of Explosives on a fast-track basis.
1.8	Obtain license from the District Deputy Commissioner for the storage and usage of acid and alkalis as part of the project DWP regeneration system	S. No 1.8, Table 3.1	UMPL	Copy of valid acid storage license	3 months prior to COD	To be obtained prior to project commercial operations.		None

S. No	Action item	Reference in ESDD Report	Responsibility	Deliverable	Suggested Timeline for completion	ERM Observations (29-31 May 2023)	Progress Status	Recommendations
1.9	Obtain BERC license as an independent power producer (IPP) prior to project operations.	S. No 1.9, Table 3.1	UMPL	Copy of valid IPP license	3 months prior to COD	To be obtained prior to project commercial operations.		None
1.10	Coordinate with TGTDCCL to share the BERC license for supply of natural gas and operation of the gas pipeline for the proposed power project prior to operations	S. No 1.10, Table 3.1	UMPL/TGTDCCL	Copy of valid license for natural gas supply and pipeline operations	3 months prior to COD	To be obtained prior to the commercial operations of the natural gas pipeline supplying the project.		None
1.11	Obtain boiler registration from the Chief Boiler Inspector prior to project operations.	S. No 1.11, Table 3.1	UMPL	Copy of valid boiler registration	3 months prior to COD	To be obtained prior to commencement of boiler installation and operations.		None
1.12	Follow up with manpower supply agency needed to ensure that they obtain the registration certificate soon.	S. No 1.12, Table 3.1	UMPL	Copy of communication with Department of Labour, Bangladesh	Immediately, prior to first disbursement	For the construction phase, the EPC consortium has deployed the following manpower supplier contractors – Manis Power and Meghna Enterprises. Document review indicates that aforesaid contractors has obtained license/registration from the Department of Inspection of Factories & Establishment (DIFE) which is found to be valid till 4 Dec 2023 and 30 June 2023 respectively. Meghna Enterprise will also reportedly ensure DIFE license by June 2023.		None
2.	PS1: Assessment and Management of Environmental and Social Risks and Impacts							
2.1	Develop and obtain ISO certification for project operations ESMS.	S. No 2.2, Table 3.1	UMPL	Copy of ISO certification for project operations ESMS	1 year from COD	To be reviewed and validated during project operations.		

S. No	Action item	Reference in ESDD Report	Responsibility	Deliverable	Suggested Timeline for completion	ERM Observations (29-31 May 2023)	Progress Status	Recommendations
2.2	Incorporate EHS&S Policies as part of the agreement / employment contract with the third-party agencies and workers.	S. No 2.3, Table 3.1	UMPL & EPC	Copy of sample agreement/contract	Immediately, prior to first disbursement.	The site has developed the EHS & Social Policy in local language (in Bengali) signed by the GE Project Director and the same was found to be displayed onsite at conspicuous places like site main entrance, worker camp etc. During the Oct-Dec monitoring it was noted that UMPL EHSS policies in local language is not found to be integrated in the sample employee appointment letter being issued. Review of the sample appointment letter and worker agreement (<i>Manis Power Corporation & Meghna Enterprise</i>) for the current monitoring period indicates that the aforesaid policies have now been furnished as part of such documentation.		
2.3	Review and update the AI matrix to cover all potential environmental aspects/impacts of the sewage treatment and batching plant operations. The AI matrix mitigation measures also need to be aligned to the project ESMMP and IFC General/Sectoral EHS Guidelines.	S. No 2.3, Table 3.1	EPC	Update project Environment Aspect-Impact (AI) Register	Immediately, prior to first disbursement.	EPC consortium has prepared an Environment Aspect-Impact (AI) Matrix in line with the EHS Risk Assessment template shared in the EHS Plan. Per the ESAP and Oct-Dec quarterly monitoring report recommendation, the AI Matrix has now been updated to cover the potential environmental impacts and mitigation measures for sewage treatment and batching plant operations for construction phase. The mitigation measures/controls for batching plant operations also now include provision of air pollution control devices (APCDs for cement silos; water sprinkling/covering of material stockpiles, and emission monitoring requirements. Similarly, provision of spill kits has been identified as a control measure for fuel loading/unloading activities. The AI matrix has also been updated to identify and assess the environmental impacts for operations; <u>however, review of the same</u>		Update the AI matrix for operations phase prior to COD to encompass potential environmental impacts and mitigation measures with respect to flue gas emissions, wastewater discharges, hazardous waste management, fuel storage and handling, water consumption, operations of high noise machineries/equipment.

S. No	Action item	Reference in ESDD Report	Responsibility	Deliverable	Suggested Timeline for completion	ERM Observations (29-31 May 2023)	Progress Status	Recommendations
						<u>indicates that the same is found to be limited to only office-based work and do not cover the potential environmental impacts associated with flue gas emissions, wastewater discharges, hazardous waste management, fuel storage and handling, water consumption, operations of high noise machineries/equipment.</u>		
2.4	Develop and maintain an updated EHSS regulatory register encompassing applicable regulatory requirements and permit conditions for both construction and operations. Track and record compliance status against regulatory register on a periodic basis	S. No 2.5, Table 3.1	UMPL, EPC & O&M	Copy of updated regulatory register for construction along with quarterly internal regulatory compliance audits.	Immediately, prior to first disbursement during construction.	In line with the ESAP recommendation, UMPL along with EPC Consortium has developed a E&S permit and regulatory register to track compliance with the applicable regulations and permit conditions. Review of the permit register indicates coverage of following permits and its conditions viz. Site Clearance Certificate, EIA approval, Factory License, NOC for ground water abstraction & construction of riverbank structures, NOC for bypass stack and chimney construction etc. In consistent with the earlier quarterly monitoring report recommendation, UMPL has now updated the legal register to ensure coverage of the following E&S regulations viz. <i>Environmental Conservation Rules, 2023, E-Waste Rules 2021, Air Pollution Control Rules, 2022, BIWTA Rules, BNBC 2020, Solid Waste Rules 2021, Water Rules 2018, Noise Control Rules 2006 etc.</i> <u>However, the legal register has not identified the requirement to demonstrate compliance with the standards prescribed for ground water, treated wastewater, sewage, and ambient noise. Furthermore, no records of quarterly regulatory compliance audits was readily available for review as the same was still pending to be undertaken.</u>		Update the EHSS regulatory register to identify regulatory requirements to demonstrate compliance with the environmental standards prescribed for ground water, treated wastewater, sewage, and ambient noise. Undertake quarterly regulatory compliance audits with respect to the E&S permit and regulatory register and maintain records of the same.

S. No	Action item	Reference in ESDD Report	Responsibility	Deliverable	Suggested Timeline for completion	ERM Observations (29-31 May 2023)	Progress Status	Recommendations
				Copy of updated regulatory register for operations along with six (6) monthly internal regulatory compliance audits	Three (3) months prior to commencement of COD and ongoing	To be reviewed and validated 3 months prior to COD.		
2.5	Develop / update and implement the project specific E&S management plans for construction, operations and decommissioning (as applicable) viz. Hydrotest Water Management Plan; Dredged Material Management Plan; Drill Cutting & Drilling Mud Management Plan; Water Management Procedure and Decommissioning Management Plan. Implement Gender Action Plan commitments which includes developing a policy on sexual harassment; constitution of a dedicated committee dealing with sexual harassment issues; organising awareness session on GBVH with communities and workforce. Implement the Labour Management Plan commitment which includes preparing a Code of Conduct (CoC) for contractor /suppliers which is to form a part of the employment contract and displayed at conspicuous places. Update the Labour Management Plan to encompass specific role and responsibilities of key personnel identified for implementation	S. No 2.6, Table 3.1	UMPL	Copy of site-specific management plan along evidence of implementation Evidence of closure of gaps identified and implementation of the Plans	Immediately, prior to first disbursement	As specified in the ESAP and ESMP, the site has presently developed/updated the following management plans as part of the ESIA viz. Hydrotest Water Management Plan; Dredged Material Management Plan; Drill Cutting & Drilling Mud Management Plan; Storm Water Management Plan and Decommissioning Management Plan. In consistent with the earlier recommendation the site has also developed a Sexual Harassment Policy which applies to all project stakeholders including subcontractors. Review of the plans for the current monitoring period revealed the following pending gaps/deviations ■ The site is yet to develop an approved decommissioning plan elaborating the details on the process for demolition, time required, management of wastes, OHS aspects, etc as specified in the ESIA report. ■ As mentioned in the earlier monitoring report, the site has made provision of silt traps at the stormwater outfalls of both worker camp and project site. However,		Develop a decommissioning management plan for the project. Demonstrate implementation to the stormwater management plan through periodic cleaning and maintenance of stormwater drains at both plant and worker camp with records being maintained. Constitute a Sexual Harassment Committee and organise awareness sessions on GBVH issues with communities and workforce in consistent with the Gender Action Plan requirements and applicable regulations. Update the Labour Management Plan and prepare and communicate a Worker Code of Conduct as per the aforesaid Plan.

S. No	Action item	Reference in ESDD Report	Responsibility	Deliverable	Suggested Timeline for completion	ERM Observations (29-31 May 2023)	Progress Status	Recommendations
	of the Plan including a checklist to assess compliance with the Plan requirements on a periodic basis.					water logging in drains continues to be noted during the current visit indicating the drains are not being subjected to periodic cleaning and inspection as per the Plan requirements. ■ Constitution of a dedicated committee dealing with sexual harassment issues; organising awareness session on GBVH with communities and workforce is still found to be pending as per the aforesaid plan requirements. ■ The Labour Management Plan developed requires the site to prepare a Code of Conduct (CoC), which commits all persons engaged by the contractor, including sub-contractors and suppliers, to acceptable standards of behaviour. The CoC is required to form a part of the employment contract along with display at conspicuous places within and outside plant in both English and local language. However, such CoC is yet to be developed and communicated as part of induction training and worker contracts/employment agreement. The Plan above have not outlined the specific role and responsibilities of key personnel identified for implementation of the Plan including a checklist to assess compliance with the Plan requirements on a periodic basis. ■ Observations related to the worker accommodation management plan implementation has been discussed under S. No. 3.6 of this Table.		

S. No	Action item	Reference in ESDD Report	Responsibility	Deliverable	Suggested Timeline for completion	ERM Observations (29-31 May 2023)	Progress Status	Recommendations
						Observations related to the SEP implementation has been discussed under S. No. 3.3 of this Report.		
2.6	Ensure mobilisation of the remaining EHS Supervisors by NEPC as per the organogram. Document and integrate the roles and responsibilities of the UMPL EHS Manager and Assistant Manager – Community Development in the EHS Plan.	S. No 2.7, Table 3.1	UMPL & EPC	Copy of appointment letter NEPC EHS Supervisors. Documented roles and responsibilities UMPL EHS Manager and Assistant Manager – Community Development	Immediately, prior to first disbursement	In line with the ESAP recommendation, the EPC consortium has deployed a Project EHS Manager (GE), Assistant EHS Manager (GE) and 2 Project EHS Manager (NEPC) and the same has been presented in the EHS organogram along with the EHS Supervisors, Site Doctor & Paramedic, EHS Trainer, Lifting Specialist & Coordinator and Certified Scaffolder. In addition to the above, GE and NEPC has mobilised 7 and 15 EHS Supervisors respectively and the same was found to be depicted in the EHS Organisational chart. Review of the project EHS Plan indicates that the roles and responsibilities of the UMPL EHS Manager and Manager – Community Development has now been documented and integrated in the aforesaid Plan. Reportedly, organogram of E&S management for operations phase is currently not available and shall be firmed up prior to project COD.		Action closed as per the Oct-Dec 2022 E&S monitoring report
2.7	Update the EPRP to include the site lay out plan, list of fire prevention and control equipment, updated onsite responders list along with details of medical and firefighting team.	S. No 2.8, Table 3.1	UMPL and EPC	Updated EPRP Copy of mock drill report	Immediately, prior to first disbursement Six monthly during construction and operation period	In line with the ESAP recommendation, the site has set up an Emergency Control Centre (ECC) at the security room (adjoining the main plant site entrance). The emergency call in number of the control room was found to be displayed at the ECC along with contact details of both onsite and offsite emergency responders. Review of the Emergency Preparedness and Response Plan (EPRP) indicate site lay out plan presented in the said plan has been updated to		Share the updated EPRP which is to include the list of fire prevention and control equipment, along with contact details of First Intervention Team, Alarm & Evacuation Team, Emergency Coordinators, Search and Rescue Team, Security Team, Tactical

S. No	Action item	Reference in ESDD Report	Responsibility	Deliverable	Suggested Timeline for completion	ERM Observations (29-31 May 2023)	Progress Status	Recommendations
						depict the evacuation routes, assembly point, occupational health centre (OHC) and first aid box location. Copy of the plan was also found to be displayed at the site entrance. The Plan was also found to be bear the contact details of the onsite and offsite responders along with the contact details of the firefighting and first aid team. As noted during the current visit, the site is yet to provide documentary evidence to address the following gaps identified with respect to the updated EPRP in the Oct-Dec 2022 monitoring report: ■ The Emergency Response Organisation chart mentions a First Intervention Team, Alarm & Evacuation Team, Firefighting Team, Emergency Coordinators, Search and Rescue Team, Security Team, Tactical Team and Oil Spill Response Team. However, except for First Aid Team and Firefighting team details of the other emergency team members (as mentioned above) has not been furnished. ■ Details related to fire prevention and control equipment available onsite is not furnished in the EPRP. Documentation review indicates that an annual mock drill schedule has been prepared for 2023, with mock drills being undertaken on a six-monthly basis and results documented.		Team and Oil Spill Response Team.
2.8	Arrange for a standby boat equipped with life jacket and trained personnel to respond to	S. No 2.9, Table 3.1	UMPL and EPC	Photographic evidence	Immediately, prior to first disbursement	In consistent with the ESAP recommendation, the site has now updated the Emergency Preparedness and Response Plan (EPRP) to		Action closed as per the Oct-Dec 2022 E&S monitoring report

S. No	Action item	Reference in ESDD Report	Responsibility	Deliverable	Suggested Timeline for completion	ERM Observations (29-31 May 2023)	Progress Status	Recommendations
	any project riverine traffic related emergencies.					encompass emergencies related to road and riverine traffic incidents/accidents along specific response, evacuation and rescue measures. Furthermore, as specified in the EPRP and ESAP, the site has now provided a standby boat equipped with life jacket and trained personnel at the material loading and unloading temporary jetty.		
2.9	Perform quarterly E&S audits of the manpower supply contractors to assess compliance with applicable regulatory requirement and project E&S plans/procedures. Extend the coverage of the weekly EIC to cover the worker accommodation along with the development of CAPA for all non-conformances identified.	S. No 2.11, Table 3.1	UMPL & EPC	Copy of quarterly subcontractor audits Copy of weekly EIC	Immediately, prior to first disbursement	The Project EHS Plan developed by the EPC consortium reveals the requirement for performing quarterly audit/inspection of the subcontractor HSE performance with the audit findings and corrective actions/recommendations to be reported to the subcontractor site manager to facilitate necessary closure. Presently, EPC has engaged “Meghna Enterprises” and “Man-Is-Power” as manpower supply contractors for the construction phase of the project. As noted during the last E&S monitoring (Oct-Dec 2022), the EPC consortium undertakes quarterly EHS performance audits of the aforesaid subcontractors with audit reports being maintained. <u>However, no Corrective & Preventive Action Plan (CAPA) was noted to be developed for the non-compliance identified as part of such quarterly EHS audits. The same is still found to be pending for the current monitoring period (Jan-Mar 2023)</u> Documentation review indicates that the EPC maintain a weekly Environmental Inspection Checklist (EIC) for the main plant to identify any non-conformance related to construction phase. As recommended in the ESAP, this checklist is		Develop a CAPA for the quarterly subcontractor audits and weekly EIC inspections undertaken by the EPC Consortium.

S. No	Action item	Reference in ESDD Report	Responsibility	Deliverable	Suggested Timeline for completion	ERM Observations (29-31 May 2023)	Progress Status	Recommendations
						also found to be extended to the worker camp/accommodation which involves domestic wastewater treatment & discharge, storage and handling of waste & hazardous chemicals etc. <u>However as earlier identified in the Oct-Dec 2022 monitoring report, the site is yet develop a Corrective & Preventive Action Plan (CAPA) for the non-conformance identified through the said checklist.</u>		
2.10	Update and implement the project Environmental Monitoring Plan to cover all environmental attributes and parameters as specified in the regulations and IFC EHS guidelines. The plan to clearly outline the rationale for selection of the monitoring locations.	S. No 2.12, Table 3.1	UMPL & EPC	Copy of updated Environmental Monitoring Plan & Monitoring Reports.	Immediately, prior to first disbursement	Documentation review indicates that the site refers to the Environmental Monitoring Plan (EMP) outlined in the ESIA report for the purpose of environmental monitoring activities being undertaken for construction phase. The locations selected for monitoring do not consider the rationale for such selection. Reportedly the site has engaged a third-party agency – M/s Environmental Laboratory and Research Centre (ELRC) to carry out E&S monitoring for the project during construction phase. Review of the ELRC quarterly monitoring report for the period Jan-Mar 2023 indicated the following <i>Ambient Air Quality Monitoring</i> Monitoring of ambient air is undertaken at 6 locations on a monthly basis (24 hr sampling) including worker camp and main site. However as specified in the EMP, the site has not undertaken ambient air monitoring at Dudhghata primary school which is identified as a sensitive receptor. The parameters monitored is limited to <i>PM10 (45.53-90.72 µg/m3), PM2.5 (16.63-55.76 µg/m3), SO2 (14.85-39.78 µg/m3); NOx (15.08-34.43 µg/m3); Ozone (46.78-59.71 µg/m3); and</i>		Update the Environmental Monitoring Plan (EMP) to include the rationale for selection of the monitoring location for both construction and operations. Update the surface water and treated sewage monitoring program to cover all parameter as specified in Schedule 2 & 3 respectively of BECR, 2023. Cover all parameters prescribed in Schedule 2 of the BECR,2023 for the groundwater samples. Update the stormwater quality monitoring program to cover all outfalls at the worker camp and parameter outlined in the IFC EHS guidelines for Thermal Power Plants.

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						CO (0.10-0.40 mg/m3). The result in all cases was found to be in compliance with Schedule 12 of the <i>Air Pollution Control Rules, 2022</i>. <i>Ambient Noise Quality Monitoring</i> Monitoring of ambient noise (both day and night) is undertaken at 7 locations (2 at main plant site, 1 at worker camp and 4 outside the plant near sensitive receptors viz, <i>Purbapara Mosque, Kurbanpur Ghat</i> etc). The monitoring is being undertaken on a weekly basis with results in all cases found to be in compliance with the day and night-time noise standards prescribed under Noise Rules, 2006. <u>However, for the <i>Poschim Para Jame Mosque and Dudhghata Primary School</i> location both day and night-time equivalent noise levels was found to be higher than the prescribed standards for silent area/zone primarily attributed to anthropogenic activities.</u> <i>Surface Water Quality Monitoring</i> Monitoring of surface water quality is being undertaken at 3 locations – upstream and downstream of Meghna River and near the project temporary jetty. The sampling is undertaken on a monthly basis and samples analyzed for the following parameters – pH, BOD, DO, COD, TSS, TDS, Oil & Grease and Total Coliform. <u>However, as per Schedule 2 of BECR, 2023, the following parameters are not found to be covered in the surface water quality monitoring program viz. ammoniacal nitrogen, total chromium, lead, mercury, and Total Dissolved Solids (TDS). Also, the results need to be assessed with the respect to standards</u>		Ensure treated sewage quality (particularly for COD and total coliform) conforms to the Schedule 2 of BECR, 2023 and IFC General EHS Guidelines for sanitary discharges prior to its discharge in the natural drainage channel.
								Update the soil quality monitoring program to cover the worker camp cum laydown area.

S. No	Action item	Reference in ESDD Report	Responsibility	Deliverable	Suggested Timeline for completion	ERM Observations (29-31 May 2023)	Progress Status	Recommendations
						<u>prescribed under the newly notified BECR, 2023.</u> <i>Ground Water Quality Monitoring</i> Review of the quarterly GW monitoring report for the Jan-Mar 2023, reveals the ground water has monitored from 4 wells (3 at main plant site and 1 at worker camp). Gaps/deviations identified with respect to the GW monitoring program were the following: ■ <u>The drinking water standards specified in Schedule 2 of the BECR, 2023 requires 55 parameters to be monitored. Review of the results indicate that total parameter suite is only covered for one location (HRSG Office), while for the remaining 3 samples it is limited to only pH, BOD, DO, COD, TDS, Oil and Grease and Total Coliform. Except for nitrite (4 mg/l) in all cases, the results were found to be in compliance with the drinking water standards specified in the aforesaid standard.</u> ■ <u>As specified in the Oct-Dec 2022 monitoring report, the drinking water analysis results is yet to be assessed with respect to the Drinking Water Standards specified in Schedule 2 of BECR, 2023.</u> <i>Storm Water Quality Monitoring</i> Review of the monitoring report indicates reveals that no stormwater was available for collection for the monitoring period. <u>However as earlier mentioned in the Oct-Dec 2022 monitoring report the site is required to cover both stormwater outfalls as part of the</u>		

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						<u>monitoring program. Furthermore, the monitoring program do not cover parameters such as oil and grease and heavy metals (iron, zinc, chromium, cadmium, mercury and arsenic) as specified in the IFC EHS Guidelines for Thermal Power Plants.</u> <i>Treated Sewage Monitoring</i> Review of the monthly treated STP effluent monitoring report for the Jan-Mar 2023, reveals the effluent has been analysed for pH, temperature, BOD, COD, TSS, sulphate, phosphate and faecal coliform. The effluent is generated from the STP located at the worker camp and is being discharge to a natural drainage channel. Key gaps/deviations identified with respect to the storm monitoring program were the following: ■ <u>The results for faecal coliform (5500-7500 CFU/100ml) and COD (360-471 mg/l) was found to be exceeding the standards prescribed for the said parameters under Schedule 3 of BECR, 2023. Similar observation was also made as part of the Oct-Dec 2022 monitoring report, wherein the faecal coliform (2332-2400 CFU/100ml) and COD (190-210 mg/l) was also found to be exceeding the aforesaid sewage discharge standards.</u> ■ <u>The treated sewage monitoring program do not cover parameters such as oil & grease and nitrate as specified in Schedule 3 of BECR, 2023.</u> <i>Soil Quality Monitoring</i>		

S. No	Action item	Reference in ESDD Report	Responsibility	Deliverable	Suggested Timeline for completion	ERM Observations (29-31 May 2023)	Progress Status	Recommendations
						Review of the quarterly soil monitoring report for the Jan-Mar 2023, reveals the soi samples has been collected from the project site and nearby agricultural land. The soil samples so collected has been analysed for pH, electrical conductivity, heavy metals, nitrogen, phosphorus, potassium, calcium and magnesium. Currently there are no soil standards in Bangladesh against which the results could be validated. <u>However as mentioned in the Oct-Dec 2022 monitoring report, the site is yet to collect and analyse soil samples from the operating a worker camp cum material laydown area.</u>		
2.11	Update the monthly E&S progress report to include social KPIs along with key environmental KPIs such as water consumption, wastewater generated and discharged, waste recycled/disposed	S. No 2.13, Table 3.1	UMPL & EPC	Copy of monthly EHS KPIs for construction	Immediately, prior to first disbursement	Documentation review indicates that EPC generates a monthly progress report encompassing Environmental and H&S KPIs along with key E&S incidents/issues and corrective actions. The following key EHS KPIs are reported in the progress report viz. <i>Fatalities LTIs, Medical Treatment Case, First Aid Case, Fire, Near Misses, Stop Work, Safety Rewards, Training hours, Toolbox Talks, Safe Man hours, EHS Inspections, Spill Incidents, Waste generation etc.</i> As specified in the Oct-Dec 2022 monitoring report, the monthly report has now been updated to cover social KPIs like grievances recorded/addressed; <u>however, details of stakeholder engagement is yet to be furnished such report. Furthermore, the coverage of key environmental KPIs like water consumption, wastewater generated and discharged, waste</u>		Update the monthly E&S progress report to include social KPIs like stakeholder engagement along with key environmental KPIs such as water consumption, wastewater generated and discharged, waste recycled/disposed

S. No	Action item	Reference in ESDD Report	Responsibility	Deliverable	Suggested Timeline for completion	ERM Observations (29-31 May 2023)	Progress Status	Recommendations
						<u>recycled/disposed etc is yet to be covered in the aforesaid report.</u>		
2.12	Update the SEP to include a point on specific channel of communication for external stakeholders established on regular basis to register concerns /feedback from general public or any other external stakeholder. A clear reporting format should be developed and used for SEP Implementation. Implement the Grievance Redress Mechanism for community and report regularly.	S. No 2.15, Table 3.1	UMPL	External Communication procedure document Stakeholder activities to be reported in the ES monitoring report Functional GRM; records and database of grievances (including all formal and informal complaints and legal court cases) and resolutions: grievances to be reported in the ES monitoring report.	Immediately, prior to first disbursement Ongoing activity Ongoing activity	Current SEP document has now included the specific channel of communication for external stakeholders, as recommended in previous Monitoring reports. GRM function appears to be working at satisfactory level. Stakeholder, specifically local community in close vicinity of project are well aware with team responsible for registering their issues and concerns. Records of issues received from stakeholder are recorded and also feature in periodic social monitoring report. Grievances received from workers at construction site are also recorded and reported in Social Monitoring report.		
2.13	Check effectiveness of GRM for workers through review of grievance records, action taken report, workers' consultations etc.	S. No 2.1 & 2.14, Table 3.1	UMPL	GRM implementation evidence	Ongoing activity	GRM function were observed to be working fine. Grievances recording system is in place and it is being documented.		
3.	IFC PS 2: Labour and Working Conditions							

S. No	Action item	Reference in ESDD Report	Responsibility	Deliverable	Suggested Timeline for completion	ERM Observations (29-31 May 2023)	Progress Status	Recommendations
3.1	Update UMPL HR policies to ensure alignment with IFC PS-2 requirements as well as BLA 2006 requirements.	S. No 2.1, Table 3.4	UMPL	Updated HR policy	Immediately, prior to first disbursement	During visit it was observed that UMPL HR policy was not yet updated with recommended points as given in ESDD Report. However, it was reported that required updates in UMPL HR policy is under management's consideration.		Update the HR Policy in line with the ESAP recommendation.
3.2	Facilitate approval of the service rules in coordination with the competent authority	S. No 3.2, Table 3.1	UMPL	Approved Service Rule	3 months prior to COD	Approved service rule is not yet in place. It can be done after the HR policy gets approved internally by UMPL Management.		Facilitate approval of the service rules in coordination with the competent authority.
3.3	Generate a list of contract workers documenting their overtime work status till date (beginning of construction phase till end of Jan'23), gaps with respect to overtime payment including arrears to be paid.	S. No 3.4, Table 3.1	UMPL in coordination EPC Contractor	OT work status spreadsheet for contract workers	Immediately, prior to first disbursement	UMPL has obtained a legal opinion on applicability of Section 108 of Bangladesh Labour Law (BLL) on overtime calculation which says: “Section 108 - Extra-allowance for overtime: □(1) Where a worker works for more hours than the hours fixed under this Act in an establishment on any day or in a week he shall, for overtime work, be entitled to allowance at the rate of twice his ordinary rate of basic wage and dearness allowance and ad-hoc or interim wage, if any.” The legal opinion concludes that wage component like dearness allowance or ad-hoc/interim wage is not applicable in case of construction workers engaged in UMPL In the initial ESDD report, it was highlighted that wage sheet maintained by labour supply sub-contractors engaged in UMPL doesn't reflect bifurcation of daily wage rate of construction workers into basic, HRA, medical allowance and transport allowance as given in minimum wage notification. Further overtime payment was being calculated at the rate of their daily gross wage rate instead of twice of basic wage rate as		UMPL is required to redo the gap assessment of OT payment to establish the requirement of arear payment for differential amount, if required. <u>Revised Minimum Wage</u> Specific recommended actions to ensure alignment with revised minimum wage rate are as follows: • UMPL to check and confirm effective date of implementation of revised minimum wage rate; • Gap assessment of revised minimum wage rate for different categories of workers against the existing wage rate that being followed at site;

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						required under section 108 of BLL. Therefore, the issue of non-compliance w.r.t OT payment calculation was raised. Based on the conclusion of legal opinion obtained, UMPL has advised their contractors and sub-contractors to redefine the wage sheet of construction workers in alignment with minimum wage notification and reflect bifurcation of daily wage rate into basic, HRA, medical allowance & transport allowance. This will enable sub-contractors and UMPL in fair assessment of the gaps w.r.t OT payment (if exist). As reported sub-contractors has started maintaining wage sheet in a recommended format and some sample copies were also shared with ERM for review that were found to be in order. UMPL has completed OT gas assessment till August 2021 considering 50% of gross salary as basic wage rate for all workers. ERM reviewed the assessment findings and observed that basic salary is more than 50% and hence UMPL is required to reassess and check requirement of differential amount of OT payment in form of arear. Revised Minimum Wage Notification It has also been noticed that updated minimum wage rate for construction workers has been uploaded in the 'Minimum Wage Board Portal' of Bangladesh Government. This new notification has increased wage for construction workers, specifically for unskilled categories of construction workers.		- NEPC update their agreement with their manpower supply agencies to ensure alignment with revised minimum wage rate base on outcome of gap assessment; - Ensure releasing payment to construction workers as per applicable revised wage rate at the earliest.

S. No	Action item	Reference in ESDD Report	Responsibility	Deliverable	Suggested Timeline for completion	ERM Observations (29-31 May 2023)	Progress Status	Recommendations
	Facilitate and complete payment of arrears to the contract workers identified with OT pay gaps in the list above.	S. No 3.4, Table 3.1	EPC Contractor	Evidence of payment of OT related arrears to the eligible workers.	Prior to COD	This is to be assessed based on wage sheet in the recommended format where in basic wage rate and OT calculation are reflected in alignment with BLL requirements.		Same a s above
	Ensure OT payment to both direct and contractual workforce is undertaken in alignment with Bangladesh Labour Rules (BLR), 2015 from 1 Feb 2023 onwards	S. No 3.4, Table 3.1	EPC Contractor	Documentary evidence of compliance	Immediately, prior to first disbursement	Same a s above		Same a s above
3.4	Every worker should be issued appointment letter by their respective sub-contractors of EPC contractor as required under section 5 of BLA 2006.	S. No 3.6, Table 3.1	EPC Contractor	Documentary evidence of compliance	Immediately, prior to first disbursement	Consultation with workers at site indicates workers are now being provided by their respective sub-contractors.		Regular follow-up with manpower supply agencies should continue to ensure that all of their new recruits provided appointment letter on the very day first of their joining.
3.5	EPC contractor should also comply with applicable provisions of BLA 2006 w.r.t records and registers required to be maintained as per BLA 2006	S. No 3.7, Table 3.1	EPC Contractor	Documentary evidence of compliance	Immediately, prior to first disbursement	Manpower supply agencies (i.e. 'Meghna Enterprise' and 'Man is Power') are maintaining the applicable compliance related documents that were reviewed at site by ERM.		None
3.6	Ensure improvement of the driver accommodation conditions at the worker camp as per EBRD guidelines. Ensure the sanitation facilities at the driver accommodation at the worker camp is designed to provide workers with adequate privacy, including ceiling-to-floor partitions. Proper locking arrangements to be provided at all doors of the temporary toilet rooms/ units on-site.	S. No 3.8, Table 3.1	EPC Contractor	Monitoring checklist and monthly monitoring reports on accommodation facility. Photographic evidence	Immediately, prior to first disbursement	A monitoring check list on worker's accommodation is though prepared and being used at site to track performance. As specified in the Oct-Dec 2022 monitoring report, the site has made necessary efforts to make provision of cupboards at the driver/worker accommodation at the worker camp for storage of belongings. However, the site is yet to demonstrate compliance with the following observations made during the earlier and current monitoring visit.		Ensure privacy of the sanitation facilities at the worker/driver accommodation at camp. Install mosquito screens/net at worker room windows as per EBRD requirements.

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						- Sanitation facilities at the driver camp still do not conform to the EBRD requirements viz. no privacy etc. - Windows at the worker room at the camp were not provided with mosquito screens/net as per the EBRD requirements.		
3.7	Remove/replace electric hand power tools using defective/frayed wiring. Appoint designated personnel having valid license for supervision of electrical works and carrying out work on high voltage electrical installations.	S. No 3.12, Table 3.1	EPC	Photographic evidence Copy of wireman permit of all the electricians specifying its validity	Immediately, prior to first disbursement	As observed during the site walk round, handheld power tools being used were found to be equipped with earthing provision and the same is checked monthly using dedicated electrical inspection checklist. <u>However, as noted during the earlier and current monitoring visits multiple instances were noted where the arc welding machines were not found to be provided with dual earthing and/or placed on insulated mats as per BNBC requirements. During the current monitoring visit, it was noted that the pumps/motors installed at the Water Treatment Plant (WTP) at the worker camp is not provided with double earthing.</u> In consistent with the applicable regulations and inspection checklist shared, the site is required to appoint certified wireman(s) for undertaking the electrical works. As specified in the Oct-Dec 2022 monitoring report, the site has appointed electricians having wireman and supervisory permit to conduct installation and operation of medium and high voltage electrical works in accordance with the provision of Electricity Rules, 2020. <u>However, documentation review indicates the wireman permit for two of the</u>		Ensure provision of double earthing for all electrical welding machines, including placement of such machines on insulated mats while in operation. Equip all pumps/motors installed at WTP with double electrical earthing. Renew the electrical wireman permit for the two electricians from Bangladesh Electricity Licensing Board.

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						<u>electricians has expired on 25 April 2024 and is currently pending renewal.</u>		
3.8	Make provision of standalone lighting at the worker restroom/shelters at the main plant site. Share periodic illumination monitoring records for review and validation. Update the GW monitoring program as specified in S. No. 3.13 of Table 3.1 of the 1st E&S monitoring report.	S. No 3.13, Table 3.1	EPC	Photographic evidence Illumination records Updated GW monitoring program	Immediately, prior to first disbursement and ongoing	As recommended in the Oct-Dec 2022 monitoring report, all the restrooms/shelters onsite have been provided with lighting. Reportedly and documentation review indicates that the site undertakes periodic illumination monitoring for all work areas. As specified in the Oct-Dec 2022 monitoring report illumination records for Mar 2023 also indicated lower illumination compared to standards (100 lux) at the following areas – Raw Material Storage (RMS) area, Cooling tower; Main Gate; Dormitory & Canteen building; Raw Water Pump House; ST Transformer Area; and Misc. Pump House. Furthermore, no illumination monitoring has been undertaken at the labour camp area. For the groundwater monitoring program, please refer to S. No. 2.10 of this Table.		Update the illumination monitoring program to cover the worker camp. Illumination level at all working areas within the construction site to conform to the workplace standards of 100 lux.
3.9	Ensure locking out (de-charging and leaving open with a controlled locking device) and tagging out (warning sign placed on the lock) devices during service or maintenance. Ensure all hot work activities is performed with use of proper barrier screens and in presence of a standby “fire watch” at all times. Provide toe board with the exiting hard barricading at open end of floor/platform as per BNBC norms.	S. No 3.14, Table 3.1	EPC	Photographic evidence Work permits for height work and confined space entry. JSA for high hazard works	Immediately, prior to first disbursement	<i>Electrical Safety</i> With respect to electrical safety, the site has marked the hazardous areas (electrical rooms, installation etc), with appropriate safety signages and warning signs. The site uses electrical hand power tools with proper earthing, which is subjected to monthly inspection based on a defined checklist and records maintained. Also as recommended in the Oct-Dec 2022 monitoring report, the site has implemented a robust Lock Out Tag Out (LOTO) program/permit system, which was evidenced during the current monitoring period.		Ensure workers involved in hot work such as grinding are equipped with appropriate PPEs along with provision of fire watch and fire extinguishers at such work areas. Ensure all scaffolds onsite bear inspection tags indicating its usage status. Toe boards conforming to BNBC standards to be used for all such scaffolding work.

S. No	Action item	Reference in ESDD Report	Responsibility	Deliverable	Suggested Timeline for completion	ERM Observations (29-31 May 2023)	Progress Status	Recommendations
	Implement standalone work permits for height work and confined space entry. Ensure provision of SCBAs, rescue watch, first aid etc. for all activities involving confined space entry. Conduct Job Safety Analysis (JSA) for all high hazard activities being undertaken Share details of the Safety Committee composition along with meeting minutes.			Safety committee composition & meeting minutes		<i>Hot Work</i> For hot work-related activities, the site has implemented a work permit system which requires all personnel performing such work to possess requisite competency, use appropriate PPEs and safety equipment viz. flame arrestors, make provision of necessary firefighting equipment at the hot work area etc. Sample document review and physical visit to the site indicates that the site made provision of fire blankets and stand by “fire watch” in the work permits as per the IFC General EHS Guideline requirements. <u>As noted during the site walkthrough, hot work (mechanical grindings) was observed to be undertaken at the Steam Turbine (ST) building without appropriate PPEs in the form of face shield. Provision of fire watch and fire extinguishers were also found to be missing in such area as per standard work practices.</u> <i>Safety Committee</i> In accordance with the BNBC, 2020 requirements, a Safety Committee has now been constituted to efficiently manage all safety related affairs. The GE-Site in Charge acts as the head of the Committee which meets on monthly basis. Documentation review indicates monthly safety committee meeting minutes being maintained and corrective actions identified. <i>Height work</i> As observed during the site walkaround, every open side floor/platform including stairways of		Ensure all worker operating on scaffolds are equipped with appropriate PPEs viz. safety belts and helmets. Provide hard barricading at all excavated trenches onsite particularly those near ST building, dormitory building and fire pump room.

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						under construction building onsite is provided with temporary hard barricading of appropriate height. Also as recommended in the ESAP, the hard barricading railing for such buildings were now provided with toe boards as per BNBC requirements. In this regard and as recommended in the Oct-Dec 2022 monitoring report, site has developed and implemented a standalone height work permit system. During the site walkthrough undertaken for the current monitoring visit the following gaps/deviations has been observed with respect to height work: ■ <u>Multiples instances have been noted wherein scaffolds used for height work is found to be missing inspection tags or “DO NOT USE” tags. The platforms on such scaffolds were not found to be provided with toe boards or such boards provided did not conform to the BNBC standards.</u> ■ <u>Workers operating on such scaffolds were not found to be equipped with appropriate PPEs (safety belts and helmets) which were being provided to them.</u> <i>Confined Space Entry</i> In consistent with the Oct-Dec 2022 monitoring report, oxygen and LEL levels are now being monitored and documented as part of the confined space work permit system. <i>Excavation Work</i> Documentation review indicates that the site has developed and implement a permit system for excavation work; <u>however, hard barricading was</u>		

S. No	Action item	Reference in ESDD Report	Responsibility	Deliverable	Suggested Timeline for completion	ERM Observations (29-31 May 2023)	Progress Status	Recommendations
						<u>found to be missing at the excavated trenches near ST building, dormitory building and fire pump room.</u>		
3.10	Develop and implement a robust near miss recording system. Conduct regular training of the workforce to enhance awareness on “near miss” definition to improve overall reporting. Update the training program to encompass the refresher training and its frequency. Maintain separate records for all refresher training being provided.	S. No 3.15, Table 3.1	EPC	Near Miss Reporting & Recording Procedure Training Records (including refresher training)	Immediately, prior to first disbursement	Documentation review indicates that site has implemented a safety induction program for the workforce with records found to be maintained. Reportedly and as noted during the documentation review, the site records and reports near miss as part of the monthly EHS KPI report. Presently a total of 8 near miss has been reported for the construction period till date which appears to be unlikely for this construction site where nearly 1500 workers are currently engaged. In this regard, a near miss reporting system has been established and awareness campaigns being undertaken on a monthly basis. Reportedly, refresher trainings are being conducted however the frequency of such trainings have not been defined under the training program and records documented.		Action closed as per the Oct-Dec 2022 E&S monitoring report
3.11	Develop and implement occupational noise monitoring plan for workers operating nearing high noise equipment viz. batching plant, grinding machines, concrete mixers etc. and maintain records for the same.	S. No 3.16, Table 3.1	EPC	Occupational noise monitoring plan and records	Immediately, prior to first disbursement	The site has prepared high noise map zone covering a total of 7 areas within main plant viz. main gate, HRSG, dormitory, batching plant, jetty, RMS and STG. Documentation review indicates noise is monitored at these locations 4 times in a day on a monthly basis. In consistent with the ESAP recommendation, the site has undertaken monitoring of occupational noise levels near high noise generating equipment and operations (diesel generator sets, cranes, batching plant, grinding and concrete mixing operations) with results found to be in		Action closed as per the Oct-Dec 2022 E&S monitoring report

S. No	Action item	Reference in ESDD Report	Responsibility	Deliverable	Suggested Timeline for completion	ERM Observations (29-31 May 2023)	Progress Status	Recommendations
						compliance with the threshold occupational exposure limit of 85 decibels specified under the IFC General EHS Guidelines.		
3.12	Ensure all LPG cylinders at the worker camp and main plant are being stored in covered storage and chain linked. For temporary/satellite LPG storages onsite ensure display of appropriate hazard communication.	S. No 3.16, Table 3.1	EPC	Photographic evidence	Immediately, prior to first disbursement	As observed during the site walkthrough, appropriate hazard and safety signages was observed to be displayed at the designated LPG storage area at the worker camp and construction site along with copy of the MSDS (in both English and Bangla). Also as recommended in the Oct-Dec 2022 monitoring report, the site has made effective provision for chain-linking of the LPG cylinders at storage and usage areas onsite. In this regard, the site has also developed a Compressed Gas Cylinder Management procedure which outlines the process of cylinder unloading in consistent with industry best practices.		.
4.	IFC PS 3: Resource Efficiency and Pollution Prevention							
4.1	Review and validate the project main and bypass stack design in consistent with the IFC General EHS Guidelines requirements. Prepare and implement a Noise Prevention & Control Plan for operations to ensure compliance with the applicable noise standards at the sensitive receptors (both day and nighttime)	S. No 4.1, Table 3.1	UMPL	Copy of stack height design validation study based on IFC EHS Guidelines. Copy of Noise Prevention and Control Plan along with evidence of implementation.	Immediately, prior to first disbursement	The Site has shared an Inspect Report (EOMR) for the HRSG Stack submitted by GE. However, the Report has not included any aspects related to stack height design validation based on IFC EHS Guideline. Also as specified in the ESAP, the site is yet to develop a Noise Prevention and Control Plan for operations phase.		Establish the conformance of the design of the project main stack and bypass stack to the IFC General EHS Guidelines requirements (as specified in Annex 1.1.3) Develop and implement a Noise Prevention & Control Plan.

S. No	Action item	Reference in ESDD Report	Responsibility	Deliverable	Suggested Timeline for completion	ERM Observations (29-31 May 2023)	Progress Status	Recommendations
4.2	Perform annual quantification of GHG emissions during operations in accordance with internationally recognized methodologies and good practices. Facilitate implementation of the Climate Change Risk Assessment (CCRA) Study Report	S. No 4.2, Table 3.1	UMPL	Copy of GHG emission quantification for operations. Report on the implementation progress of CCRA study	Annually during operations.	To be reviewed and validated during project operations.		
4.3	Install flowmeters for all borewells at the site and camp. Maintain water consumption records from such borewells and report it as part of monthly EHS KPI report being generated.	S. No 4.3, Table 3.1	UMPL & EPC	Copy of flow meters purchase order and monitoring records. Updated monthly EHS KPI report	Immediately, prior to first disbursement	With respect to the four bore wells from which ground water is being sourced for the construction phase, presently flowmeters have only been installed at the borewells at the worker camp. For the surface water being sourced, photographic evidence of water meter installation is yet to be shared as per the Oct-Dec 2022 monitoring report. Review of the water consumption records for April 2023 indicate the total water consumption (both surface and groundwater) to be 74.6 KLD. However, no well specific sourcing data/information was found to be maintained separately for groundwater and surface water. This is identified to be of importance in order to ensure compliance with the water extraction limit specified in WARPO permission issued to the site. Review of the monthly progress report for Mar 2023, reveals that the water consumption data is yet to be reported as part of the EHS KPIs.		Maintain water consumption records for each borewell and surface water sourcing location and report it as part of monthly EHS KPI report being generated.
4.4	Conduct analysis of the riverbed sediment for any potential contaminants by engaging laboratories outside Bangladesh.	S. No 4.4, Table 3.1	UMPL & EPC	Copy of riverbed sand analysis report.	Immediately, prior to first disbursement	As mentioned in the Oct-Dec 2022 monitoring report, U MPL has now undertaken analysis of the riverbed sediments (4 samples) by engaging		

S. No	Action item	Reference in ESDD Report	Responsibility	Deliverable	Suggested Timeline for completion	ERM Observations (29-31 May 2023)	Progress Status	Recommendations
	Implement sediment control measures for the riverbed sand being used for levelling at the worker camp.			Photographic evidence		a third-party agency – <i>ALS Technichem HK Pty Ltd</i> , to assess for any potential contaminants viz. PAHs, PCBs, BTEX, TPH and heavy metals. Review of the results with respect to the Dutch Soil Standards (in absence of any national soil standards) reveals in all the cases the concentration of the aforesaid contaminants to be well below the target and intervention values (as presented in the aforesaid standards), which is not indicative of any potential contamination. During the site walkthrough it was noted that arrangements has been made to prevent overflow of riverbed sand to adjoining community land parcels etc. through use of sandbags. Also as recommended in the last monitoring report and as observed during the current visit, the site has implemented erosion control measures such as grass matting on the riverbed sand slopes of worker camp/accommodation area.		
4.5	Update the WMP as per the ESAP recommendation to cover all major waste streams. viz. drill cuttings and drilling mud during gas pipeline laying; riverbed sediment from construction of water intake & outfall structures; and septic tank sewage sludge.	S. No 4.5, Table 3.1	UMPL & EPC	Copy of updated project WMP.	Immediately, prior to first disbursement	Review of the Waste Management Plan (WMP) shared indicates it has now been updated to cover the storage, collection and disposal requirements for the following wastes - drill cuttings and drilling mud during gas pipeline laying and septic tank sewage sludge. As recommended in the last monitoring report, GE has updated the WMP to cover management of riverbed sediment, which requires the sediment to be stacked in a designated location onsite equipped with bunds and handover to waste disposal agency following analysis. With respect to the sludge management, the plan has now referred to the Bangladesh Sludge		Undertake analysis of the sewage sludge and develop and implement a site-specific Sludge Management Plan as per the Bangladesh Sludge Management Guidelines.

S. No	Action item	Reference in ESDD Report	Responsibility	Deliverable	Suggested Timeline for completion	ERM Observations (29-31 May 2023)	Progress Status	Recommendations
						Management Guidelines which requires the sludge to be categorized as per the aforesaid guidelines. <u>However, the Plan is yet to refer to the preparation of a site-specific Sludge Management Plan as mentioned in the guidelines. Also, analysis of the sludge as per these guidelines is still found to be pending.</u>		
4.6	Create a centralised, covered and paved hazardous waste storage facility at both main site and construction camp. All hazardous waste storage containers at the said facility to be appropriately labelled bearing hazard codes. Maintain a waste inventory and manifests for hazardous waste being generated and collected from site in accordance with the WMP requirements.	S. No 4.6, Table 3.1	UMPL & EPC	Photographic evidence. Copy of waste inventory and manifests. Details pertaining to drilling cutting and drilling mud disposal.	Immediately, prior to first disbursement	As mentioned in the earlier monitoring report the site has established a centralised hazardous waste storage area as per the ESAP recommendation. The hazardous waste comprising of used oil was found to be kept on a paved area with spill kit and firefighting and eyewash provisions. As noted during the current visit, the following gaps/deviations were noted for hazardous waste storage at the worker camp: ■ <u>Empty and discarded paint and thinner containers and lubricant drums (~40) were found to be stored in the open on unpaved ground being exposed to weather conditions.</u> ■ <u>No secondary containment and spill kits were found to be made available at the aforesaid hazardous waste storage areas.</u> Review of the waste management documentation indicates the site maintain manifests for waste disposal as per the Waste Management Plan, however it is only limited to general solid waste. Reportedly, the site has engaged Meghna Enterprises for the collection and disposal of both general and hazardous waste. Review of the communication received		Keep empty and/or discarded oil/lubricant drums at the designated centralised waste storage area. Make provision of eyewash bottles at the aforesaid storage area. Ensure all hazardous waste bearing containers are placed in a covered and paved storage shed equipped with secondary containment and spill kits. Update the waste inventory to cover details related to recycling and disposal of general and hazardous waste. Share the ECC of the agency of the third party agency to whom the used oil is being sold Update the waste manifests being maintained to cover hazardous waste.

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						from DoE reveals that aforesaid agency is not required to obtain Environmental Clearance Certificate (ECC) for such waste collection and disposal activities. <u>As communicated, Meghna Enterprise is involved in selling of the used oil to a third-party agency, however no information is currently available on the ECC status of such agency.</u> Review of the monthly progress report for May 2023 indicates the site maintains a waste inventory, <u>however it is only limited to generation of such waste with no information available related to waste recycle/disposal quantities.</u>		
4.7	Ensure all hazardous and medical waste generated from the construction site and worker camp is collected and disposed through third party agencies having valid agreement and permission from regulatory authorities. Conduct screening audits to assess the performance of the waste treatment and disposal facilities/agencies identified prior to their engagement. Renew the biomedical waste disposal agreement with M/s Suveccha hospital.	S. No 4.7, Table 3.1	UMPL & EPC	Copy of valid agreement & license/approval for all third-party waste management agencies. Copy of audit report of third-party WMAs. Copy of renewed agreement with biomedical waste disposal agencies	Immediately, prior to first disbursement	Based on the documentation review and interaction with UMPL and GE representatives, it is understood that collection and disposal of solid wastes (including hazardous waste) and biomedical waste from site is being managed through third party agencies – M/s Meghna Enterprise and M/s Prism Review of the agreement with Meghna Enterprise is found to be valid till 30 April 2023, while the agreement with Prism is found to be valid till December 2023. As earlier stated, Meghna Enterprise is not required to obtain Environmental Clearance Certificate (ECC) from DoE, Bangladesh for current nature of waste management activities. For Prism, ECC was found to be available and valid till 26 September 2023. Furthermore, in line with the ESAP recommendation, the EPC consortium has conducted an audit of Meghna Enterprises and		Furnish compliance status to the corrective actions recommended as part of audit undertaken for the third-party waste management agencies.

S. No	Action item	Reference in ESDD Report	Responsibility	Deliverable	Suggested Timeline for completion	ERM Observations (29-31 May 2023)	Progress Status	Recommendations
						Prism with records being maintained. <u>However, the site is yet to track compliance status to the corrective actions proposed as part of this audit.</u>		
4.8	Make provision of emergency showers/eye wash at all hazardous chemical/fuel storage sheds of EPC. Avail and display concise version of MSDS of fuel/chemicals in Bangla language. Perform analysis of the transformer oil being used for the presence of PCBs. For oil storage at the worker camp, ensure provision of secondary containment and spill kit as per the Hazardous Material Handling and Storage Management Plan	S. No 4.8, Table 3.1	EPC	Photographic evidence. Analysis report of transformer oil for PCBs Photographic evidence	Immediately, prior to first disbursement	During the last monitoring visit, it was observed that diesel, lubricant and engine oil storage containers kept at the designated covered fuel and chemical storage sheds marked with hazard labels/pictograms. Material safety data sheets (MSDS) were also found to be available for the aforesaid at the EPC fuel/lubricant storage shed in both English and local language as recommended in the ESAP. Furthermore, in consistent with the recommendation in the Oct-Dec 2022 report, the site has made provision of emergency eye wash at the aforesaid hazardous chemical storage areas including the diesel storage area at the worker camp. Spill kits and MSDS were also made available at the worker camp diesel storage area, although an inspection checklist for the same is yet to be developed and implemented. Key observations/gaps identified with respect to chemical storage at the worker camp is presented below: ■ <u>Provision of emergency eyewash and spill kits were found to be lacking at the designated shed involved in the storage of paints, organic peroxides and thinners and spray-painting work areas onsite. The paint and thinner container at the spray-painting area was not found to be placed in any secondary containment.</u>		Make provision of spill kits and emergency eye wash at the thinner, paint and organic peroxide chemical storage shed at worker camp. Ensure all paints and related chemicals being used for spray-painting activities are placed in secondary containment onsite. Develop and implement a chemical compatibility matrix for chemical store at the worker accommodation. Ensure all personnel involved in spray-painting activities comprising of paints, thinners etc. are equipped with full-faced respirators as per the MSDS requirement. Procure and use SCBAs for dealing with chemical emergencies such as fire/spills etc.

S. No	Action item	Reference in ESDD Report	Responsibility	Deliverable	Suggested Timeline for completion	ERM Observations (29-31 May 2023)	Progress Status	Recommendations
						- The flammable thinners and paints at the camp were found to be stored along with oxidizing substances/chemicals viz. organic peroxides posing potential fire safety risk. The site has not adopted and implemented any chemical compatibility matrix. - The personnel involved in the spray-painting activities using chemicals such as Jotun Thinner No. 17 were not found to be equipped with appropriate PPEs viz. full-face respirators as identified in the said chemical MSDS. The site also do not maintain any Self-Contained Breathing Apparatus (SCBAs) as specified in the MSDS to address any chemical emergencies viz thinner spills/fire. As mentioned in the Oct-Dec 2022 monitoring report, the site has undertaken analysis of the transformer oil for presence of PCBs. Review of the analysis report indicate that PCBs is not detectable in the sample analysed.		
4.9	Obtain and share the renewed license of the third-party agency involved in pest control activities onsite. Discontinue the Bromadiolone and any WHO Classified Hazard Class Ia (extremely hazardous); or Ib (highly hazardous) pesticides. Update the Pest Control Procedure to introduce pesticide screening and selection	S. No 4.9, Table 3.1	UMPL & O&M Contractor	Copy of renewed licence of pesticide application agency Notice communicating the discontinuation	Immediately, prior to first disbursement	The EPC consortium has engaged a third-party agency (Care Pest Control Services Ltd.) for performing pest control activities onsite and camp on a weekly basis. Documentation review indicates that the license of the aforesaid agency as issued by the Department of Agriculture, Plant Protection Wing, Bangladesh is currently valid till 23 July 2023. As reported the agency uses the following pesticides onsite viz. Lambda Cyalothrin,		.

S. No	Action item	Reference in ESDD Report	Responsibility	Deliverable	Suggested Timeline for completion	ERM Observations (29-31 May 2023)	Progress Status	Recommendations
	based on WHO Recommended Classification of Pesticides.			of WHO Class Ia & Ib pesticides Updated pest control procedure		Cypermethrin, Permethrin and Darsbun, which do not fall within the category of Class Ia/Ib pesticide as per WHO classification. As recommended in the Oct-Dec 2022 monitoring report, the EPC has now updated the Pest Control Procedure (U-EHS-PD-037) to clearly prohibiting the selection and use of WHO Class Ia and Ib pesticides with same now being communicated to the pest control agency.		
5.	IFC PS 4: Community Health, Safety and Security							
5.1	Obtain relevant certification from concerned agency stating that the power project buildings/structures conform to BNBC requirements prior to commencement of operations. Conduct HAZOP study of the natural gas pipeline – identified as an associated facility of the project through a reputed third party agency. Implement the recommendation of the HAZOP study in the natural gas pipeline design.	S. No 5.1, Table 3.1	UMPL & EPC	Copy of BNBC certification from competent EPC personnel Copy of HAZOP report for natural gas pipeline	6 months prior to COD Immediately, prior to first disbursement.	Vysus China Inc. was engaged NEPC to carry out a HAZOP study of the power project. Review of the HAZOP Report dated 8 October 2021 indicates that it covers the following: <i>Main & Secondary Cooling Water System; Water Supply and Treatment; Demineralized Water System; Biocide Dosing System Cooling Water; Closed Cooling Water; Wastewater; Hydrogen Storage and Distribution; Compressed Air System and Fuel gas system.</i> As specified in the Oct-Dec 2022 monitoring report, HAZOP study has been extended to cover the natural gas pipeline. However, review of the assessment indicates that failure scenarios like pipeline rupture/leaks is identified to be not applicable with no discussion made with respect to current safeguards/controls available and additional controls required. The study report do not provide any definitive or logical reasoning for the aforesaid assessment.		Review the HAZOP study with respect to the natural gas pipeline identified as an associated facility for the project.

S. No	Action item	Reference in ESDD Report	Responsibility	Deliverable	Suggested Timeline for completion	ERM Observations (29-31 May 2023)	Progress Status	Recommendations
5.2	Prepare and implement a medical screening procedure for all workforce engaged in the project. Undertake specific medical test viz. audiometry, vision, colour blindness etc. for specific target worker groups based on the nature of work to be performed. Ensure the sanitation facilities at the driver accommodation at the worker camp is designed to provide workers with adequate privacy, including ceiling to floor partitions. Proper locking arrangements to be provided at all doors of the temporary toilet rooms/units onsite. Make provision of additional first aid boxes and certified first aiders at the main plant site as per BNBC norms.	S. No 5.2, Table 3.1	UMPL & EPC	Copy of pre-employment medical screening procedure along with medical examination reports for construction phase Annual medical examination report for operations Photographic evidence	Immediately, prior to first disbursement for construction phase. Annually during operations Immediately, prior to first disbursement	Reportedly and as observed during the earlier and current visit, the EPC consortium have made provision of a total of 20 sanitation facilities at the main plant site to prevent exposure to water/vector borne disease resulting from improper sanitation and hygienic conditions. In addition, as per the ESAP recommendation, adequate toilet facilities have also been provided at the UMPL/NEPC/GE employee cabins at the worker camp for both males and females. The aforesaid sanitation facilities are adequately lighted and observed to be subjected to daily cleaning by designated housekeeping team. As recommended in the <u>ESAP and the Oct-Dec 2022 monitoring report, the worker sanitation facilities at the camp do not conform to appropriate privacy requirements as per the IFC EBRD Worker Accommodation Guidelines.</u> <u>Regarding the preparation of worker pre-employment and periodic medical surveillance procedure, the same is yet to be prepared as identified in the Oct-Dec 2022 E&S monitoring report.</u> Reportedly EPC Consortium undertakes pre-employment medical screening of all workers (including security and housekeeping workforce). As earlier recommended in the Oct-Dec 2022 monitoring report, the site now undertakes specific tests like audiometry, vision and colour blindness for designated target groups along with blood tests, ECG etc. and the same was validated as part of the sample medical records review undertaken during the current visit.		Prepare a medical screening procedure for all workforce engaged in the project. of work to be performed. Ensure the sanitation facilities at the driver accommodation at the worker camp is designed to provide workers with adequate privacy, including ceiling to floor partitions.

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						With respect to first aid, as recommended in the ESAP the EPC consortium has now made provision of a 12 first aid box at the main plant site and worker camp. The first aid box contents are subjected to periodic checks based on a defined checklist. Reportedly, a total of 22 first aiders have been deployed onsite with name and contact details of the first aiders being displayed at the worker resting areas onsite. As recommended in the last E&S monitoring report, site has now arranged first aid certification training for designated first-aiders through Skill Crafts Associates on 16 Feb 2023, which is validated based on review of sample first aider certificates.		
6.	IFC PS 5: Land Acquisition and Involuntary Resettlement							
6.1	Facilitate engagement of LRP implementation monitoring agency on a fast track basis.	S. No 6.2, Table 3.1	UMPL	Engagement letter of LRP agency LRP implementation report	Immediately prior to first disbursement Quarterly during project construction and operations phase	LRP implementation agency (i.e. M/s. Sajida Foundation) and External Monitoring agency for LRP implementation (i.e. M/s. SSCL) are already on board and started their work.		None
7.	IFC PS 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources							
7.1	Promote local fish breeding site in in consultation with the Fishery Department as per ESMP requirement.	S. No 7.2, Table 3.1	UMPL	Evidence of engagement with Fishery Department	Immediately, prior to first disbursement	In consistent with the recommendation of the Oct-Dec 2022 monitoring report, UMPL has engaged with the Upazila Fisheries Department and local fishermen group with respect to		Maintain copy of the meeting minutes with Fisheries Department.

S. No	Action item	Reference in ESDD Report	Responsibility	Deliverable	Suggested Timeline for completion	ERM Observations (29-31 May 2023)	Progress Status	Recommendations
				Local fish breeding progress report	Quarterly during project construction and operations phase	promotion of local fish breeding sites. In this regard, the site was also visited by the local Fisheries Department Officer, who recommended the release around 100kgs of carp fish fingerlings of local species such as <i>Ruhi</i>, <i>Katla</i>, <i>Kalibaush</i>, <i>Mrigel</i> & <i>Sorputi</i>, <i>Bata</i> etc. by end of July to August when water level will be higher, and fishes get enough oxygen and natural feeding provisions. This is also captured as part of the UMPL Corporate Social Responsibility (CSR) Plan. Reportedly, UMPL intends to implement first phase of the fish breeding plan in August 2023 followed by second phase to be implemented in July 2024. Representative of Fisheries Department, local communities and local fishermen will also be engaged during the fish breeding promotion exercise to be conducted as part of the aforesaid Plan.		Prepare a quarterly progress update report on the fish breeding promotion program being initiated.
8.	IFC General EHS Guidelines & IFC EHS Guidelines for Thermal Power Plants							
8.1	Develop and implement a dust control procedure for managing fugitive emission from construction activities/operation in accordance to the “ <i>IAQM Guidance on the assessment of dust from demolition and construction.</i> ”	S. No 8.1, Table 3.1	EPC	Copy of dust control procedure with evidence of implementation.	Immediately, prior to first disbursement.	In consistent with the recommendation specified in the Oct-Dec 2022 monitoring report, the EPC Consortium has now developed a standalone “Dust Control Procedure” as per the IAQM guidance document as recommended in the ESAP. Review of the Plan indicates the following key actions are yet to be implemented: ■ <u>Development of a stakeholder communications plan; and a</u> ■ <u>Vehicle wheel cleaning/washing system.</u>		Ensure implementation of the Dust Control Plan through development of a stakeholder communications plan and an onsite vehicle wheel cleaning/washing system.

S. No	Action item	Reference in ESDD Report	Responsibility	Deliverable	Suggested Timeline for completion	ERM Observations (29-31 May 2023)	Progress Status	Recommendations
8.2	Update the Environmental Monitoring Plan for construction to undertake monitoring of treated sewage and storm water discharges from the main plant and worker camp to assess conformance with the discharge standards specified in BECR, 1997 and IFC Sectoral EHS Guidelines. Make provision of proper drainage arrangement at the construction plant site to prevent water stagnation. Ensure provision of sedimentation tank for collection and treatment of vehicle wash water. Ensure functionality of batching plant wastewater treatment system in order to prevent wash water overflows. Share copy of construction site drainage plan and relevant design documentation to validate the design of the septic tank system being utilised for sewage disposal at the main plant site.	S. No 8.3, Table 3.1	UMPL, EPC & O&M Contractor	Updated EMP and records of treated sewage and storm-water monitoring Photographic evidence Copy of construction site drainage plan and septic tank design documentation	Immediately, prior to first disbursement and ongoing as per the frequency specified in the EMP. Immediately, prior to first disbursement. Immediately, prior to first disbursement.	The EPC consortium has installed a modular STP at the worker camp in accordance with the ESMMP requirements. The treated effluent from the modular STP is currently being discharged into the nearby natural sewer/drainage channel. Review of the third party quarterly environmental monitoring report (Oct-Dec 2022 & Jan-Mar 2023) indicates that both treated sewage and surface run-off is being monitored to assess compliance with the discharge standards specified in Schedule 3 of the BECR, 2023 and IFC General EHS Guidelines. For further details, please refer to S. No. 2.10 of this Table. As earlier mentioned in the Oct-Dec 2022 report, the sewage at the main plant site for construction is being disposed into septic tanks and is periodically cleaned/removed through third party waste management agencies for disposal at an external location (not known). <u>However, relevant documentation to validate the adequacy and effectiveness of the septic tank system onsite is yet to be shared.</u> In accordance with the ESMMP, wastewater generated from concrete batching plant in the form of washing of transit mixers, vehicles etc along with surface run-off etc. to be subjected to treatment through temporary sedimentation tank prior to discharge into Meghna River conforming to the standards specified in the BECR, 2023. <u>However as recommended in the Oct-Dec 2022 monitoring report, the site is yet to provide a designated washing bay and sedimentation tank</u>		Provide washing bay and sedimentation tank of appropriate design for the batching plant onsite. Ensure all concrete mixer and related equipment washing is undertaken at such dedicated washing areas with the wash water being reused. Furnish the relevant design documentation to validate the design of the septic tank system being utilised for sewage disposal at the main plant site. For stormwater management and monitoring, please refer to S. No. 2.10 of Table 3.1.

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						<u>of appropriate design for the batching plant onsite.</u> For the main plant site, the drainage plan shared indicate the provision of 2 outfall equipped with catch pits. <u>However, in all cases the drainage outlet is not found to be equipped with oil-water separators. This is identified to be of significance given the stormwater is being discharged into Meghna River, abutting agricultural land and water bodies.</u> Also as discussed under S. No. 2,10, the site undertakes monitoring of surface run-off with the monitoring found to be limited to only one outfall. Also, no storm water monitoring has been undertaken for the worker camp run-off outfall. For further details please refer to S. No. 2.10 of this Table.		
8.3	Evaluate installation of automated bleed/feed controllers, and use of inert construction materials to reduce chemical treatment requirements for cooling tower. Select and use chemical additives devoid of heavy metals like chromium and zinc, being used as corrosion inhibitors. Apply intermittent shock dosing of chlorine as opposed to continuous low-level feed.	S. No 8.4, Table 3.1	UMPL, EPC & O&M Contractor	Copy of design of cooling towers Details of chemical additives to be used for treatment of condenser cooling water	3 months prior to COD	Relevant supporting documentation yet to be shared by UMLP for review and validation		
8.4	Ensure all LPG cylinders (both empty and filled) are kept in covered storage and chain linked to prevent any accidental fall. All such cylinder to be marked as empty/filled as per BNBC norms.	S. No 8.5, Table 3.1	UMPL & EPC	Photographic evidence along with quarterly inspection records of	Immediately, prior to first disbursement and ongoing	During the walkaround of the worker camp, reportedly empty LPG cylinders (45 kg capacity each) were found to be kept chain linked and in covered storage. Within the storage area, both the “empty” and “filled” LPG cylinders are		Action closed as part of the Oct-Dec 2022 E&S monitoring report.

S. No	Action item	Reference in ESDD Report	Responsibility	Deliverable	Suggested Timeline for completion	ERM Observations (29-31 May 2023)	Progress Status	Recommendations
	Update the monthly construction equipment inspection checklist to encompass gas-based welding equipment and maintain records of the same.			welding equipment Updated monthly construction equipment checklist		separated out and marked for ease of identification. In view of the ESAP recommendation, the site has developed and implemented a Gas Cutting Equipment Inspection Checklist (U-EHS-PD-001) to assess the availability and functioning of the engineering safety controls viz. non-return valves, flash back arrestors, condition of LPG/oxygen lines etc.		
8.5	Perform characterisation of waste sludge for operations and facilitate its reuse/disposal in accordance to the Bangladesh Standards and Guidelines for Sludge Management as notified by the Department of Environment (DoE), Bangladesh.	S. No. 8.6, Table 3.1	O&M Contractor	Copy of clarifier sludge analysis report and disposal plan	6 months from COD or following generation of sludge, whichever is earliest	To be reviewed and validated post the project COD and during operations of the Effluent Treatment Plant (ETP).		
8.6	Ensure providing a mechanical shaft to the pinion at all the concrete mixers being used at labour camp area. Provide adequate guard to the rotating part of the concrete mixer	S. No. 8.7, Table 3.1	EPC	Photographic evidence	Immediately, prior to first disbursement	During the site walkthrough it was observed that the portable concrete mixers being used have been provided with mechanical shaft to the pinion along with mechanical covering of rotating parts except for one, where wooden log is being used as shaft. Photographic evidence shared also indicates that movable guards installed for the rotating parts of the concrete mixers deployed while operating the machine.		Action closed as part of the Oct-Dec 2022 E&S monitoring report.
8.7	Arrange for nylon nets 3 m to 4 m below the working level along the periphery of tall buildings under construction at the main plant site.	S. No. 8.8, Table 3.1	EPC	Photographic evidence	Immediately, prior to first disbursement	As specified in the Oct-Dec 2022 report, EPC Consortium has developed and implemented full body harness inspection checklist (U-EHS-PD-02). Documentation review indicates that this inspection is being undertaken on a weekly basis and records maintained.		

S. No	Action item	Reference in ESDD Report	Responsibility	Deliverable	Suggested Timeline for completion	ERM Observations (29-31 May 2023)	Progress Status	Recommendations
						Furthermore, as recommended in the earlier monitoring report, the site has now made provision of nylon nets for all exterior height work activities as per BNBC,2020 requirement and this was validated during the site walkthrough undertaken at the construction areas.		
8.8	Develop a driver guide on road and vehicular safety in consistent with the requirements of the Traffic Management Plan. Conduct campaigns and develop brochures to enhance community awareness on pedestrian safety.	S. No. 8.9, Table 3.1	UMPL & EPC	Copy of driver guide on road and vehicular safety both on-site and off-site. Photographic evidence and copy of road safety communication material.	Immediately, prior to first disbursement.	In consistent with the Site Traffic and Transportation Management Plan, the site is yet to develop a driver guide on vehicle and road safety. Similarly, road safety related brochures are also to be prepared and shared with local communities to enhance their awareness on road and pedestrian safety. This observation is identified in the Oct-Dec 2022 report and is still pending closure.		
8.9	Ensure periodic inspection of all firefighting equipment (particularly hose reels, hydrants, sand buckets) based on a defined checklist and maintain records for the same. Make provision for fire extinguisher and smoke detection system at the driver accommodation within the worker camp. Install fire extinguishers near all temporary electrical panels and LPG storages onsite (both camp and main plant). Ensure paints/varnishes storages onsite are constructed of fireproofing material.	S. No. 8.10, Table 3.1	EPC	Copy of firefighting equipment inspection checklist and records. Photographic evidence. Photographic evidence. Fire rating enclosure certification of	Immediately, prior to first disbursement	Review of the firefighting equipment layout for both worker camp and main plan and site walkthrough indicate that the site has made provision of fire extinguishers, hydrants, hose reel boxes and sand buckets at strategic locations onsite viz. paint, chemical, hazardous waste storages etc. In addition, provision has also been made for temporary water storage facilities to serve for emergency firefighting. Smoke detection system has been installed at the worker camp offices and GE/NEPC/UMPL employee accommodation onsite. Firefighting equipment and detection system is currently under installation at the turbine and substation building.		Prepare a Fire Protection Plan as per the project Fire NOC requireme Prepare and obtain approval on the Safety Plan from Chief Electrical Inspector. Install smoke detection system at the Control Relay Centre (CRC) of the substation building and electrical panel room at worker camp.

S. No	Action item	Reference in ESDD Report	Responsibility	Deliverable	Suggested Timeline for completion	ERM Observations (29-31 May 2023)	Progress Status	Recommendations
				paint /varnish store on-site		As earlier recommended, the site has also made provision of fire hydrant/hose reel system and smoke detection system at the driver accommodation. Wooden enclosure has been removed for the flammable chemical storages in conformance with the BNBC, 2020 requirements. Also as specified in the Oct-Dec 2022 monitoring report the site has now removed all flammable packaging material from near the sanitation facility at the driver accommodation. Key gaps/deviations observed with respect to the fire prevention and control in the current visit include the following: ■ The site is yet to develop a Fire Protection Plan in accordance with the Fire NOC requirements. ■ The site is yet to prepare and approve a Safety Plan (for the under-construction buildings onsite) comprising of wiring diagrams, circuit diagrams etc. from the Chief Electrical Inspector. ■ Smoke detection system is pending installation at the Control Relay Centre (CRC) of the substation building and electrical panel room at worker camp/accommodation. ■ The electrical lighting provided at the flammable paints storage at the worker camp is not found to be flameproof in nature. ■ Multiple instances were noted where provision of fire extinguishers of requisite		Ensure provision of flameproof electrical lighting at paint storage shed at the worker camp. Install fire extinguishers near all temporary electrical panels at both camp and main plant. Prevent any storage of flammable material near all electrical panels onsite.

S. No	Action item	Reference in ESDD Report	Responsibility	Deliverable	Suggested Timeline for completion	ERM Observations (29-31 May 2023)	Progress Status	Recommendations
						capacity as per Bangladesh National Building Code (BNBC), 2020 norms were found to be lacking near electrical panels at the main plant site. This is a recurring observation also identified in the last E&S monitoring report. Also, flammable material in the form of wooden planks etc. were also found to be stored near electrical panel posing potential fire safety risk.		
8.10	Initiate conducting a Fire Safety assessment to assess the fire protection requirements	S. No. 8.11, Table 3.1	UMPL and EPC	Copy of Fire Safety Assessment Report	6 months prior to COD.	As required under Section 8.1.3 of Project EHS Plan, Site is required to undertake a Fire Safety Assessment to verify and validate the design to assess the fire protection requirements. Reportedly the site has engaged Safety Wings to conduct the Fire Safety assessment, however review of the report indicates it to be incomplete. Also, the detailed scope of work for this assessment could not established to ensure whether it is in alignment with the applicable regulatory requirement such as BNBC 2020.		Prepare a comprehensive fire safety assessment report. Share copy of the terms of reference to ensure coverage of applicable fire safety standards and codes as part of this assessment.
9.	IFC EHS Guidelines for Gas Distribution Systems							
9.1	Facilitate installation of gas detection and alarm system at the RMS in consistent with the IFC EHS Guidelines.	S. No 9.1, Table 3.1	UMPL & EPC	Copy of RMS design indicating provision of gas detection and alarm	During designing of RMS	Relevant supporting documentation to be shared by UMPL for review and validation		

S. No	Action item	Reference in ESDD Report	Responsibility	Deliverable	Suggested Timeline for completion	ERM Observations (29-31 May 2023)	Progress Status	Recommendations
9.2	Assess the occupational risks associated with gas pipeline laying and operation with respect to welding activities and considering the presence of any buried utility infrastructure in near vicinity. Coordinate with TGTDCCL to ensure all confined space entry works are undertaken in accordance to a confined space entry procedure and appropriate work permits. Ensure usage of ventilation and oxygen / explosive level detection and alarm equipment prior to any confined space access.	S. No 9.2, Table 3.1	O&M Contractor	Copy of occupational risk assessment report for natural gas pipeline. Copy of confined space entry procedure for pipeline laying. Records of work permit with oxygen level detection level for confined space entry works.	3 months prior to pipeline laying & operations 3 months prior to COD or pipeline operations, whichever is earliest. Prior to confined space entry work during operations.	The site has completed with the pipeline laying activities across the Meghna River, with potential safety risk and mitigation measures being discussed under “<i>Method Statement of Fuel Gas Pipeline HDD Construction for Crossing the Meghna River</i>” (UNQ/00/K/UEP--ADP/MS/038). As the natural gas pipeline is yet to be operational, confined space entry requirements to be formulated prior to project COD/pipeline operations.		
9.3	Identify and locate existing gas and other buried utility infrastructure, if any prior to excavation for installation or repair of gas pipelines. Ensure installation of visual marking of gas pipeline as part of installation and carry out purging of gas from pipelines prior to welding/cutting activities.	S. No 9.3, Table 3.1	EPC & O&M Contractor	Copy of underground utility infrastructure layout along the pipeline RoW. Photographic evidence	Prior to laying of gas pipeline. Prior to COD or operations of pipeline, whichever is earliest.	As communicated by the UMPL construction team, there exists no utility infrastructure along the natural gas pipeline RoW. However, copy of supporting documentation to be shared for review and validation. Provision of visual marking of the natural gas pipeline supplying the project to be undertaken prior to project COD		
9.4	Develop and implement an O&M plan for the natural gas pipeline in coordination with TGTDCCL. Submit the same to the	S. No 9.4, Table 3.1	O&M Contractor & TGTDCCL	Copy of O&M plan submitted to the	3 months prior to COD	To be reviewed and validated prior the operations of the natural gas supply pipeline		

S. No	Action item	Reference in ESDD Report	Responsibility	Deliverable	Suggested Timeline for completion	ERM Observations (29-31 May 2023)	Progress Status	Recommendations
	Department of Explosives (DoE), Bangladesh.			Department of Explosives				
9.5	Develop and implement an offsite emergency response and preparedness plan in coordination with TGTDCL. Communicate the potential hazards presented by the gas supply line, safety measure/controls in place and response measures to be adopted in case of any emergencies in the form of pipeline leaks/explosions. Implement a telephone notification system to respond to reports of leaks or questions of general safety from the affected community and other interested parties.	S. No 9.5, Table 3.1	UMPL, O&M Contractor & TGTDCL	Copy of offsite emergency response and preparedness plan with evidence of implementation.	3 months prior to COD or operations of pipeline, whichever is earliest.	To be reviewed and validated prior the project COD or operations of the natural gas supply pipeline.		
10	IFC EHS Guidelines for Electric Power Transmission & Distribution							
10.1	Ensure installation of marker balls for the power transmission line to prevent bird collisions.	S. No 10.1, Table 3.1	EPC	Photographic evidence	Prior to COD or energisation of the transmission line, whichever is earliest.	To be reviewed and validated prior the project COD or energisation of the transmission line, whichever is earliest.		
10.2	Ensure provision of effective grounding for the towers supporting the live transmission lines in accordance to the regulatory requirement.	S. No 10.2, Table 3.1	EPC	Records of earthing resistance.	Prior to COD or energisation of the transmission line, whichever is earliest.	To be reviewed and validated prior the project COD or energisation of the transmission line, whichever is earliest.		
10.3	Updated height work procedure to include work on transmission lines, rescue of fall arrested workers, use of rated hoisting equipment by trained operator.	S. No 10.3, Table 3.1	EPC	Copy of updated height work procedure with evidence of implementation.	Immediately, prior to first disbursement.	Document to be shared by U MPL for review and validation		

S. No	Action item	Reference in ESDD Report	Responsibility	Deliverable	Suggested Timeline for completion	ERM Observations (29-31 May 2023)	Progress Status	Recommendations
10.4	Develop and implement an EMF Safety Program prior to the commencement of project operations	S. No 10.4, Table 3.1	UMPL & O&M Contractor	Copy of EMF Program with evidence of implementation	Prior to COD or energisation of the transmission line, whichever is earliest.	To be reviewed and validated prior the project COD.		
10.5	Display cautionary signs and install barriers to prevent public contact with transmission towers located outside the project. Perform grounding of conducting objects (e.g. fences or other metallic structures) installed near power lines, to prevent shock.	S. No 10.5, Table 3.1	UMPL & O&M Contractor	Photographic evidence	Prior to COD or energisation of the transmission line, whichever is earliest.	To be reviewed and validated prior the project COD.		

3.2 Livelihood Restoration Plan (LRP) Implementation Status

UMPL has engaged Sajida Foundation as a LRP implementing agency and has engaged SSCL as an external Monitoring & Evaluation Agency for LRP implementation. LRP implementation is currently in progress and inception report has been submitted by Sajida Foundation and SSCL to UMPL. Sajida foundation has established their site office and their field team are mobilised at site. Currently team is in the process of undertaking baseline survey including livelihood assessment of affected families in project affected villages.

UMPL has also engaged SSCL (Sustainability Safeguard Compliance Limited) as External Monitoring consultant for LRP monitoring. SSCL has submitted their work plan as part of final Inception Report to UMPL.

3.3 Stakeholder Engagement Plan (SEP) & GRM Implementation Status

A well-qualified and trained personnel in the capacity of Community Development Manager (CDM) engaged by UMPL, is leading stakeholder engagement activities at site, with the support of a dedicated field staff who sits in Community relationship office set up by UMPL in Doodhghata village, near plant gate. Based on ERM's consultation with PAHs from Doodhghata village, it was noticed that community members are well aware with the formal engagement system established by UMPL and also quite familiar and comfortable with the CDM and his team in terms of sharing any sort of issues connected with the project activities.

UMPL Community Development team have established a system of documentation of their engagement with PAHs and other stakeholder. Minutes of meeting of all important meetings carried out by CSR Manager is being documented for records. Community Development team have established a good connect with local stakeholder and also acting as chain of communication between UMPL Management and local community.

GRM system is well established now. GRM process is displayed at notice board. Workers are informed a out this at the time of their induction training. Grievance boxes are placed across multiple locations in plant area and campsite. It was noticed that workers are familiar with this system and they hesitate a little in using the formal channel. Instead they prefer communicating their issues with their respective site supervisors. Although workers are encouraged to use formal channel of GRM by site level executives. Community issues are being taken care of by Community Development department.

APPENDIX A PHOTO DOCUMENTATION



Fig 1: Insulated mats not provided for the arc welding machines



Fig 2: Scaffold lacking inspection tags



Fig 3: Make shift toe boards do not conform to BNBC requirements



Fig 4: Provision of safety net for exterior height work activities



Fig 5: Temporary rest rooms onsite provided with lighting and drinking water centres



Fig 6: Missing barricading at excavated trench near dormitory building



Fig 7: Missing fire extinguisher near panel; flammable wooden plank stored near panel



Fig 8: Operational STP installed at worker camp



Fig 9: Hazardous waste being storage in designated covered and paved shed



Fig 10: Privacy lacking at the sanitation facility provided for the driver accommodation



Fig 11: Provision of eyewash station at diesel storage area at construction site



Fig 12: Fire watch and appropriate PPEs viz welding helmet missing for worker involved in hot work



Fig 13: Hydrogenation building under construction onsite



Fig 14: Discarded/empty used paint drums stored in the open at worker camp



Fig 15: Smoke detection system not installed at the electrical panel room at worker camp



Fig 16: Electrical motor of the water treatment plant is not provided with dual earthing



Fig 17: Chemical compatibility matrix and flame proof electrical fittings lacking at paint and thinner store at worker camp



Fig 18: Storm water drains not subjected to cleaning & maintenance



Fig 19: consultation with local community members in Doodhghata village along with LRP implementation Agency



Fig 20: Consultation with construction workers at Plant construction site location



Fig 21: Visit to Ghat area in Doodhghata village with Fishing department officer



Fig 22: Visit to Ghat area in Doodhghata village with Fishing department officer



Fig 23: visit to Drainage line construction in Doodhghata village

APPENDIX B

DOCUMENTS/INFORMATION REVIEW LIST

- Final ESIA Report dated 26 March 2022 and appendices.
- Gender Action Plan
- Copy of WARPO license for groundwater abstraction and riverbed protection construction structures
- Copy of wireman license for electricians.
- License of pest control agency – Care One Pest Services along with SOP for pesticide handling/application
- Labour license and manpower registration copies for the contractors
- Update copy of EHS Manual prepared by GE-NEPC consortium.
- Copy of updated Aspect-Impact and HIRA matrix for the project
- Training calendar for FY 2022-23 along with sample training records of workers including induction records.
- Updated emergency preparedness and response plan and copy of mock drill records at both camp and site
- Copy of duly filled in sample permits - height work, hot work, electrical work etc.
- Occupational noise monitoring records.
- Sample health surveillance records.
- Agreement with agencies involved in hazardous waste and biomedical waste – M/s Meghna Enterprise and Prism Foundation
- Copy of updated Waste Management Plan, Gender Action Plan, Dust Control Procedure, Labour Management Plan and Traffic Management Plan, Stakeholder Engagement Plan, GRM and LRP
- Copy of Method Statement for Pipeline Laying
- Hazardous Chemical Handling - Job Safety Analysis/Risk assessment document
- HAZOP study report of the project site
- List of first aiders along with their copy of training and certification.
- Inspection records of lifting equipment, tools and tackles including welding equipment and fall protection harness
- Monthly Progress Report for May 2023
- HSE Dashboard for May 2023
- Overtime calculation sheet of manpower supply contractors
- Current minimum wage notification for construction labour
- Worker's accommodation monitoring report in predefined monitoring check list
- Organogram of GE & UMPL
- Firefighting equipment lay out at main site and worker camp
- UNQ- Emergency Mock drill Schedule
- Spill Incident Mock drill report and project site camp emergency drill
- Labour license and manpower registration copies for the contractors
- Legal register and regulatory approval list

- UMPL Quarterly Environmental Monitoring Report Jan-Mar 2023
- Method statement of Fuel Gas pipeline HDD construction for crossing Meghna River
- Environment Management and Monitoring Plan including Water Management;
- Inception Report for LRP implementation and LRP implementation Monitoring;
- UPML CSR Plan
- UMPL Grievance Redressal Mechanism document
- Legal opinion on the wage component considered for overtime payment calculation
- Sample wage sheet, appointment letter for manpower supply contractors
- Sub-contractor list and manpower details
- Worker accommodation facility design;
- Premium submission evidence of group life insurance taken by NEPC
- Manpower supply agreement between NEPC and the contractor – Man is Power
- Sexual Harassment Policy



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