



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

BANGLADESH WATER DEVELOPMENT BOARD
COASTAL EMBANKMENT IMPROVEMENT PROJECT PHASE-1, (CEIP-1)

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

Fifth Annual Environmental Audit Report
for 01 January – 31 December 2020

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in association with BETS Consulting Services, Ltd.
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(CONTRACT PACKAGE NO. CEIP-1/ C2/S3)



Revised Report Submission Date: 14 July 2021
Original Report Submission Date: 05 February 2021

Acronyms

BWDB	Bangladesh Water Development Board
CC	Cement Concrete
CEGIS	Center for Environmental and Geographical Information Services
CEIP-1	Coastal Embankment Improvement Project, Phase-1
C-ESMP	Contractor's Environmental and Social Management Plan
CHWE	First Engineering Bureau of Henan Water Conservancy
CICO	Chongqing International Construction Corporation
CRTS	Consultancy for Research and Testing Services
CSE	Construction Supervision 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
ICM	Integrated Crop Management
IPM	Integrated Pest Management
IPOE	Independent Panel of Experts
JD	Job Description
KUET	Khulna University of Engineering and Technology
LTMRA	Long Term Monitoring, Research and Analysis
M&E	Monitoring and Evaluation
MTR	Mid-Term Review
NCR	Non-Compliance Register
NGO	Non-Governmental Organization
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
WB	World Bank
WMG	Water Management Group
XEN	Executive Engineer

Table of Contents

Acronyms	1
1. Introduction	5
1.1. Background	5
1.2. Audit Objective.....	7
1.3. Scope of the Audit	7
1.4. Methodology.....	9
1.5. Team Composition and Duration	10
2. Audit Findings.....	10
2.1. Existence and appropriateness of base documents	10
2.1.1. EIA and EMP	10
2.1.2. Environmental Action Plans (EAP) of Contractor for Package 01	11
2.1.3. Environmental and Social Management Plan (C-ESMP) of Package 02 Contractor	13
2.1.4. EHS Risk Assessment of Package 01 and Package 02 Contractors	14
2.1.5. Contract document of Package 01 and Package 02 and Implications for Similar Future Project.....	14
2.1.6. Quality Assurance Plan V1.0- August 2016	15
2.2. Systems- Tools, formats, institutional arrangements, protocols, and quality assurance	15
2.2.1. Environmental monitoring tools and guidelines	15
2.2.2. Twice- monthly environmental inspection report and field reports	15
2.2.2.1. Package 01	15
2.2.2.2. Package 02	16
2.2.3. Compliance Performance	17
2.2.4. Grievance Redress Mechanism.....	29
2.2.4.1. Grievance Redress Mechanism (GRM) for Package-01	31
2.2.4.2. Grievance Redress Mechanism (GRM) for Package-02	32
2.2.5. Monitoring Testing results.....	34
2.2.6. Contractor’s Emergency Response Plan.....	34
2.2.6.1 Package 01	34
2.2.6.2. Package 02	35

2.2.7. Correspondence on EHS issues	35
2.2.8. Decommissioning to be carried out by Contractor of Package 01.....	36
2.3. Environmental staff resources.....	36
2.4. Necessary equipment and arrangements for environmental monitoring and testing.....	38
2.5. Staff awareness and training.....	39
2.6. Fish Conservation Initiative by Contractors	41
2.6.1. Fish Conservation Initiative by Contractor of Package 01.....	41
2.6.2. Fish Conservation Initiative by Contractor of Package 02.....	43
2.7. EMP Implementation Budget	43
2.8. Actual implementation/ practice level	44
2.8.1. Review of achievement status of Action Items from the Aide Memoires, status of compliance of the recommendations of Third Annual Environmental Audit of Third Party M&E Consultants and Bi-Annual Environmental Monitoring Report.....	44
2.8.2. Polder-specific field observations.....	53
2.8.3. Observations on Long Term Monitoring, Research, and Analysis of Bangladesh Coastal Zone Consultants.....	61
2.8.4. Observations on NGO's Integrated Pest Management (IPM) and Integrated Crop Management Training.....	62
2.9. Labor influx.....	62
2.10. Constraints to implement EMP.....	62
3. Conclusions and recommendations	63
4. Annexes.....	A-1
4.1. Terms of Reference.....	A-1
4.2. Field visit plan for the audit.....	A-9
4.3. Some of the persons met during the audit	A-10
4.4. Sample of correspondence of EHS issue from DDSC&PMSC.....	A-11
4.5. Environmental Compliance / Non-Compliance Report: Package 01	A-13
4.6. Environmental Compliance / Non-Compliance Report: Package 02	A-21
4.7. Selected Photos from the Audit	A-25
4.8. Labour Influx Report	A-36
4.9. Time Bound Corrective Action Plan Suggested by the 5 th Annual Environmental Audit Findings	A-48



List of Tables

Table 1: Comparison in monitoring frequency between CEIP's EMPs and Contractor's EAPs of Package 01	12
Table 2: Comparison in monitoring frequency between CEIP's EMMPs and Contractor's C-ESMP	13
Table 3: Elements Comprising the Compliance Inspection Checklist Considered in 2020– Package 01	18
Table 4: Summary Status of Compliance and Non-Compliance and comparison between whole year and Quarter 4 in 2020, Package-01	23
Table 5: Elements Comprising the Compliance Inspection Checklist Considered in 2020 – Package 02	24
Table 6: Summary Status of Compliance and Non-Compliance and comparison between whole year and Quarter 4 in 2020, Package-02	28
Table 7: Type of complaints received in Package 01 during January-December, 2020 period	31
Table 8: Summary of Disposition of Grievances in Package 01	32
Table 9: Polder-wise Date of Establishment and Location of Grievance Redress Committees of Package 02	32
Table 10: Type of complaints received in Package 02 during January-December, 2020 period	33
Table 11: Summary of Disposition of Grievances in Package 02	33
Table 12: Environmental, Health and Safety Personnel	36
Table 13: Number of Package 01 Participants (Staff and Workers) Receiving Environmental Training During 2020.....	39
Table 14: Number of Package 02 Participants (Staff and Workers) Receiving Environmental Training During 2020.....	39
Table 15: Conducted training program on conservation of threatened fishes with WMA leaders & WMG members.....	42
Table 16: Fish Fry Stocking Plan for Polders sites	42
Table 17: Identified Fish Species	42
Table 18: Status of implementation of action items of WB Aide Memoire (16-20 August, 2020)	44
Table 19: Status of implementation of action items of Fourth Annual Environmental Audit (Covering Jan-Dec 2020).....	45
Table 20: Status of implementation of action items of Bi-Annual Environmental Monitoring Report (Covering Jan-Jun 2020).....	51
Table 21: Time Bound Corrective Action Plan Suggested by Fifth Annual Environmental Audit	A-48

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 2022. It covers 10 polders in two Packages of 4 and 6 polders respectively. The Detailed Design, Construction Supervision and Project Management Support Consultants (DDCS&PMSC) commenced their design work in January 2015 and the Package 01 Contractor commenced their works contract on 26 January 2016. The Package 02 Contractor's contract was signed on March 2017 and work was commenced on 12 July 2017. Moreover, contract signing between Bangladesh Water Development Board (BWDB) and the Non-Governmental Organizations (NGOs) for the consultancy services of social mobilization, afforestation and Integrated Pest Management Plan (IPM) was started from 24 February 2019 and CEIP-1 accomplished contract signing of five NGOs by 02 May 2019, and the NGOs have been providing their services. Contract between BWDB and the Consultants for Long Term Monitoring, Research and Analysis (LTMRA) of Bangladesh coastal zone was signed on 04 October 2018 which was effective from 15 October 2018 and the Inception Report was due on 15 January 2019.

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 01 January to 06 February 2017 covering the reporting period January through December 2016, second Annual Environmental Audit covering January-December 2017 was carried out during 10 January to 07 February 2018, third Annual Environmental Audit covering January-December 2018 was carried out during 06 January to 07 February 2019 and fourth Annual Environmental Audit covering January-December 2019 was carried out during 05 January to 07 February 2019. Third Party M&E Consultants have carried out this fifth Annual Environmental Audit covering the period January- December 2020 from 10 January to 07 February 2021.

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

1. Project Management Unit, with its Social and Environmental Coordination Unit (SECU), who are responsible for oversight and guidance on environmental matters as well as coordination with GoB agencies. The Environmental issues of the Project are being tended to by a Senior Environmental Specialist and an Environmental Specialist (Field) under PMU's SECU. 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. The Consultants for long term monitoring, research and analysis of Bangladesh coastal zone also need to consider the environmental safeguards and sustainability issues in their polder development plan, updated design and specifications and action plan for capacity building

activities.

4. The NGOs are responsible for the social mobilization works for the sustainable operation of the polders, social afforestation and IPM interventions.
5. Civil Works Contractors who must develop and implement polder- and site-specific Environmental Action Plans in the case of Package 01 and Contractor's Environmental and Social Management Plans known as C-ESMP in the case of Package 02.
6. World Bank reviews and provides comments and no objection to the various safeguard documents.
7. Community participation, consultation and feedback through the EIA process and Grievance Redress Mechanism.
8. 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-1, 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. The Third Party M&E Consultants will take the lead in facilitating the preparation of a time-bound action plan based on audit recommendations. It will monitor action on the recommendations of the audit by PMU, DDCS&PMSC, concerned contractors and other contractual parties.

Each polder has its own Environmental Impact Assessment (EIA) which includes an Environmental Management Plan (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's 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.

1.2. Audit Objective

The overall objective of the fifth 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 preparation and update of required safeguards documents; (2) the implementation of the EMPs, C-ESMP and EAPs; (3) the implementation of environmental monitoring, including the use of effective monitoring systems, tools and protocols; (4) institutional strengthening and capacity development, including institutional arrangements, staff and funding resources, and implementation of training programs; (5) the implementation of disclosure, consultations, communication, grievance redress mechanisms; and (6) compliance with reporting requirements.

The audit covered the Contractors for Package 01 and Package 02, NGOs, Consultants of Long-term Monitoring, Research and Analysis of Bangladesh Coastal Zone, the DDCS&PMS Consultants and Project Management Unit (BWDB- Social and Environmental Coordination Unit).

Fieldwork was centered on the polders of Package 01 and 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 similar projects or a future phase of CEIP.

Specifically, the audit assessed and covered:

- Status of implementation of the recommendations / findings of the third 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 mission/s that were conducted in 2020
- Status of implementation of the recommendations of fourth Annual Environmental Audit Report
- Status of the implementation of the recommendations / agreed actions of Bi-Annual Environmental Monitoring Report of January-June 2020
- Extent to which the environmental mitigation measures outlined in the ESMP / EAPs and C-ESMP are being followed and whether they are effective

- Status of the implementation of the environmental safeguard measures for the social mobilization, afforestation and IPM activities of the NGOs
- Status of extent of the environmental safeguards and sustainability issues in the polder development plan, updated design and specifications and action plan for capacity building activities of the consultants of long-term monitoring, research and analysis of Bangladesh coastal zone
- The extent to which 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, public health and social dynamics
- Extent to which the Environmental Monitoring Plans are being followed and whether they are effective
- The availability and quality of monitoring equipment, tools, formats and protocols; and processes and procedures for compliance monitoring
- Implementation and effectiveness of workers' and community safety and health, environmental health protocols and measures, including accidents at the work sites, in surrounding communities and along transport routes and for COVID risk management
- Functioning of the GRM in the polder areas, including timeliness and effectiveness of receiving and redressing grievances
- Effectiveness of institutional arrangements for environmental management; availability of funding
- Existence of qualified staff resources
- Design, delivery and effectiveness of awareness and training programs for Contractor and Supervision Consultant staff
- Review of accident records in the work sites and examine the magnitude of the accidents and how those were addressed by the contractor
- Whether any of the CEIP-1 activities may have negative impact on the mangrove forest Sundarbans
- Constraints if any in ensuring compliance with the EMP / EAPs / C-ESMP
- Compliance with record keeping and reporting requirements for all project partners, including the veracity, accuracy, breadth, depth and relevance of information
- Review the implementation status of the COVID-19 OHS protocols at construction sites that have been prepared by the contractors.
- Review the status of the maintenance of COVID-19 safety measures being carried by the project, more generally.
- Recommendations for corrective actions to fulfill any non-compliance with the ESMP, EAPs and C-ESMP, including gaps, omissions, deficiencies, discrepancies and concerns with respect to the above
- Considering that work of Package 01 will be completed in June 2021, specific recommendation for site clearance and decommissioning of temporary facilities
- Based on the findings of the fifth audit, M&E Consultants is suggesting a time bound Corrective Action Plan (CAP) mentioning the responsible parties, and this CAP has also

included the items of third and fourth environmental audits which are still pending. 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, test results, conducted interviews in offices and in the field, and made direct observations during a one-week period and then recorded their findings. Specific work sites, which were visited on a particular polder were selected randomly for the most part, but in all cases without advance notice to the Contractors and DDSC&PMSC and NGOs.

Document Review: Existing base documents were reviewed such as, EIAs, EMPs, Contractor EAPs and C-ESMPs, EHS Risk Assessment report, guidelines, standard procedure manuals, contractor's contract of Package 01 and Package 02, contractors' Emergency preparedness plan, and World Bank Aide Memoires 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, DDSC&PMSC environmental personnel, (the Team Leader and Environmental Specialist of the consultants of LTMRA of Bangladesh coastal zone were interviewed at DDSC&PMSC's and consultants of long-term monitoring, research and analysis of Bangladesh coastal zone's Dhaka office, NGOs and Package 01 and Package 02 field offices). Contractors' and DDSCS &PMS Consultant's staff also were interviewed in audited polders of Package 01 and Package 02 during the period of January 18-22, 2020. FGDs were conducted with local communities and Water Management Groups (WMGs) 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 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. Some of the embankment construction worksites and drainage/flushing sluice gate sites including completed drainage/ flushing sluice, CC block manufacturing plants, river protection, afforestation works 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 DDCCS&PMSC to discuss systems, strength of the environment staff and documents. During the field visits and meetings carried out by the audit team, COVID-19 guideline of GoB/WB and Project's COVID-19 protocols were followed strictly (e.g maintaining social distancing, wearing mask, hand sanitizing etc.).

1.5. Team Composition and Duration

The Environmental audit was accomplished by the Environmental Specialist–National (A.K.M. Rezaul Haque Khan) of the Third Party M&E Consultants with the support of the Team Leader (Mr. Jan T. Twarowski), Deputy Team Leader (Mr. Md. Mahidur Rahman Khan) and M&E Officer (Mr. Md. Safiqul Islam). The audit was conducted within a short timeline through fieldwork for five days 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.

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;
- 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, and the training modules (IPM and ICM, WMOs, Afforestation) of NGOs.

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 must be submitted for obtaining 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 six polders of Package 02 and these contain polder-specific EMPs. These EIAs have been approved by WB and CEIP-1 have spelled out the required actions needed comply with Government regulations and WB safeguards. The

preparation of the EIAs for the other 7 Polders (14/1, 15, 16, 17/1, 17/2, 23 and 34/3) are almost in shape to be finalized. All those 7 EIA reports were reviewed and adjusted by DDCS&PMSC to respond to the World Bank's comments of first review. World Bank also provided comments from their second review. DDCS & PMS Consultant addressed those comments with the assistance of PMU and third Party M&E Consultant. Hence, those were submitted to WB through PMU. After that submission the EIA of Polder 14/1 was reviewed by the Senior Environmental Specialist of WB made some comments on it and was advised to follow the comments in all the EIAs of remaining polders. The comments with EIA of polder 14/1 were addressed by CEIP-1 and this was submitted to WB. Hence, WB team reviewed that EIA and came up with another round of comments in 2020. The comments of that round were addressed by CEIP-1 and submitted to WB. After reviewing that version of the EIA of 14/1, WB shared another round of comments in the reporting year and suggested to address those comments with EIA of Polder 14/1 and others EIAs and submit the final EIAs to WB. CEIP-1 is addressing those comments with all the EIAs of package 03 and is in a good progress. CEIP-1 has plan to submit all the remaining EIAs by February 2021.

The EIAs of Package 03 are in good shapes and improved compare to the EIAs of Package 01 and Package 02. These are in this stage because of extensive efforts of WB team and CEIP-1 team at the end of PMU, DDCS&PMS Consultants and Third Party M&E Consultants. These EIAs have considered all the requirements of DoE and WB.

The Package 03 EIAs have 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.

The validity of the Environmental Clearance Certificate (ECC) for both Package 01 and Package 02 those need to be renewed every year from DoE and last renewal was expired on 04 November 2020. (CEIP-1 submitted the application for renewal to DoE on 24 January 2021 and waiting to obtain the renewal. It is anticipated that CEIP-1 will obtain the renewal of ECC for both Package 01 and Package 02 in couple of weeks. However, considering that the ECC renewal expires for one year and need to obtain the renewal in every year, it is recommended that CEIP-1 will start the process of renewal one month before the expiry so that the renewal is obtained on time).

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 into concrete, site-specific and time-bound actions how the environmental and EHS issues of the EMPs will be addressed. The four polders' specific EAPs are living documents; they have been updated four times. EAPs are Contractor's living documents and are subject to revision as per requirements, which have

been revised (Version 4) and submitted to DDSC & PMS Consultants. After review from the Consultants' side, these were submitted to PMU for sharing with The World Bank. The World Bank re-reviewed the Version 4 of EAPs and cleared the document in 2019. The EAPs have also been translated in Bangla and Chinese and available in the existing CC plant sides and important construction sites to be followed properly. During the reporting year, the EAPs were not updated.

From the review of the EAPs those were updated in 2019, the audit team found during the last fourth Annual Environmental Audit that the EAPs in improved stage compared to the prior versions. However, that audit found some of the monitoring (testing) frequencies given in the EAPs {The frequencies shown with the table1 for EAPs are as per the site specific environmental action plan (Annex-3) of EAPs contractor of Package 01} are not complying with the requirement of EMP (e.g. the EMP specified that air quality would be monitored half-yearly, but the EAPs indicate annually, EMP says noise level will be monitored weekly while EAPs say monthly, EMP mentioned test for drinking water should be half yearly but EAPs say annually The audit team recommends the contractor to revisit the EAPs thoroughly to make it consistent with the EMP and practically useable as a comprehensive guide for staff and laborers. However, the section 6 (Implementation Planning) of EAPs states that "Noise data was shared on a yearly basis with the consultants; from now on noise data is shared on a monthly basis with the consultants/PMU and incorporated in monthly report."

During this fifth audit, the EAPs were found in same stage and the above findings are still applicable. However, meeting with the team revealed that they are in a process to update the EAPs to address the above comments and will complete updating the EAPs by February 2021. The Contractor of package 01 is recommended to update the EAPs considering the inconsistency as soon as possible.

The following deviations were found comparing to the EAPs and EMPs of Package 01:

Table 1: Comparison in monitoring frequency between CEIP's EMPs and Contractor's EAPs of Package 01

Monitoring item	EAPs	EMPs	Remarks
Monitoring of Air Quality	Yearly	Half yearly	The WB and PMU agreed to monitor air quality in yearly basis
Monitoring of Noise Quality	Yearly	Weekly	The WB and PMU agreed to monitor noise quality fortnightly and reported in the MPR
Monitoring of Drinking Water Quality	Yearly	Half-yearly	The WB and PMU agreed to monitor drinking water quality in yearly basis
Surface water	Yearly	Yearly (during dry season)	The EAPs are consistent with Project's EMPs.

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

In Package 02, we use the term C-ESMP which is analogous to the EAP of Package 01. The C-ESMPs are also polder-specific living documents of the contractor which translate how the environmental, EHS and social issues of the EMPs are to be addressed in the way of actionable plans.

Initially, 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 had 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 who reviewed these documents and provided their comments. Subsequently, the C-ESMPs were reviewed by the World Bank who shared their comments. The comments of WB on the C-ESMPs were addressed by the Contractor Package 02 with the assistance of DDCS&PMS Consultants and Environmental Team of PMU those were approved. However, another round of updating was carried out in 2019, submitted to WB and WB commented on the C-ESMPs. These documents were also cleared by the WB. The C-ESMPs were translated in Bangla and Chinese and available in the existing CC plant sides and important construction sites to be followed properly.

As part of the audit, the Third Party M&E Consultants reviewed the C-ESMPs. From the review, frequency of monitoring of air quality, noise level, surface water and drinking water were found to be inconsistent between the C-ESMPs (as per monitoring checklists with Annexes- 3, 4, 5, 6, 7, 8 and 10 of C-ESMPs) and CEIP's EMPs of Package 02. During this fifth audit, the above findings have also been revealed. The CESMPs were not updated during the reporting year. The following deviations were found comparing to the C-ESMPs and CEIP's EMPs:

Table 2: Comparison in monitoring frequency between CEIP's EMMPs and Contractor's C-ESMP

Monitoring item	C-ESMP	EMP	Remarks
Monitoring of Air Quality	Yearly	Half yearly	The WB and PMU agreed to monitor air quality in yearly basis
Monitoring of Noise Quality	Monthly	Weekly	The WB and PMU agreed to monitor noise quality fortnightly and reported in the MPR
Monitoring of Drinking Water Quality	Yearly	Yearly	The EAPs are consistent with Project's EMPs.
Surface water	Yearly	Yearly (during dry season)	The EAPs are consistent with Project's EMPs.

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. EHS Risk Assessment of Package 01 and Package 02 Contractors

Both the polder-specific EHS Risk Assessment reports of Package 01 and Package 02 were cleared by the WB. As part of the fourth audit, the EHS Risk Assessment reports of the both contractors of CEIP-1 were reviewed. That audit revealed that the risk assessments were mostly focused on the activities of CC block manufacturing plants, sluices and barges. It was found the risk assessment covers many issues but still there are a few gaps which could be addressed. The audit found discussion on various national relevant laws/ policies, but the C-ESMP does not cover Environmental Conservation Rules (ECR), 1997 which is the basis of the environmental requirement of the various projects in Bangladesh, and which also provides a step-wise guideline to fulfil the environmental requirements as per law. The risk assessed for air quality addressed only dust creation; other aspects could be accounted (e.g. emissions from plants, vehicles). The assessment did not cover any risk those could cause health problem for workers and environmental pollution because of poor drinking water and sanitation facilities. It was recommended that both the contractors address the above-mentioned gaps in their EHS Risk Assessment reports. As the reports have not been updated yet based on the findings of fourth audit, the findings remain same and it is also recommended by this fifth audit that both the contractors update the reports by addressing the above recommendation.

2.1.5. Contract document of Package 01 and Package 02 and Implications for Similar Future Project

The fourth and current fifth audits 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) cover mostly matters of Environmental Health and Safety (EHS). It is notable that the Package 02 contract document is comprised of more elaborated environmental-measures budget lines than the contract of Package 01. Considering the smaller number of budget items for EMP implementation in the contract of Package 01, it has been recommended to monitor implementation of mitigation measures for each impact area to ensure they are adequately addressed. The bid documents and contract for similar future project 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.

2.1.6. Quality Assurance Plan V1.0- August 2016

Audit team reviewed the quality assurance plan of the DDCS & PMS Consultants, and found that it is the same version that was reviewed during the last four audits. The findings are same as previous audits 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 statement of how EMP compliance will be monitored and achieved and COVID-19 protocols. This long pending issue was discussed with the Environmental Specialist of DDCS&PMS Consultants during this fifth annual environmental audit and it is recommended that the DDCS&PMS Consultants will include how EMP compliance will be monitored and achieved with their Quality Assurance Plan as soon as possible.

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, grievance redress mechanism, Contractors' Emergency Response Plan correspondence on environmental safeguard issues and recommendations on decommissioning to be carried out by Contractor of Package 01.

2.2.1. Environmental monitoring tools and guidelines

Both the Contractors have 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 "Bi-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 (bi-monthly) environmental reports to DDCS&PMSC since November 2016. As a part of the 5th Annual Audit, the reports of January through December 2020 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.

The Environmental Specialist of DDSC&PMSC conducts field visits and 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 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. The Senior Environmental Specialist of PMU also carries out field visits to monitor the implementation of EHS practices and give his instruction to improve the EHS practices where required. The field-based Environmental Specialist of the PMU conducts field visits in the polders of the Package 01 areas to supervise and monitor the implementation of EHS practices by Contractors. (The audit recommends that field-level Environmental Specialist of PMU will prepare a monthly site and polder specific summary findings report for the visited sites, and share the report with the Project Director with a copy to Senior Environmental Specialist of PMU who will take necessary action for smooth implementation of EHS practices where required.

2.2.2.2. Package 02

Contractor for Package 02 also has been submitting the twice-monthly environmental inspection reports. As a part of the 5th Annual Audit, the reports of January through December 2020 were reviewed. It was found that the Contractor has been submitting reports using the monitoring checklist formats of the C-ESMP 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.

As is the case for Package 01, the Environmental Specialist of DDSC&PMSC also conducted field visit 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 deadlines 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 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.

Like Package 01, the Senior Environmental Specialist of PMU also carries out field visits in Package 02 areas to monitor the implementation of EHS practices and give his instruction to improve the EHS practices where required. Field based Environmental Specialist of the PMU also conducts field visit in different polders of the Package 02 areas to supervise and monitor the implementation of EHS practices by Contractors. (The audit recommends that field level Environmental Specialist of PMU will prepare a monthly site and polder specific summary findings report for the visited sites, and share the report with the Project Director with a copy to Senior Environmental Specialist of PMU who will take necessary action for smooth implementation of EHS practices where required for the Package 02 areas as well.

2.2.3. Compliance Performance

From the audit, it was found that compliance registers have 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 be improved 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 DDSC&PMSC though they do have email correspondence directing contractors to correct non-compliance on certain environmental matters. On the other hand, "Non-Compliance Registers" have been kept by the Contractors for every worksite.) 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, DDSC&PMSC and PMU. The remaining issues should be mitigated as soon as possible and reported to DDSC&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.

The audit team has reviewed the twice-monthly (so called bi-monthly Environmental Inspection report) Environmental Inspection Reports (which contain an Environmental Inspection Checklist) of Package 01 and Package 02 and has compiled the compliance status as elaborated in the following tables and Annexes 4.6 and 4.7. Table 3 comprises the elements and sub-elements considered by the contractor of Package 01 for the purpose of environmental inspections.

Table 4 that follows gives a comparison on compliances and non-compliances for the whole year and also the last quarter of 2020 for contractor of Package 01. The observations from Table 04 are:

- Based on the data garnered from the Twice-Monthly Environmental Inspection reports, Package 01 considered 32 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 2020, it was revealed that 22 elements were 100% compliant for the full year and also in the fourth quarter. Thus, compliance level is steady by this measure.

- 32 out of 34 different elements inspected were equally or more compliant in the fourth quarter of 2020 compared to the full year compliance level. Compliance is notably improving by this measure.
- A few problem areas remain in the case of 1-Construction and re-sectioning of embankment 2-Re-excavation Works, 4-Water and hydrology, and 5-Forklift Operation. The level of compliance for these 5 elements was as follows, which reveals unimproved compliance in the last quarter and over the year of the reporting year:

Area	1	2	3	4	5
Compliance Full Year 2020	67%	72%	67%	50%	88%
Compliance Q4 2020	67%	72%	67%	50%	88%

It is recommended that the Contractor of Package 01 improves the compliance level for above mentioned areas.

Moreover, it is revealed that the Contractor reported compliance level for temporary facilities decommissioning and hard rock revetment work as 100%. This level should not be reported as 100% and instead be considered “not applicable” for most of the cases. It is recommended that the DDCS&PMS Consultants give an orientation to the Contractor on how to fill the monitoring checklist and report them correctly.

Table 3: Elements Comprising the Compliance Inspection Checklist Considered in 2020– Package 01

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
	Infrastructure for adequate sanitation facilities
Fuel storage areas	Install hardstand and secondary containment
	Firefighting equipment installation
	Sand and shovel close-by
	Regular checks on physical condition
	The Material Safety Data Sheet (MSDS) from supplier of hazardous substances (diesel, oil, lubricant) will be collected and placed besides containers/storage.
	Spill kit/absorbent mat will be in place to catch any spilled fuels at the location where potential spillage may occur.
	Sufficient hydrants to address potential fire should be equipped at fuel storage area as well as the areas where chemicals/fuels are used.
	Maintain minimum distance during fueling and fueling
	Provide eye protective glass
Provide hand gloves	
Access road construction	Obtaining approval

Elements	Sub-Elements
	Construction of culverts if needed
Temporary Facilities Decommissioning	Revegetation implementation
	Close-out check
Construction and re-sectioning of embankments	Pavement (if present) will be removed and disposed of at the premises of BWDB
	Topsoil from areas of earth works will not be used for construction works. The topsoil (from surface to 15 cm depth) will be removed and preserved for later use of replacing after construction in rehabilitation.
	Disposal of excess soil will be done at site with no objection from DoE and local authority.
	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 topsoil (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
Re-excavation works	Spoil plan (volume to be dredged; disposal site to be used; quality of dredged material; applicability of dredged material) to be developed for approval by Engineer.
	Unnecessary resuspension will be avoided by selection of suitable dredging equipment.
	Temporarily deposition of dredged 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.
	Provide solid demarcation around the excavation
	Establish sufficient sign /signaling that can be visible at night
	Erect light reflective signboard
	Set and check the stability of excavator after certain interval during work
Conduct the toolbox talk before starting the work	
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.
	Provide noise control barrier around the plant area as possible
	Make a closed chamber for plant operator
	Periodic hearing check for the exposed workers
	Shifting duty for the noise exposed areas
	Spray water at certain intervals in the plant area
	Wet and clean the aggregate before using

Elements	Sub-Elements
	Cover/wet dusty parts or materials
	No operation without the screen or barrier provided with the machine
	Conduct toolbox talk regularly
Borrow Material	Agreeing on borrow area
	Perform soil analyses on borrow materials when contamination is expected
	Prevention of erosion/dust forming
	No-Tress pass line fixed with bamboo poles
	Check the physical condition of excavator regularly
	Conduct toolbox talk before starting the work
	Training on driving safety at regular interval
	Check the physical condition of truck regularly
Hard Rock Revetment	Alignment to be pre-determined
	CC Blocks/hard rocks to be stacked/stored at appropriate/designated place/distance
	Maintain and follow work safety protocols/measures
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
	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 weekdays
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

Elements	Sub-Elements
	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.
Wastewater	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.
	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
	Revegetate 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, revegetation and dust suppression etc.
	Ensure 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.
	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, SO _x , NO _x and CO during working hours
Monitoring of Noise Quality	Monitoring of noise level (dB) at selected sensitive sites during working hours

Elements	Sub-Elements
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.
Reporting and Documentation	The following records will be kept at site: <ul style="list-style-type: none"> - 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.
Electrical safety	Clearly visible notification on the safe use of electrical appliances
	Check all wirings to prevent any accident, fire due to short circuit
	Rise the wire system up or underground conduit system should be established
	Close all the switch board properly. Only responsible will check at regular intervals
	Cover the joint by tape or other insulating materials
Forklift Operation	Designate movement routes for forklifts
Safety at Barge	Occupational safety measures to be maintained
	Proper anchorage
	Balanced loading
	Workers to use PPE
	Maintain speed limit of forklift
	Regular toolbox talk
	Separate lane for pedestrian and forklift

Table 4: Summary Status of Compliance and Non-Compliance and comparison between whole year and Quarter 4 in 2020, Package-01

S.N	Inspected Sites	No. of Compliance in a Year	No. of Non-Compliance in a Year	%of Compliance in a year	%of Non-Compliance in a year	Number of Compliance in Q4	Number of Non-Compliance in Q4	%of Compliance in Q4	%of Non-Compliance in Q4
1	Construction Camps	348	0	100.0	0.0	84	0	100.0	0.0
2	Fuel storage areas	480	0	100.0	0.0	120	0	100.0	0.0
3	Access road construction	96	0	100.0	0.0	24	0	100.0	0.0
4	Temporary Facilities Decommissioning	0	48	0.0	100.0	6	12	33.3	66.7
5	Construction and re-sectioning of embankments	192	96	66.7	33.3	48	24	66.7	33.3
6	The bank and slope protection works	96	0	100.0	0.0	24	0	100.0	0.0
7	Re-excavation works	288	114	71.6	28.4	84	30	73.7	26.3
8	Manufacture of pre-cast CC blocks	299	0	100.0	0.0	78	0	100.0	0.0
9	Borrow Material	312	0	100.0	0.0	78	0	100.0	0.0
10	Hard Rock Revetment	0	48	0.0	100.0	0	12	0.0	100.0
11	Occupational Health and Safety	408	0	100.0	0.0	102	0	100.0	0.0
12	Public Health and Safety	282	0	100.0	0.0	72	0	100.0	0.0
13	Water Supply	138	48	74.2	25.8	36	12	75.0	25.0
14	Sanitation	240	0	100.0	0.0	60	0	100.0	0.0
15	Solid Waste Management	142	0	100.0	0.0	36	0	100.0	0.0
16	Wastewater	168	72	70.0	30.0	42	18	70.0	30.0
17	Air	144	0	100.0	0.0	36	0	100.0	0.0
18	Noise	192	0	100.0	0.0	48	0	100.0	0.0
19	Water and Hydrology	48	24	66.7	33.3	12	6	66.7	33.3
20	Flora and Fauna	24	96	20.0	80.0	6	24	20.0	80.0
21	Monitoring of Air Quality	24	0	100.0	0.0	6	0	100.0	0.0
22	Monitoring of Noise Quality	48	0	100.0	0.0	12	0	100.0	0.0
23	Monitoring of Soil Quality	48	0	100.0	0.0	12	0	100.0	0.0
24	Monitoring of Surface Water Quality	48	0	100.0	0.0	12	0	100.0	0.0
25	Monitoring of Drinking Water Quality	48	0	100.0	0.0	12	0	100.0	0.0
26	Deployment of Environment and Safety Supervisor	48	0	100.0	0.0	12	0	100.0	0.0
27	Complaints and Environmental Incidents	192	0	100.0	0.0	48	0	100.0	0.0
28	Reporting and Documentation	48	0	100.0	0.0	12	0	100.0	0.0
29	Training	48	0	100.0	0.0	12	0	100.0	0.0
30	Electrical safety	216	0	100.0	0.0	54	0	100.0	0.0
31	Forklift Operation	24	24	50.0	50.0	6	6	50.0	50.0
32	Safety at Barge	168	24	87.5	12.5	42	6	87.5	12.5

Table 5 comprises the elements and sub-elements considered by the contractor of Package 02 for the purpose of environmental inspections. Table 6 gives a comparison on compliances and non-compliances for the whole year and also the last quarter of 2020 for contractor of Package 02. The observations from Table 05 are:

- Based on the data garnered from the Twice-Monthly Environmental Inspection reports, Package, the audit team considered 17 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 2020, it was revealed that 5 elements were 100% compliant for the full year and also in the fourth quarter. Thus, compliance level is steady by this measure.
- 9 out of 17 different elements inspected were equally or more compliant in the fourth quarter of 2020 compared to the full year compliance level. Compliance is notably improving by this measure.
- A few problem areas (compliance level decreases a bit) remain in the case of 1-construction of base camp, 2-fuel storage areas, 3-access road to the base camp, 4-Occupational health and safety, 5-Sanitation, 6-Solid waste management and 7-Air. The level of compliance for these seven elements in the full year versus only for the fourth quarter of 2020 is show here:

Area	1	2	3	4	5	6	7
Compliance Full Year 2020	96.6%	96.3%	67%	95.7%	96.3%	76.6%	96.3%
Compliance Q4 2020	96.4%	96.1%	64%	95.6%	96.1%	75.8%	96.1%

Table 5: Elements Comprising the Compliance Inspection Checklist Considered in 2020 – Package 02

Elements	Sub-elements
Construction of Base camp	Obtaining approval for facilities construction work
	Erection of signboard in Bangla and English with project details
	Install accommodation facilities Engineers and other staff/workers
	Drainage channels installation
	Supply of safe drinking water
	Supply of adequate sanitation facilities
	Safety fencing/Barriers and Entry Kiosks
	Stack yard for plant and equipment
	Construction of storeroom/warehouse
	Temporary workshop facilities
	Arrangement of sufficient lighting facilities in the camp area
Fuel storage areas	Install hardstand and secondary containment
	Firefighting equipment installation
	Sand and shovel close-by
	Regular checks on physical condition
	Approval fuel storage
Access road to the base camp	Obtaining approval
	Construction of culverts if needed

Elements	Sub-elements
	Construction of temporary road
Training	Environmental training on EMP will be arranged for Construction Field supervisors and Environment & Safety Supervisors
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
	Provision and use of life jacket during visiting campsite/worksites 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 diversion signboard with warning for 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 weekdays
Water Supply	Providing construction camps with potable water either through installing tube wells (hand pump, shallow and deep tubewell), Pond Sand Filter (PSF) 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
	Maintaining the distance of a tube well / surface water resource from a soak pit at minimum 15m
	Maintaining the drainage from the tube well diverting into the drainage system of the camp area
	Providing separate tube wells for the use of women
	Providing suitable sanitation facilities for the workforce
Sanitation	Ensuring the location plan of the latrine at least 50 meters away from the accommodation facility
	Providing separate latrines for the use of women
	Installing treatment facilities (ie septic tank, soak pits etc) for sewerage of toilet and camp site wastes

Elements	Sub-elements
	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
Wastewater	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
	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
	Ensure proper drainage of working areas eg 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 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
Reporting and Documentation	The following records will be kept at site:

Elements	Sub-elements
	Environmental Monitoring Results
	Contractors self-assessment record/results
	Register of non-compliance
	Register of corrective actions
	Monthly Environmental Reports

Table 6: Summary Status of Compliance and Non-Compliance and comparison between whole year and Quarter 4 in 2020, Package-02

SI	Inspected Sites	No. of Compliance in a Year	No. of Non-compliance in a Year	%of Compliance in a year	%of Non-compliance in a year	Number of Compliance in Q4	Number of Non-compliance in Q4	%of Compliance in Q4	%of Non-compliance in Q4
1	Construction of Base camp	1360	48	96.6	3.4	329	12	96.48	3.52
2	Fuel storage areas	616	24	96.3	3.8	149	6	96.13	3.87
3	Access road to the base camp	256	128	66.7	33.3	56	31	64.37	35.63
4	Training	127	0	100.0	0.0	30	0	100.00	0.00
5	Occupational Health and safety	1080	48	95.7	4.3	261	12	95.60	4.40
6	Public Health and Safety	712	56	92.7	7.3	173	13	93.01	6.99
7	Water Supply	560	80	87.5	12.5	136	19	87.74	12.26
8	Sanitation	616	24	96.3	3.8	149	6	96.13	3.87
9	Solid Waste Management	392	120	76.6	23.4	94	30	75.81	24.19
10	Wastewater	384	256	60.0	40.0	93	62	60.00	40.00
11	Air	616	24	96.3	3.8	149	6	96.13	3.87
12	Noise	512	0	100.0	0.0	124	0	100.00	0.00
13	Water and Hydrology	256	0	100.0	0.0	62	0	100.00	0.00
14	Monitoring of Drinking Water Quality	128	0	100.0	0.0	31	0	100.00	0.00
15	Deployment of Environment and Safety Supervisor	128	0	100.0	0.0	31	0	100.00	0.00
16	Complaints and Environmental Incidents	384	128	75.0	25.0	93	31	75.00	25.00
17	Reporting and Documentation	128	8	94.1	5.9	31	1	96.88	3.13

2.2.4. Grievance Redress Mechanism

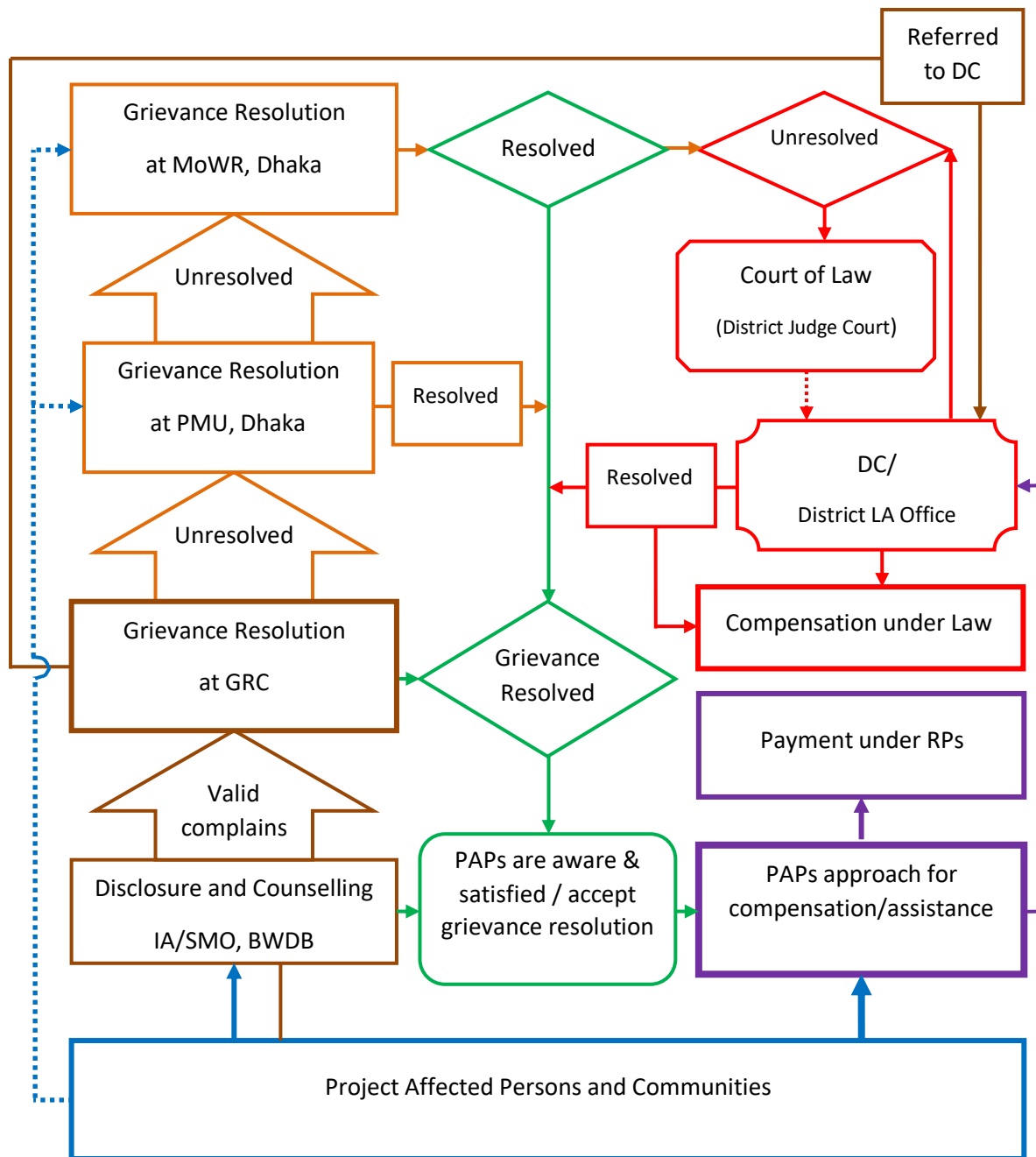
Several social and environmental issues may arise during implementation stages of the Project. Following are some of the environmental issues that could be subjected to grievances from the affected people, concerned public, construction workers and civil society members:

- 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 including crop damage;
- 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. CEIP-1 has designed the GRM and the PMU, with the 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, it is designed to use 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 the following figure.



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. In past years, the project information brochure including information on the GRM has been 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 171 complaints/grievances have been received up to December 2020 by GRC in Package-01. Table 7 shows the types of complaints received during the January-December, 2020 period in Package 01.

Table 7: Type of complaints received in Package 01 during January-December, 2020 period

SL	Nature of Grievances	Polder Number				Total
		P-32	P-33	P-35/1	P-35/3	
1	Application for shifting the Proposed Alignment	-	3	1	3	7
2	Application for Crops Compensation	-	1	-	-	1
3	Application for Fish Gher Compensation	1	1	-	41	43
4	Application for Land Compensation	-	1	-	-	1
5	Application for replacement of EP ID Name	5	1	3	-	9
6	Application for the land acquisition	-	-	-	2	2
7	Application for Re-Compensation for dissatisfaction	20	3	-	1	24
8	Request for Proper Solution for damaging the land for soil collection by the contractor	1	1	-	-	2
9	Application for compensation for dismantling the brick soling road	-	-	-	1	1
10	Application for Structure Compensation	31	5	22	23	81
11	Application for Trees Compensation	-	1	2	1	4
12	Application for structure compensation on own land	-	-	2	-	2
Grand Total		58	17	30	72	177

Source: MPR of Social Safeguards Management, December 2020, DDCS&PMS Consultant

Among the complaints, 42 cases have been resolved at the entry level and 135 cases have been resolved through investigation and formal hearing by GRC. Table-8 shows the status of complaints/cases received and resolved so far by GRC.

Table 8: Summary of Disposition of Grievances in Package 01

Sl. No.	District	Polder no	Total Complaints/cases	Resolved by field level investigation	Resolved by GRC	Pending with GRC
1	Khulna	32	58	19	39	00
2	Khulna	33	17	8	9	00
3	Bagerhat	35/1	30	8	22	00
4	Bagerhat	35/3	72	7	65	00
Total			177	42	135	00

Source : MPR, December 2020, DDCS&PMS Consultant

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 9: 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 Poursosova, 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 Poursosova, 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

Sl. No.	Polder Name	Number of Committees	Location	Date of Formation
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

There are 21 Grievance Redress Committees (GRC) at local level for Package-02 since this Package covers 21 unions. Grievance Redress Committees (GRC) have been formed earlier at each Union of all Polders under Package-2 with the representatives of BWDB, Union Parishad, educational institute, PAPs and DDCSPMS Consultants. Efforts have been made to reach resolution of all cases within a four-week time from the date of receiving the complaint and trying to resolve locally.

A total number of 51 complaints/grievances have been received up to December 2020 by GRC in Package 02. Table 10 shows the types of complaints received during the January-December, 2020 period in Package 02.

Table 10: Type of complaints received in Package 02 during January-December, 2020 period

SL	Nature of Grievances	Polder Number			Total
		P-40/2	P-41/1	P-43/2C	
1	Application for Re-Compensation for dissatisfaction	10	16	17	43
2	Application for Structure Compensation	8	-		8
Grand Total		18	16	17	51

Source : MPR, December 2020, DDCS&PMS Consultant

Among the complaints, 43 cases have been resolved at the entry level. The remaining 8 cases have been pending. Table-11 shows the status of complaints/cases received and resolved so far by GRC.

Table 11: Summary of Disposition of Grievances in Package 02

Sl. No.	District	Polder no	Total Complaints/ cases	Resolved by field level investigation	Resolved by GRC	Pending with GRC
1	Pirojpur	39/2C	0	0	0	0
2	Barguna	40/2	18	10	0	8
3	Barguna	41/1	16	16	0	0
4	Patuakhali	43/2C	17	17	0	0
5	Patuakhali	47/2	0	0	0	0
6	Patuakhali	48	0	0	0	0
Total			51	43	0	8

Source: MPR, December, 2020, DDCS&PMS Consultants

In Package 02 areas, the GRM covers both social and environmental concerns, no formal grievance has been also 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.

2.2.5. Monitoring Testing results

Samples for tests for air quality, surface and drinking water, and soil were collected from both the Package 01 and Package 02 areas and the reports were under preparation stage at lab during the audit reporting period. Noise level measurements were, however, undertaken. Complete reports of the testing are expected to be submitted by the both contractors soon and it is recommended that analysis of the testing results will be incorporated with the Bi-Annual Environmental Monitoring Report (covering period of January-June 2021)

2.2.6. Contractor's Emergency Response Plan

2.2.6.1 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 area, 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, 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.

The emergency response plan is also a living document; it has been used by the Contractor of Package 01 continuously. The emergency response plan covers both natural and man-made disasters, and accidents and injuries. As injuries/accidents have been experienced by the Contractor continuously (mostly minor accidents), the emergency response plan has been utilized continuously. Examples of this are the actions being taken for accident/injury victims including the reporting, or awareness raising by the Contractor among its staff members/workers regarding the preparedness measures for any anticipated disaster such as the Amphan cyclone which took place in Bangladesh..

However, an Emergency Preparedness Plan considering the COVID19 management has been prepared by the contractor based on the GoB/WHO/WB guidelines, that was submitted to WB and cleared by the WB. Currently, the plan is being translated in Bengali and Chinese languages by the contractor. Contractor of Package 01 is recommended to include this plan with the EAPs.

2.2.6.2. Package 02

The Contractor 02 has also prepared its emergency plan and from the audit it is found to be a comprehensive and good document that would allow the contractor to face a wide variety of emergency situations.

The emergency response plan has been also used by the Contractor of Package 02 continuously. The emergency response plan of Contractor of Package 02 covers both natural and man-made disasters, and accidents and injuries. As injuries/accidents have been experienced by the Contractor continuously (mostly minor accidents), the emergency response plan has been utilized continuously similarly to what has been described above with respect to Package 01.

However, an Emergency Preparedness Plan considering the COVID19 management has been also prepared by the contractor of Package 02 based on the GoB/WHO/WB guidelines, that was submitted to WB and CEIP-1 is waiting for the clearance from WB. Contractor of Package 02 is recommended to include this plan with the C-SMPs.

2.2.7. Correspondence on EHS issues

In CEIP-1, the correspondences for improving the EHS practices and complying the non-compliance issues have been maintained based on the findings or gaps revealed by the PMU and DDCS&PMS Consultants to keep the environmental safeguards issues on track. The fifth audit found that from PMU, the Project Director with the advice of Sr. Environmental Specialist and Field level Environmental Specialist of the PMU makes necessary with the DDCS&PMS Consultants for environmental safeguards

issues as and when required.

The DDCS&PMS Consultants also make necessary correspondences/ send letter to the contractors of both Package 01 and Package 02 of CEIP-1 and vice-versa on environmental issues to improve the EHS practice levels and comply the non-compliance issues (Annex- 4.4).

2.2.8. Decommissioning to be carried out by Contractor of Package 01

The works of the Package 01 are planned to be completed by June 2021. It is anticipated that there may be negative environmental and social consequences of decommissioning activities if a proper plan is not in place and proper mitigation measures are not taken by the contractor. It is recommended that Contractor of the Package 01 prepares a site-specific (e.g. identification and listing of all facilities to be decommissioned, time line for them, listing down all the mitigation measures to be taken) decommissioning plan, submits to DDCS&PMS Consultants, PMU and M&E Consultants, and implement this after getting approval from PMU. The implementation of the decommissioning plan is also recommended to be monitored by the PMU and DDCS&PMS Consultants.

2.3. Environmental staff resources

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

Table 12: Environmental, Health and Safety Personnel

Sl.	Name	Designation	Place of posting	Mobile No.	E-mail Address
01	Syed Hasan Imam	Project Director	Dhaka	0 1720-015064	pdpmuceip@gmail.com
02	Jean Henry (Harrie) Laboyrie	Team Leader, CEIP-1	Dhaka	01935146720	harrie.laboyrie@rhdhv.com
03	Md. Habibur Rahman	Deputy Team Leader, CEIP-1	Dhaka	01755627386	habibceip@yahoo.com
04	Jan T. Twarowski	Team Leader, Third Party M&E Consultants	Dhaka	01745573470	tl.me.ceip1.sheladia@gmail.com
05	Md. Asraful Alam	Executive Engineer, CEIP-1, BWDB, Khulna	Khulna	01318235115	xen.ceip1.khulna@gmail.com
06	Mr. Mahidur Rahman	Deputy Team Leader, Third Party M&E Consultant	Dhaka	01711173629	dtl.me.ceip1@gmail.com
07	Dr. Abu H. Murshid	International Environ. Specialist, Third Party M&E Consultant	Dhaka	01785073802	amurshid@aol.com

Sl.	Name	Designation	Place of posting	Mobile No.	E-mail Address
08	A.K.M. Rezaul Haque Khan	Environmental Specialist, Third Party M&E Consultant	Dhaka	01712142502	env.me.ceip1.sheladia@gmail.com
09	Md. Amir Faisal	PMU Sr. Environmental Specialist	Dhaka	01715-315227	faisal.mdamir@gmail.com
10	Dr. Md. Towhidul Islam	PMU Field level Environmental Specialist	Khulna	01911493918	towhidenvs@gmail.com
11	Mr. M.A. Saleque	PMU Senior Revenue Officer	Dhaka	01785214443	masaleque@gmail.com
12	Vacant since June 2020	Senior Social Specialist, PMU	Dhaka		
13	Mr. Akbar Hossain	Senior Forestry Specialist, PMU	Dhaka	01711543475	ahossain56.bd@gmail.com
14	Kamal Najmus Salehin,	Communication Officer, PMU	Dhaka	01716408919	s.kamal17@gmail.com
15	Zahiruddin Md. Babar	Social Specialist/ Economist, PMU	Khulna	01711005885	zahir_babar@yahoo.com
16	GM. Akram Hossain	Resident Engineer-1	Patuakhali	01713040037	gmakram68@gmail.com
17	A.K.M. Sayeed Uddin	Deputy Resident Engineer-1, CEIP-1	Khulna	01919432163	akmsayeed1951@gmail.com
18	Mohammad Ali	Deputy Resident Engineer-2, CEIP-1	Patuakhali	01711320432	ceip1patuakhali@gmail.com
19	Abu Bakr Siddique	Environment Specialist, CEIP-1	Dhaka	01795095607	abs_1949@yahoo.com
20	Md. Delwar Hossain	Quality Control Specialist	Khulna	01712614024	delwarhossain03@yahoo.com
21	Md. Saiful Islam	Construction Supervision Engineer-1	Khulna	01727332986	saifulkhulna@gmail.com
22	Shyamal Kumar Datta	Construction Supervision Engineer-2	Khulna	01711233580	skduta91@yahoo.com
23	Md. Harunur Rashid	Quality Control Specialist	Patuakhali	01720043618	enrharun7@gmail.com
24	A.K.M. Mazibur Rahman	Construction Supervision Engineer	Patuakhali	01712540050	akmmr1955@gmail.com
25	Sadequl Islam	Construction Supervision Engineer	Patuakhali	01822213320	Sadequl477@gmail.com
26	Md. Ghiasuddin Ahmed	Construction Supervision Engineer	Patuakhali	01711171011	ghiasbd@gmail.com

Sl.	Name	Designation	Place of posting	Mobile No.	E-mail Address
27	Mr. Sun Huaxin	Project Manager (Contractor), CHWE	Khulna	01991996805	chwe_ceip1_bd@hotmail.com
28	Mr. Monirujjaman	Fisheries Specialist CHWE, Package-1	Khulna	01711017359	kumonir1995@gmail.com
29	Mr. Ren Gaofei	Environment, Health and Safety in-charge, CHWE, Package-1	Khulna	01761931689	18738153286@163.com
30	Mr. Babu	Local EHS Officer, Khulna, Package-1	Khulna	01716717871	prodip.babu80@yahoo.com
31	Mr. Song Kunpeng	Chinese EHS Engineer	Polder 32	01646810982	441656743@qq.com
32	Mr. Aporup Roy	Local EHS officer	Polder 32	01751630797	Aporoy09@gmail.com
33	Mr. Ji Yuhang	Chinese EHS Engineer	Polder-33	01311852735	1065819979@qq.com
34	Mr. Khalil	Local EHS Officer	Polder-33	01795999151	khalilmia720@gmail.com
35	Mr. Gao Xing	Chinese EHS Engineer	Polder-35/1	01646737474	1065708430@qq.com
36	Mr. Sohel Rana	Local EHS Officer	Polder-35/1	01792094033	md.masudr921@gmail.com
37	Mr. Wang Zhiqiang	Chinese EHS Engineer	Polder-35/3	01752126828	popt1989@hotmail.com
38	Mr. Hasan	Local EHS Officer	Polder-35/3	01703949848	hm933715@gmail.com
39	Mr. Li Guofang	Acting Project Manager, (Contractor), CICO, Package-2	Dhaka	01927409142	lclv2005@163.com
40	Wang Jian	Chinese EHS Manager	39/2C	01887707650	281196254@qq.com
41	Chen Guangyong	Chinese EHS Manager	40/2	01788933654	981444742@qq.com
42	Luo Tao	Chinese EHS Manager	41/1	01645649518	1498290447@qq.com
43	Guo Linyang	Chinese EHS Manager	43/2C	01648201676	471277572@qq.com
44	Yong Zhen	Chinese EHS Manager	47/2 & 48	01741510253	1196150381@qq.com
45	Ma Dianyong	EHS In-charge of CICO	Patuakhali	01712707924	1291430960@qq.com

2.4. Necessary equipment and arrangements for environmental monitoring and testing

As mentioned in section 2.2.5 that Samples for tests for air quality, surface and drinking water, and soil were collected from both the Package 01 and Package 02 areas and the reports were under preparation

stage at lab of Consultancy for Research and Testing Services (CRTS) of Department of Civil Engineering of Khulna University of Engineering & Technology (KUET). During the audit reporting period, noise level measurements were, however, undertaken. Complete reports of the testing are expected to be submitted by the both contractors soon and it is recommended that analysis of the testing results will be incorporated in the Bi-Annual Environmental Monitoring Report (covering January-June 2021).

2.5. Staff awareness and training

The Package 01 Contractor has conducted a program of monthly environmental training during the January-December 2020 period. More than 1,700 participants (staff and workers) were trained, allowing for multiple-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 13: Number of Package 01 Participants (Staff and Workers) Receiving Environmental Training During 2020

Polder No/ Place	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sep	Oct	Nov	Dec	Total in 2020
32	-	-	-	113	98	116	83	93	102	101	100	78	884
33	-	-	-	-	-	-	-	-	-	-	-	-	-
35/1				93	100	93	115	84	102	109	65	62	823
35/3	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	206	198	209	198	177	204	210	165	140	1,707

Source: Report of Contractor of Package 01

Interviewing the Contractor 01 EHS staff revealed that, considering less works in the field due to the COVID19, less participants compared to previous year have been covered during the reporting year.

The Package 02 Contractor has also conducted a program of monthly environmental training during the January-December 2020 period. More than 1,700 participants (staff and workers) were trained, allowing for multiple-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 14: Number of Package 02 Participants (Staff and Workers) Receiving Environmental Training During 2020

Polder No/ Place	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sep	Oct	Nov	Dec	Total in 2020
39/2C	100	80	60	30	20	15	10	8	8	8	25	30	394
40/2	30	30	50	35	20	20	15	10	10	10	20	50	300
41/1	40	50	55	40	8	5	5	5	5	5	25	33	276
43/2C	40	50	50	55	20	15	15	7	7	7	25	40	331

47/2	20	35	35	0	0	0	0	0	0	0	0	27	117
48	40	40	40	45	25	15	14	10	10	10	24	40	313
Total	270	285	290	205	93	70	59	40	40	40	119	220	1,731

Source: Report of Contractor of Package 02

Considering less works in the field due to the COVID19, less participants compared to previous year have been covered by the Contractor 02 during the reporting year.

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

- Environmental Management in the CEIP-1
- Environmental Health and Safety
- COVID19 management
- Environmental Monitoring
- Reporting

The Environmental Specialists of PMU, DDCS&PMSC and Third Party M&E team also provided on-the-job training during their combined/joint visits to work sites.

In all the training sessions, the following issues were discussed:

- The workers should use all required PPE like helmet, musk, hand gloves, safety boot, glass, visible jacket, life jacket (during crossing river) etc. The Contractor has to supply the PPE and workers have to use them for their safety.
- Regular hand washing, sanitizing, social distancing.
- Conduct of regular tool box talk with the workers for enhancement of workers' awareness on EHS safety.
- Provision of safe water and supply of required medicine to be made by the Contractor for the use by the workers during work.
- Monitoring and recording of noise levels of high noise areas and provision of noise barriers and required locations.
- Introduction of rotational works for the workers of high of high noise area (especially in the CC block manufacturing yards) to limit the effect of high noise.
- Construction and maintenance of suitable secondary container (with minimum 110% capacity) for storage of hazardous fuel and chemical materials.
- Establishment of impervious/concrete pavement with collection sump/ditch at the refueling areas with spill kit/absorbent mat.
- Establishment of temporary industrial waste storage with impervious/concrete pavement at required work sites, especially at the CC block manufacturing plants.
- Take all required arrangement for traffic management including deployment of guard;

maintaining separate facility for movement of fork lifters.

- Provision of signboards/signage at required location for provision of information and maintaining safety for workers, local population and avoiding of potential accident.

As part of the audit, the evidence from both contractors was examined with respect to training (e.g. training records/attendance sheets, photos).

2.6. Fish Conservation Initiative by Contractors

As per the contractual obligation of the Contractors of Package 01 and Package 02, they need to take measures for the conservation and stocking of threatened fish species in polder areas. Considering the work progress and completion period of activities of Package 01, Contractor of Package 01 has made significant progress on fish conservation measures and they have a robust plan to achieve before completion of all other activities of their Package. Contractor of Package 02 has also plan to carry out such works once their activities will be in a stage to initiate required measures.

2.6.1. Fish Conservation Initiative by Contractor of Package 01

The activities considering conservation of threatened fish species carried out by the Contractor of Package 01 are as follows:

- For awareness on conservation of threatened fishes of polders, developed leaflets, signboard, festoons and other display materials. Delivered leaflets to local community peoples during training and other meetings and erected the signboard (with awareness raising messages).
- As part of individual pond/ water body survey, conducted several field visits in polders 32 ,33, 35/1, & 35/3 for assessing the pond condition as well as canal/khal status.
- To know the status of threatened fishes, conducted 08 field base FGDs with WMG /WMA members for identifying the existing status of threatened fishes and its conservation mechanism's.
- Conducted individual/group meetings with WMG/WMA leaders to aware the WMG/WMA members & leaders on threatened fishes and their conservation suggestions. Identified the major threatened fishes from local resources.
- Met with local Government Union Parishad Chairman & Members about their opinion and for their support at local level.
- Conducted meeting with DAE (Department of Agriculture Extension) & DoF (Department of

Fisheries) officials for way forward on threatened fishes and their conservation.

Moreover, Contractor of Package 01 has implemented a training program for fish conservation for WMG leaders and WMG members which is as follows:

Table 15: Conducted training program on conservation of threatened fishes with WMA leaders & WMG members

Polder no	Date of training	Participants numbers	Venue	Remarks
32 & 33	22December 2020	24	Upazila Hall Room, Dacope, Khulna	WMG /WMA leaders
35/1	24 December2020	30	RKDS Pilot Junior Girls School.Sarankhola	WMG /WMA leaders
32	06 October 2020	35	Kalinagar Govt. Pri. School. Kamarkhola	WMG /WMA leaders, villagers
35/1	07 October2020	60+	Rajapur Bazar site	WMG /WMA leaders, villagers

The following plan is going to be implemented by the Contractor of Package 01:

Table 16: Fish Fry Stocking Plan for Polders sites

Sl. No	Polder Nos	Quantity of Fish Fry	Fish Species	Stocking Places	Probable Date
1	32	5000	Shing, Koi, Kalibashu.	Release the fish fry into polder area canal/khal through consult with WMA/WMG representatives	8 February 2021
2	33	5000	Shing, Koi, Kalibashu.	Release the fish fry into polder area canal/khal through consult with WMA/WMG representatives	8 February 2021
2	35/1	5000	Shing, Koi, Kalibashu.	Release the fish fry into polder area canal/khal through consult with WMA/WMG representatives	09 February 2021
3	35/3	5000	Shing, Koi, Kalibashu.	Release the fish fry into polder area canal/khal through consult with WMA/WMG representatives	10 February2021

The Contractor has also identified the species to stock at polder level as follows:

Table 17: Identified Fish Species

SI	Fish Detail	Sizes (Approximate)
1	(Shing Fish) Catfish Scientific name: <i>Heteropneustes fossilis</i>	2 inches

2	(Koi Fish) Climbing Fish Scientific name: <i>Anabas testudineus</i>	2 inches
3	(Kalibaus) Orange Fin Labeo Scientific name: <i>Labeo calbasu</i>	1.5 inches

2.6.2. Fish Conservation Initiative by Contractor of Package 02

Contractor of Package 02 has also plan to carry out such works like Package 01 once their activities will be in a stage to initiate required measures. However, it is recommended to initiate the fish conservation activities for Package 02.

2.7. EMP Implementation Budget

As part of the implementation of EMP approximately BDT 6 crore (about \$750,000) is earmarked for each Package-01 and Package-02, though many more items for environmental monitoring and mitigation are included in Package-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, the total expenditure for EMP cost so far paid is Tk. 55,791,359 out of a maximum budget of Tk. 60,200,000 and 92.70% of total budget has been paid. This included cost of works consists of emergency breach closing, minor earthworks, compaction and positioning of geo-bags (175 kg) and other items of EMP components in various stages of utilization. For Package 02, the total paid cost for EMP implementation so far is Tk. 2,115,728 out of a maximum budget of Tk. 64,364,491 and 3.30% of total budget has been paid

2.8. Actual implementation/ practice level

2.8.1. Review of achievement status of Action Items from the Aide Memoires, status of compliance of the recommendations of Third Annual Environmental Audit of Third Party M&E Consultants and Bi-Annual Environmental Monitoring Report

The following tables represent the achievement status of specific action items raised in Aide Memories of World Bank missions, fourth and third Annual Environmental Audits, and ninth Bi-Annual Environmental Monitoring Report during the audit period:

Table 18: Status of implementation of action items of WB Aide Memoire (16-20 August, 2020)

SL	Actions	Agreed timeline as per August 16 to 20, 2020 Implementation Support Review Mission	Remarks
1	Prepare Emergency Preparedness Plan (EPP) by taking the suggested COVID-19 measures	October 31, 2020	Both the Contracts prepared the plans and those Plans have been cleared by WB.
2	Submission of 9 th Bi-annual report	October 31, 2020	Was prepared and submitted to WB.
3	EIA for Polder 15, 16, 17/1, 17/2, 24 and 34/3 under W-03 to be finalized in accordance to the comments provided for Polder 14/1	November 30, 2020	In finalization stage and PMU will submit all the reports to WB by February 2021.
4	Conduct Environmental sampling/testing in Packages-1 & 2 for the year of 2020	Continuous	Samples collected, tests are done and reports are being prepared in lab.
5	4th Annual Environmental Audit Report (Revised version) for the year of 2019 to be finalized	October 15, 2020	Finalized and submitted to WB for their record.
6	Prepare action plan for the 4th Annual Environmental Audit Report	October 31, 2020	Prepared and was annexed with final 4 th Annual Environmental Audit report.
7	Revise the "Grievance Collection Box" report and ensure the number of boxes are increased relocated in less visible places as suggested.	October 31, 2020.	The numbers has been increased and need to continue.
8	PMU should implement the GRM and record the grievances and share the status in the MPR.	Monthly	To be added with MPRs and continue
9	Contractor of package 2 to complete construction of the pedestrian at the camp site for polder 41/1	September 30, 2020	Done.

SL	Actions	Agreed timeline as per August 16 to 20, 2020 Implementation Support Review Mission	Remarks
10	Implementation of IPM/IPSNM practices at farmer's field.	September 30, 2020	Those are being implemented and the audit observed some demonstration plots on these practices.
11	Conduct the monthly EHS committee meetings and share the minutes with the Bank team	Monthly	This is going to be started from February and will need to continue monthly.
12	Implement the recommendation of the COVID Emergency plan and the follow the guidance and clauses for contractors	October 31, 2020	Being continued.

Table 19: Status of implementation of action items of Fourth Annual Environmental Audit (Covering Jan-Dec 2020)

SI	ACTION TO BE TAKEN	PARTY RESPONSIBLE	TARGET DATE	REMARKS
1	Contractors of both Packages should follow the findings and recommendations of this audit.	Contractors of Package 01 and Package 02	Continuous process as and when applicable	Being followed.
2	The DDCS&PMS Consultants and PMU should consider the recommendations for the upcoming next phase of the project where applicable.	DDCS&PMS Consultants and PMU	To adopt as and when required	To be adopted during next phase.
3	The audit report should be shared with the Contractors, Consultants, relevant sub-Consultants, NGOs and PMU staff and the responsible parties should address the findings.	Third Party M&E Consultants with PMU, PMU with relevant consultants, sub-consultants, NGOs and contractors who should address the findings	15 February 2021	Need to share.
4	Both the Contractors recommended to revise the EAPs and C-ESMPs considering the frequencies for environmental monitoring testing suggested in EMPs in their next revision.	Contractors of Package 01 and Package 02	28 February 2021	Under revision.

SI	ACTION TO BE TAKEN	PARTY RESPONSIBLE	TARGET DATE	REMARKS
5	The Contractors of both Package 01 and Package 02 must address the risks of air quality (e.g. emissions from plants, vehicle), and the environmental and health risk for poor drinking water and sanitation facilities with EHS Risk Assessment reports.	Contractors of Package 01 and Package 02	31 January 2021	Need to address.
6	Considering the smaller number of EMP implementation budget items with the contract of Package 01, it is recommended that DDCS&PMSC monitor the implementation of mitigation measures for each impact area to ensure they are properly addressed. The M&E Consultants and PMU to continue to spot-check.	DDCS&PMSC, ME& Consultants and PMU	To be continued up to closure of Package 01 works	Continued.
7	PMU with the assistance of DDCS&PMS Consultants and M&E Consultants to incorporate an assessment of the environmental impacts of the completed works of Package 01 in the next Bi-Annual Environmental Monitoring Report.	PMU with assistance of DDCS&PMS Consultant M&E Consultants	15 February 2021	To be included with the Bi-Annual Environmental Monitoring report.
8	PMU with the assistance of DDCS&PMS Consultants and M&E Consultants to conduct a supervision for ongoing works to evaluate whether it is following environmental good practice and health and safety measures are in place. In case of any gap identified, the contractor needs to prepare a retrofit action plan and continue with monitoring.	PMU with DDCS&PMS Consultants, M&E Consultants and Contractors	Continuous	Continued.
9	DDCS&PMS Consultants need to include how EMP compliance will be monitored and achieved with their Quality Assurance Plan.	DDCS&PMS Consultants	28 February 2021	Need to include with the Quality Assurance Plan of DDCS&PMS Consultants.

SI	ACTION TO BE TAKEN	PARTY RESPONSIBLE	TARGET DATE	REMARKS
10	As the compliance level for the Decommissioning of Temporary Facilities and Hard Rock Pavement is extremely poor, the Package 01 Contractor needs to ensure necessary efforts to improve the compliance level.	Contractor of Package 01	15 February 2021	The improvement to be continued
11	To improve the unhygienic conditions of the toilets of Contracts of Package 01 and Package 02, they need to ensure soak pit/ septic tanks with all constructed toilets, regular cleanliness and maintenance of the toilets, water seal with all toilets, supply of sufficient water and soap inside the toilets. Moreover, sensitizing the workers regularly on hygienic practices should be also carried out.	Contractor of package 01 and package 02	15 February 2021	Improved and need to continue. The audit found all the visited toilets with water seal except one toilet in polder 39/2C.
12	PMU is requested to share the ESIRT toolkit with WB for their review and both the Contractors need to follow the Environmental Social Response Tool (ESRIT) kit as it is not being followed.	PMU to Share with WB and Contractors of Package 01 and Package 02 to follow	31 January 2021	Update on this has been shares with WB and the toolkit to be followed continuously.
13	The practice of using PPE should be enhanced.	Contractors of Package 01 and Package 02	Continuous	Continued (audit notes few lapses in some sites).
14	Both the Package 01 and Package 02 Contractors of CEIP-1 need to arrange exchange visit for learning and scale up of practices for improvement environmental compliance in their packages in the current year.	Contractors of Package 01 and Package 02	31 March 2021	Need to carry out.
15	Both the Contractors need to carry out environmental monitoring testing as per the schedule every year.	Contractors of Package 01 and Package 02	15 February 2021	Tests done; Reports are under preparation stage.
16	Both Contractors to follow proper record keeping of EHS practices	Contractors of Package 01 and Package 02	20 February 2021	Records are being kept.

SI	ACTION TO BE TAKEN	PARTY RESPONSIBLE	TARGET DATE	REMARKS
17	Both the Contractors should carry out the efforts to improve the EHS practices.	Contractors of Package 01 and Package 02	Continuous	Continued and need to continue.
18	EHS practices in Package 02 (other than those in Polder 39/2C) are found to be poor, the Contractor of Package-02 should give continuous effective efforts to improve the EHS practices.	Contractors of Package 02	Continuous	Need pay extensive efforts. The reflection on the EHS practices of Package 02 has been captured in polder-specific findings section.
19	Alternative/ diversion canal should be ensured in case of construction of sluices rather stopping the water flow to reduce environmental stress and people's sufferings.	Contractors of Package 01 & Package 02 and DDCS&MPS Consultants	Continuous as and when required	Need to continue.
20	Both the contractors need to fix the gates of the completed sluices and WMGs should be formed and functional to reduce the environmental stress and people sufferings in their agriculture activities.	Contractors of Package 01 and Package 02; DDCS&PMSC NGOs; PMU.	30 April 2021	Need to fix.
21	Long Term Monitoring, Research, and Analysis of Bangladesh Coastal Zone Consultants need to add section with the report by giving ideas how biodiversity/ecology and environment may be impacted in relation to the polder development activities.	Long Term Monitoring, Research, and Analysis of Bangladesh Coastal Zone Consultants	30 April 2021	Need add the mention section.

SI	ACTION TO BE TAKEN	PARTY RESPONSIBLE	TARGET DATE	REMARKS
22	The activity of polder development plan of Long-Term Monitoring, Research, and Analysis of Bangladesh Coastal Zone Consultants is suggested to include study or polder specific EIA on the areas about environmental status and the study should include the environmental base line information/ impacts/constraints/ challenges may be evolved for polder development as well as the measures will be needed to be taken.	Long Term Monitoring, Research, and Analysis of Bangladesh Coastal Zone Consultants	30 April 2021	Need to include the issue.
23	The updated design and specification Long Term Monitoring, Research, and Analysis of Bangladesh Coastal Zone Consultants need to consider the environmental aspects.	Long Term Monitoring, Research, and Analysis of Bangladesh Coastal Zone Consultants	Continuous parallel to the design and specification works	Need to continue by the said Consultants
24	Environmental Specialist of the Long-Term Monitoring, Research and Analysis Bangladesh Coastal Zone Consultants needs to work by maintaining close coordination including updating about works with the Senior Environmental Specialist of PMU of CEIP-1 and also maintains good collaboration with Environmental Specialists of other Consultants (DDCS&PMS Consultants and 3rd Party M&E Consultants) of CEIP-1.	Long Term Monitoring, Research, and Analysis of Bangladesh Coastal Zone Consultants	31 January 2021	Need to follow as no coordination has been experienced yet.

SI	ACTION TO BE TAKEN	PARTY RESPONSIBLE	TARGET DATE	REMARKS
25	The training module and the trainings to be carried out by the NGOs should have discussion on the use of required PPE during preparation and application of the pesticides. Management of pesticides related waste in sound manner should be also discussed. The proper weather conditions, proper time and wind direction to be followed in case of application of the pesticides should be discussed in training module and during the training. The above the EHS issues for pesticides use should be discussed in IPM and ICM module and during the training of all the NGOs of CEIP-1.	All NGOs of CEIP-1	15 February 2021	Addressed.
26	NGOs should involve the local level GoB DAE Officers in their IPM activities.	All NGOs involved in CEIP-1 activities	As and when applicable during the trainings	NGOs coordinated on the technical issues as and when required.
27	Integration and coordination of key agencies who have a role in CEIP-1, even if not funded by the Project, must proceed. Examples are DOF, DAE and others. MOUs may be needed as has been done with the Department of Forestry.	PMU with the assistance of the DDCC&PMS Consultants	Continuous as applicable	MOUs were made with forest department; IPSNM activities were considered with proper coordination with DAE; To explore if needed and possible with other GoB departments.
28	Public awareness of the GRM mechanism must be enhanced as the number of grievances seems to have fallen to negligible levels in the one-year period covered by this audit.	DDCC&PMS Consultants	Continuous	Efforts have been extended

SI	ACTION TO BE TAKEN	PARTY RESPONSIBLE	TARGET DATE	REMARKS
29	It is recommended to address the polder-specific recommendations of the fourth environmental audit for the items which are applicable in the fields currently (e.g. works of many audited sites may be accomplished). For information, a polder-specific action items table has been annexed with the fourth Annual Environmental Audit report.	Contractors of Package 1 and Package 2, and the NGOs of relevant polders	Continuous	To continue
Pending items of 3rd Annual Environmental Audit need to be addressed				
30	Along with other Polders, it is recommended that the Contractor of Package 02 concentrate on complying EHS issues at Polder 47/2 and 48 for which the audit found poor EHS practices.	Contractor of Package 02	20 February 2021	Contractor advised to improve significantly by 15 February 2021 and to continue this.
31	Contractor's EAPs and C-ESMPs should be improved continuously as those are living documents. The monitoring frequencies spelled out in the EAPs and C-ESMPs should be consistent with the monitoring frequencies defined with the CEIP-1's EMPs.	Contractors of Package 01 and Package 02	28 February 2021	Need to revise the plans.

Table 20: Status of implementation of action items of Bi-Annual Environmental Monitoring Report (Covering Jan-Jun 2020)

SL	Proposed Actions	Status
1	Assure strict compliance of OHS protocols prepared for measures against spreading of Covid-19 at working sites and camps.	Practices have been adopted and need to improve, and continue.
2	Provide translated version of Bangla and Chinese of Emergency Preparedness Plan (EPP) for Covid-19 measures.	Translation is in process for Package 01. Package 02 is waiting for WB clearance after getting clearance from WB, translation will be done.
3	Monitor the incidents as per ESIRT of the World Bank.	Need to follow and continue.

SL	Proposed Actions	Status
4	Both Contractors to implement the action plan prepared on the basis of 4th Environmental Audit report and the incomplete action plan of 3rd Audit report.	Need to implement the pending items.
5	Both the contractor should conduct regular Environmental test from recognized laboratory with the frequencies as stipulated in EAP and C-ESMP.	To continue.
6	Assure the use of PPE by the workers.	Continuous improvement needed.
7	Adequate toilet facilities should be provided in all working sites. Special care should be taken for cleanliness of toilets.	Improved and improvement should be continued.
8	Both the contractors should follow the test result of drinking water, surface water, soil quality, air quality and noise quality and take necessary action accordingly.	To continue.
9	Continue for carry out the practice of hearing test of the worker who are working in high noise area in both packages.	Need to continue if applicable.
10	Ensure regular toolbox talk at all sites including awareness of measures against Covid-19. Follow the safety procedure of the equipment at all sites.	Being followed and need to continue
11	Aware the workers about the existence of grievance box and register their demand/complain.	To continue.
12	Construct separate roadway for vehicle and pedestrians.	To ensure.
13	Regular exchange visit of EHS team of Package-1 and 2 to be ensured for adopting good practices.	To continue.
14	Follow the safety procedure of the equipment at all sites.	To continue.
15	Engage EHS Chinese and Local officer in every polder where same has been discontinued.	Need to ensure strictly.

2.8.2. Polder-specific field observations

Package 01

Polder 35/1

In polder 35/1 areas, the audit team visited stackyard (chainage 4+560 km) of slope protection works, Drainage Sluice (DS) 02, DS 13, drainage outlet, IMP/ IPMSN demonstration plot at Radhalaxmi village, slope protection works at chainage 3+800 km and 4+239 km, social afforestation and conducted meeting with Radhalaxmi Water Management Group (WMG) Executive Committee members and Dhansagar Khejurbari WMG Executive Committee members. Moreover, a meeting was held with NGO team (SHUSHILAN). The findings from the visit are as follows:

- From the visit the stackyard in between chainage 3+800 km to 4+239 km, it was found that there is no any safety signage, signboard and demarcation with the site. The construction materials (brick chips) also found kept open at the stackyard which is on the bank of the river. This is recommended that Contractor will ensure adequate demarcation, safety signage at the worksite and the construction materials will also be covered (e.g. with tarpaulin).
- From the visit and discussion with the community people at completed DS02, it was revealed that the construction of the structure is completed, and the community people are not facing any problem and they do not have any concern on it.
- The completed DS13 was visited along with the WMG personnel. The construction of the main structure has been completed. The gate has not been fixed yet which need to be done as soon as possible. From the discussion with the WMG and community people, it was revealed that canal was filled and made narrow during the construction of the DS. Contractor did not remove the filled soil and the canal remained narrow. Community people had to remove the filling soil and make the canal a bit wider by themselves. But the width of the canal is still not same as previous as in the preconstruction stage. This is recommended that Contractor will ensure widening of all canals up to the level of preconstruction stage after completion of each structures.
- Two sections of slope protection work at chainage 3+800 km and 4+239 km were visited. It was found that workers are working and handling heavy blocks. But workers were not using mask, safety shoes, gloves. It is recommended that Contractor of Package 01 will ensure use of all required PPE at all such worksites.

- The audit at drainage outlet 1 found demarcation and first aid box in place. All the workers also found using masks. However, there was lack of using other required PPE (e.g. safety shoes, hand gloves). There was no drinking water for the workers at the worksite. Oil spillage (small drips) were observed with the machine used for mixing of brick chips, cements, and sands. It is recommended that there is safe drinking water for the workers at the worksite, workers use all the required PPE and trays with required oil observant kits are ensured with the machine being used for mixing of construction materials.
- Three IPM/IPSNM demonstration plots were visited. From the visit it was revealed that numbers of IPM technologies (e.g. net cultivation, lining, use of improved seed, mechanical technique to control pests) have been adopted. The discussion with the plot owners also revealed that they know the EHS issues on handling of pesticides and application including the waste management. Discussion with the owners of the IPM demonstration plots revealed that they are getting more crops for adopting the IPM technologies than before.
- Radhalaxmi WMG consists of 220 members. Among them 128 are male and 92 are female. Twelve members of Executive Committee were present at the meeting. From the meeting, it was revealed that all the participants received training on the required topics, and they are now aware of use of chemical pesticides. They were also able to talk on EHS measures need to take in case of using of pesticides.
- Dhansagar WMG consists of 517 members. Among them 400 are male and 117 are female. Twelve members of Executive Committee were present at the meeting. From the meeting, it was also revealed that all the participants received training on the required topics, and they are now aware of use of chemical pesticides. They were also able to talk on EHS measures need to take in case of using of pesticides.
- From the audit of the afforestation (3 km section of afforestation) site at Radhalaxmi village, it was found that the afforestation group are responsible for this section of the afforestation works. Forest department has appointed 3 caretakers (one is responsible for 1 km section) to look after the planted saplings. The audit found that the growth of the plants is good and the species have been planted (e.g. wood, medicinal, fruits) as per the afforestation plan of the CEIP-1 and no invasive or exotic species has been planted.

Polder 39/2C

Under Polder 39/2C, the audit team visited the Contractor's Nadmula camp and Nadmula CC block manufacturing yard, FS01 and embankment construction works at chainage 50+005 km. The audit findings are as follows:

- In the Nadmula camp, the record keeping/ documentation of EHS issues found to be good. C-ESMP, EHS risk assessment report, non-compliance register, accident register, records on toolbox talk, previous testing reports found at the camp office. There is COVID-19 screening (e.g. temperature measurement), arrangement and hand sanitizer at the entry gate of the camp. Fire extinguishers are also found at the camp with adequate date of expiry. The waste management at camp also found sound (e.g. separate bins for degradable, non-degradable wastes). Demarcated assembly point for emergency situation also found at the camp premises. With the camp and CC block manufacturing yard, there were adequate signboards, safety signage. Hand sanitizers, first aid box with adequate items, safe drinking water and hygienic toilet facilities found in place for the workers. For contacting in any emergency situation, contact numbers were also written on wall at the worksite. The store rooms found managed well. Grievance box found at the premises of the site. There were also designated sheds for industrial wastes with required safety measures. The fuel storage found in good condition with paved floor. There was adequate signage of the speed limit in the CC block yard. The drain from the workshop areas towards sluice found waterlogged which needs regular maintenance (e.g. cleaning, maintaining proper sloping) and this finding was also revealed during last fourth audit and this should be addressed by the contractor as soon as possible to stop breeding of vector insects. There was dust and the water sprinkling to suppress the dusts found not practiced well. It is recommended that contractor will maintain regular water sprinkling to suppress the dust. The stacked metallic plates found oil and there are oil spills to the soil under the plates. It is recommended that the plates are cleaned well with oil absorbent kits ensuring no soil or water contamination before they stack the metallic plates.
- In FS01, there were toilets and living sheds for the workers. The generator found kept on paved floor. From the audited site, it was revealed that there was no safe drinking water for the workers, adequate safety signage, demarcation, and visibility of emergency contact number at

the worksite. Adequate demarcation, safety signage, safe drinking water and emergency contract numbers in visible place should be ensured at the worksite. The workers also found not using the adequate items of PPE (e.g. mask, no safety shoes, gloves) except helmets. All the construction workers should use the required items of the PPE. Electric wires were found on the ground which should always be overhead. The electric board was also found open which should be locked, the key should be with the site responsible person who will only open as and when required. The workers shed where 12 persons stay and sleep found with inadequate space. The size of the shed was 162 square feet. This is recommended that contractor will ensure shed with adequate size for the workers.

- From the visit of construction of the embankment work at chainage 50+005 km, it was found that the worker engaged in the excavation work using mask. But was not using earplug/earmuff though there is significant sound from the excavator. It is recommended that worker engaged to operator excavator will use earplug/earmuff. There was no safety signage, demarcation at the worksite. Demarcation and safety signage should be erected with the worksite. It was found that soil is excavated from the borrow pit which is 10 m away from the toe of the embankment to the riverside. The EMP of polder 39/2C suggested that borrowing to be avoided from the lands close to toe line and within 0.5 km from toe line. It is recommended that the DDCS&PMS Consultant will look on the standard and suggest the contractor a viable recommendation as applicable.

Polder 41/1

In Polder 41/1 areas, the Audit Team visited Burirchar camp of the Contractor, DS03, DS08, Gulbunia CC block manufacturing and stockyard, social afforestation at chainage 5+300 km and chainage 6+00 km. Team also conducted meeting with Chotolobongola WGG Executive Committee. The findings from the Polder 41/1 are mentioned below:

- At the Burirchar camp site of the Contractor, there was good documentation of the EHS records and materials. There was proper demarcation, safety signage, wall-mounted fire extinguishers, and first aid box. The workers found using the required items of PPE. Waste management system at site found good. There were separate bins/place for collection of industrial, kitchen, other degradable and non-degradable wastes. The fuel storage system also found in good manner. However, the drainage system around the camp found water logged and this needs to be maintained (cleaning, maintain proper slopes towards the outlet etc.) regularly to

avoid the water logging. The metal scraps and other unused metallic equipment found kept randomly at the premises of the camp. It is recommended that contractor will keep such scraps in designated place with demarcation and signage. Construction vehicles also found parked randomly at the site premises. This is recommended that the all the such vehicles are parked at designated place with proper demarcation and signage.

- During the visit at DS03, block placing work found ongoing. The workers found using mask. Other required PPE (e.g. safety shoes, gloves) were not used by the workers. It is recommended that the workers use all the required PPE items. There was no safety signage and demarcation at the worksite which should be ensured at the worksite.
- The works of DS08 were completed (except the fixing of gates) around 2 years back. But the canals have been stopped from operating for more than 2.5 years. There were no diversion/alternative canals and this has created problems like lack of availability of water for irrigation, water logging and risk of accelerating the growth of vectors (mosquitoes), lack of native fishes and aquatic species in the canals, etc. From the discussion with WMG and the local people, it was also revealed that the farmers have been suffering in their agriculture. Damage to crop production due to the stopped canals has been experienced for more than 2 years. The gates of the DS08 should be fixed as soon as possible and it should be ensured that the structures are functional as early as possible considering the situation.
- From the visit at Gulbunia, it was found that there are not any EHS related records/documents at the worksite. There was no demarcation, safety signage, signboard, fire extinguisher, first aid box, safe drinking water and hygienic toilet facilities for the workers. During the visit, the workers found making CC block manually and none of them found using any PPE. There were no bins for the collection of wastes, and wastes and debris found kept inside the yard randomly. There was traffic movement (e.g. forklift, truck) inside the yard and there was no flagman to manage the traffic movement. There was no drainage system within the yard though the site is on the bank of reiver and has potential risks of pollution. Further to this, a proper drainage system should be provisioned as soon as possible to avoid any kind of pollution to the nearby river. At the worksite, all the EHS related records/documents, fire extinguishers, first aid box, safety drinking water should be ensured for the workers. The workers dealing with cement bags at the storeroom found with no mask and there were dusts. Considering the health risk all the workers dealing with cement bags should use mask. All the other workers also should use all the required PPE items. A dedicated flagman should be ensured to manage the traffic at worksite.

Proper demarcation and adequate signage and signboard should be erected at the worksite. Proper management system should be ensured at the work sites for managing construction debris, industrial and other wastes. The audit did not find any improvement compared to the situation revealed during last fourth annual environmental audit. It is recommended that contractor gives extensive efforts to improve the EHS practices at this site. The DDCS&PMS Consultants and PMU Environmental teams are also suggested to pay attention to improve the EHS practices at this site.

- The WMG has 420 members and 227 members are male, and 193 members are female. From the discussion with the Executive Committee members and villagers, it was revealed that it is an utmost need to make the sluice (DS08) operational and re-excavate the khal as soon possible otherwise they will not be able to cultivate the crops incoming season also.
- From the audit of the afforestation (3 km section of afforestation) site at chainage 5+300 km and chainage 6+600km, it was found that the afforestation group are responsible for this sections of the afforestation works. Forest department has appointed 3 persons to look after the planted saplings. The audit found that the growth of the plants is good and the species have been planted (e.g. wood, medicinal, fruits) as per the afforestation plan of the CEIP-1 and no invasive or exotic species has been planted.

Polder 43/2C

In polder Galachipa camp, 43/2C, DS01, DS03, DS08, FS1 and embankment work at chainage 0+850 km were visited. A meeting was also conducted with Taltoli khal WMG Executive Committee. The findings from the visits are as follows:

- The visit at the camp found supply of drinking water and first aid box for the workers. There was also fire extinguisher at the camp site. During the visit, workers were doing welding work and they were using PPE except the hand gloves. Considering the risk of arc ray, the welding workers should use the hand gloves. The waste management at the site found well.
- Visit at DS01 found demarcation and signage of diversion road in place. There was no safety signage at the site. Electric wires found on the ground and the electric board was also open. This is recommended that contractor will ensure adequate signage at the worksite. The electric wires are also needed to be overhead. The electric board should also be locked.

- Completed DS03 was also visited. The visit did not find any EHS concern.
- From the visit at DS08, it was revealed that the workers are using required PPE. There was first aid box and supply of drinking water for the workers. However, there was no demarcation and safety signage at the worksite. The electric wires also found on the ground. It is recommended that contractor will ensure adequate demarcation and safety signage at the worksite. The electric wires also should be overhead at the worksite.
- During the visit at FS01 work was not ongoing. However, the site found kept with demarcation. No EHS issue was revealed from the visit.
- During the visit of embankment work at chainage 0+850 km, soil excavation was ongoing. There was no safety signage at the worksite which should be ensured. The soil was excavated from the borrow pit adjacent to the toe (not more than 10 m). The EMP of polder 43/2C suggested that borrowing to be avoided from the lands close to toe line and within 0.5 km from toe line. It is recommended that the DDCS&PMS Consultant and field level PMU Environmental Specialist will look on the standard and suggest the contractor a viable recommendation as applicable.
- The WMG has 536 members and 292 members are male, and 244 members are female. From the discussion with the Executive Committee members, it was revealed that the committee has not been registered yet and all the required trainings have not been conducted for the committee yet. The WMG should be registered and trainings should be provided as soon as possible.

Polder 47/2

In polder 47/2, Dabluganj CC block manufacturing yard, FS1 and social afforestation at chainage 10+000 km were visited. Following findings were revealed from the visit:

- During the visit, CC block manufacturing was ongoing manually. There was first aid box with adequate items and supply of drinking water for the workers. Fire extinguishers were also in place at the worksite. The storeroom found in good condition. Discussion with workers revealed that they do not have any problem to work here. They are nearby community people and they go back to their houses every day after their works. The site is on the bank of river and there was no drainage system. Runoff/ storm water from construction site will fall to the river during the rainy season. It is recommended that the contractor will construct a well design drainage system in a way that quality of river water will not be deteriorated. The workers found using

mask only who need to use safety shoes and hand gloves as well. Welding workers found not using hand gloves which has risk of exposure of arc ray. Workers should use gloves for such welding works. Empty cement bags found stacked at open place which should be stored at a designated place. Oil drums found kept on open place which is recommended at designated place.

- From the audit of the afforestation site at chainage 5+300 km and chainage 10+000km, it was found that the growth of the plants is good and the species have been planted (e.g. wood, medicinal, fruits) as per the afforestation plan of the CEIP-1 and no invasive or exotic species has been planted.

Polder 48

Under Polder 48, the audit team visited the slope protection work at chainage 31+450 km to 31+650 km as that was the active site during the visit. The audit findings are as follows:

- There was proper demarcation and signage at the worksite. There was also drinking water facilities for the workers. Workers found using PPE. There was first aid box (a paper box). It is recommended that contractor will ensure improved first aid box at the worksite.

2.8.3. Observations on Long Term Monitoring, Research, and Analysis of Bangladesh Coastal Zone Consultants

Comments in Chapter of Coastal Biodiversity: A Review Report Prepared for Coastal Embankment Improvement Project, Phase-1 (CEIP-1)

The Long-Term Monitoring, Research, and Analysis (LTMRA) Consultants have prepared an overview report based on the literature review on coastal biodiversity. This report covers giving overview on coastal zones dividing the whole coastal zones into four zones as Ganges Tidal Plain West (GTPW), Ganges Tidal Plain East (GTPE), Meghna Deltaic Plain (MDP) and Chittagong Coastal Plain (CCP). Audit recommended during last fourth audit to add a section with the report by giving ideas how the biodiversity may be impacted in relation to the polder development. The fifth audit did not reveal any progress on this, and the above recommendation should be addressed by the said consultants. The chapter should also consider the baseline conditions (e.g. natural habitats including the biodiversity of birds, valued environmental components, aquatic biodiversity, list of endangered species).

Polder Development Plan: The activities of polder development plan should include study or polder specific EIA on the areas about environmental status, the environmental impacts/constraints/challenges may be evolved for polder development as well as the measures will be needed to be taken. This was suggested from last fourth audit. Meeting with the Environmental Specialist of the Consultant during this fifth audit revealed no evidence on progress on it.

Updated design and specification: The updated design and specification works are in initial stage. The audit recommends that the updated design and specification consider the environmental aspects (e.g. fish migration issues in case sluices, considering the sea level rise, species for afforestation). This recommendation also remains same for this audit which was from last fourth audit. The consultants are recommended to address the recommendation.

Action Plan for capacity building activities: It is recommended during the last fourth audit it that the Environmental Specialist of the Consultants carry out on-job training for the personnel on how to address the environmental issues in their works. There was no progress on this during the audit period.

Coordination and collaboration: No coordination was revealed, and It is recommended that Environmental Specialist of the Long-Term Monitoring, Research and Analysis Bangladesh Coastal Zone Consultants maintain close coordination including updating about works with the Senior Environmental Specialist of PMU of CEIP-1 and also maintains good collaboration with Environmental Specialists of other Consultants (DDCS&PMS Consultants and 3rd Party M&E Consultants) of CEIP-1.

2.8.4. Observations on NGO's Integrated Pest Management (IPM) and Integrated Crop Management Training

The training module of the Integrated Pest Management (IPM) and Integrated Crop Management (ICM) Plan of the NGOs was reviewed during fifth audit. From the perspective of the environmental safeguards, it has covered the EHS issues. The training module and the trainings carried out considered discussion on the use of required PPE during preparation and application of the pesticides. Management of pesticides related waste in sound manner was discussed in training. The proper weather conditions, proper time and wind direction to be followed in case of application of the pesticides was also discussed in training during the training as interviewed people were able to talk on the issues.

2.9. 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. The updated labor influx report (December 2020) has been included in Annex 4.8.

2.10. Constraints to implement EMP

Though the audit revealed many EHS good practices. The International Environmental Specialists of DDCS&PMS Consultants and Third Party M&E Consultants have not been mobilized for long time. Their engagement can contribute to achieve EMP implementation in a success manner as many of the gaps in EHS practices have been revealed by the audits. The audit recommends that The International Environmental Specialists of DDCS&PMS Consultants and Third Party M&E Consultants are mobilized and the Project Director of CEIP-1 extends cooperation as required to mobilize them.

The EMPs of the project outlined the institutional arrangement to implement the environmental mitigation measures. In line with that the EMPs 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 PMU, CEIP-1. To facilitate this coordination, the Project has its steering committee which consists of persons from different agencies. From the audit point of view, the coordination through the steering committee should be enhanced. This audit revealed that MoU has been made Department of forest and coordination has been made with department of fisheries so far. 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 continue coordination with them as applicable.

Considering the smaller number of EMP implementation budget items with the contract of Package 01, it is recommended that DDSC&PMSC monitor the implementation of mitigation measures for each impact area to ensure they are properly addressed. The M&E Consultants and PMU to continue to spot-check.

3. Conclusions and recommendations

The audit was conducted as per the TOR (attached with Annex-4.1). 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 fifth annual environmental audit.
2. The DDSC&PMS Consultants and PMU should consider the recommendations for the upcoming next phase of the project where applicable.
3. The audit report of fifth audit should be shared with the Contractors, Consultants, relevant sub-Consultants, and PMU staff.
4. As many of the findings of fourth Annual Environmental Audit and also a couple of findings of third audit have not been implemented yet, this audit recommends implementing those findings as per the action plan of fourth audit and the action plan of the 5th Environmental Audit in the

Annex to this report. The contractors, consultants and PMU should convene periodically to report on the implementation of the time-bound action plan incorporating the findings/recommendations of this 5th Environmental Audit Report.

5. The practice of using PPE should be enhanced by the contractors of Package 01 and Package 02.
6. Both of the Contractors of CEIP-1 are recommended to arrange exchange visit for learning and scale up of practices for improvement environmental compliance in their packages in the current year.
7. Both the Contractors should carry out the efforts to improve the EHS practices.
8. As this fifth audit also found that EHS practices in Package 02 are still poor, the Contractor of Package-02 should give continuous effective efforts to improve the EHS practices. The DDCS& PMS Consultants and PMU also need rigorous supervision to improve the EHS practices in Package 02.
9. It is recommended to initiate the fish conservation activities for Package 02.
10. DDCS&PMS Consultants are advised to give the Contractor of Package 01 an orientation on how to fill the monitoring checklists and prepare report for them.
11. It is recommended that Contractor of the Package 01 prepares a site-specific (e.g. identification and listing of all facilities to be decommissioned, time line for them, listing down all the mitigation measures to be taken) decommissioning plan, submits to DDCS&PMS Consultants, PMU and M&E Consultants, and implement this after getting approval from PMU.
12. The implementation of the decommissioning plan is also recommended to be monitored by the PMU and DDCS&PMS Consultants.
13. This audit also recommends fixing the gates of the completed sluices to make them functional to reduce the environmental stress and people sufferings in their agriculture.
14. The recommendations made for Long Term Monitoring, Research, and Analysis of Bangladesh Coastal Zone Consultants during last audit are still applicable as none of them has been addressed. It is recommended that the said Consultant address the recommendations made during fourth audit as per the action plan.
15. Considering that there are many gaps in field level EHS practices, field level Environmental

Specialist of PMU will prepare a monthly site and polder specific summary findings report for the visited sites and share the report with the Project Director with a copy to Senior Environmental Specialist.

16. PMU with the help of DDSC & PMSC identify the issues and the relevant agencies/ stakeholders for EMP implementation and sign MoUs with them as applicable.
17. A time bound Corrective action Plan has been added with Annex-4.9. The deadlines have been agreed by PMU, DDSC&PMS Consultants, Long Term Monitoring, Research, and Analysis of Bangladesh Coastal Zone Consultants, contractors of Package 01 and Package 02 in a meeting with audit team of Third Party M&E Consultants. It is recommended that all the responsible parties implement the Corrective Action Plan following the deadlines.
18. The audit recommends that The International Environmental Specialists of DDSC&PMS Consultants and Third Party M&E Consultants are mobilized and the Project Director of CEIP-1 extends cooperation to mobilize them.
19. Along with the above recommendations, both the Contractors are advised to follow the Polder-Specific recommendations those came out from the Audit. The polder-specific recommendations are as follows:

Package 01

Polder 35/1

The recommendations from the Audit at the stackyard:

- I. This is recommended that Contractor will ensure adequate demarcation, safety signage at the worksite and the construction materials will also be covered (e.g. with tarpaulin).

The recommendations from the Audit at DS13:

- II. The gate with the structure should be fixed as soon as possible.
- III. Contractor needs to ensure widening of canal up to the level of preconstruction stage as construction of the structure is completed.

The recommendations from the Audit at slope protection work at chainage 3+800 km and 4+239 km:

- I. Contractor of Package 01 needs to ensure use of all required PPE at all such worksites.

The recommendations from the Audit at drainage outlet 1:

- I. Safe drinking water for the workers at the worksite should be ensured by the contractor.
- II. Workers should use all the required PPE.
- III. Trays with required oil absorbent kits should be ensured with the machine being used for mixing of construction materials.

Package 02

Polder 39/2C

Recommendations from the Audit at Nadmula Camp and CC block manufacturing yard:

- I. The drain from the workshop areas towards sluice needs regular maintenance (e.g. cleaning, maintaining proper sloping).
- II. Contractor needs to maintain regular water sprinkling to suppress the dust.
- III. The metallic plates should be cleaned well with oil absorbent kits ensuring no soil or water contamination before stacking the metallic plates at site premises.

Recommendations from the Audit at FS01:

- I. All the construction workers should use the required items of the PPE.
- II. Electric wires should not be on the ground which should always be overhead.
- III. The electric board should be locked, and the key should be with the site responsible person who will only open as and when required.
- IV. Contractor should ensure shed with adequate size for the workers.

Recommendations from the embankment work at chainage 50+005 km:

- I. Worker engaged to operator excavator need to use earplug/earmuff.
- II. Demarcation and safety signage should be erected with the worksite.
- III. DDCS&PMS Consultant need to look on the standard and suggest the contractor a viable recommendation as applicable on maintain distance between toe of the embankment and borrow pit.

Polder 41/1

Recommendations from the Audit at the Burirchar camp site of the Contractor:

- I. The drainage system around the camp found waterlogged and this needs to be maintained (cleaning, maintain proper slopes towards the outlet etc.) regularly to avoid the water

logging.

- II. Contractor needs to keep the scraps in designated place with demarcation and signage.
- III. All construction vehicles should be parked at designated place with proper demarcation and signage.

Recommendations from the Audit at DS03:

- I. Workers should use all the required PPE items.
- II. Safety signage and demarcation at the worksite should be ensured.

Recommendations from the Audit at the completed DS08:

- I. The gates of the DS08 should be fixed as soon as possible and it should be ensured that the structures are functional as early as possible considering the situation.

Recommendations from the Audit at the Gulbunia CC block manufacturing and stockyard:

- I. Considering the health risk all the workers dealing with cement bags should use mask.
- II. All the workers other also should use all the required PPE items.
- III. At the worksite, all the EHS related records/documents, fire extinguishers, first aid box, safety drinking water should be ensured for the workers.
- IV. A dedicated flagman should be ensured to manage the traffic at worksite.
- V. Proper demarcation and adequate signage and signboard should be ejected at the worksite.
- VI. Proper management system should be ensured at the work sites for managing construction debris, industrial and other wastes.
- VII. Contractor should give extensive efforts to improve the EHS practices at this site.
- VIII. The DDCS&PMS Consultants and PMU Environmental teams are also suggested to pay attention to improve the EHS practices at this site.

Polder 43/2C

Recommendations from the Audit at Galachipa Camp:

- I. The welding workers should use the gloves.

Recommendations from the Audit at DS01:

- I. Adequate signage at the worksite should be ensured.
- II. The electric wires are needed to be overhead and electric board should be locked.

Recommendations from the Audit at DS08:

- I. Contractor needs to ensure adequate demarcation and safety signage at the worksite.
- II. The electric wires also should be overhead at the worksite.

Recommendations of audit from visit of embankment work at chainage 0+800 km:

- I. Safety signage at the worksite should be ensured.
- II. DDCS&PMS Consultant need to look on the standard and suggest the contractor a viable recommendation as applicable on maintain distance between toe of the embankment and borrow pit.

Recommendations of audit from the meeting with Taltoli khal WMG Executive Committee:

- I. The WMG should be registered and trainings should be provided as soon as possible.

Polder 47/2

Recommendations of audit Dabluganj CC block manufacturing yard:

- I. Contactor should construct a well design drainage system in a way that quality of river water will not be deteriorated by runoff/storm water from the construction site.
- II. The construction workers need to use safety shoes and gloves.
- III. Workers should use gloves for welding works.
- IV. Empty cement bags should be stored at a designated place.
- V. Oil drums should be kept at designated place.

Polder 48

Recommendations of audit from slope protection work at chainage 31+450 km to 31+650 km:

- I. Contractor need to ensure improved first aid box at the worksite.

4. Annexes

4.1. Terms of Reference

Fifth Annual Environmental Audit of CEIP-1 Project Terms of Reference

Background:

The Coastal Embankment Improvement Project – Phase 1 (CEIP-1) is a 9-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 June 2022. It covers 17 polders in three packages of 4, 6 and 7 polders respectively. Ten polders (Packages 1 and 2) will have their embankments upgraded and the remaining 7 polders are being designed as part of CEIP-1 and prepared for tendering under CEIP-Phase 2. 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. Moreover, contract signing between Bangladesh Water Development Board (BWDB) and the Non-Governmental Organizations (NGOs) for the consultancy services of social mobilization, afforestation and Integrated Pest Management Plan (IPM) was started from 24 February 2019 and CEIP-1 accomplished contract signing of five NGOs by 02 May 2019, and the NGOs have been providing their services. Contract between BWDB and the Consultants for long term monitoring, research and analysis of Bangladesh coastal zone was signed on 04 October 2018 which was effective from 15 October 2018 and the Inception Report was due on 15 January 2019.

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 01 January to 06 February 2017 covering the reporting period January through December 2016, second Annual Environmental Audit covering January-December 2017 was carried out during 10 January to 07 February 2018, third Annual Environmental Audit covering January-December 2018 was carried out during 06 January to 07 February 2019 and fourth Annual Environmental Audit covering January-December 2019 was carried out during 05 January to 07 February 2019. This TOR is for the fifth Annual

Environmental Audit covering the period January-December 2020, due to commence about the second week of January 2021.

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

9. Project Management Unit, with its Social and Environmental Coordination Unit (SECU), who are responsible for oversight and guidance on environmental matters as well as coordination with GoB agencies. The Environmental issues of the Project are being tended to by a Senior Environmental Specialist and an Environmental Specialist (Field) under PMU's SECU. PMU also reports to BWDB, the Project Steering Committee (PSC) and the World Bank.
10. 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.
11. The Consultants for long term monitoring, research and analysis of Bangladesh coastal zone also need to consider the environmental safeguards and sustainability issues in their polder development plan, updated design and specifications and action plan for capacity building activities.
12. The NGOs are responsible for the social mobilization works for the sustainable operation of the polders, social afforestation and IPM interventions.
13. 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.
14. World Bank reviews and provides comments and no objection to the various safeguard documents.
15. Community participation, consultation and feedback through the EIA process and Grievance Redress Mechanism.

16. 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. The Third Party M&E Consultants will take the lead in facilitating the preparation of a time-bound action plan based on audit recommendations. It will monitor action on the recommendations of the audit by PMU, DDCS&PMSC and concerned contractors.

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 fifth 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 the status of: (1) the preparation and update of required safeguards documents; (2) the implementation of the EMPs, C-ESMP and EAPs; (3) the implementation of environmental monitoring, including the use of effective monitoring systems, tools and protocols; (4) institutional strengthening and capacity development, including institutional arrangements, staff and funding resources, and implementation of training programs; (5) the implementation of disclosure, consultations, communication, grievance redress mechanisms; and (6) compliance with reporting requirements.

The audit will cover the Contractors for Package 01 and Package 02, the DDCS&PMSC, NGOs, Consultants of monitoring, research and analysis of Bangladesh coastal zone 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 and cover:

- Status of implementation of the recommendations / findings of the third 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 mission/s that were conducted in 2020

- Status of implementation of the recommendations of fourth Annual Environmental Audit Report
- Status of the implementation of the recommendations / agreed actions of Bi-Annual Environmental Monitoring Report of July 2020
- Extent to which the environmental mitigation measures outlined in the ESMP / EAPs and C-ESMP are being followed and whether they are effective
- Status of the implementation of the environmental safeguard measures for the social mobilization, afforestation and IPM activities of the NGOs
- Status of extent of the environmental safeguards and sustainability issues in the polder development plan, updated design and specifications and action plan for capacity building activities of the consultants of long-term monitoring, research and analysis of Bangladesh coastal zone
- The extent to which 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, public health and social dynamics
- Extent to which the Environmental Monitoring Plans are being followed and whether they are effective
- The availability and quality of monitoring equipment, tools, formats and protocols; and processes and procedures for compliance monitoring
- Implementation and effectiveness of workers' and community safety and health, environmental health protocols and measures, including accidents at the work sites, in surrounding communities and along transport routes and for COVID risk management
- Functioning of the GRM in the polder areas, including timeliness and effectiveness of receiving and redressing grievances

- Effectiveness of institutional arrangements for environmental management; availability of funding
- Existence of qualified staff resources
- Design, delivery and effectiveness of awareness and training programs for Contractor and Supervision Consultant staff
- Review of accident records in the work sites and examine the magnitude of the accidents and how those were addressed by the contractor
- Whether any of the CEIP-1 activities may have negative impact on the mangrove forest Sundarbans
- Constraints if any in ensuring compliance with the EMP / EAPs / C-ESMP
- Compliance with record keeping and reporting requirements for all project partners, including the veracity, accuracy, breadth, depth and relevance of information
- Review the implementation status of the COVID-19 OHS protocols at construction sites that have been prepared by the contractors.
- Review the status of the maintenance of COVID-19 safety measures being carried by the project, more generally.
- Recommendations for corrective actions to fulfill any non-compliance with the ESMP, EAPs and C-ESMP, including gaps, omissions, deficiencies, discrepancies and concerns with respect to the above
- The work of Package-1 will complete on June 2021. Specific recommendation should be included for site clearance and decommissioning of temporary facilities
- Based on the findings of the fifth audit, M&E Consultants will suggest a time bound Corrective Action Plan (CAP) mentioning the responsible parties, and this CAP will also include the items of third and fourth environmental audits which are still pending.

The Environmental Audit will present findings and observations followed by a time bound Corrective Action Plan (CAP) as it has been experienced from the last audit that the deadlines to comply the audit findings were not provided by the responsible parties even after a long period of time passed. This is 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.

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, DDSC&PMSC and NGOs.

The Environmental Audit will examine documents and lab test results records, examine construction site daily logs and records, undertake field observation on compliance status and require field staff to demonstrate/ share 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 DDSC&PMS Consultants, long term monitoring consultant and NGOs 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.

Document Review: Existing base documents or reports will be reviewed such as the 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. Contracts' bi-monthly environmental inspection checklists corresponding to the period will also be reviewed.

Key Informant Interviews: PMU, DDSC&PMSC, long term monitoring consultants, NGOs, 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, a few afforestation sites and IPM training (if it continues), one Water Management Group (WVG) per package will be visited to examine field level application of the environmental safeguards on a random sampling basis. 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.

Moreover, the findings on environmental safeguards issues revealed from different site visits conducted by the M&E Team members during the period of January to December 2020 will be incorporated with the Audit report as applicable.

During the field visits and meetings to be carried out by the audit team, COVID-19 guideline of GoB/WB and Project's COVID-19 protocols will be followed strictly.

Team Composition and Duration:

The audit will be accomplished by the Environmental Team Environmental Specialist–National (A.K.M. Rezaul Haque Khan) of the Third Party M&E Consultants with the support of the Team Leader (Mr. Jan T. Twarowski), Deputy Team Leader (Md. Mahidur Rahman Khan) and M&E Officer (Md. Safiqul Islam). 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 5th Annual Environmental Audit
3rd Party M&E Consultants
CEIP-1

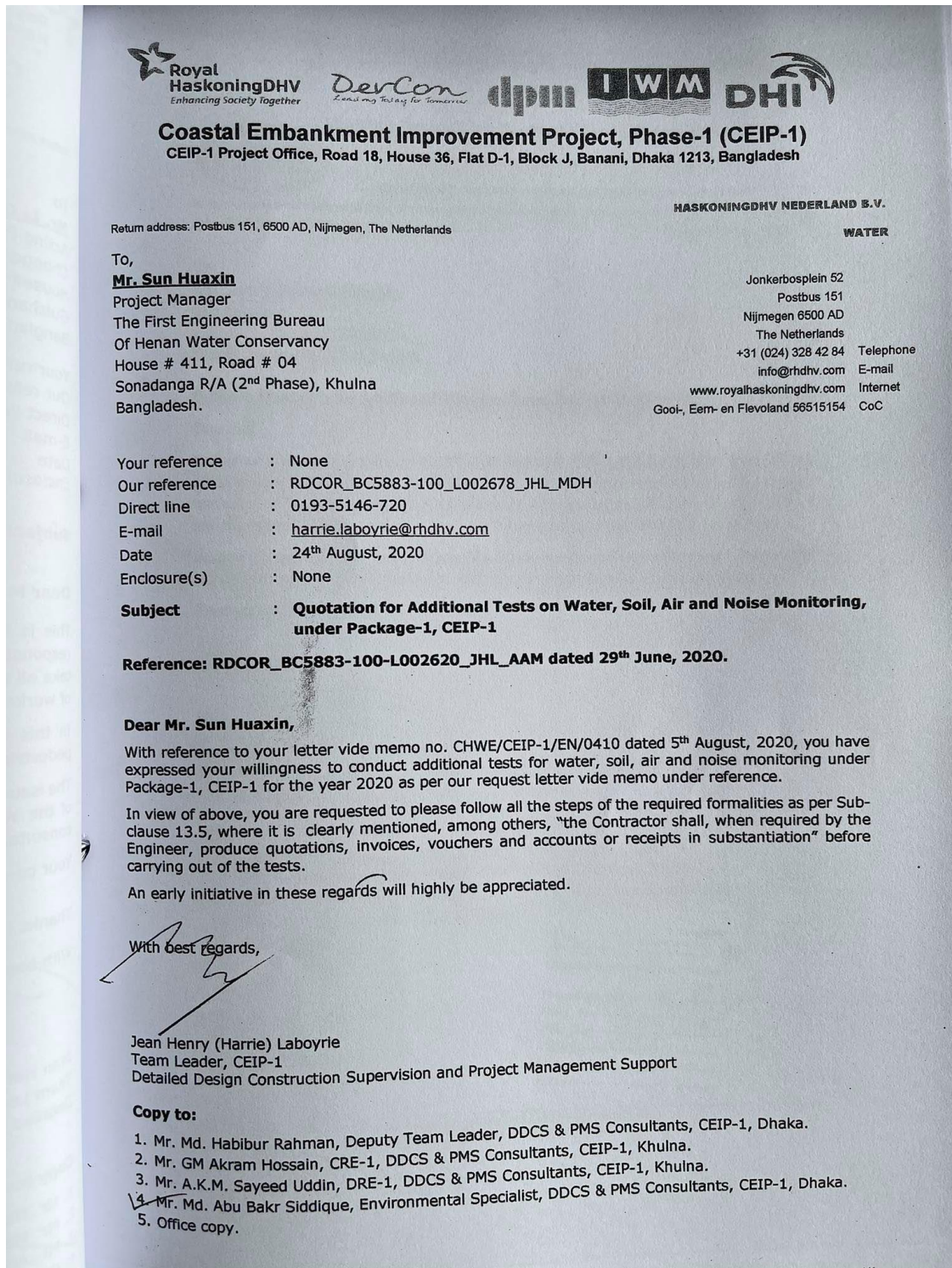
Team members of the Field Visit: A. K.M. Rezaul Haque Khan (National ES)
Md. Safiqul Islam (M&E Officer)

SI	Activity	Time	Date	Remarks
1	Travel from Dhaka to Khulna	Morning flight	18-01-2021	
2	Meet with XEN, DDCS&PMSC, Contractor-01 and NGOs Khulna office team	3:00 pm-7:00 pm	18-01-2021	NGOs will be requested to share Training relevant documents
3	Travel from Khulna and audit the activities in Polder 35/1 areas	8:00 am-6:00 pm	19-01-2021	Audit contractor's and NGOs works (Afforestation, IPM and WMG)
4	Travel from Khulna to Package 02 areas and audit the activities in Polder 39/2C areas and travel to Kuakata	7:30 am-6:00 pm	20-01-2021	Audit contractor's Night Stay in Kuakata
5	Travel and audit the activities in Polder 43/2C, 48 and 47/2 areas	8:00 am- 07:00 pm	21-01-2021	Audit contractor's and NGOs works (Afforestation, IPM and WMG) Night Stay in Baruguan
6	Travel and audit the activities in Polder 41/1	7:30 am -11:00 am	22-01-2021	Audit contractor's and NGOs works (Afforestation, IPM and WMG)
7	Travel from Barguna to Barishal and travel back from Barisal Airport to Dhaka	Late afternoon flight	22-01-2021	Team returns to Dhaka

4.3. Some of the persons met during the audit

SI	Name	Position	Organization	Location	Cell Number
1	Md. Amir Faisal	Senior Environmental Specialist	BWDB	Dhaka	01715315227
2	Mr. Asraful Alam	XEN	BWDB	Khulna	01732435998
3	Jean Henry (Harrie) Laboyrie	Team Leader, CEIP-1	Dhaka	01935146720	harrie.laboyrie@rhdhv.com
4	Md. Habibur Rahman	Deputy Team Leader, CEIP-1	Dhaka	01755627386	habibceip@yahoo.com
5	Abu Bakr Siddique	Environmental Specialist	DDCS&PMS	Dhaka	01795095607
6	Dr. S.M.A. Rashid	Environmentalist	Long Term Monitoring, Research and Analysis Consultants	Dhaka	01717318906
7	Engr. A.K.M. Sayeed Uddin	DRE	DDCS & PMSC	Khulna	01919432163
8	Blank	AE	BWDB	Khulna	
9	Mr. Moshir Rahamn	DTL, NGO Pkg. A	CNRS	Khulna	01817583403
10	Mr. Ren Gaofei	EHS in charge	CHWE Contractor	Khulna	01761931689
11	Mr. Ram Proshad	District Manager	Shushilan	Bagerhat	01996297292
12	Mr. Lakidul	Field Engineer	DDCS & PMSC	Polder-35/1	01717141606
13	Mr. Ma Zemou	Polder Manager	CICO Contractor	Polder -39/2C	01887707644
14	Md. Sadequl Islam	CSE	DDSC & PMSC	Polder- 39/2C	01706947667
15	Md. Taher	EHS Officer	CICO Contractor	Polder- 39/2C	01712003561
16	Engr. A.K.M. Mazibur Rahman	CSE	DDCS & PMSC	Polder- 47/2 & 48	01712948147
17	Mr. Wang	Mechanical in charge	CICO Contractor	Polder- 47/2 & 48	01623521230
18	Mr. Li Xiang	Polder Manager	CICO Contractor	Polder- 47/2 & 48	01870509678
19	Mr. Harunur Rashid	CSE	DDCS & PMSC	Polder- 43/2C	01720043618
20	Mr. Abdullah Al Mamun	Field Engineer	DDCS & PMSC	Polder- 43/2C	01758680088
21	Mr. Yang Dong	Polder Manager	CICO Contractor	Polder-41/1	01644783390
22	Mr. Azhar	Safety Officer	CICO Contractor	Polder-41/1	01797181079
23	Mr. K.H. Shamim Ahmed	Field Engineer	DDCS & PMSC	Polder-41/1	01970910691
24	Mr. S.M. Shamim Hasan	Field Engineer	DDSC & PMSC	Polder -41/1	01716277693
25	Mr. Shahin Islam	DTL, NGO Pkg. D	Shushilan	Barguna	01815309462
26	Mr. Shohel Sikder	C.O. NGO Pkg. E	AMS, PDI, AO	Polder-43/2C	01710211598
27	Wang Linqiag	Administrator	CHWE Contractor	Dhaka Office	01968360701
28	Li Hua Xen	Administrator	CICO Contractor	Dhaka Office	01827935882

4.4. Sample of correspondence of EHS issue from DDSC&PMSC





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

To
Mr. Li Guofang
 Acting Project Manager,
 Chongqing International Construction Corporation
 House#18/B, Apt.#F-1, Road#48
 Gulshan-2, Dhaka-1212
 Bangladesh.

Inkerbosplein 52
 Postbus 151
 Nijmegen 6500 AD
 The Netherlands
 +31 (0)24 328 42 84 Telephone

Your reference : None
 Our reference : RDCOR_BC5883-100_L002705_JHL_MDH
 Direct line : 0193-5146-720
 E-mail : harrie.laboyrie@rhdhv.com
 Date : 17th September, 2020
 Enclosure(s) : None

Subject : Appointment of Environmental Specialist in Package-2 of CEIP-1.

Dear Mr. Li Guofang,

I would like to bring to your kind notice that the position of an experienced Environmental Specialist in Package-2, CEIP-1 is lying vacant for a long time. As a consequence, environmental activities are being suffering a lot in Package-2 working areas for want of an experienced Environmental Specialist.

Under these circumstances, you are requested to please urgently recruit an experienced Environmental Specialist for conducting the environment-related activities in Package-2 working areas.

An early action in this respect is urgently required from your end under intimation to the undersigned.

Thanking you in advance.

With best regards

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

Member N.Ingenieurs
 A company of Royal HaskoningDHV

1/2



4.5. Environmental Compliance / Non-Compliance Report: Package 01

Environmental Issues	Types of Compliance, Non-compliance & Repeating Non-compliance	Total no. of Compliance for the year 2020	Total no. of Non-compliance for the year 2020	Total no. of repeating Non-compliance for the year 2020
Construction Camps	Obtaining approval	48	0	0
	Erection of signboard in Bangla and English with project details	48	0	0
	Install accommodation facilities for workers	48	0	0
	Drainage channels installation	48	0	0
	Supply of safe drinking water	48	0	0
	Supply of adequate sanitation	48	0	0
	Solid fencing and demarcation to prevent villagers from entering the premises	48	0	0
	Infrastructure for adequate sanitation facilities	12	0	0
Fuel storage areas	Install hardstand and secondary containment	48	0	0
	Firefighting equipment installation	48	0	0
	Sand and shovel close-by	48	0	0
	Regular checks on physical condition	48	0	0
	The Material Safety Data Sheet (MSDS) from supplier of hazardous substances (diesel, oil, lubricant) will be collected and placed besides containers/storage.	48	0	0
	Spill kit/absorbent mat will be in place to catch any spilled fuels at the location where potential spillage may occur.	48	0	0
	Sufficient hydrants to address potential fire should be equipped at fuel storage area as well as the areas where chemicals/fuels are used.	48	0	0
	Maintain minimum distance during fueling and fueling	48	0	0
	Provide eye protective glass	48	0	0
Provide hand gloves	48	0	0	
Access road construction	Obtaining approval	48	0	0
	Construction of culverts if needed	48	0	0
Temporary	Revegetation	0	48	0

Environmental Issues	Types of Compliance, Non-compliance & Repeating Non-compliance	Total no. of Compliance for the year 2020	Total no. of Non-compliance for the year 2020	Total no. of repeating Non-compliance for the year 2020
Facilities Decommissioning	implementation			
	Close-out check	24	0	0
Construction and re-sectioning of embankments	Pavement (if present) will be removed and disposed of at the premises of BWDB	48	0	0
	Topsoil from areas of earth works will not be used for construction works. The topsoil (from surface to 15 cm depth) will be removed and preserved for later use of replacing after construction in rehabilitation.	48	0	0
	Disposal of excess soil will be done at site with no objection from DoE and local authority.	0	48	0
	All works will be demarcated clearly.	48	0	0
	Signals will be installed to indicate the entry and exits of vehicles and movement of construction	48	0	0
	The contractor shall manage the topsoil (15) cm during earth work activities	0	48	0
The bank and slope protection works	Spilling of earth material in surface water will be avoided.	48	0	0
	Turfing will be applied to prevent erosion	48	0	0
Re-excavation works	Spoil plan (volume to be dredged; disposal site to be used; quality of dredged material; applicability of dredged material) to be developed for approval by Engineer.	0	48	0
	Unnecessary resuspension will be avoided by selection of suitable dredging equipment.	0	48	0
	Temporary deposition of dredged material will be away from the channel edge to limit damage to streamside and stream habitats.	42	0	0
	Return water will be conveyed through siltation chambers to avoid high loads of fines to be discharged on	42	0	0

Environmental Issues	Types of Compliance, Non-compliance & Repeating Non-compliance	Total no. of Compliance for the year 2020	Total no. of Non-compliance for the year 2020	Total no. of repeating Non-compliance for the year 2020
	surface water.			
	Where applicable biotechnical Engineering, for example, geo textile, may be used to help stabilize the material.	0	18	0
	Smothering of important flora and habitats will be avoided.	18	0	0
	Provide solid demarcation around the excavation	18	0	0
	Establish sufficient sign /signaling that can be visible at night	42	0	0
	Erect light reflective signboard	42	0	0
	Set and check the stability of excavator after certain interval during work	42	0	0
	Conduct the toolbox talk before starting the work	42	0	0
Manufacture of pre-cast CC blocks	Workers will be equipped with proper PPE.	23	0	0
	Signals will be installed to indicate the entry and exits and movement of vehicles construction in the work area.	23	0	0
	Manufacturing will not take place at night.	23	0	0
	Stacks with sand will be covered or wetted.	23	0	0
	Provide noise control barrier around the plant area as possible	23	0	0
	Make a closed chamber for plant operator	23	0	0
	Periodic hearing check for the exposed workers	23	0	0
	Shifting duty for the noise exposed areas	23	0	0
	Spray water at certain intervals in the plant area	23	0	0
	Wet and clean the aggregate before using	23	0	0
	Cover/wet dusty parts or materials	23	0	0
No operation without the screen or barrier provided with the machine	23	0	0	

Environmental Issues	Types of Compliance, Non-compliance & Repeating Non-compliance	Total no. of Compliance for the year 2020	Total no. of Non-compliance for the year 2020	Total no. of repeating Non-compliance for the year 2020
	Conduct toolbox talk regularly	23	0	0
Borrow Material	Agreeing on borrow area	48	0	0
	Perform soil analyses on borrow materials when contamination is expected	24	0	0
	Prevention of erosion/dust forming	24	0	0
	No-Tress pass line fixed with bamboo poles	24	0	0
	Check the physical condition of excavator regularly	48	0	0
	Conduct toolbox talk before starting the work	48	0	0
	Training on driving safety at regular interval	48	0	0
	Check the physical condition of truck regularly	48	0	0
Hard Rock Revetment	Alignment to be pre-determined	0	48	0
Occupational Health and Safety	Development of Health and Safety plan including emergency procedures	48	0	0
	Train all staff in health and safety	48	0	0
	Provision of HIV, including STI (Sexually Transmitted Infections) information, education and communication	48	0	0
	Provision of PPE and ensuring their use	48	0	0
	Provision and use of life jacket during visiting campsite/worksites by boat	48	0	0
	Installation of first aid facilities at work site and camps with adequate stock	24	0	0
	Provide sanitation facilities where needed	48	0	0
	Provision of safe drinking water to work force (tube-well water, bottled water or pond water)	48	0	0
	Proper signaling of work areas	48	0	0
Public Health and Safety	Notification of the public adjacent to the construction areas	48	0	0
	Installation of dedicated pathways for pedestrians	48	0	0

Environmental Issues	Types of Compliance, Non-compliance & Repeating Non-compliance	Total no. of Compliance for the year 2020	Total no. of Non-compliance for the year 2020	Total no. of repeating Non-compliance for the year 2020
	Proper signaling of work areas	48	0	0
	Limitation of construction vehicles at public roads during peak hours.	48	0	0
	The temporary traffic detours in settlement areas will be kept free of dust by frequent application of water	48	0	0
	Construction activities will be undertaken according to during daylight working hours between the hours of 07:00-17:00 on week days	42	0	0
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	48	0	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	18	0	0
	Maintaining the distance of a tubewell/surface water resource from a soak pit at minimum 15 m	48	0	0
	Maintaining the drainage from the tubewell diverting into the drainage system of the camp area	24	24	0
	Providing separate tubewells for the use of women.	0	24	0
Sanitation	Providing suitable sanitation facilities for the workforce	48	0	0
	Ensuring the location plan of the latrine at least 50 m away from the accommodation facility	48	0	0
	Providing separate latrines for the use of women	48	0	0
	Installing treatment facilities (i.e. septic tank, soak pits etc.) for the sewerage of toilet and camp site wastes.	48	0	0

Environmental Issues	Types of Compliance, Non-compliance & Repeating Non-compliance	Total no. of Compliance for the year 2020	Total no. of Non-compliance for the year 2020	Total no. of repeating Non-compliance for the year 2020
	Arranging disposal of wastewater from washrooms, kitchens, s, etc. via the camp area's drainage system	48	0	0
Solid Waste Management	Ensuring collection and disposal of solid wastes within the construction camps and work areas	48	0	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.	46	0	0
	Establish measures for Waste collection, transportation and disposal systems at approved disposal sites.	24	0	0
	Disposal of construction and demolition waste.	24	0	0
Wastewater	Installation of decanter boxes for washing buckets and cement mixers	48	0	0
	Installation of proper filtering elements.	0	48	0
	Carrying out periodic checks and clean-ups for the decanter box.	48	0	0
	Prioritize reuse of aggregates and water from the decanter box.	24	24	0
	Ensure safe disposal of liquid wastes generated at camp site.	48	0	0
Air	Regular maintenance of vehicles	48	0	0
	Covering or wetting of dusty materials	48	0	0
	Dust suppression by wetting surfaces	24	0	0
	Impose speed limits	24	0	0
Noise	Notify nearby population prior to any typical noise events	48	0	0
	Ensure construction activities do not generate unacceptably high level of noise	48	0	0
	Restrict working to daylight hours	48	0	0
	Locate noisy equipment /	48	0	0

Environmental Issues	Types of Compliance, Non-compliance & Repeating Non-compliance	Total no. of Compliance for the year 2020	Total no. of Non-compliance for the year 2020	Total no. of repeating Non-compliance for the year 2020
	facilities away from sensitive receptors			
Water and Hydrology	Preventing waste, soil, etc. entering in the water system by waste collection, revegetation, and dust suppression etc.	48	0	0
	Ensure proper drainage of working areas e.g. perimeters lines must be provided with open shallow drains	0	24	0
Flora and Fauna	Agreeing with local authorities on tree felling.	0	24	0
	Prevent disturbance of animals	0	48	0
	Ensuring sufficient free flow in the construction work for fish migration	24	24	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	24	0	0
Monitoring of Noise Quality	Monitoring of noise level (dB) at selected sensitive sites during working hours	48	0	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.	48	0	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.	48	0	0
Monitoring of Drinking Water Quality	Performance of analyses on drinking water for: arsenic, iron, chloride and total faecal coliform bacteria.	48	0	0
Deployment of Environment and Safety Supervisor	Employ one full-time Environment and Safety Supervisor for compliance monitoring of EMP	48	0	0
Complaints and Environmental Incidents	Grievance Redress Mechanism will be established.	48	0	0
	Complaints received from the public or other stakeholders will be registered and recorded and	48	0	0

Environmental Issues	Types of Compliance, Non-compliance & Repeating Non-compliance	Total no. of Compliance for the year 2020	Total no. of Non-compliance for the year 2020	Total no. of repeating Non-compliance for the year 2020
	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.	48	0	0
	Action will be taken within 7 working days.	48	0	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	48	0	0
Training	Environmental training on EMP will be arranged for Construction Field supervisors and Environment & Safety Supervisors.	48	0	0
Electrical safety	Clearly visible notification on the safe use of electrical appliances	48	0	0
	Check all wirings to prevent any accident, fire due to short circuit	48	0	0
	Rise the wire system up or underground conduit system should be established	24	0	0
	Close all the switch board properly. Only responsible will check at regular intervals	48	0	0
	Cover the joint by tape or other insulating materials	48	0	0
Forklift Operation	Designate movement routes for forklifts	24	24	0
Safety at Barge	Occupational safety measures to be maintained	48	0	0
	Proper anchorage	24	0	0
	Balanced loading	24	0	0
	Workers to use PPE	24	0	0
	Maintain speed limit of forklift	24	0	0
	Regular toolbox talk	24	0	0
	Separate lane for pedestrian and forklift	0	24	0

4.6. Environmental Compliance / Non-Compliance Report: Package 02

SI	Environmental Issues	Types of Compliance, Non-compliance & Repeating Non-compliance	Total no. of compliance for the year 2020	Total no. of Non-compliance for the year 2020	Total no. of repeating Non- for the year 2020
1	Construction of Base camp	Obtaining approval for facilities construction work	128	0	0
		Erection of signboard in Bangla and English with project details	128	0	0
		Install accommodation facilities Engineers and other staff/workers	104	24	0
		Drainage channels installation	128	0	0
		Supply of safe drinking water	128	0	0
		Supply of adequate sanitation facilities	128	0	0
		Safety fencing/Barriers and Entry Kiosks	128	0	0
		Stock yard for plant and equipment	128	0	0
		Construction of storeroom/warehouse	128	0	0
		Temporary workshop facilities	104	24	0
		Arrangement of sufficient lighting facilities in the camp area	128	0	0
2	Fuel storage areas	Install hardstand and secondary containment	104	24	0
		Firefighting equipment installation	128	0	0
		Sand and shovel close-by	128	0	0
		Regular checks on physical condition	128	0	0
		Approval fuel storage	128	0	0
3	Access road to the base camp	Obtaining approval	128	0	0
		Construction of culverts if needed	0	128	0
		Construction of temporary road	128	0	0
4	Training	Environmental training on EMP will be arranged for Construction Field supervisors and Environment & Safety Supervisors	127	0	0
5	Occupational Health and safety	Development of Health and Safety Plan including emergency procedures	128	0	0
		Train all staff in health and safety	128	0	0
		Provision of HIV, including STI (sexually transmitted infections) information, education & communication	80	48	0
		Provision of PPE and ensuring their use	128	0	0
		Provision and use of life jacket during visiting campsite/worksites by boat	128	0	0
		Installation of first aid facilities at work site and camps with adequate stock	128	0	0
		Provide sanitation facilities where needed	128	0	0
		Provision of safe drinking water to work force (tube-well water, bottled water or pond water)	128	0	0
		Proper signaling of work areas	104	0	0

Sl	Environmental Issues	Types of Compliance, Non-compliance & Repeating Non-compliance	Total no. of compliance for the year 2020	Total no. of Non-compliance for the year 2020	Total no. of repeating Non- for the year 2020
6	Public Health and Safety	Notification of the public adjacent to the construction areas	128	0	0
		Installation of diversion signboard with warning for dedicated pathways for pedestrians	128	0	0
		Proper signaling of work areas	128	0	0
		Limitation of construction vehicles at public roads during peak hours	80	48	0
		The temporary traffic detours in settlement areas will be kept free of dust by frequent application of water	120	8	0
		Construction activities will be undertaken according to during daylight working hours between the hours of 07:00 – 17:00 on weekdays	128	0	0
7	Water Supply	Providing construction camps with potable water either through installing tube wells (hand pump, shallow and deep tubewell), Pond Sand Filter (PSF) or supplying safe bottled water	128	0	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	128	0	0
		Maintaining the distance of a tube well / surface water resource from a soak pit at minimum 15m	104	24	0
		Maintaining the drainage from the tube well diverting into the drainage system of the camp area	128	0	0
		Providing separate tube wells for the use of women	72	56	0
8	Sanitation	Providing suitable sanitation facilities for the workforce	128	0	0
		Ensuring the location plan of the latrine at least 50 meters away from the accommodation facility	128	0	0
		Providing separate latrines for the use of women	104	24	0
		Installing treatment facilities (ie septic tank, soak pits etc) for sewerage of toilet and camp site wastes	128	0	0
		Arranging disposal of wastewater from washrooms, kitchens, etc via the camp area's drainage system	128	0	0
9	Solid Waste Management	Ensuring collection and disposal of solid wastes within the construction camps and work areas	128	0	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	80	48	0
		Establish measures for Waste collection, transportation and disposal systems at approved disposal sites	80	48	0
		Disposal of construction and demolition waste	104	24	0
10	Wastewater	Installation of decanter boxes for washing buckets	104	24	0

SI	Environmental Issues	Types of Compliance, Non-compliance & Repeating Non-compliance	Total no. of compliance for the year 2020	Total no. of Non-compliance for the year 2020	Total no. of repeating Non- for the year 2020
		and cement mixers			
		Installation of proper filtering elements	128	0	0
		Carrying out periodic checks and clean- ups for the decanter box	0	128	0
		Prioritize reuse of aggregates and water from the decanter box	24	104	0
		Ensure safe disposal of liquid wastes generated at camp site	128	0	0
11	Air	Regular maintenance of vehicles	128	0	0
		Covering or wetting of dusty materials	128	0	0
		Dust suppression by wetting surfaces	128	0	0
		Impose speed limits	128	0	0
		Re-vegetate bare surfaces soonest	104	24	0
12	Noise	Notify nearby population prior to any typical noise events	128	0	0
		Ensure construction activities do not generate unacceptably high level of noise	128	0	0
		Restrict working to daylight hours	128	0	0
		Locate noisy equipment / facilities away from sensitive receptors	128	0	0
13	Water and Hydrology	Preventing waste, soil, etc entering in the water system by waste collection, re-vegetation and dust suppression etc	128	0	0
		Ensure proper drainage of working areas eg perimeters lines must be provided with open shallow drains	128	0	0
14	Monitoring of Drinking Water Quality	Performance of analyses on drinking water for: arsenic, iron, chloride and total faecal coliform bacteria	128	0	0
15	Deployment of Environment and Safety Supervisor	Employ one full-time Environment and Safety Supervisor for compliance monitoring of EMP	128	0	0
16	Complaints and Environmental Incidents	Grievance Redress Mechanism will be established	24	104	0
		Complaints received from the public or other stakeholders will be registered and recorded and be brought to the attention of the Site Engineer	128	0	0
		All environmental incidents occurring on the site will be recorded and be brought to the attention of the Site Engineer	128	0	0
		Action will be taken within 7 working days	104	24	0
17	Reporting and Documentation	The following records will be kept at site:	128	8	0
		Environmental Monitoring Results	-	-	-
		Contractors self-assessment record/results	-	-	-
		Register of non-compliance	-	-	-
		Register of corrective actions	-	-	-
		Monthly Environmental Reports	-	-	-



4.7. Selected Photos from the Audit

Package 01

Good Practices



First aid box with adequate items for the workers at Outlet-01 under polder-35/1



Presence of demarcation at Outlet -01 under polder-35/1

Bad Practices



Workers without using PPE at Slope Protection Work (Ch: Km 3+880) under polder-35/1



Workers without using PPE at Outlet-01 under polder-35/1



Workers without using PPE at Slope Protection Work (Ch: Km 4+239) under polder-35/1



No signal man and demarcation at stakeyard (Ch: Km 4.560) under polder-35/1

NGO Section



Meeting with NGO personnel (CNRS in Khulna Office under polder-32&33



Meeting with NGO personnel (Shushilan) in Sharonkhola Office under polder-35/1



Meeting with Radha Laxmi WMG under polder-35/1



Meeting with Radha Laxmi WMG under polder-35/1



Visit an IPM Demonstration plot in Radha Laxmi WMG under polder-35/1



Visit a Social Afforestation (Ch: From km 48.50 km to km 51.5) group at Dhansagar Khajurbaria WMG under polder-35/1

Package 02

Good Practices



Gateman measuring temperature at the entry of the gate at Nadmullah CC Block manufacturing yard under polder-39/2C



Supply of drinking water, seniteizer and First Aid box for the workers at Nadmullah CC Block manufacturing yard under polder-39/2C



Fire extinguisher with expiry date presence on the work site at Nadmullah CC Block manufacturing yard under polder-39/2C



Presence of Grievance collection box at Nadmullah CC Block manufacturing yard under polder-39/2C



Separate storeroom for oil & lubricant at Nadmullah CC Block manufacturing yard under polder-39/2C



Presence of one signage at FS-1 under polder-39/2C



Supply of drinking water and First Aid box for the workers at Galachipa CC Block manufacturing yard under polder-43/2C



Presence of demarcation at DS-1 under polder-43/2C



Supply of drinking water and First Aid box for the workers at DS-8 under polder-43/2C



Presence of demarcation at DS-1 under polder-43/2C



Supply of drinking water and First Aid box for the workers at DabluGANj CC Block manufacturing yard under polder-47/2



Workers are using face mask at Dalbuganj CC Block manufacturing yard under polder-47/2





Presence of signage and proper demarcation at Slope protection work (Ch:31+450) under polder-48



First Aid items for the workers at Slope protection work (Ch:31+450) under polder-48



Workers welding work using proper PPE at Burirchar CC Block manufacturing yard under polder-41/1



Supply of drinking water and First Aid box for the workers at Burirchar CC Block manufacturing yard under polder-41/1

Bad Practices



Stagnant water in drain at Nadmullah CC block manufacturing yard under polder-39/2C



Stuffs need to keep in designated place at Nadmullah CC block manufacturing yard under polder-39/2C



No signboard and demarcation at Embankment Construction (Ch: 50.05 km) worksite under polder-39/2C



No signboard and demarcation at Embankment Construction (Ch: Km 50.05) worksite under polder-39/2C



Electric wires haphazardly on the ground at the worksite (DS-8) under polder-43/2C



No signboard and demarcation at Embankment Construction (Ch: 0+850 km) worksite under polder-43/2C



Workers welding work without using proper PPE at Dabluganj CC Block manufacturing yard under polder-47/2



Empty cement bags stacked in open space at Dabluganj CC block manufacturing yard under polder-47/2



Stagnant water in drain at Burirchar CC block manufacturing yard under polder-41/1



Scraps and metallic items kept randomly at Burirchar CC block manufacturing yard under polder-41/1



Workers work without PPE in Cement storeroom at Gulbunia CC block manufacturing yard under polder-41/1



Workers work without PPE at Gulbunia CC block manufacturing yard under polder-41/1

NGO Section



Meeting with Taltoli Khal WMG under polder-43/2C



Meeting with Sotolobongola WMG under polder-41/1



Visit a Social Afforestation (Ch: km 5+300) group at Dakkhin Burirchar Burir Char under polder-35/1



Visit a Social Afforestation site (Ch: km 10+000) under polder-47/2

4.8. Labour Influx Report

Initial information on labour influx risks, requirements and implication for work package W-01 under CEIP-1

1. PROJECT DATA		
1.1	Name of Project	Coastal Embankment Improvement Project - Phase I (P128276)
1.2	Contract Package	Package-1
1.3	Date of Commencement	January 2016
1.4	Date of Completion	June 2021
1.5	Location	Polder-32 and Polder-33 under Khulna district; & Polder-35/1; Polder-35/3 under Bagerhat District
1.6	Name and Contact Information (email/phone) of Contractor	CHWE, mainland China
1.7	Name and Contact Information (email/phone) of all sub-Contractors	Project Manager Mr. Sun Huaxin; No sub-contractors; about 56 Chinese and skilled workers influx; 01 Indian worker; local labour and foremen about 610 persons;
1.8	Type of Works (single site, linear, clustered and construction duration)	Civil engineering/hydraulic works: earthen embankment; water control sluices; river bank protection works; embankment slope protection works; closure dam; offices and site buildings; excavation of sediment internal channels (khals); social re-afforestation; single and localized sites, stand-alone site for construction of one structure or one stretch of embankment etc; These are the standard engineering interventions in a typical coastal polder in Bangladesh, since 'time immemorial'; no rocket science; a lot of manual labour work activities, for men and women both;
2. INITIAL SCREENING LABOR INFLUX REQUIREMENTS AND IMPLICATIONS		
2.1	Will the project potentially involve an influx of migrant workers? If yes, are there also foreign labourers mobilized on site?	Yes, there are Migrant workers' influx at Project area, relatively small numbers and scattered all over the many construction sites; foreign labourers yes, Chinese & Indian, around 56 persons including middle technicians and Master of Science level engineers;
2.2	Is the influx of non-local workforce significant for the local community?	The mobilization of foreign worker started in November 2015 and on ward. Not significant because there are many stand-alone construction sites and the number of Chinese/foreign workers per stand-alone site is about 3 to 5 Chinese men; this is not disruptive for the social cohesion of the local site; local stand-alone construction sites are mostly far away from community centres (rural setting, remote sites; sluices are not located inside a community); In the camp site, there have a separate place for their living, dining. Also police from local Thana/authority provide the security for the safety of Chinese workers. There have two or three local translator; if any problem arises they will arrange communication with local people. Even now there is no complain from local people, mentioned that in camp site also have a register to note down to take proper action within appropriate time.

2. INITIAL SCREENING LABOR INFLUX REQUIREMENTS AND IMPLICATIONS		
		At least certain percentage of local people would have been mobilized in civil work that would be beneficial for the local people.
2.3	What are the opportunities for local laborers?	Of course there were opportunities for local worker in civil work. Local residents are poor people with virtually no mobility or transport facilities and are employed in agriculture, aquaculture and civil construction works such as road, buildings etc. in 'urban' areas, mostly intermittent job contracts. There is some small business such as small shops, chicken and duck breeding/farm, aquaculture, and motorbike repair workshops etc which do not employ many people; e.g. Polder-35/1 is located 100 km away from the city of Khulna, hence not much influx from Khulna to Polder-35/1; due to few numbers of small rudimentary road tracks, there is hardly any economic traffic to the 4 Polders; one needs to cross many rivers with (small) ferries; labour market is non-existent for local laborers; Recently for polder-32, 206 local workers engaged for construction workers; P-33, 80 local workers; P-35/1, 207 local workers; P-35/3, 70 local workers. There are no women because, for heavy civil work women are not suitable. By negotiating we fixed the salary, so there is no unsatisfactory and no complain.
2.4	Frequency of outsider's visit	Chinese labourers are generally permanently stationed and working; they live together inside a fenced compound, with professional security guards; Non-local labours are regular, but they have the seasonal vacation during rainy season.
2.5	Environmental sensitivity of the project site	Refer to the four approved EIA Reports of the 4 Polders; in general, the close location of the border lines of the Sundarbans mangrove forest prompt the Chinese Contractor to take care/be alerted of the possible negative impacts on the water, noise, environment, biodiversity of the Sundarbans;
2.6	Community experience with similar projects?	Much community experience yes as all 139 coastal polders were built back in the 1970s and 1980s and had undergone many subsequent small and big interventions, emergency works, repair and recovery after huge flood disaster events etc.; local labourers are fully familiar with similar types of civil engineering works; And also familiar with the similar movement of non-local labour because in coast region in different time different improvement work have done throughout the specific period.

3. SOCIO-ECONOMIC CONSIDERATIONS		
3.1	How similar are local and migrant labour backgrounds? (cultural, religious and demographic considerations)	The background particularly cultural, religious and demographic point of view is dissimilar in many ways and similar in some ways. They have different language, ethnicity, belief system even political system but it does not create any problem to perform the job or pose any risk for the project. The migrant is few in number that does not make any imbalance in local social coherence. The main similarities imply that both groups come from same profession; There is no issue at all, because the non-local workers are busy in day time for work. Also the work site is located in different place from their residence.

2. INITIAL SCREENING LABOR INFLUX REQUIREMENTS AND IMPLICATIONS		
		No negative impact on job market because this project makes the more opportunity of job for local people.
		Group means not like two separate parts. Both local and non-local workers are working as a part of the project as like a team work.
3.2	Are there increased competitions for resources (e.g. accommodation, water, food, fuel) with the local community?	Absolutely not;
3.3	Given local community characteristics any specific adverse impacts anticipated?	No adverse impact is anticipated at the moment;

4. LOCAL COMMUNITY (Please provide Polder wise description of Facilities)			
4.1	Size of Local Population	Bangladesh is highly densely populated country but the project area has lesser density. It is found from the RAP document that inside the Polder-32, 33, 35/1 and 35/3 the total population amounts to 38397, 62305, 99182 and 33075 respectively.	
4.2	Working age population and capacity (education, skills, experience)	The labour force (age between 15 and 59 year), the actual number of people available for work is 61%. The labour force includes both the employed and the unemployed. According to BBS, 30% of the people fall in the age group 1-15 year. The literacy rate in the project area roams around 58% whereas the national figure is 51.8%. The livelihood of 66.1% of people depends on agriculture activities;	
4.3	Working age population capacity	<i>Education</i>	<i>Skill</i>
		No information is available	No information
4.3		<i>Experience</i>	No information
4.4	Local capacity for infrastructure, services, utilities, health (please provide a short brief)	Inside the 4 Polders, both earthen and pucca roads are available and there are waterways also. There are academic institution, market, religious institution, local government offices, providing necessary public services to the local people. Motor bikes play important role to communicate in project areas. Auto rickshaw is main transportation vehicle; No there is no impact of these facility due to the inflow of chines people.	
4.5	Availability of accommodation, food, water (please provide a short brief)	Contractor provides adequate accommodation, water and food, protective sheds etc to their workers; Yes these facilities are easily available for rent and consumption	
4.6	Are there any security considerations?	Not from the local governments; Contractor is now paying for the security force mainly in work site cum residential sites.	
4.7	Are there any marginalized, vulnerable, ethnic, indigenous- communities?	Some marginalized and vulnerable people are in the project side like other places of the country but there are no ethnic and indigenous groups.	

5. MAINTENANCE OF OTHER LABOR RECORDS		
5.1	Is a copy of photo ID of each labourer kept with the Contractor/ Sub-contractor?	Yes. NID for local workers and visa copy for chinese workers; no sub-contractors;
5.2	Is contact information of labour's next-of-kin kept for each labourer?	Yes. Family members are mostly close-by. Chinese contractor recruits mainly from the locality;

6. LABOR PROFILE (Please provide Polder wise information)

This data is to be collected for each Polder where civil works has commenced, and cover the regular labour, temporary labour, labour hired through sub-contractors or labour contractors / groups.

		Male		Female		Total
6.1	Number of laborers by sex					
6.2	Number of laborers by skill	314		2		316
		<i>Skilled</i>	<i>Semi-skilled</i>	<i>Unskilled</i>		<i>Total</i>
6.3	Number of laborers by origin	113	58	14		316
		<i>Local (same or adjoining district)</i>	<i>Other districts</i>	<i>Other Country</i>		<i>Total</i>
6.4	Number of laborers by age	119	48	18		316
		<i>18-25</i>		<i>25- 50</i>	<i>Above 50</i>	<i>Total</i>
6.5	Source of labour	87		56	42	316
		<i>Contractor</i>	<i>Subcontractor</i>	<i>Independent</i>	<i>Other</i>	<i>Total</i>
		185	0	0	0	316

7. FACILITIES (Please provide Polder wise description of Facilities)

7.1	Details of labour camps	Number	Permanent/Temp.	Location	Distance from nearest village/habitation
		2	<i>Permanent</i>	Every CC blocks	Almost within 100m
		4	<i>Temporary</i>	yard and every work site	
7.2	Type of housing in labour camp on leased land (temporary shelters / kuchha /pukka)	Work site have temporary shelter but cc block yard has pukka house			
7.3	Is there any housing on public land like roadsides, open fields and other spaces?	No. Only housing exist inside the constructional premises.			
7.4	Is there any housing in rented accommodation in residential areas? If so, who is it rented by?	Yes, for the Chinese and Bangladeshi senior staff. Contractor rents the buildings themselves			
7.5	How many laborers have families on/near	The migrant workers do not live with their family. Sometime their family member visit here for			

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	worksite?	very short time. The local worker mostly live with their family
7.6	Likelihood of family members accompanying (visiting)	They hardly visit the project side. Labourers have family homes close by; daily transport is done by motorbikes or by vehicles of Contractor
7.7	Is drinking water available on site and at the campsite?	Yes
7.8	Are latrines and urinals provided on site and at the campsite?	Yes
7.9	Are First Aid facilities provided on site?	Yes
7.10	Does a doctor visit the worksite / campsite regularly?	Yes
7.11	Is there a tie-up with a hospital or dispensary near the worksite / campsite	Yes
7.12	Is there a facility for cooking / canteen facility for all labour?	Yes
7.13	Are leisure activities / facilities available for all labour	Yes
7.14	Is transport to and from the worksite provided to labour?	Yes, for migrant labourer but no provision for unskilled local labourer.

8. SUPERVISION BY LABOR OFFICIALS		
8.1	Has the worksite / campsite been inspected by a labour official?	In 20-22 November, 2017 and 04-06 February, 2018 WB team visited the work area of CEIP-1,
8.2	How many times has the worksite / campsite been inspected by a labour official since commencement of work?	Six times since commencement from WB. From the part of PMU and BEDB, visited the worksite frequently, as per the need basis.
8.3	What documents were inspected by labour officials?	Accident /injury register, salary sheet/record
8.4	What documents were maintained and which ones were not?	Safety training record, accident register, safety guideline document, compliance register, GRM system notice. Nothing missing, if anything required please give us the valuable suggestion. We will ensure it in work site.
8.5	What directions were given by labour officials?	About personal health and safety
8.6	What is the mode of compliance with such directions?	Action taken in field level as soon as possible
8.7	Are you facing any legal proceedings on labour issues in Labour Court/ Other?	None;

9. ACCIDENTS, EMERGENCIES AND INCIDENTS (Please provide Polder wise description of Facilities)		
9.1	What is the nature of accidents / emergencies usually occurring at a worksite like yours?	No accident so far has been taken place
9.2	Is a functioning First Aid available at the campsite / worksite?	Yes
9.3	Is functioning fire-fighting equipment available at the campsite / worksite?	Yes
9.4	Which is the nearest doctor / clinic / dispensary?	Within some kilometres, alert by mobile phone of which the number is known to all Chinese people (Chinese medical doctor available); doctor covers the four Polders
9.5	Which is the nearest hospital?	The nearest hospital is situated at Upazila head quarter. But there some clinic or satellite clinic inside the polder. If any worker required critical services then he/she refer to Khulna or Dhaka. The contractor have own car for every camp site and CC block manufacturing site to transport he/she to Khulna or Dhaka.
9.6	Which is the nearest Police Station?	In any Polder, there is Police office close-by, within 10 km range. On the other hand, a team of 2-3 nos. police available in work camp site and cc block manufacturing site cum residential site. If required they will help us. But even no situations arise to do this.
9.7	Are details of nearest doctor / clinic / dispensary / hospital / Police station available and prominently displayed at worksite / campsite?	Yes
9.8	What is the system of informing next of kin?	For the migrant worker, there is focal person to deal with the issue. The contact numbers of all workers are well documented. For the local worker, the system is same. Bengali senior staff employed by the Chinese contractor.
9.9	What is your familiarity with accident reporting procedures?	Chinese Contractor holds regular drills on procedures and protocols to enact in case of accidents
9.10	What is your familiarity with police reporting procedures?	We are well familiar to local police reporting system and we have their contact number and relation. So far, no such incident whereby Police is to be called upon. It is worthy to mention that Contractor site camps are secured by police protection permanently.
9.11	Is there any mechanism to address the work place Sexual Harassment of Women	Yes (sanctions are known to Chinese workers and their bosses). Mechanism is there. We have gender policy. There is complaint system to mitigate sexual harassment. Finally, legal step can

Initial information on labour influx risks, requirements and implication for work package W-02 under CEIP-1

1. PROJECT DATA		
1.1	Name of Project	Coastal Embankment Improvement Project - Phase I (CEIP-1)
1.2	Contract Package	Package-2
1.3	Date of Commencement	12 th July, 2017
1.4	Date of Completion	30 th June, 2022
1.5	Location	Polder-39/2C, Polder-40/2, Polder-41/1, Polder-43/2C, Polder-47/2 & Polder-48
1.6	Name and Contact Information (email/phone) of Contractor	Chongqing International Construction Corporation cicobangladesh@gmail.com/+8801917264485
1.7	Name and Contact Information (email/phone) of all sub-Contractors	None
1.8	Type of Works (single site, linear, clustered and construction duration)	<ol style="list-style-type: none"> 1. Upgrading via new construction and re-sectioning of embankments with a length of about 209km; 2. Excavation and re-excavation of drainage channels in the Polders with a total length of about 188km; 3. Construction of 50 drainage sluices; 4. Repairing of 6 drainage sluices; 5. Construction of 73 flushing sluices; 6. Repairing of 8 flushing sluices; 7. Construction of embankment slope protection works with a total length of some 9.5km; 8. Construction of river bank protection works with a total length of 5.40 km; 9. Construction of 8 Khal Closing Closures with varying widths between 35m to 60m; 10. Dismantling of 36 drainage sluices, 70 flushing sluices and road pavement for about 50 km; 11. Construction of RCC Flood wall with a length of about 17km; 12. Construction of Road Pavement with a length of about 51km. <p>Construction duration: 42 months</p>

2. INITIAL SCREENING LABOR INFLUX REQUIREMENTS AND IMPLICATIONS		
2.1	Will the project potentially involve an influx of migrant workers? If yes, are there also foreign laborers mobilized on site?	Yes, scattering all over the construction sites. There are no foreign labourers mobilized onsite.
2.2	Is the influx of non-local workforce significant for the local community?	Yes, these benefits are typically related to economic opportunities through employment and/or training by the project, or through selling goods and services. Other benefits include the provision of local infrastructure (e.g., access roads, power or water connection) which is developed for the project and which serves the community beyond the project duration.
2.3	What are the opportunities for local laborers?	It will bring more employment opportunities to the local labourers. It will improve the education status because of workers' training.
2.4	Frequency of outsider's visit	Normal
2.5	Environmental sensitivity of the project site	Fuel supply for cooking and heating, fuel storage area, by-pass road construction, sanitation, water supply and construction work.
2.6	Community experience with similar projects?	Embankment construction, Bridge construction and road pavement construction

3. SOCIO-ECONOMIC CONSIDERATIONS		
3.1	How similar are local and migrant labour backgrounds? (cultural, religious and demographic considerations)	The labour no matter where they from are Bangladesh citizen. They almost have the same cultural and religious background. The demographics are shifted just from one region to another and there is no change on total demographics of Bangladesh.
3.2	Are there increased competition for resources with the local community (e.g. accommodation, water, food, fuel)	More water, electricity, medical services, transport, education and social services will be required with the influx
3.3	Given local community characteristics any specific adverse impacts anticipated?	It will bring more influx of additional population and Increased pressure on accommodations and rents, Increase in traffic and related accidents

4. LOCAL COMMUNITY (Please provide Polder wise description of Facilities)								
4.1	Size of Local Population	Polder-39/2C: 84853, Polder-40/2: 41317, Polder 41/1: 41051, Polder-43/2C: 14851, Polder-47/2: 5411, Polder-48: 26260						
4.2	Working age population and capacity (education, skills, experience)	No information						
4.3	Working age population capacity	<table border="0"> <tr> <td><i>Education</i></td> <td><i>Skill</i></td> <td><i>Experience</i></td> </tr> <tr> <td>No information</td> <td>No information</td> <td>No information</td> </tr> </table>	<i>Education</i>	<i>Skill</i>	<i>Experience</i>	No information	No information	No information
<i>Education</i>	<i>Skill</i>	<i>Experience</i>						
No information	No information	No information						
4.4	Local capacity for infrastructure, services, utilities, health (please provide a short brief)	The health centre and hospital are available in local place.						
4.5	Availability of accommodation, food, water (please provide a short brief)	Accommodation, water and food is available to the local community.						
4.6	Are there any security considerations?	Yes						
4.7	Are there any marginalized, vulnerable, ethnic, indigenous- communities?	No						

5. MAINTENANCE OF OTHER LABOR RECORDS		
5.1	Is a copy of photo ID of each labourer kept with the Contractor/ Sub-contractor?	Yes
5.2	Is contact information of labour's next-of-kin kept for each labourer?	No

6. LABOR PROFILE (Please provide Polder wise information)

This data is to be collected for each Polder where civil works has commenced, and cover the regular labour, temporary labour, labour hired through sub-contractors or labour contractors / groups

6.1	Number of laborers by sex	Male		Female		Total
		377		5		
6.2	Number of laborers by skill	Skilled	Semi-skilled	Unskilled		Total
		136	74	172		382
6.3	Number of laborers by origin	Local (same or adjoining district)	Other districts	Other Country		Total
		320	60	0		382
6.4	Number of laborers by age	18-25		25-50	Above 50	Total
		158		219	5	382
6.5	Source of labour	Contractor	Subcontractor	Independent	Other	Total
		382			0	382

7. FACILITIES (Please provide Polder wise description of Facilities)

7.1	Details of labour camps	Number	Permanent/Temp.	Location	Distance from nearest village/habitation
		6	Temporary	Near the project	Within 1 km
7.2	Type of housing in labour camp on leased land (temporary shelters / kuchha / pukka)	Temporary shelter			
7.3	Is there any housing on public land like roadsides, open fields and other spaces?	Yes, there are housings on open field.			
7.4	Is there any housing in rented accommodation in residential areas? If so, who is it rented by?	Yes, it is rented by the Chinese Contractor as temporary shelter.			
7.5	How many laborers have families on/near worksite?	No information			
7.6	Likelihood of family members accompanying (visiting)	Not allowed			
7.7	Is drinking water available on site and at the campsite?	Yes			
7.8	Are latrines and urinals provided on site and at campsite?	Yes			

7.9	Are First Aid facilities provided on site?	Yes
7.10	Does a doctor visit the worksite / campsite regularly?	No, sometimes.
7.11	Is there a tie-up with a hospital or dispensary near the worksite / campsite	Yes
7.12	Is there a facility for cooking/canteen facility for all labour	No
7.13	Are leisure activities / facilities available for all labour	Yes
7.14	Is transport to and from the worksite provided to labour?	Yes

8. SUPERVISION BY LABOR OFFICIALS		
8.1	Has the worksite / campsite been inspected by a labour official?	No
8.2	How many times has the worksite / campsite been inspected by a labour official since commencement of work?	None
8.3	What documents were inspected by labour officials?	None
8.4	What documents were maintained and which ones were not?	None
8.5	What directions were given by labour officials?	None
8.6	What is the mode of compliance with such directions?	None
8.7	Are you facing any legal proceedings on labour issues in Labour Court/ Other?	No

9. ACCIDENTS, EMERGENCIES AND INCIDENTS (Please provide Polder wise description of Facilities)		
9.1	What is the nature of accidents / emergencies usually occurring at a worksite like yours?	Drowning, Injury from machine
9.2	Is a functioning First Aid available at the campsite / worksite?	Yes
9.3	Is functioning fire-fighting equipment available at the campsite / worksite?	Yes
9.4	Which is the nearest doctor / clinic / dispensary?	Polder-39/2C: Digital X-ray Clinic, 5 minutes by car away from the campsite, 01717-997-914, Kamrunnasar Polder-41/1: DR.Abudus salam M.B.B.S Ex-medical officer of Barguna general hospital, clinic-sharif x-ray clinic, Dispensary mourir medical hall. Polder-47/2: 1 km from our working site to the nearest dispensary Polder-48: 100 m from our temporary camps to the nearest dispensary but the doctor and clinic are 1 km away.
9.5	Which is the nearest hospital?	Polder-39/2C: Upazila Health Complex, 5 minutes by car away from the campsite, 01735-950-462, Fakrel Islam. Polder-41/1: Barguna sader hospital Polder-47/2: 10 km from our working site to the nearest hospital.

9.6	Which is the nearest Police Station?	<p>Polder-48: the nearest hospital is 3 km towards the seaside.</p> <p>Polder-39/2C: Bandarie Police station, 5 minutes by car away from the campsite, 01713-374-337, Kamruzzaman.</p> <p>Polder-41/1: Barguna sader police station.</p> <p>Polder-47/2: 8 km from our working site to the nearest police station.</p> <p>Polder-48: the nearest police station is 3 km approximately around the third bridge.</p>
9.7	Are details of nearest doctor / clinic / dispensary / hospital	<p>Polder-39/2C: Yes, such information shall be printed on paper and displayed at the site office.</p>
		<p>information is true and they are able to respond within short period and mentioned location is very nearest to our worksite.</p> <p>Polder-47/2: Yes. Such, information shall be printed on paper and displayed at the site office.</p> <p>Polder-48: Yes, such information shall be printed on paper and displayed at the site office.</p>
9.8	What is the system of informing next of kin?	<p>A phone number chat including all the Chinese people has been distributed to all working site/ campsite, anything happening at site will be reported immediately to the person who is in charge of corresponding issue.</p>
9.9	What is your familiarity with accident reporting procedures?	<p>For any accident happened at site, the foreman shall report to the site office and site manager immediately, and site office shall write on the accident log book for records. Then site office shall report to the corresponded local government office.</p>
9.10	What is your familiarity with police reporting procedures?	<p>So far, no such incident whereby Police is to be called upon. The Contractor camps are secured by police.</p>
9.11	Is there any mechanism to address the work place Sexual Harassment of Women at the project sites?	<p>No, because all male workers at the project working at sites and the working place for female staff are limited in the camp and office.</p>
	worksite / campsite?	<p>Dispensary mouir medical hall, Barguna sader hospital, Barguna sader police station, above mentioned details</p>

4.9. Time Bound Corrective Action Plan Suggested by the 5th Annual Environmental Audit Findings

Table 21: Time Bound Corrective Action Plan Suggested by Fifth Annual Environmental Audit

SI	ACTION TO BE TAKEN	PARTY RESPONSIBLE	TARGET DATE
1	Contractors of both Packages should follow the findings and recommendations of this fifth annual environmental audit.	Contractors of Package 01 and Package 02	Continuous
2	The DDCS&PMS Consultants and PMU should consider the recommendations for the upcoming next phase of the project where applicable.	DDCS&PMS Consultants and PMU	As and when applicable
3	The audit report of fifth audit should be shared with the Contractors, Consultants, relevant sub-Consultants, and PMU staff.	PMU with relevant consultants, sub-consultants, and contractors who should address the findings	Assuming by 15 May 2021 (subject to obtain acceptance from WB)
4	As many of the findings of fourth Annual Environmental Audit and couple findings of third Annual Environmental Audit have not been implemented yet, this audit recommends implementing those findings as per the action plan of fifth audit.	As applicable	As per the deadlines mentioned below for 4 th and 3 rd Audits
5	The practice of using PPE should be enhanced by the contractors of Package 01 and Package 02.	Contractors of Package 01 and Package 02	20 May 2021 (to show significant improvement in use of PPE) To be continued
6	Both of the Contractors of CEIP-1 are recommended to arrange exchange visit for learning and scale up of practices for improvement environmental compliance in their packages in the current year.	Contractors of Package 01 and Package 02	Contractor of Package 01 will visit to Package 02 areas by 30 March 2021; Contractor of Package 02 will visit to Package 01 areas by 20 June 2021 (if COVID19 situation allows)
7	Both the Contractors should carry out the efforts to improve the EHS practices.	Contractors of Package 01 and Package 02	20May 2021 (to start paying more efforts) To be continued

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Fifth Annual Environmental Audit Report – January-December 2020

Page A-48



SI	ACTION TO BE TAKEN	PARTY RESPONSIBLE	TARGET DATE
8	As this fifth audit also found that EHS practices in Package 02 are still poor, the Contractor of Package-02 should give continuous effective efforts to improve the EHS practices. The DDCS& PMS Consultants and PMU also need rigorous supervision to improve the EHS practices in Package 02.	Contractor of Package 02; DDCS& PMS Consultants; and PMU	By 20 May 2021 to Show good performance; Practices to be continued and
9	It is recommended to initiate the fish conservation activities for Package 02	Contractor of Package 02	31 July 2021
10	DDCS&PMS Consultants are advised to give the Contractor of Package 01 an orientation on how to fill the monitoring checklists and prepare report for them.	DDCS&PMS Consultants	20 May 2021
11	It is recommended that Contractor of the Package 01 prepares a site- specific decommissioning plan, submits to DDCS&PMS Consultants, PMU and M&E Consultants, and implement this after getting approval from PMU.	Contractor of the Package 01	31 March 2021
12	The implementation of the decommissioning plan is recommended to be monitored by the PMU and DDCS&PMS Consultants.	DDCS&PMS Consultants; PMU	20 May 2021 to end of the Package works
13	This audit also recommends fixing the gates of the completed sluices to make them functional to reduce the environmental stress and people sufferings in their agriculture.	Contractors of Package 01 and Package 02; DDCS&PMSC NGOs; PMU.	30 May 2021
14	The recommendations made for Long Term Monitoring, Research, and Analysis of Bangladesh Coastal Zone Consultants during last audit are	Long Term Monitoring, Research, and Analysis of Bangladesh Coastal Zone Consultants	As per the deadlines provided with the action plan of 4 th audit below

SI	ACTION TO BE TAKEN	PARTY RESPONSIBLE	TARGET DATE
	still applicable as none of them has been addressed. It is recommended that the said Consultant address the recommendations made during fourth audit as per the action plan.		
15	Considering that there are many gaps in field level EHS practices, field level Environmental Specialist of PMU will prepare a monthly site and polder specific summary findings report for the visited sites and share the report with the Project Director with a copy to Senior Environmental Specialist.	PMU	From May 2021
16	PMU with the help of DDSC & PMSC identify the issues and the relevant agencies/ stakeholders for EMP implementation and continue coordination with them as applicable.	of DDSC & PMS Consultants; PMU	Will be looking for more coordination as and when required
17	All the responsible parties implement the Corrective Action Plan following the deadlines.	Contractors of Package 01 and Package 02; of DDSC & PMS Consultants; Long Term Monitoring, Research, and Analysis of Bangladesh Coastal Zone Consultants; and PMU	To be continued
18	The audit recommends that the International Environmental Specialists of DDSC&PMS Consultants and Third Party M&E Consultants are mobilized and the Project Director of CEIP-1 extends cooperation to mobilize them.	DDCS&PMS Consultants; and Third Party M&E Consultants; The Project Director to Cooperate	June to July 2021 (if RDDP budget covers)
19	Both the Contractors are advised to follow the Polder-Specific recommendations those came out from the Audit (included in conclusion and	Contractors of Package 01 and Package 02;	Start from May 2021 and complied all the findings by June 2021

SI	ACTION TO BE TAKEN	PARTY RESPONSIBLE	TARGET DATE
	recommendation section of the report)		
Pending items of 4th Annual Environmental Audit need to be addressed			
1	Contractors of both Packages should follow the findings and recommendations of this audit.	Contractors of Package 01 and Package 02	Continuous process as and when applicable
2	The DDCS&PMS Consultants and PMU should consider the recommendations for the upcoming next phase of the project where applicable.	DDCS&PMS Consultants and PMU	To adopt as and when required
3	The audit report should be shared with the Contractors, Consultants, relevant sub-Consultants, NGOs and PMU staff and the responsible parties should address the findings.	Third Party M&E Consultants with PMU, PMU with relevant consultants, sub-consultants, NGOs and contractors who should address the findings	Complied
4	Both the Contractors recommended to revise the EAPs and C-ESMPs considering the frequencies for environmental monitoring testing suggested in EMPs in their next revision.	Contractors of Package 01 and Package 02	20 May 2021
5	The Contractors of both Package 01 and Package 02 must address the risks of air quality (e.g. emissions from plants, vehicle), and the environmental and health risk for poor drinking water and sanitation facilities with EHS Risk Assessment reports.	Contractors of Package 01 and Package 02	31 May 2021
6	Considering the smaller number of EMP implementation budget items with the contract of Package 01, it is recommended that DDCS&PMSC monitor the implementation of mitigation measures for each impact area to ensure they are properly addressed. The M&E Consultants and PMU to continue to spot-check.	DDCS&PMSC, ME& Consultants and PMU	To be continued up to closure of Package 01 works

SI	ACTION TO BE TAKEN	PARTY RESPONSIBLE	TARGET DATE
7	PMU with the assistance of DDCCS&PMS Consultants and M&E Consultants to incorporate an assessment of the environmental impacts of the completed works of Package 01 in the next Bi-Annual Environmental Monitoring Report.	PMU with assistance of DDCCS&PMS Consultant M&E Consultants	Complied
8	PMU with the assistance of DDCCS&PMS Consultants and M&E Consultants to conduct a supervision for ongoing works to evaluate whether it is following environmental good practice and health and safety measures are in place. In case of any gap identified, the contractor needs to prepare a retrofit action plan and continue with monitoring.	PMU with DDCCS&PMS Consultants, M&E Consultants and Contractors	Continuous
9	DDCCS&PMS Consultants need to include how EMP compliance will be monitored and achieved with their Quality Assurance Plan.	DDCCS&PMS Consultants	10 June 2021
10	As the compliance level for the Decommissioning of Temporary Facilities and Hard Rock Pavement is extremely poor, the Package 01 Contractor needs to ensure necessary efforts to improve the compliance level.	Contractor of Package 01	15 May 2021
11	To improve the unhygienic conditions of the toilets of Contracts of Package 01 and Package 02, they need to ensure soak pit/ septic tanks with all constructed toilets, regular cleanliness and maintenance of the toilets, water seal with all toilets, supply of sufficient water and	Contractor of package 01 and package 02	15 May 2021

SI	ACTION TO BE TAKEN	PARTY RESPONSIBLE	TARGET DATE
	soap inside the toilets. Moreover, sensitizing the workers regularly on hygienic practices should be also carried out.		
12	PMU is requested to share the ESIRT toolkit with WB for their review and both the Contractors need to follow the Environmental Social Response Tool (ESRIT) kit as it is not being followed.	PMU to Share with WB and Contractors of Package 01 and Package 02 to follow	31 May 2021
13	The practice of using PPE should be enhanced.	Contractors of Package 01 and Package 02	Continuous
14	Both the Contractors need to carry out environmental monitoring testing as per the schedule every year.	Contractors of Package 01 and Package 02	Following the suggested schedule
15	Both Contractors to follow proper record keeping of EHS practices	Contractors of Package 01 and Package 02	20 May 2021
16	Both the Contractors should carry out the efforts to improve the EHS practices.	Contractors of Package 01 and Package 02	Continuous
17	EHS practices in Package 02 (other than those in Polder 39/2C) are found to be poor, the Contractor of Package-02 should give continuous effective efforts to improve the EHS practices.	Contractors of Package 02	Continuous
18	Alternative/ diversion canal should be ensured in case of construction of sluices rather stopping the water flow to reduce environmental stress and people's sufferings.	Contractors of Package 01 & Package 02 and DDCS&MPS Consultants	Continuous as and when required
19	Long Term Monitoring, Research, and Analysis of Bangladesh Coastal Zone Consultants need to add section with the report by giving ideas how biodiversity/ecology and environment may be impacted	Long Term Monitoring, Research, and Analysis of Bangladesh Coastal Zone Consultants	30 April 2021

SI	ACTION TO BE TAKEN	PARTY RESPONSIBLE	TARGET DATE
	in relation to the polder development activities including the baseline conditions as mentioned in section 2.8.3.		
20	The activity of polder development plan of Long Term Monitoring, Research, and Analysis of Bangladesh Coastal Zone Consultants is suggested to include study or polder specific EIA on the areas about environmental status and the study should include the environmental base line information/ impacts/constraints/ challenges may be evolved for polder development as well as the measures will be needed to be taken.	Long Term Monitoring, Research, and Analysis of Bangladesh Coastal Zone Consultants	30 April 2021
21	The updated design and specification Long Term Monitoring, Research, and Analysis of Bangladesh Coastal Zone Consultants need to consider the environmental aspects.	Long Term Monitoring, Research, and Analysis of Bangladesh Coastal Zone Consultants	Continuous parallel to the design and specification works
22	Environmental Specialist of the Long Term Monitoring, Research and Analysis Bangladesh Coastal Zone Consultants needs to work by maintaining close coordination including updating about works with the Senior Environmental Specialist of PMU of CEIP-1 and also maintains good collaboration with Environmental Specialists of other Consultants (DDCS&PMS Consultants and 3rd Party M&E Consultants) of CEIP-1.	Long Term Monitoring, Research, and Analysis of Bangladesh Coastal Zone Consultants	31 January 2021
23	The training module and the trainings to be carried out by	All NGOs of CEIP-1	Complied

SI	ACTION TO BE TAKEN	PARTY RESPONSIBLE	TARGET DATE
	the NGOs should have discussion on the use of required PPE during preparation and application of the pesticides. Management of pesticides related waste in sound manner should be also discussed. The proper weather conditions, proper time and wind direction to be followed in case of application of the pesticides should be discussed in training module and during the training. The above the EHS issues for pesticides use should be discussed in IPM and ICM module and during the training of all the NGOs of CEIP-1.		
24	NGOs should involve the local level GoB DAE Officers in their IPM activities.	All NGOs of CEIP-1	Complied
25	Public awareness of the GRM mechanism must be enhanced as the number of grievances seems to have fallen to negligible levels in the one-year period covered by this audit.	DACS&PMS Consultants	Continuous
26	It is recommended to address the polder-specific recommendations of the fourth environmental audit for the items which are applicable in the fields currently (e.g. works of many audited sites may be accomplished). For information, a polder-specific action items has been annexed with the fourth Annual Environmental Audit report.	Contractors of Package 1 and Package 2, and the NGOs of relevant polders	Continuous
Pending items of 3rd Annual Environmental Audit need to be addressed			
1	Along with other Polders, it is recommended that the Contractor of Package 02 concentrate on complying EHS	Contractor of Package 02	20 May 2021

SI	ACTION TO BE TAKEN	PARTY RESPONSIBLE	TARGET DATE
	issues at Polder 47/2 and 48 for which the audit found poor EHS practices.		
2	Contractor's EAPs and C-ESMPs should be improved continuously as those are living documents. The monitoring frequencies spelled out in the EAPs and C-ESMPs should be consistent with the monitoring frequencies defined with the CEIP-1's EMPs.	Contractors of Package 01 and Package 02	31 May 2021

