

# **Social Safeguard and Monitoring Report**

**10<sup>th</sup> Semi-Annual (July – December 2020) Report**



## **ASHUGANJ 400 MW (EAST) COMBINED CYCLE POWER PLANT PROJECT**

**At Ashuganj, Brahmanbaria**



**Ashuganj Power Station Company Limited (APSCCL)**

<b>Rev</b>	<b>Date</b>	<b>Prepared By</b>	<b>Approved By</b>	<b>Description</b>
00	December 2020	Md. Dilshad-Ibne-Baqui Assistant Manager (HS&E) Ashuganj 400 MW CCPP (East) Project, APSCL.	Md. Atiqur Rahman, Manager (HS&E), APSCL.	10 <sup>th</sup> Semi-Annual Social Safeguard and Monitoring Report

## Table of Contents

EXECUTIVE SUMMARY .....	3
1.0 INTRODUCTION .....	5
1.1 Background .....	5
1.2 Location of the Project .....	5
1.3 Project Progress Status.....	5
1.4 Objective of the Report .....	6
2.0 SOCIO-ENVIRONMENTAL RESPONSIBILITIES AND INSTITUTIONAL SETUP ...	8
3.0 COMPLIANCE OF SOCIAL SAFEGUARD COVENANTS FROM THE ADB LOAN AGREEMENT .....	13
4.0 SAFEGUARD MONITORING RESULTS AND UNANTICIPATED IMPACTS .....	18
4.1 Traffic Volume .....	18
4.2 Site Security .....	18
4.3 Personal Protective Equipment .....	19
4.4 Solid Waste .....	20
4.5 Worker’s Health and COVID Response .....	21
4.6 Sanitation & Drinking Water Facility .....	22
4.7 Dust Control.....	23
4.8 Grievance Redress Mechanism and Status.....	23
4.9 Safety Assurance of the Project Site.....	24
5.0 CONCLUSION AND RECOMMENDATION .....	29
ANNEXURE.....	30

### List of Tables

Table 1: Project Progress Status .....	6
Table 2: Role & Responsibilities for SEMP Implementation.....	9
Table 3: List of Personal Protective Equipment Used in Project Site .....	19
Table 4: Waste Inventory Log of CNTIC-CCOEC Consortium .....	20
Table 5: Members of the Committee of Grievance Redress (GRC).....	24
Table 6: Evaluation of Fitness Certificate of Lifting Equipment .....	25
Table 7: Summary of HSE Management .....	26

### List of Figures

Figure 1: Location Map of APSCL 400 MW CCPP (East) project.....	6
Figure 2: SEMP Organizational Structure .....	8
Figure 3: Site Security of the Project.....	18
Figure 4: Safety Instruction Board at the Project Site .....	19
Figure 5: Use of Proper PPEs .....	20
Figure 6: Photograph of on-site Ambulance and furnished First Aid box.....	21
Figure 7: Photograph of Daily Body Temperature Monitoring .....	21
Figure 8: On-site Hand Washing Facility & Supply of Hand Sanitizer, Soap & Mask .....	22
Figure 9: Pure Drinking Water & Sanitation facility to workers.....	22
Figure 10: Water is spraying for dust control .....	23
Figure 11: Photograph of Suggestion/Complain Box .....	24
Figure 12: Site HSE Management .....	27
Figure 13 Project Overview .....	31

## **EXECUTIVE SUMMARY**

During the period from July to December 2020, the EPC Contractor has carried out foundation and structural work for HRSG, Central Control Building (CCB), Main Building and Turbine Base, Gas booster and conditioning station, Exhaust Stack, Air compressor Building, Air Storage tank, Service and Fire water pump house, Service and Fire water tank, Emergency Oil pit, Oily waste water treatment station, sewage treatment station, Power Control Center, Gas Station, erection of unit and auxiliary Transformer etc. To complete these works, they mobilized the equipment, workers and materials. This creates an opportunity of livelihood for local skilled and un-skilled people to improve their lives. For eliminating gender boundaries, 13 women of different skills were also engaged in different sections. Both APSCL and EPC contractor are committed to ensure an accident free workplace by implementing occupational health and safety management system. Daily tool box was not possible to arrange daily due to the COVID 19 situation. From this December tool box meeting is conducting daily and section wise limiting the contact. Frequent workplace inspection and consultation with workers at site were done daily in collaboration with the HSE personals both from APSCL and EPC contractor to improve working condition. Adequate personal protective equipment was supplied to the worker. Total safe man hour during the reporting time was 294792 and 1450284 cumulatively throughout the project period. However, 78 first aid cases occurred with no lost time in the last semiannual period. Visual monitoring suggested that the worker camp was maintained proper hygiene and safe drinking water was also supplied to them. Providing the highest priority to the health of workers in this COVID 19 situation and smooth operation of plant construction, a COVID response policy is implemented. Body temperature was monitored two times each day and kept recorded. Proper precautionary measures like hand wash facility with adequate supply of sanitizing material, masks, restriction in movement etc. are maintaining. The plant is constructing at the existing site of APSCL and therefore land acquisition, resettlement of people and land development was not required. Different social and environment issues regarding the construction activity were identified in EIA and other reports were managed by recommended measures in SEMP, ADB Environmental Safeguard Policy 2009, IFC/World Bank Thermal Power Plant Guideline 2008 & 2017 and Department of Environment, Bangladesh guideline.

# **CHAPTER 1**

## **INTRODUCTION**

## **1.0 INTRODUCTION**

### **1.1 Background**

The Government of Bangladesh has given highest priority to the power sector to enhance the generation capacity. BPDB has come with a comprehensive plan to meet the surging demand in power. Accordingly, the Government plans to eliminate the demand supply gap and achieve the ultimate goal of providing "electricity to all" by 2021 by having generation capacity of 20,000 MW. To ensure overall and balanced development of the sector Government has devised immediate, short term, medium term and long-term generation plans. The plans have been developed based on a techno-economic analysis and least cost options.

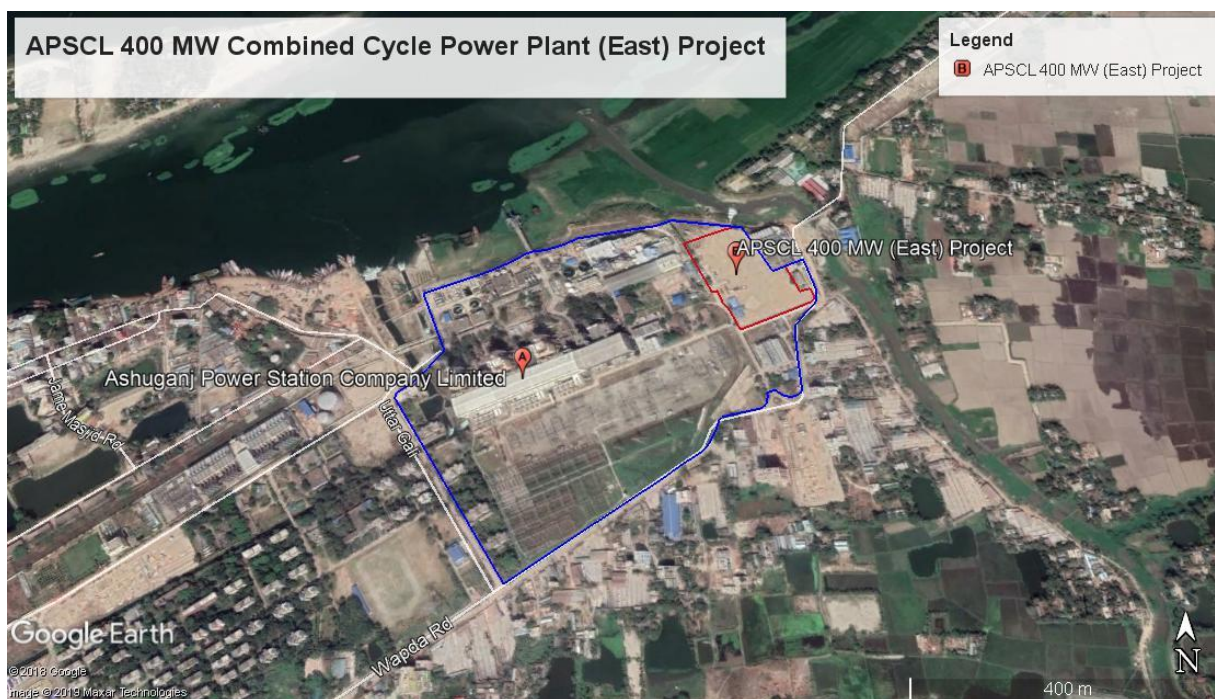
As part of the Government's initiative to increase the generation of electricity in the country and to solve the reeling power crisis, the Government has approved proposals to generate electricity across the country for installation of power plants in the private sector. Ashuganj Power Station Company Limited (APSCL) is establishing a combined cycle power plant with a generating capacity of 400MW naming Ashuganj 400 MW CCPP (East) financed by ADB and Islamic Development Bank (IDB) replacing an old inefficient unit [Unit#3 (150 MW) plant] with an high energy efficient technology at the site of existing GT-1, ST, and GT-2 units (146 MW CCPP) which has already been retired.

### **1.2 Location of the Project**

The power plant is setting up at the existing power plant area of Ashuganj Power Station Company Ltd. (APSCL) at Ashuganj, Brahmanbaria, Bangladesh. Ashuganj located on the east bank of the Meghna River about 91 km Northeast to Dhaka & is connected by railway & highway way with Dhaka. There also exists good waterway connection to the site by seaports of Chittagong and Mongla. The project is in Sonaram Mouza of Ashuganj Upazila, Brahmanbaria District. The location map of APSCL 400 MW (East) is shown in Figure 1. Bangladesh UK Friendship Bridge across the river Meghna (Meghna Bridge) connects both the banks of Bhairab and Ashuganj which connects with Dhaka-Sylhet highway which passes along the south side of the project.

### **1.3 Project Progress Status**

APSCL and CNTIC are working so hard to reach the target within the timeframe. About 66% of work has been done where 8% was done in this semi-annual. Majority of work was related to the erection of auxiliary system, structural work of main building, civil work of hydrogen generation station, installation of Main stack, civil work of Control building, equipment installation of gas station etc. The updated status of Ashuganj 400 MW (East) Combined Cycle Power Plant Project (CCPP) from July 2020 to 6<sup>th</sup> December 2020 is given below in Table 1 and some photographs of the present condition of project can be found in Annexure (Figure 13):



**Figure 1: Location Map of APSC 400 MW CCPP (East) project**

**Table 1: Project Progress Status**

Sl No.	Task Name	Progress upto June 2020	Progress from July-December 2020	Cumulative Progress
1	Design	72%	12%	84%
2	Procurement	79%	8%	97%
3	Demolition work of old plant	100%	0%	100%
4	Erection, Structure	65%	17%	82%
5	Installation	22%	11%	33%
6	Commissioning	0%	0%	0%
7	Total Progress	56%	8%	66%

#### 1.4 Objective of the Report

The objective of the social safeguard management and monitoring is to record social impacts resulting from the project construction activities and to ensure proper implementation of the mitigation measures suggested earlier in order to reduce adverse impacts and in contrary to enhance positive impacts of the project.

This report is prepared by Ashuganj Power Station Company Limited (APSC) under the Asian Development Bank, ADB Loan Project Loan/ Grant Nos.: Loan 3350-BAN: Power System Expansion and Efficiency Improvement investment Program, Tranche-3.

## **CHAPTER 2**

# **SOCIO-ENVIRONMENTAL RESPONSIBILITIES & INSTITUTIONAL SETUP**

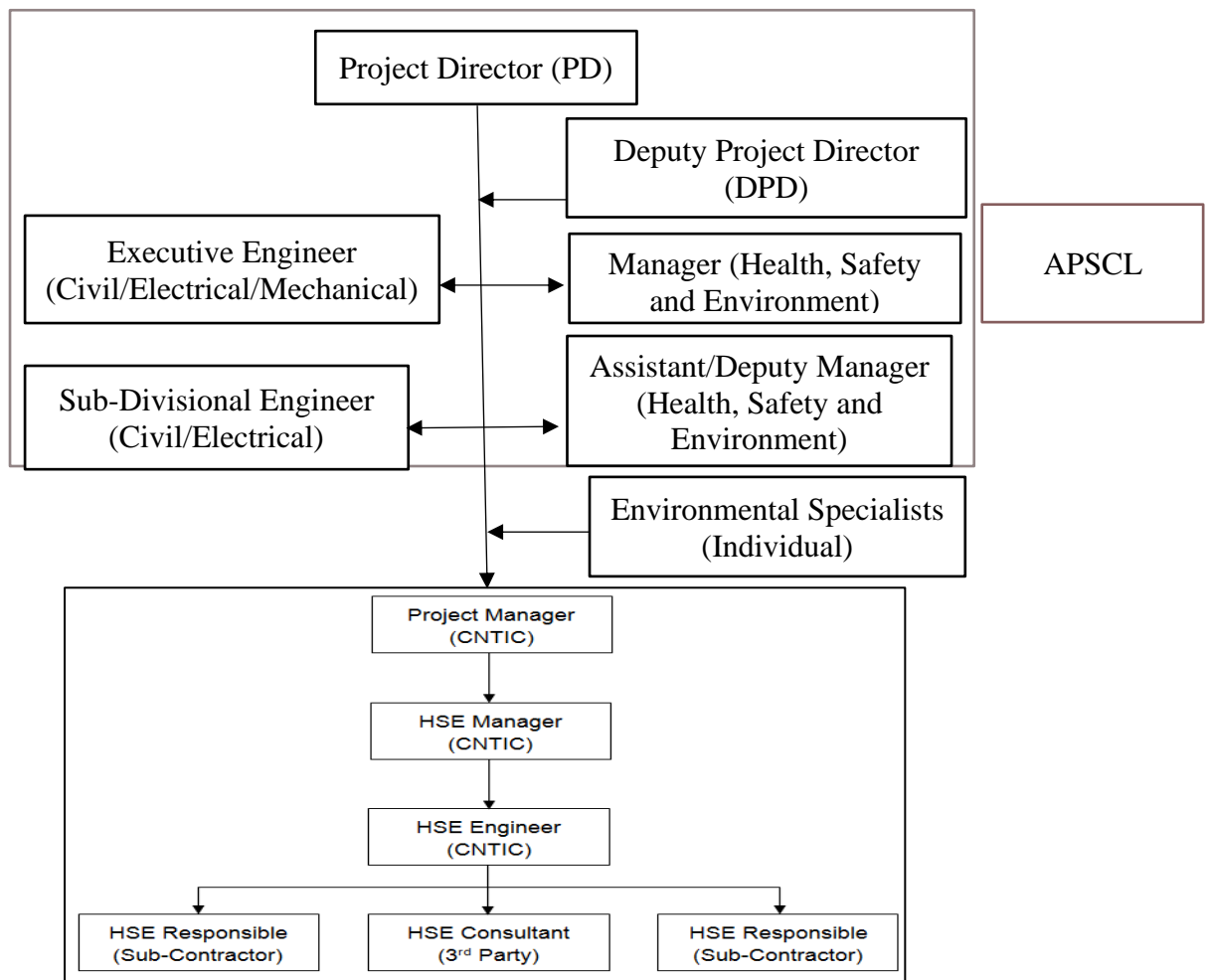
## 2.0 SOCIO-ENVIRONMENTAL RESPONSIBILITIES AND INSTITUTIONAL SETUP

For ensuring proper implementation of Site Specific Environmental and Social Management Plan (SEMP) role and responsibilities are delegated among personals from both project proponent and contractor at all stages of the project implementation

Key SEMB responsibilities are defined and communicated to the relevant stakeholders. Sufficient management sponsorship, human and financial resources are also allotted to achieve effective and continuous SEMB performance.

Management of environmental and social impacts during construction period is primary responsibility of the EPC Contractor as per the EPC contract. During the construction phase, APSCCL will review and monitor EPC Contractors performance in accordance with the SEMB.

The overall Project organizational structure for the implementation of the SEMB is shown in Figure 2 and key roles for implementation and supervision of the SEMB are described in Table 2.



**Figure 2: SEMB Organizational Structure**

**Table 2: Role & Responsibilities for SEMP Implementation**

Role and Responsibilities	Key Staff Responsibilities
<p><u>Ashuganj Power Station Company Ltd - Project Implementation Unit (PMU):</u></p> <ul style="list-style-type: none"> <li>○ Overall responsibility for environmental Social safeguard performance of the Project during construction;</li> <li>○ Decision-maker on applicable policies for the Project;</li> <li>○ Oversight supervisory role during construction.</li> <li>○ Review reports of the Independent Environmental Monitoring Consultant;</li> <li>○ Approves changes to the SEMP, as necessary, as part of an adaptive approach to HSE and social management of the Project;</li> <li>○ Responsible for working with stakeholders as required;</li> <li>○ Establishing an HSE department to implement the SEMP requirements;</li> <li>○ Management, implementation, monitoring and compliance of the SEMP, sub-contractors;</li> <li>○ Review of SEMP performance and implementation of correction actions, or stop work procedures, in the event of breaches of SEMP conditions, that may lead to serious impacts on local communities, or affect the reputation of the Project;</li> <li>○ Ensure effective</li> </ul>	<p style="text-align: center;"><u>APSCL Project Director:</u></p> <ul style="list-style-type: none"> <li>○ Actively promote and participate in the Project HSE and social programs.</li> <li>○ Ensure that the HSE and social programs reflect the requirements of the Project in terms of resources;</li> <li>○ Ensure that all legislative and company requirements are complied with;</li> <li>○ Ensure that the work scope is conducted in accordance with the Project HSE rules and regulations, work practices and procedures, as detailed in this SEMP and other associated documentation;</li> <li>○ Ensure that all contractors are made aware of their roles and responsibilities with regard to HSE and social management;</li> <li>○ Ensure that safety is an agenda item in every contractor meeting;</li> <li>○ Ensure that all contractors are evaluated throughout the duration of the Project, as to their capabilities and performance; and</li> <li>○ Ensure implementation of HSE and social audits and recommendations for addressing non-compliances/corrective actions.</li> </ul> <p style="text-align: center;"><u>APSCL HSE Department:</u></p> <ul style="list-style-type: none"> <li>○ Manage, review and develop the HSE program to ensure that it fulfills Project requirements, including measures observed in this SEMP, and monitoring the implementation of the SEMP;</li> <li>○ Coordinate and evaluate the effectiveness of all program elements;</li> <li>○ Liaison with related government bodies as necessary;</li> <li>○ Manage the Project HSE and social team and supervise them to ensure that all areas of the project are given the required level of safety support and attention;</li> <li>○ Ensure proper housekeeping and waste disposal in accordance with company requirements and</li> </ul>

<b>Role and Responsibilities</b>	<b>Key Staff Responsibilities</b>
<p>communication and dissemination of the content and requirements of the SEMP to contractors and sub-contractors;</p> <ul style="list-style-type: none"> <li>○ Assisting the contractor with implementation of SEMP;</li> <li>○ Ensuring compliance to all Project social commitments,</li> <li>○ Report on environmental performance to DOE, the ADB, and other regulators as required;</li> <li>○ Prepare environmental reports summarizing project activities, as required;</li> <li>○ Representing the Project at community meetings</li> <li>○ Ensuring effective community liaison and fulfilling commitments to facilitate public consultation throughout construction.</li> </ul>	<p>regulations;</p> <ul style="list-style-type: none"> <li>○ Ensure that the respective control areas are given the required level of safety support and attention;</li> <li>○ Ensure that all HSE and social reports/findings of any unsafe conditions/practices are brought to attention and those are immediately corrected, and coordinate accident/incident investigations and report to the Project Director; and</li> <li>○ Manage HSE and social audits and report the results to the Project Director.</li> </ul>
<p><u>CNTIC</u></p> <ul style="list-style-type: none"> <li>○ Implementation of the SEMP;</li> <li>○ Prepare and maintain records and all required reporting data as stipulated by the SEMP, for submission to APSCL.</li> <li>○ Ensure that all construction personnel and sub-contractors are informed of the intent of the SEMP and are made aware of the required measures for environmental and social compliance and performance.</li> </ul>	<p><u>CNTIC HSE Department:</u></p> <ul style="list-style-type: none"> <li>○ Actively promote and implement all Project HSE and social plans related with the work they are performing;</li> <li>○ Make sure that all activities under his/her responsibility shall follow all safety regulation/requirements, coordinating with APSCL's HSE Manager;</li> <li>○ Ensure that committed resources (personnel, material, and equipment) used are consistent with achieving the objectives and requirements of Project HSE and social plans.</li> </ul> <p><u>Construction Workers</u></p> <ul style="list-style-type: none"> <li>○ Familiarize themselves with the concept of the Project HSE and social rules and regulations;</li> <li>○ Work in accordance with Project HSE procedures, safe work practices, and method statements, risk assessments, permits to work and any other instructions that apply to their works;</li> <li>○ Use only tools/equipment and materials, which have</li> </ul>

Role and Responsibilities	Key Staff Responsibilities
	<p>been approved for use, and employ them only for the purpose for which they were designed;</p> <ul style="list-style-type: none"> <li>○ Take an active part in the protection of themselves, fellow workers, property and the environment from accidental losses;</li> <li>○ Immediately report to his respective supervisor or HSE officer/inspector if any potential hazards (relates to unsafe conditions and/or unsafe acts), which could lead to an accident, are found;</li> <li>○ Report promptly to immediate supervisor and HSE officer/inspector if any incidents/near misses as well as injuries, regardless how minor; and</li> <li>○ Shall attend Project safety training and drills programs as required.</li> </ul>
<p><u>Supervising / Owners Engineer (OE):</u></p> <ul style="list-style-type: none"> <li>○ Assistance in preparation and implementation of the SEMP;</li> <li>○ Reporting any incidents or non-compliance with the SEMP to APSCL.</li> </ul>	<p><u>OE Environmental and Social Safeguard Consultants:</u></p> <ul style="list-style-type: none"> <li>○ An OE local consultant and international consultant will report to APSCL and the ADB on compliance with the HSE and social commitments in the SEMP.</li> <li>○ Preparation and implementation of the Environmental Supervision Plan during construction.</li> <li>○ Preparation and implementation of the Environmental Monitoring Plan during construction</li> <li>○ Supervision of contractor performance on implementation of the Construction and Work Camp Management Plan.</li> <li>○ Reporting any incidents or non-compliance with the SEMP to the PMU.</li> <li>○ Ensuring adequate training and education of all staff involved in environmental supervision.</li> <li>○ Making recommendations to the APSCL (PMU) regarding SEMP performance as part of an overall commitment to continuous improvement.</li> </ul>

## **CHAPTER 3**

# **COMPLIANCE OF ADB LOAN COVENANTS**

### 3.0 COMPLIANCE OF SOCIAL SAFEGUARD COVENANTS FROM THE ADB LOAN AGREEMENT

Covenants	Reference	Compliance status
<b>Environment</b>		
<p>The borrower shall ensure, or cause APSCL to ensure, that the preparation, design, construction implementation, operation and decommissioning of the project and all project facilities comply with</p> <p>(a) All applicable laws and regulations of the Borrower relating to the environment, health, and safety;</p> <p>(b) The environmental safeguards;</p> <p>(c) The EARF; and</p> <p>(d) All measures and requirement set forth in the respective EIA, IEE and EMP, and any corrective or preventive actions set forth in a safeguards monitoring report</p>	<p>LA, Schedule 5, Para 2</p>	<ol style="list-style-type: none"> <li>1. All applicable statutory and regulatory environmental and social safeguard requirements of Different government agencies like Department of Environment, Department of Labor etc. and Donor agencies are evaluated and keep registered in SF-ENV-06. The activities were done compiling these requirements or action will be taken to comply with.</li> <li>2. Environmental Quality was monitored and report is submitted by EPC each month which was verified by an independent environmental Consultant to evaluate the environmental and social safeguard policy performance.</li> <li>3. All measures and requirement set forth in the respective EIA, IEE and EMP, and any corrective or preventive actions set forth in a safeguard monitoring report was followed and maintained</li> </ol>

		properly and updated time to time. Environmental and social Semiannual report was submitted regularly.
<p><b>Land Acquisition and Involuntary Resettlement</b></p> <p>The borrower shall ensure, or cause APSCL to ensure, that all land and all rights-of-way required for the project, and all project facilities are made available to the works contractor in accordance with the schedule agrees under the related works contract and all land acquisition and resettlement activities are implemented in compliance with</p> <p>(a)all applicable laws and regulations of the borrower relating to land acquisition and involuntary resettlement;</p> <p>(b)the involuntary resettlement safeguards;</p> <p>(c)the RF; and</p> <p>(d) All measures and requirement set forth in the respective RP, and any corrective or preventive actions set forth in a safeguards monitoring report.</p>	LA, Schedule 5, Para 3	In the case of APSCL, this type of issues does not arise due to the project location. The project location is inside the premises of APSCL own land. So, There is no requirement of Land Acquisition and Involuntary Resettlement
<p><b>Safeguards – Related provisions in bidding documents and works contracts</b></p>		
<p>The borrower shall ensure, or cause each projects executing agency to ensure, that all bidding documents and contracts for works contain provisions that require the contractor to:</p> <p>(a) Comply with the measures and requirements relevant to the contractor set forth in the EIA, IEE, the EMP, the RP and any small ethnic community peoples plan(to the extent they concern impacts on affected people during construction), and any corrective or preventive actions set out in a safeguards monitoring report;</p> <p>(b) Make available a budget for all such environmental and social measures;</p> <p>(c) Provide the borrower with a written notice of any unanticipated</p>	LA, Schedule 5, Para 7	1) Provisions of compliance with Environmental and social safeguard recommended in EIA, IEE was incorporated in bidding documents and work contracts. All applicable safeguard procedure was strictly followed and update time to time for further requirements.

<p>environmental, resettlement or small ethnic community people risks or impacts that arise during construction, implementation or operation of the project that were not considered in the EIA, the IEE, the EMP, the RP or any small ethnic community peoples plan;</p> <p>(d) Adequately record the condition of roads, agricultural and other infrastructure prior to starting to transport materials and construction;</p> <p>(e) Fully reinstate pathways, other local infrastructure, and agricultural land to at least their pre-project condition upon the completion of construction.</p>		<p>2) Adequate budget was available for implementation of environmental and social compliance.</p> <p>3) APSCL followed that properly as per requirements and standard of ADB Social Safeguard Policy.</p> <p>4) Upon completion of construction the areas which are somewhat slightly modified or impacted will be restored as its pre-construction condition.</p>
<b>Safeguards- Monitoring and Reporting</b>		
<p>The borrower shall do the following or shall cause APSCL to do the following:</p> <p>(a) Submit semiannual safeguards monitoring reports to ADB and disclose relevant information from such reports to affected persons promptly upon submission;</p> <p>(b) If any unanticipated environmental and or social risks and impacts arise during construction, implementation or operation of the project that were not considered in the EIA, the IEE, the EMP or the RP, promptly inform ADB of the occurrence of such risks or impacts, with detailed description of the event and proposed corrective action plan;</p> <p>(c) No later than the mobilization of the turnkey contractor for APSCL,s power plant, engage qualified and experienced external experts or qualified no-governmental organizations under a selection process and terms of reference acceptable to ADB, to verify information produced through the project monitoring</p>	<p>LA, Schedule 5, Para 7</p>	<p>1) APSCL is submitting semiannual safeguards monitoring reports to ADB timely.</p> <p>2) No such incident occurs yet.</p> <p>3) An independent environmental consultant is engaged for the verification of environmental and social monitoring processed.</p> <p>4) No such kind of breaching of compliance was occurred in the reporting period and as per SEMP, we will follow the instruction.</p>

<p>process, and facilitated the carrying out of any verification by such external experts; and</p> <p>(d) Report any actual or potential breach of compliance with the measures and requirements set forth in the EMP or the RP promptly after becoming aware of the breach.</p>		
<p><b>Labor standards</b></p>		
<p>The borrower shall ensure that all works contract documents to be prepared under the project incorporate provisions and budget to the effect that contractors</p> <p>(a) Comply with all applicable labor laws and related international treaty obligations of the borrower and do not employ child labor as defined under Bangladesh law;</p> <p>(b) Provide safe working conditions for male and female workers;</p> <p>(c) Carry out HIV/ AIDS and human trafficking prevention and awareness campaigns in the campsites and corridors of influence;</p> <p>(d) Engage women worker as wage laborers depending on their skill; and</p> <p>(e) Provide equal wages for equal work between men and women</p>	<p>LA, Schedule 5, Para 10</p>	<p>a) Applicable requirements of Bangladesh Labor Rule 2015 was evaluated and implemented to ensure safe working condition for male and women. Child Labor is strictly prohibited at the construction site.</p> <p>b) Number of total manpower worked in the reporting period was 215 in monthly average of which 13 were female.</p> <p>c) The women were engaged on the basis of their skill and there was no discrimination between man and women in terms of wage of equal work.</p>

## **CHAPTER 4**

# **SAFEGUARD MONITORING RESULTS AND UNANTICIPATED IMPACTS**

## 4.0 SAFEGUARD MONITORING RESULTS AND UNANTICIPATED IMPACTS

### 4.1 Traffic Volume

The Project is under construction phase now. The daily traffic details on day to day basis are being monitored and recorded in the registered book properly. Due to the pandemic situation traffics were not allowed to enter the plant and therefore, no such record was kept.

### 4.2 Site Security

CNTIC-CCOEC Consortium already constructed of site boundary fencing (Figure 3) to isolate the project site. Before entrance into project site, the employees were checked properly to restrict their entry with cigarette or other narcotics. Proper sign boards and pictorial safety instructions (Figure 4) were posted at different place of plant including the storing area of petroleum, highly flammable materials. With the incorporation of the security system at the main entry gate, overall site security system is come into a good shape and eventually will be under proper control.



**Figure 3: Site Security of the Project**



**Figure 4: Safety Instruction Board at the Project Site**

### 4.3 Personal Protective Equipment

The working personnel involved in the construction activities has to be under the safeguard of personal protective equipment (PPE) properly. Everyone was instructed to use proper PPE strictly. Figure 5 show that, the workers involved in construction were using applicable PPEs. Lists of PPE that are supplied are listed in Table 3.

**Table 3: List of Personal Protective Equipment Used in Project Site**

SI No.	Type of work	Personal Protective Equipment used in site
1	Excavation	Safety Jacket, Safety Shoes, Helmet, Respiratory protection and Hand Gloves.
2	Construction	Safety Jacket, Safety Shoes, Helmet, Respiratory protection and Hand Gloves.
3	Welding	Helmet, Safety shoes, Eye face protection, protective clothing, Hand Gloves, Ear defence, Respiratory protection etc.
4	Scaffolding	Safety vests, Headwear, Safety footwear, Eye face protection, Slush Boots, Safety belt, Rain Suits, Hand protection.



**Figure 5: Use of Proper PPEs**

#### 4.4 Solid Waste

Solid wastes were generated from construction works (construction waste) and workers activities (kitchen waste, paper waste) at the project site. Waste inventory was properly maintained and table 4 describes the amount of waste generated according to their character during the reporting time.

**Table 4: Waste Inventory Log of CNTIC-CCOEC Consortium  
(From July to December 2020)**

SI	Wastage Name	Wastage Classification	Wastage Type	Source of wastage	Wastage storage area	Storage quantity (kg)	Delivery quantity (kg)	Agreement	Remarks
1	Plastic Pipe	Hazardous	Solid	Construction Site	On site	12.2	12.2	Ok	Ok
2	Brick	Non-Hazardous	Solid	Construction Site	On site	53.1	53.1	Ok	Ok
3	Rubbish	Non-Hazardous	Solid	Construction Site	On site	33.7	33.7	Ok	Ok
4	Scrap	Hazardous	Solid	Construction Site	On site	15.7	15.7	Ok	Ok
5	Cable	Non-Hazardous	Solid	Construction Site	On site	12.3	12.3	Ok	Ok
6	Aggregate	Non-Hazardous	Solid	Construction Site	On site	70	70	Ok	Ok

#### 4.5 Worker's Health and COVID Response

The CNTIC-CCOEC consortium will provide all kinds of treatment facilities and pay compensation according to Bangladesh Labor Law 2018. A medical center is already installed with first aid facility and an ambulance (Figure 6) is always available for any kind of emergency. Besides, an understanding with a local hospital for the emergency incident related to the worker's health of the plant and CNTIC-CCOEC Consortium has been established. To monitor the health condition of workers, body temperature (Figure 7) of each worker was checked two times a day and record was kept. Use of mask is mandatory and the entire worker was encouraged to sanitize their hand. Hand wash facilities were installed at different locations of project site and adequate materials were made available (Figure 8). During the period total 92 Chinese people arrived and the last one arrived on 29<sup>th</sup> November 2020. After completing quarantine for 14 days and confirming COVID19 negative they were allowed to enter the site.



**Figure 6: Photograph of on-site Ambulance and furnished First Aid box**



**Figure 7: Photograph of Daily Body Temperature Monitoring**



**Figure 8: On-site Hand Washing Facility & Supply of Hand Sanitizer, Soap & Mask**

#### 4.6 Sanitation & Drinking Water Facility

Ground water is being supplied through the arrangement of piping network in the construction site and this water is available for the workers for the washing and toilet facilities. Besides, CNTIC-CCOEC Consortium Management supplies drinking water Jar for drinking purpose of the workers. Furthermore, robust drinking water purification system with reverse osmosis, UV disinfection system with ambient and cold water facility (Figure 9) has installed at three different suitable locations of this plant site by APSCL. Adequate toilets for male and female workers have already been constructed and cleaned time to time.



**Figure 9: Pure Drinking Water & Sanitation facility to workers**

## 4.7 Dust Control

Dust poses negative impact of air quality as well as health especially in dry season. To control the dust water were sprayed regularly (Figure 10) and stock materials are kept covered.



**Figure 10: Water spraying for dust control**

## 4.8 Grievance Redress Mechanism and Status

During the construction phase of a project, the complaints that may be anticipated are mostly related to poor environmental quality, lack of job opportunity, discrimination of wage and gender, unsafe working condition and so on. However, unforeseen issues may occur. CNTIC-CCOEC consortium has already established grievance redress mechanism. Complain from neighbours are duly recorded & adequate measures are taken accordingly. Though the project site is within the APSCL boundary, the North West side of the project site is near to some houses of neighbors. CNTIC-CCOEC Consortium has already set up a suggestion box (Figure 11) in front of the project site to facilitate the neighbours to rise complains and take immediate measure to resolve the complaints. However, no such complaine was raised to resolve. APSCL as a project proponent also set a grievance redress committee (GRC) has been formed with following personals (Table 5) to rectify issue from different stockholders if raised.

Beside this as per Labor Law 2018 and Clause no 81 of Labor Rules 2015, APSCL has an active 'Safety Committee' to address and solve the internal grievance regarding Health, Safety and Environmental issues. APSCL has established and published 'Citizen's Charter' System to address any grievance related to it and to rectify the problem rapidly by proper system. The web link of this is: [https://apscl.portal.gov.bd/site/view/citizen\\_charter/](https://apscl.portal.gov.bd/site/view/citizen_charter/).

APSCL has also online Grievance Redress System. The useful links of these are: <http://apscl.gov.bd/site/page/929f626c-752c-4724-9680-845d0414883f/Process-Map> & <http://www.grs.gov.bd/>.

If anybody is affected by this 400 MW CCPP (East) project activities of APSCL can give complain here. However, no grievance was recorded regarding this project.

**Table 5: Members of the Committee of Grievance Redress (GRC)**

Sl No	Designation
1.	Project Director (Chief Engineer), Ashuganj 400 MW East Project
2.	Chief Engineer (O&M), APSCL.
3.	Manager (HRM), APSCL.
4.	Manager (HS&E), APSCL.
5.	Deputy Manager (Security & Discipline), APSCL.
6.	Assistant Manager (Security & Discipline), APSCL.
7.	Chairman, Ashuganj Union Parishad, Member.



**Figure 11: Photograph of Suggestion/Complain Box**

#### **4.9 Safety Assurance of the Project Site**

Use of proper safety materials is mandatory for all at the project site. Workers use appropriate PPE, such as safety boots, helmet, safety jacket, safety belt, safety harness, gloves, protective clothing, goggles, grinding shield, welding shield, anti-dust mask, anti-gas mask and ear protection etc. Daily workplace inspection was done regularly by HSE personals of APSCL and CNTIC. The observations found during site visit were informed immediately for taking action to resolve it. Safe entry into confined space and height work procedure was strictly maintained. Good housekeeping practice was maintained to ensure walkway and working areas were free from any kind of hazards. Firefighting appliances were placed at different locations of the project site to make them available an accessible during emergencies. These were checked regularly to ensure that that were operable. Compressed gas cylinders were stored and handled with proper care. All the lifting equipment was fitness and load test certified. The certificate of fitness test checked every month to make sure they were fit to operate. The table 6 displays the lifting equipment used with their due date of certification. Total 37 HSE observations were found regarding housekeeping, use of PPE, site isolation, soil transfer, work at height and so on that were resolved immediately. Furthermore, 78 first

aid cases took place with no loss time. Total safe man hour was 294792 in the reporting time and cumulatively 1450284.

**Table 6: Evaluation of Fitness Certificate of Lifting Equipment**

Sl. No	Type of Equipment	Model No.	Capacity (Ton)	Next Date of Inspection
1	Mobile Crane	KR-25H-V KATO Ltd.	25	Before 12 January 2021
2	Mobile Crane	RK-250 P&H Kobelco.	25	03 November 2021
3	Truck Crane	QY50K-11 XUZHOU Heavy Machinery Co. Ltd.	50	15 June 2021
4	Truck Crane	QY55KA-Y XUZHOU Heavy Machinery Co. Ltd.	55	Under Processing

Training (Figure 12) is essential to maintain the employees' health and safety at construction site. Both theoretical and practical training was arranged regularly for the employees especially on the identification of hazards of workplace and their mitigation measure, safe use of personal protective equipment (PPE), COVID awareness, procedure of hot work and confined space entry, safe handling and storage of pressure gas cylinder. Due to the pandemic the tool box talk was not performed for the last few months. However, from the beginning of December it is now continuing. Safety talk before work execution was done section wise to limit the contact with others. Daily toolbox meeting before starting of work is a mandatory that is affected by the COVID 19 situation. Tool box talk has been started from this December among different sections. However, the EPC and its subcontractor were advised to conduct tool box within the group maintaining safe distance and precaution and they are doing this as per instructions. During site visit HSE personals from both APSCL and EPC regularly consulted with the worker to improve safety of workplace.

To improve the environmental, health & safety performance, monthly safety meeting was conducted each month with CNTIC and NEPC. Last safety meeting was conducted on 17/12/2020. About 19 issues were discussed to resolve within a set deadline. Responsibilities were also delegated to different persons from both CNTIC and NEPC for proper implementation of work.

A summary of HSE management and monitoring is illustrated in Table 7 above and Figure 12.

**Table 7: Summary of HSE Management**

Areas to improve:		Housekeeping all area, Proper Safety, Housekeeping, Confined Space entry, toolbox, drainage system, Use of PPE, Incident reporting		
SI	Description	Till June 2020	From July-December 2020	Cumulative
1	Total Man-hour	1155492	294792	1450284
2	Safe man hours	1155492	294792	1450284
3	Fatal Accidents	0	0	0
4	Lost Time Injury (LTI)	0	0	0
5	Medical Treatment (MT)	4	0	4
6	First Aid Cases (FAC)	266	78	344
7	Health Incidents	0	0	0
8	Property Damage (PD)	0	0	0
9	Fire/Explosion	0	0	0
10	Security Incident	2	0	2
11	Near Miss	4	1	5
13	Environment (EN)	0	0	0
14	Job Transfer days	0	0	0
15	Total Days Lost	0	0	0
17	<b>Tool Box Talks</b>	599	30	629
18	HSE Weekly Meetings	85	12	97
19	HSE Inspections	63	12	75
20	HSE Induction	18	3	21
21	Grievance	0	0	0



**On-site Firefighting Appliances**



**Hazardous area kept isolated**



**Safe Storage of Pressurized Gas Cylinders**



**Houskeeping Practice**



**Tool Box Talk**



**Safety Meeting With EPC Contractor**

**Figure 12: Site HSE Management**

## **CHAPTER 5**

# **CONCLUSION AND RECOMMENDATION**

## **5.0 CONCLUSION AND RECOMMENDATION**

The social safeguard monitoring report consists of 10th Semiannually social monitoring reporting based on identified parameters in ESIA during construction phase. But till now no grievance is recorded for the project construction activities. There is no land acquisition and resettlement issue for this project because it is establishing inside the APSCL's existing plant premises replacing old one combined cycle power plant. Development of the site for this project has positive impact on livelihoods of local people. No issues are triggered under ADB safeguard policy and no population will be impacted by the project at this site. So, no negative impact was found on the socio-environment due to this project. During construction activities all the mitigation measures will be taken following ADB Environmental Safeguard Policy 2009, IFC/World Bank Thermal Power Plant Guideline 2008 and 2017 and DoE, Bangladesh guideline and suggestive and recommended measures in the EIA.

During the Visual monitoring on Traffic Volume, Personal Protective Equipment, Incident Record & Reporting, Solid Waste, Oily Waste Generation & Disposal System, Worker's Health, Safety Orientation & Training of Workers, Sanitation & Drinking Water facility to workers, Site Drainage all are found in progress for July-December, 2020. Most of the records are being maintained in the Project site. However, it was assured by CNTIC-CCOEC Consortium that they will develop remaining required system as appropriate prior to start operation activity.

Supply of pure mineralized drinking water is ensured for all by HS&E division of APSCL in the plant area by enough high-quality Drinking water purifier & Dispenser at suitable locations that are visible to all.

Housekeeping is also in good condition at the plant site. All solid, liquid, and hazardous waste are disposed of the designated container at the plant site and managed properly. Most of the solid wastes are disposed of by landfill. The usable solid wastes are handed over to proper party for recycling.

To recapitulate, the project has no detrimental impact on the social safeguard during the period from July to December 2020.

# **ANNEXURE**



**Construction of Central Control Building**



**Construction of Turbine-Generator Hall**



**Transformer Installation**



**Construction of HRSG and Exhaust Stack**



**Gas RMS**



**Hydrogen Gas Storage System**




**Installation of Different Auxiliaries**



**Water Intake**

**Figure 13 Project Overview**

  
 03.01.2021  
 Md. Atiqur Rahman  
 Manager (Health, Safety & Environment)  
 Ashuganj Power Station Co. Ltd.  
 Ashuganj, Brahmanbaria