Environmental Monitoring Report

Project No. 47254-003
Semi-annual Report (July-December 2022)
February 2023

Bangladesh: Dhaka Water Supply Network Improvement Project (DWSNIP)

Prepared by the Dhaka Water Supply and Sewerage Authority (DWASA), Government of Bangladesh for the Asian Development Bank.

DHAKA WATER SUPPLY NETWORK IMPROVEMENT PROJECT
(DWSNIP, ADB Loan No. 3397-BAN)

PROJECT MANAGEMENT UNIT

10th

SEMI ANNUAL ENVIRONMENTAL MONITORING REPORT (SEMR)

(Period July - December 2022)

February 2023

Dhaka Water Supply and Sewerage Authority (DWASA)

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ABBREVIATIONS

ADB	–	Asian Development Bank
ARE	-	Assistant Resident Engineer
BRM	-	Bangladesh Resident Mission
BOD_5	-	Biochemical Oxygen Demand in 5 days
CPP	-	China Petroleum Pipeline Engineering Company Ltd.;
CFMCC	-	China First Metallurgical Group Co. Ltd.
COVID	-	Corona Virus Disease of 2019
CME	-	Contract Management Expert
DWASA	-	Dhaka Water Supply and Sewerage Authority
DWSNIP	-	Dhaka Water Supply Network Improvement Project
DMA	-	District Metering Area
DMSC	-	Design, Management and Supervision Consultants
DoE	-	Department of Environment
DTW	-	Deep Tube well
ECC	-	Environmental Clearance Certificate
EMP	-	Environmental Management Plan
EIA	-	Environmental Impact Assessment
GoB	-	Government of Bangladesh
GRC	-	Grievance Redress Committee
GRM	-	Grievance Redress Mechanism
HDD	-	Horizontal Directional Drilling
ICB	-	International Competitive Bidding
IEE	-	Initial Environmental Examination
LGD	-	Local Government Division
PMU	–	Project Management Unit
PCU	-	Project Coordination Unit
PPE	-	Personnel Protective Equipment
PM	-	Project Manager
PM10	-	Particulate Matter diameter less than 10 micron
PM2.5	-	Particulate Matter diameter less than 2.5 micron
SCC	-	Site Clearance Certificate
SPM	-	Suspended Particulate Matter
SPS	-	Safeguard Policy Statement
SEMR	-	Semi Annual Environmental Monitoring Report
SEP	-	Site Environmental Plan
SEMP	-	Site Specific Environmental Management Plan
SIU	-	Safeguard Implementation Unit

EXECUTIVE SUMMARY

Dhaka Water Supply Network Improvement Project (DWSNIP) has been initiated by Dhaka Water Supply and Sewerage Authority (DWASA) in improving the water supply distribution network in various zones of Dhaka City. The estimated cost of the Project is US$ 408 million. The Government of the People's Republic of Bangladesh (GOB) has obtained a loan of US$ 275 million from the Asian Development Bank (ADB Loan: 3397-BAN) and the balance US$133 million equivalent would be financed by the GOB. The Project will implement 75 DMAs in which about 1669 km pipe lines will be rehabilitated including about 148,230 service connections. The Project has five (5) contract packages and the expectation to complete by the year 2023 (As proposed in RDPP). The Project was classified as Category Red by the Department of Environment (DoE) and a Category B project by the Asian Development Bank (ADB).

The Safeguard Experts and Executive Engineers were deployed in the PMU and PCU level along with the DMS Environmental Team, Resettlement Specialist and Social /Gender Experts are already on board. The Environmental Clearance Certificates were obtained, for different packages/batches, from DoE during 12 June 2019. As per condition of ECC provided by DoE, DWASA obtained Renewal Certificates from DoE during June 2020 (the first renewal certificate), June 2021 (second renewal certificate) and July 2022 (third renewal certificate). All renewal certificates obtained from DoE are attached in **Annex-3**

For implementation of EMP, arrangement of human safety, provision of PPE for workers engaged in construction is being implemented. Training is being provided to the contractors' representatives by DMSC's Environmental Team. Moreover, instruction has been provided to follow the specified clause of BID document to mitigate environmental and social impacts. Measures were taken to protect and facilities and locations of social and cultural importance (hot spots). Measures were taken to comply with occupational health and safety including measures to combat COVID19 situation.

Contractors have been taking mitigative measures and maintaining records through reporting of different potential environmental impacts associated with construction activities which are Air pollution, Noise pollution, Water pollution, etc. During the reporting period, ICB 2.8 and ICB 2.9 have conducted during construction monitoring (air, noise and water quality) for DMA during civil works and construction monitoring for DMA 901 and DMA 204. ICB 2.10 has conducted baseline monitoring (air, noise and water quality) for DMA during civil works and construction monitoring for DMA 102, DMA 103, DMA 106, DMA 113. The Environmental Management Implementation Work Schedule has been prepared for next six months (January-June 2023) to implement the EMP plan wise while showing precisely how and when construction period mitigation and monitoring actions will take place.

With the outbreak of COVID 19 Pandemic and subsequent lockdown, most of the activities in the country stopped temporarily until the country became normal. The Addendum Health and Safety (H&S) Plans in response to COVID-19 were developed by all civil works contractors and approved by PMU as well as ADB.

Based on the foregoing observations, findings and environmental monitoring carried out from July - December 2022, it may be concluded that ICB 2.8, ICB 2.9 and ICB 2.10 under DWSNIP subprojects (DMAs) have been implemented as just satisfied.

I. INTRODUCTION

A. Background

1. Dhaka Water Supply Network Improvement Project (DWSNIP) has been initiated by Dhaka Water Supply and Sewerage Authority (DWASA) for improving the water supply distribution network in various zones of Dhaka City. The estimated cost of the Project is US$ 408 million. The Government of the People's Republic of Bangladesh (GOB) has obtained a loan of US$ 275 million from the Asian Development Bank (ADB Loan: 3397-BAN) and the balance US$133 million equivalent would be financed by the GOB. The Project will implement in 75 DMAs where 1669 km (approximately) pipe lines will be rehabilitated and installed including about 148,230 service connections and 50 PTWs. The Project has been divided into five (5) contract packages and the packages will take 17 to 36 months for implementation with an expectation to be completed December, 2023 (As proposed in RDPP). The objectives targeted from the Project are:

- To reduce NRW and achieve 24 hours water supply in the targeted 82 DMAs (As per approved DPP).
- To provide new or regular connections to low-income communities.

2. The project area of each package is shown in Figure-1 and summary of the Construction packages are depicted in Table 1.

Figure 1: Project Area

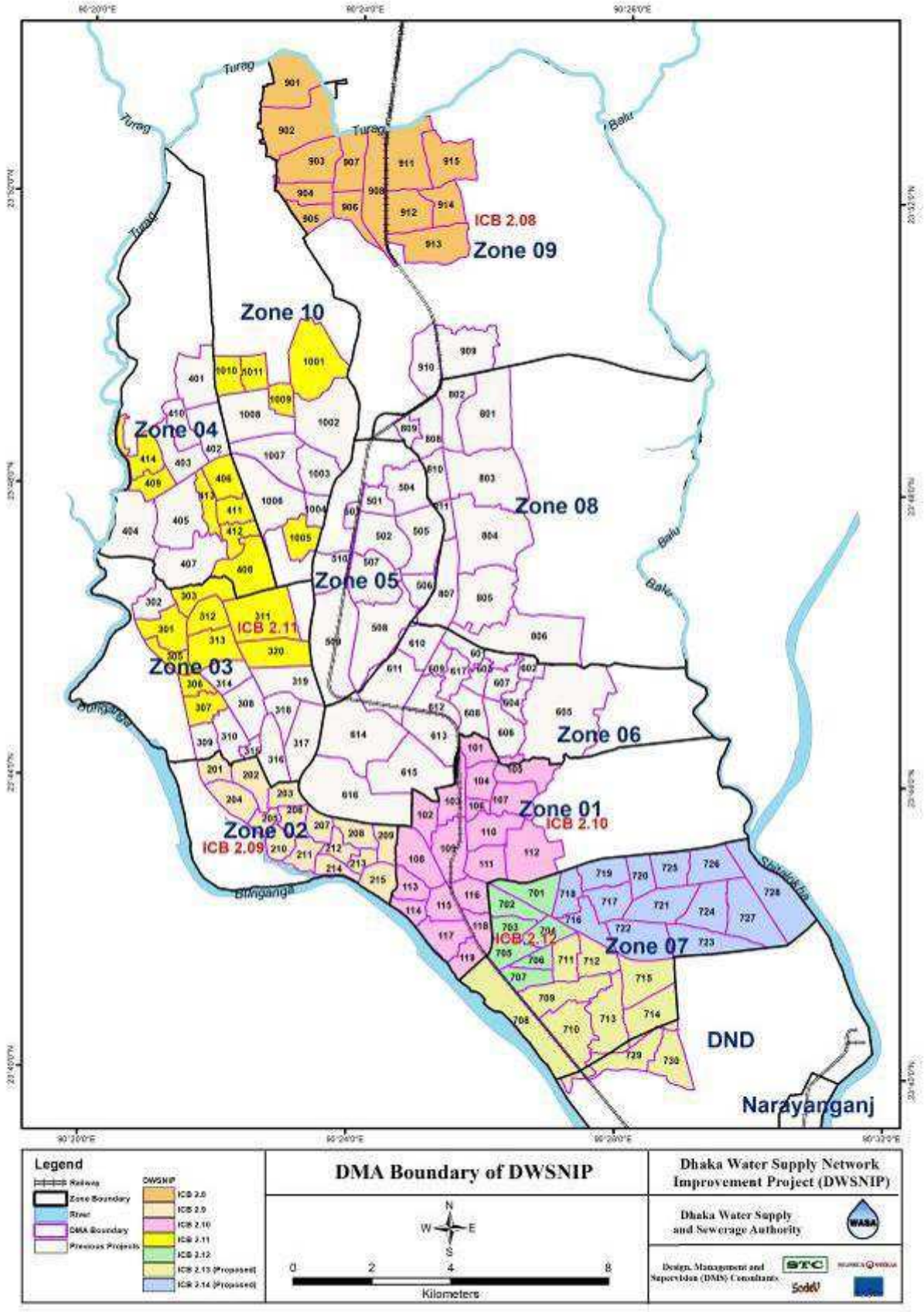

Table 1: Summary of Works in all Packages under DWSNIP (As of December, 2022)

Package No.	MODS Zone	DMA Nos.	Design Pipeline Km	Service Connection nos. (as per BOQ)	Deep Tube well (nos.) ((as per BOQ))	Contract Amount (US$ in Million)	Construction Duration days	Name of Contractor	Remarks
ICB 2.8	9	16	457.41	39,297	10	46.84	1534	CPP	Awarded
ICB 2.9	2	19	275.3	33,903	10	27.46	1628	CFMCC	As per final design, length has been changed
ICB 2.10	1	21	340.75	39,000	10	45.18	830	CCSEB-RPL (JV)	As per final design, length has been changed
NCB-2.11A to 2.11D and NCB 2.6	3,4,10	21	453. 41	44,841	10	53.89	1000	The Civil Engineers Ltd, RFL Plastic Ltd, PDL-AEDL-JV., M/S MAN Enterprise	Awarded
NCB-2.12A to 2.12E	7	8	163.95	16,100	10	19.42	540	Under Evaluation	Under Evaluation
Total Civil Works		85	1677.42	173,269	50				

Source: DMS Consultants, December 2022

B. Purpose of the Report

3. This is the Semi-annual Environmental Monitoring Report (SEMR) prepared by PMU for the monitoring period of July - December 2022. This SEMR provides the status of project, presents preparation and implementation of environmental management, mitigation and monitoring actions, and reports status of compliance with Environmental Management Plans (EMPs) and loan covenants.

C. Approach and Methodology

4. The report has been prepared through review and monitoring the necessary environmental compliances with respect to (i) Environmental safeguards, (ii) loan covenants and (iii) implementation of Environmental Management and Monitoring Plans of ADB approved IEE reports for all subprojects. The report also referred the Environmental covenants, Initial Environmental Examination report approved by ADB, Environmental Monitoring Reports and Aid- Memoires prepared by ADB. The approach and methodology include the following work plan.

5. Activity 1: Collection of relevant documents/reports included Initial Environmental Examination report approved by the ADB, Environmental Monitoring Reports and Aid-Memoires prepared by ADB etc.

6. Activity 2: On the basis of Environmental due diligence review conducted to strengthen and followed the agreed Environmental compliances. Major decisions have been taken to address the shortfalls identified and bridging the gaps.

7. Activity 3: Site visits were carried out for the Environmental monitoring of the sub projects. Checklists were prepared to monitor the Environmental safeguards. Focused Group Discussions were carried out for public consultations. The shortcomings observed during the field visits have been communicated with the Corrective Action Plan for remedial measures. The same have already been initiated by the PMU and PCU and the concerned contractors.

D. Environmental Categorization

According to ADB Safeguard Policy Statement, 2009

8. Sub projects under Five Packages (ICB 2.8, ICB 2.9, ICB 2.10, ICB 2.11 and ICB 2.12) under DWSNIP has been classified by ADB as environmental assessment category B (some negative impacts but less significant than category A) and the impacts of subprojects were assessed through Initial Environmental Examination (IEE), prepared according to ADB Safeguard Policy (SPS 2009).

According to National Laws and Regulations

9. As per Schedule 1 of ECR, 1997 all packages under DWSNIP are likely to be classified as red category (serial number 64 under ECR) which requires Environmental Clearance Certificate (ECC) from the Department of Environment (DoE). Maintaining all the formalities (after submission of EIA report, Feasibility report, Fees etc.), DWASA obtained ECC from DoE on June 12, 2019. As per condition of ECC (requirements of Renewal of ECC in every year), DWASA obtained First Renewal Certificate from DoE during June, 2020 (validity of which was up to June 2021), Second Renewal Certificate from DoE during June, 2021 (validity of which was up to June 2022) and Third Renewal Certificate from DoE during July, 2022 (validity of which was up to June 2023). All renewal certificates obtained from DoE are attached in **Annex-3**

10. DWSNIP civil works is divided into five contracts (packages): ICB 2.8 covering 13 DMAs, ICB 2.9 covering 15 DMAs, ICB 2.10 covering 20 DMAs, ICB 2.11 (NCB 2.11A to 2.11D and NCB 2.6) covering 21 DMAs, and ICB 2.12 (NCB 2.12A to 2.12E) covering 8 DMAs.

11. Till 31st December 2022, construction contract agreements have been signed for all five (5) packages under DWSNIP. Among 5 packages, ICB 2.8 signed contract for zone 9 on 9th May, ICB 2.9 signed contract for zone 2 on 22nd November, ICB 2.10 signed contract for zone 1 on 30th July, 2020, ICB 2.11 signed contract for zone 3, 4 and 10 on 4th April 2018 and ICB 2.12 signed contract for zone 7 on 26th November, 2020. However, construction contract agreements for ICB 2.11 and ICB 2.12 have been terminated and then rewarded again as NCB packages. Table 2 shows various subproject progress and status of the three ICB packages which are under construction.

Table 2 A: Subprojects Implementation status till December 2022

Package Number	Designed Interventions	Status of Implementation			% of Progress of activities	Expected Completion Date
		Pipe line (Km)	House Connection (nos.)	DTW Headworks upgradation (nos.)		
ICB 2.08	DMA Nos. – 13 nos. Pipeline – 461.211km Service Connections-29,635 nos. Upgradation of DTW - 10nos	427.711	28,837	45	92.95%	30.06.2023
ICB 2.09	DMA No.- 15 nos. Pipeline- 261.90 km Service connections-33,903 nos. Upgradation of DTW pump-10 nos.	242.74	27,412	49	88.17%	30.06.2023
ICB 2.10	DMA No.- 20 nos. Pipeline-342km Service connections-39,128 nos. Upgradation of DTW pump- 10 nos.	180.32	14,613	26	39.03%	31.12.2023

Source: DMS Consultants, December 2022

Table 2 B: Progress on Implementation of EMP (up to December 2022)

Activity	ICB 2.08 (13-DMAs in 3-batches)	ICB 2.09 (15 DMAs in 4-batches)	ICB 2.11 (21 DMAs in 6-batches)	ICB 2.10 (21 DMAs in 4-batches)	ICB 2.12 (8 DMAs in 3-batches)
Updating IEE Reports with site specific EMP	All DMAs Approved by ADB and disclosed	All DMAs Approved by ADB and disclosed	15 DMAs (4-batches) – approved & disclosed. Remaining 2 batches (6 DMAs) are yet to be prepared & submitted	5 DMAs (1st Batch) & 6 DMAs (2nd Batch) are approved and disclosed. 5 DMAs (3rd Batch) is submitted and waiting for ADB approval. Remaining one batch (05 DMAs) are yet to be prepared and submitted.	4 DMAs (1st Batch) approved & disclosed. Remaining two batches (4 DMAs) are yet to be prepared and submitted.
Monitoring and Reporting					
Monthly internal progress reports	All monthly reports under three different packages (ICB 2.08, ICB 2.09, ICB 2.10) prepared by the Contractors during construction, submitted to DMS and PMU. These monthly reports include; (a) physical progress of each component; (b) mitigation measures implemented; (c) grievances received and resolved as directed in GRM				
Quarterly Progress Reports (QPR)	Quarterly Progress Report on performance of contractors on EMP implementation has been submitted till September 2022 (started since commencement)				
Semi-annual Environmental Monitoring Reports (SEMR)	9 – SEMRs submitted and approved and 10th SEMR – now being sent for approval				
Environmental Quality Monitoring					
Activity	**ICB 2.08**	**ICB 2.09**	**ICB 2.10**	**ICB 2.11**	**ICB 2.12**
Air Quality Sampling and Testing (CO, $S0_2$, $N0_2$, SPM, $PM_{2.5}$, PM_{10})	Pre construction Phase monitoring – completed all DMAs Construction phase monitoring - completed in DMA 901, DMA 902, DMA 903, DMA 904, DMA 905, DMA 906, DMA 907, DMA 911, DMA 912, DMA 913, DMA 914 and DMA 915	Pre construction Phase monitoring – completed all DMAs Construction Phase monitoring completed in DMA 201, DMA 203, DMA 204, DMA 205, DMA 206, DMA 208, DMA 209, DMA 210, DMA 213, DMA 214 and DMA 215	Pre construction Phase monitoring- Completed in DMA 101, DMA 102, DMA 103, DMA 105, DMA 106, DMA 108, DMA 113, DMA 114, DMA 115 & DMA116 Construction phase monitoring – Completed in DMA 108, DMA 115 and DMA 116	Pre construction phase-done (all DMAs) – 3 batches Construction work has not been during reporting period	Preconstruction Phase monitoring completed in DMA 701, DMA 702, DMA 703); Construction monitoring – Construction work yet to be started.

Noise (dBA for day and night time)	Pre construction Phase monitoring – completed all DMAs Construction phase monitoring - completed in DMA 901, DMA 902, 903, DMA 904, DMA 905, DMA 906, DMA 907, DMA 911, DMA 912, DMA 913, DMA 914 and DMA 915	Pre construction Phase monitoring completed in all DMAs Construction Phase monitoring completed in DMAs 201, 203, 204, 205, 206, 208, 209, 210, 213, 214 and 215	Pre construction Phase monitoring- Completed in DMA 101, DMA 102, DMA 103, DMA 105, DMA 106, DMA 108, DMA 113, DMA 114, DMA 115 & DMA116 Construction phase monitoring – Completed in DMA 108, DMA 115 and DMA 116	Pre construction phase-done (all DMAs) – 3 batches Construction work has not been during reporting period	Pre construction Phase monitoring completed in (DMAs 701, 702, 703); Construction monitoring – Construction work yet to be started.
Surface Water Quality (SS, pH, DO, BOD5, COD, As, Cl, Fe, Mn)	Pre-construction phase monitoring – completed in DMA903, DMA904, DMA906, DMA907, DMA908 Construction phase –completed in DMA903, DMA904, DMA906, DMA907	Pre construction Phase monitoring- completed in (DMAs 203, 207, 208, 209 and 215); Construction Phase monitoring completed in DMAs 203, 208, 209 and 215	Pre construction Phase monitoring- Completed in DMA 101, DMA 102, DMA 103, DMA 105, DMA 106, DMA 108, DMA 113, DMA 114, DMA 115 & DMA116 Construction monitoring – Yet to be done	Pre construction phase-done. No construction is in progress during reporting period	Pre construction Phase monitoring completed in (DMAs 701, 702, 703); Construction monitoring – Construction work yet to be started.
Groundwater Quality ((pH, DO, BOD5, COD, As, Cl, Fe, Mn and Total Coliform)	Pre construction Phase monitoring – completed all DMAs Construction phase monitoring - completed in DMA 901, DMA 902, DMA 903, DMA 904, DMA 905, DMA 906, DMA 907, DMA 911, DMA 912, DMA 913, DMA 914 and DMA 915	Pre construction Phase monitoring completed in all DMAs Construction Phase monitoring completed in DMAs 201, 203, 204, 205, 206, 208, 209, 210, 213, 214 and 215	Pre construction Phase monitoring- Completed in DMA 101, DMA 102, DMA 103, DMA 105, DMA 106, DMA 108, DMA 113, DMA 114, DMA 115 & DMA116 Construction monitoring – DMA 108, DMA 115 and DMA 116	Pre construction phase-all done. No construction during reporting period	Pre construction Phase monitoring completed in (DMAs 701, 702, 703); Construction monitoring – Construction work yet to be started.

II. SAFEGUARDS COMPLIANCE STATUS

A. Compliance of Safeguard Loan Covenants

12. The loan agreement for DWSNIP was signed on 17th July 2016 between PEOPLE'S REPUBLIC OF BANGLADESH ("Borrower") and ASIAN DEVELOPMENT BANK ("ADB"). Table 3 provides a summary of compliance to the loan covenants related to environmental Safeguards.

Table 3: Compliance of Loan Covenants- Environment Part

Loan agreement schedule and Program Specific Covenants	Status / Issues
Procurement of Goods, Works and Consulting Services	
Loan Agreement Schedule 4 Item 7 **Conditions of Works' Commencement:** DWASA shall issue a notice to commence Works after having clearance from DOE: (a) Any Work involves with environmental impacts shall be granted with the DoE-approval in IEE (b) Incorporated the relevant provisions from the EMP into the Works contract	DWASA obtained Environmental clearance certificate for DWSNIP-subprojects from Department of Environment on June 12, 2019. Incorporated EMP into the Civil works contract for ICB 2.8, ICB 2.9, ICB 2.10, ICB 2.11 and ICB 2.12
Safeguards Environment	
Loan Agreement Schedule 5 Item 5 **Conditions of Works' Commencement** The Borrower shall ensure or cause the DWASA to ensure that the preparation, design, construction, implementation, operation and decommissioning of the Project, and all projects' facilities comply with all applicable laws and regulations of the Borrower relating to environment, health, and safety; Measures and requirements set forth in the EMP, including corrective measures against any impact that occurs during implementation	IEE reports are with the Environmental Management Plan which describes the specific activities to be performed in preparation and design phases including in operation phases. All the anticipated impacts were identified and mitigation measures were included in the IEE/EIA reports The DoE agreed and issued the environmental clearance certificates before commencement of works. All measures and requirements as prescribed in IEE/EIA and EMP is considered during implementation. Civil works has started for all awarded packages.
Human and Financial Resources to Implement Safeguards Requirements	
Loan Agreement; Schedule 5 Item 9 **Conditions of Works' Commencement** The Borrower shall make available, or cause the DWASA to make available, all necessary budgetary and human resources to fully implement the EMP required.	All the Environment and Social safeguard positions in the PMU and DMSC including the Safeguard People under each package has been ensured before commencement of works.
Safeguards - Related Provisions in Bidding Documents and Works Contracts	
Loan Agreement Schedule 5 Item 10 **Conditions of Works' Commencement** The Borrower shall ensure, or cause the DWASA to ensure, that all bidding documents and contracts for Works contain provisions that require contractors to: (a) comply with the measures against each item of EMP, and the final RP (to the extent they concern impacts on affected people during construction), and any corrective or	**Complied** (a) All the anticipated measures were included in the EMPs those were included in the EIA report of DOE and updated IEE reports and approval obtained from DOE and ADB. All the measures were included in the bidding documents. (b) Included in Section 8: Special Conditions of the Contract, Item 47

Loan agreement schedule and Program Specific Covenants	Status / Issues
preventative actions set forth in a Safeguards Monitoring Report; (b) make available a budget for all such environmental measures; (c) provide the Borrower with a written notice of any unanticipated environmental, resettlement or indigenous peoples risks or impacts that arise during construction, implementation or operation of the Project that were not considered in the IEE, the EMP, and the RP; (d) adequately record the condition of roads, agricultural land and other infrastructure prior to starting to transport materials and construction; and (e) Reinstate pathways, other local infrastructure, and agricultural land to at least their pre-project condition upon the completion of construction.	(c) Included in Section 8: Special Conditions of the Contract, Item 22.1.2 (d) Included in Section 8: Special Conditions of the Contract, Item 21.1. (e) Included in Section 8: Special Conditions of the Contract, Item 24.9
Safeguards Monitoring and Reporting	
Loan Agreement Schedule 5 Item 11 **Conditions of Works' Commencement** The Borrower shall cause the DWASA to do the following: (a) submit semi-annual Safeguards Monitoring Reports to ADB and disclose relevant information from such reports to affected persons promptly upon submission; (b) if any unanticipated environmental and/or social risks and impacts arise during construction, implementation or operation of the Project that were not considered in the IEE, the EMP, and the RP, promptly inform ADB of the occurrence of such risks or impacts, with detailed description of the event and proposed corrective action plan; and (c) Report any actual or potential breach of compliance with the measures and requirements set forth in the EMP, and the RP promptly after becoming aware of the breach.	(a) Being complied with this is 10th Semi-annual safeguard monitoring on Environment for the period July - December 2022. The previous SEMR were "recorded as "submitted" and disclosed on ADB/DWASA website https://www.adb.org/sites/default/files/project-documents/47254/47254-003-emr-en_13.pdf All other previous SEMRs were also approved and recorded in ADB/DWASA website. (b) and (c) Complied The requirement to report any unanticipated environmental impacts with detailed propose correction action is included in the SEMR template.
Prohibited List of Investments *(Safeguards Covenant)*	
Loan Agreement Schedule 5 Item 12 **Conditions of Works' Commencement** The Borrower shall ensure that no proceeds of the Loan are used to finance any activity included in the list of prohibited investment activities provided in Appendix 5 of the SPS.	**Complied** The condition is included in the Project Administration Manual (PAM) and the possibility of such happening is nil.

Labor Standards Health and Safety	
Loan Agreement Schedule 5 Item 13 **Conditions of Works' Commencement** The Borrower shall ensure that core labor standards and the Borrower's applicable laws and regulations are compiled during project implementation. The borrower shall include specific provisions in the bidding documents and contracts financed by ADB that the contractors shall; (a) comply with the Borrower's applicable labor law and regulations and incorporate applicable workplace occupational safety norms; (b) not use child labor; (c) not discriminate workers in respect of employment and occupation; (d) not use forced labor; (e) allow freedom of association and effectively recognize the right to collective bargaining; and (f) disseminate, or engage appropriate service providers to disseminate, formation on the risks of sexually transmitted diseases, including HIV/AIDS, to the employees of contractors engaged under the Project and to members of the local communities surrounding the Project area, particularly women. The Borrower shall strictly monitor compliance with the requirements set forth above and provide ADB with regular reports	**Complied in document and to be complied during implementation** Provision is included (as per EMP & BID document) to carry out HIV/AIDS awareness programs for construction contractor, application of all relevant labour laws for health and safety including child labour law and engagement of local labors (preferably from economically backward group) covering women labors. In case of any breach of provision, necessary corrective measures as per contract clauses shall be taken. All activities including awareness program is reflected in "Monitoring Report". Civil works contractor (ICB 2.8, 2.9, 2.10 and 2.11 prepared Health and Safety Plan in response to COVID 19 pandemic and approved by PMU as well as ADB.

B. Compliance status with National/Local statutory environmental requirements with Environmental Statutory Clearance

13. Before implementation of the project, compliance with environmental policy, law and legislation is necessary.

14. DWASA with the assistance of the consultant teams, has prepared EIA Report and submitted to DoE and presentation on EIA report has done at DoE office on April 1, 2019. PMU submitted revised EIA report to DoE incorporating all comments and got Environmental Clearance Certificate on June 12, 2019. DoE issued 1st ECC renewal on August 18, 2020 which is valid until June 12, 2021, 2nd ECC renewal on June 30, 2021 which is valid until June 12, 2022 and 3rd ECC renewal on July 24, 2022 which is valid until June 12, 2023 **(please refer to Annex-3 for ECC from DOE**).

15. Under DWSNIP present status of relevant permits and statutory clearance are mentioned in Table 4 on next page.

Table 4: Status of Permit and Statutory Clearance (till reporting period)

ICB packages	Compliances	Status
ICB-2.08: Batch-1, 2, 3 & 4	Environmental clearance from DOE	Obtained for all batches
	Updated IEE – approved by ADB	Done for all Batches
	Road cutting permission from City Corporation	Pipe Installation is done only after having road cutting permission
	Utility services – identification and measures accordingly (Gas Line, Electricity, Sewerage line etc.)	Identify the all utility before starting of work
ICB-2.09: Batch-1,2,3,4	Environmental clearance from DOE	Obtained for all batches
	Updated IEE – approved by ADB	Done for all Batches
	Road cutting permission from City Corporation	Pipe Installation is done only after having road cutting permission
	Utility services – identification and measures accordingly	Identify the all utility before starting of work
ICB-2.10: Batch-1,2,3,4	Environmental clearance from DOE	Obtained for all batches
	Updated IEE – approved by ADB	1st and 2nd batches – Approved, 3rd batch under revision
	Road cutting permission from City Corporation	Pipe Installation is done only after having road cutting permission
	Utility services – identification and measures accordingly	Identify the all utility before starting of work
ICB-2.11: Batch-1,2,3,4, 5, 6	Environmental clearance from DOE	Obtained for all batches
	Updated IEE – approved by ADB	4 Batches – Approved
	Road cutting permission from City Corporation	Pipe Installation is done only after having road cutting permission
	Utility services – identification and measures accordingly	Identify the all utility before starting of work
ICB-2.12: Batch-1,2	Environmental clearance from DOE	Obtained for all batches
	Updated IEE – approved by ADB	1st Batch – Approved
	Road cutting permission from City Corporation	Construction work yet to be started
	Utility services – identification and measures accordingly	Construction work yet to be started

C. Implementation Arrangements

16. The PMU have a Safeguard Implementation Unit (SIU) staffed with three officers - 1 Environmental Officer, 1 Social Officer, and 1 Gender Officer - at executive engineer level. The SIU has been assisted by relevant safeguard specialists in the DMS teams to implement safeguards.

17. The responsibilities of the Environmental Officer of SIU ensure that (i) environmental safeguard issues are addressed; (ii) EMP/approved SEP is implemented; (iii) physical and non-physical activities under the subproject are monitored; and (iv) monitoring reports are prepared on time and submitted to ADB.

18. PMU has been supported by the Design Management and Supervision Consultants (DMS). An Environment Specialist has been engaged to ensure: (i) EMP/ approved SEP is implemented; (ii) surveys and measurements are undertaken; (iii) inspections and observations throughout the construction period are recorded to ensure that safeguards and mitigation measures are provided as intended; and (iv) statutory clearances and permits from government agencies/other entities are obtained prior to start of civil works.

19. Project coordination unit (PCU) in each zone (zone 1,2,3,4,7,9,10), headed by an executive engineer, are responsible for liaising and coordinating with the contractors, DMS, NGO and other stakeholders on all day-to-day implementation of distribution network improvement work under the project.

20. The three (3) safeguards experts were hired in the PMU; seven (7) executive engineers were hired in the project coordination unit (PCU) and DMS Environmental Specialist, Resettlement Specialist, Social Development/Gender Expert and Environmental Inspector has already been mobilized. Table 5 shows detail of safeguards Team and Figure 2 shows the status of permit and statutory clearance for DWSNIP till this reporting period.

Table 5: Safeguards Team

Name	Designation/Office	Email Address	Contact Number
PMU			
1. Jeni Chakma	Executive Engineer (Environmental Expert in charge)	tongla11@yahoo.com	+8801553266545
2. Sharmin Haque Amir	Executive Engineer (Resettlement Expert in charge)	sharmine.amir@gmail.com	+880171502568
3. Sazia Afrin	Executive Engineer (Gender Expert in charge)	Sazia004@gmail.com	+8801716332483
PCUs			
1. Md. Mujahidur Rahman	Executive Engineer MODS Zone-9 (ICB 2.8)	Mujahid_buet@yahoo.com	+8801723944481
2. Md. Firoz Alom	Executive Engineer MODS Zone-2 (ICB 2.9)	firoz.alom_dw@yahoo.com	+8801819229415
3. Md. Al Amin	Executive Engineer MODS Zone-1 (ICB 2.10)	m.alamin.dwasa@gmail.com	+8801819229419
4. Jayanta Saha	Executive Engineer MODS Zone-3 (ICB 2.11)	jayanta2k7@gmail.com	+8801819229418
5. Md. Mazharul Islam	Executive Engineer MODS Zone-4 (ICB 2.11)	marufdwasaz9@gmail.com	+8801819229417
6. Md. Ashraful Habib, Choudury	Executive Engineer MODS Zone-10 (ICB 2.11)	ashraf9910127@gmail.com	+880181714495
7. Md. Shah Alam	Executive Engineer MODS Zone-7 (ICB 2.12)	abid310@gmail.com	+8801763051234
DMS Consultants			
1. Md. Emdadul Haque Bhuiyan	Resettlement Specialist	rse.dms@dwsnip.com	+8801715005682
2. Abdus Samad	Social Development/Gender Expert	Samad3364@gmail.com	+8801718644317
3. Jannatul Ferdous Barsha	Environmental Inspector	engr.barsha12@gmail.com	+8801755388383

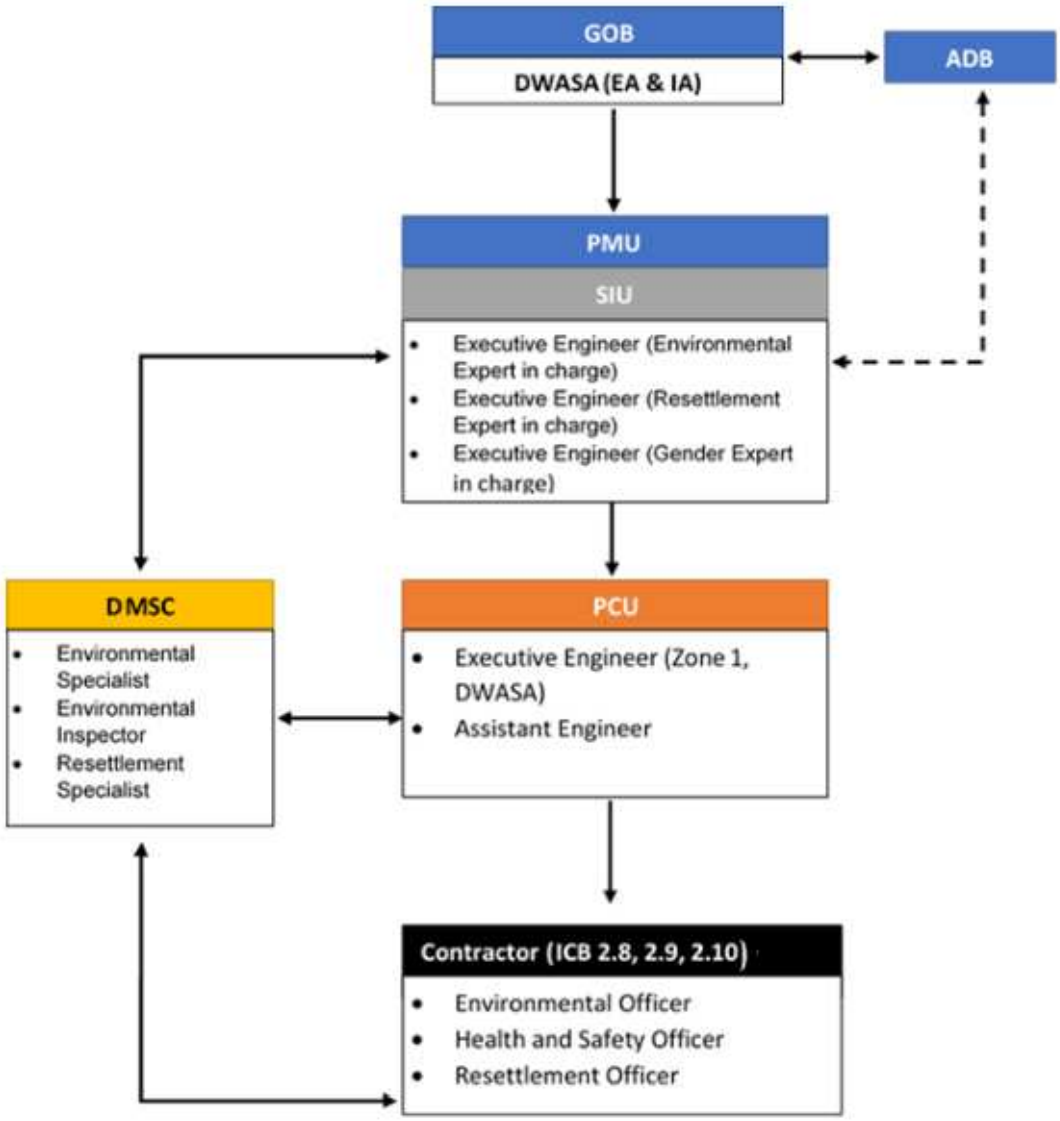

Figure 2: Safeguard Implementation Arrangements

21. The Contractor is responsible for the following activities:

(i) Submitting the Site environmental plan (SEP) for the proposed sites/locations for construction work camps, storage areas, hauling roads, lay down areas, disposal areas for solid and hazardous wastes

(ii) Complying with all applicable legislations and requirements of the approved SEP;

(iii) Briefing the staff, employees, and laborer about the requirements of the EMP/ approved SEP;

(iv) Ensuring the sub-contractors and suppliers engaged in the works to comply with the environmental requirements as per EMP/SEP because the Contractor is held responsible for non-compliance on sub-contractors' behalf;

(v) Supply method statements for all activities requiring special attention as specified and/or requested by the DMS Environmental team during Contract period;

(vi) Provide environmental awareness training to staff, employees, and laborers;

(vii) Bear the costs of any damages/compensation resulting from non-adherence to the EMP/ approved SEP or written site instructions;

(viii) Conduct all activities in a manner that minimizes disturbance to directly affected residents and the public in general, and foreseeable impacts on the environment.

(ix) Ensure that the PMU Environment Officers are timely informed of any foreseeable activities that requires input from the DMS Environmental Team.

22. During reporting period, all awarded civil contract packages were mobilized Environment, Resettlement and Health and safety Officers for implementation of EMP during works implementation. The details are as follows:

Table 6: Contractor's EHS Personnel

Name	Designation	Contact no.
ICB 2.8		
Mohammad Shahidul Islam	QHS & Environment Manager	01730150939
Samiul Haque Robin	HSE Engineer	01770764647
Abul Bashar	HSE Engineer	01612322067
Md. Alif	QHSE In-charge	01922654234
Nahid Siddik	HSE In-charge	01701704454
ICB 2.9		
S.M. Sofi Uddin	Quality Control Manager	+8801717241616
Sheikh Atiqur Rahman	Resettlement Officer (EHS Officer in Charge)	+8801798117871
ICB 2.10		
Md. Muniad Jaman Khan	Environmental Officer	01873219103
Md. Sharif Ullah	Resettlement officer	01844659354
Shakil Kawser	Health and Safety officer	01844601811
Md. Rashedul Kabir	Health and Safety officer	01844662317
Parag Rana Partho	Health and Safety officer	01896007301
Md. Shamim Reza	Health and Safety officer	01841405572
Istiak Arifin Wridoy	Health and Safety officer	01844606173
Anas Ahmmed Shuva	Health and Safety officer	01844664699

23. **Reporting Arrangement.** Contractor of each ongoing package monitored safeguard **i**mplementation on daily basis, while DMS team reviewed safeguard implementation weekly. The Environmental Team of DMSC, after reviewing, advised contractor for corrective measures. Monthly report summarizing observation, compliance and corrective measures were prepared by Environmental Officer of Contractor. Quarterly monitoring report was prepared by the DMS Consultants on performance of contractors on EMP implementation. Then reports were forwarded to PMU from DMSC for observation, review and record. Based on monthly and quarterly reports and site observations, PMU through the support from DMS Consultants reviewed and consolidated the semi-annual environment monitoring report for submission to ADB.

III. ENVIRONMENTAL MANAGEMENT AND MONITORING COMPLIANCES

24. This section presents the compliance status of Environmental Management and Monitoring Plans of DWSNIP subprojects under 3-ICB packages with implementation and rehabilitation of different activities mentioned below:

Table 7: Implementation and rehabilitation of different activities

Work packages	Concerned DMAs	Interventions as per Bid Document		
		Pipeline (Km)	House Connection (no.)	DTW (no.)
ICB 2.08	DMA 903, DMA 904, DMA 906, DMA 907, DMA 905, DMA 908, DMA 912, DMA 913, DMA 915, DMA 911, DMA 902, DMA 901, DMA 914	427.711	28,035	45
ICB 2.09	DMA 201, DMA 202, DMA 203, DMA 204A, DMA 204B, DMA 205, DMA 206, DMA 207, DMA 208A, DMA 208B, DMA 209A, DMA 209B, DMA 210A, DMA 210B, DMA 211, DMA 212, DMA 213, DMA 214 and DMA 215	242.74	27,412	49
ICB 2.10	DMA 108A, DMA 108B, DMA 113, DMA 115, DMA 116, DMA 101, DMA 102, DMA 103, DMA 105, DMA 106, DMA 114, DMA 104, DMA 110, DMA 117, DMA 118, DMA 119, DMA 107, DMA 109A, DMA 109B, DMA 111, DMA 112	180.32	14,613	26

25. The site inspections, for EMP compliances, were conducted on regular basis by the Assistant Resident Engineers/ Sub Assistant Resident Engineers of DMSC. Joint meetings among the PMU-PCU, DMSC and Contractors were organized whenever the environmental and safety issues were identified, and corrective actions were requested.

26. For implementation of EMP, arrangement of human safety, provision of PPE for workers engaged in construction is being implemented. Trainings were provided to the contractor by DMSC's Environmental Team. Moreover, instruction was given to contractors to follow the specified clause of BID document to mitigate environmental and social impacts.

27. Construction site monitoring is a continuous process. All ongoing construction sites of ICB 2.08, ICB 2.09, ICB 2.10 and NCB (2.11A to 2.11D, 2.6) are monitored on a daily basis by contractors EHS team as well as assistant resident engineer/sub assistant resident engineer of DMSC to make sure the contractors are compliant according to their respective EMP. In addition to that Joint site inspections of the PMU-PCU, DMSC and contractors are conducted to evaluate the same. The summary of site visits is listed in the following table.

Table: Environment and Safety Monitoring Activities

Mission/Task	Date	Location of Site Visits/DMA	Conducted by Whom
Monitoring on Contractor's EMP compliance	Daily	All ongoing construction sites of ICB 2.08, ICB 2.09 and ICB 2.10	Assistant Resident Engineer/Sub Assistant Resident Engineer of DMSC
Monitoring on EMP implementation and compliance for Semi-annual Environmental Report	**ICB 2.8**		Joint site inspections of the PMU-PCU, DMSC and Contractors
	12.08.2022	DMA 911A and DMA 915	
	20.09.2022	DMA 901 and DMA 911A	
	ICB 2.9		
	31.08.2022	DMA 204, DMA 212	
	01.09.2022	DMA 212, DMA 214	
	17.10.2022	DMA 212, DMA 214	
	22.11.2022	DMA 204, DMA 214	
	ICB 2.10		
	20.08.2022	DMA 108, DMA 113 & DMA 115	
	15.09.2022 & 25.09.2022	DMA 108, DMA 113 & DMA 115	
	19.10.2022 & 31.10.2022	DMA 113, DMA 108 & DMA 115	
	03.11.2022 & 06.11.2022	DMA 108, DAM 115, DMA 113 & Material storage area	

28. Observation regarding Environmental Condition at different DMA sites due to construction work activities are as follows:

29. Safeguard Compliances under ICB 2.8, ICB 2.9 and ICB 2.10

ICB 2.8

- At noise generating location, the workers did not use ear plug.
- Water spraying was done regularly.
- Excavated materials were removed from the construction site immediately.
- Workers were wearing face masks.
- Emergency contact details was also available on the site
- Temperature screening facility, first aid box, hand washing facilities were available on the site
- Signage and posters for precaution of COVID 19 prevention were posted in and around the construction site

ICB 2.9

- First Aid Box, fire extinguisher, drinking water for workers and help desk were not available in all of the sites under ICB 2.09.
- Traffic signage (Signs, Pavement Markings, Arrow Panels, Warning Lights) was insufficient.
- Occupational health and safety trainings are provided irregularly.
- Signage and posters for precaution of COVID 19 prevention were missing in and around the construction site
- Temperature screening facility, first aid box, hand washing facilities were not available on the site

ICB 2.10

- First Aid Box, fire extinguisher, drinking water for workers and Help Desk were available in the site.
- Traffic signage (Signs, Pavement Markings, Arrow Panels, Warning Lights) were sufficient
- Workers were reluctant to wear face masks
- Infrared Thermometer and hand sanitizer were not available for all of the sites.
- Posters or signages regarding COVID 19 prevention measures were missing in and around the construction sites.

30. Compliance to EMP for the Package ICB 2.8, ICB 2.9 and ICB 2.10

Proper measures were undertaken during planning, design and implementation phases including measures during operation phases were maintained in all packages. In the reporting period; works were running under ICB 2.8, ICB 2.9 and ICB 2.10. The implementation status of DWSNIP interventions has been illustrated in table-1 and table 2-A. Implementation of EMP as well as to follow the safeguard compliances were followed in all the DMAs under ICB 2.08, ICB 2.09 and ICB 2.10 packages. A sample safeguards compliance status under both packages are illustrated in the table on the next page:

Table: Compliance to EMP for the Package ICB 2.8, ICB 2.9 and ICB 2.10 (all running DMAs)

Activity	Mitigation Measures	Responsible for		Parameter to Monitor	Frequency of Monitoring	Location	Compliance Status
		Implementation	Monitoring				
Planning, Design and Operation Stages							
Contractor's Responsibility	• Familiar with traffic system, rules and regulation of Dhaka City and road cutting plans before works; • Arrangement of temporary water supply to meet any disturbance of water supply during works • Protect all utility services from damage during works • Road survey, existing utility services were recorded.	Contractor	DMS/ PCU/ PMU	Road cutting plan Arrangement for temporary water supply Precaution for utilities around	As required in the program of performance	N/A	• The Contractor prepared road cutting plans for all DMAs. • Temporary water supply arrangement made for the disconnected HH from the regular water supply. • Shifting of any utility was not required and all damages has been repaired.
Earth filling after pipe laying works (minimum depth of filling	Ensuring 1.0 m soil cover either in trench cutting or open cut after pipe laying	Contractor	DMS/ PCU/ PMU	Residual design life and proposed method of repair	As required in the program of performance	Each DMA sites	Maintained minimum coverage 1 m after pipe laying
Working hours and times	Work at night in heavy traffic road 7pm-7am and working in day time roads with less traffic volume	Contractor	DMS/ PCU/ PMU	Work hours	As required in the program of performance	Each DMA sites	Timing maintained properly and extra precautions maintained with some diversion in some places
Road Crossing	Trenchless method used on roads with heavy traffic and open cut method for narrow roads Horizontal Drilling (HDD) method done taking care to	Contractor	DMS/ PCU/ PMU	Construction method statement	Construction method of statement	Each DMA sites	About 22% pipeline installed through open trench method

Activity	Mitigation Measures	Responsible for		Parameter to Monitor	Frequency of Monitoring	Location	Compliance Status
		Implementation	Monitoring				
	other utilities						
Road Cutting	Safeguard arrangement for utility services around Preventive measures to avoid accident Traffic management plan with planning of road signage and diversion arrangement	Contractors prepared and applied for road cutting permission from DCC and works started after permission from DCC	DMS/ PMU	• Road category along pipe alignments • Road Cutting Plan & Road cutting permission from DCC	Prior to start works (trial pit and layout of pipes)	Each DMA sites	Ensured road cutting permit prior to works. Numbers of Road Blocker, safety items, Divider, Cones and other items were used at worksite.
Road Excavation	Excavation width was maintained with minimum dimension The excavation carried out in quicker mode to avoid sufferings All excavations were with precaution to avoid structure-damage or to other utilities	Contractors for preparation of road cutting plan, application for permission, and payment for pavement restoration	DMS/ PMU	Road category along pipe alignments Budget allocation for pavement restoration Road Cutting Plan Road cutting permission from DCC	Prior to start of works (trial pit and layour of pipes)	Each DMA sites	Long waiting period for road cutting permission from DCC is hampering the progress The Flag man with a road supervisor worked for traffic diversion where required
Trench-less pipe installation	Removal of excavated soil Erosion control measures Cleanup and restoration after work	Contractor	DMS/ PMU	Program of Performance Planning for pipe laying Plan for notification during trench Traffic Management Plan	As required in the program of performance	Each DMA sites	Trenchless method followed for busy roads and open cut followed for narrow roads where trenchless is not possible
Preparation of catalogues, installation and O&M manuals	The contractor should supply catalogues and installation manuals for each type of pipes to DWASA at the time of	Contractor	PMU/ DMS	Program of Performance	Completion of civil works and decommissioning	N/A	O&M manuals prepared after completion of works (during handing over to DWASA)

Activity	Mitigation Measures	Responsible for		Parameter to Monitor	Frequency of Monitoring	Location	Compliance Status
		Implementation	Monitoring				
	submission the Operation and Maintenance manuals (both in Bangla and English)						

Planning and Design Stage

31. Contractor's Responsibility (under supervision of DMS, PCU & PMU) is to be familiar with the present traffic congestion of Dhaka city, rules and regulation of City Corporation for the preparation of road cutting plans before execution of works; to arrange for temporary water supply to the households to meet up the disturbances during pipeline rehabilitation works; to conserve all existing utility services around construction works; to pay necessary compensation to the affected persons and to conduct surveys (existing pipelines, house connection, utility services etc.) prior to complete detail design.

- The Contractor prepared road cutting plans for all DMAs.
- Temporary water supply arrangement is made to the households disconnected from the regular water supply.
- Shifting of utility was not required. Compensation was given for repair etc. required for the utility services.

Pipe line rehabilitation and installation

32. The network expansion, in the residential/industrial areas, was done through trenchless or conventional trenching methods whereby the pipelines were laid with a minimum cover depth of 1.0 metres. Maintaining minimum coverage 1.00 m for all the pipes installation other than utility Ground problems areas.

Working hours and times

33. All works in major and minor roads with heavy traffic volume, were executed at night time (7pm-7am). In the minor roads with lower traffic volume, works were done during day time (except some works at night time). Alternative passageways were provided for allowing easy movement of vehicles & people. With some exceptions, working hours were maintained except places where works were allowed at night time.

34. Trenchless Technology was designed for crossing through the busy traffic roads and open trenches were followed for crossing roads with less traffic. Horizontal Directional Drilling (HDD) method was followed after ensuring no disturbance of utilities is there on the way of drilling equipment. About 22% pipeline was installed through open trench method

For pipeline rehabilitation and installation;

- Trenches were with minimum dimension.
- Safety measures for the excavation works were taken
- Safety measures were taken for preserving surrounding service facilities around
- Proper traffic signage was kept in line with traffic and walkers' movements

35. Preparation of catalogues, installation and O&M manuals (pipelines, safety valves, wash out, pump houses etc.) and all the manuals (English and Bangla version) are prepared and in the progress of preparation and those are to be supplied during handing over to DWASA.

36. Proper storage facilities for the construction works. Asbestos Cement Pipes were well located and well planned for careful installation of pipelines besides the AC pipes.

37. During installation of pipelines, proper measures to be taken to conserve surrounding environment, the environmental parameters (air, water and noise). Measures were taken to control pollution of surrounding water around the sites.

38. Proper site selection and construction of labor camp with suitable facilities for laborers. Proper handling of all excavated materials. Avoid all type of public disturbances during installation of pipelines and other interventions. Maintaining water supply undisturbed during installation of pipelines and other interventions.

39. Proper measures to protect trees and vegetation around handling of traffic and access during construction works Measures were taken to minimize noise level. Dust was suppressed through spraying water during excavation works.

40. Measures were taken to protect and facilities and locations of social and cultural importance (hot spots). Measures were taken to comply with occupational health and safety including measures to combat COVID19 situation.

41. After completion of works, the measures were taken like;

- All the excavated roads were reinstated to original condition,
- All disrupted utilities were restored to original condition
- All affected structures were rehabilitated/compensated
- Labor camp and storage areas were cleaned to original landscape
- Ensure leak detection and restoration (in case) to ensure safe water distribution

Table 8: Corrective Action Measures during Reporting Period

Problems found	Measures undertaken to enhance the situation	Timeline
Insufficient traffic signages was available	Recommended to provide the adequate number of traffic signage in and around the construction site. Ensured to place the rerouting signage appropriately.	Correction for any irregularity found during site visits by DWASA, PMU, NGO, DMSC etc. were done within next 24 hours, because the corrections were found mandatory.
Insufficient Occupational safety equipment (OSE) were provided by contractors	Management with respect to use of PPEs has been improved. Awareness in labor was required for proper use of PPE. Adequate number of PPEs is required to ensure at each working site including the sub-contractor work.	
Management of air quality, dust and noise	Spraying water on dry weather day at road to suppress dust twice in a day. Speed limits were maintained at all sites Ensured use of ear plugs by workers at high noise producing areas found necessary	
Spoil disposal management	Spoils were disposed at approved spoil disposal site on the same working day	
Signage and posters for precaution of COVID 19 prevention were missing in and around the construction site	Suggest to provide signage and posters in and around the construction site and labor camp.	

IV. ENVIRONMENTAL MONITORING AND EVALUATION

42. In addition to desk reviews and site inspections, monitoring of selected environmental parameters has been conducted during the reporting period. Before the start of project activities baseline monitoring is being done in each Package at prominent locations identified in updated IEE to access the initial conditions of environment in the DMA areas. During construction phase, monitoring for ambient environmental conditions (air, noise and water) is conducted on quarterly duration on the locations identified in IEE/EMP. During site visit if any other requirement for environmental monitoring is found, which is not identified in IEE/EMP, the contractor is required to do monitoring after approval of PMU. Monitoring results are compared from baseline data and/or project standards and if unacceptable deviation is found, mitigation measures are prepared by Environmental team of DMSC and conveyed to contractor for compliance.

43. Air quality monitoring results for all DMAs are shown in **Table 9** at the following page.

44. It is ensured that all engaging laboratories who are conducting air, noise and water quality, are following internationally accepted sampling protocol and analysis. PMU through DMSC has already instructed all contactors to select such laboratories who will maintain international protocol for sampling and analysis environmental quality parameters.

45. Salient findings from air quality monitoring are as follows,

Table -9: Ambient Air Quality Monitoring Data

Package No.	Name of DMAs	Monitoring Stage	Date of Testing	Site Location	Parameters (Monitoring Results)				
					PM_{10} µg/m3	$PM_{2.5}$ µg/m3	SO_2 µg/m3	NO_2 µg/m3	CO ppm
National Standards of Ambient Air Quality*					**150**	**65**	**365**	**100**	**10**
ICB 2.08	DMA 901	During Construction	04.07.2022	Beside Kamarpara High School and College, Turag, Dhaka (23.891224°N, 90.384553°E)	111.59	61.56	41.52	16.11	<1
				Near East West Medical College, Turag, Dhaka (23.894316°N, 90.377061°E)	130.6	59.31	19.31	21.73	<1
ICB 2.09	DMA 204	During Construction	29.11.2022	Hazaribagh Park Road, Hazaribagh, Dhaka (23.726321°N, 90.373073°E)	54.28	26.30	102.6	50.2	<1
				Kalunagar New Road, Hazaribagh, Dhaka (23.729098°N, 90.367956°E)	52.45	25.43	117.3	61.7	1
ICB 2.10	DMA 102	Baseline	25.09.2022	Women's University Hatkhola Road, Tikatuli, Wari (23°43'5.06" N & 90°25'13.15" E)	110	54	43	28	2.8
				Sher-E-Bangja Girls Mohabiddaloy. Hatkhola Road, Tikatuli, Wari (23° 43' 6.81" N & 90°25'3.52" E)	105	49	32	22	2.2
				In front of Sonali Bank, Shapla Chattar Motijheel (23°43'34.8S" N & 90°25'17.61" E)	114	58	49	27	2.5
	DMA 103	Baseline	25.09.2022	In front of Arambag Bus Counter, Arambag, Motijheel (23°43'47.75" N & 90°25'17.71" E)	126	57	48	35	3.7
				In front of Bangladesh Bank High School, Bangladesh Bank Colony, Arambag, Motijheel. (23°43'51.71" N & 90°25'21.43" E)	94	37	23	26	2.4
				In front of Kamlapur Railway Station Kamlapur (23°43'53.87" N & 90°25'33.56" E)	146	62	67	42	4.2

Package No.	Name of DMAs	Monitoring Stage	Date of Testing	Site Location	Parameters (Monitoring Results)				
					PM_{10} µg/m3	$PM_{2.5}$ µg/m3	SO_2 µg/m3	NO_2 µg/m3	CO ppm
National Standards of Ambient Air Quality*					**150**	**65**	**365**	**100**	**10**
	DMA 106	Baseline	25.09.2022	Bir Shestho Shahid Sipahi Mostafa KamaJ Stadium. Kamlapur (23°43'31.07" N & 90°25'44.35" E)	163	83	64	56	4.3
				Wasa Road Bridge, South Mugdapara (23°43'36.72" N & 90°26'1.67" E)	84	32	21	5	1.4
				Bir Shestho Shahid Sipahi Mostafa KamaJ Stadium. Kamlapur (23°43'31.07" N & 90°25'44.35" E)	163	83	64	56	4.3

*The Bangladesh National Ambient Air Quality Standards have been taken from the Environmental Conservation Rules, 1997.

46. Findings: The laboratory analysis of ambient air quality shows that air quality parameters concentration of most of the locations were within allowable limits of DoE, Bangladesh. PM10 and PM2.5 value has been exceeded at two locations in ICB 2.10 package. This is mainly due to emissions from motorized vehicles and other anthropogenic sources (shops, warehouse and plastic factories, vehicular movement etc.) in the area.

47. Mitigation measures, like dust suppression was applied as per EMP. Contractors are being advised regularly to take necessary action on dust suppression (during dry periods) by sprinkling of water whenever required. Moreover, aware to contractor and the local communities, applied the following mitigation measures:

- Wearing masks while working in dusty sites.
- Controlled vehicular movement and safe transportation during upload/unload construction materials;
- Regular maintenance of vehicles/equipment's and use of good quality fuel;
- Cover the excavated material and stockpiles and also cover the whenever it is transported.

48. Baseline and during construction ambient noise level data are presented in **Table 10**

Table-10: Noise Level Monitoring Data at DMA Sites

Package No.	Name of DMAs	Monitoring Stage	Date of Testing	Site Location	Land use Category	L_{eq} (dBA)	
						Day Time	Night Time
ICB 2.8	DMA 901	During Construction	04.07.2022	Kamarpara High School and College, Turag, Dhaka (23.868350°N, 90.413520°E)	Commercial	57.41	55.27
				Near East West Medical College, Turag, Dhaka (23.894316°N, 90.377061°E)	Commercial	75.53	63.55
ICB 2.09	DMA 204	During Construction	29.11.2022	Hazaribagh Park Road, Hazaribagh, Dhaka (23.726323°N, 90.373071°E)	Mixed	62.4	51.1
				Kalunagar New Road, Hazaribagh, Dhaka (23.729103°N, 90.367949°E)	Residential	59.4	49.2
ICB 2.10	DMA 102	Baseline	26.09.2022	Hatkhola road Tikatoli, Wari, Dhaka Central women's University (23° 43' 5.06"N & 90° 25' 13.15"E)	Institutional	76	69
				Hatkhola road Tikatoly, Wari Dhaka. Sher e Bangla Girls Mohabiddaloy, Dhaka. (23° 43' 6.81"N & 90° 25' 3.52"E)	Institutional	72	64
				Shapla Chattar Motijheel. Infront of Shonali bank (23°43'34.BS"N & 90°25'17.61"E)	Commercial	73	57
	DMA 103	Baseline	26.09.2022	Arambagh Motijheel in front of Arambagh bus counter (23°43'47.7S"N & 90°25'17.71"E)	Commercial	74	69
				Bangladesh Bank colony, Arambagh Motijheel Infront of Bangladesh Bank High school (23°43'51.71"N & 90°25'21.43"E)	Residential	63	51
				Kamalapur In front of kamalapur railway station (23° 43' 53.87"N & 90° 25' 33.56"E)	Commercial	75	72
	DMA 106	Baseline	26.09.2022	Kamalapur Bir Sreshtho Shohid Shipahi Mostafa Kamal Stadioum (23° 43' 31.0T'N & 90° 25' 44.3S"E)	Commercial	76	72
				South Mugdapara WASA road bridge (23°43'36.72"N & 90°26'1.67")	Residential	59	48
Standard					Commercial	70	60
					Residential	55	45
					Mixed	55	45

Findings:

49. For most of the cases, noise levels during both baseline and construction stage are exceeded the national standards set for both day and night time due to different types of commercial activities, construction activities, traffic volume & other interruptions.

50. Mitigation measures need to be applied as per site specific EMP. Particular use of ear plugs by workers at high noise producing areas is necessary. Noise producing activity should be limited near residential areas, schools and healthcare facilities during working hours. Accordingly, instruction has been given to contractors. It is ensured that the contractors will strictly implement the action plan as per EMP for reduction of noise level and minimization of noise impact.

51. As per the site specific EMP, the Contractors are required to test the drinking water used by labors. Surface water test was not conducted due to no project activities was implemented during reporting period in the surrounding water bodies. The results are shown in Table 11 for drinking water.

Table-11: Drinking Water Quality Results-at DMA Sites

Package No.	Name of DMAs	Date of Testing	Site Location	pH	BOD_5 mg/L	As mg/L	DO Mg/L	COD mg/L	Iron Fe mg/L	Mn mg/L	Chloride Mg/l	Total Coliform N/100 ml
ICB 2.8	DMA 901 During Construction	04.07.2022 06.07.2022	DTW, Uttara-10/A, (New), DMA-901	6.96	-	<0.01	6.17	-	0.817	0.140	10	0
			DTW, Uttara-10/A (Old), DMA-901	6.89	-	<0.01	6.72	-	0.224	0.076	40	0
ICB 2.9	DMA 204 During Construction	28.11.2022	DTW, Kalunagar	6.85	-	<0.01	5.10	-	1.258	0.424	13	0
			DTW, Hazaribag Park	6.82	-	<0.01	4.43	-	0.670	0.228	12	0
			Dhakeshwari Water Pump 23.721575^{0}N, 90.390061^{0}E	6.95	-	0.001	3.68	-	0.079	0.575	31	0
ICB 2.10	DMA 113 (After Construction	26.7.2022-31.07.2022	Beauty Boarding Water Pump, Banglabazar, Dhaka (23.706287ºN, 90.413122ºE)	6.94	0.18	<0.01	3.81	<1	<1	0.318	10	0
			Distribution Network, Baitul Taqwa Mosque, Dhaka (23.706603ºN,90.413317ºE)	6.87	0.13	<0.01	7.45	<1	<1	0.340	14	0
			Narinda Water Pump, Sutrapur, Dhaka (23.710018 ºN, 90.418478ºE)	6.85	0.2	<0.01	4.52	<1	<1	0.203	86	0
			Kaji Abdur Rouf Water Pump, Sutrapur, Dhaka (23.710934ºN, 90.434585ºE)	6.95	0.2	<0.01	3.15	<1	<1	0.322	36	0
			Lakshmi Bazar Water Pump, Dhaka. (23.70743ºN, 90.415ºE)	6.97	0.19	<0.01	3.95	2	2	0.231	68	0
			Distribution Network, 30, Laxmi Bazar, Dhaka	6.90	0.13	<0.01	7.90	<1	<1	0.053	20	0
Standards for drinking water				6.5-8.5	0.2	0.05	>=6	4.0	0.3-1.0	0.1	150-600	Not detectable

52. Findings: The laboratory analysis of water quality shows that water quality parameters concentration of most of the locations were within allowable limits of DoE, Bangladesh. DO has been surpassed in some location. This is mainly due to the concentrations are constantly affected by diffusion and aeration, photosynthesis, respiration and decomposition. While water equilibrates toward 100% air saturation, dissolved oxygen levels will also fluctuate with temperature, salinity and pressure changes in the area.

53. During Construction" air quality, noise level and water quality monitoring will be continued for the packages as per Environment Management and Monitoring Plan. All monitoring expenses will be borne by contractors which mentioned in the bidding document under the contract section 6, sub clause 2.14 (safeguards) and sub clause 2.14.1 (IEE).

54. The Environmental Management Implementation Work Schedule has been prepared by contractor for next six months (January - June 2023) to implement the EMP plan wise while showing precisely how and when construction period mitigation and monitoring actions will take place. The following Table shows the Environmental Management Implementation Work Schedule for next six months (January - June 2023).
Attached in annex-08

V. CONSULTATIONS AND DISCLOSURES CONDUCTED

55. During the IEE updating of various DMAs (subprojects), the stakeholders were consulted and involved through discussions on-site and public consultation at several places in the DMA. The view and feedback were incorporated into the IEEs and project design and development as appropriate. As per approved IEE, consultations and disclosure will be a continuous process throughout project implementation involving public consultations and focus group discussions. Accordingly, during the implementation phase, the consultation process has been continued to ensure that stakeholders are fully engaged in the project and have the opportunity to participate in its development and implementation.

56. Different type of stakeholders such as respective WARD representatives - elected Councilor, line departments and utility agencies, general public, residents, business, vendors etc., in were consulted. Consultations conducted mostly near the work sites such as along pipe laying sites, such consultation is basically one to one discussion with public and generally to be continued throughout the construction period. Construction phase issues, and implementation of EMP measures were discussed. The issues like requirement of restoration of utility services, removal of overburden soil, road restoration done or not, dust and noise pollution during implementation of the project, community safety arrangement, availability of public access have been discussed and views has been tabulated**.**

57. The indicative schedule for consultations and disclosure are presented in Table 14.

Table 14: Indicative Schedule for Consultations and Disclosure

Type of Consultation/Disclosure	Target Date	Location	Target Participants	Responsible Person
Local Level Consultation	Weekly – to be continued	At all construction locations	General public, shop keepers, pedestrian population	Supervisors of 'NGO Awareness'; Environment and Safety Officer of Contractor, ARE, Environmental Inspector of DMS- continuous process
Consultation-safety issues, EMP implementation	Bimonthly	DMS office, PM site office and construction site	ARE/SARE of DMS, Supervisor Engineers of Contractor, Environment and safety Officer of Contractors	Environmental Specialist, Environmental Inspector of DMS

58. During reporting period, Civil contract contractor has updated IEE report for ICB 2.8, ICB 2.9 and ICB 2.10 at different DMA locations. During updating of IEE report, local level consultation has been conducted at different DMA locations. List of participants, pictures etc. are provided in annex 10.

Summary of Public Consultation Meetings – July-December 2022

Sl.	Date	Time	Place	DMA	Types of Meeting	Participants		
						Male	Fem.	Total
1	28/07/22	11:30	Satish Sarker Road, Gendaria	119	TSM	10	4	**14**
2	31/07/22	10:30	KB Road, Gendaria	117	TSM	10	4	**14**
3	01/08/22	3:15	Ahmedbag Water Pump Road	104	TSM	08	2	**10**
4	03/08/22	3:40	Mugdapara Baro Masjid Goli	104	TSM	10	1	**11**
5	08/08/22	3:30	Kadomtali School Road	104	TSM	10	02	**12**
6	10/08/22	3:00	Kalicharon Road	117	TSM	12	2	**14**
7	11/08/22	12:30	Balur Mat Water Pump Road	119	TSM	10	2	**12**
8	18/10/22	12:00	Manik Nagor Main Road	110	TSM	13	01	**14**
9	19/10/22	2:00	Wasa Road	110	TSM	13	01	**14**
10	04/08/22	11:30	Dhalka Nagor Main Road	117	FGD	14	06	**20**
11	27/10/22	12:10	Manik Nagor Govt Primary School	110	FGD	06	14	**20**
12	17/08/22	10:25	Dharmarajika High School, Dhaka	104	PCM	19	34	**53**
13	24/08/22	10:15	Bipin Roy Boys Govt. Primary School, Dhaka	117	PCM	14	40	**54**
14	06/11/22	11:30	Maniknagor Model High School	110	PCM	**22**	**30**	**52**
Total 14 sessions						**171**	**143**	**314**

Sl.	Date	Time	Place	DMA	Types of Meeting	Participants		
						Male	Female	Total
1	27/11/22	11:10	Sher shah shuri Road	313	TSM	10	02	**12**
2	28/11/22	12:10	Jannathbag Road, bijli Mohallah	312	TSM	10	02	**12**
3	29/11/22	12:00	15/1 Iqbal Road	313	TSM	09	02	**11**
4	17/12/22	10:30	General Stare Road	307	TSM	**08**	**03**	**11**
5	20/12/22	2:25	Shat tara Mosjid Road	406	TSM	10	02	**12**
6	21/12/22	12:30	Amtola Mosjid road	406	TSM	10	01	**11**
						57	12	**69**
7	24/11/22	11:00	Shia Mosjid Road	313	FGD	08	10	**18**
8	30/11/22	11:30	Tazmahol Road	312	FGD	14	03	**17**
						22	**13**	**35**
9	01/12/22	11:30	Bangabandhu Govt Primary school,Dhaka	312	PCM	09	59	**68**
Total 9 sessions						167	109	**276**

- All stakeholders were very supportive of the project, extended full cooperation during the works, and requested the PMU to complete the works at the earliest
- Stakeholders indicated that works are being conducted without much disturbance to people, however, some stakeholder aired their grievances such as damaged to utilities (water pipelines, and house connections), non-clearance of surplus soil, delay in road restoration, dust, traffic disruptions, etc., PMU informed that these gaps in EMP implementation have already been identified by DMSC and PCU and respective Civil Works Contractor directed to improve the compliance.
- PMU also explained the grievance redress system of the project, and encouraged public to bring their grievances, if any, to the notice of project agencies for early resolution

VI. GRIEVANCE REDRESS MECHANISM

59. A project-specific grievance redress mechanism (GRM) is established to receive, evaluate, and facilitate the resolution of AP's concerns, complaints, and grievances about the social and environmental performance at the level of the project. The GRM aims to provide a time-bound and transparent mechanism to record and resolve social and environmental concerns linked to the project. A common GRM is in place for social, environmental, or any other grievances related to the project; the resettlement plans (RPs) and IEEs will follow the GRM described below. The GRM provides an accessible and trusted platform for receiving and facilitating resolution of affected persons' grievances related to the project. The multi-tier GRM for the project is outlined below, below, each tier having time-bound schedules and with responsible persons identified to address dress grievances and seek appropriate persons' advice at each stage, as required.

60. PMU will maintain a Complaint Cell headed by a designated Grievance Officer at its office. The Grievance Registration/Suggestion Form **(Annex 6)** is available at the Complaints Cell and in Zonal Offices and will also be downloadable from the DWASA website (link to DWASA website: https://dwasa.org.bd/dwsnip/).

61. PMU/PCU with assistance from NGO (Resettlement and Public Awareness Campaign) are ensuring that awareness on grievance redress procedures is generated through the campaign. PCU Safeguard Focal Person through NGO –Public Awareness (SAMAHAR) team conduct wide awareness campaigns at each DMA sites to ensure that poor and vulnerable households are made aware of grievance redress procedures and entitlements.

62. APs have the flexibility of conveying grievances/suggestions by dropping grievance redress/suggestion forms in complain complaints/suggestion boxes or by e-mail, by post, by telephone, or by writing in a complaint register in PMU/PCU offices. Careful documentation mentation of the name of the complainant, date of receipt of the complaint, address/contact details of the person, location of the problem area, and how the problem was resolved are being undertaken by NGO/DMSC. The PMU Project Officers (Environment & Social) have the overall responsibility for timely grievance redress respectively on environmental and social safeguards issues and for registration of grievances, related disclosure and communication with the aggrieved party through PCU (Safeguard Nodal Person).

63. GRC was established on Dec 19, 2018 at both PMU and PCU level. The GRC committee are shown below:

GRC at PMU Level:

1.	Project Director- DWSNIP	-	Convener
2.	Deputy Project Director	-	Joint Convener
3.	Safeguard Focal Person (Concerned Executive Engineer)	-	Member
4.	Environmental Expert, DMS, DWSNIP	-	Member
5.	Resettlement Expert, DMS, DWSNIP	-	Member
6.	Team Leader, Resettlement (NGO SAMAHAR)	-	Member
7.	Affected Person (APs)/Representative (if applicable)	-	Invited Specially

GRC at PCU Level:

1.	Executive Engineer (Concerned MODS Zone)	-	Convener
2.	Safeguard Focal Person (AE/SDE, (Concerned MODS Zine)	-	Member
3.	Team Leader, Resettlement (NGO SAMAHAR)	-	Member
4.	Resettlement Officer of Concerned Civil Works Contractor	-	Member
5.	Ward Councilor/Female Ward Councilor (Concerned City Corporation)	-	Member
6.	Affected Person (APs)	-	Invited specially

Grievance Redress Process

64. Grievances received and responses provided have been documented and reported back to the affected persons. The number of grievances recorded and resolved and the outcomes have been displayed/disclosed in the offices of the different Zonal office of DWASA and web. Project-affected people can also send their grievances directly to ADB through the Bangladesh Resident Mission and/or to ADB's Accountability Mechanism

65. To resolve all project related grievances and complaints a common social and environmental grievance redress mechanism have been in place. Common and simple grievances is sorted out at project site/DMA level by the Contractor's Resettlement Supervisor, supervision staff of PMU and project NGO within 7 days. More serious complaints are sent to the safeguard officer at the PCU to be resolved in 14 days. If any unresolved grievances occur, the procedure is to forward that to PMU to resolve within 21 days. Despite the project GRM, an aggrieved person has access to the country's legal system at any stage.

66. **Consultation Arrangements.** This includes group meetings and discussions with affected persons, to be announced in advance and conducted at the time of day agreed on with affected persons and conducted to address general/common grievances; and if required with the Environment/Resettlement Specialist of PMU/DMSC for one-to-one consultations. Non-literate affected persons/ vulnerable affected persons are assisted to understand the grievance redress process, to register complaints and with follow-up actions at different stages in the process.

67. Record-Keeping. Records are kept by PMU/PCU Office/Contractors' site office of all grievances received including contact details of complainant, date the complaint was received, nature of grievance, agreed corrective actions and the date these were in effect, and final outcome.

68. The number of grievances recorded and resolved and the outcomes are displayed/disclosed in the offices of the different MODS zone of DWASA and web. The phone number where grievances are to be recorded are prominently displayed at the construction sites.

69. Periodic Review and Documentation of Lessons Learned**.** PMU periodically reviews the functioning of the GRM and effectiveness of the mechanism, especially on the Project's ability to prevent and address grievances.

70. All costs involved in resolving the complaints (meetings, consultations, communication and reporting/information dissemination) is borne by PMU.

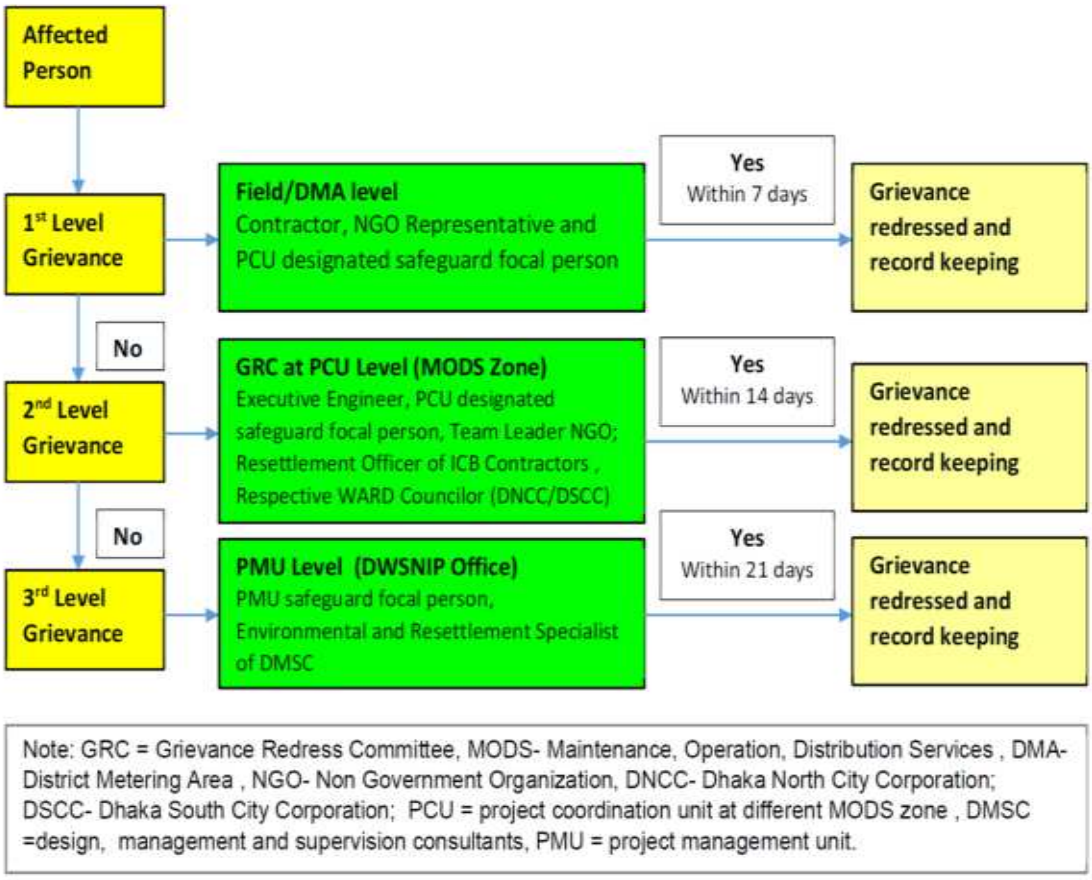

Figure 3: Flow Chart of GRM Process

Complaints Received during Reporting Period

71. All grievances – major or minor, during the project implementation are registered. Officials are maintaining a register of all grievances with the name of the complainant, date of receipt of the complaint, address/contact details of the person, location of the problem area, and how & when the problem was resolved, etc.

72. No complain received during reporting period.

GRM for Labors

73. Grievance Redress Mechanism (GRM) has also been established for labourers /workers whose grievances are heard and recorded regularly, and appropriate actions are taken to redress them. All Civil works contractors discussed with Labourers during working time to receive and record their complaint if they had.

VII. TRAINING AND CAPACITY BUILDING PROGRAM AND INCIDENT SUMMARY

74. As suggested in the respective IEE and EMPs, various training and capacity building programs conducted specific to environment, health, safety and implementation of EMPs. Training program on safety and environment has been arranged for contractors, supervisors by DMSC and ADB safeguard specialists / consultants in PMU Office, DMS office and PM site office, Contractor's site office, stockyard/ camp site and construction site during the reporting period. Details are provided in the following table.

Table -16: Capacity Building/Training Activities

Training Title	Date and Venue	Training Details	No of Participants	
			Male	Female
Training of Precaution for Covid-19	16.07.2022 Location: Fulbaria Construction Site	Site In Charge, Site Engineers, Supervisors, workers of contractors	15	0
Training for construction Safety	17.08.2022 Location: DMA-901 Construction Site	Engineers, Supervisor, Technician and others	14	0
Training for Construction Safety & Covid-19	28.09.2022 Location: Ranavola, Uttara, Dhaka, DMA- 901 Construction Site	Project Engineer, Supervisor, Technician and Laboure	4	8
Training for Construction Safety	24.10.2022 Location: DMA-907 (DTW Installation site)	Project Engineer, Supervisor, Technician and labors	10	0
Training for Construction Safety of DTW	14.11.2022 Location: DMA-907 DTW Construction site Pump-7/A	Project Engineer, Supervisor, Technician and labors	7	0
Training for Construction Safety	13.12.2022 Location: DMA-907, Pump-9/C	Engineer, Supervisor, Technician and Labors	10	0
Safety Procedures During House Connection Works	30.07.22 DMA-212 (Store)	Site Engineers, Technician, Supervisors and HDD Helpers	12	0
Safety Issues during Meter Shifting Works and How to Solve Them.	20.08.22 DMA-209 (Store)	Site Engineers, Technicians and Pipe Fitters	10	0
Precautions needed while How to Do Open Trench Works in Busy and Narrow Roads Effectively and Safely.	25.09.22 DMA-214 27.10.22 DMA-212 (Store)	Site Engineers, Technicians and Mechanics	10	0
Safe and effective use of different pipe fittings.	29.11.22 DMA-207 (Store)	Technicians	8	0

Precautions to be taken during pipe joining using Butt Fusion Machine.	29.12.22 DMA-211 (Store)	Technicians, Mechanics and Pipe Fitters	10	0
Training on Electric Fusion and Butt Fusion machine sleeve joint and IC works	26.11.2022 At Komlapur Project office	Site Engineer, 2nd man, Site In Charge, Site Engineers, Supervisors of contractors, Jointer Plumber	30	2
Training for Safety and health issues at construction (Road cone, Steel sheet placing, Safety barrier & encircling the spot using security Tape, Dust emission)	09.11.2022 Construction Site	Project Engineer, Supervisor, Technician and Labor, HDD operating group HDD team (operator, tracker, helper and supporting staffs.	25	0
Mechanics training program	22.12.2022 Demra workshop	Engineer, Supervisor, Technician & Mechanics	10	0
Environment, Health and Safety at working sites	24.12.2022 At Komlapur Project office	PMU representative ARE SARE DMS NGO, SM, DSM, ASM, SE, HDD & Jointing team	30	2

VIII. HEALTH AND SAFETY STATUS

75. This section presents the status of Health and Safety of DWSNIP subprojects under 3-ICB packages (ICB-2.8, ICB-2.9, ICB-2.10) with implementation and rehabilitation of different activities mentioned below:

Objectives	Measures
Site Security Measures	Use of proper safety signage, display board, caution tape, hard barricading should be done during implementation work. The photograph of safeguard compliances attached in **Annex-5**
PPE inventories	Use of proper Personal Protective Equipment (PPEs); i.e.; Hard hat, Eye Protection, Hand Protection, Foot ware, Ear-protection, Safety Vest; should be used during implementation work. **(Annex-5)**
Medical and First Aid provision:	First aid kits are necessary so that injuries can be treated immediately to help reduce the risk of infection to the injury. A first aid assessment should be carried out to be able to provide first response to all types of accidents and injuries. First aid kits should include: Moist wipes, Disposable gloves, Medium and large sterile dressings, Sterile eye pads, Saline solution, Eye baths, Triangular bandages.
Emergency preparedness and response procedures	The following emergency protocol will be maintained. Site Manager will seal off the work area immediately; He will notify appropriate emergency mitigation team (i.e., hospital, fire department, etc.); Then he will notify Contract Manger of the incident; Contract Manager will inform the Director and the client of the incident; Contract Manager and Client will decide when to re-open work site; The emergency incident will be logged for Client's review. The Root cause analysis reports during reporting period have been enclosed in **annex-12**
Safety Checklists	Safety Checklists for Excavation work, Traffic Management Work, Electrical Work, Fire Safety, DTW works, Safety for Asbestos Cement pipe, Dust and Noise control, OHS a& CHS safety have been enclosed in **annex-14**

76. Few minor incidents occurred at DWSNIP during this reporting period. Please see the summary of all the incident/accident in the following table. And root cause analysis report has been attached in **Annex-12**

Table: Incident Report for Human (July - December, 2022)

Sl.	Date and Time	Location	Type of Work	Nature of Incident	Description	Corrective Action
1	10.07.2022 01:45 PM	DMA-901	Labour	Cut and Pain in right leg	He slipped his right leg while open cutting work.	First Aid was applied and he was advised to take rest.
2	14.08.2022 11:30 AM	DMA-902	Labour	Cut and Pain in hand	Got hand injury while house connection work	First Aid was applied and he was advised to take rest
3	11.08.2022 10:45 AM	DMA-104	Jointer	Cut in finger	Small portion of finger was cut during work	First Aid was applied and he was advised to take rest.
4	16.09.2022 3:20 PM	DMA-119	Labour	Cut in leg	He slipped while house connection work	First Aid was applied and he was advised to take rest
5	14.10.2022 11:30 pm	DMA-108A	Plumber	Cut in leg	He slipped his left leg while house connection work	First Aid was applied
6	26.10.2022 2:00 pm	DMA-110	Labour	Cut in hand	He lost his balance he was slightly hurt	Medicine was provided
7	21.11.2022 9:30 pm	DMA-118	Jointer	Cut in hand	He was hurt at hand while joining fittings	First Aid was applied
8	10.12.2022 3:42 PM	DMA-105	Labour	Cut and Pain in hand	Got hand injury while machine pulling	First Aid was applied

IX. MITIGATION MEASURES FOR PREVENTION OF COVID 19

77. With the outbreak of COVID 19 Pandemic and subsequent lockdown, most of the activities in the country stopped temporarily until the country became normalized. From around 26th March up to 31st May 2020 almost all the construction sites in the country were temporarily suspended. With the decrease of the threat of COVID 19, construction activities of the DWSNIP resumed with compliance to government's Technical Guidance for Social and Institutional Containment and Prevention of Pandemic COVID-19 Infection issued on 11 May 2020 applied by the Ministry of Health and Family Welfare and Director General Health Service (MOHFW/DGHS) and the guidelines circulated by the LGD.

78. The Addendum Health and Safety (H&S) Plans in response to COVID-19 were developed by all civil works contractors and approved by PMU as well as ADB. In summary, the following important elements in the H&S plans:

(i) The plans are not intended to replace any formalized procedures currently in place for the Contractors. If the H&S Plans do not meet or exceed the standards put forth by the Contractors in their EMPs, SEMPs or other plans, the Contractors shall abide by the most stringent procedures/standards available;
(ii) The existing Environmental Officer or health & safety officer or Site Manager of the contractors can be designated as OHS officers;
(iii) Requirement for induction of employees and workers on COVID-19 per WHO guidelines, including training and monitoring;
(iv) List of specific PPE needs of all workers on a daily basis, with estimated costs to be borne by the contractors or funded under the contingency cost of provisional sum (subject to confirmation by PMU);
(v) Specific guidance for the management teams, offices, site labourers and stock yards/construction camps, including site facilities needed, on the implementation of COVID-19 prevention measures;
(vi) Self-declaration and monitoring checklists; and
(vii) Arrangement and contact numbers in cases of emergencies.

79. Meanwhile, BRM have prepared a COVID-19 Health and Safety Advisory Guidance for Construction Workforce and provided to Project Director on July 21, 2020. The guidance includes the protocols on the following:

(i) Prerequisite measures before reopening the worksites;
(ii) Worksite entrance;
(iii) Worksite management;
(iv) Camp management;
(v) Work site awareness raising;
(vi) Risk exposure assessment guidance;
(vii) Engage an employee/staff to oversee health and safety issues; and
(viii) Monitoring and reporting mechanism.

X. OBSERVATIONS AND RECOMMENDATIONS

80. Based on the foregoing observations, findings and environmental monitoring carried out from July - December 2022, it may be concluded that ICB 2.8, ICB 2.9 and ICB 2.10 under DWSNIP subprojects (DMAs) have been implemented as just satisfied. There are some non-compliance EMP activities noticed in the monitoring report in each DMA sites of different packages for which Corrective Action Plans have been prepared and presented in Table 8. Following are noncompliance issues for Packages

- Some trenches were found open after laying pipes.
- Although Contractor has provided adequate numbers of PPEs but use of these PPEs during construction sites are inadequate.
- Management of air quality, dust and noise
- Lack of using barricade and caution tape
- Spoil disposal management

81. The concerned Contractors have been suitably advised. Contractors have also been advised to provide written commitment for implementation of corrective action plan. Contractor will mitigate the above issues according to Table 8 to remove these non-compliances.

82. At the beginning of the construction works at all DMAs, the Contractors were reluctant to comply with the EMP, HSP and use of Face Mask properly. From the initiative and continuous monitoring and supervision both from DMS and DWASA the safeguard compliances were achieved and all the safeguard compliances were found to carry out by the Contractors during reporting period.

83. Table 17 provides the recommended corrective action plan that has been devised and target dates that have been set so as to remove these non-compliances. The concerned Contractors have been suitably advised. Contractors have also been advised to provide written commitment for implementation of corrective action plan

Table 17: Implementation of Corrective Action Plans

Sl No.	Non-Compliance	Action Required	Responsibility	Implementation status of corrective action
Package ICB 2.9-				
1	Dust problem was noticed in the construction area	Sprinkling of water should be carried out at dusty sites	Contractor-CFMCC	Improved but not enough (as per ECC of DOE) that the sprinkling should be done twice but it was done for once in a day
2	The contractor could not dispose excavated materials from sites regularly;	Ensure proper collection and disposal of excavated materials at designated disposal sites on the same working day.	Contractor-CFMCC	The situation has been improved now
3	Non availability of traffic signage (Signs, Pavement Markings, Arrow Panels etc.	Implement the Traffic Management Plan to ensure the safety of all the road users	Contractor-CFMCC	Improved and satisfactory
4	Pits and trenches are not always covered with steel plates	Prompt action is required to cover trenches after laying of pipes	Contractor-CFMCC	Improved and satisfactory
5	Lack in use of PPEs among the workers	Encourage use of PPEs on construction site in daily tool-box trainings	Contractor-CFMCC	Immediate and to be continued
Package ICB 2.10				
1	Not available traffic signage (Signs, Pavement Markings, Arrow Panels, Warning Lights) on site	Ensure the safety of all the road users along the work zone and Mark all under construction road.	Contractor-CCSEB-RPL JV	Partially improved; Further improvement is required
2	No notice board installed in the construction area within DMA	Immediate arrangement of proper notice board (Project information, nature of work and duration of the activities) at all construction sites	Contractor-CCSEB-RPL JV	Improved
3	Dust problem was noticed in the construction area	Sprinkling of water should be carried out at dusty sites	Contractor-CCSEB-RPL JV	Partially Improved
4	Noise level at some worksites was found higher	Provide Air plug to the workers and aware them to use it. Noise level needs to be monitored according to EMP	Contractor-CCSEB-RPL JV	Improved
5	Incomplete use of PPEs by Workers	The Contractor to ensure the use of PPE on site	Contractor-CCSEB-RPL JV	Partially improved; Further improvement is required
6	Poor Health and safety in COVID 19 prevention	Immediate improvement is required	Contractor-CCSEB-RPL JV	Improved satisfactorily

84. Failure to perform the instructions, The Project Manager will take action against each Contractors. Alongside the Contractors are advised to follow the guidelines & instructions of DMS Officials. Environmental Specialist of DMS recommended the corrective measures which the contractor will do immediately for EMP and HSP compliance.

85. Prior to start works, the Contractor will recommend to provide the following information according to SEMP

- Name of Health, Safety Officer and Site Supervisors with contact details
- No. of workers (Male/Female wise)
- Copies of all permission/approvals for construction from concerned authority
- Tool box training to staff and workers
- Detail of Notice Board
- DMA wise traffic management plan
- Details of PPEs (item wise) including prevention of COVID 19
- Awareness Poster for COVID 19 prevention

Annex 01: ICB Package-wise Design and Implementation Status (Till December 2022)

ICB Package no.	Batch no. (DMAs)		Activities performed during Jan-Jun'22 (Y-done; N-not done; N.A.-not applicable)						
		DMA	Survey	Model Design	Detail Design	Joint Verification	Method of Statement	Road cutting permission	Materials Mobilization & Testing
ICB 2.8	1st Batch	DMA 903	Y	Y	Y	Y	Y	CPP obtained permissions for all DMAs	HDPE pipe & fittings, HC pipe & fittings, Regular Valve (Gate Valve & NRV), Special Valve (PSV & ARV), Domestic Water Meter, Bulk Water Meter, Float Valve, Data Logger; all mobilization and testing completed Deep Tube Well 10 sets mobilization and testing completed
		DMA 904	Y	Y	Y	Y	Y		
		DMA 906	Y	Y	Y	Y	Y		
		DMA 907	Y	Y	Y	Y	Y		
	2nd Batch	DMA 905	Y	Y	Y	Y	Y	CPP obtained permissions for all DMAs	HDPE pipe & fittings, HC pipe & fittings, Regular Valve (Gate Valve & NRV), Special Valve (PSV & ARV), Domestic Water Meter, Bulk Water Meter, Data Logger, Float Valve; all mobilization and testing completed.
		DMA 912	Y	Y	Y	Y	Y		
		DMA 913	Y	Y	Y	Y	Y		
		DMA 914	Y	Y	Y	Y	Y		
	3rd Batch	DMA 915	Y	Y	Y	Y	Y	CPP obtained permissions for DMA915, DMA911, DMA901, DMA902 CPP applied for road cutting permission for DMA908 waiting for the permission.	HDPE pipe & fittings, HC pipe & fittings, Regular Valve (Gate Valve & NRV), Special Valve (PSV & ARV), Bulk Water Meter, Data Logger, Float Valve, Domestic Water Meter; mobilization and testing completed.
		DMA 911	Y	Y	Y	Y	Y		
		DMA 901	Y	Y	Y	Y	Y		
		DMA 902	Y	Y	Y	Y	Y		
		DMA 908	Y	Y	Y	Y	Y		

ICB Package no.	Batch no. (DMAs)	DMA	Activities performed till December 2022 (Y-done; N-not done; N/A-not applicable)						
			Survey	Model Design	Detail Design	Joint Verification	Method of Statement	Road cutting permission	Materials Mobilization & Testing
ICB 2.09	1st Batch	DMA 201	Y	Y	Y	Y	Y	Obtained permissions for DMA 201, 202, 203 and 204B. Permissions for some portions of DMA 204A are pending.	HDPE pipes & fittings, HC pipes & fittings, domestic water meters, regular valves, special valves, float valves, bulk water meters, data loggers (all mobilization and testing completed)
		DMA 202	Y	Y	Y	Y	Y		
		DMA 203	Y	Y	Y	Y	Y		
		DMA 204A	Y	Y	Y	Y	Y		
		DMA 204B	Y	Y	Y	Y	Y		
	2nd Batch	DMA 205	Y	Y	Y	Y	Y	Obtained permissions for all DMAs	HDPE pipes & fittings, HC pipes & fittings, domestic water meters, regular valves, special valves, float valves, bulk water meters, data loggers (all mobilization and testing completed)
		DMA 206	Y	Y	Y	Y	Y		
		DMA 209A	Y	Y	Y	Y	Y		
		DMA 209B	Y	Y	Y	Y	Y		
		DMA 210A	Y	Y	Y	Y	Y		
		DMA 210B	Y	Y	Y	Y	Y		
	3rd Batch	DMA 212	Y	Y	Y	Y	Y	Obtained permissions for DMA 213. Permissions for some portions of DMA 212 and 214 are pending.	HC pipes & fittings, domestic water meters, regular valves, data loggers (all mobilization and testing completed) HDPE pipes & fittings, special valves, bulk water meters, float valves are partially procured.
		DMA 213	Y	Y	Y	Y	Y		
		DMA 214	Y	Y	Y	Y	Y		
	4th Batch	DMA 207	Y	Y	Y	Y	Y	Obtained permissions for DMA 215. Permissions for some portions of DMA 207, 208A, 208B and 211 are pending.	HC pipes & fittings, domestic water meters, regular valves, data loggers (all mobilization and testing completed) HDPE pipes & fittings, special valves, bulk water meters, float valves are partially procured.
		DMA 208A	Y	Y	Y	Y	Y		
		DMA 208B	Y	Y	Y	Y	Y		
		DMA 211	Y	Y	Y	Y	Y		
		DMA 215	Y	Y	Y	Y	Y		

ICB Package no.	Batch no. (DMAs)	DMA	Survey	Model Design	Detail Design	Joint Verification	Method of Statement	Road cutting permission	Materials Mobilization & Testing
ICB-2.10	1st Batch	DMA 108A	Y	Y	Y	Y	Y	CPP obtained permissions for all DMAs	HDPE pipe & fittings, HC pipe & fittings, Regular Valve (Gate Valve & NRV), Special Valve (PSV & ARV), Domestic Water Meter, Bulk Water Meter, Float Valve; all mobilization and testing completed Deep Tube well 6 sets mobilization and testing completed.
		DMA 108B	Y	Y	Y	Y	Y		
		DMA 113	Y	Y	Y	Y	Y		
		DMA 115	Y	Y	Y	Y	Y		
		DMA 116	Y	Y	Y	Y	Y		
	2nd Batch	DMA 101	Y	Y	Y	Y	Y	CPP obtained permissions for all DMAs	HDPE pipe & fittings, HC pipe & fittings, Regular Valve (Gate Valve & NRV), Special Valve (PSV & ARV), Domestic Water Meter, Bulk Water Meter, Float Valve; all mobilization and testing completed
		DMA 102	Y	Y	Y	Y	Y		
		DMA 103	Y	Y	Y	Y	Y		
		DMA 105	Y	Y	Y	Y	Y		
		DMA 106	Y	Y	Y	Y	Y		
		DMA 114	Y	Y	Y	Y	Y		
	3rd Batch	DMA 104	Y	Y	Y	Y	Y	CPP applied for road cutting permission for	HDPE pipe & fittings, HC pipe & fittings, Regular Valve (Gate Valve & NRV), Special Valve (PSV & ARV), Bulk Water Meter, Float Valve; mobilization and testing completed.
		DMA 110	Y	Y	Y	Y	Y		
		DMA 117	Y	Y	Y	Y	Y		
		DMA 118	Y	Y	Y	Y	Y		
		DMA 119	Y	Y	Y	Y	Y		
	4th Batch	DMA 107	Y	Y	Y	Y	Y	CPP applied for road cutting permission for	
		DMA 109A	Y	Y	Y	Y	Y		
		DMA 109B	Y	Y	Y	Y	Y		
		DMA 111	Y	Y	Y	Y	Y		
		DMA 112	Y	Y	Y	Y	Y		

Annex 02: Environmental Safeguards Compliance Matrix

Package	Batch (DMAs)	Targeted pipeline length (Km)	Pipe laying (Km) till 31 December 2022	Updated IEE (Y/N)	Disclosure (DWASA/ ADB)	Environmental Clearance from DOE (ECC)	Targeted date of Updated IEE submission
ICB 2.08	1st Batch	457.41	426.17	Y	Y	Y	NA
	2nd Batch			Y	Y	Y	NA
	3rd Batch			Y	Y	Y	NA
ICB 2.09	1st Batch	261.90	242.74	Y	Y	Y	NA
	2nd Batch			Y	Y	Y	NA
	3rd Batch			Y	Y	Y	NA
	4th Batch			Y	Y	Y	NA
ICB 2.11	1st Batch	453.41	100	Y	Y	Y	NA
	2nd Batch			Y	Y	Y	NA
	3rd Batch			Y	Y	Y	NA
	4th Batch			Y	Y	Y	NA
	5th Batch			N	N	Y	Detailed design – not completed
	6th Batch			N	N	Y	Detailed design – not completed
ICB 2.10	1st Batch	340.75	180.32	Y	Y	Y	NA
	2nd Batch			Y	Y	Y	NA
	3rd Batch			Y	N	Y	NA
	4th Batch			N	N	Y	NA
ICB 2.12	1st Batch	163.95	Yet to be started	N	N	Y	NA
	2nd Batch			N	N	Y	NA

Annex 03: Copy of Environmental Clearance Certificate and Renewal Certificate

Government of the People's Republic of Bangladesh
Department of Environment
Paribesh Bhaban, E-16, Agargaon
Sher-e-Bangla Nagar, Dhaka-1207
www.doe.gov.bd

Environmental Clearance Certificate

Section 12 of the Environment Conservation Act, 1995 (Amended 2002)

Clearance Certificate Number: 233

File number: 22.02.0000.018.72.43.19.

Clearance Certificate Issue Date: 12 June 2019

Renewal date not later than: 11 June 2020

A. Clearance Certificate Type

Environmental Clearance Certificate

B. Clearance Certificate Holder

Project Director
Dhaka Water Supply Network Improvement Project
Dhaka WASA,WASA Bhaban (8th Floor)
98, Kazi Nazrul Islam Avenue, Kawran Bazar
Dhaka-1215.

C. Premises to which this Clearance Certificate Applies

The distribution pipelines will be laid within the RoW of Government roads. Total length of 1668 km distribution pipelines and reticulation will be laid in 29 Thana under DNCC and DSCC.

D. Activities for which this Clearance Certificate Authorizes and Regulates

The following components will be implemented through Dhaka Water Supply Network Improvement Project under Dhaka WASA -

- Survey, GIS base Network Modelling and Design, Pressure Test, Pre-commissioning, commissioning/Guarantee Tests
- Supplying and laying of 75-450 mm dia HDPE pipes (approx. 1668 km) water distribution lines by using open Trench, Pipe Bursting and Horizontal Drilling Technologies
- Installation of Service connections to approx. 156,163 households including supplying of HDPE pipes, fittings and accessories etc.
- Replacement/Up-gradation of approx. 50 Deep tubewells
- Supplies of key plant of Regular and special valves, Domestic and Bulk-Water meters and welscreen are also part of the facility.

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E. Terms and Conditions for Environmental Clearance Certificate

1. **Limit Condition for Discharges to Air and Water**: The Environmental Clearance Certificate must comply with schedule 2 and 10, rule 12 of the Environment Conservation Rules, 1997.

2. **Noise Limit**: The Environmental Clearance Certificate must comply with the Noise Pollution (Control) Rules, 2006.

In case of non-coverage of ECR 1997 the World Bank Environment, Health and Safety Guideline shall be adhered to.

3. **Operating conditions:**

3.1 Activities must be carried out in a competent manner. This includes:
(a) the processing, handling, movement and storage of materials and substances used to carry out the activity; and
(b) the treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity.

3.2 All plant and equipment installed at the premises or used in connection with the Environmental Clearance activity:
(a) must be maintained in a proper and efficient condition; and
(b) must be operated in a proper and efficient manner.

3.3 Construction works shall be restricted to day time hours so as to avoid/mitigate the disturbance of local lives as well as implementation schedules of the works shall be notified in advance to nearby residents.

3.4 Storage area for soils and other construction materials shall be carefully selected to avoid disturbance of the natural drainage.

3.5 This shall be ensured that soil is obtained from nearby areas, which are free of invasive plants. Re-vegetation and replanting shall be undertaken if rehabilitation works involve extensive vegetation clearance.

3.6 Vegetation clearance shall be minimizing at the construction phase as to minimize soil erosion. Soils for embankments shall be properly tested and compacted to ensure stability.

3.7 Proper construction practices shall be followed that minimize loss of habitats and fish breeding, feeding & nursery sites.

3.8 Proper and adequate sanitation facilities shall be ensured in labor camps throughout the proposed project period.

3.9 In order to control noise pollution, vehicles & equipment shall be maintained regularly; working during sensitive hours and locating machinery close to sensitive receptor shall be avoided.

3.10 No solid waste can be burnt in the project area. An environment friendly solid waste management should be in place during whole the period of the project in the field.

3.11 Proper and adequate on-site precautionary measures and safety measures shall be ensured so that no habitat of any flora and fauna would be demolished or destructed.

3.12 All the required mitigation measures suggested in the EIA report are to be strictly implemented and kept operative/functioning on a continuous basis.

2/4

3.13 Any heritage sight, ecological critical area, and other environmentally and/or religious sensitive places shall be avoided during project construction phase.

3.14 Resettlement plan should be properly implemented and people should be adequately compensated, where necessary.

3.15 Construction material should be properly disposed off after the construction work is over.

3.16 The Environmental Management Plan included in the EIA report shall strictly be implemented and kept functioning on a continuous basis.

4.1 Monitoring and Recording conditions:

4.1.1 The results of any monitoring required to be conducted by this Clearance Certificate must be recorded.

4.1.2 The following records must be kept in respect of any samples required to be collected for the purposes of this Clearance Certificate:
(a) the date(s) on which the sample was taken;
(b) the time(s) at which the sample was collected;
(c) the point at which the sample was taken; and
(d) the name of the person who collected the sample.

4.2 Requirement to monitor concentration of pollutants discharged

For each monitoring, the Clearance Certificate holder must monitor (by sampling and obtaining results by analysis) the following parameter: air quality, water quality and Noise.

5. Reporting Conditions: Environmental Monitoring Reports shall be made available simultaneously to Head quarters and Dhaka Metropolitan office of the Department of Environment on a quarterly basis during the whole period of the project.

6. Notification of environmental harm: The Clearance Certificate holder or its employees must notify the Department of Environment of incidents causing or threatening material harm to the environment as soon as practicable after the person becomes aware of the incident.

F. Recording of pollution complaints

The certificate holder must keep a legible record of all complaints made to the certificate holder or any employee or agent of the certificate holder in relation to pollution arising from any activity to which this Environmental certificate applies. The record must include details of the following:

(a) the date and time of the complaint;
(b) the method by which the complaint was made;
(c) any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect;
(d) the nature of the complaint;

(e) the action taken by the certificate holder in relation to the complaint, including any follow-up contact with the complainant; and
(f) if no action was taken by the certificate holder, the reasons why no action was taken.

The record of a complaint must be kept for at least 4 years after the complaint was made. The record must be produced to any authorized officer of the DOE who asks to see them.

G. Validity of the Clearance Certificate

This Environmental Clearance is valid for one year from the date of issuance and the project authority shall apply for renewal to the Dhaka Metropolitan office with a copy to Head Office of DOE at least 30 days ahead of expiry.

Violation of any of the above conditions shall render this clearance void.

12.06.19

(Syed Nazmul Ahsan)
Director (Environmental Clearance)
Phone: 8181673

Renewal Certificate

শেখ হাসিনার বাংলাদেশ
পরিচ্ছন্ন পরিবেশ

গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পরিবেশ অধিদপ্তর
ঢাকা মহানগর কার্যালয়
পরিবেশ ভবন, ই/১৬, আগারগাঁও
শেরে বাংলা নগর, ঢাকা-১২০৭।
www.doe.gov.bd

স্মারক নং-২২.০২.০০০০.০৯১.৭২.০৭৫.২০/নবায়ন- ৫৭ তারিখঃ ১৮/০৮/২০২০ খ্রিস্টাব্দ।

বিষয় ঃ পরিবেশগত ছাড়পত্র নবায়ন (শ্রেণীঃ লাল) প্রসঙ্গে।

সূত্র ঃ আপনার গত ২১.০৬.২০২০ তারিখের আবেদন ও অন-লাইন(৭৯৫১৯)।

উপর্যুক্ত বিষয় ও সূত্রের প্রেক্ষিতে জানানো যাচ্ছে যে, আপনার আবেদন, দাখিলকৃত অন্যান্য কাগজপত্র ও সরেজমিন পরিদর্শন প্রতিবেদন যাচাই বাছাই করে ঢাকা ওয়াটার সাপ্লাই নেটওয়ার্ক ইমপ্রোভমেন্ট প্রজেক্ট(ডিডব্লিউএসএনআইপি), ঢাকা ওয়াসা অনুকূলে ইস্যুকৃত পরিবেশগত ছাড়পত্রের নবায়নের কপি অন-লাইনে প্রদান করা হয়েছে, যার সনাক্তকরণ নম্বর-৭৯৫১৯। উল্লেখ্য অন-লাইনে উদ্যোক্তার আইডি দিয়ে লগইন করে পরিবেশগত ছাড়পত্রের নবায়নের কপি ডাউনলোড করে প্রিন্ট করা যাবে। ডিজিটাল ছাড়পত্র একটি সিস্টেম জেনারেটেড ছাড়পত্র হওয়ায় এতে কোন স্বাক্ষরের প্রয়োজন নেই।

১৮.০৮.২০২০
(ড. মুঃ সোহরাব আলি)
পরিচালক
ফোন ঃ ৮১৮১৭৮৯
Email: dhakametro@doe.gov.bd

জনাব মোঃ আখতারুজ্জামান
অতিরিক্ত প্রধান প্রকৌশলী
ও
প্রকল্প পরিচালক
ঢাকা ওয়াটার সাপ্লাই নেটওয়ার্ক
ইমপ্রোভমেন্ট প্রজেক্ট(ডিডব্লিউএসএনআইপি)
ঢাকা ওয়াসা
৯৮, কাজী নজরুল ইসলাম এভিনিউ
কাওরান বাজার, ঢাকা-১২১৫।

অনুলিপিঃ অবগতির জন্যঃ
১। সহকারী পরিচালক, মহাপরিচালক মহোদয়ের শাখা, পরিবেশ অধিদপ্তর, ঢাকা।

Draft

গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পরিবেশ অধিদপ্তর
ঢাকা মহানগর কার্যালয়
পরিবেশ ভবন, ই/১৬, আগারগাঁও, ঢাকা ১২০৭
www.doe.gov.bd

পরিবেশগত ছাড়পত্র নবায়ন

ছাড়পত্র নং: ২০-৪৩২৫১

পরিবেশগত ব্যবস্থাপনা নিশ্চিতকরণ সাপেক্ষে সংযুক্ত শর্তে নিম্নবর্ণিত প্রতিষ্ঠান/প্রকল্পের অনুকূলে পরিবেশগত ছাড়পত্র নবায়ন প্রদান করা হলো :

প্রতিষ্ঠান/প্রকল্পের নাম	: Dhaka water supply Network Improvement project
উদ্যোক্তার নাম	: Dhaka Water Supply And Sewerage Authority
সনাক্তকরণ নং	: ৭৯৫১৯
প্রতিষ্ঠান/প্রকল্পের কার্যক্রম	: Water, power and gas distribution line laying/relaying/extension
প্রতিষ্ঠান/প্রকল্পের শ্রেণী	: Red
প্রতিষ্ঠান/প্রকল্পের ঠিকানা	: project director,Dhaka WASA, WASA Bhaban (8th floor), 98, Kazi Nazrul Islam Avenue, Kawran Bazar, Dhaka-1215,Tejgaon,Dhaka
প্রদানের তারিখ	: 18.08.2020
মেয়াদ উত্তীর্ণের তারিখ	: 12.06.2021

ছাড়পত্রটি যাচাই করতে ভিজিট করুন: http://ecc.doe.gov.bd/certificate_verification

সনাক্তকরণ নং: ৭৯৫১৯ Dhaka water supply Network Improvement project ছাড়পত্র নং: ২০-৪৩২৫১

Draft

পরিবেশগত ছাড়পত্র নবায়ন জন্য প্রযোজ্য শর্তাবলী:

১. এ ছাড়পত্র শুধুমাত্র ঢাকা ওয়াটার সাপ্লাই নেটওয়ার্ক ইমপ্রোভমেন্ট প্রজেক্ট(ডিডব্লিউএসএনআইপি)-এর ক্ষেত্রে প্রযোজ্য হবে।

২. বর্ণিত প্রকল্পের অনুকূলে পরিবেশ অধিদপ্তরের বিগত ১২.০৬.২০১৯ তারিখ নং-২২.০২.০০০০.০১৮.৭২.৪৩.১৯.২৩৩ সংখ্যক স্মারকে প্রদত্ত পরিবেশগত ছাড়পত্রের সকল শর্ত অপরিবর্তীত থাকবে।

৩. প্রকল্পের কার্যক্রম দ্বারা কোন অবস্থায় রাস্তায় যানজট সৃষ্টি করা যাবেনা। এ বিষয়ে বিকল্প ব্যবস্থাপনা সার্বক্ষণিক কার্যকর রাখতে হবে।

৪. প্রকল্পের এলাইনমেন্টে যানজট নিয়ন্ত্রণের জন্য নিজস্ব জনবল দ্বারা সার্বক্ষণিক যানজট নিয়ন্ত্রনের জন্য কার্যকর উদ্যোগ গ্রহণ করতে হবে।

৫. কোন অবস্থায় প্রকল্পের কার্যক্রম দ্বারা কোন জলাজয়, ডোবা, নালা, বিল, খাল, পুকুর, বন্যা প্রবাহ এলাকা, ওয়াটার রিটেনশন এরিয়া ভরাট করা যাবেনা।

৬. প্রকল্পের কার্যক্রম বাস্তবায়নের সময় রাস্তা খোড়া-খোঁড়ি করার সময় তাৎক্ষণিকভাবে রাস্তার মাটি নিরাপদে অপসারণ করতে হবে এবং কোন মাটি/বালি উন্মুক্ত অবস্থায় রাখা যাবেনা যাতে রোদে ডাস্ট উত্থিত হয়ে বায়ু দূষণ না হয় এবং বৃষ্টির পানিতে স্ট্রম ওয়াটারের সাথে মিশে রাস্তা সংলগ্ন ড্রেনেজ ব্লক সৃষ্টি হয়ে জলাবদ্ধা সৃষ্টি না করে।

৭. প্রকল্পের পাশের রাস্তায় কোন ধরনের নির্মাণ সামগ্রী রেখে ফুটপাত/রাস্তার প্রতিবন্ধকতা সৃষ্টি করা যাবেনা।

৮. প্রকল্পের কার্যক্রম দ্বারা পরিবেশ ও প্রতিবেশের ক্ষতিসাধন করা হলে Polluters Pay Principle অনুসারে ক্ষতিপূরণ ধার্য করে নির্ধারিত সময়ের মধ্যে ধার্যকৃত ক্ষতিপুরণ আদায় করা হবে।

৯. মহামান্য হাইকোর্ট বিভাগের রিট পিটিশন নম্বর ৯১৬/২০১৯ এর বিগত ২৯/০১/২০১৯ তারিখের আদেশ অনুযায়ী প্রকল্প নির্মাণকালে বায়ু/ডাস্ট দূষণ নিয়ন্ত্রণকল্পে দৈনিক অন্ততঃ দুইবার পানি ছিটিয়ে বায়ু দূষণ নিয়ন্ত্রণ করতে হবে।

১০. প্রকল্পের কার্যক্রমের মাধ্যমে কোন প্রকার বায়ু/শব্দ দূষণ সৃষ্টি করা যাবেনা। নির্মাণ কাজ চলাকালিন নির্মাণাধীন অবকাঠামো/বালু/মাটি যথাযথভাবে ঢেকে রাখতে হবে যাতে ধূলাবালি আশেপাশে ছড়িয়ে না পড়ে।

১১. প্রকল্পের কাজ শেষ হওয়ার সাথে সাথে তাৎক্ষণিকভাবে খোঁড়া-খোঁড়িকৃত রাস্তা পূর্বের অবস্থায় ফিরিয়ে আনতে হবে। এ বিষয়ে সংশ্লিষ্ট ঠিকাদারী প্রতিষ্ঠানকে প্রয়োজনীয় নির্দেশনা প্রদান করতে হবে। পরিবেশগত বিষয়াদি যথাযথভাবে বাস্তবায়ন করার জন্যও ঠিকাদারী প্রতিষ্ঠানকে নির্দেশনা প্রদান করতে হবে।

১২. বায়ুদূষণ নিয়ন্ত্রণের জন্য নির্মাণ সামগ্রী ঢেকে রাখতে হবে এবং নির্মাণ সামগ্রী পরিবহনের সময়ও ঢেকে পরিবহণ করতে হবে।

১৩. নির্মাণাধীন অবকাঠামো/প্রকল্পের এলাইনম্যান্ট এলাকায় নিয়মিত পানি ছিটিয়ে বায়ু দূষণ নিয়ন্ত্রণ করতে হবে।

১৪. প্রকল্পের নির্মাণ কার্যক্রম চলাকালে শব্দ নিঃসরণ/নির্গমন মাত্রা শব্দ দূষণ (নিয়ন্ত্রণ) বিধিমালা, ২০০৬ এবং পরিবেশ সংরক্ষণ বিধিমালা, ১৯৯৭-এ বর্ণিত মানমাত্রার মধ্যে রাখতে হবে।

১৫. সব ধরণের বর্জ্যরে ক্ষেত্রে বিশেষতঃ কঠিন বর্জ্য ব্যবস্থাপনায়, উৎসে বর্জ্য পৃথকীকরণ করতে হবে এবং বর্জ্য হ্রাস, পুনঃব্যবহার ও পুনঃচক্রায়ন নীতিমালা তথা 3R(Reduce, Reuse, Recycle) Principles অনুসরণ করতে হবে। এছাড়া পৃথকীকৃত বর্জ্য আবৃত অবস্থায় উপযুক্ত সময় নিকটস্থ সিটি কর্পোরেশনের ট্রান্সফার ষ্টেশন/ডাম্পিং গ্রাউন্ডে স্থানান্তর/পরিবহনের বিষয়টি উদ্যোক্তা নিজস্ব উদ্যোগ/সিটি কর্পোরেশনের সহায়তায় নিশ্চিত করবেন।

১৬. নির্মাণকাজ চলাকালে শ্রমিকদের পেশাগত স্বাস্থ্য সুরক্ষা সামগ্রী (পিপিই যেমন ইয়ার প্লাগ, নোজ মাস্ক ইত্যাদি) সার্বক্ষণিকভাবে ব্যবহার করতে হবে।

১৭. পরিবেশগত ছাড়পত্র ও সর্বশেষ নবায়নের কপি প্রকল্প অফিসে সংরক্ষণ করতে হবে।

১৮. ছাড়পত্র নবায়নের মেয়াদ শেষ হবার অন্ততঃ ত্রিশ দিন পূর্বে প্রাসঙ্গিক কাগজপত্রসহ অন-লাইনে নবায়নের জন্য আবেদন করতে হবে।

১৯. উপর্যুক্ত শর্ত এবং অবস্থান বিষয়ক পরিবেশগত ছাড়পত্রের প্রদত্ত অন্যান্য শর্তাবলী প্রতিপালনে ব্যর্থ হলে ছাড়পত্র বাতিল বলে গণ্য হবে এবং বাংলাদেশ পরিবেশ সংরক্ষণ আইন, ১৯৯৫ (সংশোধিত-২০১০) এবং পরিবেশ সংরক্ষণ বিধিমালা, ১৯৯৭ অনুযায়ী আইনগত ব্যবস্থা গ্রহণ করা হবে।

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পরিবেশ ভবন, ই/১৬, আগারগাঁও
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স্মারক নং-২২.০২.০০০০.০৯১.৭২.০৭৫.২০/নবায়ন-৬০ তারিখঃ ৩০/৫/২০২১ খ্রিস্টাব্দ।

বিষয় ঃ পরিবেশগত ছাড়পত্র নবায়ন (শ্রেণীঃ লাল) প্রসঙ্গে।

সূত্র ঃ আপনার গত ১৪.০৬.২০২১ তারিখের আবেদন ও অন-লাইন(৭৯৫১৯)।

উপর্যুক্ত বিষয় ও সূত্রের প্রেক্ষিতে জানানো যাচ্ছে যে, আপনার আবেদন, দাখিলকৃত অন্যান্য কাগজপত্র ও সরেজমিন পরিদর্শন প্রতিবেদন যাচাই বাছাই করে ঢাকা ওয়াটার সাপ্লাই নেটওয়ার্ক ইমপ্রোভমেন্ট প্রজেক্ট(ডিডব্লিউএসএনআইপি), ঢাকা ওয়াসা অনুকূলে ইস্যুকৃত পরিবেশগত ছাড়পত্রের নবায়নের কপি অন-লাইনে প্রদান করা হয়েছে, যার সনাক্তকরণ নম্বর-৭৯৫১৯। উল্লেখ্য অন-লাইনে উদ্যোক্তার আইডি দিয়ে লগইন করে পরিবেশগত ছাড়পত্রের নবায়নের কপি ডাউনলোড করে প্রিন্ট করা যাবে। ডিজিটাল ছাড়পত্র একটি সিস্টেম জেনারেটেড ছাড়পত্র হওয়ায় এতে কোন স্বাক্ষরের প্রয়োজন নেই।

৩০/৫/২১

(মোহাম্মদ আসাদুল হক)
পরিচালক(উপসচিব)
ফোন-৯৮১৮১৭৮৯
Email: dhakametro@doe.gov.bd

জনাব মোঃ আখতারুজ্জামান
অতিরিক্ত প্রধান প্রকৌশলী
ও
প্রকল্প পরিচালক
ঢাকা ওয়াটার সাপ্লাই নেটওয়ার্ক
ইমপ্রোভমেন্ট প্রজেক্ট(ডিডব্লিউএসএনআইপি)
ঢাকা ওয়াসা
৯৮, কাজী নজরুল ইসলাম এভিনিউ
কাওরান বাজার, ঢাকা-১২১৫।

অনুলিপিঃ অবগতির জন্যঃ
১। সহকারী পরিচালক, মহাপরিচালক মহোদয়ের শাখা, পরিবেশ অধিদপ্তর, ঢাকা।

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পরিবেশ অধিদপ্তর
ঢাকা মহানগর কার্যালয়
পরিবেশ ভবন, ই/১৬, আগারগাঁও, ঢাকা ১২০৭
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পরিবেশগত ছাড়পত্র নবায়ন

ছাড়পত্র নং: ২১-৬০৩১১

পরিবেশগত ব্যবস্থাপনা নিশ্চিতকরণ সাপেক্ষে সংযুক্ত শর্তে নিম্নবর্ণিত প্রতিষ্ঠান/প্রকল্পের অনুকূলে পরিবেশগত ছাড়পত্র নবায়ন প্রদান করা হলো :

প্রতিষ্ঠান/প্রকল্পের নাম	:	Dhaka water supply Network Improvement project
উদ্যোক্তার নাম	:	Dhaka Water Supply And Sewerage Authority
সনাক্তকরণ নং	:	৭৯৫১৯
প্রতিষ্ঠান/প্রকল্পের কার্যক্রম	:	Water, power and gas distribution line laying/relaying/extension
প্রতিষ্ঠান/প্রকল্পের শ্রেণী	:	Red
প্রতিষ্ঠান/প্রকল্পের ঠিকানা	:	project director,Dhaka WASA, WASA Bhaban (8th floor), 98, Kazi Nazrul Islam Avenue, Kawran Bazar, Dhaka-1215,Tejgaon,Dhaka
প্রদানের তারিখ	:	30.06.2021
মেয়াদ উত্তীর্ণের তারিখ	:	12.06.2022

এ ছাড়পত্র সনদের সাথে পৃথকভাবে সংযুক্ত প্রদত্ত শর্তাবলী যথাযথভাবে প্রতিপালন করতে হবে, অন্যথায় ছাড়পত্র বাতিল/ক্ষতিপূরণ আদায়সহ যে কোন আইনানুগ ব্যবস্থা গ্রহণ করা হবে।

বিঃদ্রঃ এটি একটি সিস্টেম জেনারেটেড ছাড়পত্র এবং এতে কোনোরূপ স্বাক্ষরের প্রয়োজন নেই।

ছাড়পত্রটি যাচাই করতে ভিজিট করুন: http://ecc.doe.gov.bd/certificate_verification

সনাক্তকরণ নং: ৭৯৫১৯ Dhaka water supply Network Improvement project ছাড়পত্র নং: ২১-৬০৩১১

পরিবেশগত ছাড়পত্র নবায়ন জন্য প্রযোজ্য শর্তাবলী:

১. এ ছাড়পত্র শুধুমাত্র ঢাকা ওয়াটার সাপ্লাই নেটওয়ার্ক ইমপ্রোভমেন্ট প্রজেক্ট(ডিডব্লিউএসএনআইপি)-এর ক্ষেত্রে প্রযোজ্য হবে।

২. বর্ণিত প্রকল্পের অনুকূলে পরিবেশ অধিদপ্তরের বিগত ১২.০৬.২০১৯ তারিখ নং-২২.০২.০০০০.০১৮.৭২.৪৩.১৯.২৩৩ সংখ্যক স্মারকে প্রদত্ত পরিবেশগত ছাড়পত্রের সকল শর্ত অপরিবর্তীত থাকবে।

৩. প্রকল্পের কার্যক্রম দ্বারা কোন অবস্থায় রাস্তায় যানজট সৃষ্টি করা যাবেনা। এ বিষয়ে বিকল্প ব্যবস্থাপনা সার্বক্ষণিক কার্যকর রাখতে হবে।

৪. প্রকল্পের এলাইনমেন্টে যানজট নিয়ন্ত্রণের জন্য নিজস্ব জনবল দ্বারা সার্বক্ষণিক যানজট নিয়ন্ত্রণের জন্য কার্যকর উদ্যোগ গ্রহণ করতে হবে।

৫. কোন অবস্থায় প্রকল্পের কার্যক্রম দ্বারা কোন জলাজয়, ডোবা, নালা, বিল, খাল, পুকুর, বন্যা প্রবাহ এলাকা, ওয়াটার রিটেনশন এরিয়া ভরাট করা যাবেনা।

৬. প্রকল্পের কার্যক্রম বাস্তবায়নের সময় রাস্তা কেড়ী-খোঁড়ি করার সময় তাৎক্ষণিকভাবে রাস্তার মাটি নিরাপদে অপসারণ করতে হবে এবং কোন মাটি/বালি উন্মুক্ত অবস্থায় রাখা যাবেনা যাতে রোদে ভাঁপ উত্থিত হয়ে বায়ু দূষণ না হয় এবং বৃষ্টির পানিতে স্টর্ম ওয়াটারের সাথে মিশে রাস্তা সংলগ্ন ড্রেনেজ বক্স সৃষ্টি হয়ে জলাবদ্ধতা সৃষ্টি না করে।

৭. প্রকল্পের পাশের রাস্তায় কোন ধরনের নির্মাণ সামগ্রী রেখে ফুটপাত/রাস্তার প্রতিবন্ধকতা সৃষ্টি করা যাবেনা।

৮. প্রকল্পের কার্যক্রম দ্বারা পরিবেশ ও প্রতিবেশের ক্ষতিসাধন করা হলে Polluters Pay Principle অনুসারে ক্ষতিপূরণ ধার্য করে নির্ধারিত সময়ের মধ্যে ধার্যকৃত ক্ষতিপূরণ আদায় করা হবে।

৯. মহামান্য হাইকোর্ট বিভাগের রিট পিটিশন নম্বর ৯১৬/২০১৯ এর বিগত ২৯/০১/২০১৯ তারিখের আদেশ অনুযায়ী প্রকল্প নির্মাণকালে বায়ু/ভাঁপ দূষণ নিয়ন্ত্রণকল্পে দৈনিক অন্ততঃ ৩বার পানি ছিটিয়ে বায়ু দূষণ নিয়ন্ত্রণ করতে হবে।

১০. প্রকল্পের কার্যক্রমের মাধ্যমে কোন প্রকার বায়ু/শব্দ দূষণ সৃষ্টি করা যাবেনা। নির্মাণ কাজ চলাকালিন নির্মাণাধীন অবকাঠামো/বালু/মাটি যথাযথভাবে ঢেকে রাখতে হবে যাতে ধূলাবালি আশেপাশে ছড়িয়ে না পড়ে।

১১. প্রকল্পের কাজ শেষ হওয়ার সাথে সাথে তাৎক্ষণিকভাবে খোঁড়া-খোঁড়ি কৃত রাস্তা পূর্বের অবস্থায় ফিরিয়ে আনতে হবে।

১২. বায়ুদূষণ নিয়ন্ত্রণের জন্য নির্মাণ সামগ্রী ঢেকে রাখতে হবে এবং নির্মাণ সামগ্রী পরিবহনের সময়ও ঢেকে পরিবহণ করতে হবে।

১৩. নির্মাণাধীন অবকাঠামো/প্রকল্পের এলাইনম্যান্ট এলাকায় নিয়মিত পানি ছিটিয়ে বায়ু দূষণ নিয়ন্ত্রণ করতে হবে।

১৪. প্রকল্পের নির্মাণ কার্যক্রম চলাকালে শব্দ নিঃসরণ/নির্গমন মাত্রা শব্দ দূষণ (নিয়ন্ত্রণ) বিধিমালা, ২০০৬ এবং পরিবেশ সংরক্ষণ বিধিমালা, ১৯৯৭-এ বর্ণিত মানমাত্রার মধ্যে রাখতে হবে।

১৫. সব ধরণের বর্জ্যের ক্ষেত্রে বিশেষতঃ কঠিন বর্জ্য ব্যবস্থাপনায়, উৎসে বর্জ্য পৃথকীকরণ করতে হবে এবং বর্জ্য হ্রাস, পুনঃব্যবহার ও পুনঃচক্রায়ন নীতিমালা তথা 3R(Reduce, Reuse, Recycle) Principles অনুসরণ করতে হবে। এছাড়া পৃথকীকৃত বর্জ্য আবৃত অবস্থায় উপযুক্ত সময় নিকটস্থ সিটি কর্পোরেশনের ট্রান্সফার ষ্টেশন/ডাম্পিং গ্রাউন্ডে স্থানান্তর/পরিবহনের বিষয়টি উদ্যোক্তা নিজস্ব উদ্যোগ/সিটি কর্পোরেশনের সহায়তায় নিশ্চিত করবেন।

১৬. নির্মাণকাজ চলাকালে শ্রমিকদের পেশাগত স্বাস্থ্য সুরক্ষা সামগ্রী (পিপিই যেমন ইয়ার প্লাগ, নোজ মাস্ক ইত্যাদি) সার্বক্ষণিকভাবে ব্যবহার করতে হবে।

১৭. পরিবেশগত ছাড়পত্র ও সর্বশেষ নবায়নের কপি প্রকল্প অফিসে সংরক্ষণ করতে হবে।

১৮. ছাড়পত্র নবায়নের মেয়াদ শেষ হবার অন্ততঃ ত্রিশ দিন পূর্বে প্রাসঙ্গিক কাগজপত্রসহ অন-লাইনে নবায়নের জন্য আবেদন করতে হবে।

১৯. উপর্যুক্ত শর্ত এবং অবস্থান বিষয়ক পরিবেশগত ছাড়পত্রের প্রদত্ত অন্যান্য শর্তাবলী প্রতিপালনে ব্যর্থ হলে ছাড়পত্র বাতিল বলে গণ্য হবে এবং বাংলাদেশ পরিবেশ সংরক্ষণ আইন, ১৯৯৫ (সংশোধিত-২০১০) এবং পরিবেশ সংরক্ষণ বিধিমালা, ১৯৯৭ অনুযায়ী আইনগত ব্যবস্থা গ্রহণ করা হবে।

3rd Renewal Application Copy

DHAKA WATER SUPPLY NETWORK IMPROVEMENT PROJECT
Dhaka Water Supply & Sewerage Authority
WASA BHABAN
98, Kazi Nazrul Islam Avenue (8th Floor), Kawran Bazar, Dhaka-1215.
Phone: 880-2-9116033, Fax: 880-2-9116086
Website: www.dwsnip-dwasa.com

WASA

শেখ হাসিনার মূলনীতি
গ্রাম শহরের উন্নতি

Memo No: 46.113.624.00.00.G-06/DWSNIP/ 744 Date: 14/06/2022

পরিচালক
ঢাকা মহানগর
পরিবেশ অধিদপ্তর
পরিবেশ ভবন, ই-১৬, আগারগাঁও
শেরে বাংলা নগর, ঢাকা-১২০৭।

পরিবেশ অধিদপ্তর
ঢাকা মহানগর কার্যালয়
গৃহীত

বিষয়: ঢাকা ওয়াটার সাপ্লাই নেটওয়ার্ক ইমপ্রুভমেন্ট প্রজেক্ট এর পরিবেশগত ছাড়পত্রের নবায়ন প্রসঙ্গে।

সূত্র: পরিবেশ অধিদপ্তরের স্মারক নং- ২২.০২.০০০০.০৯১.৭২.৭৫.২০.নবায়ন-৬০, তারিখ-৩০.০৬.২০২১।

উপর্যুক্ত বিষয় ও সূত্রের প্রেক্ষিতে জানানো যাচ্ছে যে, এডিবি সাহায্যপুষ্ট ঢাকা ওয়াটার সাপ্লাই নেটওয়ার্ক ইমপ্রুভমেন্ট প্রজেক্ট ঢাকা ওয়াসার আওতাধীন সরকারের একটি অগ্রাধিকার প্রকল্প। অত্র প্রকল্পের আওতায় ঢাকা শহরের অন্তর্ভুক্ত এলাকা যথা-উত্তরা, শ্যামলী, মোহাম্মদপুর, লালবাগ, আজিমপুর, হাজারীবাগ, বংশাল, সূত্রাপুর, দনিয়া, শনির আখড়া, যাত্রাবাড়ী ও সংশ্লিষ্ট এলাকার পুরাতন জরাজীর্ণ পানির লাইন পরিবর্তনসহ গ্রাহকগণকে নতুন পানি সংযোগ প্রদানের মাধ্যমে ৮২ (বিরাশি) টি District Metered Area (DMA) প্রতিষ্ঠার কাজ করা হবে। অত্র প্রকল্পের পরিবেশগত ছাড়পত্র প্রাপ্তির লক্ষ্যে গত ২১/০৬/২০২০ তারিখে পরিবেশ অধিদপ্তর বরাবরে আবেদন করা হয়। উক্ত আবেদনের প্রেক্ষিতে সূত্রস্থ স্মারক মোতাবেক ০১ (এক) বছর মেয়াদী পরিবেশগত ছাড়পত্র ইস্যু করা হয়। কিন্তু ইস্যুকৃত পরিবেশগত ছাড়পত্র এর মেয়াদ গত ১২/০৬/২০২২ তারিখ শেষ হবে বিধায় তা নবায়ন করা প্রয়োজন। পরিবেশগত ছাড়পত্র নবায়নের জন্য ছাড়পত্রের আবেদন ফি'র উপর আরোপিত ২৫% বাৎসরিক নবায়ন ফি বাবদ ১,২৫,০০০/- টাকা ((কোড নং-১-৪৫৪১-০০০০-২৬৮১) এবং সরকার কর্তৃক আরোপকৃত ১৫% ভ্যাট বাবদ ১৮৭৫০/- টাকা ((কোড নং-১-১১৩৩-০০০৫-০৩১১)-এ ট্রেজারী চালানের মাধ্যমে জমা প্রদান করে অনলাইন আবেদন পত্র পূরণ পূর্বক হার্ডকপি এতদসঙ্গে সংযুক্ত করা হ'ল।

এমতাবস্থায়, "Dhaka Water Supply Network Improvement Project" এর পরিবেশগত ছাড়পত্র ইস্যু নবায়ন করার জন্য আপনাকে বিশেষভাবে অনুরোধ করা হ'ল।

সংযুক্ত:
(ক) পরিবেশগত ছাড়পত্রের অনুলিপি;
(খ) Received copy of the letter for sending Quarterly Environment Monitoring Report (July to September 21);
(গ) Received copy of the letter for sending Quarterly Environment Monitoring Report (October to December 21);
(ঘ) Quarterly Environment Monitoring Report (January to March 22);
(ঙ) বিনিয়োগের আলোকে পরিবেশগত ছাড়পত্র নবায়ন ফি এর চালান (চালান নং T-2, তারিখ-১৫/০৬/২০২২, সোনালী ব্যাংক লিমিটেড,আওলাদ হোসেন মার্কেট শাখা, ঢাকা);
(চ) পরিবেশগত ছাড়পত্র নবায়ন ফি এর উপর আরোপিত ১৫% ভ্যাট (চালান নং T-1, তারিখ-১৫/০৬/২০২২, সোনালী ব্যাংক লিমিটেড,আওলাদ হোসেন মার্কেট শাখা, ঢাকা);
(ছ) অন-লাইন আবেদনের কপি;

মোঃ আব্দুল লতিফ
তত্ত্বাবধায়ক প্রকৌশলী ও
প্রকল্প পরিচালক
ডিডব্লিউএসএনআইপি, ঢাকা ওয়াসা।

অনুলিপি:
১. মহাপরিচালক, পরিবেশ অধিদপ্তর, ঢাকা।
২. পরিচালক (উন্নয়ন), ঢাকা ওয়াসা।
৩. উপ-প্রকল্প পরিচালক, ডিডব্লিউএসএনআইপি, ঢাকা ওয়াসা।
৪. নির্বাহী প্রকৌশলী, ডিডব্লিউএসএনআইপি, ঢাকা ওয়াসা।

গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পরিবেশ অধিদপ্তর
ঢাকা মহানগর কার্যালয়
পরিবেশ ভবন, ই/১৬, আগারগাঁও, ঢাকা ১২০৭
www.doe.gov.bd

পরিবেশগত ছাড়পত্র নবায়ন

ছাড়পত্র নং: ২২-৮০৭৫০

পরিবেশগত ব্যবস্থাপনা নিশ্চিতকরণ সাপেক্ষে সংযুক্ত শর্তে নিম্নবর্ণিত প্রতিষ্ঠান/প্রকল্পের অনুকূলে পরিবেশগত ছাড়পত্র নবায়ন প্রদান করা হলো :

প্রতিষ্ঠান/প্রকল্পের নাম	:	Dhaka water supply Network Improvement project
উদ্যোক্তার নাম	:	Dhaka Water Supply And Sewerage Authority
সনাক্তকরণ নং	:	৭৯৫১৯
প্রতিষ্ঠান/প্রকল্পের কার্যক্রম	:	Water, power and gas distribution line laying/relaying/extension
প্রতিষ্ঠান/প্রকল্পের শ্রেণী	:	Red
প্রতিষ্ঠান/প্রকল্পের ঠিকানা	:	project director,Dhaka WASA, WASA Bhaban (8th floor), 98, Kazi Nazrul Islam Avenue, Kawran Bazar, Dhaka-1215
প্রদানের তারিখ	:	২৪/০৭/২০২২খ্রিঃ
মেয়াদ উত্তীর্ণের তারিখ	:	১২/০৬/২০২৩খ্রি

এ ছাড়পত্র সনদের সাথে পৃথকভাবে সংযুক্ত প্রদত্ত শর্তাবলী যথাযথভাবে প্রতিপালন করতে হবে, অন্যথায় ছাড়পত্র বাতিল/ক্ষতিপূরণ আদায়সহ যে কোন আইনানুগ ব্যবস্থা গ্রহণ করা হবে।

বিঃদ্রঃ এটি একটি সিস্টেম জেনারেটেড ছাড়পত্র এবং এতে কোনোরূপ স্বাক্ষরের প্রয়োজন নেই।

ছাড়পত্রটি যাচাই করতে ভিজিট করুন: https://ecc.doe.gov.bd/certificate_verification
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সনাক্তকরণ নং: ৭৯৫১৯ Dhaka water supply Network Improvement project ছাড়পত্র নং: ২২-৮০৭৫০

পরিবেশগত ছাড়পত্র নবায়ন এর জন্য প্রযোজ্য শর্তাবলী:

১. এ ছাড়পত্র শুধুমাত্র ঢাকা ওয়াটার সাপ্লাই নেটওয়ার্ক ইমপ্রোভমেন্ট প্রজেক্ট(ডিডব্লিউএসএনআইপি)-এর ক্ষেত্রে প্রযোজ্য হবে।

২. বর্ণিত প্রকল্পের অনুকূলে পরিবেশ অধিদপ্তরের বিগত ১২.০৬.২০১৯ তারিখ নং-২২.০২.০০০০.০১৮.৭২.৪৩.১৯.২৩৩ সংখ্যক স্মারকে প্রদত্ত পরিবেশগত ছাড়পত্রের সকল শর্ত অপরিবর্তীত থাকবে।

৩. প্রকল্পের কার্যক্রম দ্বারা কোন অবস্থায় রাস্তায় যানজট সৃষ্টি করা যাবেনা। এ বিষয়ে বিকল্প ব্যবস্থাপনা সার্বক্ষণিক কার্যকর রাখতে হবে।

৪. প্রকল্পের এলাইনমেন্টে যানজট নিয়ন্ত্রণের জন্য নিজস্ব জনবল দ্বারা সার্বক্ষণিক যানজট নিয়ন্ত্রণের জন্য কার্যকর উদ্যোগ গ্রহণ করতে হবে।

৫. কোন অবস্থায় প্রকল্পের কার্যক্রম দ্বারা কোন জলাজয়, ডোবা, নালা, বিল, খাল, পুকুর, বন্যা প্রবাহ এলাকা, ওয়াটার রিটেনশন এরিয়া ভরাট করা যাবেনা।

৬. প্রকল্পের কার্যক্রম বাস্তবায়নের সময় রাস্তা খোড়া-খোঁড়ি করার সময় তাৎক্ষণিকভাবে রাস্তার মাটি নিরাপদে অপসারণ করতে হবে এবং কোন মাটি/বালি উন্মুক্ত অবস্থায় রাখা যাবেনা যাতে রোদে ভাপ উত্থিত হয়ে বায়ু দূষণ না হয় এবং বৃষ্টির পানিতে ষ্ট্রম ওয়াটারের সাথে মিশে রাস্তা সংলগ্ন ড্রেনেজ ব্লক সৃষ্টি হয়ে জলাবদ্ধতা সৃষ্টি না করে।

৭. প্রকল্পের পাশের রাস্তায় কোন ধরনের নির্মাণ সামগ্রী রেখে ফুটপাত/রাস্তার প্রতিবন্ধকতা সৃষ্টি করা যাবেনা।

৮. প্রকল্পের কার্যক্রম দ্বারা পরিবেশ ও প্রতিবেশের ক্ষতিসাধন করা হলে Polluters Pay Principle অনুসারে ক্ষতিপূরণ ধার্য করে নির্ধারিত সময়ের মধ্যে ধার্যকৃত ক্ষতিপূরণ আদায় করা হবে।

৯. মহামান্য হাইকোর্ট বিভাগের রিট পিটিশন নম্বর ৯১৬/২০১৯ এর বিগত ২৯/০১/২০১৯ তারিখের আদেশ অনুযায়ী প্রকল্প নির্মাণকালে বায়ু/ডাষ্ট দূষণ নিয়ন্ত্রণকল্পে দৈনিক অন্ততঃ দুইবার পানি ছিটিয়ে বায়ু দূষণ নিয়ন্ত্রণ করতে হবে।

১০. প্রকল্পের কার্যক্রমের মাধ্যমে কোন প্রকার বায়ু/শব্দ দূষণ সৃষ্টি করা যাবেনা। নির্মাণ কাজ চলাকালিন নির্মাণাধীন অবকাঠামো/বালু/মাটি যথাযথভাবে ঢেকে রাখতে হবে যাতে ধুলাবালি আশেপাশে ছড়িয়ে না পড়ে।

১১. প্রকল্পের কাজ শেষ হওয়ার সাথে সাথে তাৎক্ষণিকভাবে খোঁড়া-খোঁড়িকৃত রাস্তা পূর্বের অবস্থায় ফিরিয়ে আনতে হবে।

১২. বায়ুদূষণ নিয়ন্ত্রণের জন্য নির্মাণ সামগ্রী ঢেকে রাখতে হবে এবং নির্মাণ সামগ্রী পরিবহনের সময়ও ঢেকে পরিবহণ করতে হবে।

১৩. নির্মাণাধীন অবকাঠামো/প্রকল্পের এলাইনম্যাণ্ট এলাকায় নিয়মিত পানি ছিটিয়ে বায়ু দূষণ নিয়ন্ত্রণ করতে হবে।

১৪. প্রকল্পের নির্মাণ কার্যক্রম চলাকালে শব্দ নিঃসরণ/নির্গমন দ্বারা শব্দ দূষণ (নিয়ন্ত্রণ) বিধিমালা, ২০০৬ এবং পরিবেশ সংরক্ষণ বিধিমালা, ১৯৯৭-এ বর্ণিত মানমাত্রার মধ্যে রাখতে হবে।

১৫. সব ধরণের বর্জ্যের ক্ষেত্রে বিশেষতঃ কঠিন বর্জ্য ব্যবস্থাপনায়, উৎসে বর্জ্য পৃথকীকরণ করতে হবে এবং বর্জ্য হ্রাস, পুনঃব্যবহার ও পুনঃচক্রায়ন নীতিমালা তথা 3R(Reduce, Reuse, Recycle) Principles অনুসরণ করতে হবে। এছাড়া পৃথকীকৃত বর্জ্য আবৃত অবস্থায় উপযুক্ত সময় নিকটস্থ সিটি কর্পোরেশনের ট্রান্সফার ষ্টেশন/ডাম্পিং গ্রাউন্ডে হ্যান্ডেল/পরিবহনের বিষয়টি উদ্যোক্তা নিজস্ব উদ্যোগ/সিটি কর্পোরেশনের সহায়তায় নিশ্চিত করবেন।

১৬. নির্মাণকাজ চলাকালে শ্রমিকদের পেশাগত স্বাস্থ্য সুরক্ষা সামগ্রী (পিপিই যেমন ইয়ার প্লাগ, নোজ মাস্ক ইত্যাদি) সার্বক্ষণিকভাবে ব্যবহার করতে হবে।

১৭. পরিবেশগত ছাড়পত্র ও সর্বশেষ নবায়নের কপি প্রকল্প অফিসে সংরক্ষণ করতে হবে।

১৮. ছাড়পত্র নবায়নের মেয়াদ শেষ হবার অন্ততঃ ত্রিশ দিন পূর্বে প্রাসঙ্গিক কাগজপত্রসহ অন-লাইনে নবায়নের জন্য আবেদন করতে হবে।

১৯. উপর্যুক্ত শর্ত এবং অবস্থান বিষয়ক পরিবেশগত ছাড়পত্রের প্রদত্ত অন্যান্য শর্তাবলী প্রতিপালনে ব্যর্থ হলে ছাড়পত্র বাতিল বলে গণ্য হবে এবং বাংলাদেশ পরিবেশ সংরক্ষণ আইন, ১৯৯৫ (সংশোধিত-২০১০) এবং পরিবেশ সংরক্ষণ বিধিমালা, ১৯৯৭ অনুযায়ী আইনগত ব্যবস্থা গ্রহণ করা হবে।

Annex 04: Environmental Safeguard Compliances in the Field (Sample)

ICB-02.8

Project name: DHAKA WATER SUPPLY NETWORK IMPROVEMENT PROJECT	**Package**: ICB 2.08 Batch – 3rd	
Date: 20.09.2022	**Contractor**: CPP	
Project Activity: Pipe Laying Activities and House Connection or PTW Rehabilitation	**Location**: Sector-10, Dhaka **under** ICB 2.08, DMAs -901	
Project Activity Stage	Survey	
	Design	
	Implementation	√
	Pre-Commissioning	
	Guarantee Period	

Sl. No.	Monitoring/Inspection Questions	Findings			Comments/ Clarifications
		Yes	No	NA	
1.	**Supervision and Management On-site**				
a.	EMP is available at site?	√			
b.	Toolbox talks – conducted?	√			
c.	EHS Supervisor is available?	√			
2.	**Availability of Safeguard Facilities at sites**				
a.	First aid box available at site?	√			
b.	Emergency contact nos. of health center, Fire Service, Police Station etc. are available?	√			
c.	Sufficient PPEs-available at site?	√			
d.	Firefighting equipment are available?	√			
e.	Separate sanitary facilities for male and female?	√			
f.	Drinking water availability at site?	√			
g.	Rest areas for the workers are available at site?	√			
h.	Chemicals and petroleum storage area- available?			√	
3.	**Occupational Health and Safety**				
a.	Workers are using PPEs?	√			Not Proper
b.	Excavated trenches are provided with shores or protection from landslide?			√	
4.	**Community safety**				
a.	Excavated areas are filled immediately after work?	√			
b.	Safety signage - posted around construction areas?	√			Not sufficient
c.	Safe walkways are available around construction works	√			
d.	Community drinking water is tested and recorded?	√			

5.	**Solid Waste management in construction sites**				
a.	Excavated soil is kept at safer places and away from water body	√			
b.	Availability of waste segregation facilities?	√			
c.	Regular waste collection is done from project site?	√			
6.	**waste water management/ sanitary latrines are available at sites?**				
a.	Is there any chance of discharging waste water to storm drains?		√		
b.	Waste water is tested prior to discharge?			√	
c.	Measures are in place to protect siltage during discharging to drains?			√	
7.	**Dust Control**				
a.	Is water sprayed to sub-press dust	√			Irregular
b	Soil/ materials carrying vehicles are kept covered?	√			
c.	construction materials (cement, sand, chips etc.) are kept covered		√		
d.	Is there provision of generator use with air pollution control device?		√		
e.	Are the chemicals used in construction regularly under maintenance to control black smoke?			√	
8.	**Noise Control**				
a.	Are the works done between 7:00 am-7:00pm?	√			
b.	Is generator used with closed door and with muffler?		√		
c.	Are the Idle equipment kept turned off and throttled down	√			
d.	Are the noise mitigation measures undertaken during construction works?		√		
e.	Are the neighboring communities well informed before starting any noise generation works?	√			
9.	**Traffic Management**				
a.	Traffic signage are available around the construction area?	√			
b.	Are the re-routing signage sufficient to guide motorists?		√		
c.	Sufficient barricades are provided in and around the excavated sites	√			
d.	Excavated sights are with sufficient lighting at night		√		

10.	**Documentation and Recording System**				
a.	The site-specific environmental management plan (EMP) is available in the construction sites?	√			
b.	daily monitoring sheets are maintained by the EHS supervisor	√			
c.	environmental parameters are tested with proper sampling	√			
d.	The testing results are available at construction sites?	√			
11.	**COVID 19 Prevention**				
a.	Are adequate PPE, disinfectant, sanitizer, soap, covered trash bin etc. available at site?	√			
b.	Temperature measuring equipment are available?	√			
c.	Body temperature of workers/staff are measured regularly?	√			
d.	Posters and signage for COVID 19 are available at sites?	√			

Prepared by: Environmental Team, DMSC

ICB-02.9

SAMPLE INSPECTION CHECKLIST

Site Inspection Checklist

DMA No. / Package: ICB - 2.09 Date: 01.09.2022

Location: DMA 212, DMA 208B, ~~DMA 214~~ K M Azam Road, Begum Bazar Road, Nur Box Road, Abul Hasnat Road of DMA 212 Kayettuli Road, Agdsadek Road, Agamasi Lane of DMA 208B

	Monitoring / Inspection Questions	Findings			Comments/ Clarifications
1.	Supervision and Management On-Site	Yes	No	NA	
	a. Is an EHS supervisor available?	✓			
	b. Is a copy of the SEMP available?	✓			
	c. Are daily toolbox talks conducted on site?	✓			
2.	The Facilities	Yes	No	NA	
	a. Are there a medical and first aid kits on site?	✓			
	b. Are emergency contact details available on-site?	✓			
	c. Are there PPEs available? What are they?		✓		
	d. Are the PPEs in good condition?	✓			
	e. Are there firefighting equipment on site?	✓			
	f. Are there separate sanitary facilities for male and female workers?	✓			
	g. Is drinking water supply available for workers?	✓			
	h. Is there a rest area for workers?	✓			
	i. Are storage areas for chemicals available and with protection? In Safe location?	✓			
3.	Occupation Health and Safety	Yes	No	NA	
	a. Are the PPEs being used by workers	✗	✓		
	b. Are excavation trenches provided with shores or protection from landslide?	✓			
	c. Is breaktime for workers provided?	✓			
	d. How many for each type of collection vehicle is in current use?				2 types
4.	Community Safety	Yes	No	NA	
	a. Are excavation areas being used by workers	✓			
	b. Are safety signages posted around the sites?	✓			insufficient
	c. Are temporary and safe walkways for pedestrians available near work sites?	✓			
	d. Is there a record of treated waste			✓	

	Monitoring / Inspection Questions	Findings			Comments/ Clarifications
	water quality testing/measurement?				
5.	Solid Waste Management	Yes	No	NA	
	a. Are excavated materials placed sufficiently away from water courses?	✓			
	b. Is solid waste segregation and management in place?	✓			
	c. Is there a regular collection of solid wastes from work sites?	✓			
6.	Wastewater Management	Yes	No	NA	
	a. Are there separate sanitary facilities for various types of use (Septic Tanks, Urination, Washing, etc.)?		✓		
	b. Is any wastewater discharged to storm drains?		✓		
	e. Is any wastewater being treated prior to discharge?		✓		
	f. Are measures in place to avoid siltation of nearby drainage or receiving bodies of water?		✓		
	g. Are silt traps or sedimentation ponds installed for surface runoff regularly cleaned and freed of silts or sediments?		✓		
7.	Dust Control	Yes	No	NA	
	a. Is the construction site watered to minimize generation of dust?	✓			
	b. Are roads within and around the construction sites sprayed with water on regular intervals?	✓			
	c. Is there a speed control for vehicles carrying soils and other spoils covered?		✓		
	d. Are stockpiles of sand, cement and other construction materials covered to avoid being airborne?	✓			
	e. Are construction vehicles carrying soils and other spoiled covered?	✓			
	f. Are generators provided with air pollution control devices?		✓		
	g. Are all vehicles regularly maintained to minimize emission of black smoke? Do they have valid permits?	✓			
8.	Noise Control	Yes	No	NA	
	a) Is the work only taking place between 7 am to 7 pm, week days?	✓			
	b) Do generators operate with doors closed or provided with sound barrier around them?		✓		

	Monitoring / Inspection Questions	Findings			Comments/ Clarifications
	c) Is idle equipment turned off or throttled down?	✓			
	d) Are there noise mitigation measures adopted at construction sites?		✓		
	e) Are neighbouring residents notified in advance of any noisy activities expected at construction sites?	✓			
9.	Traffic Management	Yes	No	NA	
	a) Are traffic signages available around the construction sites and nearby roads?		✓		
	b) Are re-routing signage sufficient to guide motorists?		✓		
	c) Are the excavation sites along roads provided with barricades with reflectors?	✓			
	d) Are the excavation sites provided with sufficient lighting at night?	✓			
10.	Recording System	Yes	No	NA	
	a) Do the contractors have recording system for SEMP implementation?	✓			
	b) Are the daily monitoring sheets accomplished by the contractor EHS supervisor (or equivalent) properly complied?	✓			
	c) Are laboratory results of environmental sampling conducted since the commencement of construction activities properly complied?	✓			
	d) Are these records readily available at the site and to the inspection team?		✓		

Other Issues:

Prepared by: 04.09.2022

Name, Designation and Signature

Jannatul Ferdous Barsha
Environmental Inspector ;D
DMS, DWSNIP

ICB-02.10

Checklist for Excavation Work

DMA No. / Package: 10BA Date: 25.10.2022

Location: Boldha Bardoni Wari Area

	Description	Observation			Remarks
		Yes	No	NA	
1.	Has the contractor completed the Method Statement considering traffic management plan and H&S plan for the excavation works?	✓			
2.	Has the contractor completed risk assessment for the excavation works?	✓			
3.	Has the RFI completed for the excavation works?	✓			
4.	Is the excavation permit/pre-dig permit obtained before starting work?	✓			
5.	Is the contractor obtained road cutting permission from city corporation?	✓			
6.	Is the contractor contacted traffic authority for the excavation work?	✓			
7.	Is tool box meeting held before starting work?	✓			
8.	Does the operator and signalman have the minimum experience for the job?	✓			
9.	Have the workers provided appropriate PPEs?				Insufficient
10.	Is there any physical barrier or caution tape deployed for the excavation pit?	✓			
11.	Whether NGO has done the IEC activities?	✓			
12.	Are there sufficient display warning signs at the excavation site?				In sufficient
13.	Is the first aid box with required materials kept at site?	✓			
14.	Are the rescue procedures completed and reserved at the site?	✓			
15.	Are Display Board, Traffic diversion, Clean & Clear passage way provided?				Not sufficient
16.	Are excavated materials placed sufficiently away from water courses?		✓		
17.	Are debris and waste materials transported to selected disposal places from temporary disposal site?		✓		
	Trenches up to 2m:				
18.	Whether excavated material is dumped at least 1m away from trench wall?	✓			
19.	Whether the extra material is removed?		✓		
20.	In case of Ground water whether pumped water is drained properly?	✓			
	Trenches & pits depth of more than 2m:				
21.	Whether firm barricades are provided?	✓			
22.	In case of loose soil strata whether shoring is provided?	✓			

Contractor's representative:
Muniad 25.10.2022
Name, Designation and Signature

DMS representative:
25.10.2022
Name, Designation and Signature

Checklist for Traffic Management

DMA No. / Package: 1088 Date: 25.10.2022

Location: Wari Area

	Description	Observation			Remarks
		Yes	No	NA	
1.	Has the Contractor completed the Method Statement considering traffic management plan?	✓			
2.	Is the Contractor contacted with DMP before starting the construction work?	✓			
3.	Is there traffic control supervisor present at construction site?	✓			
4.	Is toolbox meeting held before starting the work?		✓		
5.	Have every driver and equipment operators their valid driving license?	✓			
6.	Are the traffic controllers and supervisors trained and accredited?	✓			
7.	Are traffic signages available around the construction sites and nearby roads?	✓			
8.	Are re-routing signage sufficient to guide motorists?	✓			
9.	Are flagmen present to direct traffic during construction hour?	✓			
10.	Are the excavation sites along roads provided with barricades with reflectors?	✓			
11.	Are Display Board, Traffic diversion, clean & clear passage way provided?				Not sufficient
12.	Are there sufficient display warning signs available for traffic movement?				Not sufficient
13.	Are the excavation sites provided with sufficient lighting at night?	✓			
14.	Is the first aid box with required materials kept at site?				Not sufficient
15.	Are the rescue procedures completed and reserved at site?	✓			

Contractor's representative:
Hriday, HRS officer
Name, Designation and Signature
25.10.22

DMS representative:
[illegible], EI, DMS.
Name, Designation and Signature
25.10.2022

Checklist for Dust Control & Noise Control

DMA No. / Package: DMA 119 Date 7.12.2022

Location: Postogola

	Description	Observation			Remarks
	Dust Control	Yes	No	NA	
1.	Is the construction site watered to minimize generation of dust?	✓			
2.	Are roads within and around the construction sites sprayed with water on regular intervals?	✓			
3.	Is there a speed control for vehicles carrying soils and other spoils covered?	✓			
4.	Are stockpiles of sand, cement and other construction materials covered to avoid being airborne?	✓			
5.	Are construction vehicles carrying soils and other spoiled covered?		✓		
6.	Are generators provided with air pollution control devices?	✓			
7.	Are all vehicles regularly maintained to minimize emission of black smoke? Do they have valid permits?	✓			
	Noise Control	Yes	No	NA	
1.	Is the work only taking place between 7 am to 7 pm, week days?	✓			
2.	Do generators operate with doors closed or provided with sound barrier around them?	✓			
3.	Do workers use ear plugs/hearing protections at noise generating locations?	✓			
4.	Is idle equipment turned off or throttled down?	✓			
5.	Are neighbouring residents notified in advance of any noisy activities expected at construction sites?	✓			

Contractor's representative:

Hridoy, H&S Officer

Name, Designation and Signature

07.12.22

DMS representative:

EE, DMS

Name, Designation and Signature

07.12.22

Checklist for Occupational Health & Safety and Community Health & Safety

DMA No. / Package: DMA 119 Date: 07.12.2022

Location: Postogola

	Description	Observation			Remarks
1.	Supervision and Management On-Site	Yes	No	NA	
	a. Is an EHS supervisor available?	✓			
	b. Is a copy of the SEMP available at construction site?	✓			
	c. Are daily toolbox meetings conducted on site?		✓		
2.	Facilities	Yes	No	NA	
	a. Are there a medical first aid kits available on site?	✓			
	b. Are emergency contact details available on-site?		✓		
	c. Are there PPEs available; Helmet, HI-VIS Vest, Gumboots, Eye Wear, Dust Mask, Safety Gloves, Earplugs?	✓			But worker keep them off most of the time. & Hired them and aware them to keep it on" to keep it on site
	d. Are the PPEs in good condition?	✓			
	e. Are there firefighting equipment on site?		✓		told them why does it important
	f. Are there separate mobile sanitary facilities for male and female workers?	✓			
	g. Are sanitary facilities cleaned and disinfected regularly?	✓			
	h. Is drinking water supply available for workers?	✓			
3.	Occupational Health and Safety	Yes	No	NA	
	a. Are the PPEs being used by workers	·			Not sufficiently but improving
	b. Is breaktime for workers provided?	✓			
	c. Is construction work site barricaded with caution tape?	✓			
4.	Community Health and Safety	Yes	No	NA	
	a. Are safety signages posted around the sites?	✓			
	b. Are temporary and safe walkways for pedestrians available near work sites?	✓			
	c. Are consultation meeting/focus group discussion/tea stall meeting arranged regularly on site?	✓			
	d. Are existing users notified in advance about temporary disruption of water supply?	✓			
	e. Are Leaflets distributed on site to inform the local residents about the project work?	✓			
	f. Is complain book available on work site to receive complain from local people?	✓			

5.	Recording System	Yes	No	NA	
	a) Do the contractors have recording system for SEMP implementation?	✓			
	b) Are the daily monitoring sheets accomplished by the contractor EHS supervisor (or equivalent) properly complied?	✓			
	c) Are laboratory results of environmental sampling conducted since the commencement of construction activities properly complied?	✓			
	d) Are these records readily available at the site and to the inspection team?	✓			
	e) Are utility accidents recorded and proper actions are taken immediately?	✓			
	f) Are public complaints recorded at construction site and addressed quickly and properly?	✓			
	g) Are there any registered book available at construction site/stockyard for visitors/inspection teams?	✓			
	h) Is there any Complain box available for anonymous complain at construction site/stockyard?	✓			

Contractor's representative:
Hriday, H&S Officer
Name, Designation and Signature
07.12.2022

DMS representative:
GI. DMS
Name, Designation and Signature
07.12.2022

Prepared by: Environmental Team, DMSC

Annex 05: Pictures showing Safeguards Compliances at works level

ICB 2.08

	
Portable Toilet for workers with water supply system (for Male)	Portable Toilet for workers with water supply system (for Female)
	
Hard Barricading during Chamber construction work	spraying water to control dust in winter (hand sprayer for small amount of dust)
	
Covering soil to control the dust	Wearing mask during construction work practice

Pictures showing Safeguards Compliances at works level (Annex 5 Cont.)
ICB 2.09

	
Barricading before starting the construction work	Meter replacement work done properly
	
On job site training by DMS Environmental team	Consumers feedback

Pictures showing Safeguards Compliances at works level (Annex 5 Cont.)
ICB 2.10

	
Safety vest, Hand gloves and Shoes are used in working site (for Female)	Safety vest, Hand gloves and Shoes are used in working site (for Male)
	
Safety barrier, Road cones and all other measures are taken while working	Immediately removed soil to disposal site and barricaded
	
Water spray is used to control dust and keep the site clean.	Sign boards are used for safety.

Annex 06: SAMPLE GRIEVANCE REGISTRATION FORM

The Project (DWSNIP) welcomes complaints, suggestions, queries and comments regarding project implementation. We encourage persons with grievance to provide their name and contact information to enable us to get in touch with you for clarification and feedback. Should you choose to include your personal details but want that information to remain confidential, please inform us by writing/typing "CONFIDENTIAL" above your name. Thank you.

Date	Place of registration				
Contact Information/Personal Details					
Name		Gender	* Male * Female	Age	
Home Address					
Place					
Phone no.					
E-mail					
Complaint/Suggestion/Comment/Question Please provide the details (who, what, where and how) of your grievance below: If included as attachment/note/letter, please tick here:					
How do you want us to reach you for feedback or update on your comment/grievance?					
FOR OFFICIAL USE ONLY					
Registered by: (Name of Official registering grievance)					
Mode of communication: Note/Letter /E-mail /Verbal/Telephonic					
Reviewed by: (Names/Positions of Official(s) reviewing grievance)					
Action Taken:					
Whether Action Taken Disclosed: Yes ( ) No ( )					
Means of Disclosure:					

GRIVENCE REDRESS REGISTAR GRIVENCES RECORD AND ACTION TAKEN

Sr. No.	Date	Name and Contact No. of Complainer	Type of Complain	Place	Status of Redress	Remarks

Annex 07: Status on prevention of COVID 19 during reporting period

Precautionary measures taken by the Contractors (ICB 2.08, 2.09 & 2.10)

- Disinfection of site offices, Camps, Toilets, Stores, Rest room etc.
- Display all the relevant posters, leaflets, signboards on COVID 19
- Holding site meetings with social distance other health precautions
- Using of sanitizers as far as possible
- Checking body temperature of all workers daily.
- Awareness programs have been conducted
- Conducted Monitoring at the worksite according to monitoring templates

	
Hand washing facilities at construction site	Checking Temperature before starting the construction work practice
	
Covid-19 awareness leaflets, emergency contact numbers at construction site	Sanitizing hands before starting construction work practice

Monitoring and Reporting Template

Health and Safety Issues with COVID-19 Infection

A. Environmental Health and Safety Checklist

	Checklist	Number/ Quantity	
1	Number of workers & employees available at site	260	
2	Health checkup/screening completed for all workers/employee/visitors	Every day	
3	COVID-19 posters/signboards prepared and posted at the worksite and camp	8-10 each site	
4	Washbasin, sanitizer dispenser	3 Washbasins	
5	Stock of soap, sanitizer, disinfectant, PPEs available at site	-	Stocks Available
6	Number of cleaning staff employed	3	
7	Number of covered bins with COVID sign at the site	6	

B. Daily Monitoring: COVID -19 protocols on top of usual EHS checklist (worksite and campsite)

Sl n	EHS Practices Checklist*	Observations		Corrective Action	Time frame to
		Yes	No		
1	Medical professional is available at site		No	Workers are quickly taken to hospital after First Aid if necessary.	
2	EHS officer is available at site	Yes			
3	Entrance protocol: 6 ft distance maintained as stipulated in the COVID -19 response guidance?		No	Staff and Labours should maintain 6 ft distance between each other.	Immediate and to be continued
4	Disinfectant spray used at site entry to disinfect underneath the boots of entering persons	Partially Complied		Disinfectant spray should be used underneath the boots upon entry.	Immediate and to be continued
5	Workers & employees are using mask, gloves and shoes	Yes			
6	Workers & employees are washing their hands	Yes			
7	Used PPEs are disposed in covered bin	Yes			
8	Social distancing: workers & employees maintaining social distancing all the time	Partially Complied		There should be no physical contacts like shaking hands and sitting together etc.	Immediate and to be continued
9	Vehicle protocol: vehicle disinfection protocol followed		No	All operating vehicles should be disinfected regularly.	Immediate and to be continued
10	Tools/machineries: wiped to disinfect before and after sharing/working		No	All tools and machineries should be wiped with disinfectant.	Immediate and to be continued
11	Disinfecting work area: worksite/ common surfaces, toilets etc. are disinfected before worksite opened in the morning, before lunch and yesterday after closing for the day	Partially Complied		Should be fully complied with.	Immediate and to be continued
12	Trash bins are covered and used for disposal of PPEs	Yes			

Site Assessment for Resumption of Construction

(Guidance for Site Specific Plan)

	Site Assessment Checklist (preconditions for opening the worksite) **	Yes/N	Remarks
1	Is there any hospital or health care center in close proximity that is equipped to test COVID-19 infection? a. If yes, please prepare a list of the hospitals with contact number b. If no, please make an arrangement to provide support with COVID-19 test to workers/employees, if needed.	Yes	We have prepared a list of hospitals for testing COVID-19 infection.
2	Did you locate the hospital or health care center equipped to treat COVID-19 patient? Please prepare contact details.	Yes	We have contact details of hospitals equipped to treat COVID-19.
3	Did you prepare a list of the workers/employee to be engaged at the sites? If yes, please prepare work schedule by staggering work hours (physical distance must be >1 m. to avoid crowding) If there is an issue, please contact with your EA.	Yes	We have list of workers engaged at sites.
4	Did you prepare any health checkup or screening checklist for maintaining daily health record of workers/visitors?	Yes	We use health checklist to record health conditions of workers.
5	Did you conduct worksite risk exposure using guidelines provided in Annex C? a. Construction sites with low to medium risk exposures, must follow the EHS guidelines for preventing infection. b. For a site with high-risk exposure, avoid engaging people with pre-existing medical conditions, pregnant, or older than 60	Yes	Complied.
6	Did you recruit any health and safety professional for managing occupational health and safety at the site? a. If yes, please engage immediately and share the EHS Manual for day-to-day implementation and reporting b. If no, dedicate an existing worker and employee for ensuring implementation of ESH Manual	Yes	Health and safety team is always present at sites.
7	Is there adequate PPE, disinfectant, sanitizer, soap, covered trash bin at all worksites.	Yes	Complied
8	Did you setup washbasin, sanitizer dispenser, covered waste bin adequately at each site? If not, please setup immediately and update your EA.	Yes	Complied

9	Did you prepare post COVID-19 posters/signboards in Bangla? If yes, please place them at the entrance, worksite and camp using the samples provided in Annex D? If not, please prepare immediately.	Yes	We use posters/banners /leaflets for COVID-19
10	Did you prepare a plan for raising awareness of your workers/employees on various measures to avoid COVID-19 infection? Please prepare weekly plan and disseminate at the worksite.	Yes	We have a plan for raising awareness on COVID-19 prevention.
11	Did you prepare the site-specific health and safety plan for your worksites? Please prepare the plan providing details of the issues discussed from Sections A to E and Annex (B – E) of this manual and submit to EA for approval.	Yes	We have site specific EHS plan.
12	Is the worksite falls under government declared YELLOW or RED zone? If yes, please consult with EA for reopening the site.	N/A	N/A
13	Did you review the monitoring and reporting template? If necessary, please update the template as per site condition and get it approved by EA.	Yes	It has been updated on a regular basis.

Annex 08: Environmental Management Implementation Work Schedule (EMWS): Six months working plan (January - June 2023)

Table 13 A: Environmental Management Implementation Work Schedule (EMWS): Six months working plan (January - June 2023) for ICB 2.08

Environmental Safeguard Implementation		January-22	February-22	March-22	April-22	May-22	June-22
1	Air Quality (CO, S02, N02, SPM, PM2.5, PM10)	DMA908					
2	Noise (dBA for day and night time)	DMA908					
3	Surface Water Quality (pH, DO, BOD5, COD, As, Cl, Fe, Mn)	-			-		
4	Groundwater Quality ((pH, DO, BOD5, COD, As, Cl,	DMA908					

Construction Period Reporting and Training							
5	Monthly Environmental Report	Records of environmental activities are included within Monthly progress report and the Cumulative Project Summary	Records of environmental activities are included within Monthly progress report and the Cumulative Project Summary	Records of environmental activities are included within Monthly progress report and the Cumulative Project Summary	Records of environmental activities are included within Monthly progress report and the Cumulative Project Summary	Records of environmental activities are included within Monthly progress report and the Cumulative Project Summary	Records of environmental activities are included within Monthly progress report and the Cumulative Project Summary
6	Quarterly Environmental Inspections and Report			CPP will provide according to consultant's requirement from DMS			CPP will provide according to consultant's requirement from DMS
7	Semi Annual Report						As per consultant requirement
8	Contractor Training	CPP organize QHSE related training every month and include it in monthly report	CPP organize QHSE related training every month and include it in monthly report	CPP organize QHSE related training every month and include it in monthly report	CPP organize QHSE related training every month and include it in monthly report	CPP organize QHSE related training every month and include it in monthly report	CPP organize QHSE related training every month and include it in monthly report

Construction Period Mitigation Measures							
9	Noise attenuation measures	In case of night works, prior information to locals, at worksites with minimal level of disturbance possible to locality but noise reducers are not used	In case of night works, prior information to locals, at worksites with minimal level of disturbance possible to locality but noise reducers are not used	In case of night works, prior information to locals, at worksites with minimal level of disturbance possible to locality but noise reducers are not used	In case of night works, prior information to locals, at worksites with minimal level of disturbance possible to locality but noise reducers are not used	In case of night works, prior information to locals, at worksites with minimal level of disturbance possible to locality but noise reducers are not used	In case of night works, prior information to locals, at worksites with minimal level of disturbance possible to locality but noise reducers are not used
10	Dust control (PM 2.5, PM 10)	CPP provides misting water sprays to reduce airborne dusting from demolition work and during dry weather	CPP provides misting water sprays to reduce airborne dusting from demolition work and during dry weather	CPP provides misting water sprays to reduce airborne dusting from demolition work and during dry weather	CPP provides misting water sprays to reduce airborne dusting from demolition work and during dry weather	CPP provides misting water sprays to reduce airborne dusting from demolition work and during dry weather	CPP provides misting water sprays to reduce airborne dusting from demolition work and during dry weather

11	Occupational Health and Safety	CPP develops and implement site specific occupational health and safety (OH&S) Plan, and include in the Site-specific EMP. CPP arranges H& S training for the labor on regular basis. CPP provides supplies of potable drinking water and first aid-box. CPP provides medical insurance coverage for workers	CPP develops and implement site specific occupational health and safety (OH&S) Plan, and include in the Site-specific EMP. CPP arranges H& S training for the labor on regular basis. CPP provides supplies of potable drinking water and first aid-box. CPP provides medical insurance coverage for workers	CPP develops and implement site specific occupational health and safety (OH&S) Plan, and include in the Site-specific EMP. CPP arranges H& S training for the labor on regular basis. CPP provides supplies of potable drinking water and first aid-box. CPP provides medical insurance coverage for workers	CPP develops and implement site specific occupational health and safety (OH&S) Plan, and include in the Site-specific EMP. CPP arranges H& S training for the labor on regular basis. CPP provides supplies of potable drinking water and first aid-box. CPP provides medical insurance coverage for workers	CPP develops and implement site specific occupational health and safety (OH&S) Plan, and include in the Site-specific EMP. CPP arranges H& S training for the labor on regular basis. CPP provides supplies of potable drinking water and first aid-box. CPP provides medical insurance coverage for workers	CPP develops and implement site specific occupational health and safety (OH&S) Plan, and include in the Site-specific EMP. CPP arranges H& S training for the labor on regular basis. CPP provides supplies of potable drinking water and first aid-box. CPP provides medical insurance coverage for workers
12	The Environmental Management Implementation Work Schedule (EMWS) plus other work plans as specified in EMP	CPP provides as per consultant requirements	CPP provides as per consultant requirements	CPP provides as per consultant requirements	CPP provides as per consultant requirements	CPP provides as per consultant requirements	CPP provides as per consultant requirements
13	Disposal of construction debris and other waste materials	CPP arranges all the debris and other wastes be removed from the site and transported to the disposal site	CPP arranges all the debris and other wastes be removed from the site and transported to the disposal site	CPP arranges all the debris and other wastes be removed from the site and transported to the disposal site	CPP arranges all the debris and other wastes be removed from the site and transported to the disposal site	CPP arranges all the debris and other wastes be removed from the site and transported to the disposal site	CPP arranges all the debris and other wastes be removed from the site and transported to the disposal site

14	Servicing and operating equipment	CPP ensures that all site personnel have a basic level of environmental awareness training and Staff operating equipment (such as excavators, loaders, etc.) shall be adequately trained and sensitized to any potential hazards associated with their task	CPP ensures that all site personnel have a basic level of environmental awareness training and Staff operating equipment (such as excavators, loaders, etc.) shall be adequately trained and sensitized to any potential hazards associated with their task	CPP ensures that all site personnel have a basic level of environmental awareness training and Staff operating equipment (such as excavators, loaders, etc.) shall be adequately trained and sensitized to any potential hazards associated with their task	CPP ensures that all site personnel have a basic level of environmental awareness training and Staff operating equipment (such as excavators, loaders, etc.) shall be adequately trained and sensitized to any potential hazards associated with their task	CPP ensures that all site personnel have a basic level of environmental awareness training and Staff operating equipment (such as excavators, loaders, etc.) shall be adequately trained and sensitized to any potential hazards associated with their task	CPP ensures that all site personnel have a basic level of environmental awareness training and Staff operating equipment (such as excavators, loaders, etc.) shall be adequately trained and sensitized to any potential hazards associated with their task
15	COVID 19 Prevention Measures	CPP Provides Covid-19 banner in each construction site, distributes leaflets to workers, hand wash facilities, distribute mask, sanitizer and organize training for workers	CPP Provides Covid-19 banner in each construction site, distributes leaflets to workers, hand wash facilities, distribute mask, sanitizer and organize training for workers	CPP Provides Covid-19 banner in each construction site, distributes leaflets to workers, hand wash facilities, distribute mask, sanitizer and organize training for workers	CPP Provides Covid-19 banner in each construction site, distributes leaflets to workers, hand wash facilities, distribute mask, sanitizer and organize training for workers	CPP Provides Covid-19 banner in each construction site, distributes leaflets to workers, hand wash facilities, distribute mask, sanitizer and organize training for workers	CPP Provides Covid-19 banner in each construction site, distributes leaflets to workers, hand wash facilities, distribute mask, sanitizer and organize training for workers

16	Traffic Management	CPP implements the Traffic Management Plan to ensure the safety of all the road users along the work zone	CPP implements the Traffic Management Plan to ensure the safety of all the road users along the work zone	CPP implements the Traffic Management Plan to ensure the safety of all the road users along the work zone	CPP implements the Traffic Management Plan to ensure the safety of all the road users along the work zone	CPP implements the Traffic Management Plan to ensure the safety of all the road users along the work zone	CPP implements the Traffic Management Plan to ensure the safety of all the road users along the work zone
17	On-Site Supervision and Management	CPP ensures On-site supervision and management properly	CPP ensures On-site supervision and management properly	CPP ensures On-site supervision and management properly	CPP ensures On-site supervision and management properly	CPP ensures On-site supervision and management properly	CPP ensures On-site supervision and management properly

Table 13 B: Environmental Management Implementation Work Schedule (EMWS): Six months working plan (January - June 2023) for ICB 2.09

Environmental Safeguard Implementation		January-23	February-23	March-23	April-23	May-23	June-23
1	Air Quality (CO, S02, N02, SPM, PM2.5, PM10)	DMA207, DMA212	DMA211				
2	Noise (dBA for day and night time)	DMA207, DMA212	DMA211				
3	Surface Water Quality (pH, DO, BOD5, COD, As, Cl, Fe, Mn)	DMA207					
4	Groundwater Quality (pH, DO, BOD5, COD, As, Cl, Fe, Mn and Total Coliform)	DMA207, DMA212	DMA211				

Construction Period Reporting and Training							
5	Monthly Environmental Report	Records of environmental activities are included in Monthly Progress Report.	Records of environmental activities are included in Monthly Progress Report.	Records of environmental activities are included in Monthly Progress Report.	Records of environmental activities are included in Monthly Progress Report.	Records of environmental activities are included in Monthly Progress Report.	Records of environmental activities are included in Monthly Progress Report.
6	Quarterly Environmental Inspections and Report			CFMCC will provide as per consultant requirement			CFMCC will provide as per consultant requirement
7	Semi Annual Report						As per consultant requirement
8	Contractor Training	CFMCC arranges QHSE training and includes in Monthly Progress Report.	CFMCC arranges QHSE training and includes in Monthly Progress Report.	CFMCC arranges QHSE training and includes in Monthly Progress Report.	CFMCC arranges QHSE training and includes in Monthly Progress Report.	CFMCC arranges QHSE training and includes in Monthly Progress Report.	CFMCC arranges QHSE training and includes in Monthly Progress Report.

Construction Period Mitigation Measures							
9	Noise attenuation measures	Noisy works are avoided at night as much as possible. High sound producing works are also avoided near sensitive places and sensitive times.	Noisy works are avoided at night as much as possible. High sound producing works are also avoided near sensitive places and sensitive times.	Noisy works are avoided at night as much as possible. High sound producing works are also avoided near sensitive places and sensitive times.	Noisy works are avoided at night as much as possible. High sound producing works are also avoided near sensitive places and sensitive times.	Noisy works are avoided at night as much as possible. High sound producing works are also avoided near sensitive places and sensitive times.	Noisy works are avoided at night as much as possible. High sound producing works are also avoided near sensitive places and sensitive times.
10	Dust control (PM 2.5, PM 10)	Water is sprinkled adequately in dry weather. Excavated soil is removed from the site immediately. Stockpile of excavated soil is covered with plastic sheets.	Water is sprinkled adequately in dry weather. Excavated soil is removed from the site immediately. Stockpile of excavated soil is covered with plastic sheets.	Water is sprinkled adequately in dry weather. Excavated soil is removed from the site immediately. Stockpile of excavated soil is covered with plastic sheets.	Water is sprinkled adequately in dry weather. Excavated soil is removed from the site immediately. Stockpile of excavated soil is covered with plastic sheets.	Water is sprinkled adequately in dry weather. Excavated soil is removed from the site immediately. Stockpile of excavated soil is covered with plastic sheets.	Water is sprinkled adequately in dry weather. Excavated soil is removed from the site immediately. Stockpile of excavated soil is covered with plastic sheets.

11	Occupational Health and Safety	Site specific Occupational Health and Safety (OH&S) Plan is developed and implemented, and also included in the site-specific EMP. H&S training is arranged on a regular basis. Supplies of potable drinking water and first-aid box are ensured. Medical insurance coverage is provided for workers.	Site specific Occupational Health and Safety (OH&S) Plan is developed and implemented, and also included in the site-specific EMP. H&S training is arranged on a regular basis. Supplies of potable drinking water and first-aid box are ensured. Medical insurance coverage is provided for workers.	Site specific Occupational Health and Safety (OH&S) Plan is developed and implemented, and also included in the site-specific EMP. H&S training is arranged on a regular basis. Supplies of potable drinking water and first-aid box are ensured. Medical insurance coverage is provided for workers.	Site specific Occupational Health and Safety (OH&S) Plan is developed and implemented, and also included in the site-specific EMP. H&S training is arranged on a regular basis. Supplies of potable drinking water and first-aid box are ensured. Medical insurance coverage is provided for workers.	Site specific Occupational Health and Safety (OH&S) Plan is developed and implemented, and also included in the site-specific EMP. H&S training is arranged on a regular basis. Supplies of potable drinking water and first-aid box are ensured. Medical insurance coverage is provided for workers.	Site specific Occupational Health and Safety (OH&S) Plan is developed and implemented, and also included in the site-specific EMP. H&S training is arranged on a regular basis. Supplies of potable drinking water and first-aid box are ensured. Medical insurance coverage is provided for workers.
12	The Environmental Management Implementation Work Schedule (EMWS) plus other work plans as specified in EMP	CFMCC provides regularly as per consultant requirements.	CFMCC provides regularly as per consultant requirements.	CFMCC provides regularly as per consultant requirements.	CFMCC provides regularly as per consultant requirements.	CFMCC provides regularly as per consultant requirements.	CFMCC provides regularly as per consultant requirements.

13	Disposal of construction debris and other waste materials	Excessive debris and waste materials are removed immediately from the site to avoid stockpiling and transported to selected disposal places.	Excessive debris and waste materials are removed immediately from the site to avoid stockpiling and transported to selected disposal places.	Excessive debris and waste materials are removed immediately from the site to avoid stockpiling and transported to selected disposal places.	Excessive debris and waste materials are removed immediately from the site to avoid stockpiling and transported to selected disposal places.	Excessive debris and waste materials are removed immediately from the site to avoid stockpiling and transported to selected disposal places.	Excessive debris and waste materials are removed immediately from the site to avoid stockpiling and transported to selected disposal places.
14	Servicing and operating equipment	It is ensured that all site personnel have a basic level of environmental awareness training. Staff who operate equipment (such as excavators, loaders, etc.) are adequately trained and sensitized to any potential hazards associated with their tasks.	It is ensured that all site personnel have a basic level of environmental awareness training. Staff who operate equipment (such as excavators, loaders, etc.) are adequately trained and sensitized to any potential hazards associated with their tasks.	It is ensured that all site personnel have a basic level of environmental awareness training. Staff who operate equipment (such as excavators, loaders, etc.) are adequately trained and sensitized to any potential hazards associated with their tasks.	It is ensured that all site personnel have a basic level of environmental awareness training. Staff who operate equipment (such as excavators, loaders, etc.) are adequately trained and sensitized to any potential hazards associated with their tasks.	It is ensured that all site personnel have a basic level of environmental awareness training. Staff who operate equipment (such as excavators, loaders, etc.) are adequately trained and sensitized to any potential hazards associated with their tasks.	It is ensured that all site personnel have a basic level of environmental awareness training. Staff who operate equipment (such as excavators, loaders, etc.) are adequately trained and sensitized to any potential hazards associated with their tasks.

15	COVID 19 Prevention Measures	It is ensured that workers wear facemasks and use sanitizers. Hand wash facilities are placed at designated places. Workers are told to report fever or any other diseases. Covid-19 posters and banners are provided in construction sites.	It is ensured that workers wear facemasks and use sanitizers. Hand wash facilities are placed at designated places. Workers are told to report fever or any other diseases. Covid-19 posters and banners are provided in construction sites.	It is ensured that workers wear facemasks and use sanitizers. Hand wash facilities are placed at designated places. Workers are told to report fever or any other diseases. Covid-19 posters and banners are provided in construction sites.	It is ensured that workers wear facemasks and use sanitizers. Hand wash facilities are placed at designated places. Workers are told to report fever or any other diseases. Covid-19 posters and banners are provided in construction sites.	It is ensured that workers wear facemasks and use sanitizers. Hand wash facilities are placed at designated places. Workers are told to report fever or any other diseases. Covid-19 posters and banners are provided in construction sites.	It is ensured that workers wear facemasks and use sanitizers. Hand wash facilities are placed at designated places. Workers are told to report fever or any other diseases. Covid-19 posters and banners are provided in construction sites.
16	Traffic Management	Traffic Management Plan is properly implemented to ensure the safety and security of local residents, pedestrians and vehicles.	Traffic Management Plan is properly implemented to ensure the safety and security of local residents, pedestrians and vehicles.	Traffic Management Plan is properly implemented to ensure the safety and security of local residents, pedestrians and vehicles.	Traffic Management Plan is properly implemented to ensure the safety and security of local residents, pedestrians and vehicles.	Traffic Management Plan is properly implemented to ensure the safety and security of local residents, pedestrians and vehicles.	Traffic Management Plan is properly implemented to ensure the safety and security of local residents, pedestrians and vehicles.
17	On-Site Supervision and Management	CFMCC ensures On-site supervision and management properly.	CFMCC ensures On-site supervision and management properly.	CFMCC ensures On-site supervision and management properly.	CFMCC ensures On-site supervision and management properly.	CFMCC ensures On-site supervision and management properly.	CFMCC ensures On-site supervision and management properly.

Table 13 C: Environmental Management Implementation Work Schedule (EMWS): Six months working plan (January - June 2023) for ICB 2.10

Environmental Safeguard Implementation		January-23	February-23	March-23	April-23	May-23	June-23
1	Air Quality (CO, S02, N02, SPM, PM2.5, PM10)	DMA-104,105,107,118,119	DMA-109A,109B,111,112 &remaining				
2	Noise (dBA for day and night time)	DMA-104,105,107,118,119	DMA-109A,109B,111,112 &remaining				
3	Surface Water Quality (pH, DO, BOD5, COD, As, Cl, Fe, Mn)	- DMA-104,105,107,118,119	DMA-109A,109B,111,112 &remaining				
4	Groundwater Quality ((pH, DO, BOD5, COD, As, Cl, Fe,	DMA-104,105,107,118,119	DMA-109A,109B,111,112 &remaining				

Construction Period Reporting and Training							
5	Monthly Environmental Report	Records of environmental activities will be included within Monthly progress report	Records of environmental activities will be included within Monthly progress report	Records of environmental activities will be included within Monthly progress report	Records of environmental activities will be included within Monthly progress report	Records of environmental activities will be included within Monthly progress report	Records of environmental activities will be included within Monthly progress report
6	Quarterly Environmental Inspections and Report				Quarterly Environmental Inspections and Report will be given in time.		
7	Semi Annual Report						As per consultant requirement
8	Contractor Training	CCSEB-RPL JV will organize QHSE related training every month and include it in monthly report	CCSEB-RPL JV will organize QHSE related training every month and include it in monthly report	CCSEB-RPL JV will organize QHSE related training every month and include it in monthly report	CCSEB-RPL JV will organize QHSE related training every month and include it in monthly report	CCSEB-RPL JV will organize QHSE related training every month and include it in monthly report	CCSEB-RPL JV will organize QHSE related training every month and include it in monthly report

Construction Period Mitigation Measures							
9	Noise attenuation measures	In case of night works, prior information to locals, at worksites with minimal level of disturbance possible to locality	In case of night works, prior information to locals, at worksites with minimal level of disturbance possible to locality	In case of night works, prior information to locals, at worksites with minimal level of disturbance possible to locality	In case of night works, prior information to locals, at worksites with minimal level of disturbance possible to locality	In case of night works, prior information to locals, at worksites with minimal level of disturbance possible to locality	In case of night works, prior information to locals, at worksites with minimal level of disturbance possible to locality
10	Dust control (PM 2.5, PM 10)	Water spraying will be done to the working site once or twice a day as per site requirement for dust emission	Water spraying will be done to the working site once or twice a day as per site requirement for dust emission	Water spraying will be done to the working site once or twice a day as per site requirement for dust emission	Water spraying will be done to the working site once or twice a day as per site requirement for dust emission	Water spraying will be done to the working site once or twice a day as per site requirement for dust emission	Water spraying will be done to the working site once or twice a day as per site requirement for dust emission
11	Occupati onal Health and Safety	Site specific occupational health and safety (OH&S) Plan, and include in the Site-specific EMP.	Site specific occupational health and safety (OH&S) Plan, and include in the Site-specific EMP.	Site specific occupational health and safety (OH&S) Plan, and include in the Site-specific EMP.	Site specific occupational health and safety (OH&S) Plan, and include in the Site-specific EMP.	Site specific occupational health and safety (OH&S) Plan, and include in the Site-specific EMP.	Site specific occupational health and safety (OH&S) Plan, and include in the Site-specific EMP.
12	The Environmental Management Implementation Work Schedule (EMWS) plus other work plans as specified in EMP	The Environmental Management Implementation Work Schedule (EMWS) plus other work plans as specified in EMP will be submitted.	The Environmental Management Implementation Work Schedule (EMWS) plus other work plans as specified in EMP will be submitted.	The Environmental Management Implementation Work Schedule (EMWS) plus other work plans as specified in EMP will be submitted.	The Environmental Management Implementation Work Schedule (EMWS) plus other work plans as specified in EMP will be submitted.	The Environmental Management Implementation Work Schedule (EMWS) plus other work plans as specified in EMP will be submitted.	The Environmental Management Implementation Work Schedule (EMWS) plus other work plans as specified in EMP will be submitted.

13	Disposal of construction debris and other waste materials	Disposal of construction debris and other waste materials will be dumped in DCC dumping area	Disposal of construction debris and other waste materials will be dumped in DCC dumping area	Disposal of construction debris and other waste materials will be dumped in DCC dumping area	Disposal of construction debris and other waste materials will be dumped in DCC dumping area	Disposal of construction debris and other waste materials will be dumped in DCC dumping area	Disposal of construction debris and other waste materials will be dumped in DCC dumping area
14	Servicing and operating equipment	Servicing and operating equipment will be done in central store,Demra.	Servicing and operating equipment will be done in central store,Demra.	Servicing and operating equipment will be done in central store,Demra.	Servicing and operating equipment will be done in central store,Demra.	Servicing and operating equipment will be done in central store,Demra.	Servicing and operating equipment will be done in central store,Demra.
15	COVID 19 Prevention Measures	Covid-19 banner in each construction site, distributes leaflets to workers, hand wash facilities, distribute mask, sanitizer and organize training for workers will be arranged per requirement in time.	Covid-19 banner in each construction site, distributes leaflets to workers, hand wash facilities, distribute mask, sanitizer and organize training for workers will be arranged per requirement in time.	Covid-19 banner in each construction site, distributes leaflets to workers, hand wash facilities, distribute mask, sanitizer and organize training for workers will be arranged per requirement in time.	Covid-19 banner in each construction site, distributes leaflets to workers, hand wash facilities, distribute mask, sanitizer and organize training for workers will be arranged per requirement in time.	Covid-19 banner in each construction site, distributes leaflets to workers, hand wash facilities, distribute mask, sanitizer and organize training for workers will be arranged per requirement in time.	Covid-19 banner in each construction site, distributes leaflets to workers, hand wash facilities, distribute mask, sanitizer and organize training for workers will be arranged per requirement in time.
16	Traffic Management	Implementation of the Traffic Management Plan will be done to ensure the safety of all the road users along the work zone	Implementation of the Traffic Management Plan will be done to ensure the safety of all the road users along the work zone	Implementation of the Traffic Management Plan will be done to ensure the safety of all the road users along the work zone	Implementation of the Traffic Management Plan will be done to ensure the safety of all the road users along the work zone	Implementation of the Traffic Management Plan will be done to ensure the safety of all the road users along the work zone	Implementation of the Traffic Management Plan will be done to ensure the safety of all the road users along the work zone
17	On-Site Supervision and Management	On-site supervision and management will be ensured properly	On-site supervision and management will be ensured properly	On-site supervision and management will be ensured properly	On-site supervision and management will be ensured properly	On-site supervision and management will be ensured properly	On-site supervision and management will be ensured properly

Annex 09: DMA wise Environmental parameter Testing Reports

Air Quality Monitoring: Laboratory Test report, ICB 2.08

Air Quality -DMA 901

Appendix 1: Air Quality Test Results

DSCL

Development Solutions Consultant Limited

Multidisciplinary Development Consultants

DSCL Environmental Laboratory

Name of the Project	Dhaka Water Supply Network Improvement Project (DWSNIP)
Location ID	DMA 901
Description of Sample	Ambient Air Quality Test
Sample Collector	Collected by DSCL Personnel
Sampling Date	04 July 2022

Test Result of Ambient Air Quality Analysis

Parameter	Unit	AAQ_01 Kamarpara High School and College, Turag, Dhaka 23.89°224 °N 90.38483°E		AAQ_02 Near East West Medical College, Turag, Dhaka 23.894316 °N 90.377091°E		Bangladesh Standard**	Project Standards (DWSNIP)***	Duration (hours)	Method of Analysis
		Actual Result	After 24-hour conversion	Actual Result	After 24-hour conversion				
$PM_{2.5}$	µg/m³	196.37	91.56	180.33	59.31	65	25	24	AEROQUAL Series 500Particulate matter monitor
PM_{10}	µg/m³	301.60	111.59	352.98	139.6	150	50	24	
SO_2	µg/m³	41.52	-	19.31	-	365	20	24	AEROQUAL Series SO_2 monitor
NO_x	µg/m³	16.11	-	21.73	-	100	200	Annual	AEROQUAL Series NOx monitor
CO*	ppm	<1	-	<1	-	10	8	8	Lutron AQ 9901
Weather Condition		Cloudy		Sunny		-	-	-	-
Monitoring Date		04/07/2022							

DSCL Environmental Laboratory, July 2022

** The Bangladesh National Ambient Air Quality Standards have been taken from the Environmental Conservation Rules, 1997 which was amended on 19th July 2005 vide S.R.O. No. 220-Law/2005.*

*** Ambient Air Quality Standards for Dhaka Water Supply Network Improvement Project (DWSNIP)*

Description of the Surrounding Environment

Location	Sample Site Description
Kamarpara High School and College, Turag, Dhaka (AAQ_01)	❖ Weather was cloudy during the monitoring. ❖ Vehicle movement around the project area was high (3- wheeler). ❖ School was closed due to Eid vacation. ❖ Visual dust particles were low. ❖ The project area situated at a commercial area. ❖ A mini market, shops, clinic and a hospital situated near the project area.
Near East West Medical College, Turag, Dhaka (AAQ_02)	❖ Vehicle movement was high around the project. ❖ People movement was high. ❖ Weather was sunny during the monitoring. ❖ Visual dust particles are moderate. ❖ Construction works are ongoing near the project. ❖ The project location situated near hospitals and medical college.

Afia Ratri

Test Performed By:
Afia Ratri
Jr. Environmental Specialist

Checked By:
Saiful Islam Imran
Deputy Manager

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Air Quality Monitoring: Laboratory Test report, ICB 2.09; DMA 204

DSCL

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Multidisciplinary Development Consultants

DSCL LABORATORY 2022

Name of the Project	Environmental Quality Assessment for Dhaka Water Supply Network Improvement Project (DWSNIP)
Description of Sample	Ambient Air Quality
Sample Collector	Collected by DSCL Personnel
Sampling Date	29 November 2022

Test Result of Ambient Air Quality Analysis

Parameter	Unit	DMA_204_AAQ_01 Hazaribagh Park Road, Hazaribagh, Dhaka 23.726321°N 90.373873°E		DMA_204_AAQ_02 Kalunagar New Road, Hazaribagh, Dhaka 23.729086°N 90.367956°E		Bangladesh Standard*	Project Standards (DWSNIP)***	Duration (hours)	Method of Analysis
		Actual Result	After 24-hour conversion	Actual Result	After 24-hour conversion				
$PM_{2.5}$	µg/m³	69.4	26.30	67.1	25.43	65	25	24	AEROQUAL series 500 portable air quality monitors
PM_{10}	µg/m³	143.2	54.28	138.4	52.45	150	50	24	
SO_2	µg/m³	102.6	-	117.3	-	80	20	24	
NO_x	µg/m³	50.2	-	61.7	-	80	200	Annual	
CO*	ppm	<1	-	1	-	5	8	8	Lutron AQ-9901
Weather Condition	Sunny					-	-	-	-

*Note: * CO concentrations and standards are 8-hourly only.*
*** The Bangladesh National Ambient Air Quality Standards have been taken from the "Air Pollution Control Rules, 2022."*
**** Ambient Air Quality Standards for Dhaka Water Supply Network Improvement Project (DWSNIP)*

Description of the surrounding Environment

Location	Sample Site Description
Hazaribagh Park Road, Hazaribagh, Dhaka **(DMA_204_AAQ_01)**	➢ Vehicle movement high. ➢ People movement Moderate. ➢ Dust particle was visible as children were playing in the Park field. ➢ No construction on going.
Kalunagar New Road, Hazaribagh, Dhaka **(DMA_204_AAQ_02)**	➢ People movement moderate. ➢ Visible dust particle low. ➢ Vehicle movement moderate. ➢ Sand was uncovered beside the monitoring location.

Test Performed By
Md. Bappy Rahman
Jr. Office Engineer

Development Solutions Consultant Limited * DSCL *

Checked By
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Deputy Manager

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Air Quality Monitoring: Laboratory Test report, ICB 2.10; DMA 102

GLOBAL ENVIRONMENT CONSULTANTS LTD.

Laboratory Analysis Report (DMA 102)

Project Name: Dhaka Water Supply Network Improvement Project (DWSNIP).
Package No. ICB 2.10, MODS Zone – 1 (20 DMAs).
Description of sample: Ambient Air Quality
Sample Collector: GECL Team
Sampling Date: September, 2022
Sampling Time: 10.00 AM - 12.00 PM
Reporting Date: September 25, 2022

Laboratory Test Result

Sample Description	Concentration Present					
	SPM ($\mu g/m^3$)	PM_{10} ($\mu g/m^3$)	$PM_{2.5}$ ($\mu g/m^3$)	SO_2 ($\mu g/m^3$)	NO_2 ($\mu g/m^3$)	CO (mg/m^3)
TWA Sampling Duration	24 hrs	24 hrs	24 hrs	24 hrs	24 hrs	8 hrs
DMA-102 **Sampling Location:** Hatkhola Road, Tikatuli, Wari **Sampling Address:** Central Women's University **GPS Location:** 23° 43' 5.06"N & 90° 25' 13.15"E	**167**	110	54	43	28	2.8
DMA-102 **Sampling Location:** Hatkhola Road, Tikatuli, Wari **Sampling Address:** Sher-E-Bangla Girls Mohabiddaloy. **GPS Location:** 23° 43' 6.81"N & 90° 25' 3.52"E	**158**	105	49	32	22	2.2
DMA-102 **Sampling Location:** Shapla Chattar Motijheel **Sampling Address:** In front of Sonali Bank, **GPS Coordinate:** 23°43'34.85"N & 90°25'17.61"E	**154**	114	58	49	27	2.5

Reference Standards						
DoE, Bangladesh Standard for Ambient Air, 2021	400 $\mu g/m^3$ (Commercial and mixed)	150 $\mu g/m^3$ (24 hrs)	65 $\mu g/m^3$ (24 hrs)	250 $\mu g/m^3$ (1 hr)	80 $\mu g/m^3$ (24 hrs)	5 mg/m^3 (8 hrs)
		50 $\mu g/m^3$ (Annual)	35 $\mu g/m^3$ (Annual)	80 $\mu g/m^3$ (24 hrs)	40 $\mu g/m^3$ (Annual)	20 mg/m^3 (1 hr)
WHO Ambient Air Quality Guideline, 2021	120 $\mu g/m^3$ (24 hrs)	45 $\mu g/m^3$ (24hrs)	15 $\mu g/m^3$ (24 hrs)	500 $\mu g/m^3$ (10 mins)	25 $\mu g/m^3$ (24 hrs)	7 mg/m^3 (24 hrs)
		15 $\mu g/m^3$ (Annual)	5 $\mu g/m^3$ (Annual)	40 $\mu g/m^3$ (24 hrs)	10 $\mu g/m^3$ (Annual)	

Note 1: Schedule-2 Air Quality Standards, Environmental Conservation Rules 1997 (dated 28 Aug 1997) (amended by the Notification SRO 220-Law/2005 (dated 19 July 2005).
Note 2: WHO Ambient Air Quality Guidelines, 2021.

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Air Quality Monitoring: Laboratory Test report, ICB 2.10; DMA 103

GLOBAL ENVIRONMENT CONSULTANTS LTD.

Laboratory Analysis Report (DMA 103)

Project Name: Dhaka Water Supply Network Improvement Project (DWSNIP).
Package No. ICB 2.10, MODS Zone – 1 (20 DMAs).
Description of sample: Ambient Air Quality
Sample Collector: GECL Team
Sampling Date: September, 2022
Sampling Time: 12.30 PM - 2.00 PM
Reporting Date: September 25, 2022

Laboratory Test Result

Sample Description	Concentration Present					
	SPM ($\mu g/m^3$)	PM_{10} ($\mu g/m^3$)	$PM_{2.5}$ ($\mu g/m^3$)	SO_2 ($\mu g/m^3$)	NO_2 ($\mu g/m^3$)	CO (mg/m^3)
TWA Sampling Duration	24 hrs	24 hrs	24 hrs	24 hrs	24 hrs	8 hrs
DMA-103 **Sampling Location:** Arambag, Motijheel **Sampling Address:** In front of Arambag Bus Counter **GPS Coordinate:** 23°43'47.75"N & 90°25'17.71"E	176	126	57	48	35	3.7
DMA-103 **Sampling Location:** Bangladesh Bank Colony, Arambag, Motijheel **Sampling Address:** In front of Bangladesh Bank High School **GPS Coordinate:** 23°43'51.71"N & 90°25'21.43"E	137	94	37	23	26	2.4
DMA-103 **Location:** Kamlapur **Sampling Address:** In front of Kamlapur Railway Station **GPS Location:** 23° 43' 53.87"N & 90° 25' 33.56"E	183	146	62	67	42	4.2

Reference Standards						
DoE, Bangladesh Standard for Ambient Air, 2021	400 $\mu g/m^3$ (Commercial and mixed)	150 $\mu g/m^3$ (24 hrs)	65 $\mu g/m^3$ (24 hrs)	250 $\mu g/m^3$ (1 hr)	80 $\mu g/m^3$ (24 hrs)	5 mg/m^3 (8 hrs)
		50 $\mu g/m^3$ (Annual)	35 $\mu g/m^3$ (Annual)	80 $\mu g/m^3$ (24 hrs)	40 $\mu g/m^3$ (Annual)	20 mg/m^3 (1 hr)
WHO Ambient Air Quality Guideline, 2021	120 $\mu g/m^3$ (24 hrs)	45 $\mu g/m^3$ (24hrs)	15 $\mu g/m^3$ (24 hrs)	500 $\mu g/m^3$ (10 mins)	25 $\mu g/m^3$ (24 hrs)	7 mg/m^3 (24 hrs)
		15 $\mu g/m^3$ (Annual)	5 $\mu g/m^3$ (Annual)	40 $\mu g/m^3$ (24 hrs)	10 $\mu g/m^3$ (Annual)	

Note 1: Schedule-2 Air Quality Standards, Environmental Conservation Rules 1997 (dated 28 Aug 1997) (amended by the Notification SRO 220-Law/2005 (dated 19 July 2005).
Note 2: WHO Ambient Air Quality Guidelines, 2021.

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Air Quality Monitoring: Laboratory Test report, ICB 2.10; DMA 106

GLOBAL ENVIRONMENT CONSULTANTS LTD.

Laboratory Analysis Report (DMA 106)

Project Name: Dhaka Water Supply Network Improvement Project (DWSNIP).
Package No. ICB 2.10, MODS Zone – 1 (20 DMAs).
Description of sample: Ambient Air Quality
Sample Collector: GECL Team
Sampling Date: September, 2022
Sampling Time: 2.30 PM - 5.00 PM
Reporting Date: September 25, 2022

Sample Description	Concentration Present					
	SPM ($\mu g/m^3$)	PM_{10} ($\mu g/m^3$)	$PM_{2.5}$ ($\mu g/m^3$)	SO_2 ($\mu g/m^3$)	NO_2 ($\mu g/m^3$)	CO (mg/m^3)
TWA Sampling Duration	24 hrs	24 hrs	24 hrs	24 hrs	24 hrs	8 hrs
DMA-106 **Sampling Location:** Kamlapur **Sampling Address:** Bir Shestho Shahid Sipahi Mostafa Kamal Stadium. **GPS Location:** 23° 43' 31.07"N & 90° 25' 44.35"E	182	163	83	64	56	4.3
DMA-106 **Sampling Location:** South Mugdapara **Sampling Address:** Wasa Road Bridge **GPS Coordinate:** 23°43'36.72"N & 90°26'1.67"E	125	84	32	21	5	1.4

Reference Standards						
DoE, Bangladesh Standard for Ambient Air, 2021	400 $\mu g/m^3$ (Commercial and mixed)	150 $\mu g/m^3$ (24 hrs)	65 $\mu g/m^3$ (24 hrs)	250 $\mu g/m^3$ (1 hr)	80 $\mu g/m^3$ (24 hrs)	5 mg/m^3 (8 hrs)
		50 $\mu g/m^3$ (Annual)	35 $\mu g/m^3$ (Annual)	80 $\mu g/m^3$ (24 hrs)	40 $\mu g/m^3$ (Annual)	20 mg/m^3 (1 hr)
WHO Ambient Air Quality Guideline, 2021	120 $\mu g/m^3$ (24 hrs)	45 $\mu g/m^3$ (24hrs)	15 $\mu g/m^3$ (24 hrs)	500 $\mu g/m^3$ (10 mins)	25 $\mu g/m^3$ (24 hrs)	7 mg/m^3 (24 hrs)
		15 $\mu g/m^3$ (Annual)	5 $\mu g/m^3$ (Annual)	40 $\mu g/m^3$ (24 hrs)	10 $\mu g/m^3$ (Annual)	

Note 1: Schedule-2 Air Quality Standards, Environmental Conservation Rules 1997 (dated 28 Aug 1997) (amended by the Notification SRO 220-Law/2005 (dated 19 July 2005)).
Note 2: WHO Ambient Air Quality Guidelines, 2021.

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Noise Monitoring: Laboratory Test report, ICB 2.08

Noise Quality -DMA 901

DSCL

Development Solutions Consultant Limited

Multidisciplinary Development Consultants

DSCL Environmental Laboratory

Name of the Project	Dhaka Water Supply Network Improvement Project (DWSNIP)
Location ID	DMA 901
Description of Sample	Noise Level Monitoring
Sample Collector	Collected by DSCL Personnel
Sampling Date	04 July 2022

Test Result of Noise Monitoring

Sample ID	Sample Location	GPS Location	Land Use Category	Time				Noise Level (dBA) (LAeq)		Bangladesh Standard (dB A)**	
				Day		Night		Day	Night	Day	Night
				Start	End	Start	End				
NM_01	Kamarpara High School and College, Turag, Dhaka	23.851224°N 90.384530°E	Commercial	10:30	11:00	21:45	22:15	57.41	55.27	70	60
NM_02	Near East West Medical College, Turag, Dhaka	23.894316°N 90.377061°E	Commercial	13:10	13:40	22:32	23:02	75.53	63.55	70	60

DSCL Environmental Laboratory, July 2022

Description of the Surrounding Environment

Sample Location and ID	Sample Site Description
Kamarpara High School and College, Turag, Dhaka **(NM_01)**	➢ Vehicle movement was high near the project. ➢ People movement was high near the project. ➢ The project area situated near a market. ➢ No construction work was ongoing near the project area.
Near East West Medical College, Turag, Dhaka **(NM_02)**	➢ People's movement was high. ➢ Vehicle movement was high. ➢ The place is in commercial area. ➢ Construction works ongoing near the project. ➢ The project area situated beside a highway.

Test Performed By:
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Jr. Environmental Engineer

Development Solutions Consultant Limited DSCL

Checked By:
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Deputy Manager

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Noise Monitoring: Laboratory Test report, ICB 2.09

Noise Quality -DMA 204

DSCL

Development Solutions Consultant Limited

Multidisciplinary Development Consultants

DSCL LABORATORY 2022

Name of the Project	Environmental Quality Assessment for Dhaka Water Supply Network Improvement Project (DWSNIP)
Description of Sample	Noise Level Measurement
Sample Collector	Collected by DSCL Personnel
Sampling Date	29 November 2022

Noise Level Analysis

Sample ID	Sample Location	GPS Location	Land Type	Time				Noise Level (dBA) (LAeq)		Bangladesh Standard (dBA)**	
				Day		Night		Day	Night	Day	Night
				Start	End	Start	End				
DMA_204_NM_01	Hazaribagh Park Road, Hazaribagh, Dhaka	23.726323°N 90.373071°E	Mixed	11:10 pm	11:40 pm	09:01 pm	09:31 pm	62.4	51.1	60	50
DMA_204_NM_02	Kalunagar New Road, Hazaribagh, Dhaka	23.729103°N 90.367949°E	Residential	03:13 pm	03:43 pm	09:50 pm	10:20 pm	50.4	49.2	55	45

Notes:
- Land use category is based on the classification provided in the Noise Pollution Control Rules (2006)
- The sound level standards for the residential area are 55 at day time and 45 at night time.
- The sound level standards for the mixed area are 60 at day time and 50 at night time.
- Noise Level is the average noise recorded throughout the monitoring period.

Description of the surrounding Environment

Location	Sample Site Description
Hazaribagh Park Road, Hazaribagh, Dhaka (DMA_204_NM_01)	➢ The place is in a mixed (residential & commercial) area. ➢ People movement moderate. ➢ Vehicle movement high. ➢ The project location was beside a Park.
Kalunagar New Road, Hazaribagh, Dhaka (DMA_204_NM_02)	➢ People movement was high. ➢ The project location was beside a playground. ➢ Vehicle movement high. ➢ The area is residential.

Test Performed By
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Checked By
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Noise Monitoring: Laboratory Test report, ICB 2.10; DMA 102, 103, 106

GLOBAL ENVIRONMENT CONSULTANTS LTD.

ANALYSIS REPORT ON AMBIENT NOISE LEVEL

Client Name	**Dhaka Water Supply Network Improvement Project (DWSNIP), Package No. ICB 2.10, MODS Zone – 1 (20 DMAs)**		
Report ID	GECL/DWSNIP/NOISE/2022/09/29/01	**Date of Sampling**	September 26, 2022
Sampling Time	Day and Night (September 26, 2022)		
Sampling Team	Global Environment Consultants Ltd. (GECL Monitoring Team).		
Analysis Date	September 29, 2022	**Report Issuing Date**	September 29, 2022

Description of Analysis

Sampling Location	Time Weighted Average Noise Level (LAeq) dB	
	Day Time (06.00 AM – 21.00 PM)	Night Time (09.00 PM – 06.00 AM)
DMA-102 **Sampling Location:** Hatkhola Road, Tikatuli, Wari **Sampling Address:** Central Women's University **GPS Location:** 23° 43' 5.06"N & 90° 25' 13.15"E	76	69
DMA-102 **Sampling Location:** Hatkhola Road, Tikatuli, Wari **Sampling Address:** Sher-E-Bangla Girls Mohabiddaloy. **GPS Location:** 23° 43' 6.81"N & 90° 25' 3.52"E	72	64
DMA-102 **Sampling Location:** Shapla Chattar Motijheel **Sampling Address:** In front of Sonali Bank. **GPS Coordinate:** 23°43'34.85"N & 90°25'17.61"E	73	57
DMA-103 **Sampling Location:** Arambag, Motijheel **Sampling Address:** In front of Arambag Bus Counter **GPS Coordinate:** 23°43'47.75"N & 90°25'17.71"E	74	69
DMA-103 **Sampling Location:** Bangladesh Bank Colony, Arambag, Motijheel **Sampling Address:** In front of Bangladesh Bank High School **GPS Coordinate:** 23°43'51.71"N & 90°25'21.43"E	63	51
DMA-103 **Location:** Kamlapur **Sampling Address:** In front of Kamlapur Railway Station **GPS Location:** 23° 43' 53.87"N & 90° 25' 33.56"E	75	72
DMA-106 **Sampling Location:** Kamlapur **Sampling Address:** Bir Shestho Shahid Sipahi Mostafa Kamal Stadium. **GPS Location:** 23° 43' 31.07"N & 90° 25' 44.35"E	76	72
DMA-106 **Sampling Location:** South Mugdapara **Sampling Address:** Wasa Road Bridge **GPS Coordinate:** 23°43'36.72"N & 90°26'1.67"E	59	48

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Ground Water Quality Monitoring: Laboratory Test report, ICB 2.08

Drinking/Ground Water Quality- DMA 901

Dhaka Water Supply and Sewerage Authority

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Asad gate, Mohammadpur
Dhaka-1207, Tel-48122751
E-mail: dwasacentrallaboratory@gmail.com

"শেখ হাসিনার মূলনীতি
প্রথম শহরের উন্নতি"

Memo No:46.113.519/520.00.00.001.2022.12 MCD Date 06-07-2022

Mohammad Noor A Alam
Construction Manager
Dhaka Water Supply Network
Improvement Project (DWSNIP), ICB-02.8

Subject: Testing report of supplied DTW water samples (02 Nos.) from DMA-901 under ICB-02.8 .
Ref: CPP-BD-DWASA _02.8-1762-2022, Date:04-07-2022

Date of Sample Received: 05-07-2022
Date of Testing: 05-07-2022 - 06-07-2022

Water Quality Analysis Report

SN	Parameters	Units	Drinking Water Standards		DTW, Uttara-10/A, (New), DMA-901	DTW, Uttara-10/A (Old), DMA-901	Analysis Methods
			Bangladesh ECR 1997	WHO-2011			
1	pH	–	6.5-8.5	6.5-8.5	6.96	6.89	Electrometric
2	Turbidity	NTU	≤10	5	6.41	0.94	Nephelometric Metho
3	Total Dissolved Solids	mg/L	1000	1000	152.2	201.9	Electrometric
4	Dissolved Oxygen	mg/L	≥6.00	–	6.17	6.72	Electrometric
5	Hardness (Total)	mg/L	200-500	–	100	128	EDTA Titrimetric
6	Chloride	mg/L	150-600	250	10	40	Argentometric
7	Iron	mg/L	0.3-1.0	0.3	0.817	0.224	AAS
8	Manganese	mg/L	0.1	0.4	0.140	0.076	AAS
9	Arsenic	mg/L	0.05	0.01	<0.01	<0.01	As-test kit
10	Total Coliforms	CFU/100 mL	0	0	0	0	Membrane Filration

NB: Results are applicable for the above mentioned sample.

06-07-2022 01:18 PM	06-07-2022 01:40 PM	06-07-2022 01:42 PM	06-07-2022 01:28 PM	06-07-2022 06:17 PM
Md. Abdur Rahman	Md. Ruhul Amin	Hasna Hena Rahman	Tahmina Begum	Dr. Md. Alamgir Hossain
Lab. Assistant	Assistant Chemist	Assistant Microbiologist	Chemist	Deputy Chief Microbiologist

NB: 1. Samples supplied to the laboratory by client.
2. This report is valid only for particular sample tested and can not be used for publicity.
3. Reports are not allowed to be used or reproduced for any commercial purpose.

Ground Water Quality Monitoring: Laboratory Test report, ICB 2.09

Drinking/Ground Water Quality- DMA 204

Dhaka Water Supply and Sewerage Authority
Office of the Deputy Chief Microbiologist
Microbiology & chemical Division
(Dhaka WASA Central Laboratory)
Asad gate, Mohammadpur
Dhaka-1207, Tel-48122751
E-mail: dwasacentrallaboratory@gmail.com

Memo No:46.113.519/520.00.00.001.2022.240 MCD Date 30-11-2022

Xia Changhai
Contract Manager
DWSNIP/ICB-02.9
CFMCC

Subject: Testing Report of DTW Water Samples (02 Nos) Collected from DMA-204 area of the Contract Package No-ICB-02.9.
Ref: DWSNIP/ICB-02.9/DMS/2022/2328, Date:15-11-2022

Date of Sample Received: 28-11-2022
Date of Testing: 28-11-2022

Water Quality Analysis Report

SN	Parameters	Units	Drinking Water Standards		DTW, Kalunagar	DTW, Hazaribag Park	Analysis Methods
			Bangladesh ECR 1997	WHO-2011			
1	pH	--	6.5-8.5	6.5-8.5	6.85	6.82	Electrometric
2	Turbidity	NTU	≤10	5	13.7	4.72	Nephelometric Method
3	Dissolved Oxygen	mg/L	≥6.00	--	5.10	4.43	Electrometric
4	Chloride	mg/L	150-600	250	13	12	Argentometric
5	Iron	mg/L	0.3-1.0	0.3	1.256	0.670	AAS
6	Manganese	mg/L	0.1	0.4	0.424	0.228	AAS
7	Arsenic	mg/L	0.05	0.01	<0.01	<0.01	Arsenic kit
8	Total Coliforms	CFU/100 mL	0	0	0	0	Membrane Filtration

NB: Results are applicable for the above mentioned sample.

30-11-2022 11:04 AM	30-11-2022 11:36 AM	30-11-2022 11:13 AM	30-11-2022 11:14 AM	30-11-2022 11:36 AM
Md. Abdur Rahman	Md. Ruhul Amin	Hasna Hena Rahman	Tahmina Begum	Dr. Md. Alamgir Hossain
Lab. Assistant	Assistant Chemist	Assistant Microbiologist	Chemist	Deputy Chief Microbiologist

NB: 1. Samples supplied to the laboratory by client.
2. This report is valid only for particular sample tested and can not be used for publicity.
3. Reports are not allowed to be used or reproduced for any commercial purpose.

Ground Water Quality Monitoring: Laboratory Test report, ICB 2.10; DMA 113

Dhaka Water Supply and Sewerage Authority

Office of the Deputy Chief Microbiologist
Microbiology & chemical Division
(Dhaka WASA Central Laboratory)
Asad gate, Mohammadpur
Dhaka-1207, Tel-48122751
E-mail: dwasacentrallaboratory@gmail.com

Memo No:46.113.519/520.00.00.001.2022.39 MCD Date 01-08-2012

Contract Manager
ICB-02.10-MODS Zone-1 (19 DMAs)
Dhaka Water Supply Network Improvement Project (DWSNIP)
Dhaka WASA.

Subject: Testing Report of Supplied Water Samples (06 Nos.) from DMA-113 (After Construction) of the Contract Package no- ICB-02.10.
Ref: CCSEB-RPL-JV/RPL/ICB-02.10/PM/799/2022, Date:23-07-2022

Date of Sample Received: 26-07-2022
Date of Testing: 26-07-2022 - 31-07-2022

Water Quality Analysis Report

SN	Parameters	Units	Drinking Water Standards		DTW, Beauty Boarding	Distribution Network, Baitul Taqwa Mosque	DTW, Narinda	DTW, Kazi Abdur Rouf	DTW, Lakshmi Bazar	Distribution Network, 30,Lakshmi Bazar	Analysis Methods
			Bangladesh ECR 1997	WHO-2011							
1	pH	–	6.5-8.5	6.5-8.5	6.94	6.87	6.85	6.95	6.97	6.90	
2	Turbidity	NTU	≤10	5	1.56	0.58	0.50	2.65	0.33	0.53	
3	Total Suspended Solids (TSS)	mg/L	10	–	4.0	10.0	6.0	3.0	2.0	2.0	
4	Dissolved Oxygen	mg/L	≥6.00	–	3.81	7.45	4.52	3.15	3.95	7.90	
5	Chloride	mg/L	150-600	250	10	14	66	36	66	20	
6	Iron	mg/L	0.3-1.0	0.3	1.50	0.13	0.14	0.48	0.06	0.07	
7	Manganese	mg/L	0.1	0.4	0.318	0.340	0.203	0.322	0.231	0.053	
8	Arsenic	mg/L	0.05	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
9	BOD_5	mg/L	0.2	–	0.18	0.13	0.2	0.2	0.19	0.13	
10	COD	mg/L	4.00	–	<1	<1	<1	<1	02	<1	
11	Total Coliforms	CFU/100 mL	0	0	0	0	0	0	0	0	

NB: Results are applicable for the above mentioned sample.

01-08-2022 10:43 AM	01-08-2022 11:36 AM	01-08-2022 10:47 AM	01-08-2022 11:22 AM	01-08-2022 01:05 PM
Md. Abdur Rahman	Md. Ruhul Amin	Hasna Hena Rahman	Tahmina Begum	Dr Md. Alamgir Hossain
Lab. Assistant	Assistant Chemist	Assistant Microbiologist	Chemist	Deputy Chief Microbiologist

NB. 1. Samples supplied to the laboratory by client.
2. This report is valid only for particular sample tested and can not be used for publicity.
3. Reports are not allowed to be used or reproduced for any commercial purpose.

Annex 9A: Methodology of Air quality monitoring including sample calculation

2 METHODOLOGY

2.1 Air Quality

The ambient air quality monitoring was carried out at two (02) locations at the project corridor on 04 July 2022. The parameters were SO_x, NO_x, PM_{10}, $PM_{2.5}$ and CO. AEROQUAL series 500 portable air quality monitors were used to measure particulate matters (PM_{10} and $PM_{2.5}$) and gaseous pollutants (SO_2 and NOx) (Figure 2.1). Lutron AQ-9901 meter was used to monitor carbon monoxide (CO). The locations of sample collection are showed in the map (Figure 2.2). The weather was sunny during the monitoring period. Proper Personal Protective Equipment (PPE) including vests, face musk, hand gloves and helmets were used during the monitoring period.

OC-905 Portable Gas Detector	OC-500 Portable Gas Detector	Lutron AQ-9901

Figure 2.1: Equipment used for Air Quality Sampling

Conversion of Hourly to 24-hour Averages - Agencies, including the GoB's DoE, use the 24-hour collection period as the standard for establishing ambient air quality levels. Many agencies (e.g. New York State Dept. of Environmental Conservation, California Office of Environmental Health Hazards Assessment, USEPA, Ontario Ministry of Environment) face the same problems and have had to adapt by applying a conversion process using Pasquill's (1961) air mass dispersion tables defining six air mass stability classes (Table 2.1) and a set of meteorological conditions (Table 2.2). Using the simple power law principal Schroeder and Jugloff (2012) described the steps for converting one-hour readings to 24-hour values the stability classes (Table 2.1) are related to average wind speed, daytime solar radiation and night-time cloud cover and a second table (Table 2.2), refining these relationships, was also developed by Pasquill.

Table 2.1: Pasquill-Gifford Air Dispersion Stability Classes and Associated Dispersion Exponents

Stability Class	p	Definition
A	0.5	Very unstable
B	0.5	Unstable
C	0.333	Slightly unstable
D	0.2	Neutral
E	0.167	Slightly stable
F	0.167	Stable

Table 2.2: Meteorological Conditions Used to Define the Stability Classes

Surface wind Speed Cloud		Day time solar radiation		Night time Cover	
m/s	Strong	moderate	slight	>50%	<50%
< 2	A	A – B	B	E	F
2 – 3	A – B	B	C	E	F
3 – 5	B	B – C	C	D	E
5 – 6	C	C – D	D	D	D
> 6	C	D	D	D	D

Note: Grey highlight indicates condition selected for Bangladesh

Therefore, taking the simple average of these three values from Table 1, the Project stability class was calculated as 0.39 (see below).

$$P= \frac{0.5+0.5+0.2}{3} = 0.4$$

This suggests a somewhat unstable air mass, resulting in considerable dilution of a one-hour sample when spread out over a 24-hour period. In order to provide 24- hour averages for the seven parameters the following power-law equation, as defined in Schroeder and Jugloff was applied

$$C_{24h}=C_{1h}(t_{short}/t_{long})^{0.4}$$

Where C 1h is the measured 1-hour concentration and C 24 h is the estimated average using the exponent 0.370, and "t" is time. Therefore:

$$C_{24h}= C_{2h}\,(2/24)^{0.4}$$
$$= C_{2h\,X}\,(0.0833)^{0.4}$$
$$= C_{2h\,X}0.370$$

So, for example for the two-hour measurement of $PM_{2.5}$ of 188.37 µg/m3 the 24- hour average would be:

$$\text{24hr Avg. } PM_{10} = 188.37x\ 0.370$$
$$= 69.7\ \mu g/m^3$$

This generalized approach was applied to all data, and the 24-hour averages generated, in order to be able to compare Project results to GoB standards.

Annex 9B: Photograph of air quality, noise and water quality monitoring during the reporting period (July-December, 2022)

AAQ_01 (Kamarpara High School and College, Turag, Dhaka)

AAQ_02 (Near East West Medical College, Turag, Dhaka)

NM_01 (Kamarpara High School and College, Turag, Dhaka)

DTW Hazaribagh Park

DTW Kalunagar

Annex 10: Photographs and Attendance of the Consultation Meetings

Public Consultation Meeting Photos

Public Consultation Meeting (PCM)
at DMA -117 of ICB-2.10 (24.08.22)

Public Consultation Meeting (PCM)
at DMA-104 of ICB-2.10 (17.08.22)

TSM at DMA-104 of ICB 2.10 (08.08.22)

TSM at DMA-117 of ICB 2.10 (04.08.22)

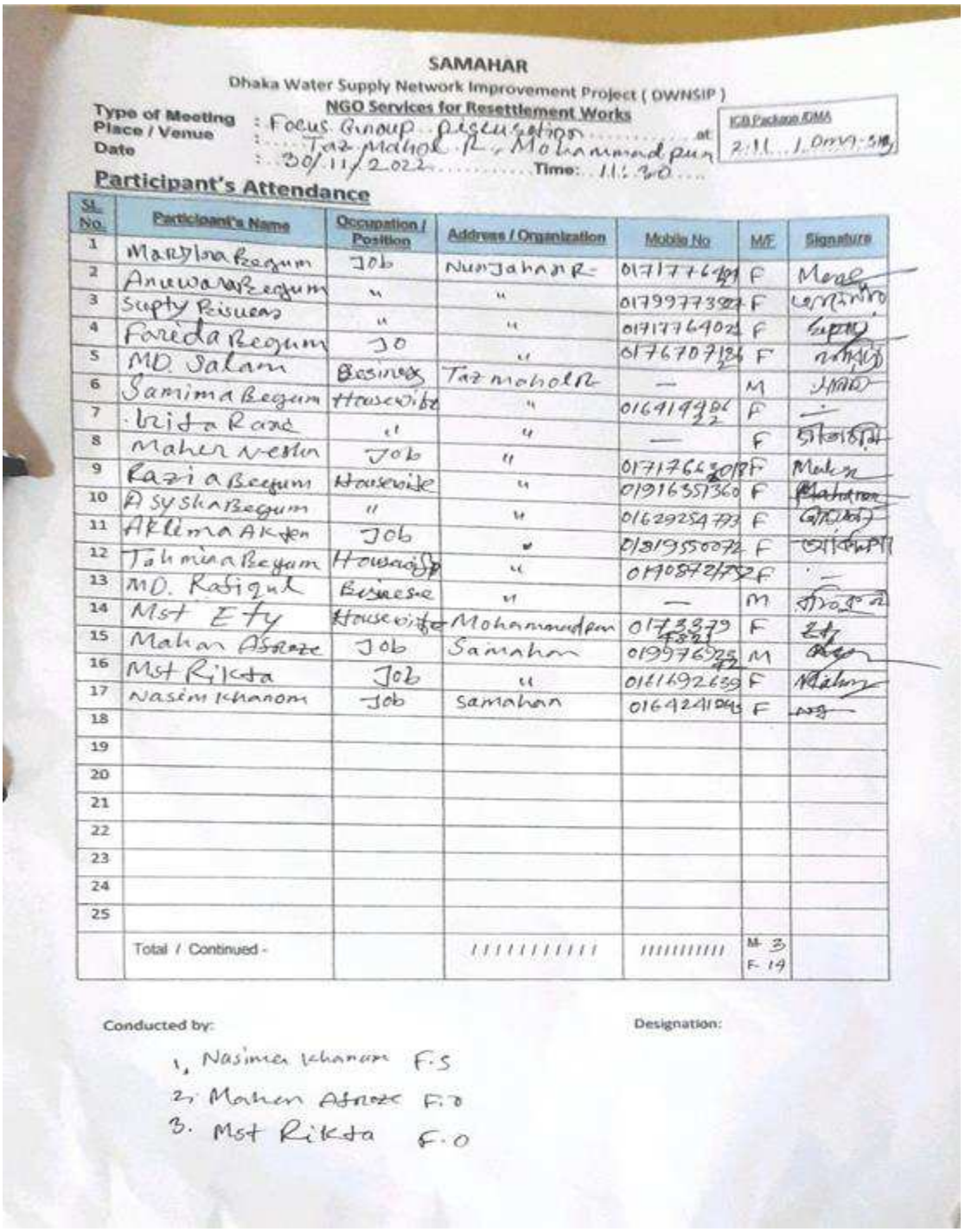
esettlement Officer is visiting a Construction work site site at DMA-108 of ICB-2.10 areas

Resettlement Officer is visiting a Construction work site site at Badhanagar Mukulika school road DMA-204 of ICB-2.9 areas

Resettlement Officer is visiting a Construction work site site at Rankin Street in DMA-108-B of ICB-2.10 areas

The PAPs of ICB Package 2.9 areas, with the PD of DWSNIP & officials of PMU, DMS and INGO, after receiving their compensation cheques at PMU, on November 14, 2022

ATTENDENCE SHEETS OF CONSULTATION MEETINGS (SCANNED COPIES)



SAMAHAR

Dhaka Water Supply Network Improvement Project (DWNSIP)

NGO Services for Resettlement Works

Type of Meeting : Focus Group Discussion
Place / Venue : Taz Mahol R., Mohammadpur at
Date : 30/11/2022 Time: 11:30

ICB Package /DMA 2:11, 1:DMA-312

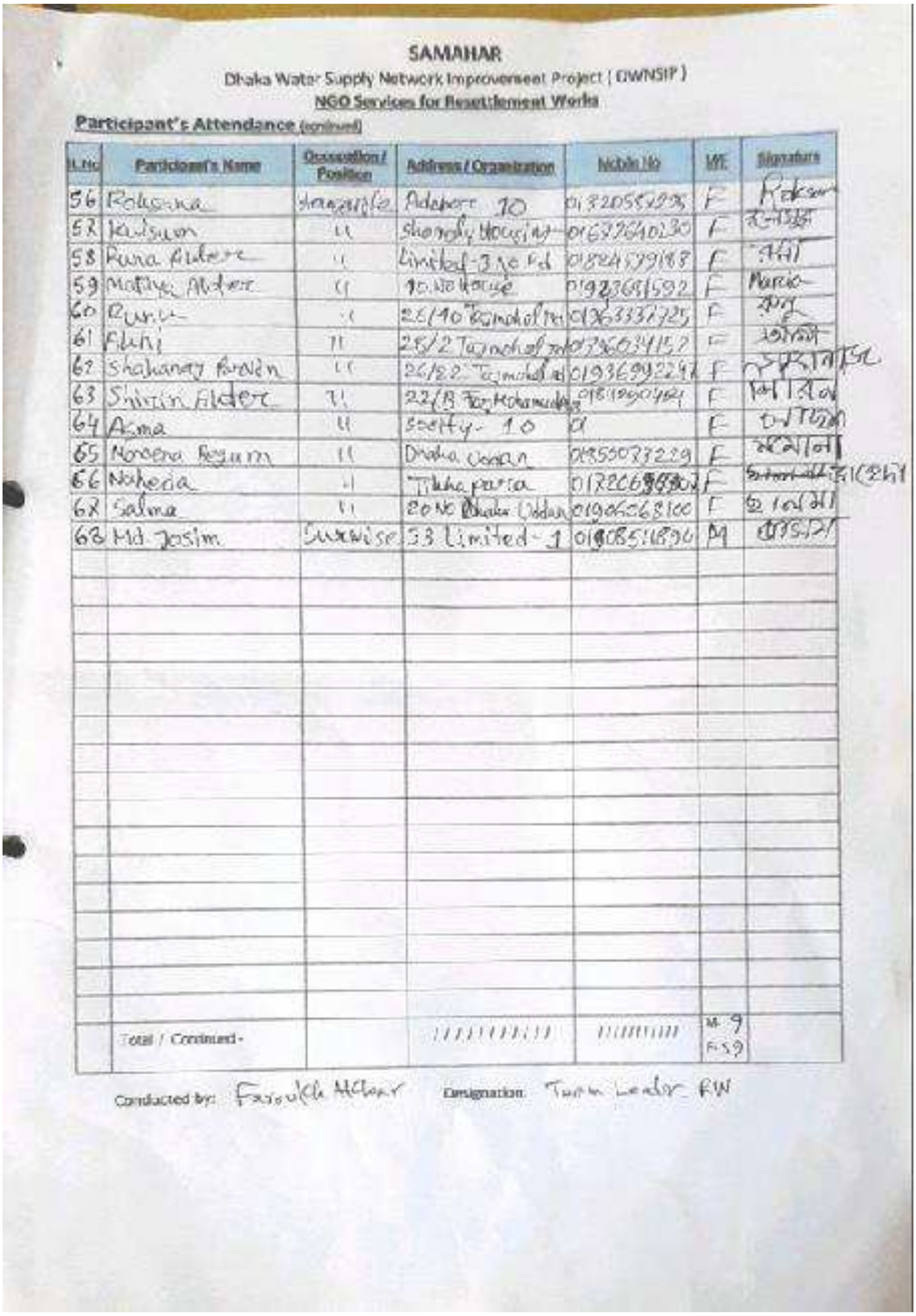
Participant's Attendance

Sl. No.	Participant's Name	Occupation / Position	Address / Organization	Mobile No	M/F	Signature
1	Marjina Begum	Job	Nurjahan R-	01717764[illegible]	F	Marj
2	Anowara Begum	"	"	01799773[illegible]	F	Anowara
3	Supty Biswas	"	"	01917764[illegible]	F	Supty
4	Fareda Begum	Jo	"	01767071[illegible]	F	[illegible]
5	MD. Salam	Business	Taz mahol R	—	M	[illegible]
6	Samima Begum	Housewife	"	01641[illegible]	F	—
7	Brista Rani	"	"	—	F	[illegible]
8	Maher Nesha	Job	"	01717[illegible]	F	Maher
9	Razia Begum	Housewife	"	01916551360	F	[illegible]
10	Ayesha Begum	"	"	01629254[illegible]	F	[illegible]
11	Akhima Akter	Job	"	01819550072	F	[illegible]
12	Tahmina Begum	Housewife	"	01908721[illegible]	F	—
13	MD. Rafiqul	Business	"	—	M	[illegible]
14	Mst Efy	Housewife	Mohammadpur	01733[illegible]	F	Efy
15	Mahar Afroze	Job	Samahar	01997692[illegible]	M	[illegible]
16	Mst Rikta	Job	"	01611926[illegible]	F	[illegible]
17	Nasim Khanom	Job	samahar	01642411[illegible]	F	[illegible]
18						
19						
20						
21						
22						
23						
24						
25						
	Total / Continued -				M- 3 F- 19	

Conducted by: Designation:

1. Nasima Khanom F.S
2. Maher Afroz F.O
3. Mst Rikta F.O

Attendance Sheet of Focus Group Discussing Meeting at DMA-312 (30.11.2022)



SAMAHAR

Dhaka Water Supply Network Improvement Project (DWNSIP)

NGO Services for Resettlement Works

Participant's Attendance (continued)

Sl. No	Participant's Name	Occupation / Position	Address / Organization	Mobile No	M/F	Signature
56	Roksana	Housewife	Adabor 10	01320558295	F	Roksana
57	Kulsum	"	Shamoly Housing	01637640230	F	[illegible]
58	Runa Akter	"	Limited-3 no Rd	01824579188	F	[illegible]
59	Mariya Akter	"	10 No House	01923691592	F	Maria
60	Runu	"	26/10 Tajmohol Rd	01963337725	F	[illegible]
61	Fuli	"	28/2 Tajmohol Rd	01796034157	F	[illegible]
62	Shahanaz Parvin	"	26/22 Tajmohol Rd	01936992247	F	[illegible]
63	Shirin Akter	"	22/B Tajmohammadpur	01819890484	F	[illegible]
64	Asma	"	Society 10	"	F	[illegible]
65	Noreena Begum	"	Dhaka Uddan	01855077229	F	[illegible]
66	Naheda	"	Tikkapara	01722698802	F	[illegible]
67	Salma	"	20 No Dhaka Uddan	01906068100	F	[illegible]
68	Md Josim	Business	33 Limited-1	01908511890	M	[illegible]
	Total / Continued -		//////////	//////////	M-9 F-59	

Conducted by: Farukh Akter Designation: Team Leader RW

Attendance Sheet of Public Consultation Meeting at DMA-312 (01.12.2022)

Annex 11: Photographs and Records of Training and Workshop Carried out on Environmental Compliance During the Reporting period

	
Training for construction safety on 17.08.2022	**Training for construction safety (DTW Installation site) on 24.10.2022**
	
Training on Safety Procedures During Hous Connection Works	**Training on Safety Issues during Meter Shifting Works**
	
Tool Box Meeting before starting the site work	**Training on Environment Health and Safety during project Implementation**

ICB-2.8

Date: 17.08.2022, Location: DMA-901, Training for Construction Safety

孟加拉达卡供水管网改进工程（No.ICB-2.8）项目
Dhaka Water Supply Network Improvement Project
(DWSNIP)ICB-02.8

签到表
Participants Register

名 称/Topic: Training for Construction safety
时 间/Date: 17-08-2022
地 点/ Location: DMA-901
主 持 人/Presider: Mohammad Shahidul Islam
参 加 人/Participants:

序号 No.	参加人 (Participants)	单位/部门 (Department)	职务 (Position)	手机/办公电话 (Telephone)	温度 (Temperature)	备注 (Remark)
1	Naieem Hoque	QHSE	Engineers	01703401159	36.5	[illegible]
2	Samim	Construction	Supervisor	01912-220727	36.7	[illegible]
3	Robin	Construction	Supervisor	01770769697	36.4	[illegible]
4	Rakib	Construction	Supervisor	01935-009219	36.3	[illegible]
5	Zakin	Construction	Labour	01774-618954	36.6	[illegible]
6	Asif	Construction	Labour	01979-909634	36.4	[illegible]
7	Manik	Construction	Labour	01978-931585	36.5	[illegible]
8	Kaduss	Construction	Labour	01407-246492	36.6	[illegible]
9	Raju	Construction	Labour	0177-526968	36.4	[illegible]
10	Abdul Hamid	Construction	Labours	0187-5896725	36.5	[illegible]
11	Momen	Construction	Labour	0165-3578953	36.4	[illegible]
12	Shadequle	Construction	Labour		36.6	[illegible]
13	Mashid	Construction	Labour		36.5	[illegible]
14	Abdul Broder	Construction	Labours	015-77638959	36.7	[illegible]
15						
16						

Date: 24.10.2022, Location: DMA-907 (DTW Installation site), Training for Construction Safety

孟加拉达卡供水管网改进工程（No.ICB-2.8）项目
Dhaka Water Supply Network Improvement Project
(DWSNIP)ICB-02.8

签到表
Participants Register

名 称/Topic: Training for Construction Safety (DTW Installation Site)
时 间/Date: 24-10-2022
地 点/Location: DMA-907 (DTW Construction site)
主 持 人/Presider: Mohammad Shahidul Islam
参 加 人/Participants:

序号 No.	参加人 (Participants)	单位/部门 (Department)	职务 (Position)	手机/办公电话 (Telephone)	备注 (Remark)
1	Mashiur	Construction	Labourer	01701-704454	[illegible]
2	Md. Rakib	QHSE	Engineers	0168-5L196257	[illegible]
3	Abdul Wahid	Construction	Labours		[illegible]
4	Md. Mamun	Construction	Labours	018-68548752	[illegible]
5	Md. Rafik	Construction	Labours		[illegible]
6	Md. Salim	Construction	Labours		[illegible]
7	Md. Sagor	Construction	Labours	017-3569588	[illegible]
8	Md. Habib	Construction	Labours		[illegible]
9	Md. Motin	Construction	Labours		[illegible]
10	Md. Alamin	Construction	Labours		[illegible]
11	Mohammad Shahidul Islam	QHSE	Managers	01730150938	[illegible]

ICB 2.9

Date: 30.07.2022, Location: DMA-212 (Store)

ATTENDANCE SHEET

DHAKA WATER SUPPLY NETWORK IMPROVEMENT PROJECT (DWSNIP)
CHINA FIRST METALLURGICAL GROUP CO., LTD. (CFMCC)
TOOL BOX TRAINING: Safety Procedures During House Connection works.

LOCATION: DMA-212 (Store) DATE: 30-07-22

SL No.	NAME	DESIGNATION	CONTACT NO.	SIGNATURE
1	Md. Rana	Site Engr	01707-171141	Rana
2	Md. Unus Ali	Site Eng	01708128513	Unus
3	S.M. ASIF MASUD	Site Eng.	0157171861[illegible]	Asif
4	Md. Shahinur Islam	Supervisor	0175055618[illegible]	[illegible]
5	Shamim	Technician		[illegible]
6	Sofi Miah	Technician		[illegible]
7	Maksedul	HDD Helper	01987590577	[illegible]
8	Shaju	Technician		Shaju
9	Billal	TC		[illegible]
10	Amirul	HDD Helper	01795317267	[illegible]
11	Jasim	Technician	01708128506	[illegible]
12	Md. A. Salam	SAP	01708-143445	Salam
13				
14				
15				
16				
17				
18				
19				

Date: 25.09.2022, Location: DMA-214 (Store)

ATTENDANCE SHEET

DHAKA WATER SUPPLY NETWORK IMPROVEMENT PROJECT (DWSNIP)
CHINA FIRST METALLURGICAL GROUP CO., LTD. (CFMCC)
TOOL BOX TRAINING: Precautions needed while using generator and machines and other electric equipment

LOCATION: 214 (Store) DATE: 25-09-22

SL No.	NAME	DESIGNATION	CONTACT NO.	SIGNATURE
1	Mohammad Faysal	Survey Engineer	01737875658	[illegible]
2	md. Aminul Islam	Site Engineer	0177735[illegible]	[illegible]
3	YAMIN	Technician	01735[illegible]2395	Yamin
4	Hossain	Mechanic	01722841270	HOSSAIN
5	md. Sohel Rana	Sn. Tec.	0173567945[illegible]	[illegible]
6	Rakibur Rahman	Tech.	01708128456	[illegible]
7	Roy han	Sn. Tec	01708128491	[illegible]
8	Mizan	Sn. Tec	01708128[illegible]	[illegible]
9				
10				
11				
12				
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17				
18				
19				

Annex 12: Records of Incident Report

HEALTH AND SAFETY FORM

NAME OF THE PROJECT: Dhaka Water Supply Network Improvement Project (DWSNIP)

CONTRACT NO.: ICB-02.10 **Date:** 15.10.22

DMA: 108A **LOCATION:** Narinda

INCIDENT REPORT –INJURY

INCIDENT Involving injury or illness to WORKERS
INCIDENT Involving injury or illness to NON-Workers at our workplace
(I.e. those not covered by our workers compensation, e.g. Visitor, volunteer, student, contractor)

Date of Incident: 14.10.2022 Time of Incident: 11:30 am/pm

PERSON AFFECTED BY INCIDENT

Given Name: Forcid Mia Surname: Forcid

Gender: Male

Injury Sustained: This day only.

Treatment Administered: First aid was applied

Location of Incident: Shah Shaheb lane

Description of Incident: While house connection he slipped in house connection trench which was metal road surface.

First Aider Name: Md. Nizhum

First Aider Signature: Nizh Date: 15/10/22

Other Staff present a time of incident: yes.

Authorized Supervisor Signature: Sofajem Date: 15.10.22

Signature of HS Inspector: Date: 23-10-22

HEALTH AND SAFETY FORM

NAME OF THE PROJECT: Dhaka Water Supply Network Improvement Project (DWSNIP)

CONTRACT NO.: ICB-02.10 **Date:** 17.09.2022

DMA: 119 **LOCATION:** Postogola

INCIDENT REPORT –INJURY

INCIDENT Involving injury or illness to WORKERS
INCIDENT involving injury or illness to NON-Workers at our workplace
(i.e. those not covered by our workers compensation, e.g. Visitor, volunteer, student, contractor)

Date of Incident: 16.09.2022 Time of Incident: 3:20 am/pm

PERSON AFFECTED BY INCIDENT

Given Name: Rasel Mia Surname: Rasel

Gender: Male

Injury Sustained: This day only

Treatment Administered: First aid was applied and advised to take rest.

Location of Incident: West jurain

Description of Incident: During House connection work, he slipped and his leg was cut.

First Aider Name: MD. Rafiq

First Aider Signature: Rafiq Date: 17.9.22

Other Staff present a time of incident: yes

Authorized Supervisor Signature: Arif Date: 17.9.22

Signature of HS Inspector: Date: 17-09-22

HEALTH AND SAFETY FORM

NAME OF THE PROJECT: Dhaka Water Supply Network Improvement Project (DWSNIP)

CONTRACT NO.: ICB-02.10 **Date:** 23.11.2022

DMA: 118 **LOCATION:** Dholaipar

INCIDENT REPORT –INJURY

INCIDENT Involving injury or illness to WORKERS
INCIDENT involving injury or illness to NON-Workers at our workplace
(i.e. those not covered by our workers compensation, e.g. Visitor, volunteer, student, contractor)

Date of Incident: 21.11.2022 Time of Incident: 9:30 am/pm

PERSON AFFECTED BY INCIDENT

Given Name: Yasin Arafat Surname: Yasin

Gender: Male

Injury Sustained: Only that day

Treatment Administered: First aid was applied

Location of Incident: West Dholaipar

Description of Incident: While joining fittings he was hurt and small portion was cut.

First Aider Name: Ashraful Alam Rizvi

First Aider Signature: Rizvi Date: 23.11.22

Other Staff present a time of incident: yes.

Authorized Supervisor Signature: Asraful Date: 23.11.22

Signature of HS Inspector: Date: 23-11-22

HEALTH AND SAFETY FORM

NAME OF THE PROJECT: Dhaka Water Supply Network Improvement Project (DWSNIP)

CONTRACT NO.: ICB-02.10 **Date:** 11.08.2022

DMA: 104 **LOCATION:** Mughalar

INCIDENT REPORT –INJURY

INCIDENT Involving injury or illness to WORKERS
INCIDENT involving injury or illness to NON-Workers at our workplace
(I.e. those not covered by our workers compensation, e.g. Visitor, volunteer, student, contractor)

Date of Incident: 11.08.2022 Time of Incident: 10:45 ~~am~~/pm

PERSON AFFECTED BY INCIDENT

Given Name: Md. Al Mamun Surname: Mamun

Gender: Male

Injury Sustained: 2 days

Treatment Administered: First aid was applied and advised to take rest.

Location of Incident:

Description of Incident: Small portion of finger was cut during scraping HDPE pipe.

First Aider Name: Shakil

First Aider Signature: Date: 11.08.2022

Other Staff present a time of incident: Yes.

Authorized Supervisor Signature: Date: 11.08.2022

Signature of HS Inspector: Date: 11.08.2022

Annex 13: Calibration certificate of Air & Noise Quality Equipment

CALIBRATION TECHNOLOGY PVT. LIMITED

CERTIFICATE OF CALIBRATION

CERTIFICATE OF CALIBRATION

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Annex 14: Task specific Health and Safety Checklists

Checklist for Excavation Work

DMA No. / Package: _____ Date: _____

Location: _____

	Description	Observation			Remarks
		Yes	No	NA	
1.	Has the contractor completed the Method Statement considering traffic management plan and H&S plan for the excavation works?				
2.	Has the contractor completed risk assessment for the excavation works?				
3.	Has the RFI completed for the excavation works?				
4.	Is the excavation permit/pre-dig permit obtained before starting work?				
5.	Is the contractor obtained road cutting permission from city corporation?				
6.	Is the contractor contacted traffic authority for the excavation work?				
7.	Is tool box meeting held before starting work?				
8.	Does the operator and signalman have the minimum experience for the job?				
9.	Have the workers provided appropriate PPEs?				
10.	Is there any physical barrier or caution tape deployed for the excavation pit?				
11.	Whether NGO has done the IEC activities?				
12.	Are there sufficient display warning signs at the excavation site?				
13.	Is the first aid box with required materials kept at site?				
14.	Are the rescue procedures completed and reserved at the site?				
15.	Are Display Board, Traffic diversion, Clean & Clear passage way provided?				
16.	Are excavated materials placed sufficiently away from water courses?				
17.	Are debris and waste materials transported to selected disposal places from temporary disposal site?				
	Trenches up to 2m:				
18.	Whether excavated material is dumped at least 1m away from trench wall?				
19.	Whether the extra material is removed?				
20.	In case of Ground water whether pumped water is drained properly?				
	Trenches & pits depth of more than 2m:				
21.	Whether firm barricades are provided?				
22.	In case of loose soil strata whether shoring is provided?				

Contractor's representative:

_____

Name, Designation and Signature

DMS representative:

_____

Name, Designation and Signature

Checklist for Traffic Management

DMA No. / Package: _____ Date: _____

Location: _____

Description		Observation			Remarks
		Yes	No	NA	
1.	Has the Contractor completed the Method Statement considering traffic management plan?				
2.	Is the Contractor contacted with DMP before starting the construction work?				
3.	Is there traffic control supervisor present at construction site?				
4.	Is toolbox meeting held before starting the work?				
5.	Have every driver and equipment operators their valid driving license?				
6.	Are the traffic controllers and supervisors trained and accredited?				
7.	Are traffic signages available around the construction sites and nearby roads?				
8.	Are re-routing signage sufficient to guide motorists?				
9.	Are flagmen present to direct traffic during construction hour?				
10.	Are the excavation sites along roads provided with barricades with reflectors?				
11.	Are Display Board, Traffic diversion, clean & clear passage way provided?				
12.	Are there sufficient display warning signs available for traffic movement?				
13.	Are the excavation sites provided with sufficient lighting at night?				
14.	Is the first aid box with required materials kept at site?				
15.	Are the rescue procedures completed and reserved at site?				

Contractor's representative:

_____

Name, Designation and Signature

DMS representative:

_____

Name, Designation and Signature

Checklist for Electrical Work

DMA No. / Package: _____ Date: _____

Location: _____

Description		Observation			Remarks
		Yes	No	NA	
1.	Has the contractor completed risk assessment for the electrical works?				
2.	Are all the electrical equipment operated by licensed electrician?				
3.	Are all electrical components certified?				
4.	Are all the electrical equipment checked before operation?				
5.	Whether the workers are using proper gloves and goggles?				
6.	Whether required earthing is provided for equipment?				
7.	Whether proper wiring & connections boards with RCCB (30mA) fuse are being used?				
8.	Is the electrical equipment are kept on dry place, barricaded to avoid accidental contact by stakeholder?				
9.	Is the area barricaded and using flags where electrical work is conducting?				
10.	Are emergency contact details available on-site in case of electrocutions or burns?				
11.	Is toolbox meeting held before starting the work?				
12.	Are there a medical first aid kits available on site for primary medical care?				
13.	Are the rescue procedures completed and reserved at the site?				

Contractor's representative:

_____

Name, Designation and Signature

DMS representative:

_____

Name, Designation and Signature

Checklist for Fire Safety

DMA No. / Package: _____ Date: _____

Location: _____

	Description	Observation			Remarks
		Yes	No	NA	
1.	Has the contractor completed the Method Statement considering fire safety plan and H&S plan for the fire safety?				
2.	Has the contractor completed risk assessment for the fire?				
3.	Is toolbox meeting held before starting the work?				
4.	Are there firefighting equipment on site?				
5.	Are there fire extinguisher available at labour shed?				
6.	Are all the firefighting equipment operated by trained & experienced operators?				
7.	Are emergency contact details available on-site in case of fire burns?				
8.	Are emergency contact details available at labour shed in case of fire burns?				
9.	Are there a medical first aid kits available on site for primary medical care?				
10	Are the rescue procedures completed and reserved at the site?				

Contractor's representative:

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Name, Designation and Signature

DMS representative:

_____

Name, Designation and Signature

Checklist for DTW works

DMA No. / Package: _____ Date: _____

Location: _____

Description		Observation			Remarks
		Yes	No	NA	
1.	Has the contractor completed the Method Statement considering Deep Tube well Work and H&S plan for the DTW works?				
2.	Has the contractor completed risk assessment for the DTW works?				
3.	Is the contractor informed Zonal Authorities and Councillor before starting work?				
4.	Is the contractor informed Electrical Authorities before starting the work				
5.	Is the contractor contacted traffic authority before starting the work?				
6.	Is tool box meeting held before starting work?				
7.	Does the operator have the minimum experience for the job?				
8.	Have the workers provided appropriate PPEs?				
9.	Is there any physical barrier or caution tape deployed for the excavation pit?				
10.	Whether NGO has done the IEC activities?				
11.	Are there sufficient display warning signs at the DTW work site?				
12.	Is the first aid box with required materials kept at site?				
13.	Are the rescue procedures completed and reserved at the site?				
14.	Are Display Board, Traffic diversion, Clean & Clear passage way provided?				
15.	Are excavated materials placed sufficiently away from water courses?				
16.	Are debris and waste materials transported to selected disposal places from temporary disposal site?				
17.	Whether firm barricades are provided?				
18.	In case of loose soil strata whether shoring is provided?				
19.	Do generators operate with doors closed or provided with sound barrier around them?				
20.	Do workers use ear plugs/hearing protections at noise generating locations?				
21.	Are neighbouring residents notified in advance of any noisy activities expected at construction sites?				

Contractor's representative:

_____

Name, Designation and Signature

DMS representative:

_____

Name, Designation and Signature

Checklist for Asbestos Cement Pipe

DMA No. / Package: _____ Date: _____

Location: _____

	Description	Observation			Remarks
		Yes	No	NA	
1.	Has the contractor completed the Method Statement considering safety for asbestos cement pipe?				
2.	Has the RFI completed for the asbestos cement pipe?				
3.	Has the contractor identified presence, location & quantity of all asbestos cement pipe?				
4.	Is the marked map of AC pipe available on site?				
5.	Is the safety procedure of AC pipe available on site?				
6.	Has the safety supervisor conducted toolbox meeting regarding AC pipe?				
7.	Has the contractor attached signs or labels so workers and supervisors know to avoid the area of AC pipe?				
8.	Is sufficient distance maintained between existing AC pipes and newly installed pipes?				
9.	Is the area of AC pipe marked and barricaded?				
10	Is drinking and smoking prohibited in the work areas?				

Contractor's representative:

_____

Name, Designation and Signature

DMS representative:

_____

Name, Designation and Signature

Checklist for Dust Control & Noise Control

DMA No. / Package: _____ Date: _____

Location: _____

	Description	Observation			Remarks
	Dust Control	Yes	No	NA	
1.	Is the construction site watered to minimize generation of dust?				
2.	Are roads within and around the construction sites sprayed with water on regular intervals?				
3.	Is there a speed control for vehicles carrying soils and other spoils covered?				
4.	Are stockpiles of sand, cement and other construction materials covered to avoid being airborne?				
5.	Are construction vehicles carrying soils and other spoiled covered?				
6.	Are generators provided with air pollution control devices?				
7.	Are all vehicles regularly maintained to minimize emission of black smoke? Do they have valid permits?				
	Noise Control	Yes	No	NA	
1.	Is the work only taking place between 7 am to 7 pm, week days?				
2.	Do generators operate with doors closed or provided with sound barrier around them?				
3.	Do workers use ear plugs/hearing protections at noise generating locations?				
4.	Is idle equipment turned off or throttled down?				
5.	Are neighbouring residents notified in advance of any noisy activities expected at construction sites?				

Contractor's representative:

_____

Name, Designation and Signature

DMS representative:

_____

Name, Designation and Signature

Checklist for Occupational Health & Safety and Community Health & Safety

DMA No. / Package: _____ Date: _____

Location: _____

	Description	Observation			Remarks
1.	Supervision and Management On-Site	Yes	No	NA	
	a. Is an EHS supervisor available?				
	b. Is a copy of the SEMP available at construction site?				
	c. Are daily toolbox meetings conducted on site?				
2.	Facilities	Yes	No	NA	
	a. Are there a medical first aid kits available on site?				
	b. Are emergency contact details available on-site?				
	c. Are there PPEs available; Helmet, HI-VIS Vest, Gumboots, Eye Wear, Dust Mask, Safety Gloves, Earplugs?				
	d. Are the PPEs in good condition?				
	e. Are there firefighting equipment on site?				
	f. Are there separate mobile sanitary facilities for male and female workers?				
	g. Are sanitary facilities cleaned and disinfected regularly?				
	h. Is drinking water supply available for workers?				
3.	Occupational Health and Safety	Yes	No	NA	
	a. Are the PPEs being used by workers				
	b. Is breaktime for workers provided?				
	c. Is construction work site barricaded with caution tape?				
4.	Community Health and Safety	Yes	No	NA	
	a. Are safety signages posted around the sites?				
	b. Are temporary and safe walkways for pedestrians available near work sites?				
	c. Are consultation meeting/focus group discussion/tea stall meeting arranged regularly on site?				
	d. Are existing users notified in advance about temporary disruption of water supply?				
	e. Are Leaflets distributed on site to inform the local residents about the project work?				
	f. Is complain book available on work site to receive complain from local people?				

5.	Recording System	Yes	No	NA	
	a) Do the contractors have recording system for SEMP implementation?				
	b) Are the daily monitoring sheets accomplished by the contractor EHS supervisor (or equivalent) properly complied?				
	c) Are laboratory results of environmental sampling conducted since the commencement of construction activities properly complied?				
	d) Are these records readily available at the site and to the inspection team?				
	e) Are utility accidents recorded and proper actions are taken immediately?				
	f) Are public complaints recorded at construction site and addressed quickly and properly?				
	g) Are there any registered book available at construction site/stockyard for visitors/inspection teams?				
	h) Is there any Complain box available for anonymous complain at construction site/stockyard?				

Contractor's representative:

_____

Name, Designation and Signature

DMS representative:

_____

Name, Designation and Signature