

Environmental Monitoring Report

Project No. 42173-013
Semi-Annual Report
July 2021

Bangladesh: Dhaka Environmentally Sustainable Water Supply Project

Prepared by Ministry of Local Government, Rural Development and Co-operatives Dhaka Water Supply and Sewerage Authority, Government of the People's Republic of Bangladesh for the Asian Development Bank.

This semi-annual environmental monitoring report is a document of the borrower. The views expressed herein do not necessarily represent those of ADB's Board of Directors, Management, or staff, and may be preliminary in nature.

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Government of the People's Republic of Bangladesh
Ministry of Local Government, Rural Development and Co-operatives
Dhaka Water Supply and Sewerage Authority (DWASA)



Dhaka Environmentally Sustainable Water Supply Project (DESWSP)
ADB Loan No. 3051-BAN



Part A:
Distribution Network Improvement (DNI)
Package No.: ICB 02.7
Package No.: NCB 4.1

Part B:
Intake, Raw Water Pipeline, WTP, Treated Water Pipeline & Distribution Network
ICB-01/B&D/DESWSP/2014 (Package 1)
ICB-3.0/TWP/DESWSP/2018 (Package 2)
ICB-3.1/DRP/DESWSP/2018 (Package 3.1)
ICB-3.2/FL/DESWSP/2018 (Package 3.2)

July to December 2020

9th floor, WASA Bhaban, 98 Kazi Nazrul Islam Avenue, Karwan Bazar, Dhaka-1215



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PART A: Distribution Network Improvement (DNI) Package No.: ICB 02.7 & Package No.: NCB 4.1

I. Introduction

1. Dhaka Water Supply and Sewerage Authority (DWASA) is the Executing Agency (EA) and Implementing Agency (IA) as well. A Project Management Unit (PMU) has been established to monitor the project work execution and implementation. The PMU is being assisted by a Management and Supervision Consultants (MSC) in (i) distribution system and quality improvement; (ii) capacity building and institutional strengthening; and (iii) project management and implementation support. The project is being implemented under the contract package ICB 02.7 covers the area commonly known as MODS Zone-6 of DWASA comprising of 16 DMAs from DMA 601-616. The contract package of ICB 02.7 was signed on 24th April, 2014.

2. The project under the contract package ICB 02.7 is subdivided into 16 district metered areas (DMAs) which will be hydraulically isolated from one to another with at least one water export and import facility between the adjacent DMAs.

Project Safeguards Team

Name	Designation/Office	Email Address	Contact Number
1. PMU			
Md Saidur Rahman	Safeguard officer (Env)	Saidur.r.m.plc@gmail.com	8801715149604
2. Contractors			
Md. Kauser Hossen	PE / Env & safgrd officer	Rfl997@rflgroupbd.com	8801844665521
Md. Shakel kawser	Site Engr / Env & safeguard officer	Rcl11@rclgroupbd.com	8801844601811
3. Consultants	Project's Environmental Team members are absent [Environmental Inspector lastly absent after covid-19 started]. Project activity almost completed, so no person is employed for rest of the period.	N/A	N/A

II. Overall project and subproject/package progress and status

3. The up-to-date revised quantity of the water pipe line under the project is 493.80 km., quantity installed 490.84 km, which is 99.40 % of the total quantity, total nos. of completed service connections are 36,509 out of 37,300 that is 97.88% of the H/C total. Cumulative progress was 97.43% up to last report June'2020 and stands to 99.12 % at the end of this reporting period December, 2020. Due to Pandemic COVID situation government holidays and lockdown from 25 March to May30 2020 all field work have been stopped and re started on 1st June. The reason why the project progress fallen much behind the schedule.

Table 1: Overall project and subproject/package progress and status

Package Number	Components/List of Works	Type of Contract (DB)	Status of Implementation (On-going Construction) ¹	Contract Status ((contract awarded)	On-going Construction	
					%Physical Progress	Expected Completion Date
ICB-02.7	Water supply Network improvement project	DB	Implementation is going on	Awarded	99.12%	May,2021 (Physical)
			Out of 16 , DMA 602, 603, 604, 606, 609 ,612, 601, 607, 608, 610, 605 and 613 = 12 DMAs has been handed over			
			Pipe line installation completed in DMA 614			
			Commissioning running at DMA 611 & 615			
			House /service connection isolation going on at DMA 614 and 616			
			Segment wise Pre commissioning running are at the finishing stage at DMA 616. Only 2 segment left.			
			Pipe installation, Inter connection and house connection running at DMA 616			
NCB 4.1	Installation of 50 DTWs (New 7, Replacement/ Rehabilitation 43) for the area of ICB 2.7 and its adjacent areas is running under DESWSP, DWASA.		Work is On-going	Awarded	75%	August 31, 2021
NCB 4.2	Construction of one new DTW,		This package has been dropped by	This package	0%	N/A

	including construction of 5 km water line & supply of necessary materials at intake area under DESWSP, DWASA.		ADM and PIMU.	has been dropped by ADB and PIMU.		
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Table 2: Physical work progress up-to December, 2020

Sl. No.	Construction Batch	DMA No.	Work Status up-to December , 2020			Remarks
			Physical Works	RP/AP	EMP/IEE	
1	Construction Batch -1	602	Handed Over to PCU (Zone-6) on 19/01/2017	Done	EMP and IEE has completed and already been published in ADBs Website	Works Completed
2		603	Handed Over to PCU (Zone-6) on 16/03/2017	Done		Works Completed
3		604	Handed Over to PCU (Zone-6) on 19/01/2017	Done		Works Completed
4	Construction Batch-2	606	Handed Over to PCU (Zone-6) on 28/08/2017	Done	EMP and IEE has completed and already been published in ADBs Website	Works Completed
5		609	Handed Over to PCU (Zone-6) on 03/01/19	Done		Works completed
6		612	Handed Over to PCU (Zone-6) on 17/09/19	Done		Works completed
7	Construction Batch-3	601	Handed Over to PCU (Zone-6) on 07/02/2018	Done	EMP and IEE published in ADBs Website	Works Completed
8		605	Handed Over to PCU (Zone-6) on 21.09.20	Done		Work completed
9		607	Handed Over to PCU (Zone-6) on 13/12/2017	Done		Works Completed
10		608	Handed over to PCU (Zone-6) on 23/10/2018	Done		Works Completed
11	Construction Batch-4	610	Handed Over to PCU (Zone-6) on 02.09.19	Done		Works Completed

Sl. No.	Construction Batch	DMA No.	Work Status up-to December , 2020			Remarks
			Physical Works	RP/AP	EMP/IEE	
12		611	Meter shifting completed.	Done	EMP and IEE published in ADB website	Expected handing over date:10.03.21
13		613	Handed Over to PCU (Zone-6) on 02.11.20	Done		Work completed
14		614	Service connection running	Done	EMP and IEE published in ADBs Website	H/C delayed for road cutting permission. Expected 25.04.21
15	Construction Batch-5	615	Meter shifting completed	Done		Expected handing over date:15.03.21
16		616	Pipe Installation running	Done		Physical work delayed due to road cutting permission. Expected 28.05.21
17	NCB 4.1	50 DTWS at the area of ICB 2.7 and its adjacent areas	Installation of 50 DTWs (New 7, Replacement/ Rehabilitation 43) for the area of ICB 2.7 and its adjacent areas is running under DESWSP, DWASA.	N/A	This package is classified as Environment Category C per ADB SPS. No IEE is required.	Expected works completion date:30.06.21
18	NCB 4.2	1 New DTW at intake area	This package has been dropped by ADB and PMU.	N/A	N/A	This package has been dropped by ADB and PMU.

Table 3: Package-wise Contractor/s' Nodal Persons for Environmental Safeguards

Package	IEE Cleared	Contractor	HSE Nodal	Email Address	Contact
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Name	by ADB (provide date)		Person		Number
ICB-02.7	Draft and Updated IEEs cleared during the period 2013 – 2018. ^a	RFL-FSL-CRFG JV	Md.Shakel Kawser	Rcl11@rclgroupbd.com	8801844601811
NCB 4.1	This package is classified as Environment Category C per ADB SPS. No IEE is required.	1. RFL Plastic Ltd 2. Man-Sigma –JV 3. PDL-BTCL –JV 4. AEDL-Millnars – JV	1. Kawser Hossin 2. Mr. Md. Solaiman 3. Mr. Md. Arifuzamman Raju 4. Mr. Md. Sarwar	1. rfl663@rflgroupbd.com 2. aktarulislam@gmail.com 3. pdtender@gmail.com 4. aedl@yahoo.com	1. 01844601149 2. 01725942755, 3. 01713013654, 4. 01718930202
NCB 4.2	This package has been dropped by ADB and PMU.	N/A	N/A	N/A	N/A

^a There are 16 district metering areas (DMAs) under this package. These DMAs were grouped into 5 batches. Each batch had an IEE approved. The IEEs (draft and updated) were cleared during the period 2013 – 2018 and now disclosed on ADB website.

III. Status of IEE Per Subproject/Package.

4. The IEE report including EMP that has already been prepared providing necessary recommendations on how the potential environmental hazards' impacts could be mitigated. The IEE guided to develop environmental management plan to provide a set of guidance on what, how, when and where the mitigation measures have to be implemented. It includes also who has to implement and monitor the implementation of mitigation measures in different phases of the project. The Initial Environmental Examination (IEE) report prepared under the feasibility stage included an EMP that:

- Provides the basic information about the existing environmental features as baseline of the sub-project areas and what will be the potential environmental impacts;
- Provides the recommendations to mitigate potential environmental impacts and describes on how to implement in the Environmental Management Plan (EMP);
- Provides guidance on how the environmental monitoring has to be carried out; and
- Indicates what kind of environmental lawful clearance will need to be obtained.

5. The IEEs including EMPs of construction batch 1 (DMAs 602, 603 and 604), batch 2 (DMAs 606, 609 and 612), batch 3 (DMAs 601, 605, 607 and 608), batch 4 (DMAs 610, 611 and 613) has already been completed already published in ADBs Website. IEEs and EMP for construction was published in project website (www.DESWSP-DWASA.com) EMPs of construction batch-5 (DMA 614, 615 and 616) reviewed and approved. The updated IEE report for construction batch-5 (DMAs 614, 615, 616)] has been approved by DWASA and published in ADB website (<https://www.adb.org/sites/default/fi>). The Environmental Due Diligence Report (DDR) for Package NCB 4.1 was submitted to ADB on 24 May 2020 for clearance and approval for disclosure.

Table 4: Package-wise Implementation Status

Package Number	Final IEE based on Detailed Design				Site-specific EMP (or Construction EMP) approved by Project	Remarks
	Not yet due (detailed)	Submitted to ADB (provide)	Disclose d on project	Final IEE provided to Contractor/		

	<i>design not yet completed)</i>	<i>date of submission</i>	<i>website (provide link)</i>	<i>s (Yes/No)</i>	<i>Director?² (Yes/No)</i>	
ICB-02.7		2015 - 2018		Yes	Yes	There are 16 district metering areas (DMAs) under this package. These DMAs were grouped into 5 batches. Each batch had an IEE approved. These IEEs (draft and updated) were cleared during the period 2013 – 2018 and now disclosed on ADB website.
NCB- 4.1	This package is classified as Environment Category C per ADB SPS. No IEE is required.				N/A	Environmental Due Diligence Reports (EDDRs) have been prepared.

Table 5: List of Deep Tube Wells (DTWs) to be Constructed/ Replaced & Work Status on Dec' 31, 2020

Sl. No.	Deep Tube Well Name & Location	Contract or	PTW No./ DM A No.	Lot Number	New/ Replacement	Date of Mobilization	Production Capacity, Pump Head	Work Status	EMP (on Dec'31 , 2020)	Remarks (if any)
1	2	3	4	5	6	7	8	9	10	11
1.	Gulbag-1 Water Pump, Gulbag, Malibag, Dhaka.	RFL Plastics Ltd.	DT W-639/ DMA -613	1	Replacement	24-Dec-19	2000 L/M, 1.5 Qsec, 125 meter	Commissioning date: 15.02.2020	Submitted	
2.	Rajuk Quarter Water Pump, West Malibag, Malibag, Dhaka.	RFL Plastics Ltd.	DT W-659/ DMA -611	1	Replacement	24-Dec-19	2400 L/M, 1.5 Qsec, 110 meter	Commissioning date: 28.05.2020	Submitted	
3.	Maruf Market Water Pump, Malibag, Dhaka.	Associated- the Milners JV (AEDL)	DT W-669/ DMA -613	4	Replacement	18-Feb-20		Design and Lowering works has been completed. Jetting	Submitted	

								work is ongoing		
4.	Rampura Bangladesh Television Road (TV road) Water Pump, Rampura, Dhaka.	Purbachal- BTCL JV [(Purbachal Drillers Ltd. (PDL))]	DT W-627/DMA-609	3	Replacement		2200 L/M, 1.5 Qsec, 110 meter	Commissioning date: 14.06.2020	Submitted	
5.	Dhaka Medical College & Hospital Compound Water Pump, Dhaka.	MAN-Sigma JV (MAN Enterprise)	DT W-631/DMA-616	2	Replacement	24-Dec-19	2400 L/M, 1.5 Qsec, 110 meter	Commissioning date: 03.03.2020	Received	
6.	Rajarbag-1 Water Pump, Rajarbag, Dhaka.	Purbachal- BTCL JV. (BTCL)]	DT W-645/DMA-615	3	Replacement			Design and Lowering, Development and Testing are completed	Received	Commissioning soon
7	ArambagBaur Math Water Pump, Arambag, Dhaka.	Associated- the Milners JV [(Associated Engineers & Drillers Ltd (AEDL)]	DT W-661/DMA-615	4	Replacement	24-Dec-19	2400 L/M, 1.5 Qsec, 110 meter	Design and Lowering, Development and Testing are completed	Submitted	Commissioning soon
8	Khilgaon 3 No. Water Pump, Khilgaon, Dhaka.	RFL Plastics Ltd.	DT W-667/DMA-612	1	Replacement	24-Dec-19	2000 L/M, 1.5 Qsec, 125 meter	Commissioning date: 13.03.2020	Submitted	
9	Khilgaon 7 No. Water Pump, Khilgaon, Dhaka.	MAN-Sigma JV (Sigma and Associates)	DT W-629/DMA-612	2	Replacement	24-Dec-19	2000 L/M, 1.00 Qsec, 110 meter	Commissioning date: 20.02.2020	Submitted	
10.	Bonasree-5 Water Pump, Bonasree, Dhaka.	Purbachal- BTCL JV. [(Purbachal Drillers Ltd.(PDL))]	DT W-691/DMA-601	3	Replacement	24-Dec-19	2000 L/M, 1.00 Qsec, 125 meter	Commissioning date: 19.02.2020	Submitted	
11.	Goran-8 Water Pump, Goran, Dhaka.	MAN-Sigma JV (MAN Enterprise)	DT W-678/DMA-606	2	Replacement	24-Dec-19	2000 L/M, 1.50 Qsec, 110 meter	Commissioning date: 04.03.2020	Submitted	

12.	MeradiaBhuyan Para 2 No. Water Pump, Meradia, Dhaka.	Associated- the Milners JV [(The Milners Tube-wells Ltd (MTWL)]	DT W-687/DMA -603	4	Replacement	24-Dec-19	2000 L/M, 1.00 Qsec, 125 meter	Commissioning date: 20.02.2020	Submitted	
13.	Kakrail SOC Water Pump, Kakrail, Dhaka.	MAN-Sigma JV (Sigma and Associates)	DT W-643/DMA -614	2	Replacement	24-Dec-19	2200 L/M, 1.00 Qsec, 110 meter	Commissioning date: 05.07.2020	Submitted	
14.	Protik Housing (South Bonasree), Bonasree, Dhaka.	RFL Plastics Ltd.	DT W-DMA -607	1	New	24-Dec-19	2000 L/M, 1.00 Qsec, 110 meter	Commissioning date: 21.02.2020	Submitted	
15.	Bonasree K Block, South Bonasree, Dhaka.	Associated- the Milners JV [(Associated Engineers & Drillers Ltd (AEDL)]	DT W-6.104, DMA -602	4	New	24-Dec-19	2200 L/M, 1.00 Qsec, 110 meter	Design and Lowering, Development and Testing are completed	Submitted	Commissioning soon
16.	Bonasree M Block, South Bonasree, Dhaka.	Purbachal- BTCL JV. (BTCL)]	DT W-675, DMA -602	3	New	24-Dec-19	2000 L/M, 1.00 Qsec, 110 meter	Borehole has been rejected. Preparing for main drilling.	Submitted	
17	Goran 10 No. Watee Pump, Goran, Dhaka.	MAN-Sigma JV (MAN Enterprise)	DT W-663/DMA -606	2	Replacement	1-Mar-20	2300 L/M, 1.50 Qsec, 110 meter	Commissioning date: 11.06.2020	Submitted	
18	Mothertek Gov. Primary School Water Pump, Mothertek, Dhaka.	Purbachal- BTCL JV. [(Purbachal Drillers Ltd.(PDL)]	DT W-681/DMA -606	3	Replacement	18-Feb-20	2300 L/M, 1.50 Qsec, 110 meter	Commissioning date: 29.05.2020	Submitted	
19	Khilgaon 04 No. Water Pump, Dhaka.	RFL Plastics Ltd.	DT W-625/DMA -612	1	Replacement	3-May-20	2200 L/M, 1.50 Qsec, 110 meter	Design and lowering works are completed. Jetting work is continuing.	Submitted	
20	AGB Colony Water Pump, Palton, Dhaka.	RFL Plastics Ltd.	DT W-654/DMA -615	1	Replacement	2-Jun-20	2500 L/M, 1.50 Qsec, 125 meter	Commissioning date: 02.04.2020	Submitted	

21	Fakirapul Water Pump, Palton, Dhaka.	Purbachal- BTCL JV. (BTCL)]	DT W- DMA -615	3	Replacement			370 ft deep drilling work is continuing	Submitted	
22	Segunbagicha Water Pump, Palton, Dhaka.	Associated- the Milners JV [(The Milners Tube-wells Ltd (MTWL)]	DT W- 652/ DMA -615	4	Replacement	18-Feb-20		Design and lowering works & gravel pack are completed. Jetting work is continuing.	Submitted	
23	Mouloveertek Water Pump, Mouloveertek, Dhaka.	Purbachal- BTCL JV. [(Purbachal Drillers Ltd.(PDL)]	DT W- DMA -617	3	Replacement	18-Feb-20		Design and lowering works are completed. Jetting work is continuing.	Submitted	
24	Rayerbag Water Pump, Reayerbag, Dhaka.	MAN-Sigma JV (MAN Enterprise)	MO DS Zone-7	2	Replacement	18-Feb-20		Design and lowering works are completed. Jetting work is continuing.	Submitted	
25	Salauddin School	RFL Plastics Ltd.	MO DS Zone-7	1	Replacement	2-Jun-20		Design and lowering works are completed. Jetting work is continuing.	Submitted	
26	Dhaka College	RFL Plastics Ltd.	MO DS Zone-3	1	New			Preparation for main drilling	Submitted	
27	Mirpur 11/C,	MAN-Sigma JV (MAN Enterprise)	MO DS Zone 10	2	Replacement			Drilling 550'-0"	Submitted	
28	Matikata 02	Associated- the Milners JV [(Associated Engineers & Drillers Ltd (AEDL)]	MO DS Zone 10	4	Replacement			Drilling 100'-0"	Submitted	
29	Solimullaha Road, Mohammadpur, Dhaka	Purbachal- BTCL JV. [(Purbachal Drillers Ltd.(PDL)]	3	3	Replacement	3-Jun-20		Design and lowering works are completed. Jetting work is continuing.	Submitted	
30	Dhaka Uddan	MAN-Sigma JV (MAN	3	2				Site preparation stage for	Submitted	

		Enterprise)						main drilling		
32	Moghbazur Wireless Colony Replacement Tube well	Purbachal- BTCL JV. [(Purbachal Drillers Ltd.(PDL)]	DT W- / DMA -616	3	Replacement			Site preparation stage for main drilling	Submitted	
32	East Rampura, Titas Road Water Pump, Dhaka.		DT W- 679/ DMA -617		Replacement				Submitted	
33	Bonasree E Block, Bonasree, Dhaka.		DT W- DMA -601		New				Submitted	
34	Bonasree-3 No. Water Pump, Bonasree, Dhaka.		DT W- / DMA -601		Replacement				Submitted	
35										
36	Mothertek Old Water Pump, Mothertek, Dhaka.		DT W- / DMA -606		Replacement				Submitted	
37	Mothertek Old Water Pump, Mothertek, Dhaka.		DT W- / DMA -606		Replacement				Submitted	
38	Kakrail Old Water Pump, Kakrail, Dhaka.		DT W- / DMA -614		Replacement				Submitted	
39	Old Passport Office Water Pump, Kakrail, Dhaka.		DT W- / DMA -614		Replacement				Submitted	
40	New Eskaton Water Pump, Ramna, Dhaka.		DT W- / DMA -614		Replacement				Submitted	
41	Eskaton Garden Old Water Pump, Ramna, Dhaka.		DT W- / DMA -614		Replacement				Submitted	

IV. Compliance status with National / State / Local statutory environmental requirements³

Table 6: Compliance status with National / State / Local statutory environmental requirements

Package No.	Statutory Environmental Requirements ⁴	Status of Compliance <i>(Specify if obtained, submitted and awaiting approval, application not yet submitted)</i>	Validity Date(s) <i>(if already obtained)</i>	Action Required	Specific Conditions that will require environmental monitoring ⁵
ICB-02.7	DOE clearance	Obtained and submitted	ECC renewed until December 2021.	None.	Air quality, water quality, noise, and EMP implementation
NCB-4.1	DOE clearance	Obtained and submitted	ECC renewed until December 2021.	None	Air quality, water quality, noise, and EMP implementation

V. Compliance status with environmental loan covenants

Table 7: Compliance status with environmental loan covenant

Schedule No. and Item <i>(see Project Loan Agreement and list provisions relevant to environmental safeguards, core labor standards and occupational health and safety)</i>	Status of Compliance
<p>Schedule 4. Conditions for Issuance of Notice to Commence Works: The Borrower shall not issue a notice to commence Works under:</p> <p>(a) any Works contracts which involves environmental impacts until: (i) the Borrower's Department of Environment has granted the approval of the IEE (including approval of separate environmental impact assessment required to be prepared under Bangladesh law); and (ii) the Borrower has incorporated the relevant provisions from the EMP into the Works contract; and</p> <p>(b) any Works contracts which involves involuntary resettlement impacts, until the Borrower has prepared and submitted to ADB the final RP based on the Project's detailed design, and obtained ADB's clearance of such RP.</p> <p>Schedule 5: Environment: The Borrower and DWASA shall ensure that the preparation, design, construction, implementation, operation and decommissioning of the Project and all Project facilities comply with (a) all applicable laws and regulations of the Borrower</p>	For ICB 2.7: All other compliance related loan covenants are fulfilled or under progress

<p>relating to environment, health and safety; (b) the Environmental Safeguards; and (c) all measures and requirements set forth in the IEE, the EMP, and any corrective or preventative actions set forth in any Safeguards Monitoring Report to be provided to ADB.</p>	
<p>Schedule 5: Human and Financial Resources to Implement Safeguards Requirements The Borrower and DWASA shall make available necessary budgetary and human resources to fully implement the EMP and the RP.</p>	<p>Complied</p>
<p>Schedule 5: Safeguards – Related Provisions in Bidding Documents and Works Contracts The Borrower and DWASA shall ensure that all bidding documents and contracts for Works contain provisions that require contractors to: Comply with the measures relevant to the contractor as set forth in the IEE, the EMP, and the RP (to the extent they concern impacts on affected people during construction), and any corrective or preventative actions set forth in a Safeguards Monitoring Report; Make available a budget for all such environmental and social measures; Provide the Borrower and DWASA with a written notice of any unanticipated environmental, resettlement or small ethnic community peoples risks or impacts that arise during construction, implementation or operation of the Project that were not considered in the IEE, the EMP, and RP; Adequately record the condition of roads, agricultural land and other infrastructure prior to starting to transport materials and construction; and Fully reinstate pathways, other local infrastructure, and agricultural land to at least their pre-project condition upon the completion of construction.</p>	<p>Complied</p>
<p>Schedule 5: Safeguards Monitoring and Reporting: The Borrower shall do the following or cause DWASA to do the following: Submit semi-annual Safeguards Monitoring Reports to ADB and disclose relevant information from such reports to affected persons promptly upon submission; 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 in accordance with the SPS; and Report any actual or potential breach of compliance with the measure and requirements set forth in the EMP, or the RP promptly after becoming aware of the breach. The Contractor shall appoint its own environmental</p>	<p>Complied</p>

safeguards officer (EHS).	
Grievance Redress Mechanism: Within 6 months of Effectiveness Date, the Borrower shall establish and maintain a grievance redress committee with representation from all stakeholders in the Project facilities for the purpose of addressing any grievances, from affected peoples concerning land acquisition, environment and any other social issues, in a timely manner.	Complied.

VI. Compliance status with the environmental management plan (refer to EMP tables in approved IEE/s)

- Road cutting plan for the DMAs are being prepared segment wise considering the traffic load of the respective areas and rules of the DMP.
- All measures are being taken to excavate the trench to a minimum dimension.
- Taking all precaution to avoid any accident to the underground and overhead utilities
- All unfinished trench being covered by the steel sheet to facilitate the traffic movement at the main roads
- All open excavation, newly casted slabs, pits are encircled by using road blocker, security tape and cones.
- Nearby drain pits are in use draining out the seepage and trench water caused by rainfall and overflow.
- Removal of excavated materials from the roads simultaneously with the excavation. Sometimes the removal process becomes time consuming in case of the narrow by lane and in the rainy days.
- Hauling vehicles remain standby during working hour for emergency service at each of the working site.
- Notify the users about the work programs, water supply disruption and ensure temporary water service to the respective areas, especially in case of pipe bursting.
- Using modern vehicles and equipment to keep the noise level within the limit of 70dB
- Keeping the Dust within limit by removing the excavated earth, spraying water twice a day even, bringing the backfill /working sand just few hours before of the use.
- Screening high reflective materials if any
- Local storage facilities are well secured and planned for the different item of plants and materials.
- Running water, Electricity are available at temporary labor shed at the DMA office. Sanitary facilities at site and store are ensured in order to protect the health and safety of the labor and work force as well. Water purifier nearer to the working place, for drinking water are available at site.
- All worker are well trained and duly supervised during working hours
- Maintain record and make report covering health and safety incident.
- All the safety items has been adequately provided to the each working groups namely: Hard boot, Gum boot, Hard hat, helmet, gloves , goggles, ear plug, reflective working apron and other personal safety items including COVID -19 PPEs, sanitizer, Mask, Hand washing basins and first aid boxes with emergency medicines. The medical officer will prescribe and advice in case of any pandemic symptoms are found.
- All staffs are informed about historical /Archaeological value of the old stones
- All the waste generated from the sites are being collected from the work site and send to the DSCC DNCC dumping ground as, Solid waste management of the city are the responsibility of the City Corporation. The recyclable items send to the central store then to the respective factories.
- At the end of work on the road surface the road are being restoration at a suitable level to ease the traffic movement.
- All RP has been approved and all the compensation has been distributed to the APs.
- There is a, 5 member Grievance Redress Committee headed by the Executive Engineer PMU to settle the grievance issue.

- MSC and PMU concerned persons were visited site frequently when required.

Table 8: Overall Compliance with SEMP/CEMP

Package No.	Status of SEMP/CEMP Implementation (Excellent/ Satisfactory/ Partially Satisfactory/ Below Satisfactory)	Action Proposed and Additional Measures Required
ICB – 02.7	Satisfactory	None.
NCB-4.1	Satisfactory (Note: This package is classified as Environment Category C per ADB SPS. No IEE/SEMP is required)	None.

VII. Trainings, Workshops and Seminars Conducted

Table 9: Trainings, Workshops and Seminars Conducted

Date	Topic	Conducted by	No. of Participants (Total)	No. of Participants (Female)	Remarks
Note: No trainings, workshops or seminars conducted during the reporting period.					

VIII. Monitoring of Environmental Impacts on Project Surroundings

Table 10: Summary of Environmental Monitoring Activities (for the Reporting Period)⁶

Impacts (List from SEMP/CEMP)	Mitigation Measures (List from SEMP/CEMP)	Parameters Monitored (As identified in the SEMP/CEMP)	Method of Monitoring (Visual, Actual Sampling, etc)	Location of Monitoring (Provide GPS Coordinates) ⁷	Date of Monitoring Conducted	Person Who Conducted the Monitoring
Design Phase						
Not applicable for the reporting period. Continuing Package is under construction phase.						
Pre-Construction Phase						
Not applicable for the reporting period. Continuing Package is under construction phase.						
Construction Phase						
			Visual	Works is almost completed. This is applicable to remaining sites with ongoing works.	18 Jul 2020; 15 Aug 2020 27 Sep 2020 9-10 Oct 2020 24 Nov 2020	Md, Shakel Kawser

⁶ Attach Laboratory Results and Sampling Map/Locations

Impacts (List from SEMP/CEMP)	Mitigation Measures (List from SEMP/CEMP)	Parameters Monitored (As identified in the SEMP/CEMP)	Method of Monitoring (Visual, Actual Sampling, etc)	Location of Monitoring (Provide GPS Coordinates) ⁷	Date of Monitoring Conducted	Person Who Conducted the Monitoring
					30 Nov 2020 4 Dec 2020	
Operational Phase						
Twelve DMAs were handed over up to Dec'2020.						

Inspection report of the EHS inspector are enclosed in appendix-5

6. Other than noise level of 70 dB during working time water and air are found OK with the local standard in the previous reports.

Table 11: Air Quality Monitoring Results

Site No.	Date of Testing	Site Location (Provide GPS Coordinates) ⁸	Parameters (as required by statutory clearances or as mentioned in the IEE)			Remarks
			PM10 µg/m3	SO2 µg/m3	NO2 µg/m3	

ICB-2.7 completed ambient air quality monitoring and Noise level test phase wise in all the 16 DMAs.

Table 12: Water Quality Monitoring Results

Site No.	Date of Sampling	Site Location	Parameters (as required by statutory clearances or as mentioned in the IEE)						Remarks
			pH	Conductivity µS/cm	BO D mg/L	TSS mg/L	TN mg/L	TP mg/L	
1	15.07.2020	North 313, Shahjahanpur, DMA613	6.70	392					Turbidity(NTU): 0.35, TDS 206, Total hardness: 166
2	14.07.2020	BagichaMosjid DMA 613, PTW638	6.90	354					Turbidity(NTU): 6.30, TDS 187, Total hardness: 136
3	29.12.2020	BagichaMosjid DMA 615, PTW 655 Paltan	7.10	246					Turbidity(NTU): 3.81, TDS 131, Total hardness: 114, Fe 0.434

⁸

4	29.12.2020	Fakira pool office DMA 615, PTW New	7.20	237						Turbidity(NTU): 6.92, TDS 126, Total hardness: 108, Fe 0.596
5	30.12.2020	Segubagicha no.1 DMA 615, PTW New	6.9	418						Turbidity(NTU): 0.73, TDS 222, Total hardness: 192, Fe 0.163
5	30.12.2020	Kakrai DPHE office house connection DMA 615,	6.9	248						Turbidity(NTU): 0.98, TDS 136, Total hardness: 112, Fe 0.496

The water quality monitoring done for the handed over

Table 13: Noise Quality Monitoring Results

Site No.	Date of Testing	Site Location	LA _{eq} (dBA) (as required by statutory clearances or as mentioned in the IEE)		Remarks
			Day Time	Night Time	
1.					
2					,
3					

ICB-2.7 completed ambient air quality monitoring and Noise level test phase wise in all the 16 DMAs by the Environmental Testing Organization. There is a practice of routine for monitoring the noise level at the running DMAs

7. General Comment on Environmental Monitoring:

8. For ICB 2.7: During the reporting period due to work is almost completed, so, regarding environmental monitoring no other remarkable comment on it.

IX. Information Disclosure and Consultations

9. No consultation meeting for ICB 2.7 took place during the reporting period due to work is going almost completed. But during the reporting period the public consultation meetings for NCB 4.1 which were took place are given below:

Table 14: Summary of Consultations Conducted

Date of Consultation	Location	Number of Participants (specify total, male and female)	Issues/Concerns Raised	Response to issues/concerns
For ICB 2.7				
N/A	N/A	N/A	N/A	N/A
For NCB-4.1				
August 27, 2020 (Contractor: AEDL)	Matikata, Dhaka	15-20	Environmental/ Social Safeguard	Positive

September 06, 2020 (Contractor: MAAN)	11/C, Mirpur, Lane-5, Dhaka	Do	Do	Do
September 24, 2020 (Contractor: PDL)	DIT, Malibagh, Dhaka	Do	Do	Do
September 27, 2020 (Contractor: RFL)	Bonosree 2 nos Water Pump, Block-G, Road-3	Do	Do	Do
September 28, 2020 (Contractor: RFL)	Dhaka College Water Pump, Dhaka	Do	Do	Do
September 29, 2020 (Contractor: BTCL)	Fakirapul Water Pump, Dhaka	Do	Do	Do
October 06, 2020 (Contractor: Sigma)	Eskaton Water Pump, Dhaka	Do	Do	Do
October 22, 2020 (Contractor: PDL)	Road 06, Bonosree Water Pump, Dhaka	Do	Do	Do
October 31, 2020 (Contractor: BTCL)	Zoar Shahhara, Vatara, Dhaka	Do	Do	Do
December 28, 2020 (Contractor: AEDL)	New Eskaton Water Pump, Dhaka	Do	Do	Do

10. The Site for installation and reinstallation of 50 pumps (install 15 and reinstall 35 pumps) is located at the Area of MODS Zone 6 & surrounding areas under DWASA jurisdiction where is to be installed 19 New/ Replacement Deep Tube Wells (DTWs) under NCB package No.04.1 based on detailed design during implementation. Other materials like pumps and pump related materials will be needed for installation and reinstallation of 50 pumps (install 15 and reinstall 35 pumps). The objective of the component of the project is to install 15 New Deep Tube Wells (DTW) and reinstallation of 35 existing DTW under NCB package No.04.1.

11. Contractor will be responsible for 12 (twelve) months operation & maintenance after construction & completion of each DTW according to the Technical Specifications (Pump House, Boundary wall & Joist) of tender document. Contractor must have 3 (three) nos. experience Pump Operators in each DTW (Minimum SSC & 2 years of experience on Pump Operation) for operation of DTW on 24 hour (3 person x 8 hour/day) basis. Contractor will also handle all types' breakdowns with supply of equipment's at the time of defect liability period and will supply all necessary spares, manpower & bear expenses for operation maintenance.

X. Grievance Redress Mechanism

- Five member Grievance Redress committee is there, Headed by the Executive Engineer of the DESWSP
- Two GRC meeting held and compensation given to affected person by the JV on humanitarian ground showing due regards to GRC decision.
- The respective Site Manager of RPL-FSL-CRFG JV, TL NGO SHAMAHAR, The gender specialist with DSCC representative handed over the compensation amount Tk 84,015/- to Mst Asgori Begum

of 27/2KA Topkhna road on 28.11.19 and 24,650/- distributed to the vendors of the working area on 30.12.19 by TL NGO , Gender Specialist PMU and other member of GRC

- Last follow up half yearly visit to Asgori begum was on 07.05.2020 and Dec'20. She is found Ok at home with the son, daughters and grandchildren.

12. **Complaints Received during the Reporting Period:** No complaint received during the reporting period.

Consultation Meeting Details:

Dhaka Uddan, Mohammadpur, Dhaka, Proposed New Water Pump				
SL No.	Date and Venue	Participants Discussion	No. of Participants	Project Response
01	<u>20/08/2020</u> Dhaka Uddan, Mohammadpur, Dhaka, Proposed New Water Pump	At the meeting the suggestions of the participant's for implementing deep tube well installation was taken. The participant's only demand was to get to get water. The participants expressed the need to install the tube wells within the schedule time. The participants suggested that safety fences/barricades should be put around the work site to prevent children from going to the construction site.	25	WASA Representative informed: - The waste soil will be removed from the narrow roads immediately and from the wider road within 24 hours. - measures will be taken to reduce sound pollution. - adequate measures will be taken to reduce pollution. - barricades will be put up around the work site during construction work. - planks will be used for as bridge entering houses. - ensuring sufficient water supply.- Enclosure will be ensured during construction work.



Dhaka Environmentally Sustainable Water Supply Project (DESWSP)
Dhaka Water Supply and Sewerage Authority

Focus Group Discussion (FGD)/Consultation Meeting

Attendance Sheet

Venue : Dhaka Union, Mohammodpur, Dhaka.
 Proposed New Water Pump.
 Date : 20.08.2020

Sl. No	Name	M - F	Contact No/Address	Signature
01.	Md Enamul Karim	Male	01798642899 PMU, DWASA	
02.	Md. Mokbul Hossain	M	Dhaka Union C. block, Pd-2	
03.	Alamin	m	০১৫৮	
04.	শ্রী: সুরুর	m	"	
05.	শ্রী: আরশাদ	m	"	Amzad -
06.	শ্রী: আরশাদ	m	"	
07.	Mst. Amena Begum	F	"	
08.	শ্রী: আরশাদ	F	"	
09.	সাবিত্রী সিকি	F	"	
10.	শ্রী: আরশাদ	F	"	
11.	শ্রী: আরশাদ	F	"	
12.	সাবিত্রী সিকি	F	"	
13.	সুবর্ণা	F	"	
14.	জাহাঙ্গীর	M	"	
15.	সাবিত্রী	M	"	
16.	সাবিত্রী	M	"	
17.	সাবিত্রী	M	"	

Focus Group Discussion (FGD)/Consultation Meeting

Attendance Sheet

Venue : Dhaka Oddan, Mohammadpur, Dhaka.
Date : Proposed New Water pump.
20.08.2020

SL No	Name	M - F	Contract No/Address	Signature
18.	শ্রীঃ কামরুজ্জামান	M	✓	কামরুজ্জামান
19	শ্রীঃ রেজওয়ান	M	✓	রেজওয়ান
20	শ্রীঃ বিক্রম	M	✓	বিক্রম
21	শ্রীঃ কাজীপুর	M	✓	কাজীপুর
22	শ্রীঃ রাহান	M	✓	রাহান
23	শ্রীঃ আব্দুল করিম	M	✓	আব্দুল করিম
24	শ্রীমতীঃ রুমা	F	✓	রুমা
25	আরশ	F	✓	আরশ

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Moghbazar Wireless Gate, Water Pump, Dhaka.				
SL No.	Date and Venue	Participants Discussion	No. of Participants	Project Response
02	<u>23/08/2020</u> Moghbazar, Wireless Colony, Water Pump, Dhaka.	At the meeting the suggestionsofthe participant’s for implementing deep tube well installation was taken. The participant’s only demand was to get water. The participants suggested that safety fences/barricades should be put around the work site to prevent children from going to the construction site.	17	<p>WASA Representative informed: - The waste soil will be removed from the narrow roads immediately and from the wider road within 24 hours.</p> <ul style="list-style-type: none"> - measures will be taken to reduce sound pollution. - adequate measures will be taken to reduce pollution. - barricades will be put up around the work site during construction work. - planks will be used for as bridge entering houses. - ensuring sufficient water supply.



Focus Group Discussion (FGD)/Consultation Meeting

Attendance Sheet

Venue : Moghbazari Wazirabad Colony Water pump.
Moghbazari, Dhaka -
Date : 23.08.2020

SL No	Name	M - F	Contract No/Address	Signature
2.	Md. ALAM HIR Hossain	M	PHU, DWASA	Alam
2.	Md. Arifuzzaman	M	01767033711	Arif
3.	Sanjith Das	M	moghbazari wazirabad Colony	Sanjith
4.	Zulhas Kabir	M	Barnaly - 3 476- DIT Road.	Zulhas
5	Md. sugam meah	M	Barnaly - 2 DIT Road	Sugam
6	MD - Mostafa Kund	M	Barnaly -	Mostafa
7	KHOKON	M	478 E	KHOKON
8	সুজন	M	478 E	সুজন
9	সুজন	M		সুজন
10	A. MATIN	M	40 Sonabery	Matin
11	সুজন	M	38, Sonabery	সুজন
12	Salam আব্দুল হক	M	DIT road	Salam
13	আব্দুল হক	M		আব্দুল হক
14	সুজন	M		সুজন
15	শ্রী. সীতা	M	৩৩৩ ৩৩৩.৩৩	সীতা
16	সুজন	M	৩৩. ৩৩৩ ৩৩৩	সুজন
17	Tofazzal Hossen	M	Safeguard office DESOSP, DWASA.	Hossen

Dhaka Environmentally Sustainable Water Supply Project (DESWSP)
Dhaka Water Supply and Sewerage Authority

Matikata (Pump No.2) Water pump, Cantonment Thana, Dhaka.				
SL No.	Date and Venue	Participants Discussion	No. of Participants	Project Response
03	<u>27/08/2020</u> Matikata (Pump No.2) Water pump, Cantonment Thana, Dhaka.	<p>At the meeting the suggestions of the participant's for implementing pipe line construction:</p> <ul style="list-style-type: none"> -Mud / soil cannot be left around the construction site. -Public will get water regularly that they did not get before. --Water problem should not be made for the pipe line construction work. -It should not be problem of public movements/transport. -Where there is a risk for the construction work fence should be provided by contractors. - The participant's expects that they will not be harassed for the construction work. - The participant's thinks that the Government is doing this pipe line construction work for their benefit. 	22	<p>WASA Representative informed:</p> <ul style="list-style-type: none"> - The waste soil will be removed from the narrow roads immediately and from the wider road within 24 hours. - Ensuring 24 hour water supply with sufficient pressure. - There should be put an enclosure covers the trenches - Barricades will be put up around the work site during construction work. - Planks will be used for as bridge entering houses. - Ensuring sufficient water supply.



Focus Group Discussion (FGD)/Consultation Meeting

Attendance Sheet

Venue : Matikata (Pump No.2) Water Pump, Dhaka Cantt. Dhaka.
 Dhaka. Replenishment water pump.
 Date : 27.08.2020

Sl. No	Name	M - F	Contract No/Address	Signature
1.	Md. Saïdur Rahman	M	01715149604	
2.	Md. Saïdur	M	01718 930202	
3.	শ্রী. সৌদিয় রহমান	M	No. Dh. Matikata Dhaka Cant. Dhaka	
4.	শ্রী. সৌদিয় রহমান	M	"	শ্রী. সৌদিয় রহমান
5.	শ্রী. সৌদিয় রহমান	M	"	
6.	শ্রী. সৌদিয় রহমান	M	"	
7.	শ্রী. সৌদিয় রহমান	M	"	শ্রী. সৌদিয় রহমান
8.	শ্রী. সৌদিয় রহমান	M	"	শ্রী. সৌদিয় রহমান
9.	শ্রী. সৌদিয় রহমান	M	"	শ্রী. সৌদিয় রহমান
10.	শ্রী. সৌদিয় রহমান	M	"	শ্রী. সৌদিয় রহমান
11.	শ্রী. সৌদিয় রহমান	M	"	শ্রী. সৌদিয় রহমান
12.	শ্রী. সৌদিয় রহমান	M	"	শ্রী. সৌদিয় রহমান
13.	শ্রী. সৌদিয় রহমান	M	"	
14.	শ্রী. সৌদিয় রহমান	M	✓	শ্রী. সৌদিয় রহমান
15.	শ্রী. সৌদিয় রহমান	M	✓	শ্রী. সৌদিয় রহমান
16.	শ্রী. সৌদিয় রহমান	M	✓	শ্রী. সৌদিয় রহমান
17.	শ্রী. সৌদিয় রহমান	M	"	

Dhaka Environmentally Sustainable Water Supply Project (DESWSP)
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Mirpur 11-C (Ave-5) Water Pump, Dhaka				
SL No.	Date and Venue	Participants Discussion	No. of Participants	Project Response
04	<u>06/09/2020</u> Mirpur 11-C Water Pump, Dhaka	At the meeting the suggestions of the participants for implementing deep tube well installation was taken. The participants' only demand was to get water. The participants expressed the need to install the tube wells within the schedule time. The participants suggested that safety fences/barricades should be put around the work site to prevent children from going to the construction site.	19	<p>WASA Representative informed:</p> <ul style="list-style-type: none"> - The waste soil will be removed from the narrow roads immediately and from the wider road within 24 hours. - old line will be disconnected after establishing new supply line - adequate measure will be taken to reduce sound pollution. - barricades will be put up during construction work. - planks will be used for as bridge entering houses. - project will ensure sufficient water supply



Dhaka Environmentally Sustainable Water Supply Project (DESWSP)
Dhaka Water Supply and Sewerage Authority

Focus Group Discussion (FGD)/Consultation Meeting

Attendance Sheet

Venue : Mirpur-11 C-water Pump (Ave: 5), Dhaka.

Date : 06.09.2020


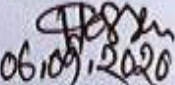
SL No	Name	M - F	Contract No/Address	Signature
01.	Md. Saidur Rahman	M	01715149604	
02.	Mst Rokeya Begum	F	01843642888	
03.	Rabey Khatun	F	01811812563	
04.	Rubel	M	11/c, Av-5	
05.	Fatunk	M	11/c - Av-5	
06.	_____	M	11/c - Av-5	
07.	Rana	M	11/c - Av-5	
08.	A Laraijee	M	11/c - Av-5	
09.	Sangita	F	11/c - A-5	
10.	Matiya	F	11/c - A-5	
11.	Halima	F	11/c - A-5	
12.	Lutfon Rahman	F	11/c - A-5	
13.	Rasel	M	11/c - Av-5	Rasel
14.	Rha Jemul	M	11/c - Av-5	
15.	Md. Sarboj Hossain	M	11/c Av-5	
16.	Md. Ziyaul Haque	M	11/c Av-5	
17.	Md. Rasheedul Islam	M	11/c Av-5	Rashed

Focus Group Discussion (FGD)/Consultation Meeting

Attendance Sheet

Venue : Mirpur 11-c, water pump (Aue: 5), Dhaka.

Date : 06.09, 2020

SL No	Name	M - F	Contract No/Address	Signature
18.	Mehedi Hasan	M	01558-667120	 6-9-2020
19.	Tofazzeel Hossen	M	Safeguard officer (S&G), DESWSP, Dhaka.	 06.09, 2020

Consultation Meeting Details

Gobindapur Government Primary School Water Pump				
SL No.	Date and Venue	Participants Discussion	No. of Participants	Project Response
01	10/14/2020 Gobindapur Government Primary School Water Pump	At the meeting the suggestions of the participant's for implementing deep tube well installation was taken. The participant's only demand was to get to get water. The participants expressed the need to install the tube wells within the schedule time. The participants suggested that safety fences/barricades should be put around the work site to prevent children from going to the construction site.	24	<p>WASA Representative informed: Due to COVID-19 situation every worker and all concerned are advised to wear masks, use hand sanitizer and keeps social distance. The concerned authorities have been asked to take all necessary steps regarding security.</p> <p>The waste soil will be removed from the narrow roads immediately and from the wider road within 24 hours.</p> <ul style="list-style-type: none"> - measures will be taken to reduce sound pollution. - adequate measures will be taken to reduce pollution. - barricades will be put up around the work site during construction work. - planks will be used for as bridge entering houses. - ensuring sufficient water supply.- Enclosure will be ensured during construction work.



Dhaka Environmentally Sustainable Water Supply Project (DESWSP)
Dhaka Water Supply and Sewerage Authority

Venue : Gobindapur Gov. Primary school.
Date : October 14, 2020

SL. No	Name	M - F	Contract No.	Signature
01				
02	Md. Haqirul Alam	M	01947162712	<i>Haqirul Alam</i>
03	Abu Sayed	M	01680701295	<i>Abu Sayed</i>
04	Tofazzal Hossen	M	Safeguard office (J&S) DESWSP	<i>Tofazzal Hossen</i> 14.10.2020
05	Rafiqul Islam	M	01515608232	<i>Rafiqul Islam</i>
06	Md. Atikul Islam	M	01847468465	<i>Atikul Islam</i>
07	Md. Faruk Hossain	M	027226026962	<i>Faruk Hossain</i>
08	Md. Faruk Hossain	M	027226026962	<i>Faruk Hossain</i>
09	Md. Faruk Hossain	M	01757655862	
10	Md. Faruk Hossain	M		
11	Md. Faruk Hossain	M		
12	Md. Faruk Hossain	M		
13	Md. Faruk Hossain	M		
14	Md. Faruk Hossain	M		
15	Md. Faruk Hossain	M		
16	Md. Faruk Hossain	M		
17	Md. Faruk Hossain	M	02632690666	<i>Faruk Hossain</i>

Dhaka Environmentally Sustainable Water Supply Project (DESWSP)
Dhaka Water Supply and Sewerage Authority

Goran-1, Water Pump, Dhaka.				
SL No.	Date and Venue	Participants Discussion	No. of Participants	Project Response
02	14/01/2021 Moghbar, Wareless Colony, Water Pump, Dhaka.	At the meeting the suggestions of the participant's for implementing deep tube well installation was taken. The participant's only demand was to get water. The participants suggested that safety fences/barricades should be put around the work site to prevent children from going to the construction site.	15	<p>WASA Representative informed: -</p> <p>Due to COVID-19 situation every worker and all concerned are advised to wear masks, use hand sanitizer and keeps social distance. The concerned authorities have been asked to take all necessary steps regarding security.</p> <p>The waste soil will be removed from the narrow roads immediately and from the wider road within 24 hours.</p> <ul style="list-style-type: none"> - measures will be taken to reduce sound pollution. - adequate measures will be taken to reduce pollution. - barricades will be put up around the work site during construction work. - planks will be used for as bridge entering houses. - ensuring sufficient water supply.



Dhaka Environmentally Sustainable Water Supply Project (DESWSP)
Dhaka Water Supply and Sewerage Authority


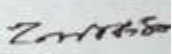
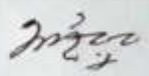
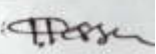
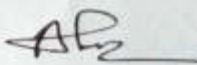

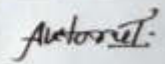
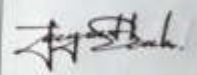
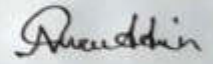
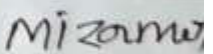
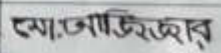
North Goran (Adorshobag) Water Pump (Proposed new)				
SL No.	Date and Venue	Participants Discussion	No. of Participants	Project Response
03	09/12/2020 North Goran (Adorshobahh) Water Pump (Proposed new).	At the meeting the suggestions of the participant's for implementing deep tube well installation was taken. The participant's only demand was to get water. The participants suggested that safety fences/barricades should be put around the work site to prevent children from going to the construction site.	17	<p>WASA Representative informed: -</p> <p>Due to COVID-19 situation every worker and all concerned are advised to wear masks, use hand sanitizer and keeps social distance. The concerned authorities have been asked to take all necessary steps regarding security.</p> <p>The waste soil will be removed from the narrow roads immediately and from the wider road within 24 hours.</p> <ul style="list-style-type: none"> - measures will be taken to reduce sound pollution. - adequate measures will be taken to reduce pollution. - barricades will be put up around the work site during construction work. - planks will be used for as bridge entering houses. - ensuring sufficient water supply.



Community Consultation/Focus Group discussion

Date: 14/01/2021

Place: Goran-1 water pump

Sl No	Name of Person	M - F	Address/Contact No	Signature
01	MD. Masud	M	01777662662	
02	Md. Lokman	M	017726005	
03	Md. Aiyub Ali	M	01731444256	
04	Tofazzal Hossen	M	Safeguard Officer (S&G) DESU/SP DHAKA WASA	
05	Aloy Ahmed	M	01681923515	
06	Md. Monjur Araud	M	01819-989127	
07	MD. Antonil Islam	M	01751-244340	
08	Jagannath Saha.	M	01711-115041	
09	MD:- Nuruddin	M	01612-100797	
10	MD: Mizanur	M	01927087521	
11	MD. Riazul Rahman	M	01767071352	

Focus Group Discussion (FGD)/Consultation Meeting

Location: Gombang water pump.

Date : 14/01/2021

SL No.	Name of Participants	M - F	Address/Contact number	Signature
12	Md. Saidur Rahman M	M	Patrol guard office (Kuv) DUSAP, DUSAP	<i>[Signature]</i> 14.1.21
13	Tara miya	M	01987847732	<i>[Signature]</i>
14	MD. Rasel	M	01977780135	<i>[Signature]</i>
15	MD. Abdul Jalil	M	01785229566	<i>[Signature]</i>

**Dhaka Environmentally Sustainable Water Supply Project (DESWSP)
Dhaka WASA
Public Consultation Meeting
Attendance Sheet**

Venue : North Goran (Adorshobag) Pump (Proposed New)
Date : December 09, 2020

SL No.	Name	M - F	Contract No/Address	Signature
01	Md. Saidur Rahman	M	Safeguard officer DESWSP (Env)	09.12.20
02	Md. Shamsul Haq		390/10 KOTIK 90 year Adorshobag	
03	Tofazzul Hossen	M	Safeguard officer DESWSP, DWASA	
04	Md. Jahangir Hossain	M.	Engineer.	
05	Md. Anisur Rahman	M	সহকারী পরিচালক সিআরও, ঢাকা	
06	শ্রী: সফিউল ইসলাম	M	২	
07	শ্রী: সফিউল ইসলাম	M	২	শ্রী: সফিউল ইসলাম
08	শ্রী: সফিউল ইসলাম	M	২	
09	শ্রী: সফিউল ইসলাম	M	২	২৫২১৬
10	শ্রী: সফিউল ইসলাম	M	২	১০০১২৩৪৫
12	শ্রী: সফিউল ইসলাম	M	২	১০০১২৩
13	শ্রী: সফিউল ইসলাম	M	01940824680	
14	শ্রী: সফিউল ইসলাম	M	01915630466	
15	শ্রী: সফিউল ইসলাম	M	01626763107	
16	শ্রী: সফিউল ইসলাম	M	0114086405	
17	শ্রী: সফিউল ইসলাম	M	01721174743	
18				

Dhaka Environmentally Sustainable Water Supply Project (DESWSP)
Dhaka Water Supply and Sewerage Authority

Moghbazar Wireless more Water Pump				
SL No.	Date and Venue	Participants Discussion	No. of Participants	Project Response
04	14/12/2020 Moghbazar Wireless more Water Pump	At the meeting the suggestions of the participant's for implementing deep tube wells installation was taken. The participant's only demand was to get to get water. The participants expressed the need to install the tube wells within the schedule time. The participants suggested that safety fences/barricades should be put around the work site to prevent children from going to the construction site.	17	<p>WASA Representative informed: -</p> <p>Due to COVID-19 situation every worker and all concerned are advised to wear masks, use hand sanitizer and keeps social distance. The concerned authorities have been asked to take all necessary steps regarding security.</p> <p>The waste soil will be removed from the narrow roads immediately and from the wider road within 24 hours. ensuring sufficient water supply.- Enclosure will be ensured during construction work.</p> <ul style="list-style-type: none"> - measures will be taken to reduce sound pollution. - adequate measures will be taken to reduce pollution. - barricades will be put up around the work site during construction work. - planks will be used for as bridge entering houses.



Dhaka Environmentally Sustainable Water Supply Project (DESWSP)
Dhaka WASA
Public Consultation Meeting
Attendance Sheet

Venue : Wareless more water pump
 Date : 14.12.2020

SL No.	Name	M - F	Contract No/Address	Signature
01	Md. Saidur Rahman M		Safeguard officer (Env) DESWSP, DCWASA	
02	Md. Abu Raihan	M	Sr. Hydrogeologist RFL Plastics Ltd.	
03	Tofazzal Hossen	M	Safeguard officer (S&G) DESWSP, DCWASA	Tofazzal Hossen 14.12.2020
04	শ্রী: রুজ্বা জিহাদ	M	০১৭২৭৭৭৬৬৮	
05	শ্রী: মাহমুদুল হক	M	০১৭২৭৭৭৬৬৮	
06	শ্রী: ইমরুল	M	০১৪৪২১৭৪৫২৩	ইমরুল ১৪/১২/২০২০
07	শ্রী: জাহাঙ্গীর			শ্রী: জাহাঙ্গীর
08	৬২১৬৬৬			৬২১৬৬৬ ১৪/১২/২০২০
09	তারেকুল		০১৬১৬৬৪১৬৩৭	তারেকুল
10	তারেকুল		০১৩০৫১৭৭১২৬	তারেকুল
11	জোনাথান			জোনাথান
12	শ্রী: মাহমুদুল হক		০১৪১৫৬৪৪৪৬৬	শ্রী: মাহমুদুল হক
13	শ্রী: মাহমুদুল হক		০১৭২১১৭৪৭৪৩	শ্রী: মাহমুদুল হক
14	তারেকুল			তারেকুল
15	শ্রী: মাহমুদুল হক			
16	শ্রী: মাহমুদুল হক			
17	মাহমুদুল হক	M		মাহমুদুল হক

XI. Summary of Key Issues and Concerns Identified during the reporting period and Remedial Actions

- Pandemic COVID - 19 situation: Physical project activities stopped other than very emergency for two months due to Govt. Holidays and Lockdown. Vehicles and equipment kept at the Central store. On withdrawal of the lockdown on 31st May 2020, the work restarted on 1 June 2020. The reason why the work progress hampered for a quite long period after and before the Pandemic government holidays, as the working people and social issues were restricted
- Provided sufficient quantities of PPE, Sanitizer and hand washing facilities at working site. Disinfecting the machineries and vehicles, arranged labor accommodation maintaining social distance and other necessary measures to work with the pandemic situation. The Representatives from MSC visited the site and remain present during pre-commissioning. Weekly assembly and training conducted for the working people to work within this difficult time while most of the city dwellers were not getting out of their homes to stay safe from COVID-19. Motivational discussion had to arrange with the house owner and the local elites, to make them understand the urgent completion of the project.
- As the working people were in panic and felt discomfort with their movement, wearing the pandemic protection PPE during Working period was also one of the reason of slow progress falling far behind the schedule date for completion.
- The Pandemic situation is still prevailing, hopefully the Vaccine will be available by February, 2021 with us. On receiving of the vaccine people will be working at the site with reasonably less fear and panic of the COVID-19.

Status of Corrective Actions from Previous SEMRs

No corrective action required from previous SEMR.

Grievance Redressed Mechanism

The GRM is established and functional. Description of the GRM is provided below.

The BAN: DESWSP's grievance redress mechanism approved by ADB will be applicable to this Package. Below are the specific information:

Following ADB Safeguard Policy Statement (SPS), 2009 established time bound grievance committees together with procedures at three levels to address or resolve unusual incidences occurs during implementation of the project activities. The solution of incidences would be based on the complaints raised from APs and community people. In case of any unsettle dispute, GRC through submission of formal reference from DWASA will resolve the problem.

Formation of GRC:

Grievance Redress Committee (GRC) constituted comprising of a panel of five members; 1st is DWASA representative, 2nd NGO representative; 3rd MSC representative 4th DWASA Representative and the other one is also from DWASA Safe Guard Officer (Social & Gender) as member Secretary.

The GRC of DMA 616 under ICB Package 02.7 of MODs Zone 6 is as below:

Table-2: GRC Composition

S.I	Name	Designation at GRC	Institution/ Organization	Designation
1	Executive Engineer, DESWSP	Convener	DWASA	EE, DESWSP
2	Resettlement and Awareness Expert	Member	Consultant (MSC)	Resettlement and Awareness Expert
3	Safeguard Officer (Env.)	Member	DESWSP DWASA	Safeguard Officer (Env.)
4	Safeguard officer (Social and Gender)	Member Secretary	DESWSP DWASA	Safeguard Officer (S&G) DESWSP

Procedures of resolving grievances

Step 1

In case of any grievances, the complainant approaches to the NGO field level officials for clarification, or submits any formal complaints. The NGO will provide clarification to the Displace Persons (DPs) and try to resolve the problem at the local level with the involvement of SIU social safeguards officer, If not resolved.

Step 2

The NGO will recommend that APs submit their complaints to the GRC. NGO staff assists the DPs filing the complaints and organizes hearing within 14 days of receiving the complaints.

Step 3

GRC to scrutinize applications determine whether the submitted cases are within their mandate. Cases related to compensation under the ARIPO will be referred to DC through DWASA SIU for further review and action GRC invites representatives of APs to attend the meetings.

Step 4

If within the GRC mandate and not related to compensation under ARIPO, GRC will hold session with aggrieved APs, minutes recorded. If resolved, the project director approves. If not resolved;

Step 5

The DP may accept GRC decision; if not, he/she may file a case in the court of law for further appeal.

Step 6

The GRC minutes, approved by the project director will be received at the conveners' office.

The approved verdict is communicated to the complainant AP in writing. APs will be able to submit their grievance/complaint about any aspects of resettlement plan implementation and compensation. Grievances can be shared with DWASA verbally or in written form, but in case of verbal form, the NGO representatives in the GRC will write it down at the first instance during the meeting at no cost to APs. The AP will sign and

formally submit the written report to the GRCs at the office of the NGO by assisting DWASA in implementing the RP. Any AP can also take their case to the court following the country legal system at any stage without going through the project GRM, if they wish to do so.

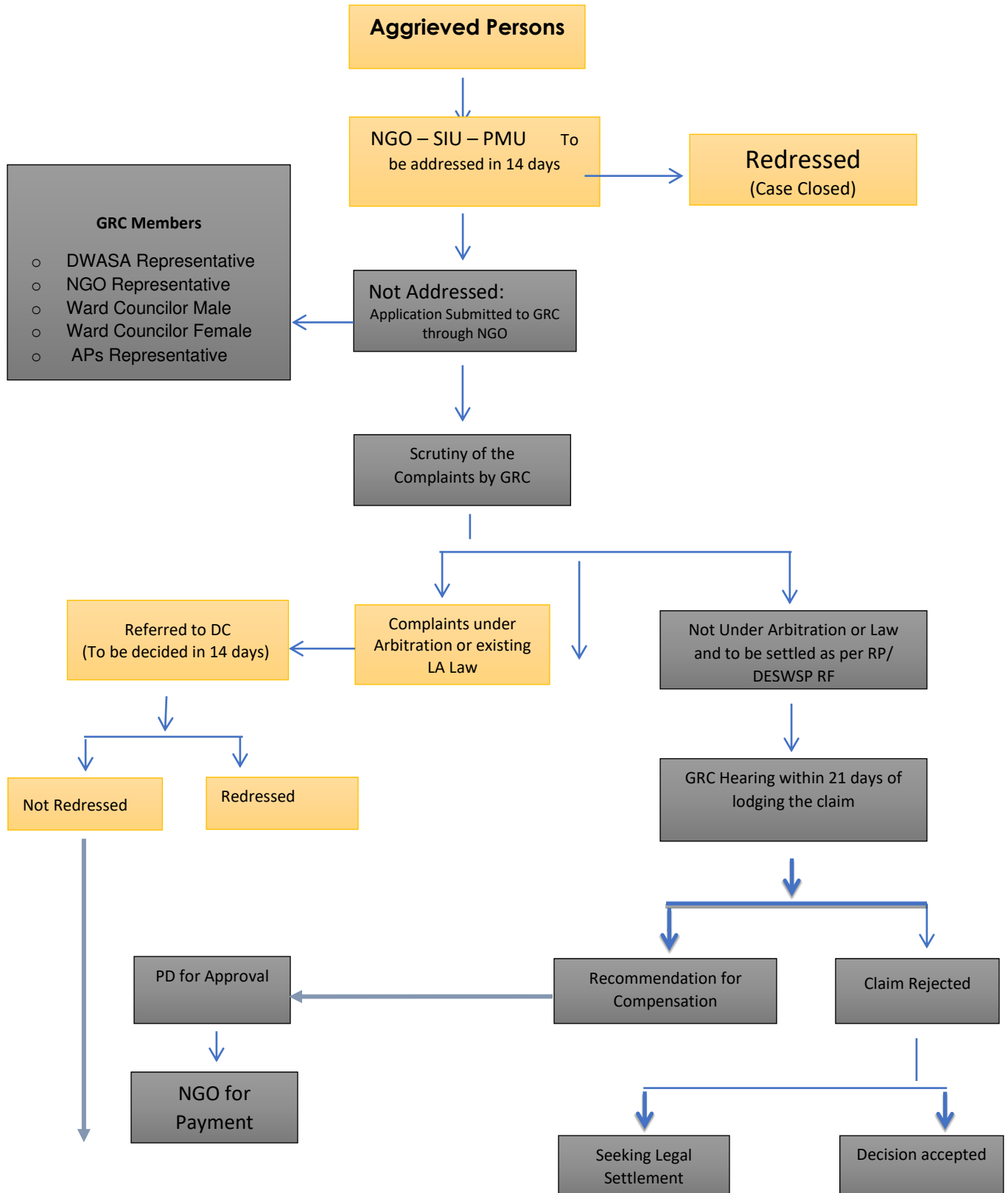
The GRCs has been activated with power to resolve resettlement and compensation issues not to be addressed under legal suit in the courts. The GRCs is ready to receive grievance cases from the affected persons through the resettlement awareness NGO. The NGO will assist the APs in lodging their resettlement complaints in a proper format acceptable to the GRCs after they get ID cards from DWASA or are informed about their entitlements and losses.

The appeal procedure and conflict resolution

- (i) All complaints from the APs will be received at the field office of the resettlement awareness NGO, the member secretary of the GRCs, with a copy for the concerned City Corporation Ward Commissioner's representatives.
- (ii) The representative of the NGO in the GRCs, upon receipt of complaints, will inform the convener (DWASA representative) of the GRC and convener will organize a hearing session from the complainants in the concerned City Corporation/Word Commissioner office, where the complaint was received.
- (iii) The GRC will review the proceedings and pass verdicts to convey to the concerned AP through the NGO.
- (iv) If there are matters relating to arbitration or compensation under the existing law, the matter will be referred to the DC and the courts. The DC has to make decision within maximum of 14 days.
- (v) The GRC will settle the disputes within a maximum of 21 days of receiving the complaints from the APs.
- (vi) Resolution of the GRCs will be sent to the PD for approval, and after approval these will be adopted in the process of resettlement for issuance of ID cards, determination of loss and entitlements, and payment thereof.

In the event that the established GRM is not in a position to resolve the issue, the affected person can also use the ADB Accountability Mechanism (AM) through directly contacting (in writing) the Complaint Receiving Officer (CRO) at ADB Headquarters or the ADB Bangladesh Resident Mission (BRM). The complaint can be submitted in any of the official Languages of ADB's DMCs. The ADB Accountability Mechanism information will be included in the PID to be distributed to the affected communities, as part of the project GRM.

Flow Chart of Grievance Redress Mechanism



XII. APPENDIXES

1. *Photos (Appendix-1)*
2. *Incident report (Appendix-2)*
3. *Incident report (Appendix-3)*
4. *Water Spray (Appendix-4)*
5. *Environmental site inspection report (Appendix-5)*

Appendix-1



CM and SM are at High court pump site DMA616 on 25.07.20



Discussion with DSCC councilor Word-9, DMA 615 on 27.07.20



Checking Readings by EE DESWSP, Ball valves



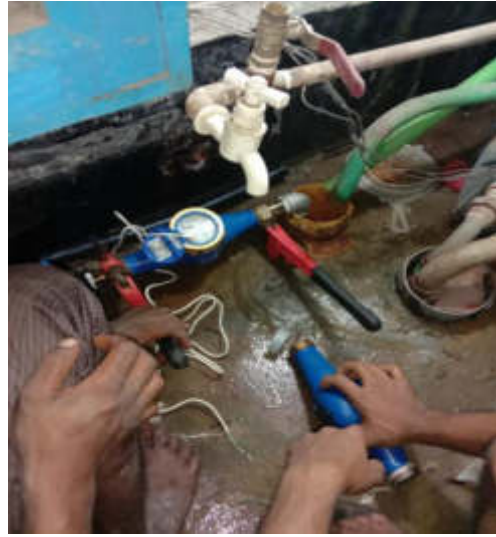
CM in visit to see pre commissioning on 29.07.20 at DMA 616 segment -3



Removing excavated earth by women laborer from DWASA System compound DMA 614



Curing the walls of DMA chamber



Meter shifting at Arambagh High school DMA 615





Marker post installation



Commissioning team DMA 615



Appendix-2

Incident Report for Human								
SI No:	Date & time of Incident:	Name of Affected Person:	Designation of Affected Person:	Injury Sustained:	Treatment Administered:	DMA:	Description on Incident:	Remarks:
1	18/07/2020(2.30 PM)	Md. Rubel Hossen	apprentice	Slightly injury	First Aid	Montripara at DMA-614	Small Injury on his right leg	Time losses 30 Minute
2	20/07/2020(4.50PM)	Momin Sangma	apprentice	Slightly injury	First Aid	Infront of Rajarbagh 3 no gate DMA-615	Small Injury on his Right hand finger	Time losses 30 Minute
3	25/7/2020(5.00PM)	MD. Sekendar	apprentice	Slightly injury	First Aid	Zero point at DMA-616	Small Injury on his left leg	Time losses 1 hrs
4	15/08/2020(2.30 PM)	Md. Azizul haque	apprentice	Slightly injury	First Aid	Near GPO Gulisthan at DMA-616	Small Injury on his right hand	Time losses 1 hrs
5	27/08/2020(10.50 AM)	sagor markin	apprentice	Slightly injury	First Aid	Gulisthan stadium road at DMA-616	Small Injury on his Right leg	Time losses 30 Minute
6	25/09/2020(1.30 PM)	SM Hedayet Kabir	apprentice	Slightly injury	First Aid	Polashir mor at DMA-616	Small Injury on his right hand	Time losses 1 hrs
7	28/09/2020(11.40 AM)	Md. Farid Mia	apprentice	Slightly injury	First Aid	Near Vikarunnessa School DMA-614	Small Injury on his left leg	Time losses 1 hrs
8	28/09/2020(3.40 PM)	Md. Sahabul	apprentice	Slightly injury	First Aid	Rajar police bagh line DMA-615	Small Injury on his Left hand	Time losses 1 hrs

9	14/10/2020(5.30 PM)	Md. Mahabur Rahman	apprentice	Slightly injury	First Aid	Fakirapool mor DMA-615	Small Injury on his right hand	Time losses 30 Minute
10	23/10/2020(12.50 PM)	Tapos Chiran	apprentice	Slightly injury	First Aid	Near Justice bhaban DMA-614	Small Injury on his left leg	Time losses 1 hrs
11	2/12/2020(2.30 AM)	Momin Sangma	apprentice	Slightly injury	First Aid	Near Burnt unit Hospital DMA-614	Small Injury on his right hand	Time losses 30 Minute
12	3/12/2020(2.50 PM)	Md. Salman Mia	apprentice	Slightly injury	First Aid	Near CID At bhaban DMA-615	Small Injury on his left leg	Time losses 30 Minute

Appendix- 3

Incident Report for Utility						
SI No:	Date & time of accident	Location	Nature of Accident	Description of Accident	Repair Completion date &time	Remarks
1	27/8/2020 (4.00 AM)	Eskatoon garden officer quarter at DMA-614	BTCL Cable	HDD Reaming time	28/8/2020(8.30 PM)	

Appendix-4

Water Spray Details Mont of July to December -2020						
SI No:	Date:	Time	Block & Road No :	DMA No:	Qty:	Remarks:
1	5-Oct-20	9.30AM	Polashi mor at DMA-616	616	8000 ltr	
2	9-Oct-20	10.00AM	Nilkhet mor to chankharpull mor	616	8000 ltr	
3	10-Oct-20	10.00AM	Nilkhet mor to chankharpull mor	616	8000 ltr	
4	11-Oct-20	9.00 AM	Nilkhet mor to polashi mor	616	8000 ltr	
5	12-Oct-20	9.35 AM	Nilkhet mor to chankharpull mor	616	8000 ltr	
6	15-Oct-20	9.30 AM	polashir mor to chankharpull mor	616	8000 ltr	
7	18-Oct-20	10.50AM	Nilkhet mor to polashi mor	616	8000 ltr	
8	20-Oct-20	10.00 AM	Nilkhet mor	616	8000 ltr	

Temporary water supply details: Month Of July to December-2020						
SI No:	Date:	Block & Road No :	House No:	DMA No:	Qty:	Remarks:
1	16-Oct-20	Police complex DMA-615		615	24000ltr	
2	21-Oct-20	Baily road officer quarter		614	24000ltr	
3	22-Oct-20	Kakrail	103	614	24000ltr	
4	23-Oct-20	Kakrail	103	614	16000ltr	

Appendix-5

EHS inspection report									
Environmental , Health and Social compliance Inspection report month of July,2020									
				Compliance					
Date	D M A	Site	Work on going	Environment al	In use	Social & Health	In use	Personnel	In use
18/7/2020	615	Arambagh High School goli	Interconnection work	Removal of excavated materials removed by Female labor	On going			Reflective dress	Complied
Day				Temporary water supply	NA	Steel sheet placing	provided	Helmet	Complied
sunny day				Closing Pipe open ends in trench	N/A	Road cone /Barricade	Done	Gumboot to operator	partially complied
				Water spraying	NA	Security tape encircled	provided	Hand gloves	partially complied
						Long length trench passer	NA	Goggles to Welder	Complied
						Drinking water	Available		
						Lighting arrangement	N/A		
18/7/2020	614	MRT Portion	House connection work	Removal of excavated materials	Partially complied			Reflective dress	Complied

Day				Temporary water supply	NA	Steel sheet placing	provided	Helmet	partially use
sunny day				Closing Pipe open ends in trench	N/A	Road cone /Barricade	Done	Gumboot to operator	partially complied
				Water spraying	NA	Security tape encircled	provided	Hand gloves	partially complied
						Long length trench passer	NA	Goggles to Welder	Complied
						Drinking water	N/A		
						Lighting arrangement	N/A		

EHS inspection report

Environmental , Health and Social compliance Inspection report month of August,2020

				Compliance					
Date	D M A	Site	Work on going	Environment al	In use	Social & Health	In use	Personnel	In use
15/8/2020	615	MRT Area	Service connection	Removal of excavated materials removed by Female labor	Partially Complied			Reflective dress	yes
Cloudy				Temporary water supply	NA	Steel sheet placing	provided	Helmet	Complied
				Closing Pipe open ends in trench	N/A	Road cone /Barricade	Done	Gumboot to operator	Non complied

				Water spraying	NA	Security tape encircled	provided	Hand gloves	Non complied
						Long length trench passer	NA	Goggles to Welder	Complied
						Drinking water	Available		
						Lighting arrangement	N/A		
15/8/2020	616	Ananda Bazar	HDD pit cutting work	Removal of excavated materials	On going			Reflective dress	Complied
Cloudy				Temporary water supply	NA	Steel sheet placing	Provided	Helmet	partially complied
				Closing Pipe open ends in trench	N/A	Road cone /Barricade	N/A	Gumboot to operator	Complied
				Water spraying	NA	Security tape encircled	N/A	Hand gloves	Complied
						Long length trench passer	NA	Goggles to Welder	not complied
						Drinking water	Available		
						Lighting arrangement	N/A		

EHS inspection report

Environmental , Health and Social compliance Inspection report month of September,2020

Date	DM A	Site	Work on going	Compliance					
				Environment al	In use	Social & Health	In use	Personnel	In use
27/9/2020	615	Paltan Thana Police Quarter	Hdd Pit cutting work	Removal of excavated materials removed by Female labor	On going			Reflective dress	yes
sunny day				Temporary water supply	N/A	Steel sheet placing	provided	Helmet	Complied
				Closing Pipe open ends in trench	N/A	Road cone /Barricade	provided	Gumboot to operator	partially complied
				Water spraying	N/A	Security tape encircled	Not Provided	Hand gloves	not complied
						Long length trench passer	N/A	Goggles to Welder	not complied
						Drinking water	Available		
						Lighting arrangement	N/A		
27/9/2020	614	VNS School	Interconnection work	Removal of excavated materials removed by Female labor	On going			Reflective dress	Complied
sunny day				Temporary water supply	N/A	Steel sheet placing	Provided	Helmet	Not complied
				Closing Pipe open ends in trench	N/A	Road cone	Provided	Gumboot to operator	Not complied

						/Barricade			
				Water spraying	NA	Security tape encircled	N/A	Hand gloves	not complied
						Long length trench passer	NA	Goggles to Welder	not complied
						Drinking water	Available		
						Lighting arrangement	N/A		

EHS inspection report

Environmental , Health and Social compliance Inspection report month of October,2020

				Compliance					
Date	D M A	Site	Work on going	Environmental	In use	Social & Health	In use	Personnel	In use
09/10/2020	615	DPHE Kakrail	Interconnection work	Removal of excavated materials removed by Female labor	on going			Reflective dress	complied
sunny day				Temporary water supply	N/A	Steel sheet placing	provided	Helmet	partially complied
				Closing Pipe open ends in trench	N/A	Road cone /Barricade	Done	Gumboot to operator	partially complied

				Water spraying	N/A	Security tape encircled	provided	Hand gloves	not complied
						Long length trench passer	NA	Goggles to Welder	not complied
						Drinking water	Available		
						Lighting arrangement	N/A		
10/10/2020	616	Nilkhet area	Road Crossing work	Removal of excavated materials removed by Female labor	ongoing			Reflective dress	complied
Day				Temporary water supply	n/a	Steel sheet placing	Not provided	Helmet	complied
sunny day				Closing Pipe open ends in trench	N/A	Road cone /Barricade	Done	Gumboot to operator	complied
				Water spraying	Done	Security tape encircled	provided	Hand gloves	complied
						Long length trench passer	NA	Goggles to Welder	not complied
						Drinking water	Available		
						Lighting arrangement	n/a		
						Long length trech passer	NA	Goggles to Welder	not complied

						Drinking water	Available		
						Lighting arrangement	N/A		

EHS inspection report									
Environmental , Health and Social compliance Inspection report month of November,2020									
				Compliance					
Date	DM A	Site	Work on going	Environment al	In use	Social & Health	In use	Person nel	In use
24/11/2020	615	Puran Palton	Service connection	Removal of excavated materials removed by Female labor	Partially Complied			Reflective dress	yes
Sunny Day				Temporary water supply	NA	Steel sheet placing	provided	Helmet	Complied
				Closing Pipe open ends in trench	N/A	Road cone /Barricade	Done	Gumboot to operator	Non complied
				Water spraying	NA	Security tape encircled	provided	Hand gloves	Non complied
						Long length trench passer	NA	Goggles to Welder	Complied

						Drinking water	Available		
						Lighting arrangement	N/A		
30/11/2020	616	Dhaka College	Interconnection work	Removal of excavated materials removed by Female labor	On going			Reflective dress	Complied
Sunny Day				Temporary water supply	NA	Steel sheet placing	Provided	Helmet	partially complied
				Closing Pipe open ends in trench	N/A	Road cone /Barricade	N/A	Gumboot to operator	Not Complied
				Water spraying	NA	Security tape encircled	N/A	Hand gloves	Not Complied
						Long length trench passer	NA	Goggles to Welder	not complied
						Drinking water	Available		
						Lighting arrangement	N/A		

EHS inspection report										
Environmental , Health and Social compliance Inspection report month of December,2020										
				Compliance						
Date	DM A	Site	Work on going	Environmental	In use	Social & Health	In use	Personnel	In use	

04/12/2020	615	Near CID Office	HDD work	Removal of excavated materials removed by Female labor	On going			Reflective dress	yes
Sunny Day				Temporary water supply	NA	Steel sheet placing	provided	Helmet	Complied
				Closing Pipe open ends in trench	N/A	Road cone /Barricade	Done	Gumboot to operator	complied
				Water spraying	NA	Security tape encircled	provided	Hand gloves	complied
						Long length trench passer	NA	Goggles to Welder	Complied
						Drinking water	Available		
						Lighting arrangement	N/A		
04/12/2020	614	Bangla motor	Isolation work	Removal of excavated materials removed by Female labor	On going			Reflective dress	Complied
Sunny Day				Temporary water supply	NA	Steel sheet placing	Provided	Helmet	partially complied
				Closing Pipe open ends in trench	N/A	Road cone /Barricade	N/A	Gumboot to operator	Not Complied
				Water spraying	NA	Security tape encircled	N/A	Hand gloves	Not Complied

						Long length trench passer	NA	Goggles to Welder	not complied
						Drinking water	Available		
						Lighting arrangement	N/A		
								MD.Shakel Kawsar	
								EHS Supervisor ICB-2.7	
								Mobile: 01844601811	
								MD.Shakel Kawsar	

Construction of New/Replacement DTW with ancillary works and supply of necessary materials under DESWSP, Dhaka WASA". (NCB-04.1/DESWSP/2018.)

Total DTW Mobilization (New/Replacement) in Favor of Contractor Under DESWSP						Date
As On: 16.02.2021						
SI No	Name of Driller(JV)	Name of Driller (Single)	Number of DTWs	Types of Installation		Remarks
				New	Replacement	
1	RFL Plastic Ltd	RFL Plastic Ltd	12	2	10	
		Total Mobilization under Single Bidder	13	2	11	
2	Man-Sigma -JV	Man Enterprise	7	1	6	
		Sigma and Assocites	4	0	4	

		Total Mobilization under JV	13	1	12	
3	PDL-BTCL -JV	Purbachal Drillers Ltd	7	1	6	
		Bengal Technological Corporation Ltd	4	1	3	
		Total Mobilization under JV	12	2	10	
4	AEDL-Millnars - JV	Associated Engineers and Drillers Ltd	7	2	5	
		The Milnars Tubewells Ltd	3	0	3	
		Total Mobilization under JV	12	2	10	
		Total Mobilization	50	7	43	

Total DTW Mobilization (New/Replacement) in Favor of Contractor Under DESWS Project, Date As On: 06.01.2021

Name of Work: "Construction of New/Replacement DTW with ancillary works and supply of necessary materials under DESWSP, Dhaka WASA". (NCB-04.1/DESWSP/2018.)

Total DTW Under this Package =50 Nos (42 Replacement + 08 New), Update As On: 31/12/2020

Lot No.	Name of Contractor	Date of Contract Agreement	Mobilization		Commissioning Nos	DTW Mobilization Within Under Zone Boundary					Awaiting For Commissioning & End Stage of Commissioning	Drilling Running & Site Preparation Stage	Supplying, Fitting, Fixing, Programming & Commissioning of SCADA Equipment under each Lot	Remarks
			New	Replace		Z-03	Z-06	Z-07	Z-08	Z-10				
Lot-1	RFL Plastics Ltd.	23-Jun-2019	02	11	08 Nos (2+6)						Awaiting for Commissioning	DTW Jetting, Development, Testing and Others	28 Nos (Already Site Selection is Completed, Now Contra	Within August, 2021 this DT
Lot-2	MAN-SIGMA JV	23-Jul-2019	01	12	10 Nos (1+9)	03	41	03	01	02				

Lot-3	PDL - BT CL JV	25-Jun-2019	02	10	08 Nos (08)						10 Nos	stage in progress = 06 Nos	ctor will start the SCADA Related Works)	W Package Will be Completed
Lot-4	AEDL-TM TL JV	25-Jun-2019	2	09	06 Nos (1+5)									
			7 Nos	43 Nos	34 Nos	Total= 50 Nos								

PART B: INTAKE, RAW WATER PIPELINE, WTP, TREATED WATER PIPELINE & DISTRIBUTION NETWORK

LIST OF ABBREVIATION

Abbreviation	Description	Abbreviation	Description
ADB	Asian Development Bank	MLD	Million Litres Per Day
AFD	Agence Française de Développement	MML	Mott MacDonald Limited
AP	Affected Person	MODS	Maintenance Operations and Distribution Services
BIWTA	Bangladesh Inland Waterway Transport Authority	MOL	Ministry of Land
BR	Bangladesh Railways	MoN	Minutes of Negotiations
BRT	Bus Rapid Transport	MOU	Memorandum of Understanding
BWDB	Bangladesh Water Development Board	MR	Monitoring Report
CCL	Cash Compensation under Law	MRT	Mass Rapid Transport
D&B	Design and Build	NGO	Non-Governmental Organization
DBO	Design-Build-Operate or Design-Build-Operation	P1	Package 1
DC	District Commissioner	P2	Package 2
DDR	Detailed Design Reports	P3	Packages 3.1 and 3.2
DED	Detailed Engineering Designs	P3.1	Package 3 Lot 1
DEEP	Dhaka Elevated Expressway Project	P3.2	Package 3 Lot 2
DESWSP	Dhaka Environmentally Sustainable Water Supply Project	PD	Project Director (DWASA)
DMA	District Metered Area	PEDS	Preliminary Engineering Designs
DNCC	Dhaka North City Corporation	PIC	Project Implementation Committee
DORP	Development Organization for the Rural Poor	PMC	Project Management Consultant
DP	Displaced Persons	PMU	Project Management Unit
DSCC	Dhaka South City Corporation	PPMS	Project Performance Management System
DTCA	Dhaka Transport City Authority	PRV	Pressure Reducing Valve
DWASA	Dhaka Water Supply and Sewerage Authority	PVAC	Property Valuation Advisory Committee
EA	Executing Agency	QA	Quality Assurance
EIA	Environmental Impact Assessment	QPR	Quarterly Progress Report

Abbreviation	Description	Abbreviation	Description
EIB	European Investment Bank	RAC	Resettlement Committee Advisory
EM	Entitlement Matrix	RAG	Red Amber Green (Traffic light status)
EMA	External Monitoring Agency	RAJUK	Rajdhani Unnayan Kartripokkho
EP	Entitled Person	REB	Rural Electrification Board
FGD	Focus Group Discussion	RHD	Roads and Highways Division
FIDIC	Fédération Internationale Des Ingénieurs- Conseils (French)	RP	Resettlement Plan
GAP	Gender Action Plan	RWP	Raw Water Pipeline
GEM	General Entitlement Matrix	SDE	Sub Division Engineer
GRC	Grievance Redresses Committee	SDWP	Shandong Water Conservancy Construction
(I)NGO	(Implementing) Non-Governmental Organization	SEMR	Semi Annual Environmental Monitoring Report
JVC	Joint Verification Committee	SIU	Safeguard Implementation Unit
LA	Land Acquisition	SNC	Société en Nom Collectif (French)
LGED	Local Government Engineering Division	SPS	Safeguard Policy Statement
MDSC	Management, Design and Supervision Consultant	SWIP	Surface Water Injection Points
MLD	Million Litres Per Day	TA	Technical Assistance
MML	Mott MacDonald Limited	TOR	Terms of Reference
MODS	Maintenance Operations and Distribution Services	WIA	Water Intake Area
MOL	Ministry of Land	WTP	Water Treatment Plant
MDSC	Management, Design and Supervision Consultant		

PREAMBLE

Mott MacDonald Ltd leads a six consultant JV for the Management, Design & Supervision Consultant (MDSC) for Dhaka Water Supply and Sewerage Authority (DWASA).

DWASA contracted MDSC to assist in delivering their Dhaka Environmentally Sustainable Water Supply Project (DESWSP).

ADB, AFD, EIB and the Government of Bangladesh jointly fund the DESWSP.

This is a MDSC Semi Annual Environmental Monitoring Report, as per MDSC's contract Clause 26 of the General Conditions: "Reporting Obligations", which requires MDSC to prepare monthly, quarterly and Semi-Annual Environmental Monitoring reports.

This report covers:

- Brief of the DESWSP Considering the Environmental Category of the Project;
- Environmental Monitoring Framework with Compliances;
- Ongoing Contract Packages Status; and
- Environmental safeguard monitoring status.

GoB imposed a COVID-19 lockdown starting from 26 March 2020 which seriously slowed down all progress on construction activities. Some progress continued at the WTP and Intake, and the construction rate improved at the end of this period. Other MDSC activities like review and approval of the P1 Contractor's detail designs, processing contractor claims and payments, tender evaluations, answering queries from financiers, and closing out long-standing pending actions, continued with little disruption.

1 INTRODUCTION

1.1 BACKGROUND

1 This report is the Eleventh Semi-annual Environmental Safeguard Monitoring Report (hereinafter refereed as SEMR) of the ADB financed Dhaka Environmentally Sustainable Water Supply Project (DESWSP) of Dhaka Water Supply and Sewerage Authority (DWASA), which covers the period of July – December 2020. The report is produced to comply with the environmental scope stipulated in the P1 contract's Environmental Management Plans (EMPs) executed by DWASA under the project.

2 This report is prepared by the Management Design and Supervision Consultant (MDSC) providing services to the PMU to ensure Environmental Monitoring for Intake and Water Treatment Plant (WTP) components of P1 package to comply with ADB and Bangladesh Government's environmental rules and regulations as well as implementation of Environmental mitigation measures during the construction phase. Anticipated Environmental issues are also detailed in this report to help avoid future impacts and to ensure timely completion of the project.

1.2 THE PROJECT

3 A loan amounting to USD 250 million equivalent from ADB's Special Funds resources was

approved for the DESWSP by the ADB Board on 22 October 2013. Originally, a loan amounting to USD 100 million each from AFD and EIB was approved by their respective Boards in October 2013. However, the government requested to revise the financing plan of the project: from USD 100 million each from AFD and EIB to USD 136 million (€100 million equivalent) from EIB and USD 64 million (€47 million equivalent) from AFD.

4 This was approved by all parties. The Loan Agreements between the government and ADB, AFD, and EIB, were signed on 24 April 2014, 29 January 2015, and 30 June 2014 respectively. Co-financing agreement between ADB and AFD, and aide-mémoire on co-financing between ADB and EIB were signed on 25 February 2015 and 9 July 2014 (amended on 12 February 2015), respectively. As a result, ADB loan became effective on 23 February 2015. ADB will administer procurement and disbursement of the AFD loan. The closing date for ADB and AFD loans is June 2022 whereas that of EIB is December 2020.

5 The DESWSP project has three outputs:

- i. New surface water supply system developed (scope: a raw water intake with a capacity of 1,050 million liters per day (MLD), with a pumping station capacity of 500 MLD, a raw water transmission pipeline from the intake to a new water treatment plant (WTP) at Gandharbpur, with production capacity of 500 MLD, a treated water transmission pipeline, and distribution reinforcements);
- ii. Distribution network strengthened (scope: distribution network improvement (DNI) in zone 6 of the service area including connections at community or household levels in low-income communities (LICs), feasibility study and preparation of bid documents for DNI in zones 1 and 2); and
- iii. Project management and administration adequately supported. Co-financing from AFD and EIB will be solely used to jointly finance one Design-Build-Operate (DBO) package that comprises the water intake, raw water transmission pipeline, and the Gandharbpur WTP.

6 The Management Supervision Consultant (MSC) commenced on 2 July 2015 which is the effective date for the Contractor of ICB 2.7 Zone-6 as well. The agreement with SAMAHAR (NGO) was signed with DWASA for Resettlement issues, Gender Action Plan & Contact with LIC (Low Income Communities) for redressing their grievances & Environmental Impact Studies under Package ICB 2.7 (Zone-6).

7 The Resettlement NGO, Development Organization for Rural Poor entered an agreement with DWASA in March 2015 to update and implement Resettlement Plan for Package 1 and Package 2 under Output 1: New surface water supply system developed. Mott MacDonald, UK was awarded the contract for the Management Design & Supervision Consultant (MDSC) and the effective date of mobilization is 7 April 2016. The Project Component is listed in Table-1.

Table-1: Project Components of DESWSP

Sl. No.	Sub project name	Status of sub-project				List of works
		Design	Pre-construction	Construction	Operation Phase	
1	Package 1 (ICB-01/B&D/ DESWSP/2014)			✓		Intake + pump station on Meghna River at Bisnandi, 21km raw water pipeline, and new WTP at Gandharbpur
2	Package 2 (ICB-3.0/TWP/ DESWSP/2018)	✓				14 km treated water transmission pipeline from Gandharbpur WTP to American Embassy in Dhaka

Sl. No.	Sub project name	Status of sub-project				List of works
		Design	Pre-construction	Construction	Operation Phase	
3	Package 3.1 (ICB-3.1/DRP/DESWSP/2018)	✓				22 km of primary distribution pipelines from American Embassy in Dhaka
4	Package 3.2 (ICB-3.2/FL/DESWSP/2018)	✓				43 km of feeder pipelines to DMAs in N-E Dhaka

8 This SEMR report is limited to Package-1 of the said output-1 especially the ongoing Intake and WTP construction works, because construction has not yet started on other packages.

9 Output 1: New surface water supply system developed

10 Package 1 - Intake, Raw water pipeline + WTP: The Package 1 contract with Suez/OTV (officially called GWT) was signed on 16 May 2018. Nevertheless, establishing the official commencement date of the Contract was delayed due to delay in making the advance payment in particular the portion from the EIB. After paying the remainder of the Advance Payment in the reporting quarter the official commencement date of the Contract was established on 13 May 2019.

1.3 PROJECT LOCATION

11 The project spread east-west through Araihasar and Rugganj Upazilla of Narayanganj District in Bangladesh. At the east end of the project, the intake is on the bank of Meghna River at Bishnanadi Union (adjacent GPS: N 23° 44' 45.821", E 90° 42' 45.186"), which is about 2km downstream (south) of Manikpur Ferry Ghat/crossing (See Figure 1). The proposed pipelines and pipeline access road are mostly through agricultural land and the pipeline will cross at Shezan Point at Dhaka-Sylhet Highway. West end of the Package-1, the Water Treatment Plant is located at Gandharbpur village of Murapara Union of Rugganj Upazilla (GPS: N 23° 45' 32.422", E 90° 30' 50.119").

12 A total of 197-acre land acquired for this part of the project. The land area required for the WTP site was acquired by DWASA in 1982, and hence, no new land acquisition required for WTP.

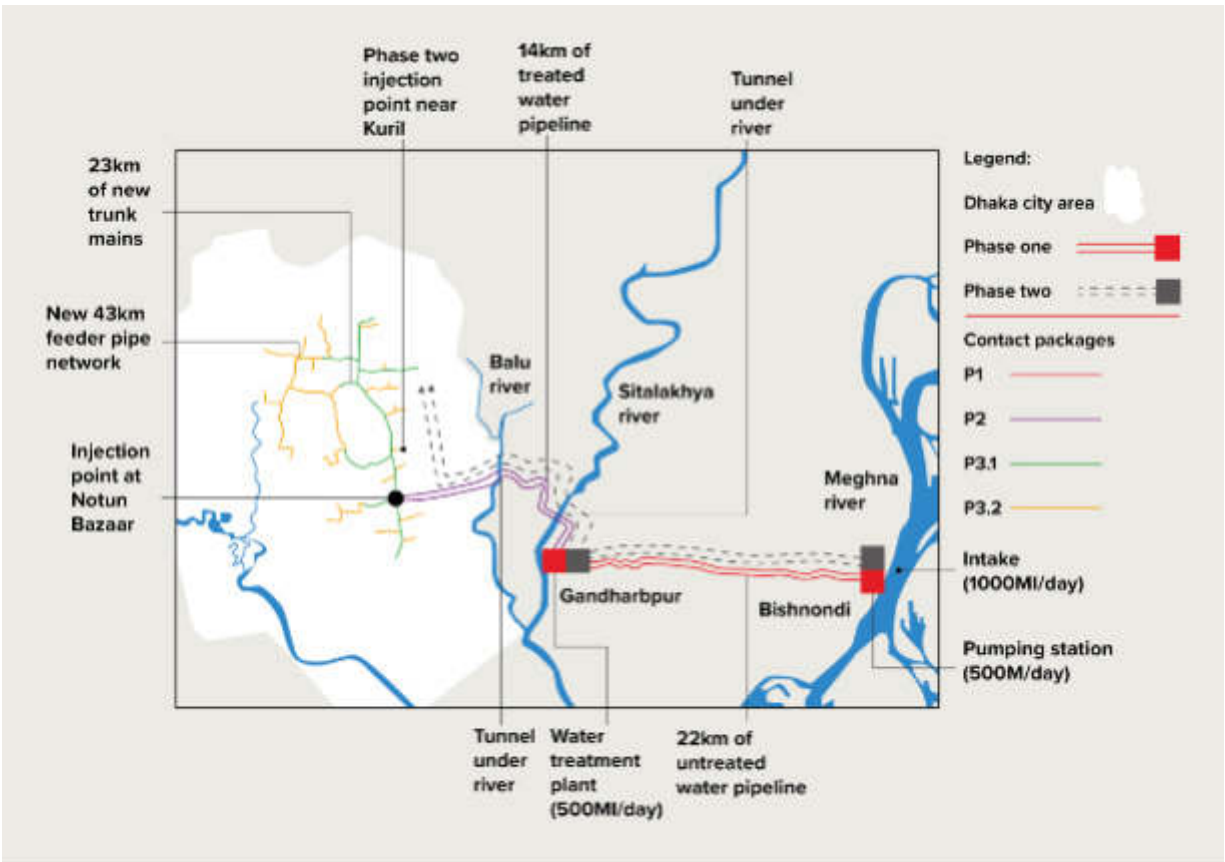


Figure-1: Locations of DESWSP Components



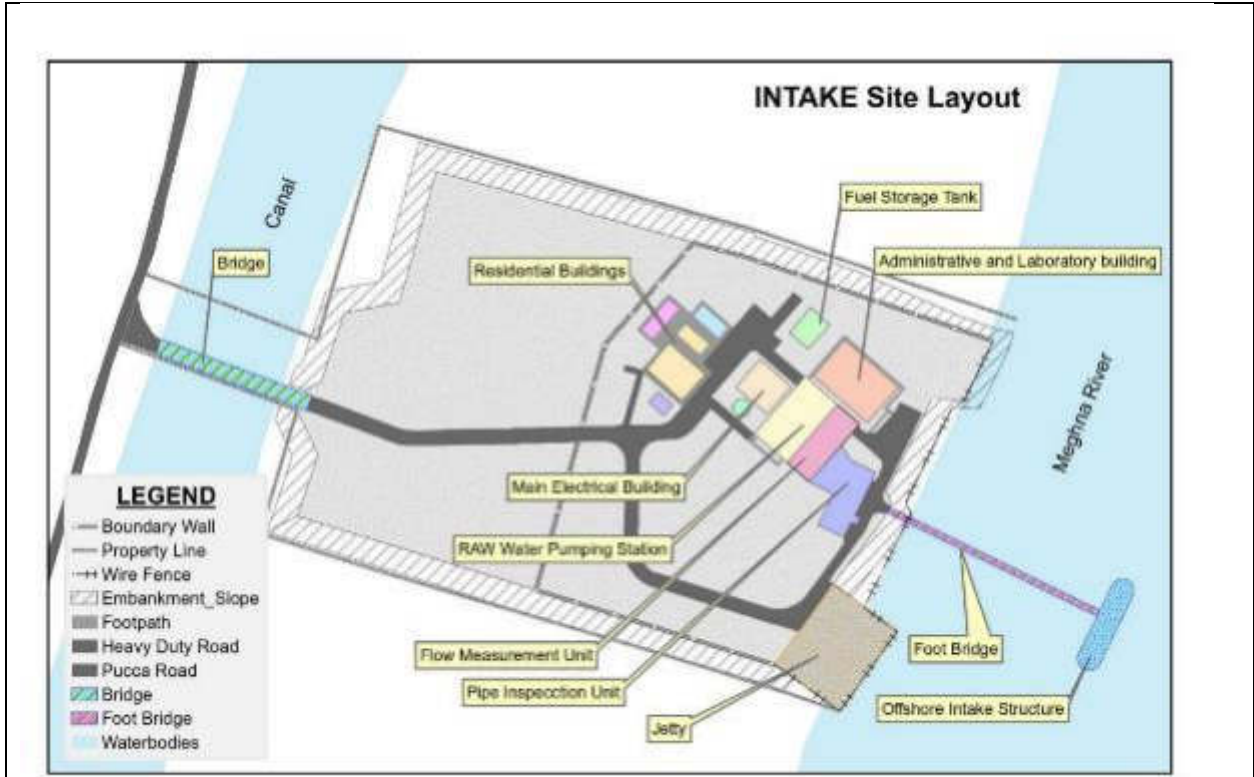


Figure-2: Intake Site Layout Plan



WTP Site Image (22-12-2020)

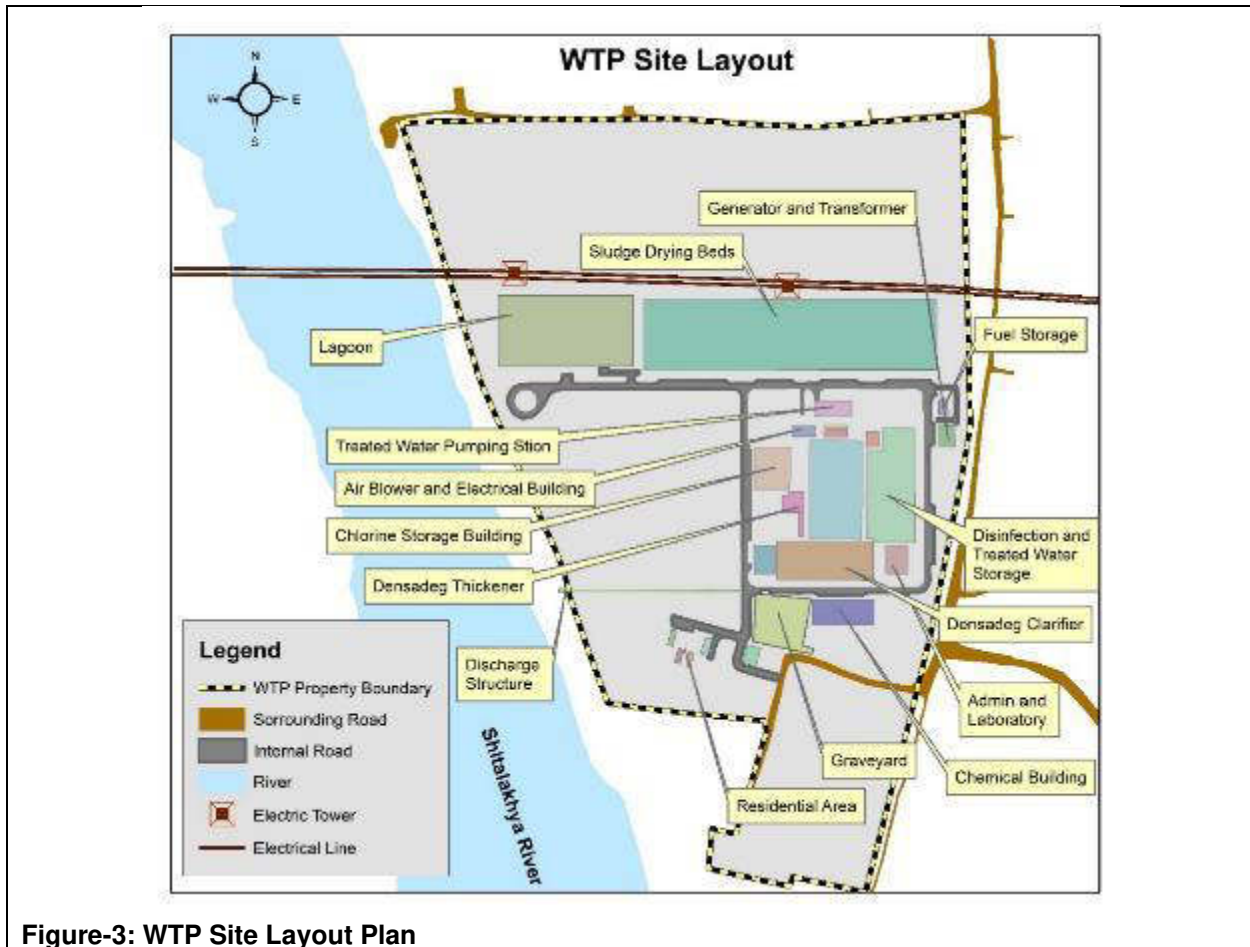


Figure-3: WTP Site Layout Plan

1.4 ENVIRONMENTAL CATEGORIZATION OF THE PROJECT

13 As per ECR '97 of DOE all existing and new industries and projects in Orange B and Red category require an Environmental Management Plan (EMP) to be prepared (after conducting an IEE or EIA) and submitted along with other necessary papers while applying for environmental clearance.

14 An EIA referring to all packages P1, P2 and P3 has been prepared and submitted to DoE. A no-objection certificate has been issued by DoE on 21 May 2015. An update of the certificate is valid until 10/12/2020. The extension for 2021 is under preparation. The updated EIA has been submitted to DoE for approval in spring 2018. Consequently, the DoE approved the EIA in December 2018.

15 Package 1 has been categorized as category B according to ADB guidelines (ADB SPS 2009) and hence an IEE is sufficient to meet the environmental requirements. An IEE report was prepared by the consultant engaged by the ADB during appraisal. However, during the detailed design stage updated IEEs for all packages are being prepared. The project is also in conformity with the latest Guideline of ADB i.e. Safeguard Policy Statement 2009.

16 The IEE report of January 2020 supersedes the IEE prepared in 2013 and considers the revised detailed design and scope of work for Package 1 (P1). Package 1 is the raw water intake at the Meghna river with structure with 1050 MLD capacity + 22 km raw water pipeline + WTP at Gandharbpur (DWASA Land) having capacity 500 MLD. The revised updated IEE was cleared by ADB in November 2020. This revised IEE report includes detailed layout plans of project components including INTAKE and WTP, readable legends Environmentally relevant technical descriptions including description of drawings, list of components in Chapter IV.

17 This SEMR report addressed the H&S Management Plan; Site specific EMPs for INTAKE, WTP and RWP; GWT Waste Management Plan, including also treatment of sewage from WTP and INTAKE, sludge storage and disposal; GWT COVID Prevention Guideline.

1.5 PURPOSE AND METHODOLOGY OF THE SEMR

18 This Semi-annual Environmental Monitoring Report (SAEMR) intends to describe the results of monitoring the construction works from July-December 2020. Accordingly, the P1 Contractor (SUEZ) mobilized and started preliminary works in May 2019, hence after the first 8 months, preparatory activities are done and permanent construction starts. As such detail information is available during this period. However, the environmental monitoring consists of two parts, and these are: (i) monitoring of the compliance with the environmental management plan (EMP); and (ii) monitoring of the ambient environmental conditions. The assessment of compliance with EMP commenced with the review of the environmental management conditions required for compliance during the construction stage of the projects.

19 The MDSC Consultant in coordination with DWASA, and Contractor is committed to conducting operations and activities in a manner that provides and maintains safe and healthful working conditions, protects the environment and the public, and conserves natural resources. Furthermore, commitment to environmental excellence through compliance with all applicable national and ADB regulations; proactive planning to integrate sound environmental, safety, and health principles; and a solid commitment to ensure water supply for Dhaka City considering environmental safeguard issues.

20 ADB environmental safeguards objectives are: (i) to ensure the environmental soundness and sustainability of projects and (ii) to support the integration of environmental considerations into the project decision-making process. ADB environmental safeguards are triggered if a project is likely to have potential environmental risks and impacts.

21 The purpose of the Environmental Safeguards for the project are defined as:

- i. Make sure the construction activities are implemented in a responsible non-detrimental manner;
 - ii. Provide a practical working tool to enable the measurement and monitoring of environmental performance on site;
 - iii. Detail out the specific actions to assist in mitigating the environmental impact of the construction activities; and
- Make sure the safety guidance is complied with. The site-specific environmental management plan (SSMP) includes a monitoring program to measure the environmental condition and effectiveness of implementation of the mitigation measures. It will include observations on-and off-site, document checks, and interviews with workers and beneficiaries.

1.6 STRUCTURE OF THE SEMR

22 This SEMR report comprise of five sections. The structure of this SEMR is listed below:

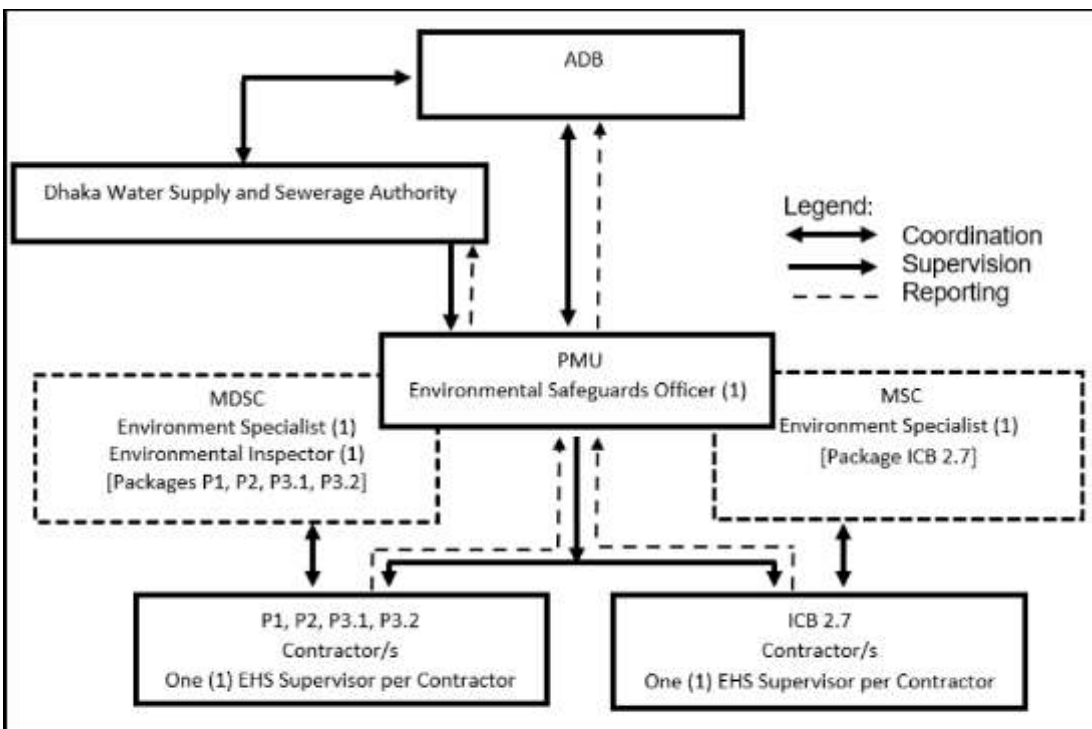
- 1. INTRODUCTION**
- 2. MONITORING FRAMEWORK AND ENVIRONMENTAL COMPLIANCE**
- 3. STATUS OF ONGOING CONTRACT PACKAGES**
- 4. ENVIRONMENTAL SAFEGUARD MONITORING STATUS**
- 5. CONCLUSION**

2 MONITORING FRAMEWORK AND ENVIRONMENTAL COMPLIANCE

2.1 MONITORING FRAMEWORK

23 This project has a setup of Project Management Unit (PMU) which includes Environmental Safeguard Officer to manage day-to-day coordination, implementation, and monitoring and administration activities of the project. The Environmental Safeguard Officer of PMU will get support from MDSC. The environmental team of MDSC in coordination with PMU will check the overall initial works and site activities considering the environmental perspectives. HSE inspector of MDSC will regularly inspect the HSE issues of the construction sites with a comprehensive checklist. The Contractor's H&S Manger is engaged in acquiring field data and information of the project and update the MDSC through a monthly progress report. In the monthly progress report, contractor addresses HSE manpower status; audit status; incident/accident status; safety inspections & meetings; HSE training; HIV/AIDS, STI & Covid-19 awareness program; air, noise & water quality monitoring; dust suppression; waste (hazardous, non-hazardous & sewage) management etc. as per the guidelines of site specific EMPs.

24 The responsible environmental safeguard officer of PMU reviews the environmental reports related to the project and reviewed monitoring of compliance of the contractors' performance with the approved EMPs, environmental standards and other environmental commitments of the contractor. Environmental monitoring in the field is among the work scope of the Engineer (MDSC-MML), and the tasks of actual monitoring is undertaken by the Contractor in association with international and national environmental specialists and environmental field inspector. The international environmental specialist is mobilized on an intermittent basis to undertake field audit. The Environmental safeguard implementation arrangement of this project is shown in figure and the information of the safeguard team is shown in a tabulated below.



ADB = Asian Development Bank, EHS = environmental, health and safety, ICB = international competitive bidding, MDSC = management, design and supervision consultant, MSC = management and supervision consultant, P = package, PMU = project management unit.

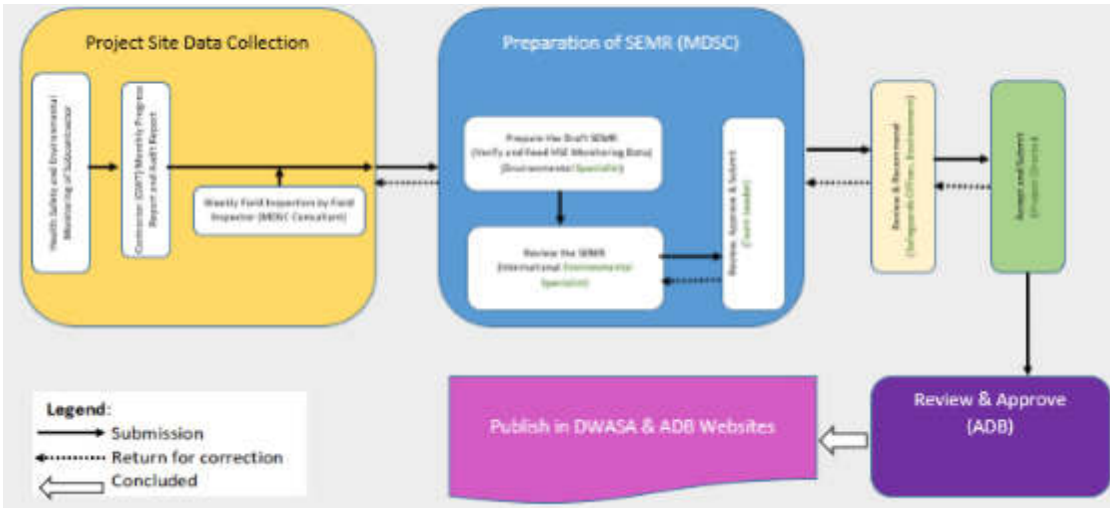


Figure-4: SEMR Preparation and Approval Process

Table-2: Environmental Safeguard Team Details

Name	Designation/Office	Contact Information
1. PMU		
Mr. Md. Saidur Rahman	Safeguard Officer (Environment) DESWSP, DWASA	Cell No.: +880 1715149604 Email: saidur.r.m.plc@gmail.com
2. Consultant		
Dr. rer nat Thomas Balling	Int. Environmental Specialist, MDSC	Cell No.: +880 1833369964 Email: thomas.balling@fwt-mobil.de
Mohammad Nurul Alam Siddique	National Environmental Specialist, MDSC	Cell No.: +8801819463345 Email: nurul.siddique@mottmac.com
Md. Shahin Matubber	Environmental Inspector, MDSC	Cell No.: +8801812181284 Email: matubber.shahin@mottmac.com
3. Contractor		
Nwokedi Uchefuna	HSE Manager, GWTSNC	Cell No.: +8801300567751 Email: nwokedi.uchefuna@gwtsnc.com

2.2 COMPLIANCE WITH ENVIRONMENT RELATED PROJECT COVENANTS

2.2.1 Compliance with ADB Guidelines

25 According to the environmental guidelines of ADB the project falls under Category B and hence an IEE is sufficient to meet the environmental requirements. An IEE report was prepared by the consultant engaged by the ADB during appraisal. However, during the detailed design stage updated IEEs for all packages are being prepared. The project is also in conformity with the latest Guideline of ADB i.e., Safeguard Policy Statement 2009.

26 At the time of project preparation at feasibility stage, the PPTA consultants were deputed for the survey and preparation of IEE for the DESWSP (Ref: IEE, DWASA, 2006). As part of detailed project preparation, environmental screening and assessment reports, IEEs were prepared by environmental consultant engaged by the DWASA supported by ADB. Further, the consultant suggested to ensure in procurement process that all information required for environmental safeguard stated in the environmental

assessment report and site specific Environmental Management Plans (EMP) which have been prepared earlier under the respective pipeline rehabilitation clauses have to be incorporated in the work schedule so that contractors can adopt mitigation measures associated with construction works. Management and Supervision Consultants (MSC) have to monitor the implementation of sEMPs which are used to work by contractors; and ensure that the sEMPs are implemented throughout project implementation period. Half yearly Environmental Safeguard Report has to be prepared by the Consultant to be forwarded to PMU and ADB. It could be mentioned that IEE with EMP has been prepared according to ECA'95 (Environmental Conservation Act) & ECR'97 (Environmental Conservation Rules) and it is mandatory to follow the rules ordered by GoB and ADB guidelines. To follow the rules, contractors have to collect no objection certificates from local authorities (like DESA, City Corporations and Housing Society etc.) before starting the works of the sub-projects.

Table-3 Status of Environmental Documents

Package	Subject	Status
P1	IEE Package 1, DESWSP, 2020	Prepared, and approved by ADB in January 2020. Updated IEE submitted to ADB in November 2020.
		The Contract awarded to French Contractor "Suez-Viola". Date of Contract Signed & Commencement
		Earthworks related to land gradation & topsoil removal in progress. Preparatory works for intake construction started.
P2	IEE P2	Approved by ADB in January 2020. Not yet awarded.
P3 (P3.1 & P3.2)	IEE P3	IEE P.3 approved by ADB in January 2020, IEE extension for additional loan for P3.2 under preparation by ADB. Not yet awarded.

27 As stated in the funding document, prior to commencing a civil work all the required statutory clearances have to be obtained with regard to the P1 contract, classified by ADB as 'B' Category project. As such, environmental statutory clearances for the Project are related construction of intake, to removal and replacement of trees, excavation of raw water transmission line, vegetation clearance at GWTP site, and acquisition of land, temporary acquisition and rental for contractor's camp and office, material stockpile, equipment storage area etc. However, clearances and no-objection letters for these activities have been obtained from the WARPO, DoE, LGED, Arai hazar and Rugganj Upazillas of Narayanganj District where the alignment will pass (Detailed in IEE P1). ECC has been extended by DoE for one year which will be valid till 10-12-2021 (Appendix-A). It refers to the project of DESWSP which covers all packages of this project.

2.2.2 Compliance Status with Environmental Loan Covenants

28 The following table summarizes the working schedules and the status of these schedules at the time when this Semi-Annual Safeguard Monitoring Report has been compiled.

Table-4: Compliance Status with Environmental Loan Covenants

Sl. No.	Reference	Details	Status	Remarks
1	Schedule 4	Conditions for Issuance of Notice to Commence Works: The Borrower shall not issue a notice to commence Works under: (a) any Works contracts which involves environmental impacts until: (i) the Borrower's Department of Environment has granted the approval of the IEE (including approval of separate environmental impact assessment required to be prepared under Bangladesh law); and (ii) the Borrower has incorporated the relevant provisions from the EMP into the Works contract;	For DBO: 8 (a) & (b) under Progress.	

Sl. No.	Reference	Details	Status	Remarks
		and (b) any Works contracts which involves involuntary resettlement impacts, until the Borrower has prepared and submitted to ADB the final RP based on the Project's detailed design, and obtained ADB's clearance of such RP.		
3	Schedule 5	Environment: The Borrower and DWASA shall ensure that the preparation, design, construction, implementation, operation and decommissioning of the Project and all Project facilities comply with (a) all applicable laws and regulations of the Borrower relating to environment, health and safety; (b) the Environmental Safeguards; and (c) all measures and requirements set forth in the IEE, the EMP, and any corrective or preventative actions set forth in any Safeguards Monitoring Report to be provided to ADB.	For DBO: 8 (a) & (b) under Progress	
4	Schedule 5	Human and Financial Resources to Implement Safeguards Requirements The Borrower and DWASA shall make available necessary budgetary and human resources to fully implement the EMP and the RP.	Complied	
5	Schedule 5	Safeguards – Related Provisions in Bidding Documents and Works Contracts The Borrower and DWASA shall ensure that all bidding documents and contracts for Works contain provisions that require contractors to: Comply with the measures relevant to the contractor as set forth in the IEE, the EMP, and the RP (to the extent they concern impacts on affected people during construction), and any corrective or preventative actions set forth in a Safeguards Monitoring Report; Make available a budget for all such environmental and social measures; Provide the Borrower and DWASA with a written notice of any unanticipated environmental, resettlement or small ethnic community peoples risks or impacts that arise during construction, implementation or operation of the Project that were not considered in the IEE, the EMP, and RP; Adequately record the condition of roads, agricultural land and other infrastructure prior to starting to transport materials and construction; and Fully reinstate pathways, other local infrastructure, and agricultural land to at least their pre-project condition upon the completion of construction.	a) Complied b) under Progress c) under Progress d) under Progress e) addressed as required	
6	Schedule 5	Safeguards Monitoring and Reporting: The Borrower shall do the following or cause DWASA to do the following: Submit semi-annual Safeguards Monitoring Reports to ADB and disclose relevant information from such reports to affected persons promptly upon submission; 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	a) Sent to ADB on 7.1.16 and 18.1.16 b) addressed in due time. c) will be addressed whenever situation	

Sl. No.	Reference	Details	Status	Remarks
		impacts, with detailed description of the event and proposed corrective action plan in accordance with the SPS; and Report any actual or potential breach of compliance with the measure and requirements set forth in the EMP, or the RP promptly after becoming aware of the breach. The Contractor shall appoint its own environmental safeguards officer (EHS).	arises. d) appointed.	
		Grievance Redress Mechanism: Within 6 months of Effectiveness Date, the Borrower shall establish and maintain a grievance redress committee with representation from all stakeholders in the Project facilities for the purpose of addressing any grievances, from affected peoples concerning land acquisition, environment and any other social issues, in a timely manner.	GRC established GRM under progress	

29 For Package 1, Environmental compliances includes securing Environmental Clearances Certificates/permits from relevant agencies are provided in Table-5.

Table-5: List of Environmental Clearance Certificate (ECC)/No objection certificates (NOC) for all packages

Sl. No.	Applicable permits	Applied on Sub project				Clearance on Sub project			
		P 1	P 2	P 3.1	P 3.2	P 1	P 2	P 3.1	P 3.2
1	ECC	Y	Y	Y	Y	Y	Y	Y	Y
2	RHD	Y	Y	Y	-	Y	Approved with conditions	Y	-
3	RAJUK	-	Y	Y	Not Applied		Approved with conditions	No response	-
4	LGED	-	Y	-	-	-	Approved with conditions	-	-
5	BIWTA	-	Y	-	-	-	Approved with yearly renewal	-	-
6	DNCC	-	-	-	-	-	-	-	-
7	Cantonment Board	-	-	-	-	-	-	Approved with conditions	Approved with conditions

2.3 GRIEVANCE REDRESS MECHANISM

30 The objective of the grievance redress mechanism (GRM) is to resolve complaints as quickly as possible and at the local level through a process of conciliation; and, if that is not possible, to provide clear and transparent procedures for appeal. A well-defined grievance redress and resolution mechanism resolve grievances and complaints in a timely and satisfactory manner. All affected persons can be fully aware of their rights, and the detailed grievance redress procedures publicizing through an effective public information campaign.

31 A Grievance Redress Committee (GRC) has been formed at PMU level and will be established at the community level in each Union to resolve complaints and grievances informally through community participation. The GRC formed with representatives from the DWASA, local elected representatives from the Local Government Institutions (LGI), NGO AHs, women AHs to allow voices of the affected communities

to be heard and ensure a participatory decision-making process. The representative of the INGO will have the responsibility as Member Secretary of GRC. The GRC decision will be disposing up on a priority basis and be publicized among the local communities. Where the complaining parties are not satisfied with the GRC decisions, they can file their cases in the court of law.

32 The GRC is established at the community level at Union Parishad through a gazette notification from the Ministry of Local Government, Rural Development and Cooperatives (MLGRDC).

33 The Member Secretary of GRC will be regularly available and accessible for AHs to address concerns and grievances. Female member of GRC and the female APs of the AHs will participate in the grievance redress session when the complainants will be a female. Legal advisor and DORP will support the GRC regularly and assist the APs to formulate their complaints. The grievance cases will be recorded with details and results of the cases for review. Further to note, the affected people can also go to the GRC for any environmental concern.

34 The complaints and grievances from the APs are addressed through the process described in the Table below.

Table-6: Grievance Resolution Process

Steps	Action Level	Process
Step 1	Counselling and Reception of Complaints	<p>The NGO and/or PMU will recommend that the APs submit their complaints to the GRC. NGO staff and/or PMU social safeguards officer and/or PMU environmental safeguards officer assists the APs filling the complaints (maximum 7 days);</p> <p>Complaints and grievances from APs will first be heard during personal contact and focus group discussion at the village level with the involvement of the PMU social safeguard officer and/or environmental safeguards officer. At this level, complaints shall be resolved within 14 days;</p> <p>If not resolved, the DORP will counsel APs for gaps in information about the policy and eligibility for compensation and resettlement assistances. The APs will sign and formally submit the written report to the GRCs at the office of the NGO assisting DWASA in implementing the RP;</p> <p>If the complaint found outside the mandate of the GRC, the DORP will advise the aggrieved APs to lodge their complaints in the court of law at the district level. If the complaint is within the jurisdiction of GRC, the DORP will advise the aggrieved APs to formally lodge their complaints with the GRC.</p>
Step 2	GRC Resolution	<p>Member Secretary of the GRC will scrutinize the complaints and prepare case file for hearing and resolution. Complaints considered under arbitration or existing Land Acquisition (LA) law shall be referred to the Deputy Commissioner (DC). In case when DC issues unfavorable decision, the AP may lodge the complaint to the court of law.</p> <p>For complaints classified as either claims not under the arbitration or LA law, or environmental safeguards-related, a formal hearing will be held before the GRC at a date fixed by the Member Secretary of GRC in consultation with the convener and other aggrieved APs. On the date of hearing, the aggrieved APs will appear before the GRC at a place set in consultation with the APs and DWASA and procedure proof in support of his/her claim. The Member Secretary will note down the statement of the complainants and documents with all proofs.</p> <p>GRC will deliver its decision on complaints/grievances within 21 days from the date of grievance received. The decisions from majority of the members will be considered final from the GRC and will be issued by the Convener</p>

Steps	Action Level	Process
		and signed by other members of the GRC. The case records will be updated, and the decision will be communicated to the complainant APs by the Member Secretary of the GRC at the village level.
Step 3	Decision from PMU, DWASA	If any aggrieved APs are not satisfied with the GRC decisions, the next option will be to lodge grievances to the Project Director of the DESWSP at Dhaka within two weeks after receiving the decision from the GRC. The APs, in the complaint, must produce documents supporting his/her claim. The PD, with the assistance of the PMU social safeguards officer and/or PMU environmental safeguards officer and/or MDSC/MS social safeguards experts/resettlement experts, will review the proceedings of the GRC hearing and convey its decisions to the aggrieved APs within two weeks after receiving the complaint.
Step 4	Decision from PD	If the resolution from PMU fails to satisfy the aggrieved APs, they will facilitate to forward their case for further review and settlement with the office of the Chief Engineer, DWASA at Dhaka. The aggrieved APs will submit the petition with all documentary evidences of complaints and the resolution proceeding of step 2 and 3 within two weeks after the decisions from the PMU.
Step 5	GRC Minutes and Communicatin g Decisions	The GRC minutes, approved by the project director, will be received at the conveners' office. The approved verdict is communicated to the complainant AP in writing.
Step 6	Decision from Court	If the grievance redress system fails to satisfy aggrieved APs, they can go/pursue further action by submitting their case to the appropriate court of law at the District level.

Construction of New/Replacement DTW with ancillary works and supply of necessary materials under DESWSP, Dhaka WASA". (NCB-04.1/DESWSP/2018.)

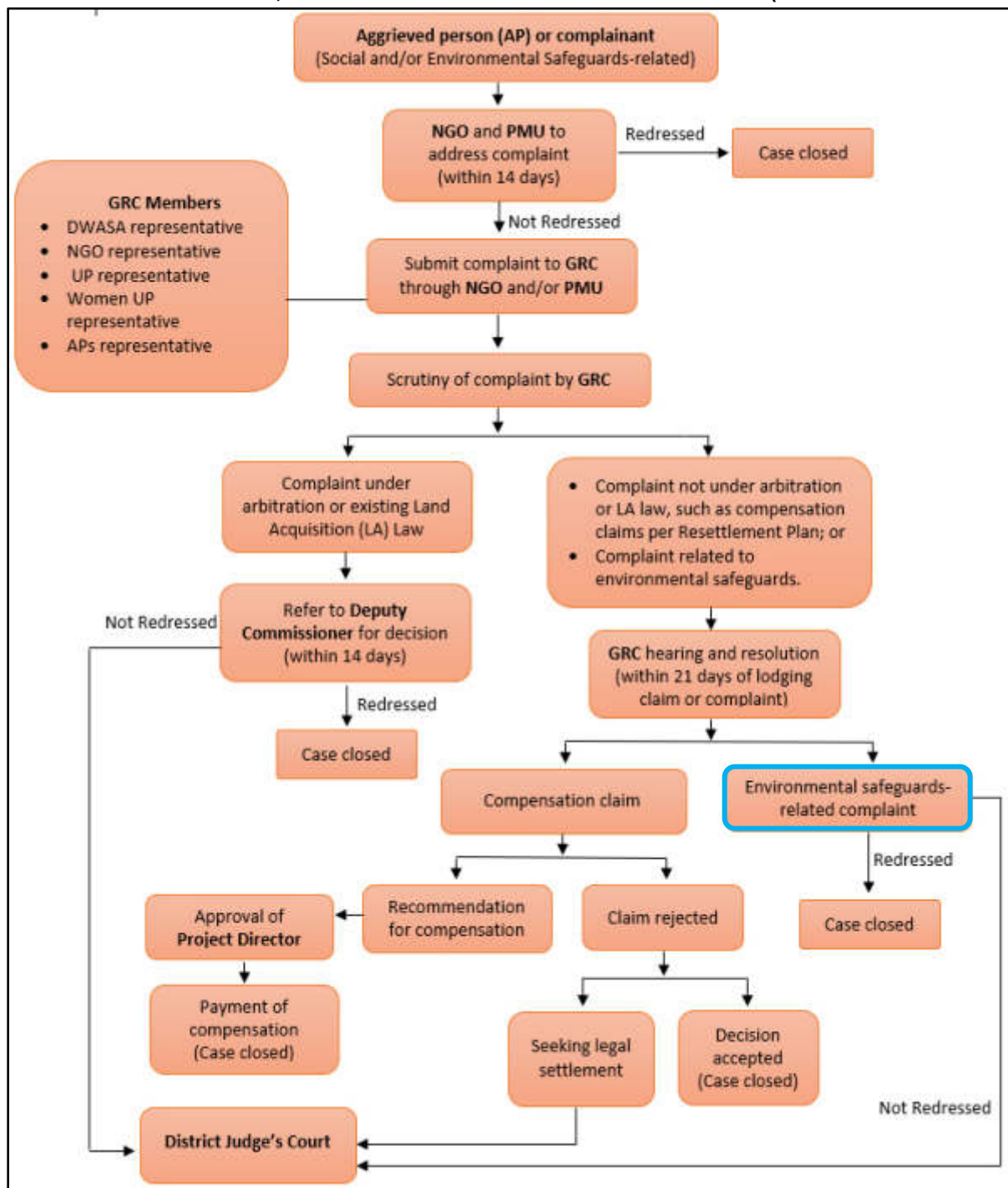


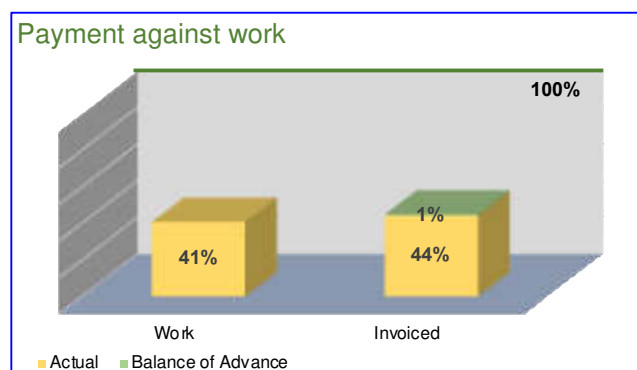
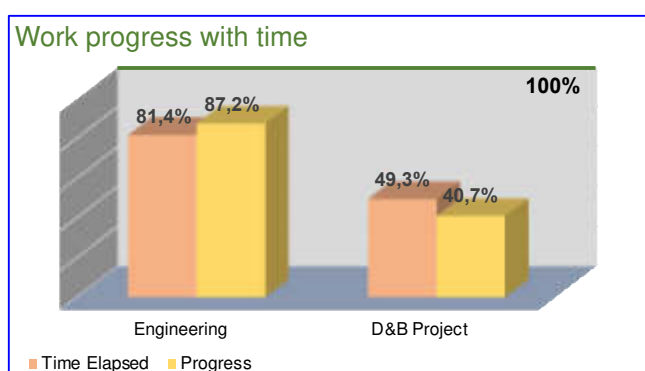
Figure-5: Grievance Redress Mechanism Flow Chart

3 STATUS OF ONGOING CONTRACT PACKAGES

3.1 PROGRESS OF WORK /ACCOMPLISHMENTS

37 Package 1: River intake, raw water pipeline and Gandharbpur WTP

Project stage	Construction	Commencement date	13 May 2019
Cost	BDT 25,394 M	Completion date	13 May 2023
Overall Project Progress	40.7% (Behind)	Time elapsed	49.3%
Spent to-date	BDT 11 190 M (44%)	Balance of Advance	0.6%
Construction	Progress	Status	
Design	87,2%	5.8% ahead of schedule	
Overall Construction	31.6%	10.5% behind schedule	



38 Package 2: Treated water transmission pipeline to Dhaka

Project stage	GoB Approval of Contract Award	Expected dates	
Progress	DWASA seeking LGD + CCGP approval	ADB to approve Bid evaluation	Approved in August 2020
Estimated Cost	USD 110 M (pre-Bid opening)	Contract Award	March 2021

39 Package 3.1: Primary distribution pipelines inside Dhaka

Project stage	Bid Evaluation	Expected dates	
Progress	FBER with ADB for Clearance	ADB to approve Bid evaluation	December 2020
Estimated Cost	USD 65 M*	Contract Award	March 2021

40 Package 3.2: Feeder pipelines inside Dhaka

Project stage	Attending ADB's new comments (about to finish)	Expected dates	
Progress	Additional Financing approved	Tendering	February 2021

* Excluding road cutting cost

3.2 WORKS IN PROGRESS (PACKAGE 1)

Work progress in the Intake Area:

- Mitigation undertaken by Contractor to minimize impact of suspension due to non-payment
- The pilot plant is completed, commissioning been done, trials planned to start after running for 2 weeks.
- Pipe-piling at Intake trial ongoing.
- New hammers and crawler crane have been delivered to site.
- 1 30 chamber raft concrete completed.
- 1 30 Rebar for walls started.
- 1 20 Sheet-piles welding is ongoing.

Work Progress in the WTP Area:

- DSM works 100% completed
- DSM works at W40 (ground reservoir) is completed: Remaining Plate load tests are in progress.
- DSM work at W82 (generator & transformer building) is completed: Area levelling and PLT done in December.
- DSM work at W01 (cross connection valve chamber) is completed: 30 done in total in December.
- DSM works at W50 is completed: Plate Load Test and area levelling completed
- DSM works at W83 (fuel storage) is completed: Plate Load Test and area levelling completed.
- DSM works at W96 (guard house) is completed. Plate Load Test and area levelling completed.
- 2 blocks reinforced from NE Quarter of reservoir: B3 and B4 blocks completed (935.00m³)
- Concreting of 2 blocks of W40 raft in December (935.00 m³). In total, 10 blocks of W40 raft completed (total concrete quantity = 4581m³ - 23.48%)
- Reinforcement of walls is ongoing for w40 (NW part). Reservoir mock-up is done, reinforcement of walls completed. Half of the walls is poured. New formwork from TECON arrived and formwork in progress.
- Blinding concrete work on going for the reservoir slab (North East quarter) 18,528m² area completed (61.51%). Area clearing in NE and SE and SW quarter in progress.
- Reinforcement concrete road work and bricks pavement in storage area in completed.

41 Intake and WTP along RWP



Intake: Progress in sheet piling



WTP: Reservoir work in progress



WTP: Reinforcement of W40 Slab- Block B2



WTP: Concrete pouring at Block B1 of W40



House of AP 11062110292 at Baliapara



House of AP 11062110292 at Baliapara

4 ENVIRONMENTAL SAFEGUARD MONITORING STATUS

4.1 ENVIRONMENT MANAGEMENT

42 Environmental management is about forecasting future environmental changes, maximizing human benefit whilst minimizing environmental degradation. Site specific Environmental Management Plans (sEMPs) for each project component are in implementation by GWT SNC to safeguard the undue or reasonably preventable adverse impacts of the construction, operation and decommissioning of a project; and that the positive benefits of the projects are enhanced. MDSC in association with PMU Environment and Safety Officer is supervising Contractors compliance with sEMPs.

43 ADB and DoE approved an Initial Environmental Examination (IEE) report for all DESWSP (prepared by PPTA consultants in 2013).

44 DWASA then prepared a comprehensive EIA in 2018, before start of construction, to revise baseline data and incorporate changes in site environment over the 4-year delay period, and add more project specific details to reflect changes in detailed design, like re-routing of P2, addition of P3.2 and river tunnels and to receive environmental clearance from DoE. DoE approved the EIA and issued a 'No Objection Certificate' (NOC) for all packages. DOE has extended the NOC that expired on 11 December 2019 to 10 December 2020.

45 Progress till end of October 2020:

- IEE reports for P1, P2 and IEE P3.1 have been approved by ADB and cleared for disclosure; P3.2 has been awaiting approval on additional financing
- 8th SEMR (Jan-Jun 2019) and 9th SEMR (Jul-Dec 2019) were approved by ADB on 16th and 17th July 2020 respectively;
- 10th SEMR (Jan-Jun 2020) has been approved by ADB.

46 The following documents, relating to the identified environmental safeguards of the Contract Package and are part of the monitoring requirements in ascertaining the degree of compliance:

- a. Initial Environmental Examination (IEE)
- b. Environmental Management Plan (EMP)

47 In accordance with the IEE (Prepared for GoB), and the accompanying Environmental Monitoring Plan (EMP), the Contractor is required to undertake parametric measurements and observations on air quality, water quality, noise and socio-cultural resources. Locations for the measurements are identified in the IEE. Accordingly, the monitoring of water quality was conducted by the firm "Onushandhani Creeds Limited of Mohakhali, Dhaka. Air quality and Noise monitoring was implemented in addition by GWT. The compliance status of the Environmental Monitoring as per the approved SEMP is tabulated in Table-7.

48 SEMP for RWP, Intake and WTP have been prepared and submitted to ADB. SEMP have been approved by ADB during their mission in November 2020 (Table-8).

Table-7: Compliance Status of Environmental Monitoring of Package-1

Sl. No.	Monitoring field prescribed in SEMP	Monitoring Parameters	Location		Monitoring Frequency	Compliance Status (Yes/No)	Comment
1.	Noise	noise	WTP	INTAKE	quarterly	Yes / no	Noise monitoring implemented monthly at WTP and at intake from Oct. – Dec. by contractor, only monitoring on

Sl. No.	Monitoring field prescribed in SEMP	Monitoring Parameters	Location		Monitoring Frequency	Compliance Status (Yes/No)	Comment
							quarterly basis required, no monitoring implemented at intake from July to September
2.	Community and worker's H&S, traffic management	H&S	WTP	INTAKE	weekly	Yes	H&S inspection implemented by MDSC
3.	Ambient air quality	SPM, PM ₁₀ , PM _{2.5} , NO _x , SO ₂ , CO	WTP	INTAKE	quarterly	Yes / No	Air quality monitoring implemented by contractor, only monitoring on a quarterly basis required, Monthly monitoring implemented Oct – Dec. at WTP and intake; no monitoring at intake and WTP from July – Sept.
4.	Water Quality of Meghna River	TDS, TSS, pH, Hardness, BOD5 and Fecal Coliform, total nitrogen, total phosphorus, heavy metals, temperature, DO, hydrocarbons, mineral oil, phenol, cyanide	-	INTAKE	monthly.	Yes	Water of Meghna River is treatable for drinking water purposes
5.	Wastewater Quality	As per BD ECR 97; DoE Standards Inland Surface Waters	WTP	INTAKE	-	Yes/No	BOD5 56.4mg/l > 50mg/l DoE Standard at WTP
6.	Drinking Water Quality	Routine Drinking Water Parameters	WTP	INTAKE	-	Yes	Parameters according to BD standard ECR 97
7.	Waste management	---	WTP	INTAKE	Weekly inspection	Yes	Appropriate waste separation and waste disposal conducted

Table-8 Submission and approval dates for SEMP, Package 1

SEMP	Submission	Approval
SEMP intake	23 November 2020	23 November 2020
SEMP WTP	23 November 2020	23 November 2020
SEMP RWP	23 November 2020	23 November 2020

4.2 ENVIRONMENTAL MONITORING

49 MDSC has prepared a comprehensive environmental checklist in compliance with ADB Safeguards policy in addressing the potential environmental issues during weekly site inspections and recording. The inspection reports here in covers major environmental issues like Air Quality, Noise Level, Dust Control, Generated Waste, Water Quality, Occupational Health and Safety, HSE Audit, HSE Observations and HSE Inspections.

4.2.1 Air Quality

50 During the construction period impacts on air quality, caused by the project, are mainly due to movement of materials. It affects air quality over a small area, though, not in significant levels. Increased dust levels along the haul roads, the borrow areas and dumping areas is as expected. Emissions from construction machinery, such as generators, bulldozers, rollers, crane, trucks etc. also cause air pollution while they are operating. But air pollution levels measured in the WTP site are particularly high due to high ambient air pollution levels outside the project area due to the following reasons:

- ✓ The WTP construction site is in the Tarabo Industrial zone. Industries like cement factory, edible oil mills, paper mills, sugar mills, rice mills, pulse mills etc. are north and south of the WTP site (Figure-6).
- ✓ In the east of the WTP site LGED road widening work adjacent to W83 is underway and for this huge earth moving activities are generating significant dust.
- ✓ The bumpy and dusty roads frequently used by these different industries (particularly City Group heavy trailers and trucks) contribute a lot of dust to the project area.



Figure-6: Industries nearby the WTP Site

51 The contractor has done air quality monitoring including temperature, Humidity, Formaldehyde (HCHO), TVOC (measure of volatile organic compounds that is mixture of air pollutants), Benzene (C₆H₆), PM_{2.5} (measure of fine particulate matter that reduce visibility), PM₁₀ (measure of respirable particulate matter), Carbon Dioxide (CO₂).

1. In particular, MDSC consultant compares the Particulate Matters (PM10 & PM2.5) with the national standards in consideration of its health impacts. The CAMCE air quality monitoring result found mostly Hazardous in December of this SEMR period and exceeded the DOE air quality standards of PM10 & PM2.5. All the way, MENARD air quality monitoring result showed moderate in the WTP site. The Intake site's air quality found moderate to unhealthy sensitive. Immediate after the release of COVID19 risk, the Air quality monitoring by independent Consultant will be conducted by GWT. The monitoring report is appended in **Appendix-B** of this SEMR report.



Air Quality Monitoring Locations

52 The following presents the Air Quality variation trend at different sites in October-December 2020. Bangladesh National Ambient Air Quality Standard (BNAAQs) is listed below in Table-9.

Table-9: Bangladesh National Ambient Air Quality Standard (BNAAQs) for Particulate Matter

Bangladesh National Ambient Air Quality Standard (BNAAQs)	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)
24h average	150	65
Annual	50	15

Table-10: Ambient Air Quality of October at WTP near Batching Plant (CAMCE)

Parameter/Date	7/Oct	12/Oct	14/Oct	15/Oct	17/Oct	18/Oct	21/Oct	26/Oct	28/Oct
PM ₁₀	90	134	119	241	94	147	112	182	109
BNAAQs (PM10) (24hr Average)	150	150	150	150	150	150	150	150	150
PM _{2.5}	51	67	67	124	51	80	54	97	57
BNAAQs (PM2.5) (24hr Average)	65	65	65	65	65	65	65	65	65

Table-11: Ambient Air Quality of October at WTP near Batching Plant (MENARD)

Parameter/Date	3/Oct	6/Oct	10/Oct	13/Oct	14/Oct	15/Oct	17/Oct	21/Oct	25/Oct
PM ₁₀	101	102	97	110	95	98	95	100	100
BNAAQs (PM10) (24hr Average)	150	150	150	150	150	150	150	150	150
PM _{2.5}	61	71	61	85	50	49	30	47	45
BNAAQs (PM2.5) (24hr Average)	65	65	65	65	65	65	65	65	65

Table-12: Ambient Air Quality of October at Intake near Material Storage Area (SDWP)

Parameter/Date	3/Oct	4/Oct	5/Oct	6/Oct	7/Oct	8/Oct	10/Oct	11/Oct	12/Oct	13/Oct
PM ₁₀	43	43	28	28	53	83	73	157	84	107
BNAAQs (PM10) (24hr Average)	150	150	150	150	150	150	150	150	150	150
PM _{2.5}	37	37	26	26	42	52	49	100	52	89
BNAAQs (PM2.5) (24hr Average)	65	65	65	65	65	65	65	65	65	65
Parameter/Date	14/Oct	15/Oct	16/Oct	17/Oct	18/Oct	20/Oct	21/Oct	22/Oct	24/Oct	25/Oct
PM ₁₀	42	45	46	48	54	50	52	15	42	60
BNAAQs (PM10) (24hr Average)	150	150	150	150	150	150	150	150	150	150
PM _{2.5}	37	40	45	39	46	40	42	14	35	52
BNAAQs (PM2.5) (24hr Average)	65	65	65	65	65	65	65	65	65	65

Table-13: Ambient Air Quality of November at WTP near Batching Plant (CAMCE)

Parameter/Date	2/Nov	4/Nov	5/Nov	8/Nov	10/Nov	19/Nov	21/Nov	23-11--20	23-11--21
PM ₁₀	92	345	188	83	48	185	217	144	220
BNAAQs (PM10) (24hr Average)	150	150	150	150	150	150	150	150	150
PM _{2.5}	49	187	104	42	34	100	119	77	121
BNAAQs (PM2.5) (24hr Average)	65	65	65	65	65	65	65	65	65

Table-14: Ambient Air Quality of November at WTP near Batching Plant (MENARD)

Parameter/Date	3/Nov	7/Nov	11/Nov	15/Nov	19/Nov	21/Nov	22/Nov
PM ₁₀	85	96	96	99	98	94	97
BNAAQs (PM10) (24hr Average)	150	150	150	150	150	150	150
PM _{2.5}	49	44	47	48	45	41	56
BNAAQs (PM2.5) (24hr Average)	65	65	65	65	65	65	65

Table-15: Ambient Air Quality of November at Intake near Material Storage Area (SDWP)

Parameter/Date	1/Nov	2/Nov	3/Nov	4/Nov	5/Nov	6/Nov	8/Nov	9/Nov	12/Nov	13/Nov
PM ₁₀	47	45	50	51	150	70	85	39	60	64
BNAAQs (PM10) (24hr Average)	150	150	150	150	150	150	150	150	150	150
PM _{2.5}	45	42	40	43	149	45	54	34	44	46
BNAAQs (PM2.5) (24hr Average)	65	65	65	65	65	65	65	65	65	65
Parameter/Date	15/Nov	16/Nov	17/Nov	18/Nov	19/Nov	22/Nov	23/Nov	24/Nov	25/Nov	
PM ₁₀	73	47	141	144	135	181	107	136	69	
BNAAQs (PM10) (24hr Average)	150	150	150	150	150	150	150	150	150	
PM _{2.5}	49	45	86	89	83	113	65	84	47	
BNAAQs (PM2.5) (24hr Average)	65	65	65	65	65	65	65	65	65	

Table-16: Ambient Air Quality of December at WTP near Batching Plant (CAMCE)

Parameter/Date	10/Dec	13/Dec	15/Dec	19/Dec	22/Dec	24/Dec
PM ₁₀	310	394	424	463	466	221
BNAAQs (PM10) (24hr Average)	150	150	150	150	150	150
PM _{2.5}	164	200	216	248	256	113
BNAAQs (PM2.5) (24hr Average)	65	65	65	65	65	65

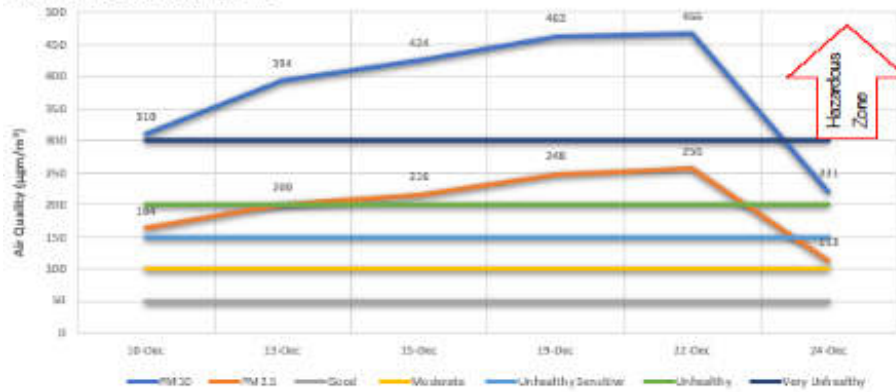
Table-17: Ambient Air Quality of December at WTP near Batching Plant (MENARD)

Parameter/Date	1/Dec	5/Dec	6/Dec	8/Dec	9/Dec	13/Dec	14/Dec	15/Dec	19/Dec	20/Dec
PM ₁₀	96	96	96	94	95	95	96	95	98	95
BNAAQs (PM10) (24hr Average)	150	150	150	150	150	150	150	150	150	150
PM _{2.5}	47	47	46	45	46	47	45	46	46	47
BNAAQs (PM2.5) (24hr Average)	65	65	65	65	65	65	65	65	65	65

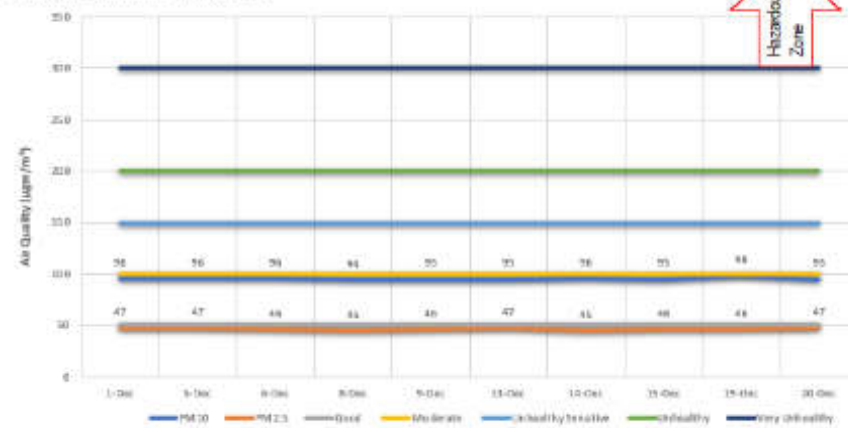
Table-18: Ambient Air Quality of December at Intake near Material Storage Area (SDWP)

Parameter/Date	13/Dec	14/Dec	15/Dec	16/Dec	17/Dec	18/Dec	19/Dec	20/Dec	21/Dec	22/Dec	23/Dec	24/Dec	25/Dec
PM ₁₀	230	247	247	308	216	180	171	237	145	303	223	167	160
BNAQS (PM10) (24hr Average)	150	150	150	150	150	150	150	150	150	150	150	150	150
PM _{2.5}	133	145	162	181	131	107	106	137	86	176	136	104	101
BNAQS (PM2.5) (24hr Average)	65	65	65	65	65	65	65	65	65	65	65	65	65

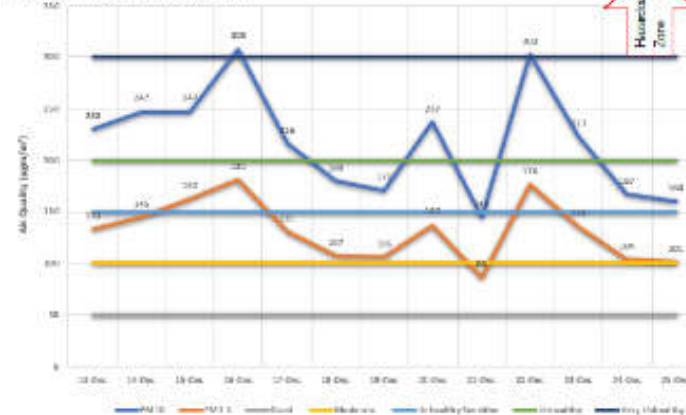
At WTP near CAMCE Batching Plant



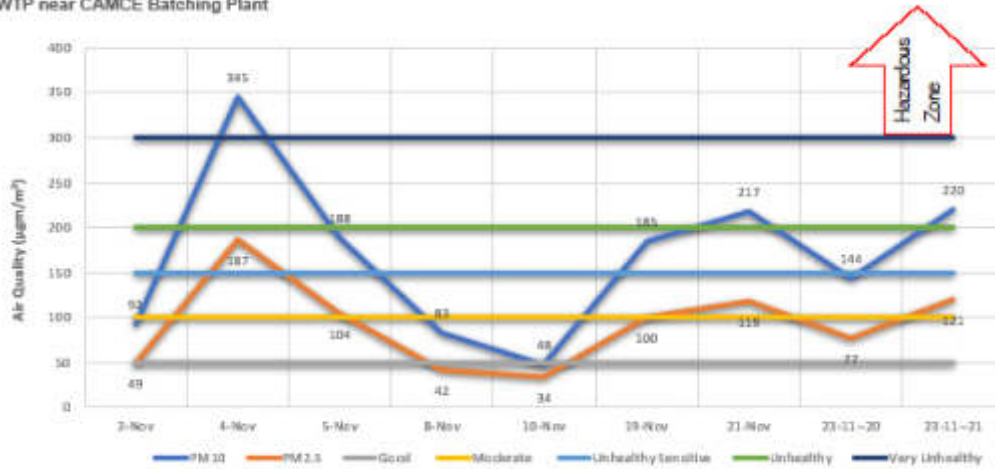
At WTP near MENARD Batching Plant



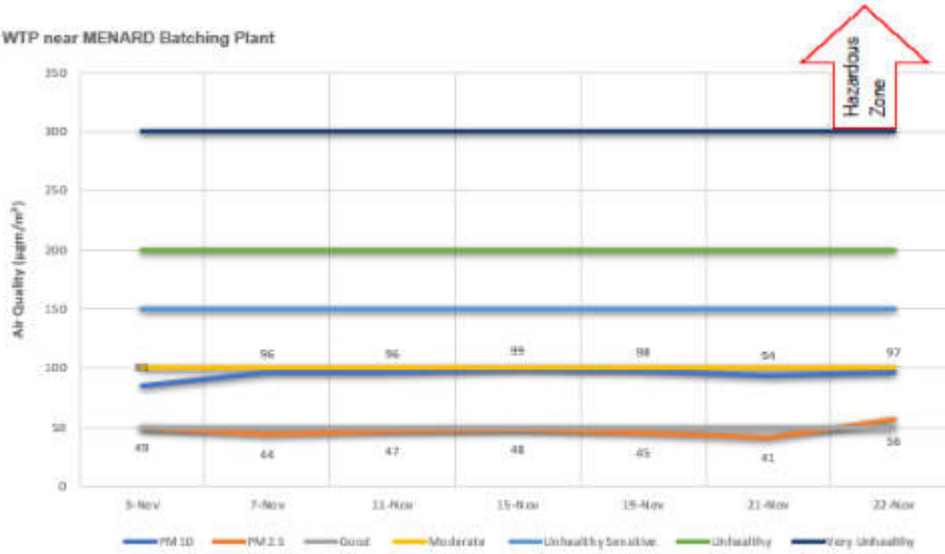
At INSAFE near SUW Material Storage Area



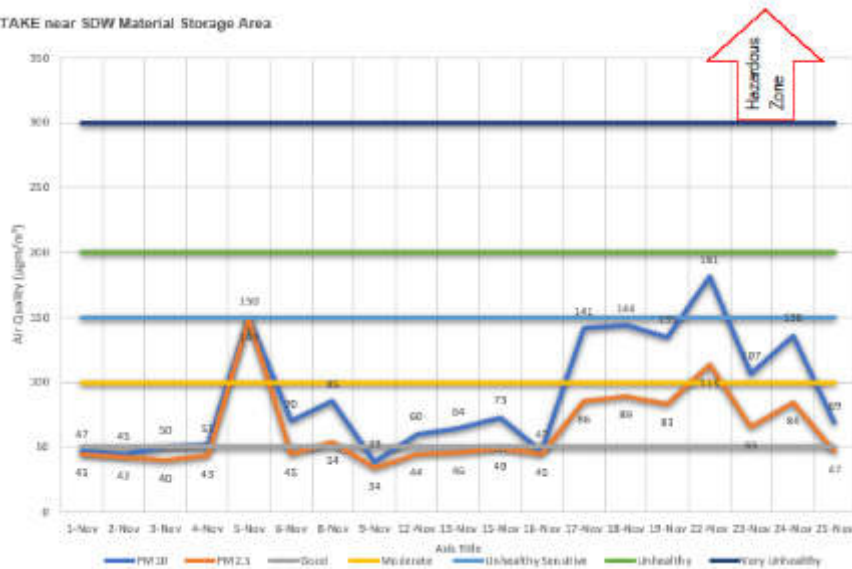
At WTP near CAMCE Batching Plant



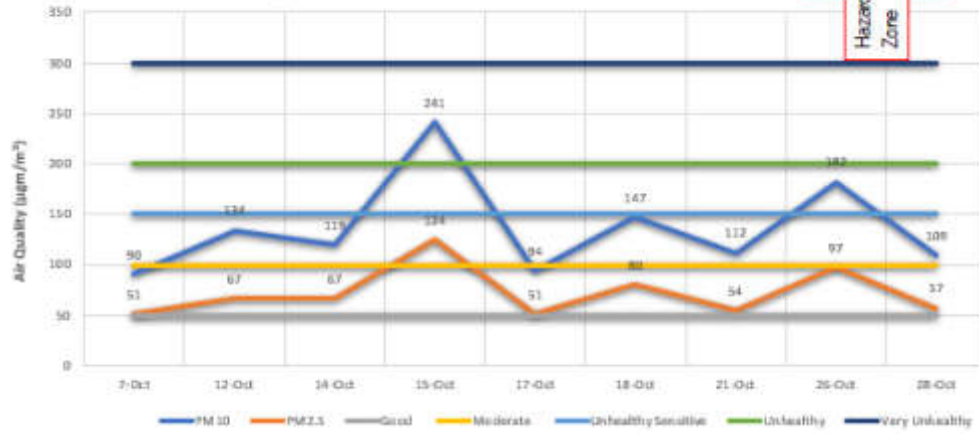
At WTP near MENARD Batching Plant



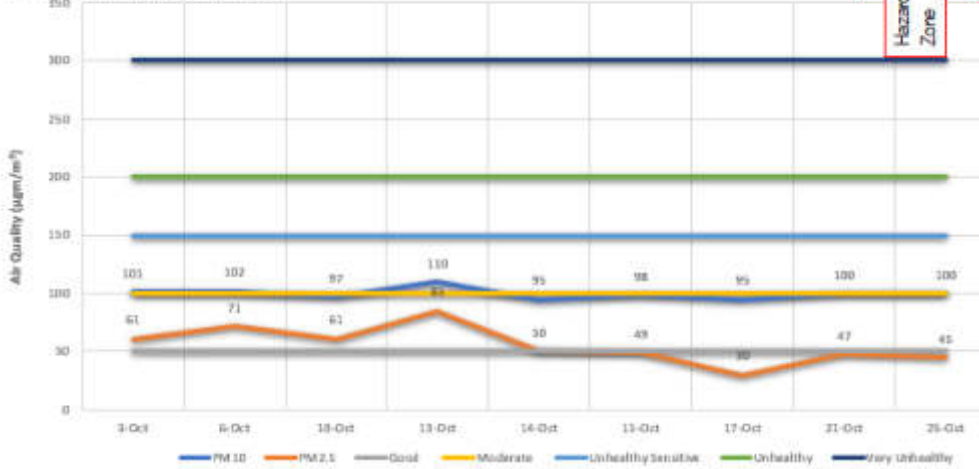
At INTAKE near SDW Material Storage Area



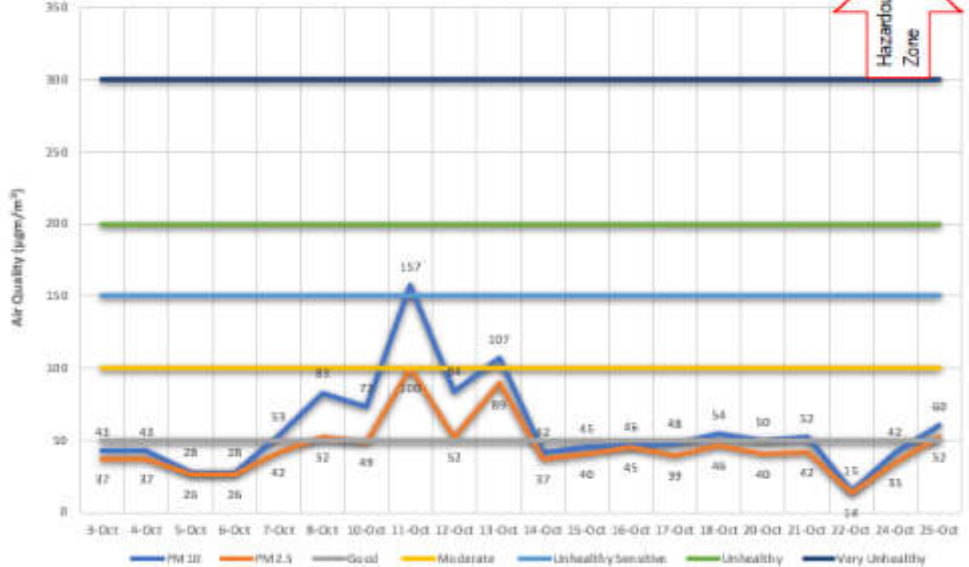
At WTP near CAMCE Batching Plant



At WTP near MENARD Batching Plant



At INTAKE near SDW Material Storage Area



Comparison of Air Quality Data of October 2020 with the baseline of August 2017:

Table-19 Comparison of baseline data of Air Quality

Sl. No.	Sample Type	Locations	PM _{2.5} (µg/m ³)	PM ₁₀ (µg/m ³)
1	Baseline (August 2017)	Chaitankanda (Intake)	22.21	56.81
2	Monitoring (October 2020)	Chaitankanda (Intake)	100	157
3	Baseline (August 2017)	Gandhabpur (WTP)	19.85	43.4
4	Monitoring (October 2020)	Gandhabpur (WTP)	85	102
Duration (hrs)			24	24
DoE Standard			65	150

Note: August is the month of peak rainy season in Bangladesh whereas the October is in the Dry season for which the comparison seems incomparable. Due to Covid-19 pandemic the August monitoring was not possible.

Corrective Action Plan: To curb the PM₁₀ and PM_{2.5} concentration within the BNAQS, the Contractor will be made to increase dust suppression by spraying water during the dry season when required, limiting speed of heavy vehicles and cars inside the construction sites, posting sign boards to limit vehicle's speed (5km/h), paving internal roads (if possible) for the movement of heavy vehicles and training the workers on dust prevention and air quality. To reduce the impact of air pollution on the workers, the contractor will be required to provide appropriate PPE to protect their health and safety. Furthermore, the Contractor will be asked to take simultaneous air quality readings upwind of the site, to check the ambient air quality entering the site, to determine what deterioration is caused by project activities.

4.2.2 Noise Level

53 During the construction phase, there are also increased noise levels due to construction machinery operation and movement of construction vehicles. Measured noise levels in the WTP site are high, but some of this is due to high ambient noise coming from outside the project area such as:

- ✓ The WTP construction site is in the Tarabo Industrial zone. Industries like cement factory, edible oil mills, paper mills, sugar mills, rice mills, pulse mills etc. are north and south of the WTP site (Figure-6).
- ✓ In the east of the WTP site, the LGED road widening work adjacent to W83 is underway, which generates noise from the heavy earth moving equipment.
- ✓ The bumpy and dusty access roads frequently used by nearby industries (e.g. City Group heavy trailers and trucks) contribute additional noise close to the project site.

54 MENARD and CAMCE are conducting the noise levels at different places of the WTP site. In the Intake site SDWP has started the noise level monitoring since October 2020.

55 Noise levels in this SEMR period were maximum 79.00 dB in December and minimum 30.00 db in October at the Intake site and that for WTP were maximum 98.00 db in October and minimum 45.00 in November.

56 It was noted that the maximum noise level recorded in the intake site was near the subcontractor facility area. In the WTP site the maximum noise level recorded was due to the operation of rig machine at working platform.

57 DoE standards on noise are 60 Leq (dB) for day time and 50 Leq (dB) for night time. Though compliance with DoE standards is not a condition of the contract, yet it is worth noting that the baseline recorded in December 2019 showed that the noise level exceeded DoE standards at property lines. The independent consultant will start the noise monitoring in both the sites after the release of COVID19 risk.

2. The following tables presents National noise level standard and the noise levels at Intake and WTP sites for the last six months. The monitoring report is appended in **Appendix-B** of this SEMR report.

Table-20: Bangladesh Standard for Sound Levels (DOE, 2006)

Location	Noise level (dBA), at day	Noise level (dBA), at night
Silent zone	50	40
Residential area	55	45
Mixed area	60	50
Commercial area	70	60
Industrial area	75	70

Table-21: Noise level data of the construction sites

Site/Noise level	Jun '20	Jul '20	Aug '20	Sep '20	Oct '20	Nov '20	Dec '20
A. Intake							
Maximum (dB)	-	-	-	-	76.5	65.3	79
Minimum (dB)	-	-	-	-	30	37	43.5
National Standard (Day time)	60	60	60	60	60	60	60
National Standard (Night time)	50	50	50	50	50	50	50
B. WTP							
Maximum (dB)	110.03	107.09	106.03	97.01	98.05	97.05	97
Minimum (dB)	43.02	40.01	45.08	58	49	45	48.06
National Standard (Day time)	60	60	60	60	60	60	60
National Standard (Night time)	50	50	50	50	50	50	50

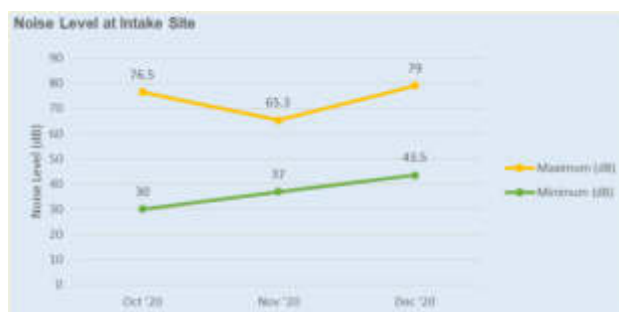


Figure-7: Noise level at the construction sites

Comparison of Noise Level data with the baseline of December 2019:

Table-22 Comparison of baseline data of Noise Level

Sl. No.	Sample Type	Locations	Led (dBA)
1	Baseline (December 2019)	Chaitankanda (Intake)	57.75
2	Monitoring (December 2020)	Chaitankanda (Intake)	79
3	Baseline (December 2019)	Gandhabpur (WTP)	59.14
4	Monitoring (December 2020)	Gandhabpur (WTP)	97
Bangladesh Standard for Sound Levels (DOE, 2006) of Daytime			60

Corrective Action Plan: Noise shall be mitigated through avoidance of night works, especially noisy works as pile driving. Use earmuff in the high noise area particularly for the workers of batching plant and Generator area and use of canopy for Generator. To reduce the impact of noise on the workers, the Contractor will be required to provide appropriate PPE to protect their health and safety. Furthermore, the Contractor will be asked to take simultaneous noise measurements at the perimeter of the site, to check

the ambient noise entering the site, to determine what extra is caused by project activities.

4.2.3 Waste Management

58 Kitchen (food waste), non-hazardous (general) and construction wastes are the main wastes generated in the construction sites which were properly disposed of to the Municipal Waste dumping site. Municipal Rickshaw Van collected the wastes every day as well as weighing the wastes for documentation. The spent lubricant (hazardous oil waste) sold to the DOE licensed third party. GWT will make a new waste collection and disposal agreement from December 2020 for their Waste management at Intake and WTP sites. Below table presents the amount of waste generated at the construction sites.



Table-23: Waste generated till December 2020

Types of Waste	Unit	Generated Waste			Remarks
		Till September 2020	End October December 2020	- To-date	
A	B	c	d	e = c + d	f
1. Non-Hazardous					
1. Kitchen Waste	Kg	8 100	13 241	21 341	
2. General Waste	Kg	2 712	1 596	4 308	
3. Construction Waste	Kg	9 891	33 465	43 356	
2. Hazardous Waste					
1. Spent Lubricant	Litre	4 940	7 600	12 540	Waste Oil
2. Sewage	Litre	4 000	-	4 000	
3. Oily Rags	Kg	10	-	10	

4.2.4 Dust Suppression

59 In order to keep the construction sites free from dust and/muds, the GWT Contractors are frequently doing dust suppression, mainly by water spray and/ mud cleaning activities. The project sites are generally maintained from normal to good condition. For cleaning the dust from the internal road of WTP site, the

Contractor has appointed three sweepers to clean the daily generated dust from the road. Dust suppressions are conducted in both INTAKE and WTP mainly in the internal roads/office zone, CAMCE/MENARD construction team office zones & BP Area; Batching plant & maintenance area, open yard, MENARD silo area etc.



Photos of Dust suppression in WTP Site



Photos of Dust suppression in INTAKE Site

4.2.5 Water Quality

A. Surface Water Quality

3. Onushandhani Creeds Ltd has been assigned to conduct surface water quality monitoring at the proposed intake point at Bishnondi to assess the variation of surface water quality over eighteen months for better understanding of the appropriate surface water treatment facilities of the Meghna river water for 500 MLD capacity Treatment Plant of the DESWSP project. In this SEMR, July and August 2020 surface water quality information are enlisted. The summary of the surface water quality is listed down below. Water quality report of August 2020 is attached to the Appendix-C.

60

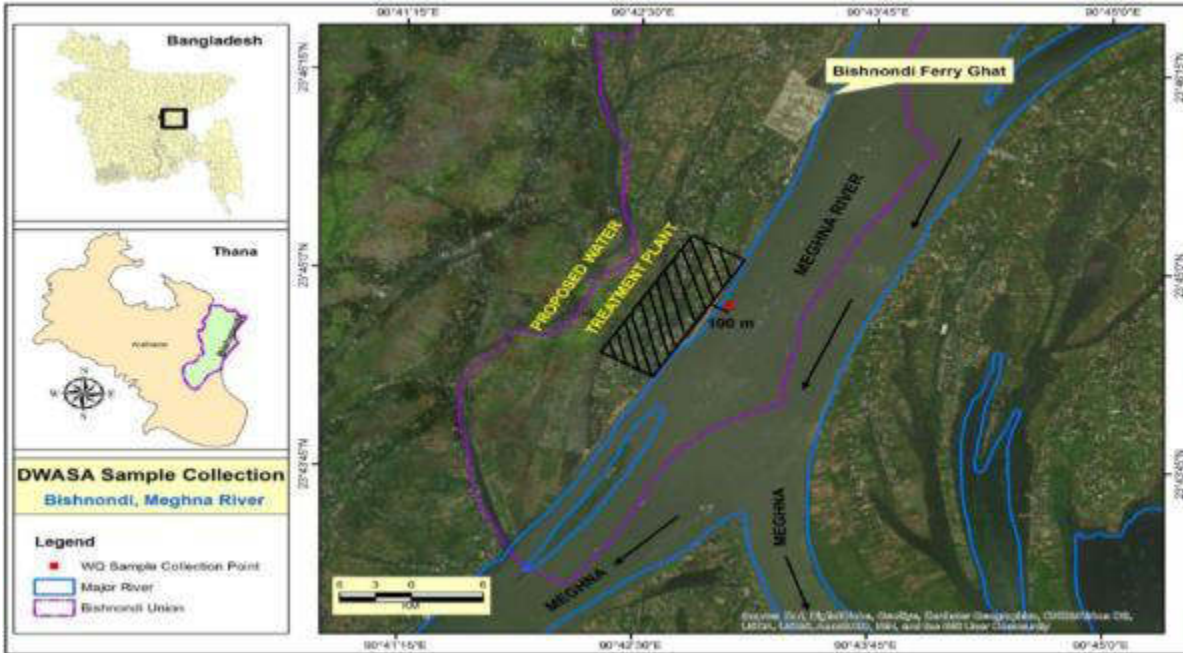


Figure-8: Location of Surface Water Sampling

Table-24: Surface Water Quality Data of Meghna River

Water quality Laboratory test result- Monthly sample; Composite sample					
Test conducted by DPHE Central Laboratory, Mohakhali, Dhaka					
Monthly sample: July/2020					
Date: 25-07-2020		Composite sample Depth= [Sample-1: 0.5m+Sample-2:4m+Sample-3: 8m]			
Water quality parameters	Bangladesh Standard	Concentration present	Unit	Analysis Method	LOQ
Alkalinity		35	mg/L	Titrimetric	
Aluminum	0.2	0.162	mg/L	AAS	0.002
Ammonia	0.5	0.43	mg/L	UVS	0.1
Arsenic (As)	0.05	0.001	mg/L	AAS	0.001
Biochemical Oxygen Demand (BOD)	0.2	5	mg/L	days incubation	0.1
Chemical Oxygen Demand (COD)	4	24	mg/L	CRM	
Hardness	200-500	148	mg/L	Titrimetric	
Iron (Fe)	0.3-1	0.39	mg/L	AAS	0.05
Manganese (Mn)	0.1	0.04	mg/L	AAS	0.03
Nitrogen (Nitrate)	10	1	mg/L	UVS	0.1
Nitrogen (Nitrite)	<1.0	0.04	mg/L	UVS	0.02
Phosphate	6	0.53	mg/L	UVS	0.1
Total Suspended Solid (TSS)	10	6	mg/L	Gravimetric Method	

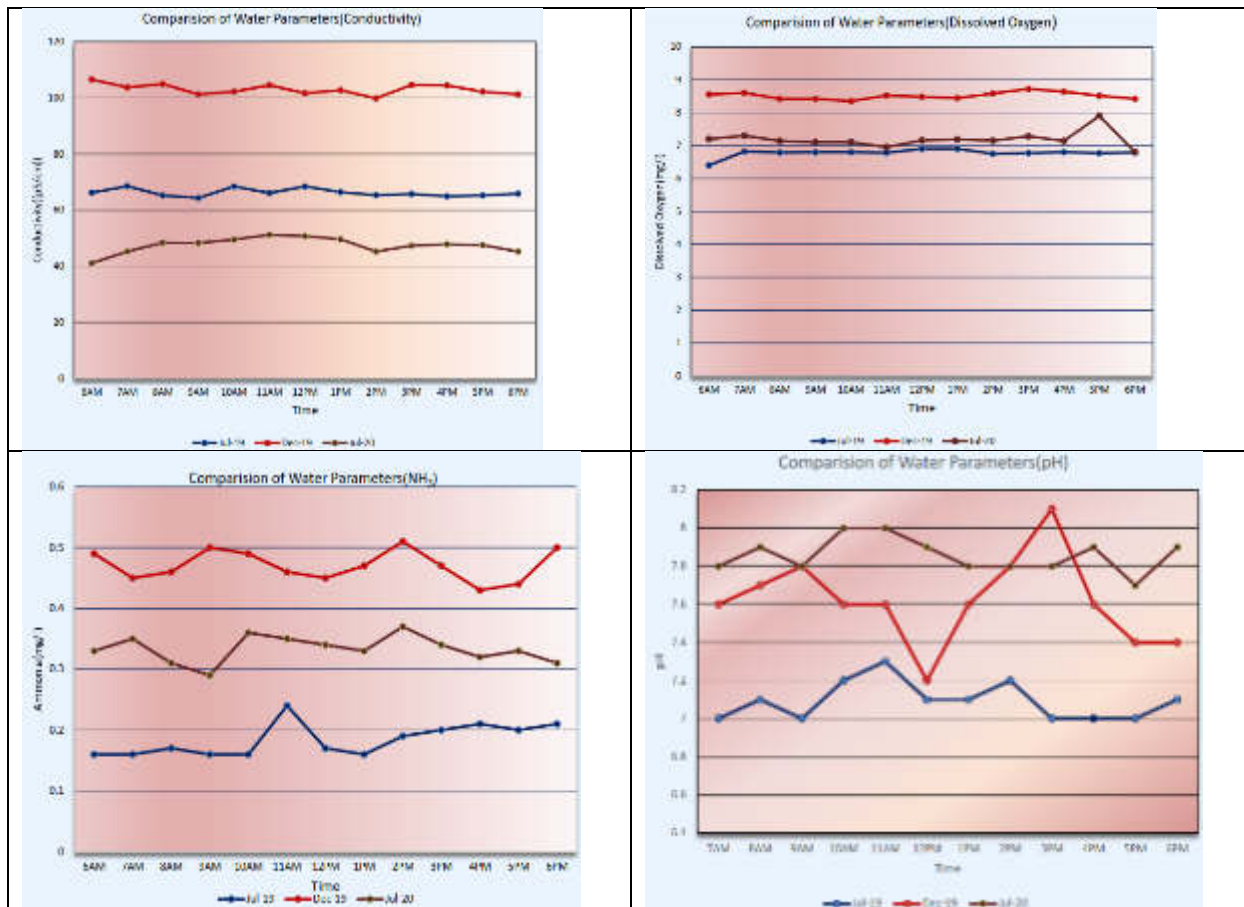
Water quality Laboratory test result- Monthly sample; Composite sample					
Test conducted by DPHE Central Laboratory, Mohakhali, Dhaka					
Monthly sample: August/2020					
Date: 29-08-2020		Composite sample Depth= [Sample-1: 0.5m+Sample-2:4m+Sample-3: 8m]			
Water quality parameters	Bangladesh Standard	Concentration present	Unit	Analysis Method	LOQ
Alkalinity		30	mg/L	Titrimetric	
Aluminum	0.2	0.163	mg/L	AAS	0.002
Ammonia	0.5	0.17	mg/L	UVS	0.1
Arsenic (As)	0.05	0.002	mg/L	AAS	0.001
Biochemical Oxygen Demand (BOD)	0.2	7	mg/L	days Incubation	0.1
Chemical Oxygen Demand (COD)	4	24	mg/L	CRM	
Hardness	200-500	157	mg/L	Titrimetric	
Iron (Fe)	0.3-1	0.18	mg/L	AAS	0.05
Manganese (Mn)	0.1	0.03	mg/L	AAS	0.03
Nitrogen (Nitrate)	10	1.8	mg/L	UVS	0.1
Nitrogen (Nitrite)	<1.0	0.02	mg/L	UVS	0.02
Phosphate	6	0.58	mg/L	UVS	0.1
Total Suspended Solid (TSS)	10	2	mg/L	Gravimetric Method	

61 BOD and COD have a higher trend in the monthly sample which indicates polluted water. Bacteria consume dissolved oxygen (DO) when large amounts of organic matter from sewage or other discharges are present in the water. BOD and COD tests result during monthly sample analysis by laboratory found 7 mg/L and 24mg/L, respectively. Also, the value of BOD and COD is approximately constant with the preceding month.

62 A decrease in dissolved oxygen (DO) is usually preceded by an increase in ammonia and BOD. During this month, the DO was an average of 6.5 mg/L, and ammonia was 0.43mg/L. Although ammonia concentration is high, the value of DO also seems to be higher. The reason for this is during the wet season the flow of the river is greater, so aeration occurs thus dissolved oxygen increases.

63 It has observed from 2019-2020 monitoring data that there is an increase in total suspended solids (TSS) from August to September (4.3 mg/L to 6 mg/L) but remained almost the same in October (5 mg/L) and dropped significantly from November to December (1 mg/L) and then gradually increased to July (6 mg/L). This increase might occur due to the increase in the flow of the river.

64 A comprehensive analysis has been performed by O. CREEDs between seasonal samples of July, December of 2019, and July 2020. They are compared through graphical representation. The trend follows a typical variation between the dry and wet season. Ammonia, TDS, and conductivity have increased in December from July (both 2019 and 2020) while TSS, color, and turbidity have decreased. The reason for this is during December the flow of the river is low compared to that in July, thus the pollutants cannot be washed out. Also due to low flow, the velocity in the river is less so turbulence is also less. This causes the TSS value to drop along with color and turbidity. The anomaly of DO (high BOD value coupled with high ammonia concentration tend to have lower DO value) is due to its inverse relationship with a temperature that is with lower temperature higher value of DO is observed. Hardness remains almost constant throughout the season with salinity increasing at a modicum level from July/2019 to December/2019 to again in July/2020. Algae concentration in the water was not found in the laboratory test.



65 In July 2020, the WQI value for the weekly samples was 91.9 (1st week), 93.1 (2nd week), 94.7 (3rd week), and 103.3 (4th week) respectively. The monthly WQI value is 306.6. The reason for the high WQI monthly value is due to the high value of BOD, COD, and TSS.

66 In August 2020, the WQI value for the weekly samples was 82.7(1st week), 80.1(2nd week), 83.9(3rd week), and 70.0(4th week) respectively. The monthly WQI value is 413.0. The reason for such a WQI value for the monthly sample is due to the high value of BOD and COD.

Table-25: Summary table of WQI of the Meghna River

Sl. No.	Month (2020)	WQI	Water Quality Status
1	July	306.6	Water Unsuitable for Drinking
2	August	413.0	Ditto
3	November	140.5	Poor

Class	WQI Value	Water Quality Status
A	<50	Excellent
B	51-100	Good
C	101-200	Poor
D	201-300	Very Poor
E	>300	Water Unsuitable for Drinking

Comparison of Meghna River Water Quality Data with the Baseline of August 2017:

Table-26 Comparison of baseline data of Meghna River

Sl. No.	Sample Type	Locations	Concentration							
			pH	DO (mg/l)	BOD ₅ (mg/l)	COD (mg/l)	TDS (mg/l)	EC (µS/cm)	TSS (mg/l)	Iron (Fe) (mg/l)
1	Baseline (August 2017)	Chaitankanda (Meghna River)	7.5	6.5	3.7	16	36	72	49	< LOD
2	Monitoring (August 2020)	Ditto	7.93	7.3	7	24	27.2	57.77	2	0.18
Bangladesh (DoE) Standard for Surface Water (Schedule- 3-A)			6.5 – 8.5	≥5	≤10	NYS	NYS	2250	NYS	NYS

Impact on Water Quality and Corrective Action Plan: Only temporary, local impact on water quality of Meghna River (turbidity) downstream of the intake is possible during construction of intake structure. Turbidity will be mitigated through construction and installation of sheet piles. But no impact on river fauna, fish; breeding habitats is expected due to the construction works of Intake site. There are no fish breeding habitats and protected areas in the vicinity of the intake. No monitoring of downstream water is required as it is not prescribed in the contract and in EMP.

B. Drinking Water Quality

67 The GWT contractor has tested their drinking water quality in November 2020 to understand the water quality status from BRTC, BUET laboratory. There are eleven parameters tested including TC and FC. All the parameters are within the standards of ECR'97 and WHO guideline value 2004. Test result is appended in **Appendix-D**.

Table-27: Drinking Water Quality of the GWT Construction Site

Sl. No.	Water Quality parameters	Unit	Concentration Presence	ECR'97	WHO (2004)
1.	pH	-	7.19	6.5-8.5	6.5-8.5
2.	Color	Pt-Co	2	15	15
3.	Turbidity	NTU	0.35	10	5
4.	Total Hardness as CaCO ₃	mg/l	234	200-500	200
5.	Chloride (Cl)	mg/l	43	150-600	250
6.	Total Dissolved Solids (TDS)	mg/l	396	1000	1000
7.	Manganese (Mn)	mg/l	0.019	0.10	0.4a, 0.1b
8.	Arsenic (As)	mg/l	0.004	0.05	0.01
9.	Iron (Fe)	mg/l	<MDL	0.3-1.0	0.30
10.	Total Coliform (TC)	CFU/100ml	0	0	0
11.	Fecal Coliform (FC)	CFU/100ml	0	0	0

Note: a. Health-based guideline; b. guideline based on other considerations.

C. Waste Water Quality

68 GWT monitored their treated sewage waste water quality before disposing of to the nearby waterbody. In early September 2020 GWT has collected their waste water from the outlet of the WTP construction site and tested by BRTC-BUET laboratory. The lab result shows that EC, DO, BOD5, COD concentrations are out of the local standards of DOE. GWT should improve maintenance of the treatment plant process to keep the concentration within the standards of DOE. In this regard, GWT can make some more test to understand the waste water quality. The lab result is shown in Table-28 below and the lab report is appended in Appendix-E.



Table-28 Treated sewage waste water quality result of WTP Site

Sl. No.	Water parameters	Quality	Unit	Concentration Presence	ECR'97 (Schedule-10) Inland Surface Water)
1.	pH @ 30.7°C		-	7.66	6-9
2.	Electrical Conductivity (EC) @ 30.3°C		µS/cm	1234	1200
3.	Total Dissolved Solids (TDS)@29.8°C		mg/l	613	2100
4.	Total Suspended Solids (TSS)		mg/l	77	150
5.	Dissolve Oxygen (DO) @ 30.3°C		ppm	1.66	4.5-8
6.	Biochemical Oxygen Demand (BOD ₅)		mg/l	56.4	50
7.	Chemical Oxygen Demand (COD)		mg/l	186.14	200
8.	Iron (Fe)		mg/l	0.34	2

69 The Intake sites sewage was tested by Bureau Veritas in September 2020 to understand the quality of the sewage. The lab result summary is listed below in Table-29 and the report is annexed in Appendix-F.

Table-29 Test result of Sewage in the Intake Site

Sl. No.	Water parameters	Quality	Unit	Concentration Presence	ECR'97 (Schedule-9)
1.	pH		-	7.72	-
2.	Total coliform		MPN/100ml	>1600	1000
3.	Fecal Coliform		MPN/100ml	>1600	-
4.	Total Aerobic bacterial count		CFU/ml	9.08x10 ²	-
5.	Total hardness		mg/l	199	-
6.	Total Dissolved Solids		mg/l	530	-
7.	Total Alkalinity as CaCO ₃		mg/l	427	-
8.	Chloride (Cl)		mg/l	57.04	-
9.	BOD		mg/l	30.6	40

70 **Corrective Action Plan:** To curb the treated sewage waste water concentration within the ECR'97 standard, contractor should have hands-on training on the improvement of maintenance on the waste water treatment plant (WWTP) by the supplier of WWTP.

4.2.6 Occupational Health and Safety

A. Health and Safety in the Construction Sites

71 Maximum 44 HSE Contractor's personnel were working at the project sites. All through the second half of the year 2020, the health and safety measures were emphasized in managing COVID-19 situation at sites. The following progress/ measures were achieved/ in place.

- Display of awareness campaign banners;
- WTP Security Gate body temperature screening (21097 Persons);
- WTP Life Camp body temperature screening (1552 Persons);
- INTAKE Security Gate body temperature screening (11543 Persons);
- INTAKE Life Camp body temperature screening (693 Persons);
- Restricted access to site;
- Screening Visitors before granting access to site;
- Enforcing use of COVID-19 PPEs, hand sanitizing and vehicles disinfection;
- Disinfecting of common areas (INTAKE & WTP);
- Total 1352 nos. of COVID-19 tested were conducted in the sites and found positive none.



Covid-19 Awareness Campaign in the construction Sites in July 2020



Covi-19 Test in the Construction Sites in WTP Sites (July 2020)



Covi-19 Test in the Construction Sites in WTP Sites (July 2020)

72 In addition to the above following trainings were conducted at sites to 241 personnel of contractors:

- 23 different training session for MENARD
- 13 different training session for CAMCE
- 7 training on HSE induction for GWT SNC
- 4 different training session for SDWP



Safety Training: Fork lifting operation (MENARD)

Table-30: HSE training for the month of December 2020

S/N	Training	Number of Personnel Trained
MENARD	1 Crane Lifting	24
	2 Forklift Operation	24
	3 Manual Handling	18
	4 Working at Height	10
	5 Hand and Finger Safety	10
CAMCE	1 GWT Life Saving Rules	3
SDWP	1 HSE Induction	10
	2 GWT Life Saving Rules	10
GWT/SNC	1 HSE Induction	16
	2 GWT Life Saving Rules	16

73 There was no workshop and seminar in this SEMR reporting period because of worldwide covid-19 pandemic.

B. Incident/ Accident Reports

74 The following is a brief report on incidents and accidents at sites during the reporting period.

Table-31: Incident/ Accident of the Construction Sites

Occurrence Date/ Site	<i>Description</i>	<i>Consequence</i>	<i>Action Taken</i>	<i>Present Status</i>
15 th Dec '20; 17:15H WTP	The fuel tube of a Fogger Machine, during working at the WTP pool area, got blocked and breakout a small fire. This caused a leaking of oil as well.	The fire didn't cause any harm to anyone. No visual leakage was noticed in the machine.	The Fogger Machine was sent to servicing to fix and ensure that there was no leak.	The Machine is functioning properly.
3 Nov '20; 13:00H Intake (Driving from Araihasar to Intake)	Losing control of brakes, a Motor Bike raider bumped into GWTSNC Double Cabin Hilux Truck.	Minor dents to hood door and bumper caused by the accident.	The Car has been repaired of minor dents.	The car is functioning properly.
9 Nov '20; 12:00H WTP (Driving from WTP to base Camp)	MENARD's passenger carrying vehicle hit the road blocker while leaving the project site.	Bumper and some body parts got damaged.	The vehicle gone through repair. Safety stands down meeting conducted.	Everything is functioning properly.
17 Nov'20; 19:45H (WTP workplace)	The excavator bucket working at access Ram for the construction of working platform pulled out the electrical cable (220 volts light pole Elec line).	The electrical cable damaged but there was no personnel injury.	The damaged cable was replaced. GWT management took decision for a joint inspection with the sub-contractors.	Everything is functioning properly.
11 Oct'20; 19:45H WTP (Site accommodation)	A fire outbreak near electrical distribution board at the ground floor.	17 number 10 RM power cables were burnt about 12 inch in length. The AutoStart system of the generator was damaged due to the power fluctuation at MBD caused by loose connection at the transformer point (REB side). There was no casualty.	Disconnected the cables from the source of fire and extinguished the fire using CO2. Burnt power cables were replaced. The AutoStart system of the generator was fixed. GWT arranged a 3rd party assessment.	Everything was functioning properly thereafter.
19 Oct '20; 19:25H Intake (Life Camp Watch Tower)	Noticed electrical sparking at Security Watch Tower No-5.	2 number 1.5 RM power cables were burnt about 3 inch in length. The root cause is overload on 1.5 RM Electrical cable. Electrical cable was hot due to overload and burnt on poor	Disconnected the damaged cables from the source of sparking caused due to use of under graded cables and was replaced by 2.5 RM cable.	Everything was functioning properly thereafter.

Occurrence Date/ Site	Description	Consequence	Action Taken	Present Status
		cable connection point.		

4.2.7 HSE Audit

75 The GWT has conducted several internal HSE Audit from August to October 2020 at WTP & Intake sites. As a part of the internal audit program of the project, GWT and MDSC HSE Teams conducted the first joint internal HSE Audit during 16th to 18th August 2020 at WTP site based on the requirement of ISO 19011:2018 International Audit Guidelines. The audit assisted CAMCE, a Sub-contractor, to evaluate implementation and effectiveness of their HSE Management System for WTP site and improve its deficiencies. MDSC informed GWT about its plan for second Internal Audit in February 2021 at WTP and Intake sites. MDSC is continuing its weekly H&S inspections on a regular basis since August 2020.

4.2.8 HSE Observation

76 A routine observation on adherence to HSE issues is conducted weekly in all the project sites. Failure to adhere with HSE protocol is recorded as negative observation and mitigation measures are put in place. Non-adherence could result fatal injuries including deaths. The observations are categorised under following items.

- | | | | |
|-----------------------|--------------------|------------------------|----------------------------------|
| - Access & Egress | - Equipment | - Lifting Activity | - Road Transport |
| - Defective Hand Tool | - Excavation | - Lifting Gear | - Scaffold |
| - Electrical | - Fire Prevention | - Positive Observation | - Working at Height |
| - Employees Welfare | - Health & Hygiene | - PPE | - Unsafe Condition |
| - Environment | - Housekeeping | - PTW/TRA/Procedure | - Chemical-Unsafe Act/ Behaviour |

77 In the SEMR period, there were all-together 1402 observations comprised of 1268 negative and 137 positives. The major observations during the period were on Environment, Housekeeping, Electrical, Unsafe Condition, Lifting Activity, PPE, Health & Hygienic and Access & Egress.

4.2.9 HSE Inspections

78 Almost every week, the MDSC inspectors visited the constructions sites as well as noted the gathered issues during their HSE inspections. After every weekly HSE inspections, MDSC prepare a short field visit report by amassing the weekly field observations and field pictures. This report is sent to the GWT contractor for their necessary corrective measures. GWT contractor responded the report's queries and close out the issues as early as possible and then inform MDSC through email with pictorial evidences. GWT contractor is regularly improving their environmental issues through their regular closing out of the observations of HSE inspections of MDSC. In this SEMR period the following important HSE issues has been notified to the Contractor's HSE officers to close out as early as possible:

- Shortage of toilet units and drinking water points in both the construction sites and check the drinking water quality periodically;
- Unmanaged disposal of cement slurry, dust control, housekeeping, waste management at WTP site and in few other locations at Intake site;
- Stairs at the entries of WTP main construction site are not properly designed and constructed. Especially the slope and unfinished steps would be difficult for workers in any emergency evacuation;

- CAMCE's Generator is operating at WTP site without Canopy, which is noncompliant to the corrective measure of noise pollution;
- Side walls at the Ramp edges at Batching plant of CAMCE and SDWP need to be added to reduce the accident risk;
- The oil storage platform should be painted should be self-levelling water borne epoxy floor paint to manage properly the spilled oil at both WTP and Intake sites;
- Absence of uncontrolled platform would cause spillage of lubricant at the WTP site;
- Smoking outside the designated smoking area were noticed during the field visit at both WTP and Intake site.

79 A sample inspection is attached in the Appendix section of this SEMR as Appendix-G.

4.2.10 Public Consultation and FGD meeting

80 DORP is working for the information disclosure and consultation such as public consultation, community meeting, focus group discussion (FGD), personal contact, etc. for this project. In this SEMR period, DORP has conducted 82 community meetings, 1 large public consultation and 2 FGDs to develop resettlement and livelihood restoration plan in the Section 1, 2, 3, 4, 5 and 6. Total numbers of participants were 1095 (326 male and 769 female). Eleven (11) DORP staff were present for conducting meetings in the two field areas of Arahazar and Rugganj. Minutes of Public Consultation is attached as Appendix-H. Two FGD minutes have appended as Appendix-I and Appendix-J. The summary minutes of the consultations is provided in Appendix-K. Main discussion points were: papers required in receiving compensation from Deputy Commissioner's office and additional payment/ other resettlement benefits from DWASA; land value at road side a Rugganj area; payment for loss of business, trees etc.; providing support to the ongoing/ensuing project construction work by the affected persons; explain Dedicated Account to the affected persons; affected persons entitlements; Take away or removal of the structures from the project acquired land; changing of alignment and need for resurvey; serving notice under section-7(1) and 8(3) (ka); receiving IGA training under LIRP; involve in income generating activities; investment of compensation, additional and other resettlement benefits in income generating activities; Grievance Redress Mechanism; and COVID-19 awareness campaign, etc. Affected persons were very keen to know about the above-mentioned issues.

4.2.11 Grievance Redress Mechanism - Complaints

81 Two GRC meetings were held during this period; one on 4 November 2020 regarding complaints (13) of Section 2 and another on 20 December 2020 regarding complaints (61) of Section 4. Out of those 74 cases, 3 were forwarded to Deputy Commissioner's office, 56 were rejected (1 of them built structure after cut-off-date and 55 (in RP Section 4) has no authenticity of crop compensation), 6 suggested for payment, 5 remains pending due to submergence of their lands, 1 advised for submitting supporting papers and the remaining 3 were absent in the hearing meeting. Minutes of 3rd and 4th GRC are attached as Appendix-L and Appendix-M. Summary of these two minutes is attached as Appendix-N.

5 CONCLUSIONS

83 This SEMR report is prepared based on Monthly progress report of the contractor as well as information of the Monthly and Quarterly progress reports of MDSC and the periodic site inspection done during the ongoing construction stage of this project. Due to accessibility issues attributed to restrictions associated with Covid-19, implementation of environmental safeguards is hindered especially the solid waste management, dust suppression etc. in the construction sites.

84 The GWT contractor's environmental compliances found improving slowly but steadily during this period though some environmental issues are repeatedly addressed to them for their improvement. MDSC is doing regular monitoring of the contractor's HSE activities and contractor is trying to respond accordingly by taking quick actions against the inspected issues. A matrix is summarized below with the corrective actions against the observed gaps of this reporting period.

Table-32: Corrective Actions for Contractor for compliances of H&S and environmental issues

Sl. No.	H&S and environmental Issues	Location		Corrective Action
1.	Implementation of dust control	WTP	INTAKE	Increase dust suppression by spraying of water during dry season, limiting speed of heavy vehicles and cars inside the construction sites, posting of sign boards for limiting vehicle's speed (5km/h), paving of internal road (if possible) for the movement of heavy vehicles and overall conduct training for the working staffs to minimize dust generation.
2.	Noise control			Use ear muff in the high noise area particularly for the workers of batching plant and Generator area. Use of canopy for Generator if not available, avoidance of night works especially pile driving.
3.	Traffic management	WTP	INTAKE	Use of proper Signage for limiting the vehicle speed as well as parking in designated areas only, no access for unauthorized vehicles to construction sites
4.	Safety measures	WTP	INTAKE	Safety signage, drill, induction and training of staff on H&S and environmental issues
5.	Wastewater Quality	WTP	INTAKE	To curb the treated sewage waste water concentration within the ECR'97 standard, contractor should have hands-on training on the improvement of maintenance on the waste water treatment plant (WWTP) by the supplier of WWTP.
6.	Drinking Water Quality	WTP	INTAKE	Provide adequate and sufficient potable water facilities for the workers and test the drinking water on a regular basis to ensure the drinking water quality.
7.	Waste Management	WTP	INTAKE	Ensure Waste segregation at source for recycling the waste following the Waste Management Plan
8.	Housekeeping	WTP	INTAKE	Improve the housekeeping all over the construction sites
9.	Stagnant storm water	WTP	INTAKE	Provision of appropriate drainage of storm water to avoid stagnant water and water borne diseases (Dengue)
10.	Soil contamination due to improper storage of oil and hazardous substances and liquids	WTP	INTAKE	Provision of soil clean-up kits, appropriate storage of oil and hazardous substances in collection trays

85 Due to the regular H&S and environmental inspections of MDSC consultant the contractor has

improved the following issues:

- Housekeeping of the Construction materials;
- Protection of health and safety of the workers, as well as the community and use of individual protection means, PPE, first-aid support;
- Proper safety signs and other methods are applied to prevent unwanted entry of people to the construction sites;
- Training for workers on appropriate methods considering the workers occupational health and safety;
- Prior health check-ups of workers involved in the construction works;
- Emergency rescue and evacuation plan for ensuring immediate and appropriate actions in the event of a fire;
- Practising of smoking in designated areas by installing designated smoking place in the construction areas.
- Overall complying with site specific EMP of the construction sites.

SAUW Semi-Environmental Monitoring Report Review – Information Log

Instructions: Provide information based on SEMR submitted by Project Management Unit (PMU). This log sheet will serve as record of the review findings, comments, and/or further actions. A copy of the SEMR log sheet should be (i) provided to PMU for their record; (ii) attached to the SEMR to be disclosed on ADB website; (iii) used as reference for review of next SEMRs; and (iv) inputted in the SARD Safeguards Compliance Tracking System.

Project title:	Dhaka Environmentally Sustainable Water Supply Project			
Loan Number:	BAN 3051	Project Number:	42173-013	
Overall Project and Objectives	The project will expand the coverage and quality of water supply in Dhaka, Bangladesh's fast-growing capital city. The project will include the development of a new raw water intake at the Meghna River - about 30 kilometers east of the city, a treatment plant at Gandharbpur capable of handling 500 million liters a day, transmission pipelines, and distribution network improvements			
Approved Categorization		Category A		Category C
	x	Category B		FI
Loan Effectivity Date:	23 Feb 2015		Frequency of Reporting	Semi-annual
Project Officer	Momoko Tada		Project Analyst	
Reporting Year		Coverage Period		1 st SEMR of the year
			x	2 nd SEMR of the year
Date of PMU submission to ADB		3 April 2021	Date of ADB's feedback/comment to PMU	23 June 2021

Item	Findings in the SEMR	Comments	Action/s Required	Response by PMU
A. Project Safeguards Team (check loan agreement and PAM requirements)				
PMU ¹	A safeguard officer is designated- Md. Saidur Rahman	Complied. PAM requirements: 1 Environmental Officer at Assistant Engineer Level (SIU)	None.	Noted.
PIU ²	Not Applicable	No PIU in the institutional arrangement.	None.	Noted.
Consultants	ICB 2.7 – MSC was not engaged during the reporting period. Package 1, 2, 3.1- Mott MacDonald Ltd (MDSC), Int. Environmental Specialist, National Environmental Specialist, Environmental Inspector	It was mentioned in past SEMRs that the positions for Environmental Monitoring Expert and Environmental Inspector of MSC were voided when the man-month was completed in November 2017, since then, DWASA's Environmental Safeguards	Ensure that the PMU's Environmental Safeguards Officer continues to implement environmental safeguards responsibilities for the remaining construction activities (pipe laying and service connection) and during post-construction and	Noted.

¹ PMU – project management unit

² PIU – project implementation unit

Item	Findings in the SEMR	Comments	Action/s Required	Response by PMU
		Officer has been performing the monitoring and supervision responsibilities. It is also noted that the works for ICB 2.7 are almost completed during the period so environmental team members of the MSC were no longer employed.	operation phase in the absence of MSC.	
Others (e.g. auditor, external monitoring team, etc)				
B. Overall Project and Subproject Description (summarize number and type of packages) ³				
Number of Packages with civil works (check if consistent with latest procurement plan)	6 packages ICB 2.7 (DMA 601-616) NCB 4.1/DESWSP/2018-DWT NCB 4.2- Construction of DTW and WL at intake area ICB-01/B&D/DESWSP/2014 - Package 1 (21 km pipeline and WTP) ICB-3.0/TWP/DESWP/2018- Package 2 (pipeline from WTP) ICB 3.1/DRP/DESWSP/2018- Package 3.1 (22 km distribution pipelines)	Consistent with the latest procurement plan Package 3.2 will be under the additional financing.	None.	Noted.
Number of DB/DBO packages and status (see footnote 3)	1 DBO Package ICB-01/B&D/DESWSP/2014 - Package 1 (21 km pipeline, intake and pump station,	Consistent with the procurement plan	None.	Noted.

³ DB/DBO – design-build or design, build, and operate or where contractor will finalize the detailed engineering design; civil works contract – enough details of the package is known and used as basis for bid/contract’s Technical Specification

Item	Findings in the SEMR	Comments	Action/s Required	Response by PMU
	and WTP)- Construction phase, contract was signed on 16 May 2018 (preparatory works started in May 2019).			
Number of civil works packages and status (see footnote 3)	<p>5 packages</p> <p>ICB 2.7 (DMA 601-616)- Awarded and implementation is on-going. (99.12% physically completed)</p> <p>NCB 4.1 -awarded; will be completed within March 2021.</p> <p>NCB 4.2/DEWSP- Not yet awarded.</p> <p>ICB- 3.0/TWP/DESWP/2018- Package 2 (treated water pipeline from WTP)- pre-construction</p> <p>ICB 3.1/DRP/DESWSP/2018- Package 3.1 (22 km primary distribution pipelines)- pre-construction</p>	None.	Please confirm that Packages 2 and 3.1 are not yet awarded. If awarded, indicate the dates of contract award and name of contractors, and designated Officers.	<p>PMU confirms that Package 2 has been awarded in March 2021.</p> <p>PMU also confirms that Package 3.1 is not yet awarded.</p>
IEEs cleared for awarded packages?	<p>ICB 2.7 (DMA 601-616)- Draft and updated IEEs were reviewed and cleared by ADB</p> <p>ICB- 01/B&D/DESWSP/2014 - Package 1 - IEE prepared during appraisal (2013), updated during detailed</p>	Complied.	None.	Noted.

Item	Findings in the SEMR	Comments	Action/s Required	Response by PMU
	design (January 2020), and cleared in November 2020.			
Safeguard documents disclosed on project website?	<p>ICB 2.7 (DMA 601-616)- Draft and updated IEEs are disclosed in ADB's website.</p> <p>Package 1, 2, 3- IEEs are disclosed in ADB's website</p> <p>Project website of DWASA lists down safeguards reports for the packages, but the reports are inaccessible.</p> <p>SEMRs -Yes</p>	Safeguards reports in DWASA's website are inaccessible.	In the next SEMR, please confirm that the reports are already accessible through the DWASA website. Provide the link.	Noted.
SEMR information on package-wise implementation phase (bidding, on-going, construction, completed, under operation, others)	Discussed for all packages	None	None	Noted.
C. Status of compliance with statutory clearances (check IEE for the complete list, summarize the findings for each package – obtained/under application and if obtained, specify validity period)				
Environmental Clearance (EC) Forest Clearance No Objection Certificate/Letter Site location clearance Permit/Consent to Construct (or equivalent) Permit/Consent to Operate (or equivalent) Road-cutting permit Utilities shifting permit Tree-cutting permit Others (specify)	<p>ICB 2.7- ECC (DoE Clearance) is obtained and renewed.</p> <p>Package 1, 2, 3.1- NOCs from RHD, RAJUK, LGED, BIWTA, Cantonment Board, ECC (valid until 10-12-2020) were obtained. ECC validity's extension to 2021 is under preparation.</p>	<p>For Package 1, 2, 3.1- Permits/clearances table is provided but dashes (-) were indicated for some permits/clearances. The meaning of the dashes is unclear.</p> <p>The letter on ECC extension until December 2021 is attached in the SEMR. This was approved in January 2021 (after the monitoring period).</p>	<p>In the next SEMR, please:</p> <p>(i) discuss clearly which permits/clearances are required, and which are not, which are obtained, and which are pending, for Packages 1, 2 and 3.1;</p> <p>(ii) indicate compliance status with environment-related conditions of the permits;</p> <p>(iii) for pending permits/clearances/ compliance with relevant condition (if any), discuss the necessary actions and updates, if any;</p> <p>(iv) attach copies of obtained permits (with English translation); and</p>	Noted.

Item	Findings in the SEMR	Comments	Action/s Required	Response by PMU
			(v) attach a copy of the renewed ECC since extension was approved in January 2021.	
D. Status of Compliance with loan covenants <i>(verify items in SEMR with the project's loan agreement)</i>				
<p>Procurement of goods, works and consulting services (Schedule 4, Item 8)</p> <p>The Borrower shall not issue a notice to commence Works under: (a) any Works contracts which involves environmental impacts until: (i) the Borrower's Department of Environment has granted the approval of the IEE (including approval of separate environmental impact assessment required to be prepared under Bangladesh law); and (ii) the Borrower has incorporated the relevant provisions from the EMP into the Works contract; and</p>	<p>Complied/under progress. For awarded contracts with ongoing construction activities (ICB 2.7 and Package 1), draft and updated IEEs were approved by the DoE.</p>	<p>None</p>	<p>None</p>	<p>Noted.</p>
<p>Safeguards environment (Schedule 5, Item 3)</p> <p>The Borrower and DWASA shall ensure that the preparation, design, construction, implementation, operation and decommissioning of the Project and all Project facilities comply with (a) all applicable laws and regulations of the Borrower relating to environment, health and safety; (b) the Environmental Safeguards; and (c) all measures and requirements set forth in the IEE, the EMP, and any corrective or preventative actions set forth in any Safeguards Monitoring Report to be provided to ADB.</p>	<p>Complied/under progress.</p>	<p>None</p>	<p>Ensure that EMP requirements (e.g. environmental monitoring, etc.) in approved IEEs, including corrective actions identified based on the monitoring reports, are duly implemented, monitored, and reported in the SEMRs.</p>	<p>Noted.</p>

Item	Findings in the SEMR	Comments	Action/s Required	Response by PMU
Human and financial resources to implement safeguards requirements (Schedule 5, Item 6) The Borrower and DWASA shall make available necessary budgetary and human resources to fully implement the EMP and the RP.	Complied. Environmental positions in MSC for ICB 2.7 was not filled since 2017 but PMU is performing responsibilities of monitoring and supervision. PIU Environmental Officers are also designated. MDSC is engaged for P1, P2 and P3.1.	None	Ensure that the PMU's Environmental Safeguards Officer continues to implement environmental safeguards responsibilities (e.g. monitoring, supervision, reporting) for the remaining construction activities (pipe laying and service connection) and during post-construction and operation phase in the absence of MSC.	Noted.
Safeguards-related provisions in bidding documents and works contracts (Schedule 5, Item 7)	Provisions are complied with/under progress/addressed as required. Contractors are required to submit SEMP for approval of the PMU.	None	None	Noted.
Safeguards monitoring and reporting (Schedule 5, Item 8)	Monitoring reports (MR) are submitted and disclosed thru the ADB website and are listed in project website. Contractor EHS officers are appointed.	None	Check disclosure in project website to ensure that monitoring reports are accessible.	Noted. PMU will ensure that monitoring reports are disclosed on project website. This will be reported in the next SEMR.
Prohibited list of investments (Schedule 5, Item 12)	Not discussed.	See action/s required.	Please confirm that this is complied.	This is complied and will be discussed in the next SEMR.
Grievance Redress Mechanism (Schedule 5, Item 15)	Complied. GRMs are established and are functional.	See action/s required.	None.	Noted.
Labor standards (Schedule 5, Item 13)	Complied. Occupational health and safety measures are implemented and reported in the SEMR.	None	None.	Noted.
E. Contractors Compliance with Environmental Safeguards Requirements				
Appointment of Environment, Health and Safety (HSE) and/or nodal person	ICB 2.7 – Yes Package 1- Yes	None.	None.	Noted.
Submission of site-specific EMPs	ICB 2.7- Yes. Package 1-Yes	None.	None.	Noted.

Item	Findings in the SEMR	Comments	Action/s Required	Response by PMU
Submission of SEMP implementation report (<i>specify in comments frequency – daily, weekly, monthly or quarterly basis</i>)	ICB 2.7- Not mentioned. Package 1- monthly progress report is submitted by the contractor	See Action/s Required	Confirm if SEMP implementation report/s was/were submitted by the Contractor for ICB 2.7 for the remaining works during the Jul-Dec 2020 period. If not, please ensure that these are attached in the next SEMR.	Noted. No implementation reports were prepared because works have almost been completed and no significant progress during the reporting period. However, for any remaining works under ICB 2.7 for the next reporting period, implementation reports will be included in the next SEMR.
Site verification by PMU, PIU, or consultants (<i>verification report should be attached to the SEMR</i>)	ICB 2.7- site inspection reports were attached Package 1- MDSC is continuing its weekly H&S inspections on a regular basis since August 2020. Sample inspection report is attached.	None.	None.	Noted.
SEMR compliance matrix on mitigation measures implementation (matrixes are based on approved SEMP)	Discussions were provided but compliance matrix was not found.	See Action/s Required	In the next SEMR, please present EMP compliance through an EMP compliance matrix (For ICB 2.7, present construction, post-construction and operation phase EMP compliance; For Package 1, present construction phase EMP compliance). Refer to the EMP in the approved IEEs.	Noted. Complete matrix based on the EMPs in the IEEs will be used in the next SEMRs.
Other information	-	-	-	-
F. Environmental Monitoring based on EMP				
Rationale				
Parameters to be monitored are commensurate to the impacts, mitigation measures, and project/subproject/package	ICB 2.7 – water quality parameters monitored were identified Air quality parameters- not identified	For ICB 2.7- Site observations of noise levels, visible increase in dust levels and particulate matter, and turbidity are required during construction phase per approved IEEs. It is noted that ICB 2.7 still	For ICB 2.7- Moving forward, please ensure that mitigation and monitoring measures for remaining construction activities (if any), and post-construction phase are implemented. Document compliance thru a	Noted. Complete matrix based on the monitoring plans in the IEEs will be used in the next SEMRs.

Item	Findings in the SEMR	Comments	Action/s Required	Response by PMU
	<p>Per general comment provided in the SEMR, works are almost complete during the reporting period, and no discussions and results were provided except the reference to completed air and noise level monitoring phase-wise, and water quality for the handed-over components.</p> <p>Package 1</p> <p>Water quality- Intake water quality (various parameters, BOD, TSS, Hardness), treated wastewater quality parameters, drinking water quality results were presented</p> <p>No monitoring of water quality in Megna River (downstream of intake) from Sep to Dec 2020.</p> <p>Air -PM10, PM2.5 were presented</p> <p>Noise- daytime and night time noise were monitored</p>	<p>has remaining works during the reporting period, thus these monitoring activities are still required.</p> <p>Package 1-</p> <p>Downstream water quality-required per IEE are TDS, TSS, pH, Hardness, BOD and Fecal Coliform. It was noted in the IEE that only turbidity would be affected by the activities. Only 3 out of 6 IEE-required parameters were presented (BOD, TSS and Hardness).</p> <p>Air- required per IEE are PM 10, 2.5, SOx, NOx, and CO. Only 2 out of 5 parameters per IEE were monitored (PM 10 and PM2.5).</p> <p>Noise- complied.</p>	<p>compliance matrix in the next SEMR. Refer to the EMP in the approved IEEs.</p> <p>Package 1- Please ensure that in the next reporting periods, monitoring parameters are consistent with the approved monitoring program in the IEEs. Provide results and discussion in the next SEMR. Provide explanation or justification for any deviation.</p>	
<p>Sampling locations identified and appropriate</p>	<p>ICB 2.7- water sampling locations for two sites were provided 613 and 615</p> <p>Air quality and noise sampling stations- not identified</p>	<p>Complied</p> <p>ICB 2.7- Only visible increase in dust level and turbidity are required per the IEE. No sampling was prescribed for air and water quality.</p>	<p>For Package 1- Continue monitoring air, noise and water quality in prescribed sampling stations and frequency in the approved IEEs. Provide explanation or justification for any deviation.</p>	<p>Noted.</p>

Item	Findings in the SEMR	Comments	Action/s Required	Response by PMU
	<p>Package 1- Locations for measurements are identified in the IEE. Three ambient air quality stations within the construction sites were presented in the SEMR. Noise levels in the WTP site and Intake site were monitored</p> <p>Water- Intake, treated wastewater, drinking water</p>	<p>For noise, baseline and monitoring during construction is required.</p> <p>However, ICB 2.7 is almost complete and sampling will no longer be useful.</p> <p>For Package 1- Sampling stations represented the project area.</p> <p>Water- required per IEE is at intake/150 meters downstream of source of impact</p>		
Sampling frequency identified and appropriate	<p>ICB 2.7 -Not discussed. Although water quality was done in July and December.</p> <p>Package 1: Complies with frequency prescribed in IEE however, gaps in monitoring months were noted due to COVID-19.</p>	ICB- only noise level monitoring was required but the frequency was not prescribed		
Sampling collection and analysis are in accordance with internationally-accepted practices	<p>ICB 2.7 -Not discussed.</p> <p>Package 1- portable electronics noise level meters and portable electronic air quality monitoring meter</p>	ICB 2.7 is almost completed.	Continue providing discussions on sampling and analysis methods, and comparison with applicable national standards/IFC EHS Guideline Values.	Noted.
Standards and performance indicators are compliant with ADB SPS requirements ⁴ (provide justification if less stringent standards are used)	<p>ICB 2.7 - Standard/performance indicators were not used/presented</p> <p>Package 1- Yes. Bangladesh National</p>	ICB 2.7 is almost completed.		Noted.

⁴ ADB SPS (Appendix 1 para 33) requires projects to apply pollution prevention and control technologies and practices consistent with international good practices as reflected in internationally recognized standards such as the World Bank Group's Environmental, Health and Safety Guidelines (<https://www.ifc.org/ehsguidelines>). These standards contain performance levels and measures that are normally acceptable and applicable to projects. When host country regulations differ from these levels and measures, the borrower/client will achieve whichever is more stringent. If less stringent levels or measures are appropriate in view of specific project circumstances, the borrower/client will provide full and detailed justification for any proposed alternatives that are consistent with the requirements presented ADB SPS.

Item	Findings in the SEMR	Comments	Action/s Required	Response by PMU
	Ambient Air Quality Standard (BNAQS)			
G. Environmental monitoring results (narrative based on presented results)				
Visual inspection (<i>refer to EMP tables in the IEE where visual inspections are required to determine if there are environmental impacts</i>)	<p>ICB 2.7- not specified, but monthly site inspection reports were attached.</p> <p>Package 1- weekly site inspection is conducted</p>	<p>ICB 2.7- Per approved monitoring program in the IEEs, visible increase in dust (air quality) and turbidity (water quality) are to be checked at the site. No ambient air or water quality sampling was recommended. Vehicle emission testing records also to be checked. Other verification through records indicated in the approved EMP. However, ICB 2.7 is almost completed.</p> <p>Package 1- Per approved IEE, weekly site inspection</p>	<p>For ICB 2.7- Moving forward, please ensure that mitigation and monitoring measures for any remaining construction activities and during post-construction phase are implemented. Document compliance thru a compliance matrix in the next SEMR.</p> <p>For Package 1- Continue monitoring appropriate environmental quality parameters according to the approved IEE, in the next reporting periods. Provide explanation or justification for any deviation.</p>	<p>Noted. PMU expects that all works under ICB 2.7 will be completed in the next reporting period. However, for any environmental monitoring in the next reporting period, compliance matrix will still be provided in the next SEMR.</p> <p>For Package 1, environmental quality monitoring will be continuing activity. Any deviation or non-compliance will be explained and provided with corrective action plan.</p>
Air quality results	<p>ICB 2.7 – conducted but not presented</p> <p>Package 1- exceedances in PM10 and PM 2.5 were observed at the sampling stations.</p>	<p>ICB 2.7- visible increase in dust level are required per IEE</p> <p>Package 1- Corrective actions were provided.</p>		
Water quality results	<p>ICB 2.7 – pH, turbidity, conductivity, TDS, total hardness (6 stations)</p> <p>Package 1- water quality at intake, drinking water supply and treated wastewater quality results were presented. Treated wastewater quality at WTP and Intake site exceeded the DoE's standards (WTP- conductivity, dissolved oxygen and BOD, Intake Site- Total coliform).</p>	<p>ICB 2.7- observation of visible increase in turbidity is mentioned in the IEE</p> <p>Package 1- Corrective actions were provided.</p>		

Item	Findings in the SEMR	Comments	Action/s Required	Response by PMU
Noise level results	ICB 2.7 – conducted but results are not presented Package 1- noise levels exceed ambient standards for mixed area	ICB 2.7- monitoring is required per approved IEEs Package 1- corrective actions are provided.		
Others	Baseline environmental conditions (air, water, noise): ICB 2.7 – No Package 1-presented	ICB 2.7- baseline survey of noise was included in costing. However, ICB 2.7 is almost completed.		
H. Consultations and/or FGDs during the reporting period				
Number	ICB 2.7 – None. Package 1- 82 community meetings, 1 large public consultation and 2 FGDs conducted, covering various topics including GRM and COVID-19.	Meaningful consultations must continue throughout the implementation of the project.	Continue implementing stakeholder consultations and provide updates in the next SEMRs. Document any health, safety and environment concerns from affected stakeholders.	
Reason/s for consultations/FGDs	Resettlement and livelihood restoration None for environmental concerns		Include in the report corrective actions based on the concerns raised by the affected stakeholders, as necessary.	
Number of participants	-			
Number of female participants	-			
I. Trainings, Workshops, Seminars during the reporting period				
Number	ICB 2.7- not discussed. However, it was noted in the SEMR that “all workers are well-trained and duly supervised during working hours.” Package 1- 10 trainings per Table 25	ICB 2.7- It was also mentioned in the Jan-Jun 2020 SEMR that weekly assembly and trainings were conducted for the working people in relation to staying safe from COVID-19. Construction is almost completed.	Continue conducting trainings/workshops/seminars for Package 1 and remaining packages that are about to begin with construction and provide updates in the next SEMRs.	Noted. Trainings will continue under P1, P2 and P3.1. However, trainings will not be expected under ICB 2.7 because this package is almost completed. Trainings have been done during the earlier period of ICB2.7 implementation.
Topics	Package 1-different HSE topics for MENARD,	None.		

Item	Findings in the SEMR	Comments	Action/s Required	Response by PMU
	CAMCE, SDWP, HSE induction			
Number of participants	Package 1- Training of 241 contractor personnel	None.		
Number of female participants	Package 1- mentioned in the report	None	None.	
J. Grievance Redress Mechanism				
GRM per PAM or IEE/EARF established	ICB 2.7- GRM is per approved IEEs Package 1- GRM is per approved IEE	For ICB 2.7- GRM notification was not found in previous and current SEMRs.	Confirm if GRM under ICB 2.7 were notified to the public. Attach copies of GRM notification in the next SEMR.	This is confirmed. GRM notification and report on any capacity building activities will be included in the next SEMR.
GRM notified via publication or notice boards	Package 1- Yes (gazette notification)		For both Packages, please confirm that capacity building activities were conducted for the GRM members. If not, please conduct in the next reporting period, and provide updates in the next SEMRs.	
GRM members identified	ICB 2.7 - 5 member GRC headed by the Executive Engineer PMU Package 1- Yes (PMU, local GRC-LGU representatives, NGO AHs, women AHs)			
GRM members have capacity to address project-related complaints (<i>detailed information on capacity development of GRM members such as trainings, workshops, briefings, etc should be attached in the SEMR</i>)	ICB 2.7, Package 1- Not discussed.			
Number of meetings conducted (<i>attach minutes of the meeting</i>)	ICB 2.7 - 2 meetings Package 1- 2 meetings		None.	
K. Complaints Received (<i>detailed information on nature of complaints, summary and status of resolution</i>)				
Number of complaints	ICB 2.7- None for the period Package 1- total of 74 complaints	Package 1- Per response in the comments matrix, there is no pending HSE-related complaint.	None.	Noted.
Nature (<i>provide summary of issues/concerns</i>)	Compensation, submergence of lands,	None.	None.	Noted.
Status of resolution	5 remains pending due to submergence of their land	See Action/s required.	PMU is requested to provide more details in the next SEMR and confirm whether these complaints are related to any Environment, Health and Safety concerns or not.	Noted. Resolution of these pending complaints will be discussed in the next SEMR.

Item	Findings in the SEMR	Comments	Action/s Required	Response by PMU
			If complaints are EHS-related, PMU to provide information on actions undertaken (if any), and or actions to be taken to resolve the issue and provide updates in the next SEMR.	
L. Summary of Issues and Corrective Actions				
Major issues/concerns (specify)	All packages- None for the period		None.	Noted.
Corrective Action to be implemented, timeline, responsible person/s, and budget are clearly specified	<p>ICB 2.7- No corrective actions were provided. However, observed gaps in implementing safety measures (i.e. use of PPE) were noted in the EHS inspection reports.</p> <p>Package 1- Corrective actions were listed in a matrix.</p> <p>Separate corrective action plans were provided for the elevated ambient air quality and high noise level at the WTP site.</p>	None	<p>For ICB 2.7- Please implement corrective actions for observed gaps on the use of PPE. Provide status in the next SEMR.</p> <p>For Package 1- Provide status of implementation/target closure in the next SEMR.</p> <p>Ensure to effectively implement the corrective action plans for elevated ambient air quality and high noise level at the WTP site, including conduct of sampling.</p>	Noted. Implementation of corrective actions on observed gaps and for elevated ambient air quality and high noise level at the WTP site will be discussed in the next SEMRs.
M. Status of Corrective Action Plan from Previous Reporting Period (list all and provide status)				
Not applicable.				
N. Appendixes				
Photos included?	ICB 2.7 -Yes Package 1- Yes	None	None	
Summary of consultations included?	ICB 2.7- Yes Package 1-Yes	None	None	
Copies of environmental clearances and permits included?	Package 1-Yes (renewed ECC, Jan 2021)	None	None	
Site EMPs (attach sample?)	None	None	None.	
Checklists?	ICB 2.7 and Package 1- Yes (EHS Inspection Checklists)	None	None	
Others	ICB 2.7 and Package 1- Incident reports	None	None	

Item	Findings in the SEMR	Comments	Action/s Required	Response by PMU
	Package 1 Environmental Monitoring Reports from Contractors			
O. Review and clearance for disclosure				
Reference	11 th SEMI-ANNUAL ENVIRONMENTAL SAFEGUARD MONITORING REPORT, Dhaka Environmentally Sustainable Water Supply Project (DESWSP) ADB Loan No. 3051-BAN			