

Social Safeguard and Monitoring Report

14th Semi-Annual (July – December 2022) Report



ASHUGANJ 400 MW (EAST) COMBINED CYCLE POWER PLANT
At Ashuganj, Brahmanbaria



Ashuganj Power Station Company Limited (APSCCL)

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ABBREVIATION

ADB: Asian Development Bank
AIDs: Acquired Immunodeficiency Syndrome
APSCL: Ashuganj Power Station Company Limited
CCB: Central Control Building
CCPP: Combined Cycle Power Plant
CNTIC: China National Technical Import & Export Corporation
EIA: Environmental Impact Assessment
EMP: Environmental Management Plan
EPC: Engineering Procurement & Construction
GIS: Gas Insulated Switchgear
GRC: Grievance Redress Committee
GRM: Grievance Redress Mechanism
GT: Gas Turbine
HIV: Human Immunodeficiency Virus
HRSG: Heat Recovery Steam Generator
MSDS: Material Safety Data Sheet
MW: Mega-Watt
PPE: Personal Protective Equipment
RMS: Regulating and Metering Station
RP: Resettlement Plan
SEMP: Site Specific Environmental Management Plan
SOx: Oxides of Sulfur
ST: Steam Turbine

EXECUTIVE SUMMARY

During the period from July to December 2022, the major tasks were commissioning and inspection of different equipment, for instance, inspection of warehouse, CEMS, hot commissioning of HRSG, steam turbine, insulation of LP & IP cylinders, inspection of safety valves. In addition to that, commissioning work of the HRSG in cold state, CW system, fire alarm system, air compressor system, DCS control (grid auxiliary transformer electrify), generator end shield opening for insulation treatment, grid auxiliary transformer, plant electricity system, GUST electrify and 400kV GIS system, hot commissioning activities (such as ST hot commissioning/Boiling tuning etc.) have been completed. Performance test was done successfully both in simple and combined cycle mode at different load. Finally the plant is now commercially operated from 26 November 2022.

Air Pollution caused by dust emission during construction traffic activities is controlled by good management practices like continuous water spray over the unpaved or bare surfaces, covering soil materials pile. Soil and water pollutions are also prevented by proper management like spill prevention and well drainage system. Solid waste is managed by the waste management plan. noise pollution is also a regarding the issue during Steel Structure Erection activities for using of demolition equipment's and for traffic and transport. Noise level is reduced by using fine-tuned low noise level construction equipment's and by the proper traffic management system. Every personnel use personal protective equipment to ensure their safety. The remarkable achievement in this period is that till now there is no record of loss time accident or injury.

Besides this, visual monitoring included traffic volume, site security, personal protective equipment, incident record and reporting, solid and oily wastes generation and disposal, worker's health, complaints from neighbors, safety orientation and training of workers, sanitation and drinking water facilities to the worker's and site drainage is covered during this period and its found that all aspects regarding visual monitoring were found in line with the environmental management plan and required environmental guidelines.

APSCL is committed to keeping the accident level in Zero by implementing its proper occupational health and safety management system. This project also has a positive effect on the socio-economic condition. Local skilled and semi-skilled peoples are engaged in different levels of construction activities and they are happy about getting employment opportunities.

1.0 INTRODUCTION

The objective of the Social safeguard management and monitoring is to record social impacts resulting from the project activities and to ensure implementation of the “mitigation measures” identified earlier in order to reduce adverse impacts and enhance positive impacts from specific project activities. Besides, it would also address any unexpected or unforeseen environmental impacts that may arise during construction and operation phases of the project. Social safeguards objectives are: (i) to ensure the social soundness and sustainability of projects and (ii) to support the integration of social considerations into the project decision-making process. ADB social safeguards are triggered if a project is likely to have potential social risks and impacts.

1.1 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 is 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 located 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 at the south side of the project. Meghna River is in the north side of the project. A khal is situated in the east side of the project and the total APSCL complex including APSCL office is located on the west side of the project.

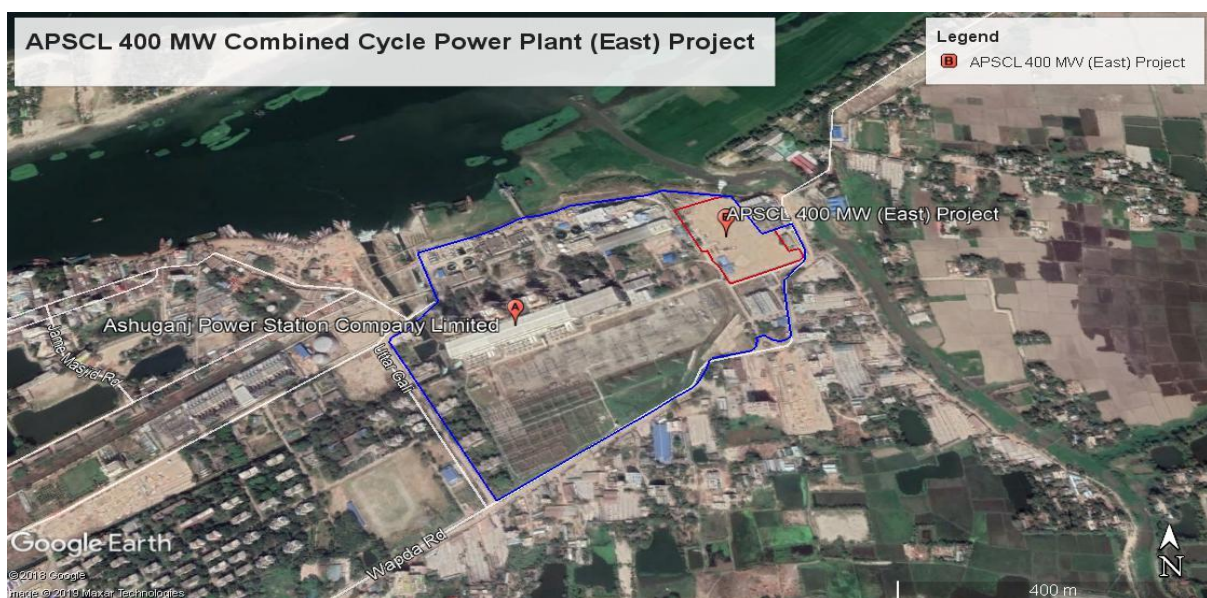


Figure 1: Location Map of APSCL 400 MW CCPP (East) project

1.2 Context of the monitoring report

The present social monitoring report period is July to December 2022 to submit as semiannual basis. Visual monitoring included traffic volume, site security, personal protective equipment, incident record and reporting, worker's health, complaints from neighbors, safety orientation and training of workers, sanitation and drinking water facilities to the worker's and site drainage are covered during this period.

1.3 Project Progress Status

APSCL and CNTIC are working so hard to reach the target within the timeframe. About 95% of work has been done where 7% 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.

Super structure construction of Bypass stack, Exhaust stack, cooling water, Oily waste water treatment station, Turbine Generator, Air compressor building, Central control Building (CCB), Power control center, Main Building has been completed. Similarly, Installation of equipment & pipe for gas booster and regulating station, RMS, drain water treatment system, site processing and foundation work for emergency Oil pit, sewage treatment station, and unit auxiliary transformer has been completed too.

On the contrary, the construction work of auxiliary system erection, GT generator installation, ST installation and electrical system are currently under progress. Commissioning work of the HRSG in cold state, CW system, fire alarm system, air compressor system, DCS control (grid auxiliary transformer electrify), generator end shield opening for insulation treatment, grid auxiliary transformer, plant electricity system, GUST electrify and 400kV GIS system have been completed. Whereas commissioning work of the gas booster regulating station & RMS, GT & ST equipment in cold state, H2 module system are currently under progress.

A photo index of progress status is attached in Annex I. The updated status of Ashuganj 400 MW (East) Combined Cycle Power Plant Project (CCPP) from July to December 2022 is given below in Table 1 & Figure 2 shows the present site condition wherein construction work is going on.

Table 1: Project Progress Status

Sl No.	Task Name	Progress till June 2022	Progress from July-December 2022	Cumulative Progress July 2018-December 2022
1	Design	100%	-	100%
2	Procurement	100%	-	100%
3	Demolition work of old plant	100%	-	100%
4	Construction	99%	1%	100%
6	Commissioning	81%	19%	100%



Figure 2: Latest Picture of the Project Site

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, APSCL 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 3 and key roles for implementation and supervision of the SEMB are described in Table 2.

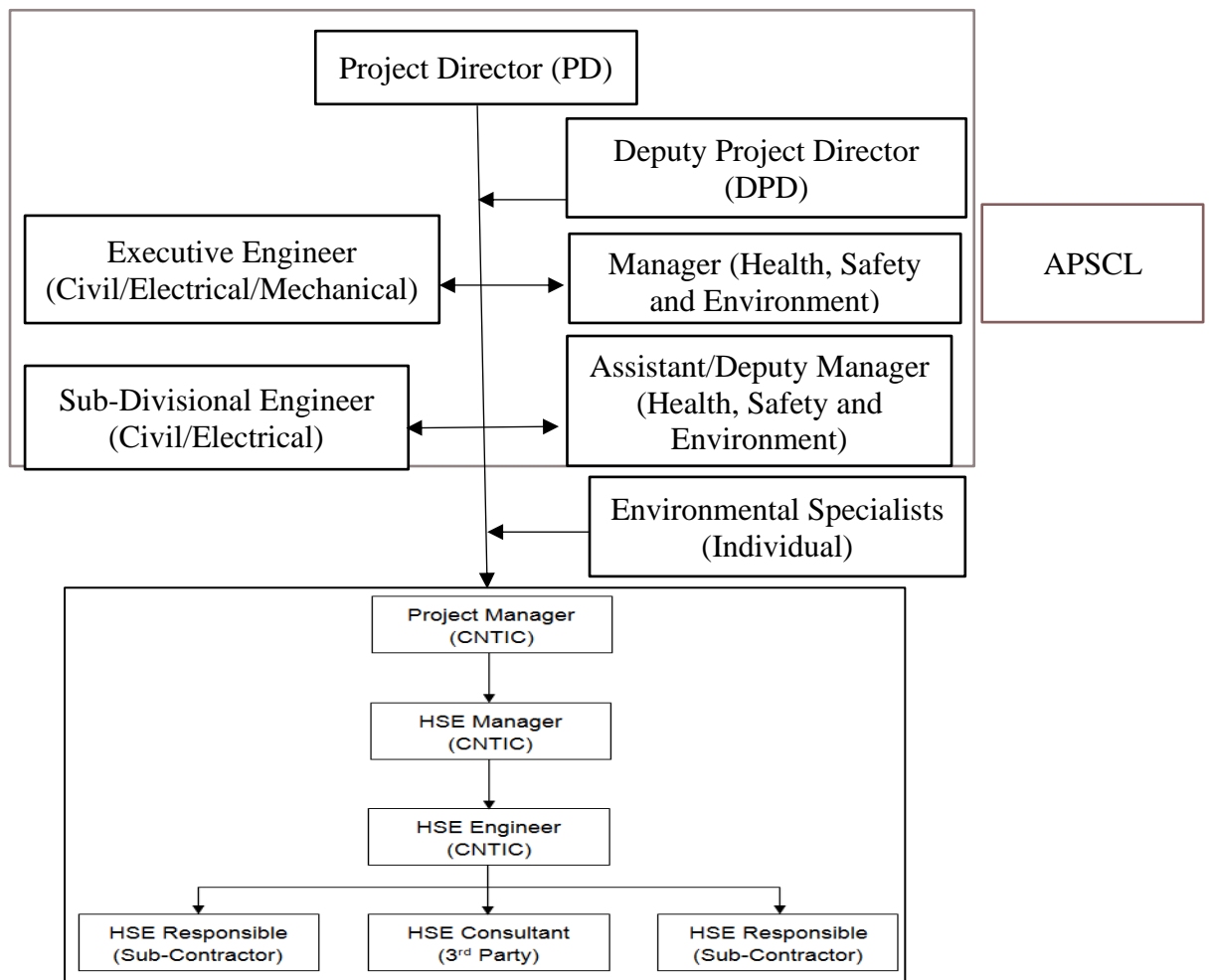


Figure 3: SEMB Organizational Structure

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"> ○ Overall responsibility for environmental Social safeguard performance of the Project during construction; ○ Decision-maker on applicable policies for the Project; ○ Oversight supervisory role during construction. ○ Review reports of the Independent Environmental Monitoring Consultant; ○ Approves changes to the SEMP, as necessary, as part of an adaptive approach to HSE and social management of the Project; ○ Responsible for working with stakeholders as required; ○ Establishing an HSE department to implement the SEMP requirements; ○ Management, implementation, monitoring and compliance of the SEMP, sub-contractors; ○ 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; ○ Ensure effective 	<p style="text-align: center;"><u>APSCL Project Director:</u></p> <ul style="list-style-type: none"> ○ Actively promote and participate in the Project HSE and social programs. ○ Ensure that the HSE and social programs reflect the requirements of the Project in terms of resources; ○ Ensure that all legislative and company requirements are complied with; ○ 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; ○ Ensure that all contractors are made aware of their roles and responsibilities with regard to HSE and social management; ○ Ensure that safety is an agenda item in every contractor meeting; ○ Ensure that all contractors are evaluated throughout the duration of the Project, as to their capabilities and performance; and ○ Ensure implementation of HSE and social audits and recommendations for addressing non-compliances/corrective actions. <p style="text-align: center;"><u>APSCL HSE Department:</u></p> <ul style="list-style-type: none"> ○ 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; ○ Coordinate and evaluate the effectiveness of all program elements; ○ Liaison with related government bodies as necessary; ○ 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; ○ Ensure proper housekeeping and waste disposal in accordance with company requirements and

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

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"> ○ Take an active part in the protection of themselves, fellow workers, property and the environment from accidental losses; ○ 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; ○ Report promptly to immediate supervisor and HSE officer/inspector if any incidents/near misses as well as injuries, regardless how minor; and ○ Shall attend Project safety training and drills programs as required.
<p><u>Supervising / Owners Engineer (OE):</u></p> <ul style="list-style-type: none"> ○ Assistance in preparation and implementation of the SEMP; ○ Reporting any incidents or non-compliance with the SEMP to APSCL. 	<p><u>OE Environmental and Social Safeguard Consultants:</u></p> <ul style="list-style-type: none"> ○ 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. ○ Preparation and implementation of the Environmental Supervision Plan during construction. ○ Preparation and implementation of the Environmental Monitoring Plan during construction ○ Supervision of contractor performance on implementation of the Construction and Work Camp Management Plan. ○ Reporting any incidents or non-compliance with the SEMP to the PMU. ○ Ensuring adequate training and education of all staff involved in environmental supervision. ○ Making recommendations to the APSCL (PMU) regarding SEMP performance as part of an overall commitment to continuous improvement.

Progress status on implementation of Social management during construction phase of the project is shown in Table 3

Table 3: Implementation of Social Monitoring Plan

SI No.	Issue	Key aspects	Monitoring Frequency	¹ Compliance status			Remarks/ Mitigation measures
				C	PC	NC	
1.	Traffic volume	Incoming & outgoing traffic, traffic movement records	Monthly	√			
2.	Site Security	Proper fencing, isolation of site from general access, marked passage for workers and visitors	Monthly	√			
3.	Personal Protective Equipment	Ensure every single person involved in the construction activity wear proper PPE	Monthly	√			
4.	Incident record & reporting	Documented record of all incident, accident, near misses etc. and its remedial process.	Monthly	√			
5.	Solid waste	Quantity of solid waste, segregation and disposal process	Monthly	√			
6.	Oily waste generation & disposal system	Quantity of oily waste, storage and disposal process	Monthly	√			
7.	Worker's health	Monitoring process of worker's health	Monthly	√			
8.	Complain from neighbours	Any significant complain from neighbours and its remedial procedure	Monthly	√			
9.	Safety orientation & training of workers	Frequency of training & orientation of workers for safety	Monthly	√			
10.	Sanitation & drinking water facility to workers	Availability of safe drinking water and sanitation to the workers	Monthly	√			
11.	Site Drainage	Maintaining proper drainage	Monthly	√			<ul style="list-style-type: none"> Should be kept it clean regularly.

C- Compliance, PC- Partially Compliance, NC- Non Compliance

3.0 COMPLIANCE OF SAFEGUARD COVENANTS FROM THE ADB LOAN AGREEMENT

3.1 SPS, 2009 compliance status

The status of the respective component sub-projects with regard to compliance status to ADB's policy statement (APS 2009) is shown in Table 4.

Table 4: ADB Safeguards Policy compliance Status for the Projects

ADB Safeguard Policy Statement	Status
Involuntary resettlement will be avoided whenever feasible.	Complied
Where population displacement is unavoidable, it should be minimized.	No displacement
All lost assets acquired or affected will be compensated. Compensation is based on the principle of replacement cost.	NA
Each involuntary resettlement is conceived and executed as part of a development project or program. Affected persons need to be provided with sufficient resources to re-establish their livelihoods and homes with time bound action in co-ordination with civil works.	NA
Affected persons are to be fully informed and closely consulted.	Complied
Affected persons are to be assisted to integrate economically and socially into host communities so that adverse impacts on the host communities are minimized and social harmony is promoted.	NA
The absence of a formal title to land is not a bar to ADB policy entitlements.	NA
Affected persons are to be identified and recorded as early as possible to establish their eligibility, through a census, which serves as a cut-off date, and prevents subsequent influx of encroachers.	NA
Particular attention will be paid to vulnerable groups including those without legal title to land or other assets; households headed by women; the elderly or disabled; and indigenous groups. Assistance must be provided to help them improve their socioeconomic status.	NA
The full resettlement costs will be included in the presentation of project costs and benefits.	NA

3.2 Compliance on the ADB loan agreement

Status of Compliance with the provisions of the ADB loan agreement are Shown in Table 5.

Table 5: Compliance with Environmental Considerations of Loan Agreements

Covenants	Reference	Compliance status
Environment		
The borrower shall ensure, or cause APSCL to ensure, that the preparation, design, construction implementation,	LA, Schedule 5, Para 2	a) All applicable laws and regulations of the Borrower relating to the environment,

<p>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>health, and safety were followed strictly in the project.</p> <p>b) The environmental safeguards and its related all safety measure were maintained in the project. Environmental Quality was monitored and report was submitted each month by EPC which was verified by an independent environmental Consultant to evaluate the environmental and social safeguard policy performance.</p> <p>c) The EARF is followed as per requirements.</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 safeguard monitoring report is followed and maintained properly and updated time to time.</p>
Land Acquisition and Involuntary Resettlement		
<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</p>	<p>LA, Schedule 5, Para 3</p>	<p>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 was no requirement of Land Acquisition and Involuntary Resettlement throughout the project period.</p>

<p>forth in the respective RP, and any corrective or preventive actions set forth in a safeguards monitoring report.</p>		
<p>Safeguards – Related provisions in bidding documents and works contracts</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> <ul style="list-style-type: none"> (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; (b) Make available a budget for all such environmental and social measures; (c) Provide the borrower with a written notice of any unanticipated 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; (d) Adequately record the condition of roads, agricultural and other infrastructure prior to starting to transport materials and construction; (e) Fully reinstate pathways, other local infrastructure, and 	<p>LA, Schedule 5, Para 7</p>	<ul style="list-style-type: none"> (a) APSCL complied 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; (b) Proper budget was allocated for all such environmental and social measures. (c) APSCL followed that properly as per requirements and standard of ADB Social Safeguard Policy. (d) It was maintained as given guideline. (e) It was followed as per requirements.

<p>agricultural land to at least their pre-project condition upon the completion of construction.</p>		
<p>Safeguards- Monitoring and Reporting</p>		
<p>The borrower shall do the following or shall cause APSCL to do the following:</p> <ul style="list-style-type: none"> (a) Submit semiannual safeguards monitoring reports to ADB and disclose relevant information from such reports to affected persons promptly upon submission; (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; (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 process, and facilitated the carrying out of any verification by such external experts; and (d) Report any actual or potential breach of compliance with the measures and requirements set forth in the EMP or the RP 	<p>LA, Schedule 5, Para 7</p>	<ul style="list-style-type: none"> a) The proper Safeguards monitoring already being carried out during pre-construction stage and is going on in construction and will be continued for post-construction phase or operation phase. b) It is followed as per the ADB guideline. c) One Environmental Expert is engaged already, and he is monitoring and giving valuable comments and feedback to APSCL. d) As per SEMP, we will follow the instruction.

promptly after becoming aware of the breach.		
Labor standards		
<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> <ul style="list-style-type: none"> (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; (b) Provide safe working conditions for male and female workers; (c) Carry out HIV/ AIDS and human trafficking prevention and awareness campaigns in the campsites and corridors of influence; (d) Engage women worker as wage laborers depending on their skill; and (e) Provide equal wages for equal work between men and women 	LA, Schedule 5, Para 10	<ul style="list-style-type: none"> a) APSCCL complies exiting all labor laws and related international treaty obligations of the borrower and not engaged any child labor at the project site. b) APSCCL is committed to provide safe working condition both for male and female workers and follow up regularly. c) APSCCL arrange this type awareness program at the foundation training of the worker. d) 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. e) It was maintained strictly.

4.0 SAFEGUARD MONITORING RESULTS AND UNANTICIPATED IMPACTS

4.1 Traffic Volume

The Project is at the last stage of construction phase and therefore, volume of traffic decreased significantly in this reporting time. The daily traffic details on day to day basis are being monitored (Table 6) and recorded in the registered book properly. To maintain the traffic register, the detail traffic management measures shall include:

- ✓ Recording details of regular inspections/audits for traffic management measures of cargoes/packages weighing more than 20 Tons and long-body trailers from port to project site.
- ✓ Recording the delays and other disruptions resulting from slow-moving heavy-lift and/or oversized cargoes.
- ✓ Reporting of any incident/accident occurs during transportation of goods.

Table 6: Total number of vehicles based on their categories

Name of vehicle	Number of Vehicles
Truck	17
Tailor (load>20T)	5
Microbus	23
Cars	28
Total	73

4.2 Site Security

CNTIC-CCOEC Consortium already constructed of site boundary fencing (Figure 4) 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 5) 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 4: Site Security & Safety Instruction Board

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 shows that, the workers involved in construction were using applicable PPEs. A list of PPEs that are supplied are listed in Table 7.

Table 7: 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 Incident Record & Reporting

Coordination of CNTIC-CCOEC Consortium with APSCL authority has developed to monitor any incident, accident, near misses, first aid recording and reporting system with proper format. It is observed that the Incident Record & Reporting are being properly monitored and recorded in the register book. There was no accident in the reporting time. However, some first aid recording was found. There is no Accident free Record Boards (displaying accident free days number, date, hours and time etc.) at the project site. If any incidental issue arises, immediately it has to be reported & recorded properly in the prescribed format. Summary of incident/accident reported at project site is shown in Table 8.

**Table 8: Summary of incident/accident reported at project site
(From July to December 2022)**

Sl. No.	Date & Time	Nature of Incident/Accident	Description of incident	Corrective Action
July				
1.	10.10.2022	Back Side Pain	<ul style="list-style-type: none">The employee has suffered pain at his back due to sitting on working long time in a same place.He does not take any sitting tool and working sits on his feet.	<ul style="list-style-type: none">HSE officer advises him not to work sitting a long time in a place and also says him to walk a few minutes after a certain time.HSE officer also advises him to use a sitting tool always during working time.

4.5 Solid Waste

Solid wastes were generated from construction works (construction waste) and workers activities (kitchen waste, paper waste) at the project site. The main solid waste is construction waste i.e. plastic pipe, brick, rubbish, scrab, cable and broken bricks. Waste inventory was properly maintained and Table 9 describes the amount of waste generated according to their character during the reporting time. Generated solid and domestic wastes are disposed at the disposal site of APSCL.

**Table 9: Waste Inventory Log of CNTIC-CCOEC Consortium
(From July to December 2022)**

SI	Wastage Name	Wastage Classification	Wastage Type	Source of wastage	Wastage storage area	Storage quantity (kg)	Delivery quantity (kg)	Agreement	Remarks
1	Cable	Hazardous	Solid	Construction Site	On site	0	0	Ok	Ok
2	Scrub	Non-Hazardous	Solid	Construction Site	On site	180.5	180.5	Ok	Ok
3	Brick	Non-Hazardous	Solid	Construction Site	On site	0	0	Ok	Ok
4	Rubbish	Hazardous	Solid	Construction Site	On site	19.4	19.4	Ok	Ok
5	Plastic Pipe	Non-Hazardous	Solid	Construction Site	On site	2.1	2.1	Ok	Ok
6	Aggregate	Non-Hazardous	Solid	Construction Site	On site	13.3	13.3	Ok	Ok

4.6 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 check 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). List of equipment and medicines in the first aid box is available with all the first aid box. First Aid Box medicine list are adhesive tape, Face Mask, Hand Gloves, Hand Sanitizer, adhesive bandages (Band-Aids) in several sizes, elastic bandage, Splint, antiseptic wipes, antibiotic ointment, antiseptic solution (like hydrogen peroxide), hydrocortisone cream (1%), acetaminophen and ibuprofen, tweezers, sharp scissors, safety pins, calamine lotion, alcohol wipes or ethyl alcohol, thermometer, saline.



Figure 6: On-site Ambulance and furnished First Aid box.



Figure 7: Daily Body Temperature Monitoring and COVID-19 warning sign

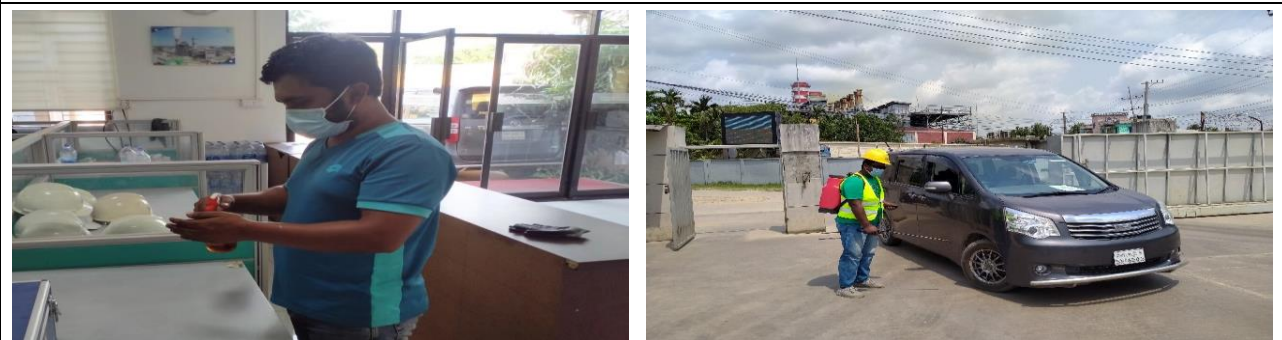


Figure 8: On-site Wash, Sanitation and Hygiene facilities.

4.7 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

4.8 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 10) 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 10) to rectify issue from different stakeholders if raised. GRM register form is attached in Annex VII.

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/.

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/>.



Figure 10: Photograph of Suggestion/Complain Box

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 10: Members of the Committee of Grievance Redress (GRC)

SI 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.

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. Total 5 HSE observations were found regarding housekeeping, use of PPE, waste management, dust control, soil transfer and so on that was resolved immediately.

Furthermore, 14 first aid cases took place with no loss time. Total safe man hour was 517440 in the reporting time and 3783884 cumulatively.

Training 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. Daily toolbox meeting is mandatory before any execution of work. Tool box meeting is done section wisely to limit the mass contact. 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.

A summary of HSE management and monitoring is illustrated in Table 10 and Figure 11.

Table 11: 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	From July-December 2022	Total
1	Total Man-hour	517440	3783884
2	Safe man hours	517440	3783884
3	Fatal Accidents	0	0
4	Lost Time Injury (LTI)	0	0
5	Medical Treatment (MT)	0	4
6	First Aid Cases (FAC)	14	753
7	Health Incidents	0	0
8	Property Damage (PD)	0	0
9	Fire/Explosion	0	1
10	Security Incident	0	2
11	Near Miss	0	5
13	Environment (EN)	0	0
14	Job Transfer days	0	0
15	Total Days Lost	0	0
17	Tool Box Talks	140	1250
18	Grievance	0	0



Medical Facility

Tool Box Talk & Training

Figure 11: Site HSE Management

5.0 CONCLUSION AND RECOMMENDATION


The social safeguard monitoring report consists of 14th 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 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, 2022. Most of the records are being maintained in the Project site.

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 2022.


29.12.2022
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