

# Environmental and Social Monitoring Report

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Second Quarterly Monitoring Report  
Project Number: 44951-014  
January 2016

## Bangladesh: Bibiyana II Gas Power Project

Prepared by ERM India Private Limited for the Summit Bibiyana II Power Company Limited and Asian Development Bank

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**Summit Bibiyana II Power  
Company Limited**

# Second Independent Environmental, Health, Safety & Social (EHS&S) Compliance Assessment during Construction Phase of Bibiyana II Power Project: *Habiganj, Bangladesh*

**Final Report**

May 2015

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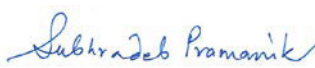
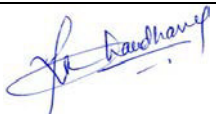

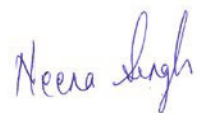
Summit Bibiyana II Power Company Limited (SBIIPCL)

**Second Independent  
Environmental, Health, Safety &  
Social (EHS&S) Compliance  
Assessment during Construction  
Phase of Bibiyana II Power  
Project: *Habiganj, Bangladesh***

May 2015

Reference # I10515 /0265459

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	<b>Tufail Khan</b> <i>Senior Consultant</i>	
Prepared by	<b>Subhradeb Pramanik</b> <i>Senior Consultant</i>	
	<b>Naval Chaudhary</b> <i>Principal Consultant</i>	
Reviewed by:	<b>Manish Singh</b> <i>Principal Consultant</i>	
Approved by:	<b>Neena Singh</b> <i>Partner</i>	

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## **ANNEX A: PHOTO DOCUMENTATION**

## ABBREVIATIONS

ADB	Asian Development Bank
BATS	Bangladesh Air Traffic Services
BCAS	Bangladesh Centre for Advance Studies
BIWTA	Bangladesh Inland Water Transport Authority
BPDB	Bangladesh Power Development Board
BRTA	Bangladesh Road Transport Authority
CAP	Corrective Action Plan
CCPP	Combined Cycle Power Plant
CDO	Community Development Officer
CDP	Community Development Plan
CIB	Chief Inspector of Boilers
CMT	Construction Management Team
CO	Carbon Monoxide
COD	Commercial Operations Date
DGM	Deputy General Manager
DOE	Department of Environment
DOEXP	Department of Explosives
EHS	Environment, Health and Safety
EHS&S	Environmental, Health, Safety and Social
EPC	Engineering, Procurement and Construction
ERM	Environmental Resources Management
ESAP	Environmental and Social Action Plan
ESIA	Environmental and Social Impact Assessment
ESMMP	Environmental and Social Management and Monitoring Plan
FNTP	Full Notice to Proceed
GIIP	Good International Industry Practices
GOB	Government of Bangladesh
GRM	Grievance Redress Mechanism
GSA	Gas Supply Agreement
GT	Gas Turbine
HIRA	Hazard Identification and Risk Assessment
HIRAC	Hazard and Risk Assessment and Control
HR	Human Resources
HRSG	Heat Recovery Steam Generator
HSD	High Speed Diesel
IA	Implementation Agreement
IFC	International Finance Corporation
IsDB	Islamic Development Bank
ISO	International Organisation for Standardisation
JCCR	Joint Committee for Community Relation
JGTDSL	Jalalabad Gas Transmission and Distribution System Limited
JHA	Job Hazard Analysis
LLA	Land Lease Agreement
LPG	Liquid Petroleum Gas
LRP	Livelihood Restoration Plan
MoM	Minutes of Meeting
MSDS	Material Safety Data Sheet
NEPC	First Northeast Electrical Power Engineering Co
NGO	Non-Governmental Organisation

NO <sub>x</sub>	Oxides of Nitrogen
OHSAS	Occupational Health and Safety Management System
OJT	On Job Training
PAF	Project Affected Family
PGCB	Power Grid Company of Bangladesh
PM	Particulate Matter
PPA	Power Purchase Agreement
PPE	Personal Protective Equipment
RAP	Resettlement Action Plan
RFP	Request for Proposal
RMP	Rural Medical Practitioner
SBIIPCL	Summit Bibiyana II Power Company Limited
SIA	Social Impact Assessment
SIMCPL	Summit Industrial and Mercantile Corporation (Pvt.) Ltd
SO <sub>2</sub>	Sulphur Dioxide
SOP	Standard Operating Procedure
ST	Steam Turbine
TBT	Tool Box Talk
TK	Bangladeshi Taka
TNA	Training Need Assessment
WB	World Bank
WHO	World Health Organisation

## 1.1

## BACKGROUND

Environmental Resources Management (ERM) was commissioned by Summit Bibiyana II Power Company Limited (SBIIPCL) on 17<sup>th</sup> September 2014 for independent Environmental, Health, Safety and Social (EHS&S) Compliance Audit as an internal audit requirement. The audit by ERM was conducted in the last week of September 2014 and final report of audit was submitted on 3<sup>rd</sup> November 2014.

After the first EHS&S compliance audit, based on the discussions with prospective lenders of the Project, which include Asian Development Bank (ADB), International Finance Corporation (IFC) and Islamic Development Bank (IsDB) (the “Lenders”), SBIIPCL has engaged Bangladesh Centre for Advance Studies (BCAS) as Borrower’s monitoring auditor/consultant for the compliance monitoring, considering that the same agency was involved during the Environmental and Social Impact Assessment (ESIA) of the Project.

In order to conduct independent monitoring/auditing on behalf of the lenders, it was agreed by the Lenders and Borrower to engage ERM in the role of **Financiers' Environmental and Social Adviser** for the purpose of the Borrower’s *Compliance with Lenders’ Environmental and Social Requirements*, and to respond to environmental and social concerns that the Lenders may have from time.

The Project is a 341MW natural gas fired combined cycle power plant (CCPP) having one Gas Turbine (GT), One Heat Recovery Steam Generator (HRSG) and One Steam Turbine (ST). The Project is located at Parkul Village in Aushkandi Union under Nabiganj Upazilla of Habiganj District, Bangladesh. The audit was to primarily assess the compliance status of the project with respect to the *EHS&S Corrective Action Plan (CAP)* developed as part of the Independent EHS&S Compliance Audit reporting done by ERM on 3<sup>rd</sup> Nov 2014 as well as to verify the internal EHS&S and Social audits being conducted by BCAS during March and April 2015.

## 1.2

## OBJECTIVES AND SCOPE OF WORK

The primary objective of this assignment was to assess the compliance status of the Project and its various components with respect to the agreed CAP, Construction Phase Environmental & Social Management & Monitoring Plan (ESMMP), action plan came out from social audit by BCAS, applicable legal requirements and to identify any key EHS&S’s issues (if any) for the Project:

The scope of the compliance assessment was as follows:

- a) To assess the Project's compliance with the environment, health, safety and social (EHS&S) requirements of the audit framework (described subsequently);
- b) To review the effectiveness of implementation of mitigation measures and monitoring programmes at site developed as part of the ESIA study;
- c) To review the status of environment management, health and safety, protection of labour force, during construction and operation phases of the Project;
- d) To review the status of environmental and social action plan (ESAP) compliance, which came out from the first compliance monitoring during the construction stage conducted by ERM and social impact assessment (SIA) conducted by BCAS;
- e) To review the implementation of the resettlement action plan (RAP) and livelihood restoration plan (LRP) developed for the Project;
- f) To review the company's existing management system, standard operating procedures (SOPs) and training in relation to EHS&S and identification of areas for improvement/ enhancement;
- g) To review the health and safety records of site and compliance with respect to the site specific safety management system adopted by the EPC contractor and by the company; and
- h) To provide objective reports to the prospective international lenders confirming compliance and if not, recommending additional corrective actions, as appropriate to the Project during construction and operation stages.

It was understood that new issues could have possibly emerged with operations for the single cycle likely to commence by end of May 2015. The scope includes identifying those issues and assessing how the project is managing them. The present assignment has tried to capture these issues, so that their performance could be suitably monitored during the next scheduled compliance assessment.

### 1.3

#### *COMPLIANCE ASSESSMENT FRAMEWORK AND EVALUATION CRITERIA*

The EHS&S compliance assessment would be carried out and evaluated against the following criteria:

- Applicable Local and National environment, occupational safety, health and social legislations;
- IFC Performance Standards on Social and Environmental Sustainability (2012);
- ADB Safeguard Policy Statement (2009);
- IFC/WB Environment, Health and Safety Guidelines – General and for Thermal Power Plants;
- Good International Industry Practices (GIIP) including elements of ISO 14001, OHSAS 18001 Occupational Health and Safety Management System;
- EHS&S CAP integral to the Independent EHS&S Compliance Audit Report of ERM dated 3<sup>rd</sup> Nov 2015;



- All requirements and mitigating or monitoring measures specified in the ESMMP of the ESIA report prepared by BCAS dated July 2014; and
- All requirements and mitigating or monitoring measures specified in the ESIA as well as RAP and LRP.

#### 1.4

#### SITE VISIT

A three member ERM team had conducted the site visit and consultations between 12<sup>th</sup> - 15<sup>th</sup> May 2015. The composition of the ERM team was as follows:

- **Naval Chaudhary (Environmental Specialist):** Naval is working as Principal Consultant with ERM India in the Impact Assessment and Planning (IAP) division. He has master degree in environmental science and engineering from Indian Institute of Technology, Bombay and more than 9 years of experience in the field of environmental and social impact assessment (ESIA), environmental and social due diligence, environmental auditing, environmental permitting, air quality dispersion modelling, noise prediction and shadow flicker assessment. His work experience covers environmental assessment studies for a variety of sectors including Industry Sector (thermal power plant, fertilisers, pharmaceuticals, automobiles, oil and gas, hydropower, mining, steel, engineering, etc.); renewable energy (wind and solar power); Infrastructure Sector (Multi-Product SEZs, Sector Specific SEZs, Industrial Areas and Estates, and river bank erosion management); Submarine Cables; & Linear Projects (Highways, Railways). He has worked in varied geographies, which gives him a wide international perspective on issues. In last five years he has worked in Bangladesh, United Arab Emirates, Liberia, Nigeria and Pakistan (desk-based).
- **Subhradeb Pramanik (Health & Safety Specialist):** Subhradeb Pramanik holds a Master Degree in Environmental Science and is presently working as a Senior Consultant at ERM India in Kolkata office. He has about 9 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 Consultant with the Impact Assessment & Planning Practice Team at ERM India Pvt Limited. Over his 10 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.

## 1.5

### *APPROACH TO THE COMPLIANCE ASSESSMENT*

The following approach and methodology was adopted for the current assignment.

#### *Kick-Off Meeting*

The site visit began with a kick off meeting with the Project Management & site EHS&S personnel at Sylhet. 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 audit.

#### *Site Visits and Physical Verification*

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 labour camps and the consultations with the project affected communities. The different activities undertaken during the course of site visits included:

1. **Discussions and Interviews:** The team conducted detailed discussions and interviews with the site personnel, contractor representatives, representatives of BCAS – the project EHS&S consultant and the construction workers to understand the on-site management of EHS issues, compliance to labour laws, working conditions and facilities available at site to these workers and satisfaction levels (of the workers and contractors) or any issues/concerns at the site. Discussions were also undertaken with the relevant personnel of the EPC contractor (here NEPC) and sub-contractors employed to understand and assess the environmental, health and safety and labour compliance and its management at the site.
2. **Documents Review:** The relevant Project documents pertaining to the EHS and social compliances 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. Key documents reviewed include:
  - a. ESIA Report of the Project (July 2014 – 7th Draft);

- b. Environment and Social Monitoring Report prepared by BCAS (April 2015);
- c. Environmental, Health, Safety & Social Monitoring Plan (SBIIPCL-EHS-007) prepared by SBIIPCL;
- d. CAP Status and Comments spreadsheet;
- e. SBIIPCL EHS and Social Policies;;
- f. Records of ambient air monitoring, surface & ground water sampling and analysis;
- g. Sample Bangladesh Staff Employment agreement of the EPC contractor;
- h. Inventory of propane gas and compressed gas cylinders;
- i. Sample subcontractor agreement between the EPC contractor and M/s Shotota Enterprise – the subcontractor;
- j. Legal Register Human Resources (HR) Policy and Procedures of Summit Group;
- k. Sample set of Incident investigation and reports;
- l. Sample set of Injury and Illness Log;
- m. Project EHS Plan;
- n. Sample set of Weekly Site Inspection Checklist;
- o. Vehicle Inspection checklist;
- p. Sample set of Work Permits;
- q. Sample set of Safety Training Records;
- r. Training Calendar;
- s. Sample copies of HSE meetings;
- t. Emergency Preparedness & Response Plan;
- u. Hazard Identification and Risk Assessment (HIRA) analysis
- v. Job Hazard Analysis (JHA) analysis
- w. Draft Stakeholder Engagement Plan;
- x. Internal Resettlement Monitoring Report;
- y. Human Resource Policy of SBIIPCL and EPC Contractor;
- z. Trade licence of labour supply contractor;
- aa. Monthly attendance sheet, salary sheet and overtime payment sheet for the workers;
- bb. Social Monitoring Report by BCAS (April 4<sup>th</sup> 2015)
- cc. Grievance Management Process and Records

### 3. Detailed Discussion with the communities and Community Development

**Officer (CDO) of SBIIPCL:** The ERM team also had discussions with the Communities, team engaged in the process of community development works. The discussions included the following:

- a) Perception of the project affected families (PAFs) on the compensation package, rehabilitation measures and other welfare initiatives and issues surrounding them, if any;
- b) Any legacy issues or open issues surrounding land acquisition, resettlement etc.
- c) Community engagement activities by the CDO and perception of the locals on these engagement interventions;
- d) Progress on livelihood restoration related intervention carried out by the project and CDO for the project affected families;
- e) Understanding vulnerability of the project affected persons;

#### *Close Out Meeting*

A close out meeting was held with the Senior Management Team at SBIIPCL Corporate office in Dhaka. ERM briefed the project management with the key

observations and findings based on the site visit, discussions with the site personnel and contractors and review of the relevant documents and sought their responses to the observations/findings.

The CAP compliance status and identified gaps and actions required to close the gaps identified were also discussed during this meeting with the Project team. Some of the newly identified issues, at the present stage of the project implementation were also briefed during the closing meeting.

### *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 CAP compliance, legal compliance and social compliance.

## **1.6**

### ***LIMITATION***

The report is based on information provided to the consultants during the site visit and prior to it. 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. The Compliance Assessment was based on readily available information/ documentation, visual reconnaissance, and management interviews in course of site visit. 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.

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The report has been prepared in the following layout:

- Section 1:*        *(this section)* provides a background of the assignment, objectives and scope of work, approach and methodology along with limitation of the review and report.
- Section 2:*        Project Appreciation and Current Status of the Project
- Section 3:*        Summary of Key Observations
- Section 4:*        Compliance Status of the CAP & ESMMP
- Section 5:*        EHS&S Regulatory Compliance Assessment
- Section 6:*        Social Audit Compliance Status
- Annex A*        *Photo Documentation*

## 2.1 THE PROJECT

The proposed Project is the new 341 MW gas-fired Combined Cycle Power Station, which is being developed by Summit Bibiyana II Power Company Limited (*SBPCL II*) by installing one Gas Turbine (GT), one Heat Recovery Steam Generator (HRSG) and one Steam Turbine (ST). Gas supply for the Project will be from Bibiyana Gas Field and will be supplied by the Gas Supplier (i.e. JGTDSL). Power generated by the Project will be evacuated through an existing 230 kV transmission line of the PGCB.

A Request for Proposal (RFP) was issued by Power Cell (the Power Division of the GoB Ministry of Power, Energy and Mineral Resources) on 3<sup>rd</sup> May 2010 (and subsequently amended on 2<sup>nd</sup> September 2010) for a sponsor to develop a 330-450 MW Combined Cycle Gas Technology (CCGT) power station at Bibiyana on a 'build, own and operate' basis. The RFP was signed by *SBPCL II* on 6<sup>th</sup> September 2010 and in May 2011 *SBPCL II* signed: Implementation Agreements (IAs) with the GoB and the Power Grid Company of Bangladesh (PGCB); Power Purchase Agreements (PPAs) with the BPDB; Land Lease Agreements (LLAs) with the BPDB; and Gas Supply Agreements (GSAs) with the Jalalabad Gas Transmission and Distribution System Limited (JGTDSL).

In addition, an Engineering, Procurement and Construction (EPC) contract was signed with a joint venture comprising the First Northeast Electrical Power Engineering Co. and Northeast China International Electric Power Corporation (herein referred to as 'the EPC Contractor') on 14<sup>th</sup> November 2012 and full notice to proceed (FNTP) was given on 25<sup>th</sup> January 2013.

### 2.1.1 Project Developer

The project developer for the Bibiyana II Gas Power Project is Summit Bibiyana II Power Company Limited (*SBIIPCL*), which was incorporated in Bangladesh on 21<sup>st</sup> December 2010, as a joint venture of Summit Industrial and Mercantile Corporation (Pvt.) Ltd. (SIMCPL) (80%) and GE Energy LLC, a wholly owned subsidiary of General Electric Company (20%). SIMCPL is part of the Summit Group, an established financial entity and is experienced in the efficient management, operation and maintenance of similar facilities in Bangladesh. Summit Group is one of the largest Bangladeshi conglomerates and the industries under this conglomerate include communication, trading, energy, power and shipping.

### 2.1.2 Current Project Status

SBIIPCL has already completed 89% construction work (physical progress). Construction work for starting single cycle operation has been completed with the first firing conducted successfully on 27<sup>th</sup> April 2015. As communicated by the project management the project is going to commence single cycle

operation by 22<sup>nd</sup>/23<sup>rd</sup> May with Commercial Operations Date (COD) for the combined cycle operations is expected to be declared in September/October 2015. However, necessary construction activities will continue till commencement of the combined cycle operation. *Table 2.1* below depicts important dates and timelines for SBIPCL Project with respect to the ongoing construction phase:

**Table 2.1: Key Timelines – Project Construction Phase**

S. No.	Particular	Date
1	Date of signing Implementation Agreement (IA)	12 <sup>th</sup> May 2011
2	Date of signing Power Purchase Agreement (PPA)	12 <sup>th</sup> May 2011
3	Date of signing Gas Supply Agreement (GSA)	12 <sup>th</sup> May 2011
4	Date of Signing Land Lease Agreement (LLA)	12 <sup>th</sup> May 2011
5	Contract effective date	12 <sup>th</sup> May 2011
6	Implementation period as per contract	31 Mar 2013 - 31 Dec 2015
7	Required Simple Cycle Operation Date (RSCOD)	31 Dec 2014
8	Target Simple Cycle Operation Date	22 <sup>nd</sup> /23 <sup>rd</sup> May 2015
9	Required Commercial Operation Date (RCOD)	Sep/ Oct 2015

The physical progress of the construction work as on 30<sup>th</sup> Apr 2015 has been provided in the *Table 2.2* below.

**Table 2.2 Construction Work - Physical Progress for month ending April 2015**

Sl. No	Description	Progress (%)	Cumulative Progress up to previous month (%)	Cumulative progress up to current month (%)	Actual progress in reporting month (%)	Target in reporting month (%)
<b>A Civil Works</b>						
1	Land Procurement (in area)	NA	NA	NA	NA	NA
2	Land Development (in volume)	100	100	100	100	
3	Foundation (in volume): pile foundation, lean work, pile cap cutting, rebar work, concrete pouring	99	98.5	99	0.5	0.5
4	Civil Construction (in volume): land development, foundation, sub-structure, superstructure, wall, rooftop, etc.	96	94	96	2	2
<b>B Installation/Erection</b>						
1	GT/ST, Engine and associates works	90	85	90	5	5

Sl. No	Description	Progress (%)	Cumulative Progress up to previous month (%)	Cumulative progress up to current month (%)	Actual progress in reporting month (%)	Target in reporting month (%)
	(GTG, STG, main Stack, By-pass Stack, Main Plant Building, HRSG, etc.)					
2	Substation (design, engineering, manufacturing, installation)	100	98	100	2	NA
3	Control Room (Central Control Building): design, foundation, superstructure, installation, erection, etc.	94	90	94	4	4

Source: SBIIPCL and BCAS

Regarding work progress on the project associated facilities (not being constructed or financed by SBIIPCL) viz. gas pipeline, switchyard, access road, transmission line etc. an update has been provided in **Table 2.3** for reference. However, as clearly specified by the Borrower, these components were not part of the compliance audit, considering the responsibility of construction as well as operation was lying with other parties (i.e. government entities).

**Table 2.3** *Project Associated Facilities – Work Progress for month ending April 2015*

S. No	Facility*	Area (acre)	Responsibility	Status (Work Completed)
1	Switchyard	26.0	PGCB	07 March 2015
2	Site Access Road	2.0	BPDB	29 November 2014
3	Gas Pipeline	8.5	JGTDSL	12 April 2015
4	Construction Laydown Area	14.0	BPDB/SBIIPCL	August 2013
5	Transmission Line	70 meters to switchyard	PGCB	28 February 2015

\*Components not under financing by lenders

Source: SBIIPCL and BCAS



The section below summarises the key observations made by the team during the course of the EHS&S compliance assessment of the project construction phase.

### 3.1 ENVIRONMENTAL, HEALTH & SAFETY

The observations made by the ERM audit team with respect to the project environmental, health and safety aspects as outlined in the CAP, ESMMP and applicable local and national regulations have been tabulated under the following sub-sections.

#### 3.1.1 Legal Register

The Environmental, Health, Safety and Social Compliance Audit Report prepared by ERM dated November 2014 suggested for development of a legal register for both construction and operations phases. SBIIPCL has prepared a legal register for ensuring timely approval or renewal of all legal compliances of the project. *Table 3.1* below provides status of the various permits/licenses as applicable for construction phase of SBIIPCL.

**Table 3.1**     **EHS License/Permit Compliance Status for Construction Phase**

Sl.No	Permit/License	Issuing Authority	Issue date	Valid until	Status
1	Trade License	Dhaka North City Corporation	9 <sup>th</sup> Jul'14	1 <sup>st</sup> Jun'15	In compliance
2	License for use of river water/ foreshore/jetty	Bangladesh Inland Water Transport Authority (BIWTA)	1 <sup>st</sup> Jul'13	30 <sup>th</sup> Jun'14	SBIIPCL has applied for license renewal vide letter dated 28 <sup>th</sup> Aug'14 and follow up communication vide letter date 30 <sup>th</sup> Sep'14 and 10 <sup>th</sup> Dec'14 with issuance of the same still pending.
3	Site Clearance Certificate	Department of Environment (DOE)	25 <sup>th</sup> Jun'14	28 <sup>th</sup> May'15	In compliance. Renewal will be required in case of delay in EIA approval.
4	EIA Approval	Department of Environment (DOE)	-	-	Application for EIA approval was submitted on 12 <sup>th</sup> February 2015 to the DOE regional office in Sylhet and Head Office in Dhaka. Presentation was made during the 384 <sup>th</sup> meeting of Environmental Clearance Committee held on 12 <sup>th</sup> April 2015. Revised EIA report with clarification asked during the meeting was submitted on 12 <sup>th</sup> May 2015. EIA Approval Certificate is awaited.
4	Environment Clearance Certificate	Department of Environment (DOE)			To be applied before the commercial operation date (COD) as per the contracted facility capacity.
5	Permission for acid and alkali storage	Department of Explosives (DOEXP)	17 <sup>th</sup> Feb'15	30 <sup>th</sup> Jun'15	In compliance
6	Fire Permit	Fire Service and Civil Defence			Site visit undertaken by Fire Service and Civil Defence representatives and conditional NOC issued vide letter dated 1 <sup>st</sup> Aug'13. Final NOC will be issued subjected to implementation of facility Fire Plan for operations followed by communication of the same to the department.
7	License for storage of Carbon Dioxide	Department of Explosives (DOEXP)			Applied on 12 <sup>th</sup> Mar'15. Layout plan for carbon dioxide storage approved by Chief Controller of Explosives vide letter dated

Sl.No	Permit/License	Issuing Authority	Issue date	Valid until	Status
8	License for Diesel Storage	Department of Explosives (DOEXP)			31 <sup>st</sup> Mar'15. Issuance of license is subjected to construction of the storage according to the approved plan followed by its communication to the concerned department for necessary action. Applied on 4 <sup>th</sup> Mar'15. Layout plan for storage approved by Chief Controller of Explosives vide letter dated 12 <sup>th</sup> Mar'15. Issuance of final license is subjected to compliance to the conditions specified in the letter.
9	License for generation of Hydrogen and storage of Hydrogen inside plant	Department of Explosives (DOEXP)			Applied on 12 <sup>th</sup> Apr'15. Layout plan for storage approved by Chief Controller of Explosives vide letter dated 29 <sup>th</sup> Apr'15. SBIIPCL is directed by this letter to construct the storage as per the approved layout and display the license as per the specifications provided. Issuance of final license is subjected to compliance to the aforesaid conditions.
10	License for installation of High pressure Gas pipeline inside power plant	Department of Explosives (DOEXP)			As reported the license has been issued on 13 <sup>th</sup> May'15. Details yet to be made available by SBIIPCL for verification.
11	License of Boiler	Office of the Chief Inspector of Boilers (CIB)			Application submitted on 18 <sup>th</sup> Feb'15. Certificate will be issued after installation and testing of the boiler.
12	Permission for Stack Erection	Bangladesh Air Traffic Services (BATS)	16 <sup>th</sup> Jun'14	Entire project life cycle	In compliance
13	License for propane cylinder storage*	Department of Explosives (DOEXP)			Not obtained by the EPC contractor
14	License for compressed gas cylinder storage*	Department of Explosives (DOEXP)			Not obtained by the EPC contractor

\* It has been further noted that SBIIPCL has sent an urgent email communication to the Project Head of NEPC for necessary action on 17<sup>th</sup> May 2015. Compliance of the same need to be assured by NEPC and SBIIPCL.

- Onsite EHS&S management system for constructions has been strengthened through appointment of qualified and experienced EHS professional's viz. an Assistant EHS Manager and CDO. Together they form an integral part of the Construction Management Team (CMT) as established with defined roles and responsibilities.
- SBIIPCL is on track with respect to the formulation of specific EHS&S management plans as mentioned in the ESIA report except for plans related to avifauna management, livelihood restoration and public relations handling. The avifauna management plan is to be based on bird surveys which is likely to be undertaken during the migratory season.
- An EHS plan in English has been prepared by NEPC outlining the key EHS procedures and permits to be implemented to safeguard onsite employees and workers of SBIIPCL, NEPC and subcontractors.
- ESMMP prepared as part of the ESIA study has been shared with NEPC with periodic compliance monitoring/verification of ESMMP implementation yet to be initiated by SBIIPCL.
- Reportedly ESMMP has been shared by SBIIPCL to NEPC however no verification checks/monitoring has been undertaken by SBIIPCL to check compliance status on a periodic basis. SBIIPCL to perform monthly assessment of the ESMMP implementation for construction phase through development and implementation of specific checklists and compliance report to be shared with NEPC for reference and necessary action for closure.
- With respect to environmental baseline monitoring ambient air quality has been monitored at three locations within the project area with results found to be in compliance to the applicable standards. Surface water quality monitoring has been undertaken at only one location (not defined) with analytical results found to be in compliance to both national and WHO standards. Regarding ground water quality the results need to be revalidated given the water quality at source is assessed to be comparatively better than treated water.
- Waste management practice was found satisfactory at site with segregation of waste at source, storage within site at designated areas and disposal of waste off-site with the help of DOE approved waste collection contractor, M/s Vertical Promoters, Sylhet, which is reported to have authorisation for handling and disposal of solid, hazardous and biomedical wastes. SBIIPCL team has also visited the Lalmatia Pilot Composting Plant, Sylhet (Medical and Hazardous), which is being used for disposal of these wastes. Inspection of the team revealed that the area is not lined and can result in soil and ground water contamination. It was reported that alternate options will be identified for operation phase of the project.

- Vehicular emission testing records not available for both SBIIPCL and NEPC operated vehicle taking into account the inherent limitations with respect to the availability of proper infrastructure and resources in Bangladesh to undertake such monitoring. In view of the above availability of certificate of fitness from Bangladesh Road Transport Authority (BRTA) to be ensured for all project vehicles in operation.
- An air quality dispersion modelling was undertaken as part of the ESIA study considering main stack height as 50 m and stack diameter as 3.0 m, which has now been modified to 70 m and 7.0 m, respectively. Modelling of air quality dispersion taking into considerations the revised stack specifications and flue gas velocity is yet to be undertaken by SBIIPCL.
- Monitoring of terrestrial and aquatic organisms within the project study area for the construction phase is currently pending. As reported by SBIIPCL efforts are being made to identify a reputed and qualified third party agency to undertake the said work.

### 3.1.3

#### *Health & Safety Linked Observations*

- An EHS plan has been developed by NEPC focusing on site specific construction activities. The plan outlines the provision of work permit for all sorts of routine and non-routine jobs at the construction site with the objective of protecting the workers from occupational injuries. NEPC in coordination with SBIIPCL has initiated implementation of the SOPs and Work Permits outlined in the EHS Plan and records for the same being maintained. Additionally training programs are also organized on workplace safety, housekeeping, compliance policy, PPE usage, fall protection, confined space, height work, electrical, fire protection etc. by NEPC for their EHS personnel.
- Emergency Response Plan has been updated by NEPC to include natural hazards with the Site-In-Charge appointed by SBIIPCL as the Emergency Coordinator for the project.
- Job Hazard Analysis (JHA) performed by NEPC is limited to only few work activities viz. thermal insulation, cooling tower construction etc. with hazards communicated to workers through Tool Box Talks (TBTs) and On Job Trainings (OJTs). JHA to be made comprehensive to encompass all critical work activities taking into account the current and future progress of project.
- A Rural Medical Practitioner (RMP) has been employed by NEPC for its First Aid Centre with records of injuries, first aid and investigation reports being maintained by NEPC in accordance to the project EHS plan. Certification training was also provided to both SBIIPCL and NEPC identified first aid responders by the Bangladesh Red Crescent Society on 8<sup>th</sup> Apr 2015.

- Bulk storage of HSD has been discontinued with less than 2000 litres of HSD was observed to be temporarily stored in a paved and covered storage shed near batching plant. The storage shed was found to be in charge of an authorized person with appropriate hazard signages posted and secondary containment provided. However display of MSDS and provision of spill kits was found to be lacking at this storage area.
- A Hazard Identification and Risk Estimation Control Procedure have been prepared by NEPC for identification and control of potential hazards associated with the work activities. Periodic safety inspections are being undertaken by NEPC as per this procedure to identify the potential safety risks/hazards along with their mitigation/control measures.
- A Personal Protective Equipment (PPE) Matrix has been developed for ensuring workers' safety for different types of jobs. On-job-training is being imparted by both EHS Team of EPC Contractor and personnel of SBIIPCL regarding usage of PPEs and its importance. Internal audit on PPE is being conducted by SBIIPCL personnel on weekly basis and documentation is being maintained. In addition, PPE and other EHS awareness materials (e.g. display boards, banners etc.) have been sited at different areas of the plant.
- Incident investigation procedure to be updated to through defining of specific roles and responsibilities of personnel involved in incident investigation process along with work flow chart. Accident/injury data available to be analysed to identify the potential risk zones and an action plan prepared for such areas.

### 3.2 SOCIAL OBSERVATION

#### 3.2.1 Manpower engagement

The total workforce engaged by EPC contractor (i.e. NEPC) directly or through sub-contractors in SBIIPCL plant was reported to be more than one thousand as on 30<sup>th</sup> April 2015.

**Table 3.2 Breakup of manpower engaged in Plant as on 30th April 2015**

S.No	Worker category	Number
	Chinese staff of NEPC	350
	NEPC contracted staff	9
	NEPC contracted workers	128
	Labour supplied by M/s. Nation Trade (sub-contractor)	429
	Labour supplied by M/s. Shotota Enterprise (sub-contractor)	198
	Labour supplied by M/s. Jui Enterprise (sub-contractor)	309
	Labour supplied by M/s. ISS (security sub-contractor)	26
	<b>Total manpower</b>	<b>1449</b>

Source: SBIIPCL site official

HR policy of SBIIPCL has been updated in line with most of the recommendations given by ERM in their previous audit report. The HR management system of the EPC contractor is being aligned with the principles of the HR policy of the SBIIPCL. Refer S. No 2.1 to 2.7 under Table 4.1 for specific observation of ERM w.r.t existing labour and working condition in SBIIPCL plant.

### **3.2.2 R&R implementation status**

Land for establishment of SBIIPCL was acquired from 14 land owners. ESIA study carried out for this project had identified 6 sharecroppers and 11 agricultural labours whose primary source of livelihood were dependent upon the piece of land acquired for this project.

One land owner became landless after land acquisition. Considering the vulnerability of this landowner, it was provisioned in the RAP to give additional 2 lacs TK for the income restoration program of this particular land owner. Project has already paid 1 lac TK to this vulnerable affected land owner which has been used by him to set up a shop in the village. remaining amount is proposed to be released after imparting training on entrepreneurship to this affected land owner.

Due compensation amount for acquired land has already disbursed to the affected land owners. The Resettlement Action Plan prepared for this project had provision of paying one time amount of TK 7500 and TK 8000 and to 6 affected sharecroppers and 11 agriculture labourers respectively and Project has already disbursed this payment except for one agriculture labour who has shifted to Dhaka with his family long back.

### **3.2.3 LRP implementation status**

A livelihood restoration plan is proposed for the 31 project affected families that will be prepared by a LRP consultant. Identification and finalisation of the consultant by SBIIPCL is complete and LRP consultant would be start working for the project by June 2015.

At Present, some the initiative by CDO regarding livelihood restoration is already started and this includes training need assessment for the for some the project affected persons.

### **3.2.4 Stakeholder engagement**

Project has put in place different mechanism to engage project affected and other general communities and provided them the opportunities to register their concern. Project has a dedicated CDO who was observed to be in regular touch with the neighbouring community.

Project has formed a Joint Committee for Community Relation (JCCR) which is active for the last five months and have regular monthly meeting. A formal grievance redress mechanism (GRM) for the community is also in place.



The compliance status based on the site visit and review of documents as on May 2015 has been presented in *Table 4.1*. In order to define the status of various action items, colour coding has been used for easy referencing, which is as follows:

	<i>Action Item Closed/ Complied</i>		<i>Satisfactory Progress</i>
	<i>Partially Complied</i>		<i>Not Complied/ Delay</i>
	<i>To be assessed during Operations/Decommissioning</i>		

**Table 4.1 CAP & ESMMP Compliance Status**

S. No	Measures and/or Corrective Actions	Significance	Responsibility	Deliverable	Suggested Timelines for Completion*	Status provided by BCAS as on 30 <sup>th</sup> Apr'15	Status	ERM Observations (as on 15 <sup>th</sup> May'15) and Recommendations
<b>1 PS 1: Assessment and Management of Environmental and Social Risks and Impacts</b>								
1.1	Form a Construction Management Team (CMT) to oversee EHS compliance of the Project during construction phase	High	SBPCL II	CMT Formation	Within 1 month of 'date of deal closure' <sup>1</sup> or November 2014, whichever is earlier	CMT formed (Organogram) with roles & responsibilities.		SBIIPCL has formed a CMT with roles and responsibilities of each position in the team being defined in detail.
1.2	Appoint a trained EHS Personnel for day to day monitoring of the EHS Plan and ESMMP implementation	High	SBPCL II	EHS Officer for the Project	Within 1 month of date of deal closure or November 2014, whichever is earlier	Complied; the EHS Plan of the EPC Contractor is being followed.		SBIIPCL has appointed an Assistant Manager – EHS on 15 <sup>th</sup> Dec 2014. He holds a degree in Chemical Engineering and has nearly 3 years of experience in EHS management in industrial sector.
1.3	<ul style="list-style-type: none"> <li>Ensure that all the records should also be made available in local language/ English by the EPC contractor</li> <li>Review of all the records being maintained as part of EHS Plan by the EPC contractor;</li> </ul>	High	SBPCL II and EPC Contractor	Records Review and Corrective Actions	Within 2 months of date of deal closure or December 2014, whichever is earlier	Complied		<p>The site EHS plan comprising of standard operating procedures (SOPs), and Work Permits including training records have been translated into English by NEPC and shared with SBIIPCL.</p> <p>Document review reveals the following records are being maintained by NEPC viz.</p> <ul style="list-style-type: none"> <li>Safety Corrective Action Request</li> <li>MoM of Environment, Health and Safety Meeting</li> <li>Weekly Inspection Checklist</li> <li>Incident Investigation and Report Form</li> <li>Injury and Illness Log</li> <li>First Aid Log</li> <li>Hot Work Permit</li> <li>Come-Along And Chain-Fall Monthly Inspection Form</li> <li>Fall Protection Equipment Monthly Inspection</li> </ul> <p>However it is recommended that records related to injury/illness; inspection of overhead cranes, gantry cranes and fall protection equipment are maintained by NEPC as per the format specified in the EHS Plan and records shared with SBIIPCL. Further update the EHS plan to incorporate permits related to electrical and height work as predominantly such activities are being undertaken at this stage of the project.</p>
1.4	Display and communicate environment and health and safety policies of the company	High	SBPCL II	Disclosure of company policies	Within 1 month of date of deal closure or December 2014, whichever is earlier	Complied. SBIIPCL will display these policies in more prominent way by May, 2015.		<p>EHS Policy has been displayed (only in English) onsite at the Main Gate 1 and at SBIIPCL site office.</p> <p>Efforts need to be made by SBIIPCL to display the EHS policy in local language (Bengali) as well at conspicuous location onsite.</p>
1.5	Develop a social policy of the Project with defined objectives, principles and performance indicators.	Medium	SBPCL II	Social Policy	Within 3 months of date of deal closure	Complied. Social Policy is developed with roles and responsibilities.		<p>Social policy is prepared and approved by SBIIPCL. Same was observed to be displayed (only in English) at different location of the plant.</p> <p>Efforts need to be made by SBIIPCL to display the Social policy in local language (Bengali) as well at conspicuous location onsite.</p>

<sup>1</sup>Date of deal closure has been assumed the date on which the lender/s give/s assurance to SBPCL II for providing project finance.

S. No	Measures and/or Corrective Actions	Significance	Responsibility	Deliverable	Suggested Timelines for Completion*	Status provided by BCAS as on 30 <sup>th</sup> Apr'15	Status	ERM Observations (as on 15 <sup>th</sup> May'15) and Recommendations
1.6	Develop and maintain legal register for all the Project components during construction phase	Medium	SBPCL II and EPC Contractor	Legal Register for Construction	Within 4months of date of deal closure for construction phase and quarterly review	Complied		<p>The legal register prepared identifies the applicable EHS permits/licenses (Refer Table 3.1) required during both construction and operational phases of the project along with their validity and approval status.</p> <p><i>SBIIPCL is required to update the legal register to incorporate the conditions specified in the EHS licenses/permits as applicable for the construction phase. This should also include incorporation of the relevant provisions of the Bangladesh Labour Law 2006 (as amended). In addition, permit obtained from Bangladesh Air Traffic Services for construction of exhaust and bypass stack for the project need to be covered in this legal register. <b>The non-compliances identified in case of storage of gas cylinders more than threshold limits require urgent attention of the EPC as well as SBIIPCL.</b></i></p>
	Develop and maintain legal register for all the Project components during operation phase	Low	SBPCL II	Legal Register for Operation Phase on Combined Cycle basis	Within 3 months prior to the operation phase and half yearly review	Not due before combined cycle operation.		<p><i>Considering the overlap of some of the licenses for simple cycle operations as well, the legal register shall also be updated for all operational phase requirements.</i></p>
1.7	Comply with the findings (not aligned) and recommendations	High	SBPCL II and EPC Contractor	Legal compliance	Within 2 months of date of deal closure or December 2014, whichever is earlier	Partially complied.		Refer Table 5.1 on Project EHS&S Regulatory Compliance Status
1.8	Develop the management plans as identified in the ESIA report and update the ESMMP with defined action items, responsibilities, monitoring indicators and review/ audit mechanisms	High	SBPCL II	Management Plans as per ESIA requirement	Within 2months of date of deal closure or December 2014, whichever is earlier	Complied. SBIIPCL has updated the ESMMP with a manual. SBIIPCL is monitoring the environmental and social issues as per their plan.		<p>As specified in the earlier audit report the terms of reference for ESIA study prepared by Bangladesh Centre for Advanced Studies (BCAS) mentions development of specific plans for construction and operation phases of the Project, which include:</p> <ul style="list-style-type: none"> <li>• Occupational and Community Health and Safety Management Plan</li> <li>• Contractor Management Plan</li> <li>• Contract Labour and Labour Camp management plan</li> <li>• Emergency Preparedness and Response Plan</li> <li>• Pollution Prevention Plan</li> <li>• Hazardous Materials Management Plan</li> <li>• Resettlement Action Plan</li> <li>• Community Development Plan</li> <li>• Stakeholder Engagement Plan Information Disclosure, Consultation, and Participation</li> <li>• Community Grievance Redress Plan</li> <li>• Livelihood Restoration Plan</li> <li>• EHS Plan</li> <li>• Public Relations Plan</li> <li>• Avifauna Management Plan based on bird survey</li> <li>• Transportation Plan</li> </ul> <p>Based on document review and discussion with SBIIPCL it is understood that presently plans with respect to emergency response and preparedness, hazardous material management, community development, stakeholder engagement, contractor &amp; labour camp management, management of EHS issues and road transportation has been prepared and is being implemented by both SBIIPCL and NEPC. The aspects related to pollution prevention and abatement has been covered as part of the</p>

S. No	Measures and/or Corrective Actions	Significance	Responsibility	Deliverable	Suggested Timelines for Completion*	Status provided by BCAS as on 30 <sup>th</sup> Apr'15	Status	ERM Observations (as on 15 <sup>th</sup> May'15) and Recommendations
								<p>Project Environmental Plan prepared by NEPC.</p> <p>Based on the above discussion it is recommended that necessary efforts are made by SBIIPCL to develop plans on avifauna management, livelihood restoration and public relations. It is further suggested that SBIIPCL considers conducting the bird survey post monsoon taking into account the migratory period.</p>
1.9	Develop an organisational structure for the construction and operation phase of the Project with defined roles and responsibilities	High	SBPCL II	Organisation Structure – Construction	Within 2months of date of deal closure or December 2014, whichever is earlier	Complied		SBIIPCL has an organogram for construction phase with defined roles and responsibilities ( <i>Refer response to S.No. 1.1</i> ). SBIIPCL has appointed an Assistant Manager – EHS and CDO for managing the site EHS&S issues in coordination with the EPC contractor.
		Low						
		Low	SBPCL II	Organisation Structure – Operation on Combined Cycle basis	3 months prior to the operation phase	Not due before combined cycle operations		<p>As suggested in the ERM audit report of 3<sup>rd</sup> Nov 2014 SBIIPCL is required to engage a suitably qualified professional to undertake a Life and Fire Safety (L&amp;FS) review of the facility after commissioning. With COD for combined cycle operations expected to be declared in Sep/Oct 2015 engagement of such a professional need to be ensured by SBIICL within the timeline (Jun'15) specified in the CAP.</p> <p>In order to implement the livelihood restoration plan, a livelihood expert is planned to be engaged by SBIIPCL by June 2015, as well.</p>

S. No	Measures and/or Corrective Actions	Significance	Responsibility	Deliverable	Suggested Timelines for Completion*	Status provided by BCAS as on 30 <sup>th</sup> Apr'15	Status	ERM Observations (as on 15 <sup>th</sup> May'15) and Recommendations
1.10	Training of SBPCL II Staff and EHS team of EPC Contractor on ESMMP	High	EPC Contractor	Training Calendar (Construction)	Within 2 months of date of deal closure or December 2014, whichever is earlier	Partially complied. EPC contractor will commence training by May, 2015 or sooner depending on the improvement of political situation of the country		<p>Review of the training records indicates that only “<b>Workplace Safety</b>” training has been conducted at NEPC conference room on 22<sup>nd</sup> Jan 2015. The training was imparted by DGM-Operations &amp; Compliance and was attended by SBIIPCL EHS - Assistant Manager, NEPC EHS team along with subcontractor supervisors. The following aspects were covered as part of this training:</p> <ul style="list-style-type: none"> <li>• EHS Induction</li> <li>• Work Place PPE requirement.</li> <li>• Rules related to smoking and food consumption onsite</li> <li>• Safety Barrier</li> <li>• Job Related Hazards</li> <li>• Hot Work Process</li> <li>• Confined Space</li> <li>• Working at Height</li> <li>• Housekeeping</li> <li>• Compressed Gas Cylinder Handling</li> <li>• Emergency Response</li> <li>• Accident/Near Miss</li> </ul> <p>SBIIPCL to arrange for additional training session/programs to enhance awareness of NEPC and its sub-contractors on management of environmental and social/labour issues (<i>environment quality monitoring, solid waste management, hazardous material handling, traffic management, grievance redressal etc.</i>) including various statutory requirements/obligations as mentioned in the ESMMP. Update the training calendar to incorporate the said training programs.</p>
1.11		Low	SBPCL II	Training Calendar (Operation)	Within 2 months of Combined Cycle Operation	Partially complied. EPC contractor will commence training by May, 2015 or sooner depending on the improvement of political situation of the country.		To be assessed during combined cycle operations
1.12	Mapping of training needs of SBPCL II Staff and development of training calendar	High	SBPCL II	Training Calendar	Within 2 months of Combined Cycle Operation	Not due before combined cycle operations		To be assessed during combined cycle operations
1.13	Develop an emergency response plan into a consolidated document with: <ul style="list-style-type: none"> <li>• Identification of, including risks associated with all project components;</li> <li>• Key community and environmental sensitivities (such as village settlements, ponds, etc.) and the potential of offsite consequences along with mitigation measures;</li> <li>• A common communication and emergency response process flow for onsite emergencies as well as their communication to authorities offsite;</li> <li>• Disclosure to communities in the vicinity of the project on the emergency readiness of the company in case of any incidents.</li> </ul>	Medium	SBPCL II	Emergency Response Plan for Operation Phase	1 month prior to the date of Combined Cycle Operation	Not due before combined cycle operations		To be assessed during combined cycle operations

S. No	Measures and/or Corrective Actions	Significance	Responsibility	Deliverable	Suggested Timelines for Completion*	Status provided by BCAS as on 30 <sup>th</sup> Apr'15	Status	ERM Observations (as on 15 <sup>th</sup> May'15) and Recommendations
1.14	Review the emergency preparedness and response plan and include the necessary required emergencies and implement the same at the earliest.	High	EPC Contractor	ERP for construction phase	Within 1 month of date of deal closure or December 2014, whichever is earlier	Complied		The EPC Contractor (NEPC) has updated the ERP to deal with potential emergencies associated with natural hazards viz. earthquake, floods and heavy rain and heavy winds
1.15	Appoint a suitably qualified Emergency Coordinator for the Project	Medium	SBPCL II	Emergency Coordinator for the Project	Within 2 months of date of deal closure or January 2015, whichever is earlier	Complied		SBIIPCL has identified the General Manager and Site-In charge to undertake the additional responsibility as Emergency Coordinator for the project since 1 <sup>st</sup> Mar 2015. This has been ratified by letter issued by the SBIIPCL CEO to this regard.
1.16	Develop a Commitment Register as a part of stakeholder engagement process in order to document the outcomes of public consultations and respond to local community expectations, and ensure that these are communicated back to stakeholders and updates provided.	High	SBPCL II EPC Contractor SBPCL II	Commitment Register (Construction)  Commitment Register (Operation)	Within 2 months of date of deal closure  Within 2 months of date of Combined Cycle Operation	Several stakeholder meetings have been done.		CDO of SBIIPCL maintains a stakeholder engagement file that includes a sheet named as commitment register. This includes brief mention of the issues shared by community and action taken upon those issues by the company.  CDO was observed to be in regular touch of the community and appeared to be first point of contact for the community to register their grievances/issues etc.
1.17	Consider preparing a detailed SEP with stakeholder profiling, key concerns, expectations, impact and influence, and risk rating of various stakeholder groups. It should include details on engagement strategy, disclosure, monitoring, reporting etc. The SEP should be subsequently updated with engagement records.	High	SBPCL II	Updated SEP for the Project	Within 3 months of date of deal closure	SEP preparation work is in process, and expected to be completed by June, 2015.		Draft SEP document is prepared and presently under review stage.  CDO also maintains record of the meeting minutes of all community consultation and issues raised by the community.  A copy of SIA (social impact assessment), LRP (Livelihood Restoration Plan), RAP (Resettlement Action Plan, CDP (Community Development Plan), executive summary of ESIA in local language, were shared with each of 31 PAHs and their feedback on project were noted down. Record of consultation and distribution of this document is maintained.
<b>2. PS 2: Labour and Working Conditions</b>								
2.1	SBPCL II while finalising its HR policy may consider the following aspects for inclusion: <ul style="list-style-type: none"> <li>Roles and responsibilities associated with various positions need to be mentioned;</li> <li>Non-discrimination policy should be mentioned;</li> <li>HIV/ AIDS non- discrimination should also be spelt out;</li> <li>Working with Suppliers and contractors and non-employee workers may also be referred to;</li> <li>Non-tolerance of child labour and forced labour not only for employee, but for the non-employee workers if any</li> <li>Anti- Sexual Harassment Policy may be explicitly captured;</li> </ul> <p>All contractors and sub-contractors within the consortium should be required to apply the principles of the SBPCL HR Policy document and also ensure that their internal procedures follow local and international standards.</p>	High	SBPCL II	HR Policy and Procedures	Within 3 months of date of deal closure	Complied		SBIIPCL's updated HR policy includes the recommended aspects like policy on non-discrimination, prohibition of child labour and forced labour, HIV-AIDS non-discrimination, anti-sexual harassment policy etc.  Provisions of updated HR policy of SBIIPCL have been communicated to the EPC contractors. The EHS person deputed by SBIIPCL, has also been held accountable for ensuring labour compliance of EPC contractor.
2.2	<ul style="list-style-type: none"> <li>HR Policy of the EPC contractor should comply with the provisions of SBPCL II HR Policy.</li> <li>EPC contractor's local staffs terms and conditions of employment to be put in compliance with SBPCL II HR</li> </ul>	High	EPC Contractor	HR Policy and Procedures of EPC Contractor	Within 2 months of date of deal closure or December 2014, whichever is earlier	Complied		HR policy of EPC contractors i.e. NEPC has not been updated. However it was reported that principles of SBIIPCL' HR policy is practically being followed by the EPC contractor. EHS Manager



S. No	Measures and/or Corrective Actions	Significance	Responsibility	Deliverable	Suggested Timelines for Completion*	Status provided by BCAS as on 30 <sup>th</sup> Apr'15	Status	ERM Observations (as on 15 <sup>th</sup> May'15) and Recommendations
	<p>policy.</p> <ul style="list-style-type: none"> <li>The EPC contractor to provide contracts or clear terms and conditions highlighting the terms of employment. Or the same could be possibly hired through sub-contractors.</li> <li>Workers to be provided clear terms and conditions of employment.</li> </ul>							<p>deputed at site by SBIIPCL has been made accountable for ensuring labour compliance in HR practices of NEPC.</p> <p>There are four categories of staff &amp; workers employed in SBIIPCL plant. These are</p> <ul style="list-style-type: none"> <li>EPC contractor own staff (Chinese staff);</li> <li>Locally contracted staff by EPC contractor;</li> <li>Locally hired workers by EPC contractor;</li> <li>Locally hired sub-contractual workers.</li> </ul> <p>Chinese staff are governed by the NEPC HR policy and conditions for staffs working on international assignments.</p> <p>A common agreement template is followed for hiring locally staff and workers by NEPC. Review of the agreement copy indicated following key observation;</p> <ul style="list-style-type: none"> <li>Agreement language is in English and Chinese only. Local workers directly hired by NEPC don't understand either of these two language;</li> <li>Agreement condition discuss about the aspects around contract duration, working time, leave, prohibition of worker under 18 years and forced workers, non-discrimination policy as per regulation of Bangladesh etc.</li> <li>there is no provision around insurance for the workers/staff;</li> <li>Overtime is not permitted as per agreement. In case of working on weekly holiday (Friday), worker will be allowed to take rest on other free time. Review of salary sheet of workers indicates that NEPC is actually allowing the workers for overtime as per work requirement and overtime payment rate is equivalent to the daily wage rate;</li> </ul> <p>Review of agreement between NEPC and their labour supply contractors (i.e. M/s. Nation Trade, M/s. Jui Enterprise, M/s. Shototo Enterprise) put forward the following key observations:</p> <ul style="list-style-type: none"> <li>As per agreement, sub-contractors are responsible for insurance of the workers supplied by them to NEPC. However no existing workers seem to have been insured by their sub-contractors.</li> <li>Wage rate for different categories of the workers (i.e. labour, welder, other skilled staff), is specified in the agreement. However there is uncertainty w.r.t compliance of this wage rate with the applicable current minimum wage rate prescribed by Wage Board of the country.</li> <li>overtime rate paid to the sub-contractor workers by NEPC is equivalent to their ordinary wage rate instead of paying at twice of ordinary wage rate.</li> </ul>

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								Review of agreement between sub-contractors and their workers indicates sub-contractors
2.3	Improve the conditions of the migrant workers- better accommodation and clearly articulated terms and conditions of employment	High	EPC Contractor	Improved workers' accommodation	November 2014	Complied. Regular monitoring and inspection is being done by NEPC and SBIIPCL.		<p>Significant improvement was observed in the labour colony for Bangladeshi Migrant workers as compare to observation of last ERM's audit. Key changes observed in the labour colony were as follows:</p> <ul style="list-style-type: none"> <li>About 6 to 8 workers are living in one room of the labour colony;</li> <li>Ventilation of the room has been improved;</li> <li>One tin shed with adequate ventilation is dedicated for cooking. No worker is cooking at their room;</li> <li>Lighting arrangement is there in the colony;</li> <li>Fire extinguisher was observed to be placed within the colony area. etc;</li> </ul>
2.4	Clear labour construction camp guidelines to be formulated and shared with SPCBL II. The guidelines should take into consideration observations highlighted in the report.	High	EPC Contractor	Labour construction camp guidelines	Within 1 month of date of deal closure or November 2014, whichever is earlier	Complied		It was noted that the NEPC has formulated labour construction camp guidelines and same was reviewed and approved by SBIIPCL.
2.5	Ensure that the principles on non-discrimination and equal opportunity are included in the HR Policy Statement and that the EPC Contractor abides by the same while engaging local sub-contractor or contract workers.	High	SCBPL II	HR Policy of SCBPL II	Within 3 months of date of deal closure	Complied.		<p>The HR policy and procedures (handbook) of SBIIPCL has been updated with policy on Non-discrimination.</p> <p>The EPC contractor is observed to following this principle of non-discrimination. the agreement with sub-contractors includes a clause regarding following principle of non-discrimination in recruitment process.</p> <p>It was observed that there is no female in the existing locally hired workers at the plant. However this is mainly attributed to the prevailing local culture and custom wherein female member of the family remain restricted to household chores.</p>
2.6	<p>The Project should establish channels for management and workers to communicate and for the workers to place their concerns as well as suggestions.</p> <p>The grievance process should be made accessible for construction workforce and should enable workforce to raise anonymous complaints. The grievance records should be properly documented, tracked and reviewed for redressal of the Grievances.</p>	High	SCBPL II EPC Contractor	Grievance redressal mechanism	Within 1 month of date of deal closure or November 2014, whichever is earlier	<p>Complied. GRM is established and maintained as per guidelines.</p> <p>Grievance process is accessible, properly documented and tracked</p>		<p>A formal Grievance Redressal Management (GRM) Committee at plant level as well as at corporate level has been established.</p> <p>Grievance register for plant workers is maintained. Additionally, grievance box is placed at the main entrance gate of the plant for workers.</p> <p>In consultation with workers, it was observed that workers prefer to verbally share their workplace related concern either with the locally safety In-charge by the EPC contractor or to the site level EHS officer of SBIIPCL. Mostly reported grievances of the workers were observed to be pertaining to non-availability PPEs. Such grievances are taken care of instantly by the safety in-charge.</p>
2.7	The EPC contractor's position on non-employment of child, forced or bonded labour has to be clearly stipulated more specifically to the sub-contractors and their associated workforce. There should be proper checks and verification systems in place for the workforce to ensure no cases of child labour or forced labour are not allowed within the site	High	EPC Contractor	HR Policy and Procedures of EPC Contractor	Within 1 month of date of deal closure or November 2014, whichever is earlier	Complied. Included in HR Policy; regularly checked and strictly followed by SBIIPCL. Before employment, National ID		The agreement with sub-contractors includes a clause around prohibition of child labour, forced labour. There is an adequate system in place to ensure prohibition of child labour and forced labour.



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	premises.					is checked.		A copy of national ID card of the worker is taken by the sub-contractor and same is submitted to NEPC. Worker below 18 years of age is not recruited by any sub-contractor.
2.8	Develop a site specific health and safety manual including SOPs and work permits required to protect the construction manpower (including subcontractors' personnel) from injuries.	High	EPC Contractor	SOPs for EHS Plan	Within 1 month of date of deal closure or November 2014, whichever is earlier	Complied		An EHS plan (in English) prepared by NEPC is in place which outlines the key procedures and permits to be implemented to safeguard onsite employees and workers of SBIIPCL, NEPC and subcontractors at the same time ensuring safe working conditions and efficient operations.
2.9	Develop a work permit system to carry out non routine jobs at the construction site.	High	EPC Contractor	SOP for work permit system	Within 1 month of date of deal closure or November 2014, whichever is earlier	Complied		A non-routine work permit has been prepared however implementation of the permit by NEPC is yet to be undertaken as no records to this regard could be made available for verification. SBIIPCL to monitor the implementation of the non-routine permits by NEPC and its subcontractors on a regular basis.
2.10	Prepare a Job hazard analysis for all the construction activity and same should be communicated to all the workers.	High	EPC Contractor	Job hazard analysis	Within 1 month of date of deal closure or November 2014, whichever is earlier	Complied		<p>Job Hazard Analysis prepared is limited to the following construction activities viz.</p> <ul style="list-style-type: none"> <li>• Thermal insulation</li> <li>• Cooling tower construction</li> <li>• Construction of cooling water intake pipeline</li> </ul> <p>It is also understood that communication of JHA to workers is being undertaken by NEPC through Tool Box Talks (TBTs) and On Job Trainings; however no inventory is maintained specifying the work areas covered, no of trainings provided and workforce being trained.</p> <p>In view of the above it is recommended that NEPC prepares a comprehensive JHA encompassing all critical work activities related to electrical installation, material lifting, confined space work, hot work etc. which is to be based taking into account the current and future progress of project construction phase. Further an inventory is to be maintained by NEPC for on job trainings and TBTs being delivered to the contractor workforce as part of JHA communication.</p>
2.11	Prepare a pre-use inspection checklist (activity and equipment specific) and same should be performed and attach with every permit before starting of activity.	High	EPC Contractor	Activity and equipment specific checklist	Within 1 month of date of deal closure or November 2014, whichever is earlier	Complied		As discussed earlier in S.No. 1.3 the EPC contractor is maintaining work permits for critical work activities (except for electrical and height work) in accordance to the project EHS. Currently NEPC is maintaining scaffolding and pre-dig checklist but the same is being implemented in isolation and not as integral to work permits being issued for such activities viz. height and excavation work. Similarly pre-use inspection checklists also need to be developed for the other work related permits viz. hot work, confined space entry etc. which is in place.
2.12	Conduct train the trainer program to increase the knowledge of the safety department.	Medium	EPC Contractor	Training Records	Within 2 months of date of deal closure	Complied		Refer response to S.No. 1.11. In addition review of records reveals that training programs on housekeeping, compliance policy, PPE usage, fall

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								<p>protection, confined space, height work etc. are being implemented by the EPC contractor for their EHS personnel.</p> <p>In this regard it is recommended that training program for contractor EHS personnel to also cover hot work, excavation, material lifting, usage of power tools, storage &amp; handling of fuels/chemicals with records for the same maintained.</p>
2.13	Recruit a qualified doctor to work at first aid centre	High	EPC Contractor	Qualified doctor at site clinic	Within 2 months of date of deal closure	Complied		<p>Reportedly a doctor has been engaged by NEPC at the First Aid Centre; however the work agreement provided to this regard does not bear information related to the date of joining of the doctor.</p> <p>Review of certificates provided in relation to doctor qualification reveals that the later holds a three year diploma degree in Medical Assistance and Family Planning and has been certified to serve as Rural Medical Practitioner (RMP).</p>
2.14	Prepare an Accident & Investigation register to include the information related to the accident.	Medium	EPC Contractor	Accident & investigation register	Within 1 month of date of deal closure or November 2014, whichever is earlier	Complied		<p>Injury Register, First Aid log and Investigation report is being maintained by the EPC Contractor in accordance to the contractor EHS plan. Review of the incident investigation record maintained reveals the worker unawareness to be one of key root causes for such incidents. The incident investigation was followed by imparting motivational/on job training jointly by NEPC and SBIIPCL to enhance EHS awareness of such workers.</p>
2.15	Carryout hazard identification and risk assessment (HIRA) for all construction and associated activities and preparation of SOPs	High	EPC Contractor	HIRA Register and SOPs	Within 2 months of date of deal closure or December 2014, whichever is earlier	Complied		<p>Hazard &amp; Risk Assessment &amp; Control (HIRAC) document prepared by NEPC takes into account the hazards related to the following work activities:</p> <ul style="list-style-type: none"> <li>• Setting up and removing of scaffolding</li> <li>• Assembling and dismantling of heavy lifting equipment</li> <li>• Welding work</li> <li>• Machinery operation</li> <li>• Civil work</li> <li>• Radiography work.</li> </ul> <p>It is recommended that the HIRAC is updated to also include hazards associated with fuel/chemical storage and handling, electrical work and confined space entry.</p>
2.16	Carry out inspection for the potential hazards at the facility and provide the risk control as per the hierarchy of control.	High	EPC Contractor	Risk control measures	Within 1 month of date of deal closure or November 2014, whichever is earlier	Complied		<p>The contractor has in place a Hazard Identification and Risk Estimation Control Procedure for identification and control of potential hazards associated with the work activities. In accordance to this procedure the contractor is periodically undertaking safety inspection of the construction site to identify the potential safety risks/hazards along with their mitigation/control measures.</p>

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2.17	Provide training to workers, supervisors and employees on importance and usage of PPEs for different activities and organize PPE awareness program.	High	EPC Contractor	Training Calendar	As per Training Calendar	Complied		As per the training calendar a PPE awareness training was undertaken by EPC contractor in Feb 2015. It is recommended that the annual training calendar is updated to include additional training programs on importance and usage of PPEs to cover majority of the workforce.
2.18	Prepare a PPE program for the facility and program should cover the following essential elements: <ul style="list-style-type: none"> <li>• Workplace Survey;</li> <li>• Selecting appropriate controls;</li> <li>• Training;</li> <li>• Maintenance;</li> <li>• Audit of the program.</li> </ul>	High	EPC Contractor	PPE Implementation Program	Within 1 month of date of deal closure or November 2014, whichever is earlier	Complied		<p>A PPE matrix has been prepared by the contractor for cutting, grinding, excavation, lifting, confined spaces, welding, spray painting, concreting, and chemical handling activities. Periodic weekly EHS inspections are being undertaken jointly by NEPC and SBIIPCL EHS team to monitor implementation of the program. In addition trainings are being imparted to workers on PPE requirement and usage through Tool Box Talks (TBTs)</p> <p>However based on document review it is recommended that the PPE matrix is updated to incorporate PPE requirement for electrical work. Further elements related to maintenance of PPEs also need to be covered in this program.</p>
2.19	Prepare training modules for job specific trainings and identify workers required to undergo job specific trainings.	High	EPC Contractor	Training modules	Within 2 months of date of deal closure or December 2014, whichever is earlier	Complied		<p>Training modules has been prepared by NEPC for the following critical work activities viz.</p> <ul style="list-style-type: none"> <li>• Work at Height</li> <li>• Confined Space</li> <li>• Electrical Work</li> <li>• Material Lifting</li> </ul> <p>In addition to the above, training modules on <i>General Housekeeping, PPE, Hazardous Material Handling, Power Tools Safety, Slips &amp; Falls, Ladder Safety, Fire Prevention, Water Damage Prevention &amp; Environmental Awareness</i> has been prepared by the SBIIPCL Site EHS Manager and shared with NEPC for necessary implementation.</p> <p>As reported by SBIIPCL selection of workers for job specific training on the aforesaid modules is based on daily and weekly EHS inspections being undertaken by both SBIIPCL and NEPC. However it is recommended that training selection is also to be based on worker skill set, experience and job profile with an inventory of such workers maintained.</p>
2.20	Conduct the first aid training with the help of qualified first aider and make sure that first aiders are available at all times at facility.	High	EPC Contractor	First aid trainings	Within 2 months of date of deal closure or December 2014, whichever is earlier	Complied		First aid certification training was imparted by Bangladesh Red Crescent Society on 8 <sup>th</sup> Apr 2015 to a total of 23 participants from both NEPC and SBIIPCL.

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2.21	Develop a standard operating procedure on incident investigation with roles and responsibilities.	High	EPC Contractor	Incident investigation SOP	Within 2 months of date of deal closure	Complied		<p>As per the project EHS plan developed by NEPC all accidents involving injury or property damage to members of the public resulting from work related activities is to be immediately reported verbally to the Site Manager, Project Manager and the responsible NEPC EHS Manager. The accident/incident will be recorded and investigated using the Incident Investigation &amp; Reporting Form as specified in the EHS Plan.</p> <p>Although NEPC is maintaining incident investigation records it is noted that no specific roles and responsibilities including process flow has been established as part of this procedure to ensure effective implementation. Hence it is recommended that the incident investigation procedure is to be updated through defining of specific roles and responsibilities of personnel involved in incident investigation process along with work flow chart.</p>
2.22	Start preparing the accident/ incident statistics for each and every area and start identifying the area of concerns and prepare an action plan to address the issues by mean of alternate work procedure, trainings, special attention to the high risk jobs, increase in number of supervisor for high risk jobs.	Medium	EPC Contractor	Statistical analysis of accident/ incident data and corrective action	Within 2 months of date of deal closure and monthly update of the same	Complied		<p>EPC contractor is maintaining accident/incident log however it is understood that the said data has not been analysed to identify the potential risk zones and an action plan prepared for such zones.</p> <p>Accident/injury data to be analysed by NEPC to identify the "areas of concerns" regarding health and safety standpoint and at the same time an action plan specific to such areas need to be prepared and implemented.</p>
2.23	<p>SBPCL II will need to put in place a formal contractor management system to audit its contractors as well as those of the EPC contractor. The management system should include:</p> <ul style="list-style-type: none"> <li>• Compliance checklist against the Applicable Standards;</li> <li>• Criterion on contractor selection to minimize HSE or labour related risks and issues at the time of engagement;</li> <li>• Monitoring and audit procedures; and</li> </ul> <p>Further the EPC contractor and the sub-contractor should be made responsible for the insurance of the workers mobilised at the site.</p>	High	SBIIPCL	Contractor Management System	Within 2months of date of deal closure or December 2014, whichever is earlier	Complied		<p>Reportedly SBIIPCL has in place a supplier management procedure to serve as for managing contractors. The procedure comprises of following key components viz.</p> <ul style="list-style-type: none"> <li>• Supplier Identification</li> <li>• Registration of Contractors based on implementation of contractor selection criteria including contractor obligation to SBIIPCL Policy.</li> <li>• Supplier assessment and rating by various users' and procurement department.</li> <li>• Supplier De-Registration.</li> </ul> <p>However the procedure is applicable for SBIIPCL direct contractors with no reference made towards obligation of the contractor to provide insurance for workers. It is therefore recommended that the procedure is updated to be applicable to sub-contractors with provision made for insurance of workers.</p>
3	PS 3: Resource Efficiency and Pollution Prevention							

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3.1	Ensure that all the ESMMP implementation requirements during construction phase are being clearly provided to the EPC contractor and implementation of mitigation measures along with records should be reviewed by EHS Officer of the SBPCL II.	High	SBPCL II and EPC Contractor  SBPCL II	ESMMP implementation	As defined in ESMMP during construction phase	Complied		<p>Reportedly ESMMP has been shared by SBIIPCL to NEPC however no verification checks/monitoring has been undertaken by SBIICL to check compliance status on a periodic basis. SBIICL to perform monthly assessment of the ESMMP implementation for construction phase through development and implementation of specific checklists and compliance report to be shared with NEPC for reference and necessary action for closure.</p> <p>Further efforts has been made by ERM team to assess the compliance status of the EHS commitments made by SBIIPCL in the construction phase ESMMP of the ESIA study report prepared by BCAS. A summary of the observations and recommendations made to this regard has been tabulated below:</p> <ul style="list-style-type: none"> <li>Speed limit signages are provided within Site. However, no signage is provided for the access road. SBIIPCL has also communicated regarding the maximum speed limit of 20 km/hr in access road to the NEPC on 20<sup>th</sup> January 2015. It was also observed that trainings to the drivers of NEPC and Summit were provided 3 times in last 5 months covering a total of 33 drivers. <i>Provide speed limit and no honking signages in the access road.</i></li> <li>AAQ monitoring was conducted in February 2015 at 3 locations within the project area. Apart from PM10 and PM2.5, SPM, SO2, NOx and CO were also monitored. All parameters were observed meeting the applicable standards.</li> <li>As per ESMMP 3 samples need to be taken (upstream, near project and downstream). Whereas only one sample report was available and exact location of sampling was not mentioned in the monitoring report. However, the levels were observed within the permissible limit. As per BD and WHO standards.</li> <li>No records available pertaining to the erosion monitoring of Khusiyara river</li> <li>There is some problem with the results. Ground water quality is much better than treated water quality. Need to recertify.</li> <li>Bird survey is yet to be undertaken for preparation of avifauna management plan to manage the impacts resulting from the proposed T-line.</li> <li>Traffic and transportation plan implemented with training provided. Signage outside the boundary also need to be provided for speed limit and no honking.</li> <li>Solid, medical and food waste are getting</li> </ul>



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								<p>segregated at site. Batteries, filters etc are being kept near HSD storage area. Vertical Promoters, Sylhet (biomedical, solid, hazardous waste, batteries, (DOE Approval/ Authorisation). Lalmatia Pilot Composting Plant, Sylhet (Medical and Hazardous) – Inspection done by SBIIPCL revealed that the area is not lined and can result in soil and ground water contamination.</p> <ul style="list-style-type: none"> <li>• There are no spill kit provisions at the fuel storage area.</li> <li>• No drill has been carried out in last 6 months.</li> <li>• Monthly erosion monitoring on both the banks of the river is currently not being conducted. Record of only one inspection in December 2014 was found, which was primarily triggered due to the complaints received from the villagers.</li> </ul>
3.2	Undertake regular monitoring of air emissions, water consumption, wastewater discharge, solid and hazardous waste disposal, noise levels, in line with the ESMMP	Low	SBPCL II	ESMMP implementation	As defined in ESMMP during operation phase	Not due		To be assessed during combined cycle operations
3.3	Ensure that impacts associated with the decommissioning phase are assessed and addressed prior to eventual decommissioning.	Low	SBPCL II	ESMMP for decommissioning phase.	1 to 2 years prior to eventual decommissioning.	Not due		To be assessed during combined cycle operations
3.4	Complete an annual GHG emissions estimation based on the actual operations of the Project during the operational phase.	Low	SBPCL II	GHG estimation and reporting.	Annually, after one year of COD	Not due		To be assessed during combined cycle operations
3.5	Develop the climate adaptation policy and procedures in line with the requirements specified in the ESMMP.	Low	SBPCL II	Climate Change Adaptation Policy	Within 12 months of COD (Plant Operations)	Not due		To be assessed during combined cycle operations
3.6	Provide organisational arrangements, capacity development and training measures and performance indicators for effective implementation of the ESMMP already developed for the Project.	High	SBPCL II	Capacity building and setting up of performance indicators	1 month prior to COD	Not due		To be assessed during combined cycle operations
3.7	Develop a Waste Management Plan for operation phase.	Low	SBPCL II	Waste inventory and disposal options.	3 months prior to start of Combined Cycle Operation	Not due		With combined cycle COD planned to be declared on Sep'15 SBIIPCL is required to develop a Waste Management Plan for operations within the timeframe specified in the CAP i.e. Jun'15.
3.8	Develop a Hazardous Materials Management (HMM) Plans.	High	EPC Contractor	HMM Plan. – Construction phase	Within 2 months of date of deal closure or December 2014, whichever is earlier	Complied		Hazardous Material Management Plan has been developed by NEPC for fuel and chemicals in use during construction phase.
		Low	SBPCL II	HMM Plan – Operation Phase	3 months prior to start of Combine Cycle Operation	Not due		With combined cycle COD planned to be declared on Sep'15 SBIIPCL is required to develop a Hazardous Material Management Plan for operations within the timeframe specified in the CAP i.e. Jun'15.

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3.9	<ul style="list-style-type: none"> <li>Ensure that spillage kit is available at the HSD storage area.</li> <li>Provide drainage system to the HSD storage shed to collect the rain water and waste water generated after floor cleaning.</li> <li>Prepare a procedure for the HSD loading &amp; unloading and spill control and trained workers for the same.</li> <li>Prepare a list of the authorised person and same should be pasted outside the storage shed area and access control system to be implemented.</li> </ul>	High	EPC Contractor	Spillage management plan	Within 1 month of date of deal closure or December 2014, whichever is earlier	Complied		<p>The container (~20 KL capacity) being used for the storage of HSD onsite as specified in the earlier ERM audit report was found to be removed. Presently as observed HSD is being stored in only 9 metallic drums (~200 litre capacity each) placed in a paved and covered storage area near batching plant. The storage was found to be access restricted with secondary containment provision. Display of appropriate safety signages/instructions including list of authorized personnel was found to be in place at this shed. However efforts need to be made by NEPC to ensure provision of spill kits at this storage along with display Material Safety Data Sheets (MSDS) for diesel.</p> <p>No drainage has been made available at the said area but as communicated taking into account the covered storage and availability of secondary containment any potential generation of contaminated run-off is likely to be minimal.</p> <p>A procedure for HSD loading and unloading and Hazardous Material Management Plan is available and training provided by SBIIPCL to the workers involved in their storage and handling. However as suggested in the earlier audit report NEPC is required to develop and implement a spill prevention control procedure and train workers towards its effective implementation.</p>
3.10	Develop a Standard Operating Procedure for Pest Management for the Project.	Medium	SBPCL II	Standard Operating Procedure for Pest Management.	Within 3 months of COD	Not due		To be assessed during combined cycle operations
3.11	Develop a Standard Operating Procedure on the use of Ozone Depleting Substances (ODS), with the focus being on no new systems or equipment use ODS.	Medium	SBPCL II	Standard Operating Procedure on the use of Ozone Depleting Substances.	Within 3 months of COD	Not due		To be assessed during combined cycle operations
3.12	Ensure that emissions from on-road and off-road vehicles should comply with Schedule 6 (Standards for emissions from motor vehicles) of the <i>Environmental Conservation Rules, 1997 of GoB</i> .	Medium	SBPCL II and EPC Contractor	Compliance checks of on-road and off-road vehicles.	Within 2months of date of deal closure or December 2014, whichever is earlier (with quarterly monitoring)	Practically, it is feasible to meet the deadline of April, 2015, if effective movement has been made by both SBIIPCL and the EPC contractor.		<p>Reportedly vehicles are being used primarily for construction activities (excavators, load carriers, cranes etc.) and transportation of project personnel. Records review reveals that vehicular certificate of fitness from Bangladesh Road Transport Authority (BRTA) is available for only the ambulance provided by SBIIPCL. However documents related to vehicular emission testing (as required under <i>Environmental Conservation Rules, 1997 of GoB</i>) and certificate of fitness was not available and/or maintained for the NEPC operated vehicles.</p> <p>It is understood based on discussion with SBIIPCL management there exist potential challenges to comply with this requirements given the absence of adequate infrastructure and/or resource for vehicular emissions monitoring. <i>In view of the same it is recommended that NEPC maintains an inventory of vehicles in operation for the project and obtain certificate of fitness for the same.</i></p>
3.13	Ensure no use of asbestos containing material is specified in	High	SBPCL II	Written confirmation	Within 1 month of date of	Complied		Reportedly no asbestos material is being used as

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	the design of the Project.			that no asbestos will be used in the Project development from newly purchased materials.	deal closure			part of project development and same has been confirmed by NEPC to SBIICL vide letter dated 15 <sup>th</sup> Feb 2015.
3.14	Conduct air quality dispersion modelling study with updated stack characteristics in the design	Medium	SBPCL II	Updated air quality dispersion modelling	Within March 2015	Not complied.		The air quality dispersion modelling study was performed considering main stack height as 50 m and stack diameter as 3.0 m, which has been modified to 70 m and 7.0 m, respectively. As suggested in the ERM audit report air quality dispersion is yet to be undertaken by SBIIPCL taking into considerations the revised stack specifications and flue gas velocity.
<b>4 PS 4: Community Health, Safety and Security</b>								
4.1	Conduct a detailed QRA for the Project based on actual design and formulate an emergency response plan.	Medium	SBPCL II	Quantitative Risk Assessment and Emergency Response Plan	3 months of COD	Not due		To be assessed during combined cycle operations
4.2	Develop a traffic management and logistics plan taking into consideration community safety	High	EPC Contractor	Traffic management plan.	Within 1 month of date of deal closure or November 2014, whichever is earlier	Complied		<p>A traffic management plan developed by SBIIPCL is currently in place, which also takes into consideration, the traffic management plan of the EPC Contractor. The speed limits within project site, access road and highway are 15 km/hr, 20 km/hr and 60 km/hr respectively. No honking is allowed near the access road. During the site visit, it was noted that speed limit signage are provided within the site, however, no signage was noticed on the access road.</p> <p>SBIIPCL has also communicated regarding the maximum speed limit of 20 km/hr in access road to the NEPC on 20<sup>th</sup> January 2015. It was also observed that trainings to the drivers of NEPC and Summit were provided 3 times in last 5 months covering a total of 33 drivers.</p> <p><i>It is recommended to provide speed limit and no honking signage on the access road considering no access control on the road and use of the same by local people.</i></p>
4.3	Undertake specific communication on health hazards and mitigation measures on an ongoing basis against new activities and associated health and safety risks to the local community.	Medium	SBPCL II	Communication on health hazards and mitigation measures.	Within 3 months of COD	Not due		To be assessed during combined cycle operations
4.4	Engage a suitably qualified professional to undertake a Life and Fire Safety (L&FS) review of the facility prior to commissioning and develop a Corrective Action Plan to address any identified deficiencies / gaps between the facility and the requirements of the WBG General EHS Guidelines.	Medium	SBPCL II	Life and Fire Safety Review and Corrective Action Plan	1 month prior to the commissioning of combined cycle	Not due		To be assessed during combined cycle operations
4.5	Ensure any future security arrangements shall comply with PS4 requirements. The SBPCL II Grievance Mechanism should include security within its scope.	Low	SBPCL II	Compliance check against PS4 requirement.	1 months of COD	Not due		To be assessed during combined cycle operations
<b>5 PS 5: Land Acquisition and Involuntary Resettlement</b>								
5.1	Ensure: <ul style="list-style-type: none"> <li>Preparation of the Livelihood restoration plan;</li> <li>Documentation of the stakeholder engagement records;</li> <li>Maintaining proper records of the employment and vendor opportunity provided to the PAFs and the local</li> </ul>	Medium	SBPCL II	Livelihood restoration plan and stakeholder engagement	Within 3 months of date of deal closure (and periodic review)	LRP will be completed by June 2015. Stakeholder engagement records are developed and documented. Record keeping of		<ul style="list-style-type: none"> <li>Livelihood Restoration Plan (LRP) is proposed to be prepared by LRP consultant. The LRP consultant has been identified and expected to join in the month of June 2015. Thereafter LRP would be prepared. However some initiative</li> </ul>



S. No	Measures and/or Corrective Actions	Significance	Responsibility	Deliverable	Suggested Timelines for Completion*	Status provided by BCAS as on 30 <sup>th</sup> Apr'15	Status	ERM Observations (as on 15 <sup>th</sup> May'15) and Recommendations
	community					employment and vendor opportunity is being done.		<p>related to Livelihood Restoration measures is already taken by CDO of SBIIPCL like vocational training need identification for 8 male PAP member; identification of 18 female PAP members for sewing training;</p> <ul style="list-style-type: none"> <li>• There is a dedicated CDO in place for the last seven months. Regular interaction of CDO is happening with the communities;</li> <li>• Project has constituted a JCCR (Joint Committee for Community Relation) with 11 members that includes Chairman of Union Parishad, Ward member of the Union Parishad, primary school headmaster, a women representative, 2 representatives from PAFs, 2 general community representatives, SBIIPCL project &amp; GM, SBIIPCL CDO, SBIIPCL Assistant EHS Manager. Monthly meeting of JCCR is conducted to discuss about issues raised by community. Meeting minutes are recorded which was verified by ERM during site visit.</li> <li>• CDO also maintain record the consultations with communities other than JCCR meeting;</li> <li>• Employment and vendor opportunity for the PAFs and local is maintained by CDO. 5 PAP provided contractual employment and 4 provided vending opportunity at present.</li> </ul>
5.2	Continued engagement and resettlement monitoring by CDO.	Medium	SBPCL II	Resettlement monitoring reports	Within 3 months of date of deal closure (and periodic review)	Complied		CDO visits the Resettlement Site on regular basis. He was observed to be regular touch with PAFs. He has also prepared a first quarterly resettlement monitoring Report for the internal consumption SPIIPCL which highlights the progress on implementation of RAP.
5.3	Establishment of a formal GRM for the PAFs and the community;	Medium	SBPCL II	GRM for PAFs	Within 3 months of date of deal closure (and periodic review)	Complied		<p>SBIIPCL has set up a formal mechanism of grievance redressal system for the PAFs and neighbouring community. Complain boxes have been near two entrance gate of the plant for the plant for receiving grievances of the community. In addition to the above, JCCR meeting provides a formal platform for raising community issues and taking appropriate decision there upon.</p> <p>CDO maintains separate register for registering grievances of PAFs and general community. Based on ERM consultation with local community, it was observed that contact number of CDO is shared with PAFs and regular formal and informal interaction happen between local community and CDO. Community members prefer to report their concern to CDO verbally which is eventually documented by CDO as well.</p>
5.4	Consider preparing a detailed SEP with stakeholder profiling, key concerns, expectations, impact and influence, and risk rating of various stakeholder groups. It should include details on engagement strategy, disclosure, monitoring, reporting etc. The SEP should be subsequently	Medium	SBPCL II	Updated SEP for the Project	Within 3 months of date of deal closure (and periodic review)	Several stakeholder meetings have been done. SEP preparation work is in process, and expected to be completed by June, 2015.		Refer ERM's observation on S.no: 1.17 of this table.

S. No	Measures and/or Corrective Actions	Significance	Responsibility	Deliverable	Suggested Timelines for Completion*	Status provided by BCAS as on 30 <sup>th</sup> Apr'15	Status	ERM Observations (as on 15 <sup>th</sup> May'15) and Recommendations
	updated with engagement records.							
5.5	SBPCL II should ensure payment of compensation to sharecroppers in line with the resettlement action plan and records should be maintained.	Medium	SBPCL II	Records of compensation payment	After finalisation of CAP	Compliance in process and achievable within the deadline.		ERM observed that payment to sharecroppers and agricultural labourer as per RAP, has been disbursed by SBIIPCL except for one Agricultural labourer (named as Masum Mian). It was reported that this person is residing with his family in Dhaka.
<b>6 PS 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources</b>								
6.1	Conduct six monthly construction phase monitoring of terrestrial and aquatic organisms	High	SBPCL II	Terrestrial and aquatic organism monitoring	As defined in ESMMP during construction phase	Not due. In process and expected to be done by May, 2015.		Monitoring of terrestrial and aquatic organisms within the project study area for the construction phase is currently pending. As reported by SBIIPCL efforts are being made to identify a reputed and qualified third party agency to undertake the said work.
6.2	Develop greenbelt within the project boundary.	Low	SBPCL II	Greenbelt Development	After completion of construction activities.	Not due		With single cycle COD planned at end of May 2015 reportedly a Green Belt Development Plan will be prepared and implemented by SBIIPCL starting July (monsoon) season by engaging a third party contractor. In this regard SBIIPCL has obtained financial proposal from SEBA (a local NGO) on 2 <sup>nd</sup> May 2015.
6.3	Include an invasive alien species management plan in the ESMMP for the construction and operational phases	Medium	SBPCL II and EPC Contractor	Invasive alien species management plan.	Within 2 months of date of deal closure	Complied		Invasive Alien Species Management Plan has been prepared by SBIIPCL as an integral to the Environment & Social Management & Monitoring Plan (SBIIPCL-EHS-007).

In addition to the CAP & ESMMP compliance assessment the ERM team has performed an EHS&S compliance audit of the project for construction phase. The audit has been conducted to assess project compliance with respect to applicable local and national regulations and has been based on site visits, site personnel interviews and document reviews with the findings/observations being presented in *Table 5.1* for reference. In order to establish the compliance status, a risk rating with appropriate colour coding has been used for easy referencing, which is as follows:

<b>High</b>	Significant deviation/departure from EHS&S regulations leading to legal prosecution, imposition of hefty fines/penalties and or both requiring senior management intervention
<b>Medium</b>	Substantial deviation from EHS&S regulations resulting in limited legal liability managed through interventions at site management level
<b>Low</b>	Minor deviation from EHS&S regulations managed through intervention of project EHS manager/personnel

**Table 5.1 EHS&S Regulatory Compliance Status**

S.No	Regulatory Requirement	Finding/Observation	Risk Rating	Recommendation
<b>1</b>	<b>EIA Approval under Environmental Conservation Rules, 1997</b>			
1.1	EIA Approval	<ul style="list-style-type: none"> <li>Draft ESIA report was submitted to the DoE by letter dated 10<sup>th</sup> August 2014. EIA approval is currently awaited.</li> <li>It was further noted that updated Draft ESIA report after addressal of IFC comments was again submitted to the DOE by letter dated 12<sup>th</sup> February 2015.</li> <li>DOE had issued a letter for presentation of the EIA/EMP report dated 07<sup>th</sup> April 2015.</li> <li>The presentation was held in the 384<sup>th</sup> meeting of the Environmental Clearance Committee on the 12<sup>th</sup> April 2015.</li> <li>On 12<sup>th</sup> May 2015, site inspection of the site was also being conducted by the DOE Regional Office in Sylhet and the inspection report was submitted to the DOE Head Office on 13<sup>th</sup> May 2015.</li> <li>It was reported that during the meeting a total of 6 comments were made by the expert committee and reply of the comments along with revised EIA report was being submitted to the DOE on 13<sup>th</sup> May 2015.</li> <li>The EIA approval is now awaited from the DOE.</li> </ul>		<p>Considering the fact that the Simple Cycle COD is planned by last week of May 2015, EIA approval should be taken before that. Furthermore, the site clearance certificate is valid only till 28<sup>th</sup> May 2015 and hence, in case of any delay in obtaining EIA approval, SBIIPCL should renew the site clearance certificate.</p> <p>The Combined Cycle COD is planned in the month of September/ October 2015. Considering this the process of getting the environmental clearance certificate should also be initiated after receipt of the EIA approval certificate.</p>
<b>2</b>	<b>LPG Gas Rules, 2004</b>			
2.1	<b>License Requirement:</b>  <b>Rule 89 of LPG Gas Rules, 2004:</b> No person is allowed to store LPG cylinder without License. Provided if the total stored quantity is less than 125 Kg, in that case no license is required.	<p>During site walkthrough nearly 50 propane cylinders (filled) were found to be kept in a paved and covered storage shed at the site warehouse area. Further review of the gas cylinder inventory maintained by NEPC also revealed the storage and use of nearly 155 propane cylinders.</p> <p>Given that total storage quantity of the propane cylinders onsite is likely to exceed 125 kg no license has been obtained by NEPC till date for the same.</p> <p>This is a repeat finding with the same observation being made in the ERM audit report dated 3<sup>rd</sup> Nov 2014.</p>		<p>Obtain license for propane cylinder storage on a fast track basis and reduce the on-site inventory below threshold limit till the receipt of license.</p> <p><i>It has been further noted that SBIIPCL has sent an urgent email communication to the Project Head of NEPC for necessary action on 17<sup>th</sup> May 2015. Compliance of the same need to be assured by NEPC and SBIIPCL.</i></p>
2.2	<b>Labelling of Cylinders:</b>	The labels on the propane cylinders being stored and used onsite in		Perform periodic inspection of propane

S.No	Regulatory Requirement	Finding/Observation	Risk Rating	Recommendation
	<p><b>Rule 61(01) of LPG Gas Rules, 2004:</b> Every cylinder shall be labelled with the name of the gas and the name and address of the person by whom the cylinder was filled with gas.</p> <p><b>Rule 61(02) of LPG Gas Rules, 2004:</b> All the LPG cylinders should be pasted with warning symbol and warning statement</p>	most cases were not found to be legible. In some cases no labels were observed on two (2) propane cylinders being used at the proposed workshop & store building.		<p>cylinder storage and usage areas to check for proper labelling of cylinders in conformance to the LPG Rules.</p> <p>Ensure labelling of propane cylinders in use at the workshop and store building. The label on each cylinder to bear the following information viz.;</p> <p>(a) Highly inflammable; No Smoking;</p> <p>(b) Do not change the colour of this cylinder;</p> <p>(c) No flammable material should be stored in the close vicinity of this cylinder or in the same room in which it is kept.</p> <p>(d) Gas cylinder should not be kept horizontally;</p> <p>(e) No oil or similar lubricant should be used on the valves or other fittings of this cylinder;</p> <p>(f) Please look for the next date of test, which is marked on a metal ring inserted between the valve and the neck of the cylinder, and if this date is over, do not accept the cylinder for filling.</p> <p>Ensure that acetylene cylinders are relocated from the propane cylinder storage shed to a designated location. Perform periodic inspection to ensure prevention of use of the shed for any storage other than propane cylinders.</p>
2.3	<p><b>Restricted Entry</b></p> <p><b>Rule 74 (01) of LPG Gas Rules, 2004:</b> No person is allowed to construct or use the storage or warehouse for purpose apart from storing LPG.</p>	The covered shed at the warehouse area designated for storage of propane cylinders was also found to be utilized for storage of acetylene cylinders. At least four (4) dissolved acetylene cylinders were observed at the said storage shed.		

S. No	Regulatory Requirement	Finding/Observation	Risk Rating	Recommendation
2.4	<b>Storage Requirements</b>  <b>Rule 90 (02) of LPG Gas Rules, 2004:</b> LPG Cylinders should not be stored in close vicinity of any corrosive or inflammable substance.	As observed during site walkthrough at least 100 metallic drums bearing turbine oil were found to be stored adjoining the propane cylinder storage shed at the warehouse area.		Maintain adequate safe distance between the turbine oil and propane storage area as per the LPG Gas Rules provision.
2.4	<b>Storage Requirements</b>  <b>Rule 90 (11) of LPG Gas Rules, 2004:</b> While storing or transporting LPG, valve cap or plug needs to be used.	No capping was observed for the valves of the propane cylinders being stored at the site warehouse shed. In some cases the caps/plugs strapped at the neck of the cylinders were not being used.		Ensure provision and use of valve caps/plugs for the propane cylinders being stored at the warehouse shed
3	<b>Gas Cylinder Rules, 1991</b>			
3.1	<b>License requirement:</b>  <b>Rule 39 of Gas Cylinder Rules, 1991:</b> As specified under Rule 39, no person is allowed to fill or store cylinder without license.	As observed the contractor is currently storing oxygen (~70 no's), CO <sub>2</sub> (~15nos) and N <sub>2</sub> (~12) cylinders (filled) in a paved and covered storage shed at the warehouse area. Review of the gas cylinder inventory maintained by NEPC reveals oxygen (180 no's), ethane (19nos), argon (101nos), nitrogen (171nos), carbon dioxide (60nos) and hydrogen (5nos) cylinders storage and usage onsite  Based on the storage volume/weight it is understood that compressed gas cylinder storage by NEPC qualifies for licensing under the provision of the Gas Cylinder Rules 1991. This is a repeat finding with related observation and recommendation made during the earlier ERM audit visit.		Obtain license for storage of compressed gas cylinders (based on their storage volume/quantity) on a fast track basis.
3.2	<b>Labelling of Cylinders</b>  <b>Rule 11(01) of Gas Cylinder Rules, 1991:</b> Every cylinder shall be labelled with the name of the gas and the name and address of the person by whom the cylinder was filled with gas.	No labelling depicting the name of the gas, filler details including warning statement was observed on most of the compressed gas cylinders being placed at the storage shed at the warehouse and near the proposed hydrogen generating station. In some cases the labels provided were not legible following exposure of the cylinder to rain and/or prolonged usage.		Perform periodic inspection of compressed cylinder storage and usage areas to check for proper labelling and availability of warning statement on cylinders in conformance to the Gas Cylinder Rules.  Ensure labelling of compressed gas cylinders being stored at the warehouse and near proposed hydrogen generating

S. No	Regulatory Requirement	Finding/Observation	Risk Rating	Recommendation
	<b>Rule 11(02) of Gas Cylinder Rules, 1991:</b> A warning statement shall be attached to every cylinder containing permanent or liquefiable gas			station. The label on each cylinder to bear the name of the gas and address of the person by whom the gas was filled along with following warning information viz.; (a) Do not change the colour of this cylinder; (b) No flammable material should be stored in the close vicinity of this cylinder or in the same room in which it is kept; (c) No oil or similar lubricant should be used on the valves or other fittings of this cylinder; (d) If hydraulic testing or next due date for hydraulic testing is not over, then the cylinder cannot be handed over or transferred.
4	<b>Bangladesh Labour Law 2006 (as amended 2013)</b>			
4.1	<b>58. Drinking water :</b> (1) In every establishment effective arrangement shall be made to provide and maintain at a suitable point conveniently situated for all workers employed therein, a sufficient supply of wholesome drinking water. (2) All such points where water is supplied shall be legibly marked 'Drinking water' in Bangla. (3) In every establishment wherein two hundred fifty or more workers are ordinarily employed, provision shall be made for cooling the drinking water during the hot weather by effective means and for distribution thereof.	The drinking water centres located near the waste water treatment plant and dormitory & canteen building were not provided with covered storage. Further no drinking water was found to be available in the pots placed in the water centres near the waste water treatment plant.		Ensure provision of covered storage for all drinking water centres located within the site. Perform periodic checks/inspection for availability of sufficient drinking water at these centres.
4.2	<b>68. Cranes and other lifting machinery :</b> The following	As observed safe working load has not been displayed for a) jib crane in use at the acid & alkali storage area of DM plant, b) an		Display safe working load for the jib crane, overhead crane and heavy lifting crane in

S.No	Regulatory Requirement	Finding/Observation	Risk Rating	Recommendation
	<p>provisions shall apply in-</p> <p>(a) every part thereof, including the working gear, whether fixed or movable, ropes and chains and anchoring and fixing appliances shall be-</p> <p>(i) of good construction, sound material and adequate strength,</p> <p>(ii) properly maintained,</p> <p>(iii) thoroughly examined by a competent person at least once in every period of twelve months and a register shall be kept containing the prescribed particulars of every such examination;</p> <p>(b) no such machinery shall be loaded beyond the safe working load which shall be plainly marked thereon; and</p> <p>(c) while any person is employed or working on or near the wheel-tract of a traveling crane in any place, where he would be liable to be struck by the crane, effective measures shall be taken to ensure that crane does not approach within six meter of that place.</p>	<p>overhead gantry crane at the workshop and store building; and c) heavy lifting crane in use at the cooling towers near the NEPC site office. In addition few damaged slings were found to be stored in the RMS area.</p> <p>Periodic inspection are being undertaken by NEPC of lifting equipment onsite with records maintained; however the overhead/gantry crane and jib crane as mentioned above has not been covered under inspection as no records for the same could be made available for review.</p>		<p>use at the project site. Replace damaged slings stored at the RMS to prevent its use by workers during material lifting. Ensure the jib crane and overhead crane are inspected in accordance to the periodic lifting equipment inspection program specified in the project EHS plan.</p>
4.3	<p><b>72. Floors, stairs and means of access:</b> In every establishment –</p> <p>(a) all floors, stairs, passages and gangways shall be of sound construction and properly maintained and where it is necessary to ensure safety steps, stairs, passages and gangways shall be provided with substantial handrails;</p>	<p>The platform of the scaffold at the “Fuel Gas Front Module” area of the Steam &amp; Turbine building was not found to be equipped with handrails and toe boards. Further no hand-rail was also observed for the ladder used for accessing the roof of the oil water tank located outside the turbine building.</p>		<p>Ensure provision of handrails at the scaffold platform and oil water tank ladder near the steam and gas turbine building. Perform periodic checks using the scaffold and height work checklist prepared to identify any safety deviations to this regard.</p>



S.No	Regulatory Requirement	Finding/Observation	Risk Rating	Recommendation
4.4	<p>(b) there shall, so far as is reasonably practicable, be provided and maintained safe means of access to every place at which any person is, at any time, required to work; and</p> <p>(c) all floors, ways and stairways shall be clean, wide and clear of all obstructions.</p> <p><b>73. Pits, sumps, opening in floors, etc.:</b> (1) In every establishment, every fixed vessel, sump, tank, pit or opening in the ground or in a floor which, by reason of its depth, situation, construction or contents is or may be a source of danger, shall be either securely covered or securely fenced</p>	<p>During the site walkthroughs no temporary barricading was observed for the areas undergoing excavation work near the dormitory and canteen building, transformer and cooling water chlorination building.</p> <p>No barricading was also observed at floor opening at the steam and gas turbine building.</p>		<p>Identify and ensure provision of temporary barricading at all excavated areas onsite including floor openings. Ensure proper implementation of the "Excavation Inspection Form" specified in the EHS Plan to identify and address any deviations to this regard.</p>
4.5	<p><b>72. Precaution against dangerous fumes:</b> (3) No person in any establishment shall enter or be permitted to enter any such confined space until all practicable means have been taken to remove any fumes which may be present and to prevent any ingress of fume and unless either-</p> <p>(a) a certificate in writing has been given by a competent person, based on a test carried out by himself, that the space is from dangerous fumes and fit for persons to enter, or</p> <p>(b) the worker is wearing suitable breathing apparatus and a belt securely attached to a rope, the free end of which is held by a</p>	<p>Document review and discussion with SBIIPCL &amp; NEPC EHS personnel it is understood that identification and labelling of confined spaces onsite has not been undertaken. Also the confined space permit being implemented by the contractor does not cover the key aspects of testing of confined space by competent person for dangerous fumes and use of breathing apparatus by workers during such entry.</p>		<p>Prepare a confined space inventory and mark/label all such areas onsite based on the inventory. Update the confined space entry permit to cover the following i.e. testing and certification of the confined space by competent person for presence of any dangerous fumes and/or usage of suitable breathing apparatus by workers entering into confined space.</p>

S.No	Regulatory Requirement	Finding/Observation	Risk Rating	Recommendation
4.6	<p>person standing outside the confined space.</p> <p><b>89. First-aid appliances:</b> (1) there shall, in every establishment be provided and maintained, so as to be readily accessible during all working hours first-aid boxes or cupboards equipped with the contents prescribed by rules.</p> <p>(3) Every first-aid box or cupboard shall be kept in charge of a responsible person who is trained in first-aid treatment and who shall always be available during the working hours of the establishment.</p>	<p>The first aid box provided at NEPC canteen was not found to bear the prescribed contents. Further the name and contact details of the first aid responder in charge of the first aid box have not been affixed at a conspicuous location throughout the work area.</p>		<p>Equip the first aid box at the NEPC canteen with content prescribed under this Rule. Perform periodic inspection of the first aid boxes onsite for presence of such prescribed contents. Affix notice at work areas stating the name of certified person in charge of the first aid box provided in respect of that area.</p>
4.7	<p><b>79. Dangerous operations:</b> (d) providing for the protection of all persons employed in the operation or in the vicinity of the places where it is carried on and the use of any specified materials or processes in connection with the operation; and</p> <p>(e) notice specifying use and precautions regarding use of any corrosive chemicals.</p>	<p>During the site walkthroughs absence of material safety data sheets (MSDS) and spill kits were observed at the following areas:</p> <ul style="list-style-type: none"> <li>• Turbine oil storage (~100 metallic drums) at the ware house area.</li> <li>• Acid and alkali storage tanks at the DM plant area.</li> <li>• HSD storage area near the batching plant</li> </ul> <p>Further the turbine oil storage lacked covering, lining and secondary containment with emergency shower at the acid-alkali storage found to be non-functional.</p>		<p>Ensure display of MSDS (in both English and Bengali) and provision of spill kits at the onsite storages for turbine oil, acids, alkalis and diesel. Provide covered and lined shed with secondary containment for storage of turbine oil. Ensure emergency shower at the acid and alkali storage is made fully functional.</p>

Social compliance Report prepared by BCAS on 4<sup>th</sup> April 2015 was reviewed and assessed by ERM during site visit of SBIIPCL. ERM's observation on the Corrective Action Plan submitted by BCAS is presented in table given below.

**Table 6.1**      *Observation on Social Monitoring Status on Corrective Action Plan*

No	Corrective Actions	Responsibilities	Deliverable Actions Taken	Time Line	SBIIPCL Status till date	BCAS Comments	ERM's observation
1	Strengthening of record keeping of grievance redress of SBIIPCL	SBIIPCL	Putting GRMP in place	Dec-14	<ul style="list-style-type: none"> <li>Both GRC-Corporate Committee and GRC-Plant Committee have been formed.</li> <li>Activities are on going, documentation has been done since September, 2014 through direct communication with CDO of SBIIPCL.</li> <li>Till date 19 grievances have been lodged from community people. Among them 12 grievances have been resolved, 2 have been rejected and the rest 5 are in the process of resolution. All the unresolved issues have been forwarded to GRC-Corporate Committee.</li> <li>Plant GRM Process: hand bills distributed, verbal communication done, registry book (at CDO Office) maintained, complain box installed outside gate no. 1 &amp;3, over cell phone communication displayed (outside gate no. 1 &amp;3).</li> </ul>	Complied.	Same status was observed in ERM visit
2	Strengthening of record keeping of grievance redress of EPC Contractor	EPC Contractor	Make present GRMP more efficient through more access to employees	Dec-14	<ul style="list-style-type: none"> <li>GRM of EPC is closely monitored by SBIIPCL and records have kept accordingly. This has increased access of workers to the GRM process.</li> </ul>	Complied.	Same status was observed in ERM visit
3	Prioritization of	SBIIPCL in	Review of	Dec-14	<ul style="list-style-type: none"> <li>Among 31 PAHs, currently 8 are</li> </ul>	Complied.	Same status was observed in

No	Corrective Actions	Responsibilities	Deliverable Actions Taken	Time Line	SBIIPCL Status till date	BCAS Comments	ERM's observation
	employment opportunity to affected persons, especially vulnerable households	coordination with EPC Contractor	present status to maximize opportunities for employment of PAHs specially venerable people		employed. If further vacancies arise, the vulnerable PAHs will be given preference in employment.		ERM visit to the site.
4	Development of a skill development and livelihood Improvement plan.	SBIIPCL in coordination with independent NGO	Based on recommendation of Social Compliance Audit finalize the implementation plan	Jan-15	<ul style="list-style-type: none"> <li>The skill development and livelihood Improvement plan preparation work is in process.</li> <li>An NGO (SEBA) has been engaged by SBIIPCL to implement the skill development and livelihood Improvement plan.</li> </ul>	In process/partially complied, but not fully complied.	To add further on BCAS comment, a detailed Livelihood Restoration Plan (LRP) is proposed to be prepared by a professional LRP consultant.
5	Income Loss of 6 Sharecroppers & 11 Agricultural Laborers	SBIIPCL in coordination with independent NGO	Priority to be given to this group for training and small enterprise development through facilitating interest free micro credit loan Tk. 40,000 for two years and direct employment	Jan-15	<ul style="list-style-type: none"> <li>Payment of Taka 7,500 to each sharecropper PAH and Taka 8,000 to each agricultural laborer PAH has been made to offset their economic displacement.</li> <li>Preliminary Training need Assessment (TNA) has been completed for 26 PAHs out of 31.</li> <li>Vocational training for January Session was missed. Next available session is in July, 2015, in which interested trainees will be enrolled. And, applications for the trainings will be made by March, 2015.</li> </ul>	In process/partially complied, but not fully complied.	Except for one Agriculture labour, cash payment of TK 7500 to each sharecropper and TK 8000 to agricultural labour has been made.  Rest of the BCAS' comment stand same.
6	Outstanding Compensation Payment	SBIIPCL in coordination with LAO	CDO to arrange legal assistance to expedite compensation payment	Dec-14	Completed	Complied within deadline.	Same status was observed in ERM visit to the site.
7	Appoint Trained	SBIIPCL	In TOR of CDO	Oct-14	<ul style="list-style-type: none"> <li>CDO has been appointed in September</li> </ul>	Complied within	Same status was observed in

No	Corrective Actions	Responsibilities	Deliverable Actions Taken	Time Line	SBIIPCL Status till date	BCAS Comments	ERM's observation
	Community Development Officer (CDO) to implement monitoring the Livelihood Restoration Plan as well as any other issue raised by community.		it would clearly mentioned the desired education Level (URP, Geography, Social Science Background) having Theoretical and practical experience in LRP implementation in Bangladesh		15, 2014 • He has been working accordingly.	deadline.	ERM visit to the site.
8	Develop and maintain all legal register of the all project components & documents the Stakeholder engagement Records	SBIIPCL	CDO office will be established, where all the documents related to land Acquisition, Legal Notice, Payment Status, Stakeholder engagement and all contractual records should be maintained for future reference	Oct-14	CDO Office has been established, and the appointed CDO is working on collecting all the legal documents from LAO. Documents of serving 3 acquisition & requisition notices (by DC) are already available. Collection of actual compensation and legal documents (paid by LAO) is in process, which is expected to be finished by June, 2015.	In process/partially complied, but not fully complied.	Same status was observed in ERM visit to the site.
9	Training of SBIIPCL official for preparation of Training calendar and Implement the	SBIIPCL authority through engagement of a Independent Consultant or	Hands on Training on monitoring the implementation of LRP, CAP	December, 2014	Awareness raising, induction and capacity building has been carried out by BCAS. Further training by an independent entity will be arranged by April, 2015.	In process but not complied.	Same status was observed in ERM visit to the site.

No	Corrective Actions	Responsibilities	Deliverable Actions Taken	Time Line	SBIIPCL Status till date	BCAS Comments	ERM's observation
10	LRP and CAP Prepare Specific Training Module for Vocational Training and SED for the PAHs	Consulting firm SBIIPCL	Engagement of a Technical Expert (Vocational Training Expert)	December, 2014	<ul style="list-style-type: none"> <li>SEBA (engaged NGO) has already produced Training Module for Sewing Training (hands on training on women: 3 hours per day and 5 days a week for 3 months). Besides, training modules for other vocational trainings have been collected from Youth Development Training Center, Habiganj.</li> <li>Vocational Training Expert has not yet been appointed (as vocational training has not been started yet). He/she will be appointed by June, 2015 by when vocational trainings by SEBA as well as Youth Development Training Center will be initiated.</li> <li>SBIIPCL is currently assessing the potential SED activities and PAHs (who will come under this program). Concurrently, SBIIPCL is negotiating with Grameen Bank, ASA and BRAC to implement the SED activities including concerned trainings.</li> </ul>	In process but not complied.	Same status was observed in ERM visit to the site.
11	Formation and activate The Joint Committee for Community Relation (JCCR)	SBIIPCL, CDO will take initiatives	From each components of the Project at least 2 representatives, Local Government and SBIIPCL representatives will form the committee for discussion and resolve any kind of Grievances and compensation	November, 2014	<ul style="list-style-type: none"> <li>JCCR has been formed, and first meeting of JCCR was held on 28 October, 2014.</li> <li>5 JCCR meetings have already taken place, and minutes have been kept.</li> </ul>	Complied.	Same status was observed in ERM visit to the site.

No	Corrective Actions	Responsibilities	Deliverable Actions Taken	Time Line	SBIIPCL Status till date	BCAS Comments	ERM's observation
12	Maintain proper Record of employment and vendor opportunity provided to the PAPs and local community & Recording the engagement of Local community in the ongoing construction project and in the associates components	SBIIPCL CDO, EPC Contractor,	List the local Vendors Daily Register of labor specially labor engaged from PAHs. Total Number of working days of each labor. Documents of each Labor contract. Record daily & Overtime payment sleep having signature and finger sprint of each labor	October, 2014	Record keeping of vendors and other details is ensured.	Complied.	Same status was observed in ERM visit.
13	Green Belt	SBIPCL	Plantation around the project boundary and Access Road. Suitable Species will be selected consultation with a botanist	May 2015	No implementation	Not due in current deadline.	Same status was observed in ERM visit.

The construction activities are in full swing at site and majority of the observations based on site assessment and documents review related to health and safety are linked with the implementation of the on-site environment, health and safety management plan by the EPC contractor as well as adherence with the already developed ESMMP from the ESIA study. In addition to that ERM found few gaps in the implementation of the corrective action plan as well as regulatory compliances, which were highlighted in the report. Key non-compliances, which were observed in case of the following:

- Legal non-compliances with respect to the LPG Gas Rules; and Gas Cylinder Rules of Bangladesh, which needs to be complied by the EPC Contractor during the construction stage due to the handling and storage of hazardous materials. SBIPCL need to follow up on this matter in continuation to the email communication made on 17<sup>th</sup> May 2015;
- No six monthly construction phase monitoring of terrestrial and aquatic organisms was being carried out as suggested in the ESMMP;
- Air quality dispersion modelling study due to design change (change in stack height and flow characteristics),
- Development of avifauna management plan, as per ESMMP (which was due during the migratory season). It was noted that SBIPCL has planned to conduct the same during June 2015, however, it is ERM's recommendation that the same shall be conducted during the post-monsoon season (i.e. November – December), as monsoon season is not a migratory season.

Overall it was observed that the project has made satisfactory progress in order to implement the CAP as well as social commitments. Furthermore, given the nature of the Project and commissioning of the project by September/ October 2015, next compliance monitoring shall be conducted by July/ August 2015.



Annex A

## Photo-Documentation

## Photo-documentation



*Photo 1: Internal road within the plant*



*Photo 2: Steam and Gas Turbine building*



*Photo 3: Floor opening at the Steam & Gas Turbine building*



*Photo 4: Blocked access to fire extinguisher at the steam and gas turbine building*



*Photo 5: SWL not displayed at the overhead crane at the workshop and store building*



*Photo 6: Scaffold platform lacking handrail and toe board*

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**Client:** Summit Bibiyana II Power Company Limited (SBIIPCL), Bangladesh

**ERM India Private Limited**

Building 10, 4<sup>th</sup> Floor,  
Tower A, DLF Cyber City  
Gurgaon – 122 002, India  
Board: +91- 0124 4170300  
Fax: + 91-0124 - 4170301





## Photo-documentation



*Photo 7: Damaged sling observed near the RMS area*



*Photo 10: Drinking water centre near ETP without covered shed*



*Photo 8: Carbon dioxide cylinders without labelling at the proposed H2 generating station*



*Photo 11: Workers resting below the ETP sludge enrichment tank*



*Photo 9: Excavated area without barricading near the transformer area*



*Photo 12: Excavated area near the dormitory without safety barricading*

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Tower A, DLF Cyber City  
Gurgaon – 122 002, India  
Board: +91- 0124 4170300  
Fax: + 91-0124 - 4170301





## Photo-documentation



*Photo 13: No spark arrestor and damaged hose pipe observed for oxygen cylinder in use*



*Photo 14: No SWL displayed for the jib crane in use at the acid & alkali storage area*



*Photo 15: Ladder to oil water tank not equipped with handrails*



*Photo 16: No MSDS and labeling observed for the acid & alkali storage tanks*



*Photo 17: Secondary containment provided for the HSD storage area*



*Photo 18: Assembly Point for the project site*

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Tower A, DLF Cyber City  
Gurgaon – 122 002, India  
Board: +91- 0124 4170300  
Fax: + 91-0124 - 4170301





## Photo-documentation



*Photo 19: Absence of covered storage, secondary containment and spill kit for turbine oil drums*



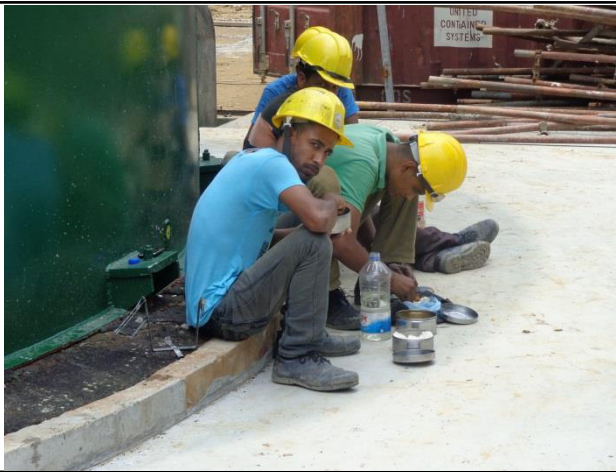
*Photo 20: Blocked access to fire extinguishers at the warehouse cylinder storage shed*



*Photo 21: Propane cylinder storage shed at the warehouse area*



*Photo 22: Compressed cylinder storage shed at the warehouse area*



*Photo 23: Workers having food at the DM plant area*



*Photo 24: Complaint box placed at the project gate*

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**ERM India Private Limited**

Building 10, 4<sup>th</sup> Floor,  
Tower A, DLF Cyber City  
Gurgaon – 122 002, India  
Board: +91- 0124 4170300  
Fax: + 91-0124 - 4170301





## Photo-documentation



*Photo 25: locally hired workers taking rest during lunch break at their workplace area*



*Photo 26: Wash basin location in labor colony*



*Photo 27: A view of labor colony for the Bangladeshi migrant workers*



*Photo 28: Inside view of a room in labor colony*



*Photo 29: Common kitchen space in labor colony*



*Photo 30: Barricaded access to the labor colony*

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Building 10, 4<sup>th</sup> Floor,  
Tower A, DLF Cyber City  
Gurgaon – 122 002, India  
Board: +91- 0124 4170300  
Fax: + 91-0124 - 4170301





# Photo-documentation



Photo 31: Waste disposal point in labor colony



Photo 32: Notice board placed at the main entrance of Plant



Photo 33: CDM office on rented structure. The structure owned by one PAF who became landless after land acquisition for the plant.



Photo 34: Community consultation in Parkul village



Photo 35: Community consultation in Parkul village



Photo 36 : Shop prepared by one PAFs who became landless after land acquisition for the plant

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Building 10, 4<sup>th</sup> Floor,  
Tower A, DLF Cyber City  
Gurgaon – 122 002, India  
Board: +91- 0124 4170300  
Fax: + 91-0124 - 4170301



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**ERM India Private Limited**

**Building 10, 4th Floor  
Tower A, DLF Cyber City  
Gurgaon – 122 002, NCR , India  
Tel: 91 124 417 0300  
Fax: 91 124 417 0301**

**Regional Office – West  
102, Boston House,  
Suren Road, Chakala  
Andheri Kurla Road, Andheri (East)  
Mumbai- 400093 India  
Office Board Telephone: 91- 22 -4210 7373 (30 lines)  
Fax: 91- 022- 4210 7474**

**Regional Office – West  
702 Abhishree Avenue,  
Near Nehru Nagar Circle, Ambawadi  
Ahmedabad -380006 India  
Tel: +91 79 66214300  
Fax: +91 79 66214301**

**Regional Office -South  
Ground Floor, Delta Block  
Sigma Soft Tech Park  
Whitefield, Main Road  
Bangalore- 560 066, India  
Tel: +91 80 49366 300 (Board)**

**Regional Office -East  
4th Floor, Asyst Park,  
GN-37/1, Sector-V,  
Salt Lake City,  
Kolkata 700 091  
Tel : 033-40450300**

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