GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
MINISTRY OF WATER RESOURCES

BANGLADESH WATER DEVELOPMENT BOARD

COASTAL EMBANKMENT IMPROVEMENT PROJECT PHASE-I (CEIP-I)

Financed by World Bank with
Grant Contribution of PPCR - Climate Investment Fund

Second Annual Environmental Audit Report

for 01 January – 31 December 2017

Prepared by
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in association with BETS Consulting Services, Ltd.
Third Party M&E Consultants for Overall Project Implementation
(CONTRACT PACKAGE NO.CEIP-1/ C2/S3)

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Acronyms

BWDB	Bangladesh Water Development Board
CC	Concrete Cement
CEGIS	Center for Environmental and Geographical Information Services
CEIP-1	Coastal Embankment Improvement Project Phase-1
C-ESMP	Contractor Environmental and Social Management Plan
CHWE	First Engineering Bureau of Henan Water Conservancy
CRTS	Consultancy for Research and Training Services
CSE	Construction Site Engineer
DDCS & PMSC	Detailed Design and Construction Supervision and Project Management Support Consultant
DPM	Deputy Project Manager
DRE	Deputy Resident Engineer
DS	Drainage Sluice
DTL	Deputy Team Leader
EHS	Environmental Health and Safety
EMP	Environmental Mitigation Plan
ES	Environmental Specialist
ESMF	Environmental and Social Management Framework
FGD	Focus Group Discussion
FS	Flushing Sluice
GoB	Government of Bangladesh
GPS	Global Positioning System
HHs	Households
IPOE	Independent Panel of Experts
JD	Job Description
KUET	Khulna University of Engineering and Technology
M&E	Monitoring and Evaluation
MTR	Mid-Term Review
NCR	Non-Compliance Register
PM	Project Manager
PMU	Project Management Unit
PPE	Personal Protective Equipment
PSC	Project Steering Committee
QC	Quality Control
R/S	River Side
RE	Resident Engineer
SECU	Social, Environmental and Communications Unit
SES	Senior Environmental Specialist
ToR	Terms of Reference
WATSAN	Water and Sanitation
WB	World Bank
WQAP	Water Quality Assurance Plan
XEN	Executive Engineer

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1. Introduction

1.1 Background

The Coastal Embankment Improvement Project – Phase 1 (CEIP-1) is a 7-year $400 million project being implemented by the Bangladesh Water Development Board in partnership with the World Bank and the Pilot Programme for Climate Resilience of the Climate Investment Fund. The Project started in 2013 and will close in 2020. It covers 17 polders in three packages of 4, 6 and 7 polders respectively. The Detailed Design and Construction Supervision Consultants (DDCS&PMSC) commenced their design work for the first of three packages in January 2015 and the Package 01 Contractor commenced services on 26 January 2016. The Package 02 Contractor's contract was signed on March 2017 and work was commenced on 12 July 2017. The Third Party M&E Consultants joined the project on 01 November 2015. After working with CEIP-1 for about one year, the Third Party M&E Consultants carried out the first Annual Environmental Audit during January 01- February 06, 2017 covering the reporting period January through December 2016. This TOR is for the second Annual Environmental Audit covering the period January – December 2017, due to commence about 10 January 2018.

Institutional arrangements for safeguarding the environment of each polder in the Coastal Embankment Improvement Project include:

- The Project Management Unit (PMU) with its Social, Environmental and Communications Unit (SECU) and Independent Panel of Experts (IPOE) who are responsible for oversight and guidance on environmental matters as well as coordination with GoB agencies. SECU monitors the Contractors' compliance with EAPs/C-ESMP and the Project's compliance with the environmental regulations of GoB and World Bank environmental safeguards. PMU is to coordinate the preparation of the Bi-Annual Environmental Monitoring Reports with the assistance of the DDCD&PMSC and M&E Consultants. PMU reports to BWDB, the Project Steering Committee (PSC) and the World Bank.
- The DDCS&PMS Consultants who are responsible for developing the EIAs and EMPs consistent with World Bank and GoB guidelines and ensuring the EMPs are implemented satisfactorily. These Consultants review and approve the Contractor's Environmental Action Plans (EAP)/C-ESMP and monitor their implementation on an ongoing basis. The DDCS&PMS Consultants develop the bidding documents and make sure that the Contract and its specifications include the necessary clauses and elements governing environmental safeguards. These Consultants also must carry out monthly field-based monitoring of EMP compliance and report their findings in their monthly progress reports.
- The Contractors - The First Engineering Bureau of Henan Water Conservancy (CHWE) in the case of Package 01 and Chongqing International Construction Corporation (CICO) in the case of Package 02 - are required to develop and implement polder-specific EAPs

and C-ESMPs respectively with site-specific actions. The Contractors monitor their implementation on an ongoing basis. The EAPs/C-ESMPs must be fully consistent with the EMPs (and the Contract and its Specifications) and elaborate on those elements for which the Contractor is responsible so that implementation details are spelled out and actionable.

- World Bank reviews and provides comments and no objection to the various safeguard documents and undertakes Implementation Support Missions, Mid-Term Review Missions and special Environmental Safeguards Missions as needed.
- Community participation, consultation and feedback through the EIA process and Grievance Redress Mechanism.
- Third Party M&E Consultants who audit, monitor and evaluate the project overall. Specifically, with respect to environmental safeguards, the M&E Consultants review and comment on environmental documents prepared under CEIP-1, spot check compliance, report their findings and prepare recommendations. They also undertake the Annual Environmental Audit and prepare the corresponding report. The M&E Consultants report to the PSC and their contract is administered by the Project Director.

Each polder has its own EIA which includes an EMP which is meant to ensure that the environmental and social management practices are integrated in the design, construction, operation and maintenance of the polder.

Among others, the specific objectives of the EIA are to:

- Comply with national regulatory and WB policy framework (further discussed later on in the document);
- Determine and describe the existing environmental and social setting of the Project Area (the project area is defined as the entire area inside the polder, project influence area outside the polder i.e. the embankment, borrow pits and spoil disposal area if located outside the polder and access route to the polder);
- Identify and assess the potential environmental and social impacts of the project;
- Identify mitigation measures to minimize the negative impacts and enhancement measures to enhance the positive impacts; and
- Detail an Environmental Monitoring Plan.

1.2 Audit Objective

The overall objective of the Annual Environmental Audit of CEIP-1 is to assess the extent to which the plans for safeguarding the environment are in place, are being implemented and are effective based on the institutional and contractual arrangements applicable to the Project.

1.3 Scope of the Audit

In summary, the audit examined: (1) the status of preparation of required safeguards documents; (2) whether the systems, tools and protocols are in place for environmental monitoring; (3) staff and funding resources; and (4) compliance with WB safeguards, including consultation, communication, grievance mechanisms and disclosure, and country legal framework.

The audit covered the Contractor, the DDCS&PMSC and Project Management Unit (BWDB- Social and Environmental Coordination Unit).

Fieldwork was centered on the four polders of Package 01 (Polders 32, 33, 35/1 and 35/3) and four of the six polders (works ran in those polders only) of Package 02, but the audit examined CEIP-1 overall whenever appropriate. It is forward-looking to draw lessons and make recommendations on areas of improvement for Package 01 and 2 which also give guidance for broader application to Package 03, similar projects or a future phase of CEIP.

Specifically, the audit assessed:

- Status of EMP and EAP/C-ESMP implementation and any constraints to implementation
- Status of implementation of the recommendations/ findings of the first Annual Environmental Audit that was conducted by Third Party M&E Consultants
- Status of the implementation of the recommendations/ agreed actions of the WB environmental missions of May and November 2017
- Whether the project involves labor influx and the sufficiency of mitigating measures. The rapid migration to and settlement of workers and followers in the project area is called labor influx, and under certain conditions, it can affect project areas negatively in terms of public infrastructure, utilities, housing, sustainable resource management and social dynamics.
- Extent to which the Environmental Monitoring Plans and environmental mitigation measures outlined in the EIAs are being followed and whether they are effective.
- Existence and quality of monitoring tools, formats and protocols.
- Processes and procedures for compliance monitoring.
- Degree to which qualified staff resources are in place.
- Necessary environmental testing equipment is in place or hired when needed.
- Staff awareness and training.
- Identify constraints if any in ensuring compliance to the measures outlined in the EMP.
- Review the GRM functioning in the polder areas and check and analyze the Grievances related to environmental safeguards in the polder areas
- Review the accident records in the work sites and examine the magnitude of the accidents and how those were addressed by the contractor
- Look forward to anticipating whether any of the CEIP-1 activities may have negative impact or not on the Sundarbans mangrove forest

The Environmental Audit presents findings and observations followed by a section on conclusions and recommendations aimed at improving the effective implementation of environmental safeguards.

1.4 Methodology

The M&E Consultants have undertaken a review of documents, reports, site records, any test results, conducted interviews in offices and in the field, and made direct observations during a one and half week period and then wrote up their findings. Specific work sites, which were visited on a given polder were selected randomly for the most part, but in all cases without advance notice to the Contractors and DDSC&PMSC.

Document Review: Existing base documents were reviewed such as the Environmental and Social Management Framework, EIAs, EMPs, Contractor EAPs and C-ESMPs, guidelines, standard procedure manuals, contractor's contract of Package 01 and Package 02, contractors; Emergency preparedness plan, and World Bank Aide Memoires (1. Aide Memoire of November 19 to 23, 2017 and 2. Aide Memoire of May 09 to 13, 2017) corresponding to the period covered by this audit were reviewed with respect to environmental aspects. The Twice monthly Environmental inspection reports of both contractors, Monthly Progress Reports of DDSC&PMSC, and Bi-Annual Environmental Monitoring Reports were also reviewed.

Key Informant Interviews and FGDs: PMU and DDCS&PMSC environmental personnel were interviewed on January 30, 2017 in DDSC&PMSC's Dhaka office. Contractors' staff were interviewed in their Khulna office and at the polder level in each of the 4 polders of Package 01 and 4 polders of package 02 during the period of January 16-23, 2018. FGDs were conducted with local communities in polder areas and workers in all visited sites were also interviewed during the audit team's field visits to gain an understanding of how well the project is implementing EMPs.

Site Records: Test results (only noise readings were available) were reviewed. Non-compliance report (NCR) logs, NCR clearance records and procedures were examined in site offices and major construction work sites.

Direct observation: Level of compliance with the EMP/EAP/C-ESMP and practices of the Project and Contractor staff was observed in the field. Demonstration of water and soil collection procedure by Package 01 Contractor staffs were observed to understand the level of skill and knowledge and whether the technique is appropriate.

Some of the embankment construction worksites and drainage/flushing sluice gate sites, CC block manufacturing plants were visited in different polders of Package 01 and Package 02 (details in Section 2.7.2) to examine field level application of the environmental safeguards on a sampling basis. The team also visited the campsites, site offices and main offices of both Contractors and DDCS&PMSC to discuss systems, strength of the environment staff and documents.

1.5. Team Composition and Duration

The audit was accomplished by the Environmental Team of the Third Party M&E Consultants consisting of one Environmental Specialist–National (A.K.M. Rezaul Haque Khan) and one Environmental Specialist–International (Dr. Abu Murshid) with the support of the Team Leader (Mr. Jan T. Twarowski). The audit was conducted within a short timeline through fieldwork for 7 days in Package 01 and 02 polder areas and several days of meetings and document/file reviews in Dhaka, followed by a week of report writing in Dhaka.

2. Audit Findings

This section summarizes the audit findings focusing on:

- existence of appropriate base documents;
- systems- tools, formats, institutional arrangements, protocols, quality assurance;
- environmental staff resources;
- staff awareness and training;
- necessary equipment and arrangements for environmental monitoring testing; and
- actual implementation/ practice level.

2.1 Existence and appropriateness of base documents

Existing base documents or reports were reviewed such as EIAs and EMPs, Contractor EAPs/ESMPs, Quality Assurance Plan, Contract/Bidding documents.

2.1.1 EIA and EMP

According to Environmental Conservation Rules (ECR) 1997 of DoE, the project is categorized as "Red", requiring that EIA and RAP have to be submitted for obtaining and Environmental Clearance Certificate (ECC). The ECC was obtained and thus the Project has complied with the regulatory requirement. According to WB safeguard policy, the Project is classified as Category "A" involving significant environmental adverse impact. To satisfy compliance of GoB and WB, CEIP-1 has already prepared EIAs for each of the four polders of Package 01 and Package 02 and these contain polder-specific EMPs. These EIAs have been approved by WB and CEIP-1 and have spelled out the required actions needed comply with Government regulations and WB safeguards. The preparation of the EIAs for the 7 Polders of Package 03 is under process. However, The validity of ECC for Package 01 has expired on 07 October 2016 and Earlier, on 20 October 2016, PMU applied to the Director of DoE, Khulna Divisional Office for renewal of ECC. The renewal of ECC has not been issued yet. In the current audit covering period, PMU issued a letter to DOE requesting Dhaka head office level for renewal of Environmental Clearance Certificate (ECC) for all CEIP-I Polders.

From the review of the draft EIA of Package 03, it was felt the EIA of the Package 03 has been improved. The audit team feels that the Package 03 EIAs have been incorporated the analysis of

National Water Act 2013, National River Commission Act 2013 and the Participatory Water Management Guidelines 2014, which were not covered in the EIAs of Packages 01 and 02, though they are mentioned in Package 02. Furthermore, the issues and concerns raised by local people during consultations have been incorporated.

From the first Annual Environmental Audit it was felt that the EIAs are too voluminous and EIA authors could look for scope to lessen the volume of the EIAs covering all required sections with adequate information. It was suggested as a possible approach, long sections of descriptive information may be considered to be annexed, making the main body of the document more focused. This recommendation remains in place as the Package 03 EIAs have not been streamlined as suggested.

2.1.2 Environmental Action Plans (EAP) of Contractor for Package 01

The EAPs are the Polder-specific living documents of the contractor which translate the environmental and EHS issues of the EMPs to be implemented.

The first round of EAPs for each of 4 polders of Package 01 were submitted by the Contractor during the first quarter of Fiscal Year (FY) 2017. Those were shared with PMU, M&E Consultants and the World Bank (WB) and comments were provided to improve the plans. As they are living documents, the updated polder-specific Environmental Action Plans (EAPs) for the four polders of Package 01 have been submitted by the Contractor to DDSC&PMSC on December 28, 2017 and DDSC&PMSC also shared those with PMU and M&E Consultants. From the review of the updated EAPs, the audit team feels there is still scope for improvement as some inconsistencies remain between the EAPs and the EMPs (e.g. the EMP specified that air quality would be monitored half-yearly, but the EAPs indicate yearly, EMP says noise level will be monitored weekly while EAPs say yearly, EMP mentioned test for surface water should be half-yearly but EAPs mentions yearly), EAPs say construction work of CC block manufacturing plant should be continued at night time, to point out just a few. Furthermore, the EAPs cover only a few EHS items for the CC block manufacturing plant, but there are many more that must be routinely implemented and thus monitored. The audit team strongly recommends the contractor to revisit the EAPs thoroughly to make it consistent with the EMP and practically useable as to comprehensive guide for staff and laborers. In cases where an exception is sought to proceed in a manner counter to the EMP guidance, this should be done formally and approved by the DDCS&PMS Consultant if justified.

2.1.3 Environmental and Social Management Plan (C-ESMP) of Package 02 Contractor

The C-ESMPs are also Polder-specific living documents of the contractor which translate the environmental, EHS and social issues of the EMPs to be implemented into actionable plans.

The C-ESMPs for the six polders of Package 02 were provisionally approved by the DDSC&PMSC with the obligation that they will update these with detailed layouts and other necessary elements by December 2017, once the specific campsites are known. The Contractor for Package 02 has indeed submitted six updated C-ESMPs for the six polders of Package 02 to DDSC&PMSC in December 2017. The DDSC&PMSC has also shared these with PMU and Third Party M&E Consultants. These C-ESMPs are currently under review. The audit found these also have gaps, e.g. they don't specifically cover major construction works like CC block manufacturing plants, there is inconsistency between the ESMPs and the EMPs as was the case for Package 01, the layout of the major construction sites/ worksites have not yet been incorporated with the documents, etc. The audit recommends the Contractor of Package 02 revisit the C-ESMPs to ensure they thoroughly cover the EMP requirements and make them an effective guide for full compliance with environmental safeguards.

2.1.4 Contract document of Package 01 and Package 02

The audit found that contracts of Package 01 and Package 02 covered the EMP's clauses partially. Penalty clauses suggested in the EMPs have not been incorporated into the contracts of Package 01 and Package 02. The Contractors' contractual obligations in general and specifically (around 20 items) covers mostly matters of Environmental Health and Safety (EHS). It is notable that the Package 02 contract document is comprised of more elaborated environmental measure budget lines than the contract of Package 01. The bid documents and contract for Package 03 should give emphasis and care to ensure all the required clauses are incorporated to fully address the relevant elements of the EMPs including the penalty clauses of the EMPs.

2.1.5 Quality Assurance Plan V1.0- August 2016

Audit team reviewed the quality assurance plan in DDCS & PMS office in Khulna and found that is the same version was reviewed during the audit of last year. The findings are same as previous audit and those are: The document covers the quality assurance for all aspects of the activities of CEIP-1. This document covered two sub-sections related to environmental issues – (1) the major tasks to be done by Environmental Specialist of DDCS&PMS of CEIP-1 and (2) Health and Safety (mostly focused on how Health and Safety Personnel will ensure compliance on health and safety issues of the project). It was adequate in these two respects, but could be strengthened in its treatment of how EMP compliance will be monitored and achieved.

2.2 Systems- Tools, formats, institutional arrangements, protocols, and quality assurance

This section covers the audit findings on Environmental Monitoring tools and guidelines, twice-monthly environmental and field visit reports, and Contractors' Emergency Response Plan.

2.2.1 Environmental monitoring tools and guidelines

Contractor has been following the monitoring checklist, which is annexed to the Contractors' EAPs and C-ESMPs as a set of monitoring tools. There are no separate guidelines to ensure compliance with the EMP. DDCS&PMSC and PMU environmental personnel have also been monitoring the implementation of EMP through the indicators of the monitoring checklist that has become part of the EAPs and C-ESMPs. The monitoring has been carried out using these tools which are known as the "Twice-Monthly Environmental Inspection Checklist". Along with the PMU and DDSC&PMSC, the M&E Consultants monitor the environmental compliances with the tools of EAPs, C-ESMPs and EMPs.

2.2.2 Twice- monthly environmental inspection report and field reports

2.2.2.1. Package 01

The Contractor has been submitting twice-monthly environmental reports to DDCS&PMSC since November, 2016. As a part of the audit, the reports of January through December 2017 were reviewed. It was found that the Contractor has been submitting reports using the monitoring checklist formats of the EAP and providing remarks for any notable findings. These reports also include an annex presenting photographs on findings. For a given reporting period, a sampling of sites is covered reflecting the visits made by the concerned EHS officer of the Contractor.

From the review of these reports, it was revealed that environmental monitoring was very minimal for borrow pits (2 sites), riverbank protection work (1 site) and no monitoring inspection was found for khal/canal excavation and re-excavation in these reports. The Audit recommends that the Contractor provide greater emphasis on environmental monitoring for the works. Furthermore, the repeating environmental non-compliances have not been reported in these reports though there is column for repeating issues and some of the non-compliances remain repeated and unresolved. It is recommended that the Contractor report the repeating non-compliance cases. It is also recommended that sites with non-compliance issues be visited again within a month to follow-up and provide updates in the reports on compliance status. Currently, because of the large number of work sites (exceeding 50), the environmental officers visit different sites on a rotating basis in each twice monthly period; while this is necessary and a good practice, follow-up monitoring for non-compliance must be worked into the program.

The Environmental Specialist of DDSC&PMSC conducts field visits and he shares the field findings after completion of the field visits with the DDSC&PMSC field level staffs and contractor staffs taking note of the deadline for addressing the non-compliance by the contractor. He prepares field visit reports for Package 01 and brings these reports with him during next field visit to see the status of compliances. This is a good approach. The field report of the Environmental Specialist is also shared with the Contractor senior management and PMU as well for gearing up the next course of action.

2.2.2.2. Package 02

Contractor for Package 02 also has been submitting the twice-monthly environmental inspection reports since the fourth quarter of calendar year 2017 for the sites where work has commenced. During the audit, these reports were reviewed and the findings are:

- The reports should mention the period of inspection covered in the front page (e.g., January 01- January 15, 2018);
- Some of the inspected issues are marked as N (meaning non-compliance) but those are not actually applicable for the stage of works. This should be marked as not applicable with a statement given in remarks column.
- Moreover, no sites are specified (e.g., in all reports, the heading says “General site mobilization work” but it is not mentioned in which sites). Monitored sites should be specified in the reports.

As for Package 01, the Environmental Specialist of DDSC&PMSC of DDSC&PMSC also conduct field visits for Package 02 and he shares the field findings after completion of the field visits with the DDSC&PMSC field level staff and contractor staff taking note of the deadline for addressing the non-compliance by the contractor. He prepares field visit reports for Package 02 and brings these reports with him during next field visit to see the status of compliances. This is also a good approach. The field report of the Environmental Specialist is also shared with the Contractor senior management and PMU as well for gearing up the next course of action.

2.2.3 Compliance Performance

From the audit, it was found that compliance register has been maintained by the contractors of Package 01 and Package 02 in the worksites. In the register, the good environmental practices for a specific site and the items that need to improve are recorded by the visiting environmental staff along with a deadline. However, no "Non Compliance Report" or “Non-Compliance Register” was found to exist or to be maintained by Contractors and DDSC&PMSC. “Non-Compliance Registers" should be kept by the Contractors for every worksites. The issues related to any non-compliance

should be mitigated and once the issues are resolved, the items should be noted as complied in the "Non-Compliance Register" by the Contractors, DDCS&PMSC and PMU. The remaining issues should be mitigated as soon as possible and reported to DDCS&PMSC on a routine basis. The record should be tracked in a way that it could be understandable how many of the compliances raised, resolved and pending.

It was found that the Package 01 Contractor maintains a complaint register. When any of the community people complain on any of the issue then the staff that heard the complaint makes a record of it in the complaint register in the site office. It is recommended that the Package 02 Contractor also maintain complaint registers for the worksites.

The audit team has reviewed the twice-monthly Environmental Inspection Reports (so-called Twice-monthly Environmental Inspection Checklist) of Package 01 and Package 02 Contractors, and compiled the compliance status as elaborated in the following tables and Annexes 4.7 and 4.8. Table 2 comprises the elements and sub-elements considered by the contractors for the purpose of environmental inspections. Table 03 gives a comparison on compliances and non-compliances for the whole year and also the last quarter of 2017. The observations from Table 03 are:

- Based on the data garnered from the Twice-Monthly Environmental Inspection reports, Package 01 considered 31 different elements for inspection and an improved compliance level was observed for most of these elements. From the analysis of compliance and non-compliance of the entire year 2017 it was revealed that 12 elements were 100% compliant for the full year while 16 elements were 100% compliant in the fourth quarter. Thus, compliance level is improving by this measure.
- 25 out of 31 different elements inspected were equally or more compliant in the fourth quarter of 2017 compared to the full year compliance level. Compliance is also notably improving by this measure.
- In cases of re-excavation works, solid waste management, waste water the compliance level for the all the year was 9.7%, 42.9% and 24.8% respectively. For these three same elements, the compliance level in the fourth quarter alone was 22.2%, 45.5% and 36.6% respectably. These comparisons show that the compliance level has improved in the last quarter of the year, though it is clear there is room for further improvement.
- A few problem areas remain in the case of Temporary Facilities Decommissioning, Construction and Demolishing of drainage sluices, flushing sluices and inlets, Construction and re-sectioning of embankments, water supply, Flora and Fauna and reporting & documentation, the level of non-compliance in the all year was 54.5%, 20.7%, 47.4%, 36.9%, 34.9% and 19.2% respectively. For the same elements, the level of non-compliance only for the fourth quarter of the 2017 was 60.0%, 23.3%, 65.2%, 48.4%, 33.3% and 33.3% respectively which reveals an increase in non-compliance for these elements in the last quarter of the reporting year.

Table 1: Extent of coverage of twice-monthly environmental inspection by Package 01 Contractor during Jan-Dec 2017

Inspected sites	Total in the year for Package -01
Drainage system	30
Flushing Sluice	12
Embankment work	17
CC block plant	4
Riverbank protection	1
Campsite (no.)	12
Khal / canal excavation (km)	0
Khal /Canal re-excavation (km)	0
Borrow Pit	2

Table 2: Elements Comprising the Compliance Inspection Checklist

Elements	Sub-elements
Construction Camps	Obtaining approval
	Erection of signboard in Bangla and English with project details
	Install accommodation facilities for workers
	Drainage channels installation
	Supply of safe drinking water
	Supply of adequate sanitation
	Solid fencing and demarcation to prevent villagers from entering the premises
Fuel storage areas	Install hardstand and secondary containment
	Firefighting equipment installation
	Sand and shovel close-by
	Regular checks on physical condition
Access road construction	Obtaining approval
	Construction of culverts if needed
Temporary Facilities Decommissioning	Agreeing with local authorities on demolition
	Review of Environmental liabilities
	Waste removal
	General re-instatement of site
	Re-vegetation implementation
	Close-out check
Construction and Demolishing of drainage sluices, flushing sluices and inlets	Demolishing debris of sluices and inlets will be disposed of at a site approved by the Engineer.
	Before starting the construction activities of drainage sluices ring bundh and diversion channel will be installed in order to work in dry conditions.
	No waste water from concrete mixing will be disposed of directly to the surface water.
	Steel sheet pile driving will not be done at night.
	The work area will be demarcated clearly.
	Signals will be installed to indicate the entry and exits of vehicles and movement of construction equipment in the work area.

Elements	Sub-elements
	Prior to every monsoon season all the temporary and permanent drainage structures under construction will be made free from debris.
Construction and re-sectioning of embankments	Pavement(if present)will be removed and disposed of at the premises of BWDB
	All works will be demarcated clearly.
	Signals will be installed to indicate the entry and exits of vehicles and movement of construction
	The contractor shall manage the top soil(15)cm during earth work activities
The bank and slope protection works	Spilling of earth material in surface water will be avoided.
	Turfing will be applied to prevent erosion
	Proper drainage provision will be kept to avoid formation of rain cuts due to surface run off.
Re-excavation works	Spoil plan (volume to be excavated; disposal site to be used; quality of excavated material; applicability of excavated material) to be developed for approval by Engineer.
	Unnecessary re-suspension will be avoided by selection of suitable dredging equipment.
	Temporarily deposition of excavated material will be away from the channel edge to limit damage to streamside and stream habitats.
	Return water will be conveyed through siltation chambers to avoid high loads of fines to be discharged on surface water.
	Where applicable biotechnical Engineering, for example, geo textile, may be used to help stabilize the material.
	Smothering of important flora and habitats will be avoided.
Construction of the closure Dam	N/A
Manufacture of pre-cast CC blocks	Workers will be equipped with proper PPE.
	Signals will be installed to indicate the entry and exits and movement of vehicles construction in the work area.
	Manufacturing will not take place at night.
	Stacks with sand will be covered or wetted.
Borrow Material	Agreeing on borrow area
	Document borrow area
	Perform soil analyses on borrow materials when contamination is expected
	Prevention of erosion/dust forming
	Borrow area excavation complying with distance from the embankment as per the technical specification
	No-Tress pass line fixed with bamboo poles
Hard Rock Revetment	N/A
Occupational Health and Safety	Development of Health and Safety plan including emergency procedures
	Train all staff in health and safety
	Provision of HIV, including STI(Sexually Transmitted Infections) information, education and communication
	Provision of PPE and ensuring their use

Elements	Sub-elements
	Provision and use of life jacket during visiting campsite/worksite by boat
	Installation of first aid facilities at work site and camps with adequate stock
	Provide sanitation facilities where needed
	Provision of safe drinking water to work force (tube-well water, bottled water or pond water)
	Proper signaling of work areas
Public Health and Safety	Notification of the public adjacent to the construction areas
	Installation of dedicated pathways for pedestrians
	Proper signaling of work areas
	Limitation of construction vehicles at public roads during peak hours.
	The temporary traffic detours in settlement areas will be kept free of dust by frequent application of water
	Construction activities will be undertaken according to during daylight working hours between the hours of 07:00-17:00 on week days
Water Supply	Providing construction camps with portable water either through installing tubewells (hand pump, shallow and deep tubewell), pond Sand Filter (PSE) or supplying safe bottled water
	Ensuring the location plan of tubewells (used for supplying potable water) that these are not sited near any sanitation facilities as to avoid water pollution
	Maintaining the distance of a tubewell/surface water resource from a soak pit at minimum 15 m
	Maintaining the drainage from the tubewell diverting into the drainage system of the camp area
	Providing separate tubewells for the use of women.
Sanitation	Providing suitable sanitation facilities for the workforce
	Ensuring the location plan of the latrine at least 50 m away from the accommodation facility
	Providing separate latrines for the use of women
	Installing treatment facilities (i.e. septic tank, soak pits etc.) for the sewerage of toilet and camp site wastes.
	Arranging disposal of wastewater from washrooms, kitchens, s, etc. via the camp area's drainage system
Solid Waste Management	Ensuring collection and disposal of solid wastes within the construction camps and work areas
	Taking measure to collect and store inorganic wastes in a safe place within the household and organic wastes cleared on daily basis to waste collector.
	Establish measures for Waste collection, transportation and disposal systems at approved disposal sites.
	Disposal of construction and demolition waste.
Waste water	Installation of decanter boxes for washing buckets and cement mixers
	Installation of proper filtering elements.
	Carrying out periodic checks and clean-ups for the decanter box.

Elements	Sub-elements
	Prioritize reuse of aggregates and water from the decanter box.
	Ensure safe disposal of liquid wastes generated at camp site.
Air	Regular maintenance of vehicles
	Covering or wetting of dusty materials
	Dust suppression by wetting surfaces
	Impose speed limits
	Re-vegetate bare surfaces soonest
Noise	Notify nearby population prior to any typical noise events
	Ensure construction activities do not generate unacceptably high level of noise
	Restrict working to daylight hours
	Locate noisy equipment / facilities away from sensitive receptors
Water and Hydrology	Preventing waste, soil, etc. entering in the water system by waste collection, re-vegetation and dust suppression etc.
	Insure proper drainage of working areas e.g. perimeters lines must be provided with open shallow drains
Flora and Fauna	Agreeing with local authorities on tree felling.
	Document trees / area of trees.
	Avoid/prevent un-necessary tree vegetation cutting and clearing.
	Re-vegetate disturbed construction and ancillary site surfaces.
	Prevent disturbance of animals
	Ensuring sufficient free flow in the construction work for fish migration
Monitoring of Air Quality	Performance of air quality tests at selected sensitive sites for parameters SPM 2.5/10, SOx, NOx and CO during working hours
Monitoring of Noise Quality	Monitoring of noise level (dB) at selected sensitive sites during working hours
Monitoring of Soil Quality	Performance of soil quality tests at selected sites (borrow areas, spill sites) for parameters as organic matter, N, P, K, pH, Salinity, S and Zn.
Monitoring of Surface Water Quality	Performance of analyses on surface water (river, khal, beel and pond) for: pH, TDS, DO, BOD, EC/Salinity and Turbidity.
Monitoring of Drinking Water Quality	Performance of analyses on drinking water for: arsenic, iron, chloride and total faecal coliform bacteria.
Deployment of Environment and Safety Supervisor	Employ one full-time Environment and Safety Supervisor for compliance monitoring of EMP
Complaints and Environmental Incidents	Grievance Redress Mechanism will be established.
	Complaints received from the public or other stakeholders will be registered and recorded and be brought to the attention of the Site Engineer.
	All environmental incidents occurring on the site will be recorded and be brought to the attention of the Site Engineer.
	Action will be taken within 7 working days.

Elements	Sub-elements
Reporting and Documentation	The following records will be kept at site: - Environmental Monitoring Results - Contractors self-assessment record/results - Register of non-compliance - Register of corrective actions - Monthly Environmental Reports
Training	Environmental training on EMP will be arranged for Construction Field supervisors and Environment & Safety Supervisors.

Table 3: Summary Status of Compliance and Non-Compliance and comparison between whole year and Quarter 4 in 2017, Contractor- 01

S.N.	Elements Inspected	Compliance in Full Year (no.)	Non-Compliance in Full Year (no.)	% of Compliance in Full Year	% of Non-Compliance in Full Year	Compliance in Q4 (no.)	Non-Compliance in Q4 (no.)	% of Compliance in Q4	% of Non-Compliance in Q4
1	Construction Camps	109	2	98.2	1.8	28	0	100	0
2	Fuel storage areas	70	25	73.7	26.3	16	0	100	0
3	Access road construction	18	0	100	0	5	0	100	0
4	Temporary Facilities Decommissioning	10	12	45.5	54.5	4	6	40	60
5	Construction and Demolishing of drainage sluices, flushing sluices and inlets	134	35	79.2	20.7	33	10	76.7	23.3
6	Construction and re-sectioning of embankments	41	37	52.6	47.4	8	15	34.8	65.2
7	The bank and slope protection works	26	0	100	0	9	0	100	0
8	Re-excavation works	3	28	9.7	90.3	2	7	22.2	77.8
9	Construction of the closure Dam	0	6	0	100	9	0	100	0
10	Manufacture of pre-cast CC blocks	74	36	67.3	32.7	18	0	100	0
11	Borrow Material	97	0	100	0	12	8	60	40
12	Hard Rock Revetment	8	0	100	0	19	0	100	0
13	Occupational Health and Safety	138	9	93.9	6.1	32	3	91.4	8.6
14	Public Health and Safety	96	2	98.0	2.0	20	0	100	0
15	Water Supply	41	24	63.1	36.9	16	15	51.6	48.4
16	Sanitation	81	6	93.1	6.9	16	0	100	0
17	Solid Waste Management	36	48	42.9	57.1	10	12	45.4	54.5
18	Waste water	28	85	24.8	75.2	15	26	36.6	63.4
19	Air	80	0	100	0	19	0	100	0
20	Noise	63	0	100	0	14	6	70	30

S.N.	Elements Inspected	Compliance in Full Year (no.)	Non-Compliance in Full Year (no.)	% of Compliance in Full Year	% of Non-Compliance in Full Year	Compliance in Q4 (no.)	Non-Compliance in Q4 (no.)	% of Compliance in Q4	% of Non-Compliance in Q4
21	Water and Hydrology	29	22	56.9	43.1	9	9	50	50
22	Flora and Fauna	54	29	65.1	34.9	6	3	66.7	33.3
23	Monitoring of Air Quality	16	0	100	0	4	0	100	0
24	Monitoring of Noise Quality	16	0	100	0	4	0	100	0
25	Monitoring of Soil Quality	16	0	100	0	4	0	100	0
26	Monitoring of Surface Water Quality	16	0	100	0	4	0	100	0
27	Monitoring of Drinking Water Quality	16	0	100	0	4	0	100	0
28	Deployment of Environment and Safety Supervisor	15	0	100	0	4	1	80	20
29	Complaints and Environmental Incidents	71	12	85.5	14.5	16	0	100	0
30	Reporting and Documentation	21	5	80.8	19.2	4	2	66.7	33.3
31	Training	0	0	0	0	0	0	0	0

N.B. - Report prepared with 5 twice monthly inspection reports of contractor wherein the time frame was not provided by the Contractor; it is assumed to be done in last quarter of 2017 since the Contractor received notice to commence on 12 July 2017 and monsoon season was in force.)

Table 4: Summary Package 02 Environmental Compliance/Non-Compliance Report

Environmental Elements	Types of Compliance, Non Compliance & Repeating Non Compliance	Total no. of compliance in Package 02 for the year	Total no. of non-compliance in Package 02 for the year	Total no. of repeating non-compliance in Package 02 for the year
Construction of Base Camp	Obtaining approval for facilities construction work	3	1	
	Erection of signboard in Bangla and English with project details	1	2	
	Install accommodation facilities Engineers and other staff / workers	1	3	
	Drainage channels installation	3	1	
	Supply of safe drinking water	3	0	
	Supply of adequate sanitation facilities	3	1	
	Safety fencing/Barriers and Entry Kiosks	3	1	
	Stack yard for plant and equipment	3	1	
	Construction of store room/warehouse	2	1	
	Temporary workshop facilities	0	1	
	Arrangement of sufficient lighting facilities in the camp area	1	0	
Fuel storage areas	Install hardstand and secondary containment	1	3	
	Firefighting equipment installation	2	0	
	Sand and shovel close-by	0	3	
	Regular checks on physical condition	1	2	
	Approval fuel storage	1	2	
Access road to the base camp	Obtaining approval	2	2	
	Construction of culverts if needed	1	2	
	Construction of temporary road	2	1	
Training	Environmental training on EMP will be arranged for Construction Field supervisors and staff	3	1	
Occupational Health and	Development of Health and Safety plan including emergency procedures	2	1	
	Train all staff in health and safety	2	1	

Environmental Elements	Types of Compliance, Non Compliance & Repeating Non Compliance	Total no. of compliance in Package 02 for the year	Total no. of non-compliance in Package 02 for the year	Total no. of repeating non-compliance in Package 02 for the year
Safety	Provision of HIV, including STI(Sexually Transmitted Infections) information, education and communication	0	3	
	Provision of PPE and ensuring their use	2	1	
	Provision and use of life jacket during visiting campsite/worksite by boat	1	2	
	Installation of first aid facilities at work site and camps with adequate stock	2	1	
	Provide sanitation facilities where needed	2	1	
	Provision of safe drinking water to work force (tube-well water, bottled water or pond water)	2	1	
	Proper signaling of work areas	0	1	
Public Health and Safety	Notification of the public adjacent to the construction areas	2	0	
	Installation of diversion signboard with warning for dedicated pathways for pedestrians	0	3	
	Proper signaling of work areas	0	3	
	Limitation of construction vehicles at public roads during peak hours.	0	3	
	The temporary traffic detours in settlement areas will be kept free of dust by frequent application of water	0	3	
	Construction activities will be undertaken according to during daylight working hours between the hours of 07:00-17:00 on week days	0	3	
Water Supply	Providing construction camps with portable water either through installing tubewells (hand pump, shallow and deep tubewell), pond Sand Filter (PSE) or supplying safe bottled water	3	1	
	Ensuring the location plan of tubewells (used for supplying potable water) that these are not sited near any sanitation facilities as to avoid water pollution	3	0	
	Maintaining the distance of a tubewell/surface water resource from a soak pit at minimum 15 m	2	1	
	Maintaining the drainage from the tubewell diverting into the drainage system of the camp area	2	1	

Environmental Elements	Types of Compliance, Non Compliance & Repeating Non Compliance	Total no. of compliance in Package 02 for the year	Total no. of non-compliance in Package 02 for the year	Total no. of repeating non-compliance in Package 02 for the year
	Providing separate tubewells for the use of women.	0	2	
	Providing suitable sanitation facilities for the workforce	3	0	
	Ensuring the location plan of the latrine at least 50 m away from the accommodation facility	3	1	
	Providing separate latrines for the use of women	3	1	
	Installing treatment facilities (i.e. septic tank, soak pits etc.) for the sewerage from toilet and camp site wastes.	2	2	
Sanitation	Arranging disposal of wastewater from washrooms, kitchens, s, etc. via the camp area's drainage system	1	3	
	Ensuring collection and disposal of solid wastes within the construction camps and work areas	1	3	
	Taking measure to collect and store inorganic wastes in a safe place within the household and organic wastes cleared on daily basis to waste collector.	1	3	
	Establish measures for Waste collection, transportation and disposal systems at approved disposal sites.	1	3	
Solid Waste Management	Disposal of construction and demolition waste.	1	2	
	Installation of decanter boxes for washing buckets and cement mixers	0	2	
	Installation of proper filtering elements.	0	2	
	Carrying out periodic checks and clean-ups for the decanter box.	0	3	
	Prioritize reuse of aggregates and water from the decanter box.	0	3	
Waste water	Ensure safe disposal of liquid wastes generated at camp site.	0	2	
	Regular maintenance of vehicles	2	1	
	Covering or wetting of dusty materials	1	3	
	Dust suppression by wetting surfaces	1	2	
	Impose speed limits	0	2	
Air	Revegetate bare surfaces soonest	0	2	

Environmental Elements	Types of Compliance, Non Compliance & Repeating Non Compliance	Total no. of compliance in Package 02 for the year	Total no. of non-compliance in Package 02 for the year	Total no. of repeating non-compliance in Package 02 for the year
Noise	Notify nearby population prior to any typical noise events	3	1	
	Ensure construction activities do not generate unacceptably high level of noise	3	0	
	Restrict working to daylight hours	3	1	
	Locate noisy equipment / facilities away from sensitive receptors	3	1	
Water and Hydrology	Preventing waste, soil, etc. entering in the water system by waste collection, re-vegetation and dust suppression etc.	0	3	
	Insure proper drainage of working areas e.g. perimeters lines must be provided with open shallow drains	0	3	
Monitoring of Drinking Water Quality	Performance of analyses on drinking water for: arsenic, iron, chloride and total faecal coliform bacteria.	0	3	
Deployment of Environment and Safety Supervisor	Employ one full-time Environment and Safety Supervisor for compliance monitoring of EMP	2	1	
Complaints and Environmental Incidents	Grievance Redress Mechanism will be established.	0	2	
	Complaints received from the public or other stakeholders will be registered and recorded and be brought to the attention of the Site Engineer.	0	2	
	All environmental incidents occurring on the site will be recorded and be brought to the attention of the Site Engineer.	0	2	
	Action will be taken within 7 working days.	0	2	
Reporting and Documentation	The following records will be kept at site: - Environmental Monitoring Results - Contractors self-assessment record/results - Register of non-compliance - Register of corrective actions - Monthly Environmental Reports	0	2	

2.2.4 Tracking of number of trees by species needed to cut for CEIP-1

Third Party M&E Consultants requested DDSC&PMSC to send the data base if their sub-contractor KMC maintains one for the number of trees by species. As of this writing, no response was received from DDSC&PMSC. Therefore, the M&E Consultants don't know if this is being tracked or not. If the data has not been maintained it will be difficult to define the mitigation measures as certain species require replacement and others do not and certain species enjoy special protection. It is recommended these records be maintained if not already being done.

2.2.5 Grievance Redress Mechanism

Several social and environmental issues may arise during implementation stages of the Project. Following are some of the environmental issues that could be subjected to grievances from the affected people, concerned public, construction workers and civil society members:

- Soil, water, dust, noise and air pollution from construction related activities;
- Traffic movement and congestion;
- Lack of adequate safety at the construction areas and approach roads;
- Lack of water and sanitation facilities at the construction sites/camps;
- Waste disposal;
- Conflicts among construction workers and with local community;
- Disturbances to flora and fauna;
- Failure to comply with standards or contractual obligations.

Of course the GRM will also entertain concerns about matters of resettlement and land acquisition including livelihood restoration.

In order to facilitate the resolution of affected people's concerns, complaints, and grievances about the social and environmental performance of the project, a Grievance Redress Mechanism (GRM) has been established which aims to provide a time bound and transparent mechanism to voice and resolve social and environmental concerns. The CEIP-1 has designed the GRM and the PMU with assistance of the DDSC&PMSC's team has been putting it in place. The grievance mechanism has been scaled to the risks and adverse impacts of the project. It has addressed affected people's concerns and complaints promptly, using an understandable and transparent process that is gender responsive, culturally appropriate, and readily accessible to all segments of the affected people at no cost and without retribution. The mechanism does not impede access to the country's judicial or administrative remedies.

The affected people were appropriately informed about the detailed mechanism by a Bengali-language brochure. The GRM Process is depicted in Figure 1.

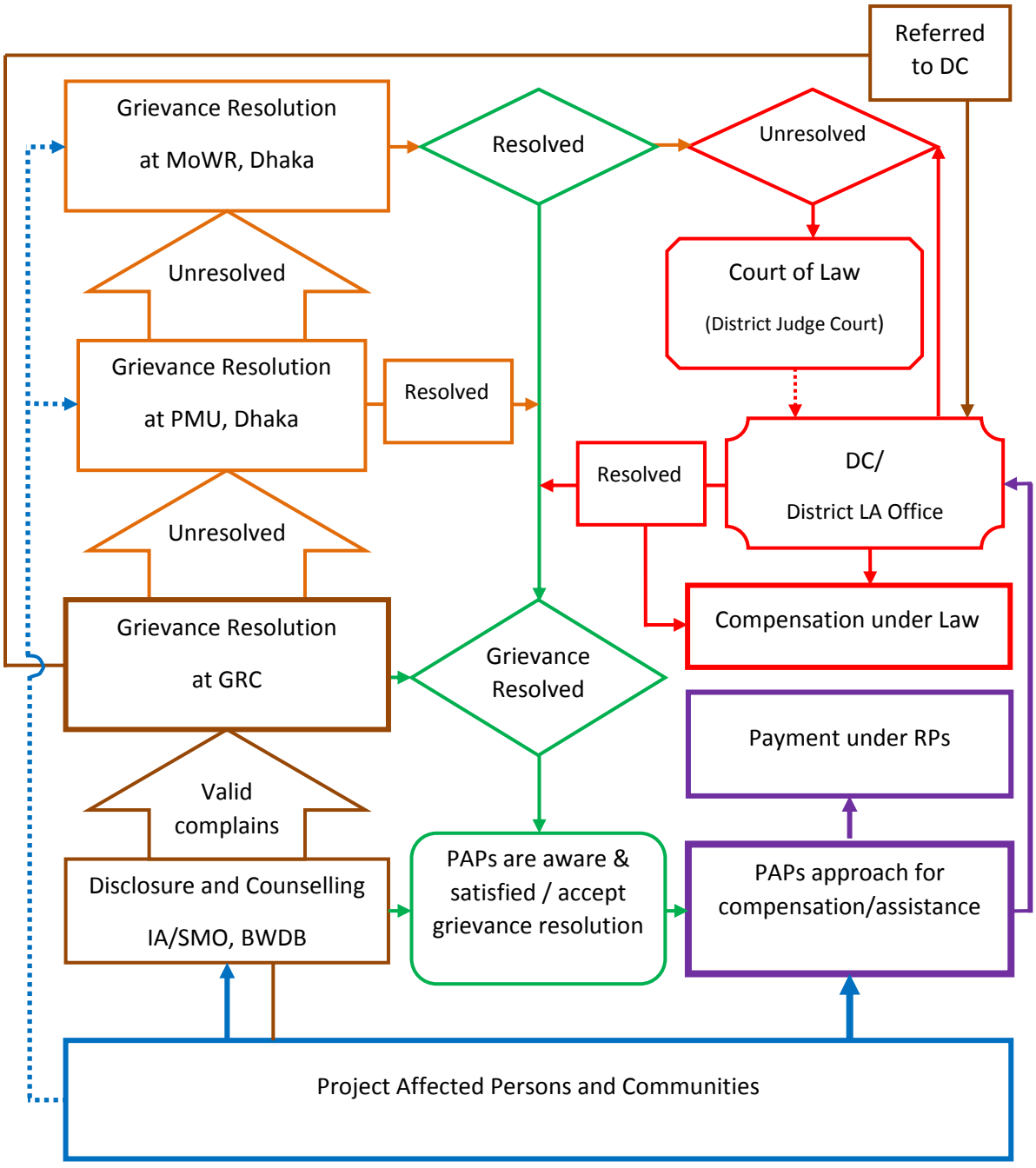


Figure 1: GRM Process Flow Chart

The Project Management Unit (PMU) and Project Implementation Organizations (PIOs) are making the public aware of the GRM through public awareness campaigns by its Resettlement Action Plan (RAP) implementing Team. The contact phone number of the respective PIOs and the PMU is serving as a

hotline for complaints and have been publicized through the media and placed on notice boards outside their offices and at construction sites. The project information brochure including information on the GRM is being widely disseminated throughout the embankment by the RAP implementing team and PIOs. Grievances can be filed in writing to any member of the Committee.

One GRC has been formed for each Union with union level representation to ensure easy accessibility by the project affected persons and communities as comprised below:

Membership of GRC

1. Executive Engineer (BWDB Division Office) : Convener
2. Representative of the RAP Implementing NGO : Member -Secretary
3. Local UP Member / Ward Council Member : Member
4. Teacher from Local Educational Institution (nominated by Upazila Administration) : Member
5. Representative from Local Women's Group : Member
6. Representative from the PAP Group : Member

2.2.4.1. Grievance Redress Mechanism (GRM) for Package-01

There are 15 Grievance Redress Committees (GRC) at local level for Package 01 out of 15 GRCs required. These GRCs have been formed earlier at each Union of all Polders under Package 01 with the representatives of BWDB, Union Parishad, educational institute, PAPs and DDCS&PMS Consultants. The Project's stated target is to try to resolve all cases within four weeks from the date of GRC receiving the complaint and trying to resolve the cases locally.

A total number of 134 complaints/grievances have been received up to December 2017 by GRC. Among those, 20 cases have been resolved at the entry level, 94 cases have been resolved through investigation and formal hearing by GRC. The remaining 20 cases have been placed for further field investigation. Table-10 shows the status of complaints/cases received and resolved so far by GRC.

Table 5: Summary of Disposition of Grievances

Sl. No.	District	Polder no	Total Complaints/ cases	Resolved by field level investigation	Resolved by GRC	Pending with GRC
1	Khulna	32	36	7	29	0
2	Khulna	33	14	8	06	0
3	Bagerhat	35/1	20	1	19	0
4	Bagerhat	35/3	64	4	40	20
		Total	**134**	**20**	**94**	**20**

Source: MPR, December 2017, DDCS&PMS Consultants

Though awareness raising of the GRM covers both social and environmental concerns, no grievance has been registered specific to environmental issues till now. The environmental hazards caused during construction are being minimized and are localized which local people generally tolerate as they consider that the project will provide many benefits to them. Consultant has instructed the Contractor to avoid and/or mitigate even the minor and localized pollution.

2.2.4.2. Grievance Redress Mechanism (GRM) for Package-02

Union-wise GRCs have been established between August and October 2017 in the Package 02 Polders (39/2C, 40/2, 41/1, 43/2C, 47/2 and 48). Table-12 lists the 21 GRCs for Package 02 polder-wise.

Table 6: Polder-wise Date of Establishment and Location of Grievance Redress Committees of Package 02

Sl. No.	Polder Name	Number of Committees	Location	Date of Formation
1.	39/2C	9	Bhandaria Pourosova, Bhandaria Pirojpur	05/10/2017
2.			1 No. Vitabaria Union, Bhandaria Pirojpur	05/10/2017
3.			2 No. Nadmullah Shialkathi Union, Bhandaria, Pirojpur	05/10/2017
4.			3 No. Telikhali Union, Bhandaria, Pirojpur	05/10/2017
5.			4 No. Ekri Union, Bhandaria, Pirojpur	05/10/2017
6.			5 No. Dhawa Union, Bhandaria, Pirojpur	05/10/2017
7.			2 No. Dhanisafa Union, Mothbaria, Pirojpur	05/10/2017
8.			3 No. Mirukhali Union, Mothbaria, Pirojpur	05/10/2017
9.			1 No. Chechri Rampur, Union, Mothbaria, Pirojpur	05/10/2017
10.	40/2	3	Pathorghata Pourasova, Pathorghata Barguna	30/08/2017
11.			Charduani Union, Pathorghata Barguna	30/08/2017
12.			4 No. Pathorghata Union, Pathorghata, Barguna	30/08/2017
13.	41/1	3	Barguna Pourosova, Barguna	30/08/2017
14.			5 No. Aila Patakata Union, Barguna	30/08/2017
15.			6 No. Burir Char Union, Barguna	30/08/2017
16.	43/2C	2	Amkhola Union, Golachipa, Patuakhali	27/08/2017
17.			Golkhali Union, Golachipa, Patuakhali	27/08/2017
18.	47/2	1	Dalbu Gonj Union, Kolapara, Patuakhali	07/09/2017
19.	48	3	Kuakata Pourosova, Patuakhali	07/09/2017
20.			Dhulashar Union, Kolapara, Patuakhali	07/09/2017
21.			Lotachapli Union, Kolapara, Patuakhali	07/09/2017

2.2.6 Monitoring Testing results

2.2.5.1. Package 01

During the period covered by the audit, no monitoring testing has been conducted by the Package 01 Contractor except noise level though it is clearly mentioned in the EMPs of the polders that environmental monitoring testing is to be carried out and the Contractor's EAPs also spelled out their obligation with regard to type of testing to be done and frequency. The audit recommends the

monitoring tests for surface water, drinking water, soil and air quality be carried out as specified in the EMPs. Before conducting the tests, the sites should specified and the test should be conducted from the same sites over the project period to monitor the impacts/ changes.

2.2.5.2. Package 02

The work of the Package 02 has commenced several months ago, but almost no monitoring testing has been conducted (the exception being noise level testing). The audit recommends the monitoring test for surface water, drinking water, soil and air quality be carried out as specified in the EMPs. Before conducting the tests, the sites should be specified and the test should be conducted from the same sites over the project period to monitor the impacts/ changes.

For both Package 01 and 02: The audit found that noise level of some places have been measured but those are not sufficient and the results have not been reported for the most part (only a few by the Package 01 Contractor). Hence, the audit recommends to measure noise level from various places in worksites and nearby the work sites in communities (key receptor sites) on a weekly basis and maintaining a proper reporting system.

2.2.7 Contractor's Emergency Response Plan

2.2.7.1 Package 01

The Contractor has prepared its emergency response plan to ensure the implementation of the occupation health, safety standards of the Project and as stipulated in the company's environment, occupation health and safety policy. These standards aim to form a safe, healthy, civilized, clean and tidy cultural environment in the entire Project, and to continuously improve the management level of engineering construction. It is designed to guide rapid response to the potential EHS emergencies (natural and accidental) that might occur due to project activities or natural disasters. At the same time, it will minimize the damage and loss to the personnel, local inhabitants and the company. This plan cites emergency resources, emergency plans in case of accidents, prevention of causalities, emergency response procedures and site emergency and rescue procedures for fire emergency, height falls, mechanical injury, lifting damage, and electric shock accident, emergency measures for a collapse accident, traffic accident and heat stroke. It also covers environmental management and control measures for dust control, noise control, solid waste control, control of water and air pollution. The plan also reveals how the Contractor will improve its emergency rescue ability and strengthening safety

education of project staffs. The Audit Team finds that the plan is a helpful document, which will reduce the EHS risks. On the other hand, the Team also recommends that the Contractor facilitate training for its staff on the emergency response plan so that they are conversant with its contents.

2.2.7.2. Package 02

The Contractor 02 has also prepared its emergency plan and from the audit it is found comprehensive and good document to face a wide variety of emergency situations. The Team also recommends that the Contractor facilitate training for its staff on the emergency plan so that they are conversant with its contents.

2.3 Environmental staff resources

For implementation, supervision and monitoring of EMP compliance, the following staff resources have been deployed.

Table 7: Environmental, Health and Safety Personnel

SI	Name and the position of the relevant staff	Hired Date	Current Status	Roles	Reason for not being hired	Expected hiring date
	Contractor of Package 01					
1	Jia Kai Quality Control and Environment, Health and Safety Officer-in-Charge	15.11.2015	Working continuously till now	Monitor EHS for all 4 Polders and oversee all EHS related staff and activities	NA	NA
2	Ren Gaofei Environment, Health and Safety in-charge	11.11.2016	Working continuously till now	In-charge all EHS related activities for all 4 Polders	NA	NA
3	Dr. Kazi ABM Mohiuddin Environmental Consultant for CEIP-1 Works Package 01; and Associate Professor, Civil Engineering, Khulna University of Engineering and Technology (KUET).	10.12.2016	Intermittent	Monitor EHS for all 4 Polders	NA	NA
4	Muhammad Shah Alam Environmental Engineer	10.12.2016	Working continuously till now	Monitor EHS in all 4 Polders	NA	NA
5	Wei Lei Polder Manager with additional charge as Environmental & Safety Officer	Oct 2015, but given ESO duty during Jul-Dec 2017	Working continuously till now	Maintains EHS standard at Polder 32	NA	NA
6	Xing Zhang Sheng Chief Engineer with additional	Nov 2015, but given	Working continuously	Maintains EHS standard at Polder 33	NA	NA

SI	Name and the position of the relevant staff	Hired Date	Current Status	Roles	Reason for not being hired	Expected hiring date
	charge as Environmental & Safety Officer	ESO duty during Jul-Dec 2017	till now			
7	Guo Zhonglin Polder Manager with additional charge as Environmental & Safety Officer	Oct 2015, but given ESO duty during Jul-Dec 2017	Working continuously till now	Maintains EHS standard at Polder 35/1	NA	NA
8	Li Jufeng Chief Engineer with additional charge as Environmental & Safety Officer	Oct 2015, but given ESO duty during Jul-Dec 2017	Working continuously till now	Maintains EHS standard at Polder 35/3	NA	NA
9	Liu Pengfei Quality Control and Health and Safety Engineer	25.04.2016	Working continuously till now	Maintains EHS standard at Rupsha CC Block Casting Yard at Polder 32	NA	NA
10	Li Qingyong Quality Control and Health and Safety Engineer	10.11.2016	Working continuously till now	Maintains EHS standard at Mongla CC Block Casting Yard at Polder 33	NA	NA
11	Li Bo-Quality Control and Health and Safety Engineer	23.06.2017	Working continuously till now	Maintains EHS standard at Tafalbari CC Block Casting Yard at Polder 35/1	NA	NA
12	Yang Yonghui Quality Control and Health and Safety Engineer	16.11.2016	Working continuously till now	Maintains EHS standard at Doratana CC Block casting yard at Polder 35/3	NA	NA
	Contractor of Package-2					
1	Wang Shihong, Construction quality Control and Environment, Health and Safety Officer-in-Charge	05.08.2017	Working continuously till now	Maintains EHS standard at Polder 39/2C cast yard	NA	NA
2	Fang Zheng Construction quality Control and Environment, Health and Safety Officer-in-Charge	01.12.2017	Presently in China and waiting for availability of visa	Maintains EHS standard at Polder 41/1 casting yard	NA	NA
3	He Yongxiang interpreter and Environment, Health and Safety Officer-in-Charge	01.12.2017	Presently in China and waiting for availability of visa	Maintains EHS standard at Polder 40/2 casting yard	NA	NA
4	Ahamed Faruk Environment, Health and Safety Officer-in-Charge	06.06.2017	Working continuously till now	Maintains EHS standard at Polder 47/2 casting yard	NA	NA

SI	Name and the position of the relevant staff	Hired Date	Current Status	Roles	Reason for not being hired	Expected hiring date
5	Khondoker Anisur Rahman Environment, Health and Safety Officer-in-Charge	12.07.2017	Working continuously till now	Maintains EHS standard at Polder 48 casting yard	NA	NA
	DDSC &PMS Consultant					
1	Anders Malgrem Hansen, Environmental Specialist	17.02.2015	Working intermittently	Reviews and prepares EIA reports and other environmental documents	NA	NA
2	Dr. S.M.A. Rashid Environmental Specialist	22.02.2015	Working Intermittently	Reviews and prepares EIA reports	NA	NA
3	Abu Bakr Siddique Environmental Specialist	01.03.2016	Working continuously till now	Prepares and reviews environmental documents, imparts Env. training and conducts environ-mental monitoring.	NA	NA
4	Henk Blok, Environmental Specialist	21.03.2016	Working intermittently	Prepares env'tal training materials, imparts environ-mental training, moni-tors environmental quality and reviews environmental reports & documents	NA	NA
	Third Party M&E Consultants					
1	AKM Rezaul Haque Khan National Environmental Specialist	January 12, 2017	Working intermittently as input is intermittent	Review and prepare documents, monitor processes and evaluate impacts CEIP-1	NA	NA
2	Dr. Abu Murshid International Environmental Specialist	November 10, 2015	Working intermittently as input is intermittent	Provide senior level guidance for review and preparation of documents, monitor processes and evaluate impacts CEIP-1	NA	NA
	Independent Panel of Experts (IPoE)					
1	Dr. Ainun Nishat IPoE for Environment, Water Management and Polder Expert	23 March 2015.	Consultant in place since 23 March 2015.	All packages. Periodic review of EMF/EIA/EMP implementation difficulties and advice to make the implementation more effective.	NA	NA

SI	Name and the position of the relevant staff	Hired Date	Current Status	Roles	Reason for not being hired	Expected hiring date
2	Dr. Hafiza Khatun IPoE, Social Expert	August 2017	Consultant in place since August 2017.	All packages. Periodic review of SMRPF, RAP, livelihoods, social mobilization implementation difficulties and advice to make the implementation more effective.	NA	NA
3	IPoE, Coastal Morphologist and Estuarine/Tidal Hydraulics Expert	NA	In process of recruitment	To assist in engineering design	Only one CV was received by Sep 2017 deadline. Fresh call for CVs underway.	June 2018
4	IPoE, Hydrodynamics and Coastal Modeling Expert	NA	In process of recruitment	To assist in engineering design	Only one CV was received by Sep 2017 deadline. Fresh call for CVs underway.	June 2018
5	IPoE, Design Expert in Embankment and Hydraulic Structures	NA	In process of recruitment	To assist in engineering design	Only two CVs were received by Sep 2017 deadline. Fresh call for CVs underway.	June 2018
	Project Management Unit (PMU)					
1	Dr. Ashadul Alam PMU Sr. Environmental Specialist – national	13 Apr, 2015	Consultant in place since 13 Apr 2015	All packages Provide senior level guidance for review and preparation of documents, monitor processes and evaluate impacts CEIP-1	NA	NA
2	Mr. Mustafizur Rahman PMU Sr. Social Specialist	August 7, 2017	Consultant in place since 07 August 2017	All packages. Supervise and monitor SMRPF, RAP, LAP, livelihoods, social mobilization implementation	NA	NA

SI	Name and the position of the relevant staff	Hired Date	Current Status	Roles	Reason for not being hired	Expected hiring date
3	Mr. Akbar Hossain PMU Sr. Forestry Specialist	August 3, 2017	Consultant in place since 03 August 2017	All packages. Guide, advise and monitor the implementation of the foreshore and social forestry aspects	NA	NA
4	Mr. Zahir Uddin PMU Social Specialist/ Economist (field)	July 20, 2017	Consultant in place since 20 July 2017	All packages. Monitor at field level RAP, LAP, livelihoods, social mobilization implementation	NA	NA
5	PMU Environmental Specialist (field)	October 30, 2017	Consultant in place since 30 October 2017	All packages. Monitor at field level EMF/EIA/EMP implementation	NA	NA
6	Communication Officer	NA	Negotiation proceeding with 2nd ranked candidate in second round of recruitment	To set up two-way channels of communication with major stakeholder groups to enhance overall effectiveness of CEIP-1. This will include advocacy, knowledge dissemination and outreach.	In 1st recruitment effort, the candidate did not mobilize despite having signed contract. In 2nd round, the first ranked candidate also recently withdrew. 2nd ranked candidate in negotiation.	March 2018

2.4 Necessary equipment and arrangements for environmental monitoring and testing

The Audit Team offered the Package 01 Contractor the opportunity to demonstrate their sample collection techniques for the testing and demonstration was conducted by the contractor staff the audit found the sample collection procedure in good manner. The Contractor conducted the monitoring test by sending the sample collected by themselves and sent to Consultancy for Research and Training Services (CRTS) by the Contractor and the actual tests were being conducted by CRTS of KUET last year.

The next set of monitoring test will be carried out by the CRTS and contractor is recommended to do sample collection by the person who will be responsible to conduct the tests.

The Package 02 Contractor is planning to conduct the tests for drinking water by DPHE but they don't yet have a plan for who will conduct the other tests.

2.5 Staff awareness and training

The Package 01 Contractor has conducted a robust program of monthly environmental training during the January-December 2017 period. More than 10,500 participants (staff and workers) were trained, allowing for double-counting wherein one person may have been trained more than once as would be the case for refresher training or training in additional topics. Please see table below for the breakdown:

Table 8: Number of Package 01 Participants (Staff and Workers) Receiving Environmental Training During 2017

Polder	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2017 Total
32	176	183	169	183	169	183	169	215	215	176	169	158	**2,165**
33	197	190	197	190	192	190	197	163	192	190	197	176	**2,271**
35/1	259	245	259	245	259	245	263	197	222	263	280	341	**3,078**
35/3	281	281	281	259	281	259	281	323	269	269	247	235	**3,266**
Total	**913**	**899**	**906**	**877**	**901**	**877**	**910**	**898**	**898**	**898**	**893**	**910**	**10,780**

The following major topics have been discussed during the training sessions.

- Environmental Management in the CEIP-1
- Environmental Health and Safety
- Environmental Monitoring
- Reporting

For the purpose, the Contractor's Environmental Specialists (International) train the international workers at all locations of 4 Polders on requirement and techniques of EMP compliance in the light of EAP as refreshing of the previous training. Chinese workers are being trained in the Chinese language. Afterwards, the local workers are also trained on the EMP issues in Bangla with the assistance of a translator, who is a Bangladeshi Environmental Specialist, appointed by the Contractor.

A training session on issues of EHS has been carried out during a field visit from 25-28 October 2017 in Polder areas of Package 2. The project-concerned engineers, surveyors, supervisors, foremen, translators, Quality Control Engineers and Managers etc. (comprised of both Chinese and local staff) were present in the discussion sessions to be aware and motivated on the compliance of environmental issues during project activities. These trainings were organized jointly by DDCS&PMS Consultants and

Contractor with the assistance of Senior Environmental Specialist PMU, BWDB, in Polder 39/2C, Polder 41/1, Polder 47/2 and Polder 48, where the numbers of participants were 20, 11, 17 and 14 respectively.

During the audit it was found that some of the toolbox talks (to discuss the EHS issues and practices that should be followed by and giving advice on continuous improvement) have been held in the work sites of Package 01 areas and the Contractor 02 has been doing these more than Package 01. It is recommended to carry out the toolbox talks daily by the both contractors.

The audit team found the DDSC&PMSC, PMU and the contractors don't have specified training plan for the future the plan which found was generic.

2.6 Funding resources

As part of the implementation of EMP approximately BDT 6 crore (about $750,000) is earmarked for each Package W-01 and Package W-02, though many more items for environmental monitoring and mitigation are included in Package W-02. Expenditures are being incurred for:

- Emergency works for breach of embankment and damaged structures;
- Crop compensation to the direct loser, land owner/share croppers of construction site/ damaged due to dredge spoils;
- Waste disposal arrangement at construction site;
- Water quality monitoring;
- Air and noise quality monitoring analysis;
- Soil and water salinity monitoring cost;
- Conservation and stocking of threatened fish species;
- Management of soil health by replacing back in agricultural land;
- Reducing erosion through proper compaction, turfing;
- Afforestation along the dyke side to reduce erosion and threat of climatic events.

For Package 01, an amount of Tk. 37,171,180.52 up to IPC 8 have been paid (by December 2017) under the provisional sum BoQ item for EMP out of a maximum budget of Tk. 60,200,000. Works consists of minor earthworks, compaction and positioning of geo-bags (175 kg). Other items of EMP components are also in various stages of utilization.

For Package 02, works (mainly emergency works) have been undertaken that draw on the EMP provisional sum of Tk. 64,364,491, but no IPC has been submitted for these works as of December 2017.

2.7 Actual implementation/ practice level

2.7.1 Review of achievement status of Action Items from the Aide Memoires

The following tables represent the achievement status of specific action items raised in Aide Memories of World Bank missions during the audit period:

Table 9: Agreed Actions for automated CC block plants

SI	Proposed Actions	Responsibility	Agreed Timeline	Status	Remarks
1	Marking of forklift area and pedestrian area at work sites	Contractor	Dec 31, 2017	Resolved	Found in the visited sites but need to erect written signboard to draw attention for using by the pedestrians
2	Excavation of contaminated soil at Polder 35/1	Contractor	Nov 30, 2017	Resoled	
3	Provide pavement at ASTs of heavy oil and change the location of electrical outlet and fueling device at Polder 35/1	Contractor	Dec 31, 2017	Partially	Only pavement was not provided since the audit time
4	100% use of PPEs at CC block casting area	Contractor	Nov 30, 2017	Improved	Not 100% in practice
5	Noise- (1) Check machine manufacturer on the potential noise and dust reduction from casting machine, (2) monitor noise level at closest houses from the CC block sites, (3) Regular health check	Contractor	Dec 31, 2017	Partial	Health Check was not done since the audit period
6	Provide fence around hopper of casting machine	Contractor	Dec 31, 2017	Resolved	
7	Provide a fence around a pond of water used as a material or replace with water tank in Polder 33 CC block plant. Electrical cable must be properly installed.	Contractor	Dec 31, 2017	Resolved	

Table 10: Agreed Actions for Works Other than CC Manufacturing

SI	Proposed Actions	Responsibility	Agreed Timeline	Status	Remarks
8	Establish forklift area and workers standing area at barge.	Contractor	Dec 31, 2017	Resolved	Found in visited site
9	Develop forklift safety procedure and its implementation	Contractor	Dec 31, 2017	Partial	Safety procedure manuals have been developed and only found in one CC block plants. Need to place in all relevant worksites
10	Noise- (1) monitor noise level at closest houses from generators and (2) provide noise barrier if necessary	Contractor	Dec 31, 2017	Resolved	
11	Provide clear demarcation/fence to clarify the project area and control the unauthorized access to the project site. Sign to prevent unauthorized entry should be placed. If fishing community exists around the project sites, no fishing zone should be placed for safety.	Contractor	Dec 31, 2017	Resolved	
12	Oil & Chemicals – provide secondary containment where oils/chemicals are used. Oil & chemical storage areas should be established at a work site. Display safety signs.	Contractor	Dec 31, 2017	Resolved	

Table 11: Agreed Actions to Improve EHS management System

SI	Proposed Actions	Responsibility	Agreed Timeline	Status	Remarks
13	Establish EHS committee of CEIP and hold monthly meeting	PMU/DDCS&PMSC Consultants	Nov 23, 2017	Resolved	3rd Monthly Meeting held in Package 01 and Package 02 areas during the field visit of audit
14	Revise C-ESMPs Incorporating our comments provided earlier and our findings in this mission	Contractor	Dec 31, 2017	Submitted	The revised C-ESMP has been submitted to DDSC and PMSC
15	Translation of C-ESMPs into Chinese for all Polders	Contractor	Jan 31, 2018	Resolved	
16	Appointment of qualified EHS managers for each polder and conduct toolbox talk every day	Contractor	Jan 31, 2018	Partial	The staffs proposed to DDSC& PMSC are for additional charge
17	Conduct EHS risk/impact assessment and to develop EHS management plan for each automated CC block plant.	Contractor (external consultant)	Jan 31, 2018	Pending	During the audit, it was found the contractor entry level EHS staff doing the task, no external consultant hired and there is no plan of contractor to do so
18	Conduct HS risk assessment and to develop HS management plan for each polder (e.g. barge, sluice, embankment)	Contractor (external consultant)	Jan 31, 2018	Pending	During the audit, it was found the contractor entry level EHS staff doing the task, no external consultant hired

SI	Proposed Actions	Responsibility	Agreed Timeline	Status	Remarks
					and there is no plan of contractor to hire one.
19	EHS Training for management and EHS managers (Class and at the sites)	PMU/DDCS&PMSC Consultants	Feb 28, 2018	Continued	
20	Ensure implementation of all the actions	PD	Continuous	Continues	

Table 12: Aide Memoire Review of May, 2017 Safeguard Mission

Location: Daratana, CC Block Manufacturing Plant

SI	Proposed Actions	Status
1	Discharges from the plant should not be disposed directly to the river, rather they can be disposed to an excavated pond, which need to be treated/decanted before final disposal to the river.	Resolved
2	Speed limit of vehicles inside the plant (specially the CC block carrying fork lifters) should not exceed 15km/hr. and signboard to be erected	Resolved
3	More effective ear-plug to be used for the workers involved directly in the cc block production site	Resolved
4	A signboard to be erected mentioning the name and addresses (position, mobile no. etc.) of the person responsible for environmental and health safety issues	Resolved
5	Reduction of working hour of the workers working exclusively near the CC plant through shifting	The option was not preferable to the workers but the risk was reduced through providing effective ear plug
6	Selective special mask to be provided to the workers involved close-by the plant/conveyer belt site	Provided
7	Fencing of the CC plant to be done as noise barrier to check noise pollution of the adjacent nearby habitation	Resolved

Sl	Proposed Actions	Status
8	A signboard of the fuel storage with its capacity to be erected and the secondary container must have at least 110% capacity of quantity of fuel storage.	Resolved
9	A responsible person will take key of the power sub-station from a particular person and he will return the key after finishing the job	Resolved
10	Provide a sub-container it the fuel storage system (under-liner) to capture any drip or leakage from the outlet valve	Resolved

2.7.2 Polder-specific field observations

Package 01

Polder 32 and 33

The audit team audited the practice level of EMP implementation with the works of CC block manufacturing plant, base camp of the contractor, and selected sites of completed embankment work in polder 32 and 33 areas. The audit team found as follows:

- Required PPE was available, including a dedicated place to keep PPE (table) with pictorial signage (the signage and the table needed to take in same location) in the Rupsha CC block manufacturing plant of Polder 32.
- Wall-mounted fire extinguishers with protection boxes and safety signage were in place in the Rupsha CC block manufacturing plant of Polder 32.
- In the CC block manufacturing plant, there were the wall mounted Safety Operating Procedure Manuals for Forklift
- The conveyor belt had the cover over it and the waste management system for the left over materials with the plant improved
- In the office of CC block manufacturing plant, the documents and records which were found: English and Chinese version of EAP for Polder 32, English and Bengali version of EIA of Polder 32, Project's EMF, Noise monitoring record (the monitoring and record keeping for noise level was

not found adequate, it should be increased), accident record register, compliance register (keeping the findings of the visitors with recommendations to improve the things)

- The audit team didn't find any of the record of noise level monitoring from the nearby households (HHs) of CC block manufacturing plants and the team suggest to measure the noise level from the nearby HHs and to take mitigation measures if the noise level exceeds the standard

- The team observed and assume from the visit that the workers don't always wear the required PPE and it was found they have been starting use of it while the team visiting. So, it is highly recommended to ensure use of all required PPE in every working moments

- The pedestrians' passage and forklift way has been separated but the signage to make the pedestrians understand about the passage was not erected. The audit team suggests to make sure it is in place.

- The base camp of Contractor for Polder 32 found with adequate number of wall-mounted fire extinguishers with protection boxes, first aid boxes with adequate medicine, proper water sanitation facilities, proper signboard and warning messages and signage where required. The documents/ records found in the camp are English and Chinese version of EAP of Polder 32, the Project's EMF, EIA and accident register. Empty fuel drum found nearby the kitchen which could create fire risks. It is recommended to maintain the proper storage in the base camp areas.

- The completed earth works around chainage 22+0.400 km in Polder 32 and Abad village of Polder 33 were visited. The audit found turfing work not done yet though the earthworks were completed during Jan-April 2017. From the discussion with contractor it was revealed that scarcity of large volume of grasses is challenging and this is the reason to do these tasks with a delay. The audit team recommend to accomplish the turfing work immediate after the earth work is done to control the erosion and prevent pollution of rivers from runoff. DDSC&PMSC could suggest a viable solution to do the work within an appropriate time period (e,g., import grass seed or bring it in from elsewhere in Bangladesh).

The work of the day planned for polder 32 and 33 was disrupted a bit due to a speed boat accident that involved the audit team. The audit team suggests that the contractor ensure professional speed boat

drivers are hired, ensure that speed boat which runs has good fitness and to ensure adequate number of life vests in the speed boats.

Polder 35/1

The sites visited by the audit team in the Polder 35/1 areas are river bank protection work (CC block dumping) at 3+0.360 to 3+0.380 km, Tafalbari CC block manufacturing plant yard, FS-05, DS-05, and FS-12 (near Sundarbans). The findings from the audit in this polder are:

- During the CC block dumping work, the workers were found using adequate PPE (e.g. ear plug, adequate number of life jackets, etc.). There was safe drinking water for workers and there were separated areas for forklift moving and standing place for the workers. The ear plugs which were being used by the workers seemed not to be appropriate to protect the workers from the generated noise. It is recommended to ensure improved ear plugs or ear muffs in such work sites. The traffic man in the barge was found with no flag; it is also recommended to use the flag for signaling purpose in barges. The Forklift Safety Procedure Manual was not in place and the team recommends to keep it in place. The sleeping room of the watchman in the barge was found to have fuel containers and the audit suggest to keep fuel containers in separate place in the interest of safety.

- In the Tafalbari CC block manufacturing plant, there were separated forklift and pedestrians' ways, adequate numbers of signboards, warning signage, signage of speed limit, separate fuel storage, adequate numbers of fire extinguishers with protection from sun/ rain, required PPE, supply of safe drinking water. The cover has been installed over the conveyor belt of the plant and a well-managed decanted ditch was observed for the effluent water from the plant to control dust, and sprinkling of water was observed inside the plant premises. It was revealed that workers are reluctant to use PPE to some extent, for example while the forklift driver was running the vehicle he was not wearing the mask and when the audit team tried to talk with him then he took the mask from his pocket. The audit team felt the use of PPE should be enforced by the EHS personnel and awareness should be raised among the workers by regular toolbox talk. The fuel storage was found with outlet pipe outside of the store room as required and the electric board was also outside the room. There were also separated store place for the empty containers of the fuel. But the audit found the floor of the fuel storage room to be bare earth; the audit team recommends a pavement floor be installed to avoid ground water/ soil pollution

in case of any emergency. There were two sets of latrines in the plant premises for the workers. The set of latrines near to the main gate provided separate latrines for male and female. During the last annual environmental audit, it was found the latrine were directly opened to a drain which was connected to nearby community ditch and a pond. This year, the audit found that the latrines have been provisioned with a septic tank, which is an improvement, but the septic tank has leaks and it is opened to the drain which is connected to community ditch and pond. The audit team highly recommends to ensure that no wastes from the latrines are going to open drain, ditch and pond. The second set of latrines to other side of the manufacturing site were also found to be directly open to the main drainages system of the plant areas. The same measures should be taken as recommended for the first set of latrines. The drainage system with the plant areas was found not confined and the outlet of the drainage system is opened to the agriculture land. The audit team recommends to ensure that the local farmers are not disturbed by the water from the drain, to conduct water quality parameter tests to make sure that the parameters are within permissible standard limit for agriculture purpose or as another option to make decanted ditches to the outlets and test the water quality before discharging to nearby water body or land. The workshop in the CC block manufacturing plant should be more organized rather than keeping different materials haphazardly. The audit team found the masks used by the workers for welding purpose is not appropriate to ensure the safety as the welding gas could pose health risk for the worker and contractor should provide the improved masks for this particular type of work. A fuel drum was observed within the room of Geo-bag premises and the audit team recommends to store the fuel drum in a dedicated store room. The electric board box found with opened door in the workshop premises which needs to be closed to avoid risks. The audit suggests to measure the noise level from the nearby community HHs and keep records of the results. If it is found exceeding the limit, then the mitigation measures should be taken. There were separated waste collection bins both for the recyclable and non-recyclable wasted and a dumping point. But from the observation, it was not clear about the ultimate destination of the wastes. The contractor should look explore appropriate options for the waste management.

- In the worksite of FS05, there were adequate numbers of signboard and safety signals, warning messages with symbol, proper fencing and pedestrian alternative walkway. Workers were using the required PPE, there were first aid box with medicine, fire extinguisher, supply of safe drinking water, waste collection bins. The generator in the worksite found opened rather

keeping under fence which could be risky for the pedestrians and especially for the children and noise level to the surrounding areas could be high. So, it is recommended to keep the generator in a closed room (or sound-dampening enclosure) rather keeping it in the open. There is a latrine for the workers on the river bank and the distance between the latrine pit and river water is around 10 feet range which has risk to contaminate the river water. It is highly recommended to ensure that any latrine installation maintains a minimum distance of 10 meter (standard of Department of Public Health Engineering, Bangladesh) from nearby water source for any of the worksites.

- During the visit in DS05, it was found workers using PPE but it was also observed that hand gloves were not used by the workers who were dealing with metallic rods. Gloves should be used by the workers for such work. Electric wire found on the ground which need to hang with bamboo pole to avoid risks.

- Worksite of FS 12 (worksite near Sundarbans) was visited which is second nearest work site of Package 01 to Sundarbans. The approximate distance of the Mangrove forest Sundarbans from the worksite is around 1.25 to 1.50 km. The activity **does not affect the Sundarbans Mangrove Forest** and its inhabitants especially the Royal Bengal Tigers and deer. Most of the tigers keep themselves deep within the forest, which is about 5-6 kms from the Polder 35/1 and FS 12. Moreover, the villagers have regularly come to the Sundarbans Forest to collect honey and Golpata over many years. They also require Sunduri trees for construction purposes as the support posts for their structures are from Sunduri trees.

  CEIP-1 has promoted the protection of the Sundarbans by:

  1. Prohibiting any project-related staff to enter the Sundarbans
  2. Training staff for awareness of the environmental importance of Sundarbans
  3. Contractor prohibiting all his employees from doing any activities which will have an adverse impact to the environment of Sundarbans, such as making high noise, dumping wasted water to the river, etc.

  During the visit, it was observed that generally workers are using PPE but those dealing with sand, however, didn't use their masks; this is required to prevent inhalation of fine particles. There was a first aid box, but it wasn't fully stocked with required items. The toilet used by the workers was found clean but the distance between the latrine and river water is approximately 3 m which doesn't meet the standard fixed by DHPE. The contractor was not able to show any

records of noise level measurement for this worksite and nearby community. The store room was not found in organized manner where it was observed that geobags, fuel drum and diesel driven machine were kept together. The team recommends to keep the fuel drum and fuel driven machine in separate place and the store room should be organized. From the discussion with the local people, it was revealed that they are disturbed with dusts created from the movement of project vehicle and they were suggesting that if the speed limit of the vehicles are maintained around the community the dust could be controlled to great extent. The audit team recommends that contractor and DDSC&PMSC talk sometime with local people to have their view on the impact of project and hear the suggested measures to mitigate the impact.

Polder 35/3

The visited sites in the polder 35/3 areas are Daratana CC block manufacturing yard, DS01, Khagraghat to observe the demonstration of soil and water sample collection. The findings of the sites are as follows:

- In Daratana CC block manufacturing yard, there were required signboard, safety and warning messages with symbol, signage of speed limit, safety fencing, fire extinguishers and sands with shovels, safe drinking water and sanitation facilities for the workers. The conveyor belt of the plant has been covered and there has been constructed a decanting box for the effluent of the plant and moveable fencing has been provided around the pit of leftover materials of the plant. The workers of the plant found using PPE. The forklift driver moving around the plant with vehicle was found without using ear plugs; workers must use their PPE and the Contractor must correct workers who do not. The generator room and electric supply station in the plant were found to be highly protected. The audit team randomly picked a worker in the plant premises to demonstrate firefighting with the fire extinguisher and the worker showed the demonstration successfully. The audit team suggest to arrange this type of mock drilling in the other relevant work sites in a certain interval for the workers. The records/ documents found in the plant premises are noise level records, accident records, English and Chinese version of EAP, EIA and EMF. Two HHs residing adjacent to the plant yard were interviewed to know if they are disturbed by the noise generated from the plant operation. It was revealed that the contractor has provided them fencing as noise barrier which reduced the noise level. The children's study are not being disturbed by the work as the work runs in the day time and children stay at school at the day time.

- In the worksite of DS01, signboard showing different awareness symbol and messages, 'no unauthorized entry ' have been in place, the soil stock pile that was on bank of the canal during the November WB safeguard mission has been removed. There was safe drinking water supply in the worksite but the latrine used by the workers found with no water seal which never could fulfill the criteria of a hygienic latrine without the water seal. The audit team recommends to ensure the water seal with all of the constructed latrines for the workers. The store room is made of bamboos and there were found fuel drums in it. There is risk of fire with combustible material (bamboos) of the store room. The probable risk should be mitigated by the contractor by taking appropriate measures.
- The contractor was ask to demonstrate the collection of sample for soil and surface water. The soil and water sample collection procedure observed was appropriate to conduct the water and soil test.

Package 02

Polder 39/2C

The sites visited in Polder 39/2C were the Nod Molla Site office and CC block manufacturing plant yard (under construction stage), DS-12, and construction of Charkhali CC block manufacturing yard. The findings from the audit are:

- In the site office of Nod Mollah, there were Environmental Health and Safety Compliance Register where the findings from any visits are kept focusing on good practices and areas for improvement, accident register and the records kept with the some details of the accident. The audit found the accident/ injury recording dates are not kept, it is recommended to keep the records with date. The audit team also recommends to keep the C-ESMP (English, Chinese and Bengali versions) and EIAs (with EMPs) of the Polders in the site offices. It was observed that there are separate waste collection bins for recyclable and non-recyclable wastes. The plastic bottle and plastic wastes have been segregated and sent to the scrap shop who buy and sell plastic bottles for recycling purpose. It is recommended to keep records on waste disposal. The waste management system in Package 02 areas found better than Package 01 and which is suggested to be replicated in Package 01 works. There is also marked assembly point for any emergency situation in the site office premises. It was also observed 10 numbers of fire extinguishers in the site. There were well designated first aid box place and first aid box was

supplied with required items, in the CC yard premises. Contractor has prepared a resting house for the workers which will be used by the workers for resting, taking food and praying purpose. As the roof is of tin, it is recommended to include a ceiling with it so that the workers can use it comfortably during the summer. In construction sites, there was a noise level measuring device and the contractor EHS in-Charge mentioned they have been measuring the noise level regularly. But there was no record of it. It is recommended to keep record of noise levels. There were adequate PPE, supply of safe drinking water and sanitation facility in the site. From the discussion with the contractor staffs, it was revealed that toolbox on EHS issue with the workers held every day around 20 minutes in the morning before the workers starts to work.

- In DS12, there was watchman to petrol during the construction sites which is good to look on the security and safety issue (to some extent). There was signboard and fencing and demarcation. Provision of safer walkway for worker to walk towards the site should be provided as there is chance of falling down. An electric wire was found on the ground which needs to be hung with pole. The electric box was opened, it should be closed and site in charge should keep the key.

- In Charkhali CC block manufacturing yard, there were required signboard, safety and warning messages with symbol and security fencing. The workers were found to be using PPE, but one of the workers was found working without PPE. He was hired by a subcontractor. The audit recommends to ensure PPE for all workers who get involved in CEIP-1 works. An electric wire was also found on the ground which should be hung with pole over the ground. The latrines used by the workers in the worksite found not clean and unhygienic and the latrines have been constructed nearby water bodies with 3-4 meter range. It is recommended that latrines be maintained in a clean and hygienic condition and to construct latrines at least 10 m away from any of the water sources.

Polder 41/1

The audited sites in this Polder are the CC block manufacturing plants/yards under construction in Burirchar and Gulbunia. From the sites the findings are:

- There were fire extinguishers in the work site of Burirchar CC block manufacturing plants but the adequate numbers of fire extinguishers need to be wall mounted. The workers were observed not to be using PPE and the audit team didn't see any first aid box in the worksites. The use of

PPE by the workers need to be ensured and first aid box with necessary items should be in place. There is drainage system around the site, but the drainage system is not incorporated with the lay out plan; it is recommended to update the layout plan to incorporate the drainage system. The outlet of the drainage is opened to a pond that has been used by the community HHs for bathing and cleaning purpose. So, it is recommended to ensure that the drainage is not connected to the pond which is being used by people from the communities. The fencing around the site was found inadequate to ensure the security and it is recommended to provide improved fencing to ensure the security of the workers. There were signboard and signage but the number of these should be increased. The demarcation should be improved around the CC block stockyard.

- In the Gulbunia CC block stockyard which is under construction (sand filling has been started only), there was a watch room for the watchman. There was no signboard and signage and no demarcation in the worksite. The supply of drinking water for the workers in the worksite has been collected from a nearby community deep tube-well from where the local people drink water. The workers found using no PPE but the contractor needs to ensure PPE use. The latrine constructed for the workers is absolutely unsafe and unhygienic as it is just installed by digging pit and the workers have been using it. It is high recommended to ensure safe and hygienic latrine for the workers as soon as possible.

Polder 47/2

The audited site in the Polder 47/2 area was Ramjanpur CC plant manufacturing plant yard which is under construction. The audit team noted the following:

- There were environmental compliance register and accident register with the same format like other sites of the Package 02. It is recommended to keep English, Chinese and Bengali versions of C-ESMP in the site office. The workers were found to be using PPE while doing the construction works, but the workers reported that the PPE had been given just before the visit of that day. It is recommended that the Contractor ensure workers use the required PPE whenever they work. There were only a few signboards and limited signage; these need to be increased. There was only one fire extinguisher in the combined premises of site office and CC block yard. Adequate numbers of fire extinguishers should be in place. The local workers mentioned they are drinking water from the deep tube-well installed by the contractor in the

site. From the discussion with the contractor it was revealed that they have not conducted the test for the water of the newly installed tube-well and there was no test result report in the site office as well. The audit team highly recommend the contractor to conduct test for water before the workers start to drink. The security fencing in the site was found inadequate to ensure safety and it is recommended to erect improved fencing. Carpenters were observed working in high places and, as there is risk of falling, the contractor should ensure use of waist belts. Furthermore, the team notes the carpenter should also use gloves to work safely. The layout plan of the site doesn't cover the drainage system that exists in the sites, so it should be updated to incorporate the drainage system. At the edge of drainage, only one decanting box was found; this will not be sufficient to prevent runoff from the yard to nearby river (the site is on the river bank). It is recommended to construct at least one more decanting box and make sure the runoff during the rainy season is not going directly to the river. The latrines constructed for the Chinese staff were clean but there was a bad odor because there were no gas pipes with the septic tank. Gas pipes should be provisioned with the septic tank. The latrines constructed for the local workers were located at one corner of the yard which takes more time for the worker to get there. Local workers reported that Chinese staff become angry when they disappear for the time required to use these latrines. Furthermore, there was no water facility to use in the toilet. The distance of the latrines is also within 3-4 meter range from the river water. The latrine facility in the worksite for the local workers should be improved. During the audit, it was observed that small number of trees had to be cut for constructing the yard. Audit recommends to keep records of the numbers of trees by species name.

Polder 48

In Polder 48, the audit team visited Khajura, Alipur CC Block manufacturing plant yard which is also under construction. The findings are:

- There was a signboard in front of the gate but a greater number of signboards, safety signs, and warning messages with symbols should be erected in front gate and yard premises. During the visits, the workers were doing brick breaking works without PPE; it is required to ensure use of all appropriate PPE whenever the workers work. The contractor has constructed rest and praying room which need to have a ceiling. A deep tube-well is installed and it is planned to supply water through an overhead tank after filtering from the filtration chambers constructed on the ground. In the filtration chambers, stagnant water was found creating nuisance as it

could be breeding space for mosquitoes. It is recommend to remove the stagnant water. From the discussion with the workers, it was learned that they have been drinking from the newly installed deep tube-well. But the water has not been tested. Water from every newly installed point must be tested before people start to drink. The layout plan of the site doesn't consider the drainage, store rooms and second set of latrines though those exist, so the drainage system needs to be include in the revised plan. The construction vehicles inside the site were found to be parked haphazardly; they should be kept in dedicated parking space. The latrines in the premises were found to be clean but they had a bad odor due to the absence of a gas pipe with the septic tanks. There are four (4) fire extinguishers which would not be sufficient for such a big area and the number should be increased to at least 10. In the site office, there were environmental compliance register and accident register with the same format like other sites of the Package 02. It is recommended that English, Chinese and Bengali versions of C-ESMP be kept at the sites. Noise level records from the worksite and nearby community HHs should be kept in the site office.

A few common findings from the works in the polder areas are as follows:

- Some of the latrines in the worksites were found to have no water seal without which a latrine could not fulfill the criteria of a hygienic latrine.
- It is appreciated that non-recyclable and recyclable wastes are being collected in separates bins. But ultimate fate of the wastes is not known by the Contractor.

2.8 Labor influx

In most of the work sites and camp sites, there is a limited influx of labor. The laborers are predominantly from the vicinity and they prefer to return to their homes after finishing their works. In a few work sites, sleeping facilities have been put in place for a few laborers. They are reasonably furnished with cooking facility and toilets. However, in the same living facility they have stored petrol and other combustible materials. Contractor should give more care on safety and security of the laborers and enforcement of environmental and occupational safety standards.

2.9 Constraints to implement EMP

From the discussion with different staffs of contractor and DDSC&PMSC, the major constraints to implement the EMP is the habits of the workers not to practice the EHS. Traditionally they are not used to practice the EHS things, so they seemed to be reluctant. But the practice level has been improving day by day by the awareness raising initiatives (e.g. training, on jobs instructions, tool box talks etc.).

The EMPs of the project outlined the inststitional arrangement to implement the environmental mitigation measures. In line with that these suggested BWDB to coordinate with relevant stakeholders such as PAPs, BIWTA, WMOs, FD, DoF, DoE, DAE, BADC, SRDI, LGED, BEDC DC DLS, LGI and NGOs. Coordination with all the stakeholders and agencies should be done by the PD, CEIP-1 and the particular member of the PMU of BWDB. To do so the project has its steering committee consists of persons from different agencies. From the audit point of view, the coordination through the steering committee should be enhanced. Moreover, the EMPs also suggested for signing of MoU with agencies for sharing particular information and for implementing particular tasks specified in the EMPs. The project has environmental issues e.g. for using the pesticides by the project beneficiaries farmers may be increased. The IPM program need to be taken for the farmers in the project. To do so, the DAE should be involved with tasks. There are fish migration issues with the project activities and relating to this, the DoF (Department of fisheries) could be involved with some tasks. The PAPs livelihood might be affected and project should think about livelihood restoration program and CEIP-1 also need to be concerned that livelihood restoration program should not be environmental unfriendly. So, the audit recommends the PMU with the help of DDSC &PMSC identify the issues and the relevant agencies/ stakeholders for EMP implementation and sign MoU with them.

3. Conclusions and recommendations

The audit was conducted as per the TOR. It found some level of progress in environmental compliance implementation. It also found some areas which need to be improved. The audit recommends as follows:

1. Contractors of both packages should follow the findings and recommendations of this audit and even consider the recommendations for the other package where applicable.
2. The audit report should be shared with the Contractors, Consultants, relevant sub-Consultants, and PMU staff.
3. Records of noise level readings should be kept by both contractors.
4. A Water Quality Assurance Plan (WQAP) for drinking water supplied for the workers should be developed and implemented. The WQAP plan will define the quality monitoring frequency, system and protocols with response in case of the water quality found not within applicable standards.
5. The team recommends that the environmental monitoring testing should be done by the both contractors for noise, air, water and soil by defining the sites to be followed by the same location over the project duration to see the impacts/ changes

6. The twice-monthly inspection should cover all the types of works as it was observed to emphasize less on some of the sites like borrow pits, excavation and re-excavation of the canal.

7. Waste management systems need to be improved, the recyclable wastes should be kept and sent to scrap shop after a certain interval. Records on wastes should be kept.

8. The practice of using PPE should be enhanced.

9. The forklift and CC plant Safety Procedure Manual should be in place in the relevant worksites.

10. The PMU with the help of DDSC & PMSC need to identify the issues and stakeholders/ agencies need to take part to implement the EMP, enhance coordination and sign MoU with them.

11. Both of the contractors of CEIP-1 are recommended to arrange exchange visit for learning and scale up in their Packages

12. The NGOs for Afforestation and WMO formation should be recruited without delay given the need to commence afforestation activities and to devise operational plans for the sluice gates that are sensitive to productive requirements as well as aquatic ecosystems.

13. EAPs and C-ESMPs should be continually improved and should address the current audit findings. Bengali and Chinese versions should be kept at worksites, along with the English versions.

14. Some of the recommendations and findings of last year's audit still remain relevant and the audit recommends to follow those along with the findings of this audit.

4. Annexes

4.1 Terms of Reference

Second Annual Environmental Audit of CEIP-1 Project

Background:

The Coastal Embankment Improvement Project – Phase 1 (CEIP-1) is a 7-year $400 million project being implemented by the Bangladesh Water Development Board in partnership with the World Bank and the Pilot Programme for Climate Resilience of the Climate Investment Fund. The Project started in 2013 and will close in 2020. It covers 17 polders in three packages of 4, 6 and 7 polders respectively. The Detailed Design and Construction Supervision Consultants (DDCS&PMSC) commenced their design work for the first of three packages in January 2015 and the Package 01 Contractor commenced services on 26 January 2016. The Package 02 Contractor's contract was signed on March 2017 and work was commenced on 12 July 2017. The Third Party M&E Consultants joined the project on 01 November 2015. After working with CEIP-1 for about one year, the Third Party M&E Consultants carried out the first Annual Environmental Audit during January 01- February 06, 2017 covering the reporting period January through December 2016. This TOR is for the second Annual Environmental Audit covering the period January – December 2017, due to commence about 10 January 2018.

Institutional arrangements of CEIP-1 for safeguarding the environment include:

1. Project Management Unit, with its Social and Environmental Coordination Unit, who are responsible for oversight and guidance on environmental matters as well as coordination with GoB agencies. PMU also reports to BWDB, the Project Steering Committee (PSC) and the World Bank.

2. DDCS&PMS Consultants who are responsible for developing the EIAs and EMPs consistent with World Bank and GoB guidelines and ensuring the EMPs are implemented satisfactorily. These Consultants review and approve the Contractor's EAPs and monitor their implementation on an ongoing basis. The DDCS&PMS Consultants develop the bidding documents and make sure that the Contract and its specifications include the necessary clauses and elements governing environmental safeguards.

3. Civil Works Contractors who must develop and implement polder- and site-specific Environmental Action Plans in the case of Package 01 and Contractor Environmental and Social Management Plans known as C-ESMP in the case of Package 02.

4. World Bank reviews and provides comments and no objection to the various safeguard documents.

5. Community participation, consultation and feedback through the EIA process and Grievance Redress Mechanism.

6. Third Party M&E Consultants who perform environmental audits and monitor and evaluate the project overall. Specifically, with respect to environmental safeguards, the M&E Consultants review and comment on environmental documents prepared under CEIP, spot check compliance, report their findings and prepare recommendations. The M&E Consultants report to the PSC and their contract is administered by the Project Director.

Each polder has its own EIA which includes an EMP which is meant to ensure that the environmental and social management practices are integrated in the design, construction, operation and maintenance of the polder.

Among others, the specific objectives of the EIA are to:

- Comply with national regulatory and WB policy framework (further discussed later on in the document),
- Determine and describe the existing environmental and social setting of the Project Area (the project area defined as is defined as the entire area inside the polder, project influence area outside the polder i.e. the embankment, borrow pits and spoil disposal are if located outside the polder and access route to the polder),
- Identify and assess the potential environmental and social impacts of the project, including health and safety issues,
- Identify mitigation measures to minimize the negative impacts and enhancement measures to enhance the positive impacts ; and
- Detail an Environmental Monitoring Plan which also defines mitigation measures

As is the case for the EIAs and EMPs, each polder is also to have an Environmental Action Plan (EAP) for package 1 and Contractor Environmental and Social Management Plan (C-ESMP) for package 2 which is prepared by the Contractors. The EAP of package 1 and C-ESMP of package 2 are to operationalize the EMP for which the Contractor is responsible. These Plans detail in a site-specific manner the mitigation and environmental compliance requirements and provide a monitoring plan outlining the protocols, frequency of monitoring, person(s) responsible, etc.

Audit Objective:

The overall objective of the second Annual Environmental Audit of CEIP-1 is to assess the extent to which these Plans for safeguarding the environment are in place and their adequacy with respect to coverage and content, the extent to which they are being implemented and whether they are effective considering the institutional and contractual arrangements applicable to the Project.

Scope of the Audit:

In summary, the audit will examine: (1) the status of preparation of required safeguards documents; (2) whether the systems, tools and protocols are in place for effective environmental monitoring; (3) institutional arrangements, staff and funding resources; and (4) compliance with WB safeguards, including consultation, communication, grievance mechanisms and disclosure, and country legal framework.

The audit will cover the Contractors for Package 01 and Package 02, the DDCS&PMSC and Project Management Unit (Social and Environmental Coordination Unit).

Field work will be centered on the polders of Package 01 and Package 02, but the audit will examine CEIP-1 overall whenever appropriate. It will be forward-looking to draw lessons and make recommendations on areas of improvement for Package 01 and Package 02 which will also give guidance for broader application to similar projects or future phase of CEIP.

Specifically, the audit will assess:

- Status of EMP and EAP/C-ESMP implementation
- Status of implementation of the recommendations/ findings of the first Annual Environmental Audit that was conducted by Third Party M&E Consultants
- Status of the implementation of the recommendations/ agreed actions of the WB environmental missions of May and November 2017
- Whether the project involves labor influx and the sufficiency of mitigating measures. The rapid migration to and settlement of workers and followers in the project area is called labor influx, and under certain conditions, it can affect project areas negatively in terms of public infrastructure, utilities, housing, sustainable resource management and social dynamics.
- Extent to which the Environmental Monitoring Plans and environmental mitigation measures outlined in the EIAs are being followed and whether they are effective.
- Existence and quality of monitoring tools, formats and protocols.
- Processes and procedures for compliance monitoring.
- Degree to which qualified staff resources are in place.
- Necessary environmental testing equipment is in place or hired when needed.
- Staff awareness and training.
- Identify constraints if any in ensuring compliance to the measures outlined in the EMP.

- Review the GRM functioning in the polder areas and check and analyse the Grievances related to environmental safeguards in the polder areas
- Review the accidents records in the work sites and examine the magnitude of the accidents and how those were addressed by the contractor
- Look forward to anticipating either any of the CEIP-1 activities may have negative impact or not have on the mangrove forest Sundarbans

The Environmental Audit will present findings and observations followed by a section on conclusions and recommendations aimed at improving the effective implementation of environmental safeguards. It will aim to identify not only direct causes of any issues, but also the root causes.

The Environmental Audit will examine documents and lab test results records, undertake field observation on compliance status and require field staff to demonstrate their knowledge of Environmental Measurements of soil, water, salinity, biological, physical, and chemical sampling techniques. Also reliability of any lab testing will be carried out randomly. The Contractor and DDCS&PMS Consultants will be informed of the scope of the Environmental Audit in advance but will not be informed in advance as to which particular work sites will be visited. Both Contractor staff capability and Construction Supervision team staff capability in the area of environmental safeguards will be assessed.

Methodology:

The M&E Consultants will undertake a review of documents, reports, site records and lab results, conduct interviews in offices and in the field, and make direct observations during one to two weeks period and then write up their findings. Specific work sites to be visited on a given polder will be selected randomly without advance notice to the Contractor and DDSC&PMSC.

Document Review: Existing base documents or reports will be reviewed such as the Environmental and Social Management Framework, EIAs, EMPs, Contractor EAPs and ESMP, works contract, consultant contract, guidelines, standard procedure manuals, etc. World Bank Aide Memoires corresponding to the period will also be reviewed with respect to environmental aspects.

The Monthly Progress Reports and Bi-Annual Environmental Monitoring Report will also be reviewed.

Key Informant Interviews: PMU, DDCS&PMSC, Contractor staff and beneficiaries will be interviewed. Perspectives of communities living near the works, workers, and others will be obtained on how well the project is implementing EMPs.

Site Records: Test results for air quality, water quality, soil quality, pH, salinity, etc. will be reviewed. Non-compliance report logs, NCR clearance records and procedures will be examined.

Direct observation: Level of compliance with the EMP/EAP/ESMP and practices of project and Contractor staff will be observed in the field. Demonstration of water and soil quality, pH, salinity, biological, chemical and physical sampling technique, etc. by Contractor staff may be requested to observe the level of skill and knowledge and whether the technique is appropriate.

Three to four embankment construction worksites and 3-4 drainage/flushing sluice gate sites per polder sites and 2-3 of the CC block manufacturing sites will be visited to examine field level application of the environmental safeguards on a random sampling basis. On the other hand, the audit team will conduct a visit a purposively selected worksite nearby the Sundarbans periphery to assume the impact of CEIP-1 on Sundarbans. The team will also visit the campsites, site offices and main offices of both Contractor and DDCS&PMSC to discuss systems, strength of the environment staff and documents.

Team Composition and Duration:

The audit will be accomplished by the Environmental Team of the Third Party M&E Consultants consisting of one Environmental Specialist–International (Dr. Abu Murshid) and one Environmental Specialist–National (A.K.M. Rezaul Haque Khan) with the support of the Team Leader (Mr. Jan T. Twarowski). The audit will be conducted within a short timeline through fieldwork for one to two weeks in Package 01 and 02 polder areas and several days of meetings and document/file reviews in Dhaka, followed by a couple of weeks of report writing in Dhaka.

4.2 Field visit plan for the audit

Field visit plan for Second Annual Environmental Audit

3rd Party M&E Consultants

CEIP-1

Team members of the Field Visit: A. K.M. Rezaul Haque Khan (National ES), Dr. Abu Murshid (International ES)

Sl	Activity	Time	Date	Remarks
1	Travel from Dhaka to Khulna	Morning flight	**16-01-2018**	
2	Meet with XEN, DDSC&PMSC, Contractor-01 Khulna office team	11:00 am-01:30 pm	16-01-2018	
3	Review environmental records/ documents of DDSC&PMSC and Contractor 01	2:00 am-05:00 pm	16-01-2018	Night Stay in Khulna
4	Travel and audit the activities in **Polder 32 and 33** areas	8:00 am-6:00 pm	**17-01-2018**	Night Stay in Khulna
5	Travel and audit the activities in **Polder 35/1 areas**	8:00 am-6:00 pm	**18-01-2018**	Night Stay in Khulna
6	Travel and audit the activities in **Polder 35/3 areas**	8:00 am-6:00 pm	**19-01-2018**	Night Stay in Khulna
7	Travel from Khulna **Package 02** to areas	7:30 am-11:30 am	**20-01-2018**	
8	Meet with XEN, DDSC&PMSC and Contractor-02 office team and review related records/ documents	11:30-01:00 pm	20-01-2018	
9	Travel and audit the activities in **Polder 39/2C and 40/2** areas	01:00 -6.30 pm	20-01-2018	Night Stay in Barguna
10	Travel and audit the activities in **Polder 40/1**, travel to Kuakata	8:00 am-6:00 pm	**21-01-2018**	Night stay in Kuakata
11	Travel and audit the activities in **Polder 47/2 and 48** areas	8:00 am-6:00 pm	**22-01-2018**	Night stay in Kuakata
12	Travel back to Dhaka from Barisal Airport	Late morning flight	23-01-2018	**Team returns to Dhaka**

Note: The responsible person who collect the sample for environmental testing are requested to demonstrate sample collection when team will be visiting in the field.

4.3 Some of the persons met during the audit

SI	Name	Position	Organization	Location	Cell Number
1	Mr. Abdul Hannan	XEN	BWDB	Khulna	01712101250
2	Anwar Hossain	AE	BWDB	Khulna	01711309008
3	Dr. Ashadul Alam	SES	PMU	Dhaka	01747215770
4	Dr. Md. Towhidul Islam	ES	BWDB	Khulna	01911493918
5	Mokhlesur Rahman	CSE	DDSC & PMSC	Khulna	01924711704
6	Shyamal Kumar Datta	CSE	DDSC & PMSC	Polder 35/1	01732708192
7	Abu Bakr Siddique	ES	DDSC & PMSC	Dhaka	01795095607
8	Habibur Rahman	DTL	DDSC & PMSC	Dhaka	
9	Mozibur Rahman	DRE	DDSC & PMSC	Khulna	
10	Rafiqul Alam	QCE	DDSC & PMSC	Khulna	01992177661
11	Jia Kai	QC & EHS in charge	CCHWE Contractor	Khulna	01876298227
12	Sun Huaxin	Chief Engineer (CE)	CCHWE Contractor	Khulna	01995623946
13	Ren Gaofei	EHS in charge	CCHWE Contractor	Khulna	01761931689
14	Shah Alam	EE	CCHWE Contractor	Khulna	01724047588
15	Wei Lei	Engineering Manager	CCHWE Contractor	Polder 32	01725772045
16	Li Jufeng	CE	CCHWE Contractor	Polder 35/3	01753663852
17	Ms. Dong Nana	Translator	CCHWE Contractor	Polder 35/3	
18	Amirul Islam	Translator	CCHWE Contractor		
19	Mashiur Rahman	XEN	BWDB	Barguna	01711107605
20	Abdul Hannan Prodhan	AC &AE	BWDB	Barguna	01740030956
21	Abu Syed Kamruzzaman	DRE	DDSC&PMSC	Package 02	01711582235
22	Didarul Alam	CSE	DDSC&PMSC	Package 02	01712540050
23	Sheikh Farid	Quality Control Specialist	DDSC&PMSC	Package 02	01711956523
24	Mr.Hu Ke	Acting Project Manager, (Contractor), CICO	Contractor CICO-P2	Dhaka	O1741510671
25	Wu Jing	Deputy Manger	Contractor CICO-P2	Package 2	
26	Wang Taofu	Polder Manger	Contractor CICO-P2	Polder 39/2C	
27	Liu Huan	Assistant Manger	Contractor CICO-P2	Package 2	
28	Ahmed Faruk	Environment, Health and Safety Officer-in-Charge	Contractor CICO-P2	Package 2	01710982107
29	Shah Alam	EHS Personnel	Contractor CICO-P2	Polder 39/2C	
30	Mr Dai	Polder Manager	Contractor CICO-P2	Polder 47/2	
31	Anisur Rahman Babu	EHS Personnel	Contractor CICO-P2	Polder 48	01711134884
32	Chang Heifu	Safety Engineer	Contractor CICO-P2	Package 2	

4.4 A sample of the records/ attendance sheets of training kept by the Contractor

Coastal Embankment Improvement Project Phase-1 (CEIP-1), Bangladesh

Training Record for EIA of HSE Department

Training Item	Safety measure about forklift, excavator, truck, fire safety, PPE		
Training Date	26.12.2017	**Training Location**	Main Camp in Polder-33
Trainers	Mr. Jia Kai, Mr. Ren Gaofei and Md. Shah Alam		
Trainees	Please see the Annex-01 & Annex-02		

1. The workers are motivated to wear safety gears like helmet, vest, hand gloves and shoes during work.
2. Helmet should use as tight and fit to head.
3. Back knob and belt to be used properly.
4. How to operate the fire-extinguisher.
5. An awareness growing educational documentary and power point presentation has showed that contains the safety issues as summarizes as below:
   - Some pictures of bitter experience to make concern about the result of accident.
   - Accident falling accident case
   - Electric shock accident case
   - Case of an object strike
   - Mechanical injury accident case
   - Collapse accident case
   - Fire accident case
   - Mechanical and Truck Injury Accident

Annex 1-List of Participants

SI No.	Name	Position	Signature
	Ren Guofei		
	Rupkumar		Rupkumar
	HALAL		HALAL
	Pritam		Pritam
	BABU		
	ASAD		
	Sumon		Sumon

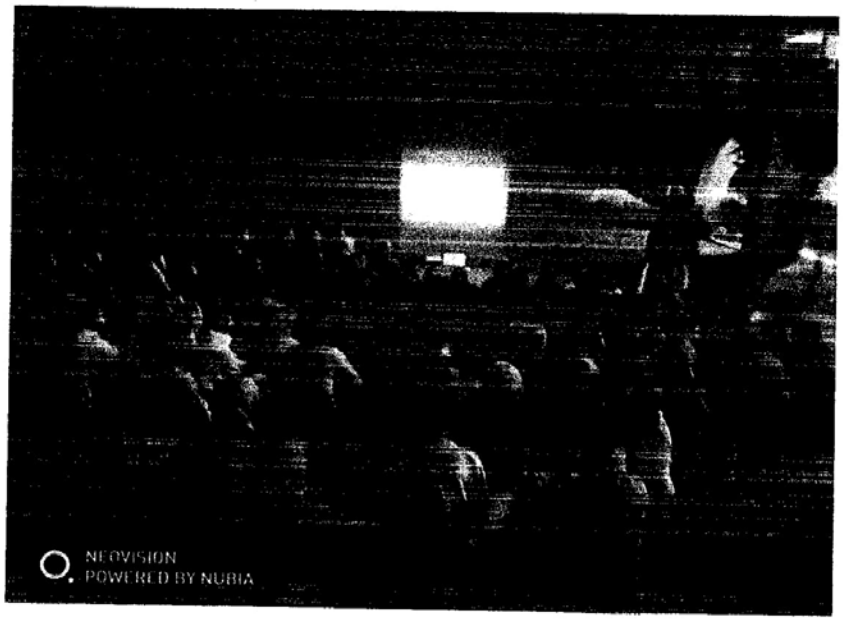
Annex 1-List of Participants

SI No.	Name	Position	Signature
	[illegible]		[illegible]
	[illegible]		[illegible]
	[illegible]		[illegible]
	[illegible]		[illegible]
	[illegible]		[illegible]
	[illegible]		[illegible]
	[illegible]		[illegible]
	[illegible]		Ruman
	[illegible]		[illegible]
	[illegible]		[illegible]
	[illegible]		[illegible]
	[illegible]		[illegible]
	[illegible]		[illegible]
	[illegible]		[illegible]
	[illegible]		[illegible]
	[illegible]		

Annex 1-List of Participants

SI No.	Name	Position	Signature
	SUJON	—	SUJON
	মহি ইসলাম		মহি
	ASLAM		
	আরিফ		আরিফ

Annex2 Safety Training Pictures in CSS Main Camp, P-33



Training Record for EIA of HSE Department

Training Item	Safety measure during CC block plant operation, welding, forklift, truck, PPE		
Training Date	28.12.2017	**Training Location**	Mongla cc yard in Polder-33
Trainers	Mr. Jia Kai, Mr. Ren Gaofei and Md. Shah Alam		
Trainees	Please see the Annex-01 & Annex-02		

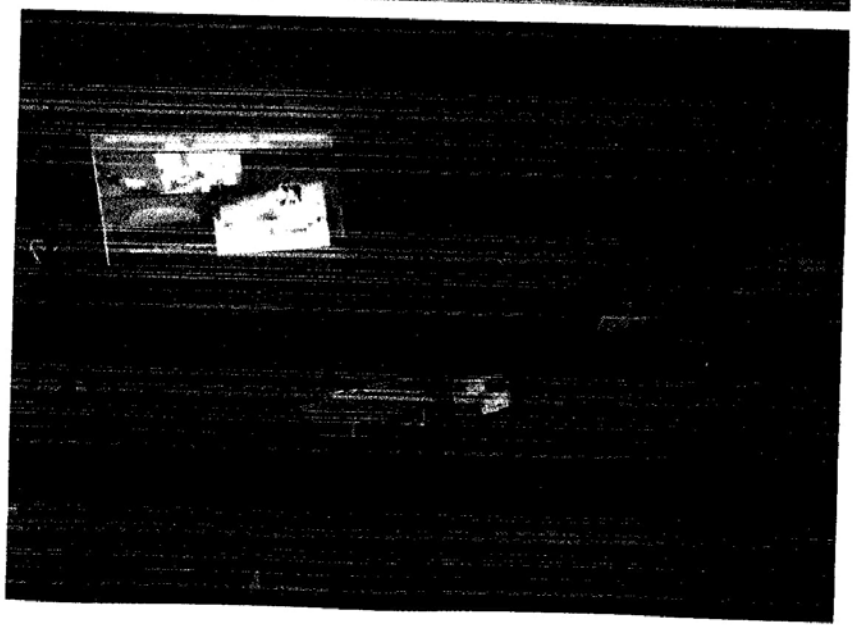
1. The workers are motivated to wear safety gears like helmet, vest, hand gloves and shoes during work.
2. Helmet should use as tight and fit to head.
3. Back knob and belt to be used properly.
4. Be safe from the arc of metal fire during welding.
5. Check the weir system before welding.
6. All old joint should change by new one before starting the work.
7. Open joint at in different place should be covered by tape and make clearly visible.
8. Please use the eye protective glass, mask, hand gloves.
9. If any joint seems to loose, immediately turn off the machine and take immediate action on this regards.
10. Weir joint should replace by maintaining frequency.
11. Old weir should change when it will reach in tension.
12. Don't be hastened during boring work because safety first and safety must.
13. Forklift driver should maintain the speed limit 15km/hr within the yard to avoid any kind of fetal accident.
14. Near the plant area should use ear plug.
15. In the Plant operation chamber, should protect from the unauthorized entry.
16. Not make sudden start and turn off the machine.
17. During clean the residual material, the plant operator should off the machine and take the key to himself.
18. During clean the hopper chamber must ***turn off the plant.*** And the hopper must lock at height place to avoid the uncertain falling.
19. Before starting the plant machine check it properly.

20. Forklift and pedestrian lane should maintain by the forklift driver and workers.
21. The temporary power sub-station is very high voltage. So without the designated person, nobody will enter into the sub-station room.
22. The temporary power sub-station is very high voltage. So without the designated person, nobody will enter into the sub-station room.
23. Rod bending machine should use carefully and slowly.
24. All shredded parts of metal and iron should keep in one place.
25. Walk carefully in reinforcement work area and wood work area.
26. Be care full about the electric joint of submersible pump.
27. If any kind of electric firing occur, not to use water first. First turn of the main switch, then use water and fire-extinguisher.

Annex 1-List of Participants

SI No.	Name	Position	Signature

Annex-02 Safety Training Pictures in Mongla cc yard, P-33



Training Record for EIA of HSE Department

Training Item	Safety measure during well boring period		
Training Date	26.12.2017	**Training Location**	FS-17 in Polder-33
Trainers	Mr. Jia Kai, Mr. Ren Gaofei and Md. Shah Alam		
Trainees	Please see the Annex-01 & Annex-02		

1. The workers are motivated to wear safety gears like helmet, vest, hand gloves and shoes during work.
2. Helmet should use as tight and fit to head.
3. Back knob and belt to be used properly.
4. During concrete casing must use the provided boot.
5. Vibrator should use carefully, no to touch in the form work wall.
6. Use horizontal ladder with railing to transport the mixture materials.
7. Don't be hastened during boring work because safety first and safety must.
8. Be care full about the electric joint of submersible pump.
9. If any kind of electric firing occur, not to use water first. First turn of the main switch, then use water and fire-extinguisher.
10. How to regulate the fire-extinguisher.

Annex 1-List of Participants

SI No.	Name	Position	Signature
1	Siddik	1	
2	[illegible]		
3	[illegible]		
4	[illegible]		
5	[illegible]		
6	[illegible]		
7	[illegible]		
8	[illegible]		
9	[illegible]		
10	ABRO[illegible]		
11	Amal [illegible]		
12	[illegible]		
13	[illegible]		
14	HASAN		
15	[illegible]		
16	[illegible]		

Training Record for EIA of HSE Department

Training Item	Safety measure during sand piling, welding, generator operation, truck unloading, reinforcement bending, PPE.		
Training Date	27.12.2017	**Training Location**	DS-02 in Polder-33
Trainers	Mr. Jia Kai, Mr. Ren Gaofei and Md. Shah Alam		
Trainees	Please see the Annex-01 & Annex-02		

1. The workers are motivated to wear safety gears like helmet, vest, hand gloves and shoes during work.
2. Helmet should use as tight and fit to head.
3. Back knob and belt to be used properly.
4. Please use safety belt during the work in high place (more than 2 meters)
5. Before installing the boring device, all three legs should be in level and stable place.
6. The pulley and chain/weir of boring machine should check and set properly to avoid the uncertain falling.
7. The operator should maintain a uniform and limited velocity of hammer falling.
8. During hammering no workers will stand within the falling radius to avoid any uncertain accident.
9. Make a temporary demarcation near the machine belt so that any worker can't come to contact of belt.
10. Be safe from the arc of metal fire during welding.
11. Check the weir system before welding.
12. All old joint should change by new one.
13. Open joint at different place should be covered by tape and make clearly visible.
14. Please use the eye protective glass, mask, hand gloves.
15. If any joint seems to loose, immediately turn off the machine and take immediate action on this regards.
16. Weir joint should replace by maintaining frequency.
17. Old weir should change when it will reach in tension.
18. Don't be hastened during boring work because safety first and safety must.
19. Be care full about the electric joint of submersible pump.
20. If any kind of electric firing occur, not to use water first. First turn of the main switch,

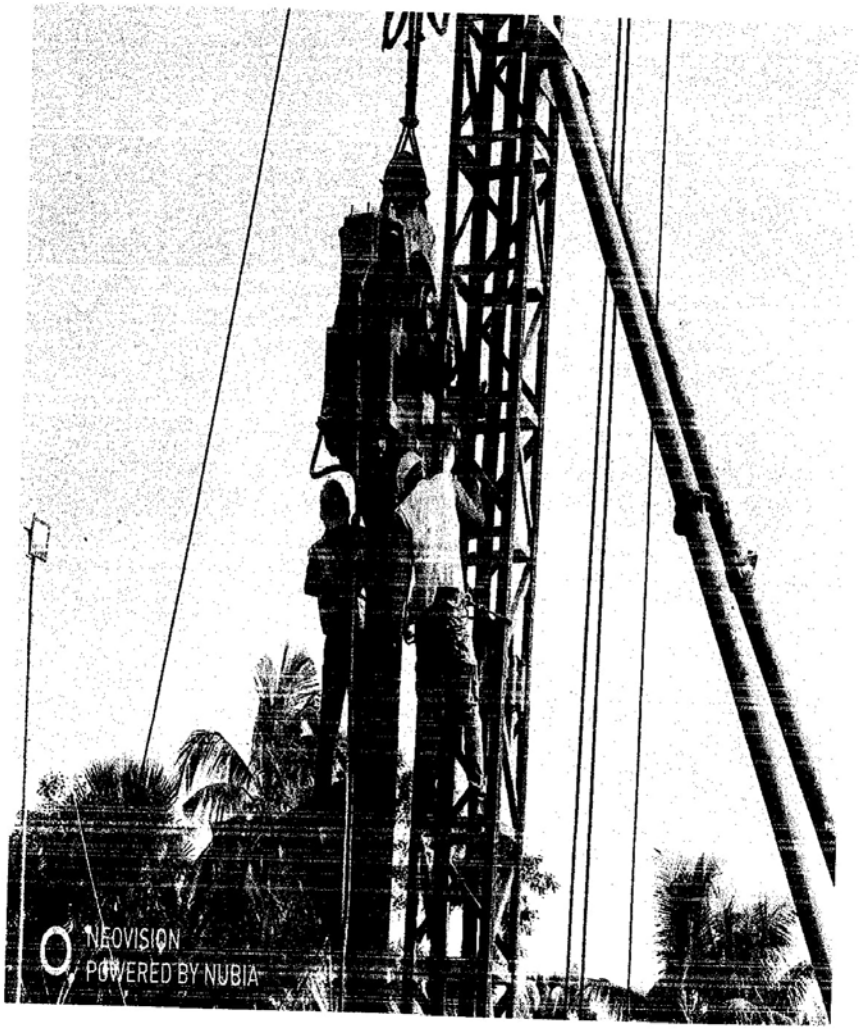
then use water and fire-extinguisher.

21. Maintain a limited speed.
22. Check the position of workers during unloading.
23. Use lock of the dump truck to avoid any uncertain falling.

Annex 1-List of Participants

SI No.	Name	Position	Signature

Annex-02 Safety Training Pictures in DS-02, P-33



4.5 Detailed Training Report of Contractor 01 covering July-December, 2017

Summary of training for month of July, 2017

Month	Polder	Date	Location	No of trainees	Training Item
July, 2017	P-32	02.07.2017	Main camp	12	Fuel storage, kitchen's firing, sanitation, use of fire extinguisher and generator
			DS-16	10	PPE, excavation, welding and generator
			DS-02	17	PPE, dewatering, use of fire extinguisher, electricity and generator
			Embankment section km 14+000	03	Excavator and excavation, PPE
		09.07.2017	Rupsha cc yard	18	PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator, noise, bulldozer
			DS-01	09	PPE, excavation, welding, use of fire extinguisher, and generator
			Main camp	10	Use of fire extinguisher, PPE, material storage area
			Embankment section km 19+000	02	Excavator and excavation, PPE
		18.07.2017	DS-01	13	Sand piling, PPE, generator, use of fire-extinguisher
			Rupsha cc yard	20	PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator, noise, bulldozer
			DS-02	12	Sand piling, PPE, generator, use of fire-extinguisher
		26.07.2017	Rupsha cc yard	22	PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator, noise, bulldozer
			DS-01	10	Sand piling, PPE, generator, use of fire-extinguisher

Month	Polder	Date	Location	No of trainees	Training Item
			DS-16	11	Sand piling, PPE, generator, use of fire-extinguisher
	P-33	03.07.2017	Laudob Embankment section	07	Excavator and excavation, PPE
			DS-11	14	PPE, excavation, welding and generator
			Mongla cc yard	25	PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator, noise, bulldozer
		10.07.2017	Mongla cc yard	30	PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator, noise, bulldozer
			DS-11	12	RCC work, Sand piling, PPE, rod bending, electricity and welding
			DS-08	15	Sand piling, PPE, rod bending, electricity, use of fire extinguisher, welding
		17.07.2017	Embankment section km 23+000	09	Excavator and excavation, PPE
			DS-09	08	Height work, sand piling, generator, electricity and use of fire extinguisher
			DS-08	18	RCC work, Height work, sand piling, generator, electricity and use of fire extinguisher
		24.07.2017	DS-11	15	Road bending, Height work, sand piling, generator, electricity and use of fire extinguisher
			DS-09	12	RCC work ,Height work, sand piling, generator, electricity and use of fire extinguisher
			Mongla cc yard	32	PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator, noise, bulldozer

Month	Polder	Date	Location	No of trainees	Training Item
	P-35/1	01.07.2017	DS-06	12	Concrete casting, Height work, RCC work, PPE, welding, electricity
			Tafalbari cc yard	29	PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator, noise, bulldozer
			DS-07	13	Concrete casting, Height work, RCC work, PPE, welding, electricity
			Embankment section km 19+000	05	Excavator and excavation, PPE
		11.07.2017	Tafalbari cc yard	35	PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator, noise, bulldozer
			DS-08	14	Height work, RCC work, PPE, welding, electricity
			DS-18	14	Potential sliding, Height work, RCC work, PPE, welding, electricity
			DS-07	13	Concrete casting, Height work, RCC work, PPE, welding, electricity
			Embankment section km 13+500	04	Excavator and excavation, PPE
		25.07.2017	Tafalbari cc yard	36	PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator, noise, bulldozer
			DS-08	16	Sand piling, Height work, RCC work, PPE, welding, electricity
			DS-07	18	Sand piling, Height work, RCC work, PPE, welding, electricity
		31.07.2017	Tafalbari cc yard	29	PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator, noise, bulldozer
			DS-06	12	Sand piling, Height work, RCC work, PPE, welding, electricity
			DS-18	13	Sand piling, Height work, RCC work, PPE, welding, electricity

Month	Polder	Date	Location	No of trainees	Training Item
	p-35/3	04.07.2017	DS-02	17	Concrete casting, Height work, RCC work, PPE, welding, electricity
			Daratana cc yard	29	PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator, noise, bulldozer
			FS-09	13	Concrete casting, Height work, RCC work, PPE, welding, electricity
			Khagraghat cc yard	22	PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator,
		15.07.2017	Daratana cc yard	28	PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator, noise, bulldozer
			FS-08	15	Sand piling, excavation
			Khagraghat cc yard	21	Potential slide of materials, PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator,
			DS-02	16	Concrete casting, Height work, RCC work, PPE, welding, electricity
			Embankment section km 13+500	06	Excavator and excavation, PPE
		23.07.2017	Daratana cc yard	28	PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator, noise, bulldozer
			DS-02	11	Sand piling, Height work, RCC work, PPE, welding, electricity
			FS-09	10	Sand piling, Height work, RCC work, PPE, welding, electricity
		29.07.2017	Daratana cc yard	22	PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator, noise, bulldozer
			DS-02	12	Sand piling, Height work, RCC work, PPE, welding, electricity
			Khagraghat cc yard	19	PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator

Month	Polder	Date	Location	No of trainees	Training Item
			FS-09	12	Concrete casting, Height work, RCC work, PPE, welding, electricity

Summary of training for month of August, 2017

Month	Polder	Date	Location	No of trainees	Training Item
August, 2017	P-32	01.08.2017	Main camp	12	Fuel storage, kitchen's firing, sanitation, use of fire extinguisher and generator
			DS-01	10	RCC work, Concrete casting ,PPE, excavation, welding and generator
			DS-02	17	PPE, dewatering, use of fire extinguisher, electricity and generator
			Embankment section km 07+000	03	Excavator and excavation, PPE
		07.08.2017	Rupsha cc yard	18	PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator, noise, bulldozer
			DS-16	09	PPE, excavation, welding, use of fire extinguisher, and generator
			Main camp	10	Use of fire extinguisher, PPE, material storage area
			Embankment section km 19+000	02	Excavator and excavation, PPE
		16.08.2017	DS-01	13	Sand piling, PPE, generator, use of fire-extinguisher
			Rupsha cc yard	20	PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator, noise, bulldozer
			DS-16	12	Sand piling, PPE, generator, use of fire-extinguisher
			Rupsha cc yard	22	PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator, noise, bulldozer

Month	Polder	Date	Location	No of trainees	Training Item
		23.08.2017	DS-02	10	Sand piling, PPE, generator, use of fire-extinguisher
			DS-16	11	Sand piling, PPE, generator, use of fire-extinguisher
	P-33	02.08.2017	Dacope Embankment section	07	Excavator and excavation, PPE
			DS-08	14	PPE, excavation, welding and generator
			Mongla cc yard	25	PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator, noise, bulldozer
		09.08.2017	Mongla cc yard	30	PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator, noise, bulldozer
			DS-09	12	RCC work, Sand piling, PPE, rod bending, electricity and welding
			DS-08	15	Sand piling, PPE, rod bending, electricity, use of fire extinguisher, welding
		18.08.2017	Embankment section km 33+000	09	Excavator and excavation, PPE
			DS-11	08	Height work, sand piling, generator, electricity and use of fire extinguisher
			DS-08	18	RCC work, Height work, sand piling, generator, electricity and use of fire extinguisher
		25.08.2017	DS-11	15	Road bending, Height work, sand piling, generator, electricity and use of fire extinguisher
			DS-09	12	RCC work ,Height work, sand piling, generator, electricity and use of fire extinguisher
			Mongla cc yard	32	PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator,

Month	Polder	Date	Location	No of trainees	Training Item
					noise, bulldozer
	P-35/1	04.08.2017	DS-08	12	Concrete casting, Height work, RCC work, PPE, welding, electricity
			Tafalbari cc yard	29	PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator, noise, bulldozer
			DS-07	13	Concrete casting, Height work, RCC work, PPE, welding, electricity
			Embankment section km 19+000	05	Excavator and excavation, PPE
		13.08.2017	Tafalbari cc yard	35	PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator, noise, bulldozer
			DS-06	14	Height work, RCC work, PPE, welding, electricity
			DS-02	14	Potential sliding, Height work, RCC work, PPE, welding, electricity
			DS-07	13	Concrete casting, Height work, RCC work, PPE, welding, electricity
			Embankment section km 14+500	04	Excavator and excavation, PPE
		22.08.2017	Tafalbari cc yard	36	PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator, noise, bulldozer
			DS-08	16	Sand piling, Height work, RCC work, PPE, welding, electricity
			DS-07	18	Sand piling, Height work, RCC work, PPE, welding, electricity
		28.08.2017	Tafalbari cc yard	29	PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator, noise, bulldozer
			DS-02	12	Sand piling, Height work, RCC work, PPE, welding, electricity

Month	Polder	Date	Location	No of trainees	Training Item
			DS-07	13	Sand piling, Height work, RCC work, PPE, welding, electricity
	P-35/3	03.08.2017	DS-02	17	Concrete casting, Height work, RCC work, PPE, welding, electricity
			Daratana cc yard	29	PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator, noise, bulldozer
			FS-09	13	Concrete casting, Height work, RCC work, PPE, welding, electricity
			Khagraghat cc yard	22	PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator,
		14.08.2017	Daratana cc yard	28	PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator, noise, bulldozer
			FS-08	15	Height work, PPE, welding, electricity
			Khagraghat cc yard	21	Potential sliding, PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator
			DS-02	16	Concrete casting, Height work, RCC work, PPE, welding, electricity
		24.08.2017	Daratana cc yard	06	PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator, noise, bulldozer
			DS-02	28	Sand piling, Height work, RCC work, PPE, welding, electricity
			FS-09	11	Sand piling, Height work, RCC work, PPE, welding, electricity
		30.08.2017	Daratana cc yard	10	PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator, noise, bulldozer
			DS-02	22	Sand piling, Height work, RCC work, PPE, welding, electricity
			Khagraghat cc yard	12	PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator
			FS-09	19	Concrete casting, Height work, RCC work, PPE, welding, electricity

Summary of training for month of September, 2017

Month	Polder	Date	Location	No of trainees	Training Item
Sept-ember, 2017	P-32	02.09.2017	Main camp	12	Fuel storage, kitchen's firing, sanitation, use of fire extinguisher and generator
			DS-01	10	RCC work, Concrete casting ,PPE, excavation, welding and generator
			DS-16	17	PPE, dewatering, use of fire extinguisher, electricity and generator
			Embankment section km 07+000	03	Excavator and excavation, PPE
		06.09.2017	DS-16	18	PPE, excavation, welding, use of fire extinguisher, and generator
			Rupsha cc yard	09	PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator, noise, bulldozer
			Main camp	10	Use of fire extinguisher, PPE, material storage area
			Embankment section km 22+000	02	Excavator and excavation, PPE
		15.09.2017	DS-01	13	RCC work, PPE, generator, use of fire-extinguisher
			Rupsha cc yard	20	PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator, noise, bulldozer
			DS-16	12	RCC work, PPE, generator, use of fire-extinguisher
		28.09.2017	Rupsha cc yard	22	PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator, noise, bulldozer
			DS-02	10	Rod cutting and bending, PPE, generator, use of fire-extinguisher

Month	Polder	Date	Location	No of trainees	Training Item
			DS-16	11	Rod cutting and bending, PPE, generator, use of fire-extinguisher
	P-3	01.09.2017	Dacope Embankment section	07	Excavator and excavation, PPE
			DS-09	14	Rod cutting and bending, PPE, excavation, welding and generator
			Mongla cc yard	25	PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator, noise, bulldozer
		08.09.2017	Mongla cc yard	30	PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator, noise, bulldozer
			DS-11	12	RCC work, PPE, rod bending, electricity and welding
			DS-08	15	PPE, rod bending, electricity, use of fire extinguisher, welding
		14.09.2017	Embankment section km 29+000	09	Excavator and excavation, PPE
			DS-09	08	Height work, generator, electricity and use of fire extinguisher
			DS-11	18	RCC work, Height work, generator, electricity and use of fire extinguisher
		24.09.2017	DS-11	15	Road bending, Height work, generator, electricity and use of fire extinguisher
			DS-09	12	RCC work ,Height work, generator, electricity and use of fire extinguisher
			Mongla cc yard	32	PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator, noise, bulldozer
			DS-08	12	Concrete casting, Height work, RCC work, PPE, welding, electricity
			Tafalbari cc	29	PPE, automatic cc plant, forklift, use

Month	Polder	Date	Location	No of trainees	Training Item
			yard		of fire extinguisher, electricity, generator, noise, bulldozer
		03.09.2017	DS-07	13	Concrete casting, Height work, RCC work, PPE, welding, electricity
			Embankment section km 19+000	05	Excavator and excavation, PPE
	P-35/1	10.09.2017	Tafalbari cc yard	35	PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator, noise, bulldozer
			DS-06	14	Height work, RCC work, PPE, welding, electricity
			DS-02	14	Potential sliding, Height work, RCC work, PPE, welding, electricity
			DS-07	13	Concrete casting, Height work, RCC work, PPE, welding, electricity
			Embankment section km 14+500	04	Excavator and excavation, PPE
		22.09.2017	Tafalbari cc yard	36	PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator, noise, bulldozer
			DS-08	16	Rod cutting and bending,Height work, RCC work, PPE, welding, electricity
			DS-07	18	Rod cutting and bending,Height work, RCC work, PPE, welding, electricity
		30.09.2017	Tafalbari cc yard	29	PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator, noise, bulldozer
			DS-02	12	Rod cutting and bending, Height work, RCC work, PPE, welding, electricity
			DS-07	13	Rod cutting and bending, Height work, RCC work, PPE, welding, electricity
			FS-09	17	Concrete casting, Height work, RCC work, PPE, welding, electricity

Month	Polder	Date	Location	No of trainees	Training Item
	p-35/3	04.09.2017	Daratana cc yard	29	PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator, noise, bulldozer
			DS-02	13	Concrete casting, Height work, RCC work, PPE, welding, electricity
			Khagraghat cc yard	22	PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator,
		12.09.2017	Daratana cc yard	28	PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator, noise, bulldozer
			FS-08	15	Height work, PPE, welding, electricity
			Khagraghat cc yard	21	Potential sliding, PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator
			DS-02	16	Concrete casting, Height work, RCC work, PPE, welding, electricity
		18.09.2017	Daratana cc yard	06	PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator, noise, bulldozer
			DS-02	28	Rod cutting and bending, Height work, RCC work, PPE, welding, electricity
			FS-09	11	Rod cutting and bending, Height work, RCC work, PPE, welding, electricity
		29.09.2017	Daratana cc yard	10	PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator, noise, bulldozer
			DS-02	22	Rod cutting and bending, Height work, RCC work, PPE, welding, electricity
			Khagraghat cc yard	12	PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator
			FS-09	19	Concrete casting, Height work, RCC work, PPE, welding, electricity

Summary of training for month of October, 2017

Month	Polder	Date	Location	No of trainees	Training Item
October, 2017	P-32	01.10.2017	Main camp	12	Fuel storage, kitchen's firing, sanitation, use of fire extinguisher and generator
			DS-02	10	RCC work, Concrete casting ,PPE, excavation, welding and generator
			DS-01	17	PPE, dewatering, use of fire extinguisher, electricity and generator
			Embankment section km 09+000	03	Excavator and excavation, PPE
		09.10.2017	DS-16	18	PPE, excavation, welding, use of fire extinguisher, and generator
			Rupsha cc yard	09	PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator, noise, bulldozer
			Main camp	10	Use of fire extinguisher, PPE, material storage area
			Embankment section km 24+000	02	Excavator and excavation, PPE
		14.10.2017	DS-01	13	Slope protection work , PPE, generator, use of fire-extinguisher
			Rupsha cc yard	20	PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator, noise, bulldozer
			DS-02	12	CC block work, PPE, generator, use of fire-extinguisher
		22.10.2017	Rupsha cc yard	22	PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator, noise, bulldozer
			DS-02	10	Sand piling, PPE, generator, use of fire-extinguisher
			DS-16	11	Sand piling, PPE, generator, use of fire-extinguisher

Month	Polder	Date	Location	No of trainees	Training Item
		03.10.2017	Dacope Embankment section	07	Excavator and excavation, PPE
			DS-09	14	Rod cutting and bending, PPE, excavation, welding and generator
			Mongla cc yard	25	PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator, noise, bulldozer
		10.10.2017	Mongla cc yard	30	PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator, noise, bulldozer
			DS-11	12	RCC work, , PPE, rod bending, electricity and welding
			DS-08	15	PPE, rod bending, electricity, use of fire extinguisher, welding
		16.10.2017	Embankment section km 29+000	09	Excavator and excavation, PPE
			DS-09	08	Height work, Rod cutting and bending, generator, electricity and use of fire extinguisher
			DS-11	18	RCC work, Height work, Rod cutting and bending, generator, electricity and use of fire extinguisher
		25.10.2017	DS-11	15	Road bending, Height work, generator, electricity and use of fire extinguisher
			DS-09	12	RCC work ,Height work, generator, electricity and use of fire extinguisher
			Mongla cc yard	32	PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator, noise, bulldozer
			DS-08	12	Concrete casting, Height work, RCC work, PPE, welding, electricity
			Tafalbari cc	29	PPE, automatic cc plant, forklift, use of fire extinguisher, electricity,

Month	Polder	Date	Location	No of trainees	Training Item
			yard		generator, noise, bulldozer
		02.10.2017	DS-07	13	Concrete casting, Height work, RCC work, PPE, welding, electricity
			Embankment section km 19+000	05	Excavator and excavation, PPE
	P-35/1	12.10.2017	Tafalbari cc yard	35	PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator, noise, bulldozer
			DS-06	14	Height work, RCC work, PPE, welding, electricity
			DS-02	14	Potential sliding, Height work, RCC work, PPE, welding, electricity
			DS-07	13	Concrete casting, Height work, RCC work, PPE, welding, electricity
			Embankment section km 14+500	04	Excavator and excavation, PPE
		18.10.2017	Tafalbari cc yard	36	PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator, noise, bulldozer
			DS-08	16	Sand piling, Height work, RCC work, PPE, welding, electricity
			DS-07	18	Sand piling, Height work, RCC work, PPE, welding, electricity
		29.10.2017	Tafalbari cc yard	29	PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator, noise, bulldozer
			DS-02	12	Sand piling, Height work, RCC work, PPE, welding, electricity
			DS-07	13	Sand piling, Height work, RCC work, PPE, welding, electricity
	p-35/3	04.15.2017	FS-09	17	Concrete casting, Height work, RCC work, PPE, welding, electricity
			Daratana cc	29	PPE, automatic cc plant, forklift, use of fire extinguisher, electricity,

Month	Polder	Date	Location	No of trainees	Training Item
			yard		generator, noise, bulldozer
			DS-02	13	Concrete casting, Height work, RCC work, PPE, welding, electricity
			Khagraghat cc yard	22	PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator,
		15.10.2017	Daratana cc yard	28	PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator, noise, bulldozer
			FS-08	15	Height work, PPE, welding, electricity
			Khagraghat cc yard	21	Potential sliding, PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator
			DS-02	16	Concrete casting, Height work, RCC work, PPE, welding, electricity
		25.10.2017	Daratana cc yard	06	PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator, noise, bulldozer
			DS-02	28	Height work, RCC work, PPE, welding, electricity
			FS-09	11	Height work, RCC work, PPE, welding, electricity
		30.10.2017	Daratana cc yard	10	PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator, noise, bulldozer
			DS-02	22	Height work, RCC work, PPE, welding, electricity
			Khagraghat cc yard	12	PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator
			FS-09	19	Concrete casting, Height work, RCC work, PPE, welding, electricity

Summary of training for month of November, 2017

Month	Polder	Date	Location	No of trainees	Training Item

Month	Polder	Date	Location	No of trainees	Training Item
October , 2017	P-32	01.11.2017	Main camp	12	Fuel storage, kitchen's firing, sanitation, use of fire extinguisher and generator
			DS-08	10	Rod bending and cutting ,PPE, excavation, welding and generator, sand piling
			DS-07	17	Rod bending and cutting ,PPE, excavation, welding and generator, sand piling
			Embankment section km 09+000	03	Excavator and excavation, PPE
		06.11.2017	DS-08	18	PPE, excavation, welding, use of fire extinguisher, and generator
			Rupsha cc yard	09	PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator, noise, bulldozer
			Main camp	10	Use of fire extinguisher, PPE, material storage area
			DS-09	02	Rod bending and cutting ,PPE, excavation, welding and generator, sand piling
		15.11.2017	DS-07	13	Rod bending and cutting ,PPE, excavation, welding and generator, sand piling
			Rupsha cc yard	20	PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator, noise, bulldozer
			DS-08	12	Rod bending and cutting ,PPE, excavation, welding and generator, sand piling
		28.11.2017	Rupsha cc yard	22	PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator, noise, bulldozer
			DS-02	10	Sand piling, PPE, generator, use of fire-extinguisher

Month	Polder	Date	Location	No of trainees	Training Item
			DS-16	11	Sand piling, PPE, generator, use of fire-extinguisher
	P-33	01.11.2017	Dacope Embankment section	07	Excavator and excavation, PPE
			DS-02	14	Rod cutting and bending, PPE, excavation, welding and generator
			Mongla cc yard	25	PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator, noise, bulldozer
		08.11.2017	Mongla cc yard	30	PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator, noise, bulldozer
			FS-17	12	RCC work, , PPE, rod bending, electricity and welding
			DS-03	15	PPE, rod bending, electricity, use of fire extinguisher, welding
		14.11.2017	Embankment section km 29+000	09	Excavator and excavation, PPE
			FS-13	08	Height work, Rod cutting and bending, generator, electricity and use of fire extinguisher
			FS-17	18	RCC work, Height work, Rod cutting and bending, generator, electricity and use of fire extinguisher
		24.11.2017	DS-03	15	Road bending, Height work, generator, electricity and use of fire extinguisher
			DS-02	12	RCC work ,Height work, generator, electricity and use of fire extinguisher
			Mongla cc yard	32	PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator, noise, bulldozer
			FS-05	12	Concrete casting, Height work, RCC

Month	Polder	Date	Location	No of trainees	Training Item
					work, PPE, welding, electricity
		03.11.2017	Tafalbari cc yard	29	PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator, noise, bulldozer
			FS-13	13	Concrete casting, Height work, RCC work, PPE, welding, electricity
			FS-16	05	Excavator and excavation, PPE
	P-35/1	10.11.2017	Tafalbari cc yard	35	PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator, noise, bulldozer
			DS-04	14	Height work, RCC work, PPE, welding, electricity
			FS-17	14	Potential sliding, Height work, RCC work, PPE, welding, electricity
			FS-13	13	Concrete casting, Height work, RCC work, PPE, welding, electricity
			Embankment section km 24+500	04	Excavator and excavation, PPE
		22.11.2017	Tafalbari cc yard	36	PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator, noise, bulldozer
			FS-17	16	Sand piling, Height work, RCC work, PPE, welding, electricity
			FS-13	18	Sand piling, Height work, RCC work, PPE, welding, electricity
		30.11.2017	Tafalbari cc yard	29	PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator, noise, bulldozer
			FS-07	12	Sand piling, Height work, RCC work, PPE, welding, electricity
			FS-05	13	Sand piling, Height work, RCC work, PPE, welding, electricity
			FS-13	17	Sand piling, Height work, RCC work, PPE, welding, electricity

Month	Polder	Date	Location	No of trainees	Training Item
	p-35/3	04.11.2017	FS-10	12	Concrete casting, Height work, RCC work, PPE, welding, electricity
			Daratana cc yard	14	PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator, noise, bulldozer
			DS-02	20	Concrete casting, Height work, RCC work, PPE, welding, electricity
			Khagraghat cc yard	26	PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator,
		12.11.2017	Daratana cc yard	16	PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator, noise, bulldozer
			FS-13	22	Height work, PPE, welding, electricity, sand piling
			Khagraghat cc yard	17	Potential sliding, PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator
			DS-02	07	Concrete casting, Height work, RCC work, PPE, welding, electricity
		18.11.2017	Daratana cc yard	25	PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator, noise, bulldozer
			DS-02	10	Height work, RCC work, PPE, welding, electricity
			FS-10	12	Height work, RCC work, PPE, welding, electricity
		29.11.2017	Daratana cc yard	24	PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator, noise, bulldozer
			DS-01	13	Height work, RCC work, PPE, welding, electricity
			Khagraghat cc yard	18	PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator
			FS-10	11	Concrete casting, Height work, RCC work, PPE, welding, electricity

Summary of training for month of December, 2017

Month	Polder	Date	Location	No of trainees	Training Item
December, 2017	P-32	05.12.2017	Main camp	12	Fuel storage, kitchen's firing, sanitation, use of fire extinguisher and generator
			Rupsha cc yard	10	PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator, noise, bulldozer
			DS-07	17	Rod bending and cutting ,PPE, excavation, welding and generator, sand piling
		15.12.2017	DS-08	03	RCC work, PPE, excavation, welding, use of fire extinguisher, and generator
			Rupsha cc yard	18	PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator, noise, bulldozer
			Main camp	09	Use of fire extinguisher, PPE, material storage area
			DS-09	10	RCC work, Rod bending and cutting ,PPE, excavation, welding and generator, sand piling
		23.12.2017	DS-07	02	Rod bending and cutting ,PPE, excavation, welding and generator, sand piling
			Rupsha cc yard	13	PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator, noise, bulldozer
			DS-08	20	Rod bending and cutting ,PPE, excavation, welding and generator, sand piling
		31.12.2017	Rupsha cc yard	12	PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator, noise, bulldozer
			DS-08	22	Sand piling, PPE, generator, use of fire-extinguisher

Month	Polder	Date	Location	No of trainees	Training Item
			DS-02	10	Boring well, CC block work for slope protection, CC of railing work
	P-33	01.12.2017	Dacope Embankment section	11	Excavator and excavation, PPE
			DS-02	07	Rod cutting and bending, PPE, excavation, welding and generator
			Mongla cc yard	14	PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator, noise, bulldozer
		10.12.2017	Mongla cc yard	25	PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator, noise, bulldozer
			DS-12	30	RCC work, , PPE, rod bending, electricity and welding
			DS-03	12	PPE, rod bending, electricity, use of fire extinguisher, welding
		21.12.2017	Embankment section km 32+000	15	Excavator and excavation, PPE
			DS-02	09	Height work, Rod cutting and bending, generator, electricity and use of fire extinguisher
			FS-17	08	RCC work, Height work, Rod cutting and bending, generator, electricity and use of fire extinguisher
		28.12.2017	DS-03	18	Road bending, Height work, generator, electricity and use of fire extinguisher
			DS-02	15	RCC work ,Height work, generator, electricity and use of fire extinguisher
			Mongla cc yard	12	PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator, noise, bulldozer
			FS-05	32	Concrete casting, Height work, RCC

Month	Polder	Date	Location	No of trainees	Training Item
					work, PPE, welding, electricity
			Tafalbari cc yard	12	PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator, noise, bulldozer
		04.12.2017	FS-07	29	Concrete casting, Height work, RCC work, PPE, welding, electricity
			FS-12	13	Concrete casting, Height work, RCC work, PPE, welding, electricity
	P-35/1		DS-04	05	Concrete casting, Height work, RCC work, PPE, welding, electricity
			Tafalbari cc yard	35	PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator, noise, bulldozer
		14.12.2017	FS-13	14	Height work, RCC work, PPE, welding, electricity
			FS-07	14	Potential sliding, Height work, RCC work, PPE, welding, electricity
			FS-16	13	Concrete casting, Height work, RCC work, PPE, welding, electricity
			FS-17	04	Concrete casting, Height work, RCC work, PPE, welding, electricity
		19.12.2017	Tafalbari cc yard	36	PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator, noise, bulldozer
			FS-07	16	Sand piling, Height work, RCC work, PPE, welding, electricity
			FS-12	18	Sand piling, Height work, RCC work, PPE, welding, electricity
			FS-13	29	Sand piling, Height work, RCC work, PPE, welding, electricity
		29.12.2017	Tafalbari cc yard	12	PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator, noise, bulldozer
			DS-02	13	Sand piling, Height work, RCC work, PPE, welding, electricity

Month	Polder	Date	Location	No of trainees	Training Item
			DS-07	17	Sand piling, Height work, RCC work, PPE, welding, electricity
	p-35/3	02.12.2017	FS-10	29	Concrete casting, Height work, RCC work, PPE, welding, electricity
			Daratana cc yard	13	PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator, noise, bulldozer
			DS-02	22	Concrete casting, Height work, RCC work, PPE, welding, electricity
			Khagraghat cc yard	28	PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator,
		12.12.2017	Daratana cc yard	15	PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator, noise, bulldozer
			FS-13	21	Height work, PPE, welding, electricity, sand piling
			Khagraghat cc yard	16	Potential sliding, PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator
			DS-02	06	Concrete casting, Height work, RCC work, PPE, welding, electricity
		18.12.2017	Daratana cc yard	28	PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator, noise, bulldozer
			DS-02	11	Height work, RCC work, PPE, welding, electricity
			FS-10	10	Height work, RCC work, PPE, welding, electricity
		27.12.2017	Daratana cc yard	22	PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator, noise, bulldozer
			DS-01	12	Height work, RCC work, PPE, welding, electricity
			Khagraghat cc yard	19	PPE, automatic cc plant, forklift, use of fire extinguisher, electricity, generator

Month	Polder	Date	Location	No of trainees	Training Item
			FS-10	12	Concrete casting, Height work, RCC work, PPE, welding, electricity

4.6 Sample of correspondence of EHS issue from DDSC&PMSC

Royal HaskoningDHV
Enhancing Society Together

DerCon
Leading Today for Tomorrow

dpm

IWM

DHI

Coastal Embankment Improvement Project, Phase-1 (CEIP-1)

CEIP-1 Project Office, Road 18, House 36, Flat D-1, Block J, Banani, Dhaka 1213, Bangladesh

Return address: Postbus 151, 6500 AD, Nijmegen, The Netherlands

HASKONINGDHV NEDERLAND B.V.
WATER

Office of the Project Director
CEIP - 1, BWDB, Dhaka

Dairy No:	Date: 03-12-17
DPD	Urgent
Addl. Director	Take Necessary Action
EE-1 / 2	Discus
EE-Khulna	Put Up
DD / AD	Keep in File
SDE -1 / 2	Preparec the Report
AE-1 / 2	
PS / SR / SSS	
FMS / SES / SCO	Project Director

To
Mr. Yang Dong
Acting Project Manager
The First Engineering Bureau
Of Henan Water Conservancy
House # 411, Road # 04
Sonadanga R/A (2nd Phase), Khulna
Bangladesh

Jonkerbosplein 52
Postbus 151
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Your reference	:	None
Our reference	:	RDCOR_BC5883-100_L001148_JHL_MIP
Direct line	:	0178-7657-801
E-mail	:	Harrie.laboyrie@rhdhv.com
Date	:	30 November 2017
Enclosure(s)	:	None

Subject : **Observations of World Bank Environment Safeguard Mission.**

Dear Mr. Yang Dong,

In connection to the above it has to be mentioned that the environmental qualities have to be improved and maintained strictly in general and in the fields mentioned in the letter within the timeline specifically.

The World Bank Mission visited some of the work sites of Polders 32, 33, 35/1 and 35/3 of Package-1 for supervision of environmental safeguard compliance during the period from 19 November 2017 to 22 November 2017. Following the field visit a meeting was held on 23 November 2017 where various levels of environmental qualities have been described along with some good practices and areas of improvement in the CC block plants and other works. The important areas improvement of EHS issues are described in the following table for compliance by the Contractor within a time frame to be informed to the undersigned.

Table-1: Environmental parameters to be improved by the Contractor within a time frame

Types	Details of Environmental issues	Timeline
	Areas of Improvement at CC Block Plant	
Noise	Need to set the clear standard and to conduct regular monitoring and recording at high noise work area. Within high noise work area, ear plug and ear muff must be worn. Warning sign to indicate high noise and to use PPE has to be displayed. Consult with machine manufacturer to seek noise reduction thorough mechanical design change including enclosure of noise source.	31 December 2017
Dust	Workers at CC block casting area must wear dust mask. Coverage on the belt conveyor and dust emitted parts of casting machine.	10 December 2017
Stockpile	Maximum height must be determined by engineer and never exceed the maximum height. Wall/fence to prevent damage from potential slide. No entry to active loading area of stockpile. Display signs.	07 December 2017
Forklift	Marking of sidewalk and forklift moving area	07 December 2017
No entry	No entry to the area where workers should not enter e.g. material mixing hoper	07 December 2017

Types	Details of Environmental issues	Timeline
Falling	Fences around hopper of casting machine and a pond of water used as a material	30 November 2017
Lockout/Tugout	Set the procedure to tum off the switch of electricity and CC block casting machine and put the tags to give alert to prevent operational mistake. Employees can be seriously injured if machinery is started/stopped unexpectedly	30 November 2017
Electrical Safety	Proper instalment of electrical cable to prevent stumble and electrocution	30 November 2017
Extinguisher	Store under the shade, expiration control and training	07 December 2017
Waste water	Pumping water pond and authorized discharge	31 December 2017
Waste	Lack of temporary waste storage, sludge management	31 December 2017
Oils/Chemicals	Leakage of machine oil (70-80cm diameter) on unpaved ground, pavement of aboveground storage tanks area	15 December 2017
Areas of Improvement for Other Works		
Chemicals	Tray/Secondary containment to be installed for oil/chemicals containers	07 December 2017
Stockpile	Use fence around sand stockpile (especially community access road side). No entry to active loading areas of stockpile. Locate on flat and stable area without side risk.	07 December 2017
Forklift	Forklift speed limit, demarcation between workers and forklift movement, no sudden start/stop, keep a distance from forklift during loading, check workers around forklift before moving, give regular training to drivers, regular maintenance- Establish forklift safety rules.	31 December 2017
No entry	Clear demarcation of the work and storage area. Access control of local people. Signs should be posted. No fishing zone.	07 December 2017
Falling	Draw the line at 0.5 -1.0m from the edge of barge (to give caution to workers), wear life jacket.	07 December 2017
Near Sundarbans	Extra attention needed- buffer zone for the use of oil/chemicals, erosion control, visual observation of animals, contingency plan.	15 December 2017

The World Bank has also spelled out some High Priority Remedial Action Plan to be implemented by the Contractor within specific time frame as mentioned in Table-2.

Table-2: HIGH PRIORITY REMEDIAL ACTIONS in CC BLOCK and for Other Works

Sl. No	Proposed Actions	Responsibility	Timeline
1.	Marking of forklift area and pedestrian area at work sites	Contractor	December 31, 2017
2.	Excavation of contaminated soil at Polder 35/1	Contractor	November 30, 2017
3.	Provide pavement at ASTS of heavy oil and change the location of electrical outlet and fueling device at Polder 35/1	Contractor	December31,2017
4.	100% PPES at CC block casting area	Contractor	November 30, 2017
5.	Noise- (1) Check machine manufacturer on the potential noise and dust reduction from casting	Contractor	December 31, 2017

Coastal Embankment Improvement Project, Phase-1 (CEIP-1)

CEIP-1 Project Office, Road 18, House 36, Flat D-1, Block J, Banani, Dhaka 1213, Bangladesh

Sl. No	Proposed Actions	Responsibility	Timeline
	machine, (2) monitor noise level at closest houses From the CC block sites, (3) Regular health check		
6.	Provide fence around hopper of casting machine	Contractor	December 31,2017
7.	Provide a fence around a pond of water used as a material or replace with water tank in Polder 33 CC block plant. Electrical cable must be Marking of forklift area and workers standing area at barge	Contractor	December 31, 2017
8.	Marking of forklift area and workers standing area at barge.	Contractor	December 31, 2017
9.	Development of forklift safely procedure and implement Marking of forklift area and worker standing area at barge. Development of forklift safely procedure and implementation	Contractor	December 31, 2017
10.	Noise- (1) monitor noise level at closest houses from generators and (2) provide noise barrier if necessary	Contractor	December 31, 2017
11.	Provide clear demarcation/fence to clarify the project area and control the unauthorized access to the project site. Sign to prevent unauthorized entry should be placed. If fishing community exists around the project sites, no fishing zone should be placed for safety.	Contractor	December 31, 2017
12.	Oil & Chemicals - provide secondary containment where oils/chemicals are used. Oil & chemical storage areas should be established at a work site. Display signs.	Contractor	December 31, 2017
13.	Establish EHS committee of CEIP and hold monthly meeting	Consultants	November 23,2017
14.	Revise C-ESMPs incorporating our comments provided earlier and our findings in this mission	Contractor	December 31, 2017
15.	Translation of C-ESMPS for all polders	Contractor	January 31, 2018
16.	Appointment of qualified EHS managers for each polder and conduct toolbox talk	Contractor	January 31, 2018
17.	Conduct EHS risk/impact assessment and to develop EHS management plan for each CC block casting plant.	Contractor (external consultant)	January 31, 2017
18.	Conduct HS risk assessment and to develop HS management plan for each polder (e.g. barge, sluice, embankment)	Contractor (external consultant)	January 31, 2018
19.	EHS Training for management and EHS managers (Class and at the site)	PMU,DDCS&PMS Consultants	February 2018
20.	Ensure implementation at all the actions	Project Director	Continuous

Thus, the Contractor is hereby requested to undertake all efforts to materialize the needful maintaining the time frame as described in Table-1 and Table-2.

It may be mentioned that the Project Authority, DDCS&PMS Consultants and Third-Party M&E Consultants will monitor the compliance level of the Contractor through field visit before submitting the report to the WB accordingly.

A you see some deadlines are already reached, so, please inform us on the status of those parameters.

Thanking you,

Jean Henry (Harrie) Laboyrie
Team Leader, CEIP-1
Detailed Design Construction Supervision and Project Management Support

Copy to:

1) Mr. Md. Delwar Hossain, Project Director, PMU, CEIP-1, BWDB, Gulshan-2, Dhaka
2) Mr. Md. Habibur Rahman, Deputy Team Leader, DDCS & PMS, CEIP-1, Banani, Dhaka
3) Mr. Md. Mazibur Rahman Khan, Deputy Resident Engineer, DDCS & PMS, CEIP-1, Khulna
4) Dr. Ashadul Alam, Senior Environment Specialist, PMU, CEIP-1, BWDB, Gulshan-2, Dhaka
5) Mr. Henk Blok,, Environmental Specialist, DDCS & PMS, CEIP-1, Banani, Dhaka
6) Mr. Abu Bakr Siddique, Environmental Specialist, DDCS & PMS, CEIP-1, Banani, Dhaka
7) Office copy

4.7 Summary Environmental Compliance / Non-Compliance Report: Package 01

Total in a year of Package 01 (2017)				
Environmental Issues	**Types of Compliance, Non-Compliance & Repeating Non Compliance**	**Total no. of compliance in package 01 for the year**	**Total no. of non-compliance in package 01 for the year**	**Total no. of repeating non-compliance in package 01 for the year**
Construction Camps	Obtaining approval	18	0	
	Erection of signboard in Bangla and English with project details	18	0	
	Install accommodation facilities for workers	18	0	
	Drainage channels installation	19	2	
	Supply of safe drinking water	18	0	
	Supply of adequate sanitation	18	0	
	Solid fencing and demarcation to prevent villagers from entering the premises	18	0	
Fuel storage areas	Install hardstand and secondary containment	16	0	
	Firefighting equipment installation	17	3	
	Sand and shovel close-by	17	3	
	Regular checks on physical condition	20	19	
Access road construction	Obtaining approval	15	0	
	Construction of culverts if needed	3	0	
Temporary Facilities Decommissioning	Agreeing with local authorities on demolition	0	6	
	Review of Environmental liabilities	2	0	
	Waste removal	2	0	
	General re-instatement of site	2	0	
	Re-vegetation implementation	4	0	
	Close-out check	0	6	
Construction and Demolishing of	Demolishing debris of sluices and inlets will be disposed of	15	37	

Total in a year of Package 01 (2017)				
Environmental Issues	**Types of Compliance, Non-Compliance & Repeating Non Compliance**	**Total no. of compliance in package 01 for the year**	**Total no. of non-compliance in package 01 for the year**	**Total no. of repeating non-compliance in package 01 for the year**
drainage sluices, flushing sluices and inlets	at a site approved by the Engineer.			
	Before starting the construction activities of drainage sluices ring bundh and diversion channel will be installed in order to work in dry conditions.	24	3	
	No waste water from concrete mixing will be disposed of directly to the surface water.	16	0	
	Steel sheet pile driving will not be done at night.	18	0	
	The work area will be demarcated clearly.	19	4	
	Signals will be installed to indicate the entry and exits of vehicles and movement of construction equipment in the work area.	16	0	
	Prior to every monsoon season all the temporary and permanent drainage structures under construction will be made free from debris.	27	0	
Construction and re-sectioning of embankments	Pavement(if present)will be removed and disposed of at the premises of BWDB	0	1	
	All works will be demarcated clearly.	20	0	
	Signals will be installed to indicate the entry and exits of vehicles and movement of construction	20	0	
	The contractor shall manage the top soil(15)cm during earth work activities	1	33	

Total in a year of Package 01 (2017)				
Environmental Issues	**Types of Compliance, Non-Compliance & Repeating Non Compliance**	**Total no. of compliance in package 01 for the year**	**Total no. of non-compliance in package 01 for the year**	**Total no. of repeating non-compliance in package 01 for the year**
The bank and slope protection works	Spilling of earth material in surface water will be avoided.	1	0	
	Turfing will be applied to prevent erosion	15	0	
	Proper drainage provision will be kept to avoid formation of rain cuts due to surface run off.	10	0	
Re-excavation works	Spoil plan (volume to be excavated; disposal site to be used; quality of excavated material; applicability of excavated material) to be developed for approval by Engineer.	3	28	
	Unnecessary re-suspension will be avoided by selection of suitable dredging equipment.	0	0	
	Temporarily deposition of excavated material will be away from the channel edge to limit damage to streamside and stream habitats.	0	0	
	Return water will be conveyed through siltation chambers to avoid high loads of fines to be discharged on surface water.	0	0	
	Where applicable biotechnical Engineering, for example, geo textile, may be used to help stabilize the material.	0	0	
	Smothering of important flora and habitats will be avoided.	0	0	

Total in a year of Package 01 (2017)				
Environmental Issues	**Types of Compliance, Non-Compliance & Repeating Non Compliance**	**Total no. of compliance in package 01 for the year**	**Total no. of non-compliance in package 01 for the year**	**Total no. of repeating non-compliance in package 01 for the year**
Construction of the closure Dam	N/A	0	0	
Manufacture of pre-cast CC blocks	Workers will be equipped with proper PPE.	20	6	
	Signals will be installed to indicate the entry and exits and movement of vehicles construction in the work area.	18	0	
	Manufacturing will not take place at night.	18	0	
	Stacks with sand will be covered or wetted.	18	0	
Borrow Material	Agreeing on borrow area	16	0	
	Document borrow area	10	35	
	Perform soil analyses on borrow materials when contamination is expected	17	1	
	Prevention of erosion/dust forming	18	0	
	Borrow area excavation complying with distance from the embankment as per the technical specification	18	0	
	No-Tress pass line fixed with bamboo poles	8	0	
Hard Rock Revetment	N/A	8	0	
Occupational Health and Safety	Development of Health and Safety plan including emergency procedures	16	0	
	Train all staff in health and safety	16	0	
	Provision of HIV, including STI(Sexually Transmitted Infections) information, education and communication	9	0	
	Provision of PPE and	17	9	

Total in a year of Package 01 (2017)				
Environmental Issues	**Types of Compliance, Non-Compliance & Repeating Non Compliance**	**Total no. of compliance in package 01 for the year**	**Total no. of non-compliance in package 01 for the year**	**Total no. of repeating non-compliance in package 01 for the year**
	ensuring their use			
	Provision and use of life jacket during visiting campsite/worksite by boat	16	0	
	Installation of first aid facilities at work site and camps with adequate stock	16	0	
	Provide sanitation facilities where needed	16	0	
	Provision of safe drinking water to work force (tube-well water, bottled water or pond water)	16	0	
	Proper signaling of work areas	16	0	
Public Health and Safety	Notification of the public adjacent to the construction areas	16	0	
	Installation of dedicated pathways for pedestrians	16	2	
	Proper signaling of work areas	16	0	
	Limitation of construction vehicles at public roads during peak hours.	16	0	
	The temporary traffic detours in settlement areas will be kept free of dust by frequent application of water	16	0	
	Construction activities will be undertaken according to during daylight working hours between the hours of 07:00-17:00 on week days	16	0	
Water Supply	Providing construction camps with portable water either through installing tubewells (hand pump,	16	0	

Total in a year of Package 01 (2017)				
Environmental Issues	**Types of Compliance, Non-Compliance & Repeating Non Compliance**	**Total no. of compliance in package 01 for the year**	**Total no. of non-compliance in package 01 for the year**	**Total no. of repeating non-compliance in package 01 for the year**
	shallow and deep tubeweel), pond Sand Filter (PSE) or supplying safe bottled water			
	Ensuring the location plan of tubewells (used for supplying potable water) that these are not sited near any sanitation facilities as to avoid water pollution	13	0	
	Maintaining the distance of a tubewell/surface water resource from a soak pit at minimum 15 m	6	21	
	Maintaining the drainage from the tubewell diverting into the drainage system of the camp area	3	3	
	Providing separate tubewells for the use of women.	3	0	
Sanitation	Providing suitable sanitation facilities for the workforce	24	6	
	Ensuring the location plan of the latrine at least 50 m away from the accommodation facility	13	0	
	Providing separate latrines for the use of women	20	0	
	Installing treatment facilities (i.e. septic tank, soak pits etc.) for the sewerage from toilet and camp site wastes.	17	0	
	Arranging disposal of wastewater from washrooms, kitchens, s, etc. via the camp area's drainage system	7	0	
Solid Waste Management	Ensuring collection and disposal of solid wastes within the construction	16	0	

Total in a year of Package 01 (2017)				
Environmental Issues	**Types of Compliance, Non-Compliance & Repeating Non Compliance**	**Total no. of compliance in package 01 for the year**	**Total no. of non-compliance in package 01 for the year**	**Total no. of repeating non-compliance in package 01 for the year**
	camps and work areas			
	Taking measure to collect and store inorganic wastes in a safe place within the household and organic wastes cleared on daily basis to waste collector.	10	23	
	Establish measures for Waste collection, transportation and disposal systems at approved disposal sites.	6	11	
	Disposal of construction and demolition waste.	4	14	
	Installation of decanter boxes for washing buckets and cement mixers	4	15	
	Installation of proper filtering elements.	3	26	
	Carrying out periodic checks and clean-ups for the decanter box.	7	16	
	Prioritize reuse of aggregates and water from the decanter box.	7	12	
Waste water	Ensure safe disposal of liquid wastes generated at camp site.	7	16	
	Regular maintenance of vehicles	16	0	
	Covering or wetting of dusty materials	16	0	
	Dust suppression by wetting surfaces	16	0	
	Impose speed limits	16	0	
Air	Revegetate bare surfaces soonest	16	0	
Noise	Notify nearby population	15	0	

Total in a year of Package 01 (2017)				
Environmental Issues	**Types of Compliance, Non-Compliance & Repeating Non Compliance**	**Total no. of compliance in package 01 for the year**	**Total no. of non-compliance in package 01 for the year**	**Total no. of repeating non-compliance in package 01 for the year**
	prior to any typical noise events			
	Ensure construction activities do not generate unacceptably high level of noise	16	0	
	Restrict working to daylight hours	16	0	
	Locate noisy equipment / facilities away from sensitive receptors	16	0	
Water and Hydrology	Preventing waste, soil, etc. entering in the water system by waste collection, revegetation and dust suppression etc.	16	0	
	Insure proper drainage of working areas e.g. perimeters lines must be provided with open shallow drains	13	22	
Flora and Fauna	Agreeing with local authorities on tree felling.	16	3	
	Document trees / area of trees.	2	26	
	Avoid/prevent un-necessary tree vegetation cutting and clearing.	2	0	
	Revegetate disturbed construction and ancillary site surfaces.	2	0	
	Prevent disturbance of animals	16	0	
	Ensuring sufficient free flow in the construction work for fish migration	16	0	
Monitoring of Air Quality	Performance of air quality tests at selected sensitive sites for parameters SPM	16	0	

Total in a year of Package 01 (2017)				
Environmental Issues	**Types of Compliance, Non-Compliance & Repeating Non Compliance**	**Total no. of compliance in package 01 for the year**	**Total no. of non-compliance in package 01 for the year**	**Total no. of repeating non-compliance in package 01 for the year**
	2.5/10, SOx, NOx and CO during working hours			
Monitoring of Noise Quality	Monitoring of noise level (dB) at selected sensitive sites during working hours	16	0	
Monitoring of Soil Quality	Performance of soil quality tests at selected sites (borrow areas, spill sites) for parameters as organic matter, N, P, K, pH, Salinity, S and Zn.	16	0	
Monitoring of Surface Water Quality	Performance of analyses on surface water (river, khal, beel and pond) for: pH, TDS, DO, BOD, EC/Salinity and Turbidity.	16	0	
Monitoring of Drinking Water Quality	Performance of analyses on drinking water for: arsenic, iron, chloride and total faecal coliform bacteria.	16	0	
Deployment of Environment and Safety Supervisor	Employ one full-time Environment and Safety Supervisor for compliance monitoring of EMP	15	0	
Complaints and Environmental Incidents	Grievance Redress Mechanism will be established.	15	8	
	Complaints received from the public or other stakeholders will be registered and recorded and be brought to the attention of the Site Engineer.	21	2	
	All environmental incidents occurring on the site will be recorded and be brought to the attention of the Site Engineer.	21	2	
	Action will be taken within 7	14	0	

Total in a year of Package 01 (2017)				
Environmental Issues	**Types of Compliance, Non-Compliance & Repeating Non Compliance**	**Total no. of compliance in package 01 for the year**	**Total no. of non-compliance in package 01 for the year**	**Total no. of repeating non-compliance in package 01 for the year**
	working days.			
Reporting and Documentation	The following records will be kept at site: - Environmental Monitoring Results - Contractors self-assessment record/results - Register of non-compliance - Register of corrective actions - Monthly Environmental Reports	21	5	
Training	Environmental training on EMP will be arranged for Construction Field supervisors and Environment & Safety Supervisors.			

4.8 Detailed Polder-wise Compliance and Non-Compliance Report for both Packages

Package 01

Polder 32:Environmental Compliance Report																
		No. of compliance					No. of non - Compliance					No. of non- Compliance repeating				
Environmental Issues	**Types of Compliance, Non-Compliance &Repeating Non-Compliance**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in a year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in a year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in a year**
	Obtaining approval	1	1	1	1	4					0					
	Erection of signboard in Bangla and English with project details	1	1	1	1	4					0					
	Install accommodation facilities for workers	1	1	1	1	4					0					
	Drainage channels installation	2	1	1	1	5	2				2					
	Supply of safe drinking water	1	1	1	1	4					0					
	Supply of adequate sanitation	1	1	1	1	4					0					
Construction Camps	Solid fencing and demarcation to prevent villagers from entering the premises	1	1	1	1	4					0					
	Install hardstand and secondary containment	1	1	1	1	4					0					
	Firefighting equipment installation	1	1	1	1	4					0					
	Sand and shovel close-by	1	1	1	1	4					0					
Fuel storage areas	Regular checks on physical condition	1	5	1	1	8	3	1			4					
Access road	Obtaining approval		1	1	1	3					0					

Polder 32:Environmental Compliance Report																
		No. of compliance					No. of non - Compliance					No. of non- Compliance repeating				
Environmental Issues	**Types of Compliance, Non-Compliance &Repeating Non-Compliance**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in a year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in a year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in a year**
construction	Construction of culverts if needed		1	1	1	3					0					
Temporary Facilities Decommissioning	Agreeing with local authorities on demolition					0			1	5	6					
	Review of Environmental liabilities			1	1	2					0					
	Waste removal			1	1	2					0					
	General re-instatement of site			1	1	2					0					
	Re Vegetation implementation			3	1	4					0					
	Close-out check					0			5	1	6					
Construction and Demolishing of drainage sluices, flushing sluices and inlets	Demolishing debris of sluices and inlets will be disposed of at a site approved by the Engineer.	2	1		1	4	2	5	1	5	13					
	Before starting the construction activities of drainage sluices ring bunch and diversion channel will be installed in order to work in dry conditions.	1	1	5	1	8			1		1					
	No waste water from concrete mixing will be disposed of directly to the surface water.	1	1	1	1	4					0					
	Steel sheet pile driving will not be done at night.	1	1	1	1	4					0					

Polder 32:Environmental Compliance Report																
		No. of compliance					No. of non - Compliance					No. of non- Compliance repeating				
Environmental Issues	**Types of Compliance, Non-Compliance &Repeating Non-Compliance**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in a year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in a year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in a year**
	The work area will be demarcated clearly.	1	1	1	1	4					0					
	Signals will be installed to indicate the entry and exits of vehicles and movement of construction equipment in the work area.	1	1	1	1	4					0					
	Prior to every monsoon season all the temporary and permanent drainage structures under construction will be made free from debris.		5	1	1	7					0					
Construction and re-sectioning of embankments	Pavement(if present)will be removed and disposed of at the premises of BWDB					0		1			1					
	All works will be demarcated clearly.	1	1	1	1	4					0					
	Signals will be installed to indicate the entry and exits of vehicles and movement of construction	1	1	1	1	4					0					
	The contractor shall manage the top soil(15)cm during earth work activities		1			1	1	1	1	1	4					
The bank and slope protection works	Spilling of earth material in surface water will be avoided.		1			1					0					

Polder 32:Environmental Compliance Report																
		No. of compliance					No. of non - Compliance					No. of non- Compliance repeating				
Environmental Issues	**Types of Compliance, Non-Compliance &Repeating Non-Compliance**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in a year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in a year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in a year**
	Turfing will be applied to prevent erosion	1	1	1	1	4					0					
	Proper drainage provision will be kept to avoid formation of rain cuts due to surface run off.	1	1	1	1	4					0					
	Spoil plan (volume to be excavated; disposal site to be used; quality of excavated material; applicability of excavated material) to be developed for approval by Engineer.				1	1			1		1					
	Unnecessary re suspension will be avoided by selection of suitable dredging equipment.					0					0					
	Temporally deposition of excavated material will be away from the channel edge to limit damage to streamside and stream habitats.					0					0					
Re-excavation works	Return water will be conveyed through siltation chambers to avoid high loads of fines to be discharged on surface water.					0					0					

Polder 32:Environmental Compliance Report																
		No. of compliance					No. of non - Compliance					No. of non- Compliance repeating				
Environmental Issues	**Types of Compliance, Non-Compliance &Repeating Non-Compliance**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in a year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in a year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in a year**
	Where applicable biotechnical Engineering, for example, geo textile, may be used to help stabilize the material.					0					0					
	Smothering of important flora and habitats will be avoided.					0					0					
Construction of the closure Dam	N/A					0					0					
Manufacture of pre-cast CC blocks	Workers will be eqipped with proper PPE.	1	1	1	1	4					0					
	Signals will be installed to indicate the entry and exits and movement of vehicles construction in the work area.	1	1	1	1	4					0					
	Manufacturing will not take place at night.	1	1	1	1	4					0					
	Stacks with sand will be covered or wetted.	1	1	1	1	4					0					
Borrow Material	Agreeing on borrow area	1	1	1	1	4					0					
	Document borrow area	1	1	1	1	4	1		3	1	5					
	Perform soil analyses on borrow materials when contamination is expected	1	1	1	1	4					0					
	Prevention of erosion/dust forming	1	1	1	1	4					0					

Polder 32:Environmental Compliance Report																
		No. of compliance					No. of non - Compliance					No. of non- Compliance repeating				
Environmental Issues	**Types of Compliance, Non-Compliance &Repeating Non-Compliance**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in a year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in a year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in a year**
	Borrow area excavation complying with distance from the embankment as per the technical specification	1	1	1	1	4					0					
	No-Tress pass line fixed with bamboo poles	1	1	1	1	4					0					
Hard Rock Revetment	N/A	1	1	1	1	4					0					
Occupational Health and Safety	Development of Health and Safety plan including emergency procedures	1	1	1	1	4					0					
	Train all staff in health and safety	1	1	1	1	4					0					
	Provision of HIV, including STI(Sexually Transmitted Infections) information, education and communication	1	1	1	1	4					0					
	Provision of PPE and ensuring their use	1	1	1	1	4					0					
	Provision and use of life jacket during visiting campsite/worksite by boat	1	1	1	1	4					0					
	Installation of first aid facilities at work site and camps with adequate stock	1	1	1	1	4					0					
	Provide sanitation facilities where needed	1	1	1	1	4					0					

Polder 32:Environmental Compliance Report																
		No. of compliance					No. of non - Compliance					No. of non- Compliance repeating				
Environmental Issues	**Types of Compliance, Non-Compliance &Repeating Non-Compliance**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in a year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in a year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in a year**
	Provision of safe drinking water to work force (tube-well water, bottled water or pond water)	1	1	1	1	4					0					
	Proper signaling of work areas	1	1	1	1	4					0					
	Notification of the public adjacent to the construction areas	1	1	1	1	4					0					
	Installation of dedicated pathways for pedestrians	1	1	1	1	4	2				2					
	Proper signaling of work areas	1	1	1	1	4					0					
	Limitation of construction vehicles at public roads during peak hours.	1	1	1	1	4					0					
	The temporary traffic detours in settlement areas will be kept free of dust by frequent application of water	1	1	1	1	4					0					
Public Health and Safety	Construction activities will be undertaken according to during daylight working hours between the hours of 07:00-17:00 on week days	1	1	1	1	4					0					

Polder 32:Environmental Compliance Report																
		No. of compliance					No. of non - Compliance					No. of non- Compliance repeating				
Environmental Issues	**Types of Compliance, Non-Compliance &Repeating Non-Compliance**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in a year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in a year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in a year**
Water Supply	Providing construction camps with portable water either through installing tubewells (hand pump, shallow and deep tubeweel), pond Sand Filter (PSE) or supplying safe bottled water	1	1	1	1	4					0					
	Ensuring the location plan of tube wells (used for supplying potable water) that these are not sited near any sanitation facilities as to avoid water pollution	1	1	1	3	6					0					
	Maintaining the distance of a tube well/surface water resource from a soak pit at minimum 15 m	1	1	1		3	1		1		2					
	Maintaining the drainage from the tube well diverting into the drainage system of the camp area		1	1		2				3	3					
	Providing separate tube wells for the use of women.		1	1		2					0					
Sanitation	Providing suitable sanitation facilities for the workforce	3	1	1	1	6	1				1					

Polder 32:Environmental Compliance Report																
		No. of compliance					No. of non - Compliance					No. of non- Compliance repeating				
Environmental Issues	**Types of Compliance, Non-Compliance &Repeating Non-Compliance**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in a year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in a year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in a year**
	Ensuring the location plan of the latrine at least 50 m away from the accommodation facility	1	1	1	1	4					0					
	Providing seprate latrines for the use of women	1	1	1	1	4					0					
	Installing treatment facilities (i.e. septic tank, soak pits etc.) for the sewerage of toilet and camp site wastes.	1	1	1	1	4					0					
	Arranging disposal of wastewater from washrooms, kitchens, s, etc. via the camp area's drainage system	1			1	2					0					
	Ensuring collection and disposal of solid wastes within the construction camps and work areas	1	1	1	1	4					0					
Solid Waste Management	Taking measure to collect and store inorganic wastes in a safe place within the household and organic wastes cleared on daily basis to waste collector.	1			1	2			1	5	6					

Polder 32:Environmental Compliance Report																
		No. of compliance					No. of non - Compliance					No. of non- Compliance repeating				
Environmental Issues	**Types of Compliance, Non-Compliance &Repeating Non-Compliance**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in a year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in a year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in a year**
	Establish measures for Waste collection, transportation and disposal systems at approved disposal sites.					0	1		1	1	3					
	Disposal of construction and demolition waste.					0	2		1	`	3					
	Installation of decanter boxes for washing buckets and cement mixers					0	1		1	5	7					
	Installation of proper filtering elements.					0	1		1	5	7					
	Carrying out periodic checks and clean-ups for the decanter box.					0	1		1	5	7					
	Prioritize reuse of aggregates and water from the decanter box.					0	1		1	1	3					
Waste water	Ensure safe disposal of liquid wastes generated at camp site.					0	1		1	5	7					
	Regular maintenance of vehicles	1	1	1	1	4					0					
	Covering or wetting of dusty materials	1	1	1	1	4					0					
Air	Dust suppression by wetting surfaces	1	1	1	1	4					0					

Polder 32:Environmental Compliance Report																	
		No. of compliance					No. of non - Compliance					No. of non- Compliance repeating				
Environmental Issues	**Types of Compliance, Non-Compliance &Repeating Non-Compliance**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in a year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in a year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in a year**
	Impose speed limits	1	1	1	1	4					0					
	Revegetate bare surfaces soonest	1	1	1	1	4					0					
	Notify nearby population prior to any typical noise events	1		1	1	3					0					
	Ensure construction activities do not generate unacceptably high level of noise	1	1	1	1	4					0					
	Restrict working to daylight hours	1	1	1	1	4					0					
Noise	Locate noisy equipment / facilities away from sensitive receptors	1	1	1	1	4					0					
	Preventing waste, soil, etc. entering in the water system by waste collection, re-vegetation and dust suppression etc.	1	1	1	1	4					0					
Water and Hydrology	Insure proper drainage of working areas e.g. perimeters lines must be provided with open shallow drains	1			1	2			1	1	2					
	Agreeing with local authorities on tree felling.	1	1	1	1	4					0					
Flora and Fauna	Document trees / area of	1				1	1		1	1	3					

Polder 32:Environmental Compliance Report																
		No. of compliance					No. of non - Compliance					No. of non- Compliance repeating				
Environmental Issues	**Types of Compliance, Non-Compliance &Repeating Non-Compliance**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in a year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in a year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in a year**
	trees.															
	Avoid/prevent un-necessary tree vegetation cutting and clearing.	1				1					0					
	Re vegetate disturbed construction and ancillary site surfaces.	1				1					0					
	Prevent disturbance of animals	1	1	1	1	4					0					
	Ensuring sufficient free flow in the construction work for fish migration	1	1	1	1	4					0					
Monitoring of Air Quality	Performance of air quality tests at selected sensitive sites for parameters SPM 2.5/10, SOx, NOx and CO during working hours	1	1	1	1	4					0					
Monitoring of Noise Quality	Monitoring of noise level (dB) at selected sensitive sites during working hours	1	1	1	1	4					0					
Monitoring of Soil Quality	Performance of soil quality tests at selected sites (borrow areas, spill sites) for parameters as organic matter, N, P, K, pH, Salinity, S and Zn.	1	1	1	1	4					0					

Polder 32:Environmental Compliance Report																
		No. of compliance					No. of non - Compliance					No. of non- Compliance repeating				
Environmental Issues	**Types of Compliance, Non-Compliance &Repeating Non-Compliance**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in a year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in a year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in a year**
Monitoring of Surface Water Quality	Performance of analyses on surface water (river, khal, beel and pond) for: pH, TDS, DO, BOD, EC/Salinity and Turbidity.	1	1	1	1	4					0					
Monitoring of Drinking Water Quality	Performance of analyses on drinking water for: arsenic, iron, chloride and total faecal coliform bacteria.	1	1	1	1	4					0					
Deployment of Environment and Safety Supervisor	Employ one full-time Environment and Safety Supervisor for compliance monitoring of EMP	1	1	5	1	8					0					
Complaints and Environmental Incidents	Grievance Redress Mechanism will be established.	1	1	1	1	4					0					
	Complaints received from the public or other stakeholders will be registered and recorded and be brought to the attention of the Site Engineer.	3	1	1	1	6					0					
	All environmental incidents occurring on the site will be recorded and be brought to the attention of the Site	3	1	1	1	6					0					

Polder 32:Environmental Compliance Report																
		No. of compliance					No. of non - Compliance					No. of non- Compliance repeating				
Environmental Issues	**Types of Compliance, Non-Compliance &Repeating Non-Compliance**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in a year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in a year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in a year**
	Engineer.															
	Action will be taken within 7 working days.		1	1	1	3					0					
Reporting and Documentation	The following records will be kept at site: - Environmental Monitoring Results - Contractors self-assessment record/results - Register of non-compliance - Register of corrective actions - Monthly Environmental Reports	1	1	1	1	4	1				1					
Training	Environmental training on EMP will be arranged for Construction Field supervisors and Environment & Safety Supervisors.															

Polder 33:Environmental Compliance Report																
		No. of compliance					No. of non-Compliance					No. of non- Compliance repeating				
Environmental Issues	**Types of Compliance, Non Compliance &Repeating Non Compliance**	**Q 1**	**Q 2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**
Construction Camps	Obtaining approval	1	1	1	1	4					0					
	Erection of signboard in Bangla and English with project details	1	1	1	1	4					0					
	Install accommodation facilities for workers	1	1	1	1	4					0					
	Drainage channels installation	1	1	1	1	4					0					
	Supply of safe drinking water	1	1	1	1	4					0					
	Supply of adequate sanitation	1	1	1	1	4					0					
	Solid fencing and demarcation to prevent villagers from entering the premises	1	1	1	1	4					0					
Fuel storage areas	Install hardstand and secondary containment	1	1	1	1	4					0					
	Firefighting equipment installation		3	1	1	5	1	2			3					
	Sand and shovel close-by		3	1	1	5	1	2			3					
	Regular checks on physical condition			2	1	3	2	1	4		7					
Access road construction	Obtaining approval	1	1	1	1	4					0					
	Construction of culverts if needed					0					0					
Temporary Facilities Decommissioning	Agreeing with local authorities on demolition					0					0					
	Review of Environmental liabilities					0					0					
	Waste removal					0					0					

Polder 33:Environmental Compliance Report																
		No. of compliance					No. of non-Compliance					No. of non- Compliance repeating				
Environmental Issues	**Types of Compliance, Non Compliance &Repeating Non Compliance**	**Q 1**	**Q 2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**
	General re-instatement of site					0					0					
	Re vegetation implementation					0					0					
	Close-out check					0					0					
Construction and Demolishing of drainage sluices, flushing sluices and inlets	Demolishing derbis of sluices and inlets will be disposed of at a site approved by the Engineer.	3	1	1		5	1	4		1	6					
	Before starting the construction activities of drainage sluices ring bundh and diversion channel will be installed in order to work in dry conditions.	1	1	5	1	8			1		1					
	No waste water from concrete mixing will be disposed of directly to the surface water.	1	1	1	1	4					0					
	Steel sheet pile driving will not be done at night.		4	1	1	6					0					
	The work area will be demarcated clearly.	1	4	1	1	7	3	1			4					
	Signals will be installed to indicate the entry and exits of vehicles and movement of construction equipment in the work area .	1	1	1	1	4					0					
	Prior to every monsoon season all the temporary and permanent drainage structures under construction will be made free from		4	1	1	6					0					

Polder 33:Environmental Compliance Report																
		No. of compliance					No. of non-Compliance					No. of non- Compliance repeating				
Environmental Issues	**Types of Compliance, Non Compliance &Repeating Non Compliance**	**Q 1**	**Q 2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**
	debris.															
Construction and re-sectioning of embankments	Pavement(if present)will be removed and disposed of at the premises of BWDB					0					0					
	All works will be demarcated clearly.	1	5	1	1	8					0					
	Signals will be installed to indicate the entry and exits of vehicles and movement of construction	1	5	1	1	8					0					
	The contractor shall manage the top soil(15)cm during earth work activities					0	1	1	1	6	9					
The bank and slope protection works	Splling of earth material in surface water will be avoided.					0					0					
	Turfing will be applied to prevent erosion		4	6	1	11					0					
	Proper drainage provision will be kept to avoid formation of rain cuts due to surface run off.		4	1	1	6					0					
Re-excavation works	Spoil plan (volume to be excavated; disposal site to be used; quality of excavated material; applicability of excavated material) to be developed for approval by			1	1	2		4	5		9					

Polder 33:Environmental Compliance Report																
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Environmental Issues	**Types of Compliance, Non Compliance &Repeating Non Compliance**	**Q 1**	**Q 2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**
	Engineer.															
	Unnecessary resuspension will be avoided by selection of suitable dredging equipment.					0					0					
	Temporary deposition of excavated material will be away from the channel edge to limit damage to streamside and stream habitats.					0					0					
	Return water will be conveyed through siltation chambers to avoid high loads of fines to be discharged on surface water.					0					0					
	Where applicable biotechnical Engineering, for example, geo textile, may be used to help stabilize the material.					0					0					
	Smothering of important flora and habitats will be avoided.					0					0					
Construction of the closure Dam	N/A					0					0					
Manufacture of pre-cast CC blocks	Workers will be equipped with proper PPE.	1	1	1	1	4					0					
	Signals will be installed to indicate the entry and exits and movement	1	1	1	1	4					0					

Polder 33:Environmental Compliance Report																
		No. of compliance					No. of non-Compliance					No. of non- Compliance repeating				
Environmental Issues	**Types of Compliance, Non Compliance &Repeating Non Compliance**	**Q 1**	**Q 2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**
	of vehicles construction in the work area.															
	Manufacturing will not take place at night.	1	1	1	1	4					0					
	Stacks with sand will be covered or wetted.	1	1	1	1	4					0					
	Agreeing on borrow area	1	1	1	1	4					0					
	Document borrow area				1	1	1	1	1	6	9					
	Perform soil analyses on borrow materials when contamination is expected	1	1	1	1	4					0					
	Prevention of erosion/dust forming	1	1	1	1	4					0					
	Borrow area excavation complying with distance from the embankment as per the technical specification	1	1	1	1	4					0					
Borrow Material	No-Tress pass line fixed with bamboo poles					0					0					
Hard Rock Revetment	N/A					0					0					
	Development of Health and Safety plan including emergency procedures	1	1	1	1	4					0					
Occupational Health and Safety	Train all staff in health and safety	1	1	1	1	4					0					

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Environmental Issues	**Types of Compliance, Non Compliance &Repeating Non Compliance**	**Q 1**	**Q 2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**
	Provision of HIV, including STI(Sexually Transmitted Infections) information, education and communication		1		1	2					0					
	Provision of PPE and ensuring their use	1	1	1	1	4					0					
	Provision and use of life jacket during visiting campsite/worksite by boat	1	1	1	1	4					0					
	Installation of first aid facilities at work site and camps with adequate stock	1	1	1	1	4					0					
	Provide sanitation facilities where needed	1	1	1	1	4					0					
	Provision of safe drinking water to work force (tube-well water, bottled water or pond water)	1	1	1	1	4					0					
	Proper signaling of work areas	1	1	1	1	4					0					
	Notification of the public adjacent to the construction areas	1	1	1	1	4					0					
	Installation of dedicated pathways for pedestrians	1	1	1	1	4					0					
	Proper signaling of work areas	1	1	1	1	4					0					
Public Health and Safety	Limitation of construction vehicles at public roads during peak hours.	1	1	1	1	4					0					

Polder 33:Environmental Compliance Report																
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Environmental Issues	**Types of Compliance, Non Compliance &Repeating Non Compliance**	**Q 1**	**Q 2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**
	The temporary traffic detours in settlement areas will be kept free of dust by frequent application of water	1	1	1	1	4					0					
	Construction activities will be undertaken according to during daylight working hours between the hours of 07:00-17:00 on week days	1	1	1	1	4					0					
	Providing construction camps with portable water either through installing tubewells (hand pump, shallow and deep tubeweel), pond Sand Filter (PSE) or supplying safe bottled water	1	1	1	1	4					0					
	Ensuring the location plan of tubewells (used for supplying potable water) that these are not sited near any sanitation facilities as to avoid water pollution	1	1	1	3	6					0					
	Maintaining the distance of a tubewell/surface water resource from a soak pit at minimum 15 m		1			1	1	4	1	3	9					
Water Supply	Maintaining the drainage from the tubewell diverting into the drainage system of the camp area					0					0					

Polder 33:Environmental Compliance Report																
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Environmental Issues	**Types of Compliance, Non Compliance &Repeating Non Compliance**	**Q 1**	**Q 2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**
	Providing separate tubewells for the use of women.					0					0					
	Providing suitable sanitation facilities for the workforce	2		4	1	7	2	1	2		5					
	Ensuring the location plan of the latrine at least 50 m away from the accommodation facility	1			1	2					0					
	Providing separate latrines for the use of women	1	5	1	1	8					0					
	Installing treatment facilities (i.e. septic tank, soak pits etc.) for the sewerage from toilet and camp site wastes.	1	5	1	1	8					0					
Sanitation	Arranging disposal of wastewater from washrooms, kitchens, s, etc. via the camp area's drainage system			1	1	2					0					
	Ensuring collection and disposal of solid wastes within the construction camps and work areas	1	1	1	1	4					0					
Solid Waste Management	Taking measure to collect and store inorganic wastes in a safe place within the household and organic wastes cleared on daily basis to waste collector.	1			2	3	3	1	1	4	9					

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Environmental Issues	**Types of Compliance, Non Compliance &Repeating Non Compliance**	**Q 1**	**Q 2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**
	Establish measures for Waste collection, transportation and disposal systems at approved disposal sites.				1	1	3	1	1		5					
	Disposal of construction and demolition waste.				1	1	3	1	1		5					
	Installation of decanter boxes for washing buckets and cement mixers				1	1	1	1	1		3					
	Installation of proper filtering elements.				1	1	1	1	1		3					
	Carrying out periodic checks and clean-ups for the decanter box.				1	1	1	1	1		3					
	Prioritize reuse of aggregates and water from the decanter box.				1	1	1	1	1		3					
Waste water	Ensure safe disposal of liquid wastes generated at camp site.				1	1	1	1	1		3					
	Regular maintenance of vehicles	1	1	1	1	4					0					
	Covering or wetting of dusty materials	1	1	1	1	4					0					
	Dust suppression by wetting surfaces	1	1	1	1	4					0					
	Impose speed limits	1	1	1	1	4					0					
Air	Revegetate bare surfaces soonest	1	1	1	1	4					0					
Noise	Notify nearby population prior to	1	1	1	1	4					0					

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Environmental Issues	**Types of Compliance, Non Compliance &Repeating Non Compliance**	**Q 1**	**Q 2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**
	any typical noise events															
	Ensure construction activities do not generate unacceptably high level of noise	1	1	1	1	4					0					
	Restrict working to daylight hours	1	1	1	1	4					0					
	Locate noisy equipment / facilities away from sensitive receptors	1	1	1	1	4					0					
	Preventing waste, soil, etc. entering in the water system by waste collection, revegetation and dust suppression etc.	1	1	1	1	4					0					
Water and Hydrology	Insure proper drainage of working areas e.g. perimeters lines must be provided with open shallow drains	1	1	1	1	4	1	1	1	1	4					
	Agreeing with local authorities on tree felling.	1	1	1	1	4					0					
	Document trees / area of trees.					0	1	1	1	1	4					
	Avoid/prevent un-necessary tree vegetation cutting and clearing.					0					0					
	Revegetate disturbed construction and ancillary site surfaces.					0					0					
	Prevent disturbance of animals	1	1	1	1	4					0					
Flora and Fauna	Ensuring sufficient free flow in the construction work for fish migration	1	1	1	1	4					0					

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Environmental Issues	**Types of Compliance, Non Compliance &Repeating Non Compliance**	**Q 1**	**Q 2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**
Monitoring of Air Quality	Performance of air quality tests at selected sensitive sites for parameters SPM 2.5/10, SOx, NOx and CO during working hours	1	1	1	1	4					0					
Monitoring of Noise Quality	Monitoring of noise level (dB) at selected sensitive sites during working hours	1	1	1	1	4					0					
Monitoring of Soil Quality	Performance of soil quality tests at selected sites (borrow areas, spill sites) for parameters as organic matter, N, P, K, pH, Salinity, S and Zn.	1	1	1	1	4					0					
Monitoring of Surface Water Quality	Performance of analyses on surface water (river, khal, beel and pond) for: pH, TDS, DO, BOD, EC/Salinity and Turbidity.	1	1	1	1	4					0					
Monitoring of Drinking Water Quality	Performance of analyses on drinking water for: arsenic, iron, chloride and total faecal coliform bacteria.	1	1	1	1	4					0					
Deployment of Environment and Safety Supervisor	Employ one full-time Environment and Safety Supervisor for compliance monitoring of EMP	1	1	1	1	4					0					
Complaints and Environmental	Grievance Redress Mechanism will be established.	1	1	1	1	4					0					

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		No. of compliance					No. of non-Compliance					No. of non- Compliance repeating				
Environmental Issues	**Types of Compliance, Non Compliance &Repeating Non Compliance**	**Q 1**	**Q 2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**
Incidents	Complaints received from the public or other stakeholders will be registered and recorded and be brought to the attention of the Site Engineer.	1	1	1	1	4					0					
	All environmental incidents occurring on the site will be recorded and be brought to the attention of the Site Engineer.	1	1	1	1	4					0					
	Action will be taken within 7 working days.		1	1	1	3					0					
Reporting and Documentation	The following records will be kept at site: - Environmental Monitoring Results - Contractors self-assessment record/results - Register of non-compliance - Register of corrective actions - Monthly Environmental Reports	3	1	1	1	6	1			1	2					
Training	Environmental training on EMP will be arranged for Construction Field supervisors and Environment & Safety Supervisors.															

Polder 35/1: Environmental Compliance/ Non-compliance Report																
		No. of compliance					No. of non- compliance					No. of non -compliance repeating				
Environmental Issues	**Types of Compliance, Non Compliance &Repeating Non Compliance**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**
Construction Camps	Obtaining approval	1	1	1	1	4					0					
	Erection of signboard in Bangla and English with project details	1	1	1	1	4					0					
	Install accommodation facilities for workers	1	1	1	1	4					0					
	Drainage channels installation	1	1	1	1	4					0					
	Supply of safe drinking water	1	1	1	1	4					0					
	Supply of adequate sanitation	1	1	1	1	4					0					
	Solid fencing and demarcation to prevent villagers from entering the premises	1	1	1	1	4					0					
Fuel storage areas	Install hardstand and secondary containment	1	1	1	1	4					0					
	Firefighting equipment installation	1	1	1	1	4					0					
	Sand and shovel close-by	1	1	1	1	4					0					
	Regular checks on physical condition	1	1	1	1	4		3	2		5					
Access road construction	Obtaining approval	1	1	1	1	4					0					
	Construction of culverts if needed					0					0					
Temporary Facilities Decommissioning	Agreeing with local authorities on demolition					0					0					
	Review of Environmental liabilities					0					0					
	Waste removal					0					0					
	General re-instatement of site					0					0					
	Revegetation implementation					0					0					

Polder 35/1: Environmental Compliance/ Non-compliance Report																
		No. of compliance					No. of non- compliance					No. of non -compliance repeating				
Environmental Issues	**Types of Compliance, Non Compliance &Repeating Non Compliance**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**
	Close-out check					0					0					
Construction and Demolishing of drainage sluices, flushing sluices and inlets	Demolishing debris of sluices and inlets will be disposed of at a site approved by the Engineer.				1	1	3	1	1	5	10					
	Before starting the construction activities of drainage sluices ring bundh and diversion channel will be installed in order to work in dry conditions.	1	1	1	1	4			1		1					
	No waste water from concrete mixing will be disposed of directly to the surface water.	1	1	1	1	4					0					
	Steel sheet pile driving will not be done at night.	1	1	1	1	4					0					
	The work area will be demarcated clearly.	1	1	1	1	4					0					
	Signals will be installed to indicate the entry and exits of vehicles and movement of construction equipment in the work area.	1	1	1	1	4					0					
	Prior to every monsoon season all the temporary and permanent drainage structures under construction will be made free from debris.		5	1	1	7					0					

Polder 35/1: Environmental Compliance/ Non-compliance Report																	
		No. of compliance					No. of non- compliance					No. of non -compliance repeating				
Environmental Issues	**Types of Compliance, Non Compliance &Repeating Non Compliance**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**
Construction and re-sectioning of embankments	Pavement(if present)will be removed and disposed of at the premises of BWDB					0					0					
	All works will be demarcated clearly.	1	1	1	1	4					0					
	Signals will be installed to indicate the entry and exits of vehicles and movement of construction	1	1	1	1	4					0					
	The contractor shall manage the top soil(15)cm during earth work activities					0		1	1	1	3					
The bank and slope protection works	Splling of earth material in surface water will be avoided.					0					0					
	Turfing will be applied to prevent erosion					0					0					
	Proper drainage provision will be kept to avoid formation of rain cuts due to surface run off.					0					0					
Re-excavation works	Spoil plan (volume to be excavated; disposal site to be used; quality of excavated material; applicability of excavated material) to be developed for approval by Engineer.					0		5	1	1	7					
	Unnecessary resuspension will be avoided by selection of suitable dredging equipment.					0					0					

Polder 35/1: Environmental Compliance/ Non-compliance Report																
		No. of compliance					No. of non- compliance					No. of non -compliance repeating				
Environmental Issues	**Types of Compliance, Non Compliance &Repeating Non Compliance**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**
	Temporary deposition of excavated material will be away from the channel edge to limit damage to streamside and stream habitats.					0					0					
	Return water will be conveyed through siltation chambers to avoid high loads of fines to be discharged on surface water.					0					0					
	Where applicable biotechnical Engineering, for example, geo textile, may be used to help stabilize the material.					0					0					
	Smothering of important flora and habitats will be avoided.					0					0					
Construction of the closure Dam	N/A					0					0					
Manufacture of pre-cast CC blocks	Workers will be equipped with proper PPE.	1	3	1	1	6	2	3			5					
	Signals will be installed to indicate the entry and exits and movement of vehicles construction in the work area.	1	1	1	1	4					0					
	Manufacturing will not take place at night.	1	1	1	1	4					0					
	Stacks with sand will be covered or wetted.	1	1	1	1	4					0					

Polder 35/1: Environmental Compliance/ Non-compliance Report																
		No. of compliance					No. of non- compliance					No. of non -compliance repeating				
Environmental Issues	**Types of Compliance, Non Compliance &Repeating Non Compliance**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**
Borrow Material	Agreeing on borrow area	1	1	1	1	4					0					
	Document borrow area		1	1	1	3	3	1	1	1	6					
	Perform soil analyses on borrow materials when contamination is expected	1	1	1	1	4					0					
	Prevention of erosion/dust forming	1	1	1	1	4					0					
	Borrow area excavation complying with distance from the embankment as per the technical specification	1	1	1	1	4					0					
	No-Tress pass line fixed with bamboo poles		1	1		2					0					
Hard Rock Revetment	N/A		1	1		2					0					
Occupational Health and Safety	Development of Health and Safety plan including emergency procedures	1	1	1	1	4					0					
	Train all staff in health and safety	1	1	1	1	4					0					
	Provision of HIV, including STI(Sexually Transmitted Infections) information, education and communication					0					0					
	Provision of PPE and ensuring their use				3	3	3	1	1	3	8					
	Provision and use of life jacket during visiting campsite/worksite by	1	1	1	1	4					0					

Polder 35/1: Environmental Compliance/ Non-compliance Report																	
		No. of compliance					No. of non- compliance					No. of non -compliance repeating				
Environmental Issues	**Types of Compliance, Non Compliance &Repeating Non Compliance**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**
	boat															
	Installation of first aid facilities at work site and camps with adequate stock	1	1	1	1	4					0					
	Provide sanitation facilities where needed	1	1	1	1	4					0					
	Provision of safe drinking water to work force (tube-well water, bottled water or pond water)	1	1	1	1	4					0					
	Proper signaling of work areas	1	1	1	1	4					0					
	Notification of the public adjacent to the construction areas	1	1	1	1	4					0					
	Installation of dedicated pathways for pedestrians	1	1	1	1	4					0					
	Proper signaling of work areas	1	1	1	1	4					0					
	Limitation of construction vehicles at public roads during peak hours.	1	1	1	1	4					0					
	The temporary traffic detours in settlement areas will be kept free of dust by frequent application of water	1	1	1	1	4					0					
Public Health and Safety	Construction activities will be undertaken according to during daylight working hours between the	1	1	1	1	4					0					

Polder 35/1: Environmental Compliance/ Non-compliance Report																
		No. of compliance					No. of non- compliance					No. of non -compliance repeating				
Environmental Issues	**Types of Compliance, Non Compliance &Repeating Non Compliance**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**
	hours of 07:00-17:00 on week days															
	Providing construction camps with portable water either through installing tubewells (hand pump, shallow and deep tubeweel), pond Sand Filter (PSE) or supplying safe bottled water	1	1	1	1	4					0					
	Ensuring the location plan of tubewells (used for supplying potable water) that these are not sited near any sanitation facilities as to avoid water pollution					0					0					
	Maintaining the distance of a tubewell/surface water resource from a soak pit at minimum 15 m					0	3	1	1	3	8					
	Maintaining the drainage from the tubewell diverting into the drainage system of the camp area					0					0					
Water Supply	Providing separate tubewells for the use of women.					0					0					
Sanitation	Providing suitable sanitation facilities for the workforce	1	1	1	1	4					0					

Polder 35/1: Environmental Compliance/ Non-compliance Report																
		No. of compliance					No. of non- compliance					No. of non -compliance repeating				
Environmental Issues	**Types of Compliance, Non Compliance &Repeating Non Compliance**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**
	Ensuring the location plan of the latrine at least 50 m away from the accommodation facility	1	1	1	1	4					0					
	Providing separate latrines for the use of women	1	1	1	1	4					0					
	Installing treatment facilities (i.e. septic tank, soak pits etc.) for the sewerage from toilet and camp site wastes.			1	1	2					0					
	Arranging disposal of wastewater from washrooms, kitchens, s, etc. via the camp area's drainage system					0					0					
	Ensuring collection and disposal of solid wastes within the construction camps and work areas	1	1	1	1	4					0					
	Taking measure to collect and store inorganic wastes in a safe place within the household and organic wastes cleared on daily basis to waste collector.	2				2	1	1	1	1	4					
	Establish measures for Waste collection, transportation and disposal systems at approved disposal sites.					0		1			1					
Solid Waste Management	Disposal of construction and demolition waste.					0	2	1	1	1	5					

Polder 35/1: Environmental Compliance/ Non-compliance Report																
		No. of compliance					No. of non- compliance					No. of non -compliance repeating				
Environmental Issues	**Types of Compliance, Non Compliance &Repeating Non Compliance**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**
Waste water	Installation of decanter boxes for washing buckets and cement mixers	1				1		1	1	1	3					
	Installation of proper filtering elements.	1				1		1	1	1	3					
	Carrying out periodic checks and clean-ups for the decanter box.	1				1		1	1	1	3					
	Prioritize reuse of aggregates and water from the decanter box.	1				1		1	1	1	3					
	Ensure safe disposal of liquid wastes generated at camp site.	1				1		1	1	1	3					
Air	Regular maintenance of vehicles	1	1	1	1	4					0					
	Covering or wetting of dusty materials	1	1	1	1	4					0					
	Dust suppression by wetting surfaces	1	1	1	1	4					0					
	Impose speed limits	1	1	1	1	4					0					
	Revegetate bare surfaces soonest	1	1	1	1	4					0					
Noise	Notify nearby population prior to any typical noise events	1	1	1	1	4					0					
	Ensure construction activities do not generate unacceptably high level of noise	1	1	1	1	4					0					
	Restrict working to daylight hours	1	1	1	1	4					0					

Polder 35/1: Environmental Compliance/ Non-compliance Report																
		No. of compliance					No. of non- compliance					No. of non -compliance repeating				
Environmental Issues	**Types of Compliance, Non Compliance &Repeating Non Compliance**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**
	Locate noisy equipment / facilities away from sensitive receptors	1	1	1	1	4					0					
Water and Hydrology	Preventing waste, soil, etc. entering in the water system by waste collection, revegetation and dust suppression etc.	1	1	1	1	4					0					
	Insure proper drainage of working areas e.g. perimeters lines must be provided with open shallow drains	1	1	1	1	4		1	1	1	3					
Flora and Fauna	Agreeing with local authorities on tree felling.	1	1	1	1	4	3				3					
	Document trees / area of trees.					0	3	1	1	1	6					
	Avoid/prevent un-necessary tree vegetation cutting and clearing.					0					0					
	Revegetate disturbed construction and ancillary site surfaces.					0					0					
	Prevent disturbance of animals	1	1	1	1	4					0					
	Ensuring sufficient free flow in the construction work for fish migration	1	1	1	1	4					0					
Monitoring of Air Quality	Performance of air quality tests at selected sensitive sites for parameters SPM 2.5/10, SOx, NOx and CO during working hours	1	1	1	1	4					0					

Polder 35/1: Environmental Compliance/ Non-compliance Report																
		No. of compliance					No. of non- compliance					No. of non -compliance repeating				
Environmental Issues	**Types of Compliance, Non Compliance &Repeating Non Compliance**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**
Monitoring of Noise Quality	Monitoring of noise level (dB) at selected sensitive sites during working hours	1	1	1	1	4					0					
Monitoring of Soil Quality	Performance of soil quality tests at selected sites (borrow areas, spill sites) for parameters as organic matter, N, P, K, pH, Salinity, S and Zn.	1	1	1	1	4					0					
Monitoring of Surface Water Quality	Performance of analyses on surface water (river, khal, beel and pond) for: pH, TDS, DO, BOD, EC/Salinity and Turbidity.	1	1	1	1	4					0					
Monitoring of Drinking Water Quality	Performance of analyses on drinking water for: arsenic, iron, chloride and total faecal coliform bacteria.	1	1	1	1	4					0					
Deployment of Environment and Safety Supervisor	Employ one full-time Environment and Safety Supervisor for compliance monitoring of EMP		1		1	2					0					
Complaints and Environmental Incidents	Grievance Redress Mechanism will be established.		1		1	2	3		1	1	5					
	Complaints received from the public or other stakeholders will be registered and recorded and be brought to the attention of the Site Engineer.	2	1	1	1	5	1				1					

Polder 35/1: Environmental Compliance/ Non-compliance Report																
		No. of compliance					No. of non- compliance					No. of non -compliance repeating				
Environmental Issues	**Types of Compliance, Non Compliance &Repeating Non Compliance**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**
	All environmental incidents occurring on the site will be recorded and be brought to the attention of the Site Engineer.	2	1	1	1	5	1				1					
	Action will be taken within 7 working days.		5	1	1	7					0					
Reporting and Documentation	The following records will be kept at site: - Environmental Monitoring Results - Contractors self-assessment record/results - Register of non-compliance - Register of corrective actions - Monthly Environmental Reports	2	1	1	1	5	1				1					
Training	Environmental training on EMP will be arranged for Construction Field supervisors and Environment & Safety Supervisors.															

Table: Polder 35/3: Environmental Compliance/ Non-Compliance Report																
		No. of compliance					No. of non- compliance					No. of non- compliance repeating				
Environmental Issues	**Types of Compliance, Non Compliance &Repeating Non Compliance**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**
Construction Camps	Obtaining approval	3	1	1	1	6					0					
	Erection of signboard in Bangla and English with project details	3	1	1	1	6					0					
	Install accommodation facilities for workers	3	1	1	1	6					0					
	Drainage channels installation	3	1	1	1	6					0					
	Supply of safe drinking water	3	1	1	1	6					0					
	Supply of adequate sanitation	3	1	1	1	6					0					
	Solid fencing and demarcation to prevent villagers from entering the premises	3	1	1	1	6					0					
Fuel storage areas	Install hardstand and secondary containment	1	1	1	1	4					0					
	Firefighting equipment installation	1	1	1	1	4					0					
	Sand and shovel close-by	1	1	1	1	4					0					
	Regular checks on physical condition	2	1	1	1	5	2	1			3					
Access road construction	Obtaining approval	1	1	1	1	4					0					
	Construction of culverts if needed					0					0					
Temporary Facilities Decommissioning	Agreeing with local authorities on demolition					0					0					
	Review of Environmental liabilities					0					0					
	Waste removal					0					0					
	General re-instatement of site					0					0					

Table: Polder 35/3: Environmental Compliance/ Non-Compliance Report																
		No. of compliance					No. of non- compliance					No. of non- compliance repeating				
Environmental Issues	**Types of Compliance, Non Compliance &Repeating Non Compliance**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**
	Revegetation implementation					0					0					
	Close-out check					0					0					
	Demolishing debris of sluices and inlets will be disposed of at a site approved by the Engineer.				5	5	1	1	5	1	8					
	Before starting the construction activities of drainage sluices ring bundh and diversion channel will be installed in order to work in dry conditions.	1	1	1	1	4					0					
	No waste water from concrete mixing will be disposed of directly to the surface water.	1	1	1	1	4					0					
	Steel sheet pile driving will not be done at night.	1	1	1	1	4					0					
	The work area will be demarcated clearly.	1	1	1	1	4					0					
	Signals will be installed to indicate the entry and exits of vehicles and movement of construction equipment in the work area.	1	1	1	1	4					0					
Construction and Demolishing of drainage sluices, flushing sluices and inlets	Prior to every monsoon season all the temporary and permanent drainage structures under construction will be made free from debris.		5	1	1	7					0					

Table: Polder 35/3: Environmental Compliance/ Non-Compliance Report																
		No. of compliance					No. of non- compliance					No. of non- compliance repeating				
Environmental Issues	**Types of Compliance, Non Compliance &Repeating Non Compliance**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**
Construction and re-sectioning of embankments	Pavement(if present)will be removed and disposed of at the premises of BWDB					0					0					
	All works will be demarcated clearly.	1	1	1	1	4					0					
	Signals will be installed to indicate the entry and exits of vehicles and movement of construction	1	1	1	1	4					0					
	The contractor shall manage the top soil(15)cm during earth work activities					0	1	5	5	6	17					
The bank and slope protection works	Spilling of earth material in surface water will be avoided.					0					0					
	Turfing will be applied to prevent erosion					0					0					
	Proper drainage provision will be kept to avoid formation of rain cuts due to surface run off.					0					0					
Re-excavation works	Spoil plan (volume to be excavated; disposal site to be used; quality of excavated material; applicability of excavated material) to be developed for approval by Engineer.					0		5		6	11					
	Unnecessary resuspension will be avoided by selection of suitable dredging equipment.					0					0					

Table: Polder 35/3: Environmental Compliance/ Non-Compliance Report																
		No. of compliance					No. of non- compliance					No. of non- compliance repeating				
Environmental Issues	**Types of Compliance, Non Compliance &Repeating Non Compliance**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**
	Temporary deposition of excavated material will be away from the channel edge to limit damage to streamside and stream habitats.					0					0					
	Return water will be conveyed through siltation chambers to avoid high loads of fines to be discharged on surface water.					0					0					
	Where applicable biotechnical Engineering, for example, geo textile, may be used to help stabilize the material.					0					0					
	Smothering of important flora and habitats will be avoided.					0					0					
Construction of the closure Dam	N/A					0					0					
Manufacture of pre-cast CC blocks	Workers will be equipped with proper PPE.	3	1	1	1	6	1				1					
	Signals will be installed to indicate the entry and exits and movement of vehicles construction in the work area.	3	1	1	1	6					0					
	Manufacturing will not take place at night.	3	1	1	1	6					0					
	Stacks with sand will be covered or wetted.	3	1	1	1	6					0					

Table: Polder 35/3: Environmental Compliance/ Non-Compliance Report																
		No. of compliance					No. of non- compliance					No. of non- compliance repeating				
Environmental Issues	**Types of Compliance, Non Compliance &Repeating Non Compliance**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**
Borrow Material	Agreeing on borrow area	1	1	1	1	4					0					
	Document borrow area		1		1	2	4	5	6		15					
	Perform soil analyses on borrow materials when contamination is expected	3	1		1	5		1			1					
	Prevention of erosion/dust forming	3	1	1	1	6					0					
	Borrow area excavation complying with distance from the embankment as per the technical specification	3	1	1	1	6					0					
	No-Tress pass line fixed with bamboo poles		1		1	2					0					
Hard Rock Revetment	N/A		1		1	2					0					
Occupational Health and Safety	Development of Health and Safety plan including emergency procedures	1	1	1	1	4					0					
	Train all staff in health and safety	1	1	1	1	4					0					
	Provision of HIV, including STI(Sexually Transmitted Infections) information, education and communication		1	1	1	3					0					
	Provision of PPE and ensuring their use	3	1	1	1	6	1				1					
	Provision and use of life jacket during visiting campsite/worksite by	1	1	1	1	4					0					

Table: Polder 35/3: Environmental Compliance/ Non-Compliance Report																
		No. of compliance					No. of non- compliance					No. of non- compliance repeating				
Environmental Issues	**Types of Compliance, Non Compliance &Repeating Non Compliance**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**
	boat															
	Installation of first aid facilities at work site and camps with adequate stock	1	1	1	1	4					0					
	Provide sanitation facilities where needed	1	1	1	1	4					0					
	Provision of safe drinking water to work force (tube-well water, bottled water or pond water)	1	1	1	1	4					0					
	Proper signaling of work areas	1	1	1	1	4					0					
	Notification of the public adjacent to the construction areas	1	1	1	1	4					0					
	Installation of dedicated pathways for pedestrians	1	1	1	1	4					0					
	Proper signaling of work areas	1	1	1	1	4					0					
	Limitation of construction vehicles at public roads during peak hours.	1	1	1	1	4					0					
	The temporary traffic detours in settlement areas will be kept free of dust by frequent application of water	1	1	1	1	4					0					
Public Health and Safety	Construction activities will be undertaken according to during daylight working hours between the	1	1	1	1	4					0					

Table: Polder 35/3: Environmental Compliance/ Non-Compliance Report																
		No. of compliance					No. of non- compliance					No. of non- compliance repeating				
Environmental Issues	**Types of Compliance, Non Compliance &Repeating Non Compliance**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**
	hours of 07:00-17:00 on week days															
Water Supply	Providing construction camps with portable water either through installing tubewells (hand pump, shallow and deep tubeweel), pond Sand Filter (PSE) or supplying safe bottled water	1	1	1	1	4					0					
	Ensuring the location plan of tubewells (used for supplying potable water) that these are not sited near any sanitation facilities as to avoid water pollution				1	1					0					
	Maintaining the distance of a tubewell/surface water resource from a soak pit at minimum 15 m			1	1	2	1	1			2					
	Maintaining the drainage from the tubewell diverting into the drainage system of the camp area				1	1					0					
	Providing separate tubewells for the use of women.				1	1					0					
Sanitation	Providing suitable sanitation facilities for the workforce	4	1	1	1	7					0					

Table: Polder 35/3: Environmental Compliance/ Non-Compliance Report																
		No. of compliance					No. of non- compliance					No. of non- compliance repeating				
Environmental Issues	**Types of Compliance, Non Compliance &Repeating Non Compliance**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**
	Ensuring the location plan of the latrine at least 50 m away from the accommodation facility		1	1	1	3					0					
	Providing separate latrines for the use of women	1	1	1	1	4					0					
	Installing treatment facilities (i.e. septic tank, soak pits etc.) for the sewerage from toilet and camp site wastes.	1		1	1	3					0					
	Arranging disposal of wastewater from washrooms, kitchens, s, etc. via the camp area's drainage system	1		1	1	3					0					
	Ensuring collection and disposal of solid wastes within the construction camps and work areas	1	1	1	1	4					0					
	Taking measure to collect and store inorganic wastes in a safe place within the household and organic wastes cleared on daily basis to waste collector.	1		1	1	3	3	1			4					
	Establish measures for Waste collection, transportation and disposal systems at approved disposal sites.			4	1	5	1		1		2					
Solid Waste Management	Disposal of construction and demolition waste.	1		1	1	3		1			1					

Table: Polder 35/3: Environmental Compliance/ Non-Compliance Report																
		No. of compliance					No. of non- compliance					No. of non- compliance repeating				
Environmental Issues	**Types of Compliance, Non Compliance &Repeating Non Compliance**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**
Waste water	Installation of decanter boxes for washing buckets and cement mixers			1	1	2	1	1			2					
	Installation of proper filtering elements.				1	1	1	1	5	6	13					
	Carrying out periodic checks and clean-ups for the decanter box.			4	1	5	1	1	1		3					
	Prioritize reuse of aggregates and water from the decanter box.			4	1	5	1	1	1		3					
	Ensure safe disposal of liquid wastes generated at camp site.			4	1	5	1	1	1		3					
Air	Regular maintenance of vehicles	1	1	1	1	4					0					
	Covering or wetting of dusty materials	1	1	1	1	4					0					
	Dust suppression by wetting surfaces	1	1	1	1	4					0					
	Impose speed limits	1	1	1	1	4					0					
	Revegetate bare surfaces soonest	1	1	1	1	4					0					
Noise	Notify nearby population prior to any typical noise events	1	1	1	1	4					0					
	Ensure construction activities do not generate unacceptably high level of noise	1	1	1	1	4					0					
	Restrict working to daylight hours	1	1	1	1	4					0					

Table: Polder 35/3: Environmental Compliance/ Non-Compliance Report																
		No. of compliance					No. of non- compliance					No. of non- compliance repeating				
Environmental Issues	**Types of Compliance, Non Compliance &Repeating Non Compliance**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**
	Locate noisy equipment / facilities away from sensitive receptors	1	1	1	1	4					0					
Water and Hydrology	Preventing waste, soil, etc. entering in the water system by waste collection, revegetation and dust suppression etc.	1	1	1	1	4					0					
	Insure proper drainage of working areas e.g. perimeters lines must be provided with open shallow drains	1		1	1	3	1	1	5	6	13					
Flora and Fauna	Agreeing with local authorities on tree felling.	1	1	1	1	4					0					
	Document trees / area of trees.				1	1	1	1	5	6	13					
	Avoid/prevent un-necessary tree vegetation cutting and clearing.				1	1					0					
	Revegetate disturbed construction and ancillary site surfaces.				1	1					0					
	Prevent disturbance of animals	1	1	1	1	4					0					
	Ensuring sufficient free flow in the construction work for fish migration	1	1	1	1	4					0					
Monitoring of Air Quality	Performance of air quality tests at selected sensitive sites for parameters SPM 2.5/10, SOx, NOx and CO during working hours	1	1	1	1	4					0					

Table: Polder 35/3: Environmental Compliance/ Non-Compliance Report																
		No. of compliance					No. of non- compliance					No. of non- compliance repeating				
Environmental Issues	**Types of Compliance, Non Compliance &Repeating Non Compliance**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**
Monitoring of Noise Quality	Monitoring of noise level (dB) at selected sensitive sites during working hours	1	1	1	1	4					0					
Monitoring of Soil Quality	Performance of soil quality tests at selected sites (borrow areas, spill sites) for parameters as organic matter, N, P, K, pH, Salinity, S and Zn.	1	1	1	1	4					0					
Monitoring of Surface Water Quality	Performance of analyses on surface water (river, khal, beel and pond) for: pH, TDS, DO, BOD, EC/Salinity and Turbidity.	1	1	1	1	4					0					
Monitoring of Drinking Water Quality	Performance of analyses on drinking water for: arsenic, iron, chloride and total faecal coliform bacteria.	1	1	1	1	4					0					
Deployment of Environment and Safety Supervisor	Employ one full-time Environment and Safety Supervisor for compliance monitoring of EMP				1	1					0					
Complaints and Environmental Incidents	Grievance Redress Mechanism will be established.			4	1	5	1	1	1		3					
	Complaints received from the public or other stakeholders will be registered and recorded and be brought to the attention of the Site Engineer.	3	1	1	1	6	1				1					

Table: Polder 35/3: Environmental Compliance/ Non-Compliance Report																
		No. of compliance					No. of non- compliance					No. of non- compliance repeating				
Environmental Issues	**Types of Compliance, Non Compliance &Repeating Non Compliance**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**
	All environmental incidents occurring on the site will be recorded and be brought to the attention of the Site Engineer.	3	1	1	1	6	1				1					
	Action will be taken within 7 working days.				1	1					0					
Reporting and Documentation	The following records will be kept at site: - Environmental Monitoring Results - Contractors self-assessment record/results - Register of non-compliance - Register of corrective actions - Monthly Environmental Reports	3	1	1	1	6	1				1					
Training	Environmental training on EMP will be arranged for Construction Field supervisors and Environment & Safety Supervisors.															

Package 02

Polder -47:Environmental Compliance/ Non –Compliance Report																
		No. of compliance					No. of non -compliance					No. of non -compliance repeating				
Environmental Issues	**Types of Compliance, Non Compliance & Repeating Non Compliance**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**
Construction of Base Camp	Obtaining approval for facilities construction work	1														
	Erection of signboard in Bangla and English with project details						1									
	Install accommodation facilities Engineers and other staff / workers						1									
	Drainage channels installation	1														
	Supply of safe drinking water	1														
	Supply of adequate sanitation facilities	1														
	Safety fencing/Barriers and Entry Kiosks	1														
	Stack yard for plant and equipment	1														
	Construction of store room/warehouse	1														
	Temporary workshop facilities															
	Arrangement of sufficient															

Polder -47:Environmental Compliance/ Non –Compliance Report																
		No. of compliance					No. of non -compliance					No. of non -compliance repeating				
Environmental Issues	**Types of Compliance, Non Compliance & Repeating Non Compliance**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**
	lighting facilities in the camp area															
	Install hardstand and secondary containment						1									
	Firefighting equipment installation	1														
	Sand and shovel close-by						1									
	Regular checks on physical condition						1									
Fuel storage areas	Approval fuel storage	1														
	Obtaining approval						1									
	Construction of culverts if needed	1														
Access road to the base camp	Construction of temporary road															
Training	Environmental training on EMP will be arranged for Construction Field supervisors and	1														
	Development of Health and Safety plan including emergency procedures	1														
Occupational Health and Safety	Train all staff in health and safety	1														

Polder -47:Environmental Compliance/ Non –Compliance Report																
		No. of compliance					No. of non -compliance					No. of non -compliance repeating				
Environmental Issues	**Types of Compliance, Non Compliance & Repeating Non Compliance**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**
	Provision of HIV, including STI(Sexually Transmitted Infections) information, education and communication						1									
	Provision of PPE and ensuring their use	1														
	Provision and use of life jacket during visiting campsite/worksite by boat						1									
	Installation of first aid facilities at work site and camps with adequate stock	1														
	Provide sanitation facilities where needed	1														
	Provision of safe drinking water to work force (tube-well water, bottled water or pond water)	1														
	Proper signaling of work areas															
Public Health and Safety	Notification of the public adjacent to the construction areas	1														

Polder -47:Environmental Compliance/ Non –Compliance Report																
		No. of compliance					No. of non -compliance					No. of non -compliance repeating				
Environmental Issues	**Types of Compliance, Non Compliance & Repeating Non Compliance**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**
	Installation of diversion signboard with warning for dedicated pathways for pedestrians						1									
	Proper signaling of work areas						1									
	Limitation of construction vehicles at public roads during peak hours.						1									
	The temporary traffic detours in settlement areas will be kept free of dust by frequent application of water						1									
	Construction activities will be undertaken according to during daylight working hours between the hours of 07:00-17:00 on week days						1									
Water Supply	Providing construction camps with portable water either through installing tube wells (hand pump, shallow and deep tube well), pond	1														

Polder -47:Environmental Compliance/ Non –Compliance Report																
		No. of compliance					No. of non -compliance					No. of non -compliance repeating				
Environmental Issues	**Types of Compliance, Non Compliance & Repeating Non Compliance**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**
	Sand Filter (PSE) or supplying safe bottled water															
	Ensuring the location plan of tube wells (used for supplying potable water) that these are not sited near any sanitation facilities as to avoid water pollution	1														
	Maintaining the distance of a tube well/surface water resource from a soak pit at minimum 15 m	1														
	Maintaining the drainage from the tube well diverting into the drainage system of the camp area	1														
	Providing separate tube wells for the use of women.						1									
Sanitation	Providing suitable sanitation facilities for the workforce	1														

Polder -47:Environmental Compliance/ Non –Compliance Report																
		No. of compliance					No. of non -compliance					No. of non -compliance repeating				
Environmental Issues	**Types of Compliance, Non Compliance & Repeating Non Compliance**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**
	Ensuring the location plan of the latrine at least 50 m away from the accommodation facility	1														
	Providing separate latrines for the use of women	1														
	Installing treatment facilities (i.e. septic tank, soak pits etc.) for the sewerage of toilet and camp site wastes.						1									
	Arranging disposal of wastewater from washrooms, kitchens, s, etc. via the camp area's drainage system						1									
Solid Waste Management	Ensuring collection and disposal of solid wastes within the construction camps and work areas						1									
	Taking measure to collect and store inorganic wastes in a safe place within the household and organic wastes cleared on						1									

Polder -47:Environmental Compliance/ Non –Compliance Report																
		No. of compliance					No. of non -compliance					No. of non -compliance repeating				
Environmental Issues	**Types of Compliance, Non Compliance & Repeating Non Compliance**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**
	daily basis to waste collector.															
	Establish measures for Waste collection, transportation and disposal systems at approved disposal sites.						1									
	Disposal of construction and demolition waste.						1									
	Installation of decanter boxes for washing buckets and cement mixers						1									
	Installation of proper filtering elements.						1									
	Carrying out periodic checks and clean-ups for the decanter box.						1									
	Prioritize reuse of aggregates and water from the decanter box.						1									
Waste water	Ensure safe disposal of liquid wastes generated at camp site.						1									
Air	Regular maintenance of vehicles						1									

Polder -47:Environmental Compliance/ Non –Compliance Report																
		No. of compliance					No. of non -compliance					No. of non -compliance repeating				
Environmental Issues	**Types of Compliance, Non Compliance & Repeating Non Compliance**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**
	Covering or wetting of dusty materials						1									
	Dust suppression by wetting surfaces						1									
	Impose speed limits															
	Re vegetate bare surfaces soonest															
Noise	Notify nearby population prior to any typical noise events	1														
	Ensure construction activities do not generate unacceptably high level of noise	1														
	Restrict working to daylight hours	1														
	Locate noisy equipment / facilities away from sensitive receptors	1														
Water and Hydrology	Preventing waste, soil, etc. entering in the water system by waste collection, re vegetation and dust suppression etc.						1									
	Insure proper drainage of working areas e.g.						1									

Polder -47:Environmental Compliance/ Non –Compliance Report																
		No. of compliance					No. of non -compliance					No. of non -compliance repeating				
Environmental Issues	**Types of Compliance, Non Compliance & Repeating Non Compliance**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**
	perimeters lines must be provided with open shallow drains															
Monitoring of Drinking Water Quality	Performance of analyses on drinking water for: arsenic, iron, chloride and total fecal coliform bacteria.						1									
Deployment of Environment and Safety Supervisor	Employ one full-time Environment and Safety Supervisor for compliance monitoring of EMP						1									
Complaints and Environmental Incidents	Grievance Redress Mechanism will be established.						1									
	Complaints received from the public or other stakeholders will be registered and recorded and be brought to the attention of the Site Engineer.						1									
	All environmental incidents occurring on the site will be recorded and be brought to the						1									

Polder -47:Environmental Compliance/ Non –Compliance Report																
		No. of compliance					No. of non -compliance					No. of non -compliance repeating				
Environmental Issues	**Types of Compliance, Non Compliance & Repeating Non Compliance**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**
	attention of the Site Engineer.															
	Action will be taken within 7 working days.						1									
Reporting and Documentation	The following records will be kept at site: - Environmental Monitoring Results - Contractors self-assessment record/results - Register of non-compliance - Register of corrective actions - Monthly Environmental Reports						1									

Polder -48:Environmental Compliance /Non-compliance Report		Based on two reports, No Inspection Date in the Report														
		No. of compliance					No. of non -compliance					No. of non- compliance repeating				
Environmental Issues	**Types of Compliance, Non Compliance & Repeating Non Compliance**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**
Construction of Base Camp	Obtaining approval for facilities construction work				1											
	Erection of signboard in Bangla and English with project details									1						
	Install accommodation facilities Engineers and other staff / workers									1						
	Drainage channels installation				1											
	Supply of safe drinking water				1											
	Supply of adequate sanitation facilities				1											
	Safety fencing/Barriers and Entry Kiosks				1											
	Stack yard for plant and equipment				1											
	Construction of store room/warehouse				1											
	Temporary workshop facilities															
	Arrangement of sufficient															

Polder -48:Environmental Compliance /Non-compliance Report		Based on two reports, No Inspection Date in the Report														
		No. of compliance					No. of non -compliance					No. of non- compliance repeating				
Environmental Issues	**Types of Compliance, Non Compliance & Repeating Non Compliance**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**
	lighting facilities in the camp area															
	Install hardstand and secondary containment									1						
	Firefighting equipment installation				1											
	Sand and shovel close-by									1						
	Regular checks on physical condition				1											
Fuel storage areas	Approval fuel storage									1						
	Obtaining approval				1											
	Construction of culverts if needed									1						
Access road to the base camp	Construction of temporary road				1											
Training	Environmental training on EMP will be arranged for Construction Field supervisors and				1											
	Development of Health and Safety plan including emergency procedures				1											
Occupational Health and Safety	Train all staff in health and safety				1											

Polder -48:Environmental Compliance /Non-compliance Report		Based on two reports, No Inspection Date in the Report														
		No. of compliance					No. of non -compliance					No. of non- compliance repeating				
Environmental Issues	**Types of Compliance, Non Compliance & Repeating Non Compliance**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**
	Provision of HIV, including STI(Sexually Transmitted Infections) information, education and communication									1						
	Provision of PPE and ensuring their use				1											
	Provision and use of life jacket during visiting campsite/worksite by boat				1											
	Installation of first aid facilities at work site and camps with adequate stock				1											
	Provide sanitation facilities where needed				1											
	Provision of safe drinking water to work force (tube-well water, bottled water or pond water)				1											
	Proper signaling of work areas															
Public Health and Safety	Notification of the public adjacent to the construction areas				1											

Polder -48:Environmental Compliance /Non-compliance Report		Based on two reports, No Inspection Date in the Report														
		No. of compliance					No. of non -compliance					No. of non- compliance repeating				
Environmental Issues	**Types of Compliance, Non Compliance & Repeating Non Compliance**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**
	Installation of diversion signboard with warning for dedicated pathways for pedestrians									1						
	Proper signaling of work areas									1						
	Limitation of construction vehicles at public roads during peak hours.									1						
	The temporary traffic detours in settlement areas will be kept free of dust by frequent application of water									1						
	Construction activities will be undertaken according to during daylight working hours between the hours of 07:00-17:00 on week days									1						
Water Supply	Providing construction camps with portable water either through installing tube wells (hand pump, shallow and deep tube well), pond Sand Filter (PSE) or				1											

Polder -48:Environmental Compliance /Non-compliance Report		Based on two reports, No Inspection Date in the Report														
		No. of compliance					No. of non -compliance					No. of non- compliance repeating				
Environmental Issues	Types of Compliance, Non Compliance & Repeating Non Compliance	Q1	Q2	Q3	Q4	Total in year	Q1	Q2	Q3	Q4	Total in year	Q1	Q2	Q3	Q4	Total in year
	supplying safe bottled water															
	Ensuring the location plan of tube wells (used for supplying potable water) that these are not sited near any sanitation facilities as to avoid water pollution				1											
	Maintaining the distance of a tubewell/surface water resource from a soak pit at minimum 15 m				1											
	Maintaining the drainage from the tube well diverting into the drainage system of the camp area				1											
	Providing separate tube wells for the use of women.									1						
	Providing suitable sanitation facilities for the workforce				1											
	Ensuring the location plan of the latrine at least 50 m away from the accommodation facility				1											
Sanitation	Providing separate latrines for the use of women				1											

Polder -48:Environmental Compliance /Non-compliance Report		Based on two reports, No Inspection Date in the Report														
		No. of compliance					No. of non -compliance					No. of non- compliance repeating				
Environmental Issues	**Types of Compliance, Non Compliance & Repeating Non Compliance**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**
	Installing treatment facilities (i.e. septic tank, soak pits etc.) for the sewerage of toilet and camp site wastes.				1											
	Arranging disposal of wastewater from washrooms, kitchens, s, etc. via the camp area's drainage system									1						
Solid Waste Management	Ensuring collection and disposal of solid wastes within the construction camps and work areas									1						
	Taking measure to collect and store inorganic wastes in a safe place within the household and organic wastes cleared on daily basis to waste collector.									1						
	Establish measures for Waste collection, transportation and disposal systems at approved disposal sites.									1						
	Disposal of construction									1						

Polder -48:Environmental Compliance /Non-compliance Report		Based on two reports, No Inspection Date in the Report														
		No. of compliance					No. of non -compliance					No. of non- compliance repeating				
Environmental Issues	Types of Compliance, Non Compliance & Repeating Non Compliance	Q1	Q2	Q3	Q4	Total in year	Q1	Q2	Q3	Q4	Total in year	Q1	Q2	Q3	Q4	Total in year
	and demolition waste.															
Waste water	Installation of decanter boxes for washing buckets and cement mixers									1						
	Installation of proper filtering elements.									1						
	Carrying out periodic checks and clean-ups for the decanter box.									1						
	Prioritize reuse of aggregates and water from the decanter box.									1						
	Ensure safe disposal of liquid wastes generated at camp site.									1						
Air	Regular maintenance of vehicles				1											
	Covering or wetting of dusty materials									1						
	Dust suppression by wetting surfaces									1						
	Impose speed limits									1						
	Re vegetate bare surfaces soonest									1						
Noise	Notify nearby population				1											

Polder -48:Environmental Compliance /Non-compliance Report		Based on two reports, No Inspection Date in the Report														
		No. of compliance					No. of non -compliance					No. of non- compliance repeating				
Environmental Issues	**Types of Compliance, Non Compliance & Repeating Non Compliance**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**
	prior to any typical noise events															
	Ensure construction activities do not generate unacceptably high level of noise				1											
	Restrict working to daylight hours				1											
	Locate noisy equipment / facilities away from sensitive receptors				1											
	Preventing waste, soil, etc. entering in the water system by waste collection, re vegetation and dust suppression etc.									1						
Water and Hydrology	Insure proper drainage of working areas e.g. perimeters lines must be provided with open shallow drains									1						
Monitoring of Drinking Water Quality	Performance of analyses on drinking water for: arsenic, iron, chloride and total fecal coliform bacteria.									1						

Polder -48:Environmental Compliance /Non-compliance Report		Based on two reports, No Inspection Date in the Report														
		No. of compliance					No. of non -compliance					No. of non- compliance repeating				
Environmental Issues	**Types of Compliance, Non Compliance & Repeating Non Compliance**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**
Deployment of Environment and Safety Supervisor	Employ one full-time Environment and Safety Supervisor for compliance monitoring of EMP				1											
Complaints and Environmental Incidents	Grievance Redress Mechanism will be established.									1						
	Complaints received from the public or other stakeholders will be registered and recorded and be brought to the attention of the Site Engineer.									1						
	All environmental incidents occurring on the site will be recorded and be brought to the attention of the Site Engineer.									1						
	Action will be taken within 7 working days.									1						

Polder -48:Environmental Compliance /Non-compliance Report		Based on two reports, No Inspection Date in the Report														
		No. of compliance					No. of non -compliance					No. of non- compliance repeating				
Environmental Issues	**Types of Compliance, Non Compliance & Repeating Non Compliance**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**
Reporting and Documentation	The following records will be kept at site: - Environmental Monitoring Results - Contractors self-assessment record/results - Register of non-compliance - Register of corrective actions - Monthly Environmental Reports									1						

Polder -39/2C:Environmental Compliance Non-compliance Report		Based on two Reports- Date of Inspection: 30/11/2017&31/12/2017														
		No. of compliance					No. of non -compliance					No. of non -compliance repeating				
Environmental Issues	**Types of Compliance, Non Compliance & Repeating Non Compliance**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**
Construction of Base Camp	Obtaining approval for facilities construction work				1											
	Erection of signboard in Bangla and English with project details				1											
	Install accommodation facilities Engineers and other staff / workers				1											
	Drainage channels installation				1											
	Supply of safe drinking water				1											
	Supply of adequate sanitation facilities				1											
	Safety fencing/Barriers and Entry Kiosks				1					1						
	Stack yard for plant and equipment				1											
	Construction of store room/warehouse									1						
	Temporary workshop facilities									1						
	Arrangement of sufficient lighting facilities in the camp area				1											
Fuel storage areas	Install hardstand and secondary containment				1					1						
	Firefighting equipment installation									1						

Polder -39/2C:Environmental Compliance Non-compliance Report		Based on two Reports- Date of Inspection: 30/11/2017&31/12/2017														
		No. of compliance					No. of non -compliance					No. of non -compliance repeating				
Environmental Issues	**Types of Compliance, Non Compliance & Repeating Non Compliance**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**
	Sand and shovel close-by									1						
	Regular checks on physical condition									1						
	Approval fuel storage									1						
Access road to the base camp	Obtaining approval				1											
	Construction of culverts if needed									1						
	Construction of temporary road				1											
Training	Environmental training on EMP will be arranged for Construction Field supervisors and				1					1						
Occupational Health and Safety	Development of Health and Safety plan including emergency procedures									1						
	Train all staff in health and safety									1						
	Provision of HIV, including STI(Sexually Transmitted Infections) information, education and communication									1						
	Provision of PPE and ensuring their use									1						
	Provision and use of life jacket during visiting campsite/worksite by boat									1						

Polder -39/2C:Environmental Compliance Non-compliance Report		Based on two Reports- Date of Inspection: 30/11/2017&31/12/2017														
		No. of compliance					No. of non -compliance					No. of non -compliance repeating				
Environmental Issues	**Types of Compliance, Non Compliance & Repeating Non Compliance**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**
	Installation of first aid facilities at work site and camps with adequate stock									1						
	Provide sanitation facilities where needed									1						
	Provision of safe drinking water to work force (tube-well water, bottled water or pond water)									1						
	Proper signaling of work areas									1						
	Notification of the public adjacent to the construction areas									1						
	Installation of diversion signboard with warning for dedicated pathways for pedestrians									1						
	Proper signaling of work areas									1						
	Limitation of construction vehicles at public roads during peak hours.									1						
	The temporary traffic detours in settlement areas will be kept free of dust by frequent application of water									1						
Public Health and Safety	Construction activities will be undertaken according to during daylight working hours between the hours of 07:00-17:00 on week									1						

Polder -39/2C:Environmental Compliance Non-compliance Report		Based on two Reports- Date of Inspection: 30/11/2017&31/12/2017														
		No. of compliance					No. of non -compliance					No. of non -compliance repeating				
Environmental Issues	**Types of Compliance, Non Compliance & Repeating Non Compliance**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**
	days															
Water Supply	Providing construction camps with portable water either through installing tube wells (hand pump, shallow and deep tube well), pond Sand Filter (PSE) or supplying safe bottled water				1											
	Ensuring the location plan of tube wells (used for supplying potable water) that these are not sited near any sanitation facilities as to avoid water pollution				1					1						
	Maintaining the distance of a tube well /surface water resource from a soak pit at minimum 15 m									1						
	Maintaining the drainage from the tube well diverting into the drainage system of the camp area									1						
	Providing separate tube wells for the use of women.									1						
Sanitation	Providing suitable sanitation facilities for the workforce				1					1						
	Ensuring the location plan of the latrine at least 50 m away from				1					1						

Polder -39/2C:Environmental Compliance Non-compliance Report		Based on two Reports- Date of Inspection: 30/11/2017&31/12/2017														
		No. of compliance					No. of non -compliance					No. of non -compliance repeating				
Environmental Issues	**Types of Compliance, Non Compliance & Repeating Non Compliance**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**
	the accommodation facility															
	Providing separate latrines for the use of women				1											
	Installing treatment facilities (i.e. septic tank, soak pits etc.) for the sewerage of toilet and camp site wastes.				1					1						
	Arranging disposal of wastewater from washrooms, kitchens, s, etc. via the camp area's drainage system				1					1						
	Ensuring collection and disposal of solid wastes within the construction camps and work areas				1											
	Taking measure to collect and store inorganic wastes in a safe place within the household and organic wastes cleared on daily basis to waste collector.				1											
Solid Waste Management	Establish measures for Waste collection, transportation and disposal systems at approved disposal sites.				1					1						

Polder -39/2C:Environmental Compliance Non-compliance Report		Based on two Reports- Date of Inspection: 30/11/2017&31/12/2017														
		No. of compliance					No. of non -compliance					No. of non -compliance repeating				
Environmental Issues	**Types of Compliance, Non Compliance & Repeating Non Compliance**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**
	Disposal of construction and demolition waste.				1					1						
	Installation of decanter boxes for washing buckets and cement mixers									1						
	Installation of proper filtering elements.									1						
	Carrying out periodic checks and clean-ups for the decanter box.									1						
	Prioritize reuse of aggregates and water from the decanter box.									1						
Waste water	Ensure safe disposal of liquid wastes generated at camp site.									1						
	Regular maintenance of vehicles				1											
	Covering or wetting of dusty materials				1											
	Dust suppression by wetting surfaces				1											
	Impose speed limits									1						
Air	Re - vegetate bare surfaces soonest									1						
	Notify nearby population prior to any typical noise events				1											
Noise	Ensure construction activities do not generate unacceptably high				1											

Polder -39/2C:Environmental Compliance Non-compliance Report		Based on two Reports- Date of Inspection: 30/11/2017&31/12/2017														
		No. of compliance					No. of non -compliance					No. of non -compliance repeating				
Environmental Issues	**Types of Compliance, Non Compliance & Repeating Non Compliance**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**
	level of noise															
	Restrict working to daylight hours				1					1						
	Locate noisy equipment / facilities away from sensitive receptors				1											
	Preventing waste, soil, etc. entering in the water system by waste collection, re -vegetation and dust suppression etc.									1						
Water and Hydrology	Insure proper drainage of working areas e.g. perimeters lines must be provided with open shallow drains									1						
Monitoring of Drinking Water Quality	Performance of analyses on drinking water for: arsenic, iron, chloride and total fecal coliform bacteria.									1						
Deployment of Environment and Safety Supervisor	Employ one full-time Environment and Safety Supervisor for compliance monitoring of EMP				1											
Complaints and Environmental	Grievance Redress Mechanism will be established.									1						

Polder -39/2C:Environmental Compliance Non-compliance Report		Based on two Reports- Date of Inspection: 30/11/2017&31/12/2017														
		No. of compliance					No. of non -compliance					No. of non -compliance repeating				
Environmental Issues	**Types of Compliance, Non Compliance & Repeating Non Compliance**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**	**Q1**	**Q2**	**Q3**	**Q4**	**Total in year**
Incidents	Complaints received from the public or other stakeholders will be registered and recorded and be brought to the attention of the Site Engineer.									1						
	All environmental incidents occurring on the site will be recorded and be brought to the attention of the Site Engineer.									1						
	Action will be taken within 7 working days.									1						
Reporting and Documentation	The following records will be kept at site: - Environmental Monitoring Results - Contractors self-assessment record/results - Register of non-compliance - Register of corrective actions - Monthly Environmental Reports									1						

4.9 Selected Photos from the Audit

Package 01

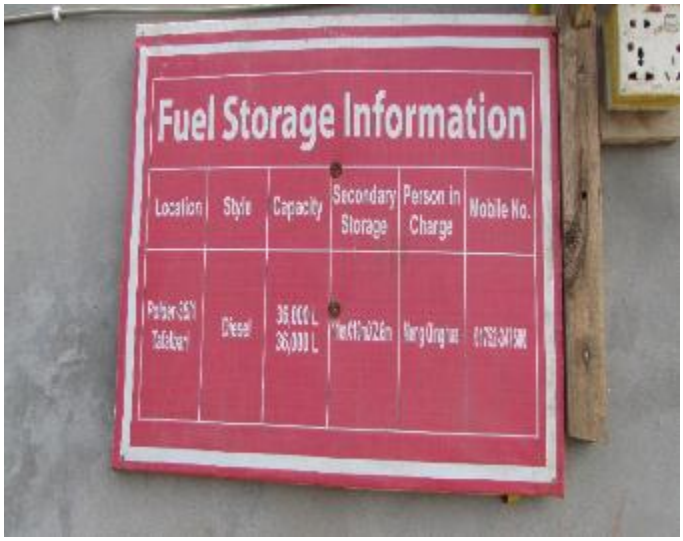
Moveable fencing has been provided around the pit

Of left over materials of CC plant

Cover over the conveyor belt of CC block manufacturing plant

Decanting ditch with the discharge of the CC block manufacturing plant

Fire extinguisher in box for protection from sun and rain



Fuel storage information

Welding workers using PPE

Designated parking are with signage

First aid box in the work site with necessary items

Pedestrian alternative passage way with DS work site

Well protected electric supply room

Demonstration of using fire extinguisher by the contractor staff

Sprinkling of water to control dust

Erection of safety and cautionary signboard, signage and symbols

Contract information of Environmental responsible staff for the site

Figure 1Storage with flammable items and fuel together

Electric box opened in the workshop

Septic tank opened to nearby ditch passing discharge

Septic tank of another latrine directly opened to drain inside plant yard

Drain from CC block manufacturing yard directly opened to agriculture land

Workers dealing with heavy materials without hand gloves

Latrines of the workers in close to river water

Latrine with no water seal

Electric wire on the ground

Mismanaged storage posing risk

Package 02

First aid box in work site

Indication of assembly point for emergency situation

Well managed waste collection

Well managed waste collection

Cautionary signboard

Motivational message on safety

Opened electric board

Drainage outlet from the work site directly opened to a pond used by community HHs

Workers working without PPE

Workers working without PPE

Opened latrine used by the workers

Latrine pit very close to river water

Water stagnant in the tank of worksite

Workers without PPE