

Semi-Annual Environmental Monitoring Report

Project number: 42173-013

Period: July – December 2019
Submission Date: July 2020

BAN: Dhaka Environmentally Sustainable Water Supply Project (PART B)

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Part B (Intake, RW Pipeline, WTP, Treated Water Pipeline & Distribution Network)

I. Introduction

A. General Information

1. This report is the Ninth Semi-annual Environmental Monitoring Report, which covers the period from July to December 2019, prepared in compliance with the environmental scope of the construction supervision of P1 Package (Tranche) of DESWSP. The main purpose of this monitoring is to ensure the implementation of environmental mitigation measures during the construction phase. Environmental issues are also anticipated to be identified in advance for avoidance and to ensure timely completion of the project. Construction work of other Packages of P2, P3.1 and P3.2 have not yet started.
2. This report is produced by the Management Design and Supervision Consultant (MDSO) providing services to the PMU Dhaka Environmentally Sustainable Water Supply Project of DWASA, Ministry of Local Government Rural Development and Cooperatives (MLGRDC) of Bangladesh Government supported by the Asian Development Bank, ADB Loan Number: 3051-BAN.
3. The Government of Bangladesh has received financing from the ADB, Agence Française de Développement (AFD), and European Investment Bank (EIB), which will be re-lent to Dhaka Water Supply and Sewerage Authority (DWASA) for the implementation of Dhaka Environmentally Sustainable Water Supply Project (DESWSP). The proposed project aims to provide safe, reliable and continuous drinking water as per Government of Bangladesh's standard to about 15 million people of Dhaka-the capital, located in the heart of the country.
4. DWASA is responsible for providing potable water supply services to about 90% of Dhaka's population, sewerage services, and storm water drainage services throughout its 400km² services areas. In fact, the city relies heavily on groundwater sources for water supply but current abstraction exceeds sustainable yields, water table levels are falling by 2 to 3 m /year and increasing numbers of tube wells become inoperable. Groundwater extraction is expected to be reduced from 1,900 MLD in 2012 to 1,360 MLD by 2020 and 1,260 MLD by 2025. In addition, ground water quality deteriorates continuously. At the same time, the overall supply needs to be increased to cater for the growing population in a larger service area.
5. Out of the total 2400 MLD currently provided by DWASA, 450 MLD is provided by the two phases of Saidabad Water Treatment Plant (WTP), which abstracts water from the nearby Shitalakhya River through an intake pumping station known as Sarulia pumping station, where water quality is deteriorating rapidly, particularly due to high ammonia concentrations during the dry season. This puts sustainable operation of the WTP at serious risk. This in turn makes it essential for DWASA to find an adequate and sustainable source of raw water to achieve its long-term development objectives.
6. The outcome of the project will be drinking water security ensured in selected district metered areas (DMAs), and in addition, gender-responsive, and sustainable drinking water service delivered in Project DMAs.
7. As discussed, the project is financed by the Asian Development Bank (ADB) and the DWASA (is the Client) is the executing agency for implementing the project. The procurement procedures and administration were performed following relevant ADB Procurement Guidelines (2010, as amended from time to time). Implementation schedule for various components is provided in the project administration manual (PAM).
8. The IEE P1 Report of July 2019 (still under updating) 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. Package 1 has been categorized as category B according to ADB guidelines (ADB SPS 2009). As described, an updated IEE has been conducted (IEE P1, July 2019) as the project is likely to have minor or limited impacts, which can easily be predicted and evaluated, and for which mitigation measures are prescribed to enable and implement monitoring of EMP commitment.

B. Objectives and Methodology

9. This Semi-annual Environmental Monitoring Report (SAEMR) intends to describe the results of monitoring the construction works from July to December 2019. Accordingly, the P1 Contractor (SUEZ) mobilized and started preliminary works in May 2019, hence during these 8 months only preparatory activities are carried out. As such no 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.
10. 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.
11. The objectives of SAEMR are:
 - i. Ensure that 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 specific actions to assist in mitigating the environmental impact of the construction; and
 - iv. Ensure that safety guidance is complied with. The site-specific 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.

C. Project Description

12. The P1 consists of the following components:
 - i. Construction of an intake at the Meghna River within the village of Bishnondi, with pumping and other facilities to deliver an uninterrupted supply of water into the transmission mains. This intends to withdraw up to 1,050 MLD from Meghna River in two phases for transmission to Dhaka city and for distribution after treatment.
 - ii. Construction of 22km raw water transmission pipelines connecting the raw water intake with the Gandharbpur water treatment plant (WTP);
 - iii. Construction of a 500-MLD surface water treatment plant at Gandharbpur, (DWASA Land).

13. 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 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").

Figure I.1: Proposed Intake location



14. 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.
15. The Project Components in details are provided in Table-1.

Table I.1: Project components

No	Sub project name	Status of sub-project				List of works	Progress of works
		Design	Pre construction	Construction	Operation Phase		
1	Package 1 (ICB-01/B&D/ DESWSP/2014)			x		Intake + pump station on Meghna River at Bisnandi, 21km raw water pipeline, and new WTP at Gandharbpur	Contractor mobilized mid May 2019. Clearing site + sand filling. Detailed design ongoing.
2	Package 2 (ICB-3.0/TWP/ DESWSP/2018)		x			14 km treated water transmission pipeline from Gandharbpur WTP to American Embassy in Dhaka	Not started
3	Package 3.1 (ICB-3.1/DRP/ DESWSP/2018)		x			22 km of primary distribution pipelines from American Embassy in Dhaka	Not started
4	Package 3.2 (ICB-3.2/FL/ DESWSP/2018)	x				43 km of feeder pipelines to DMAs in N-E Dhaka	Not started

D. Contract for Construction Supervision Services

16. Part of the project funds allocated to pay for consulting services for implementation of quality of the works involving construction of P1, P2, P3.1, and P3.2 Project components. As such, Mott MacDonald with associates are project management design and supervision consultant (MDSC) of this contract.
17. The main tasks of the Contract for Consulting Services is provision of high quality and performance of the Contract in time within budget, as well as performance of construction works in full compliance with Specifications, and FIDIC 2010 as per economic standards, and environment management plan (EMP), compliance with all Contract documents.

18. The salient information is provided below:

- i. **Package P1: Construction of Intake, RWT, & GWTP**
Contractor: SUEZ of France
 Contract Amount: USD 382,935,524.22
 Revised Contract Amount: USD N/A Contract Signed: 16th May 2018
 Location: P1 (construction of Intake, RWT, & WTP)
- ii. **Package P2: 14 km Treated Water Transmission Line from GWTP to Injection Point near US Embassy**
Contractor: N/A
 Contract Amount: N/A
 Revised Contract Amount: N/A
 Contract Signed: N/A
 Location: P2 (14 km Treated Water Transmission Line from GWTP to Injection Point near US Embassy)
- iii. **Package P3.1: Primary distribution water pipeline with 1.4-0.8 m diameter starting from US Embassy to Uttara DMA**
Contractor: N/A
 Contract Amount: N/A
 Revised Contract Amount: N/A
 Contract Signed: N/A
 Location: P2 (Primary distribution water pipeline with 1.4-0.8 m diameter starting from US Embassy to Uttara DMA)

E. Changes in Project Organization and Environmental Management Team

19. As discussed, the Executing Agency (EA) is DWASA under MLGRDC has set up a Project Management Unit (PMU)² including its national specialists to manage day-to-day coordination, implementation, and monitoring and administration activities of the project. The specialists of PMU Environmental and Social safeguard Section are assisted by MDSC. During this period, the environmental team of MDSC (environmental expert & field inspector) coordinated with those PMU specialists, checked the overall initial works and site activities from environmental perspective. The Contractor SUEZ environmental H&S Manger (Mr. Nwokedi Uchefuna) was engaged in acquiring field data and information from the beginning of the project, and Field Inspector of MDSC and MDSC construction supervision monitored the preparatory activities and collected site-specific data as part of EMMP requirement. The information of name, position and contact details of the HSE nodal person for Package 1 is shown below table.

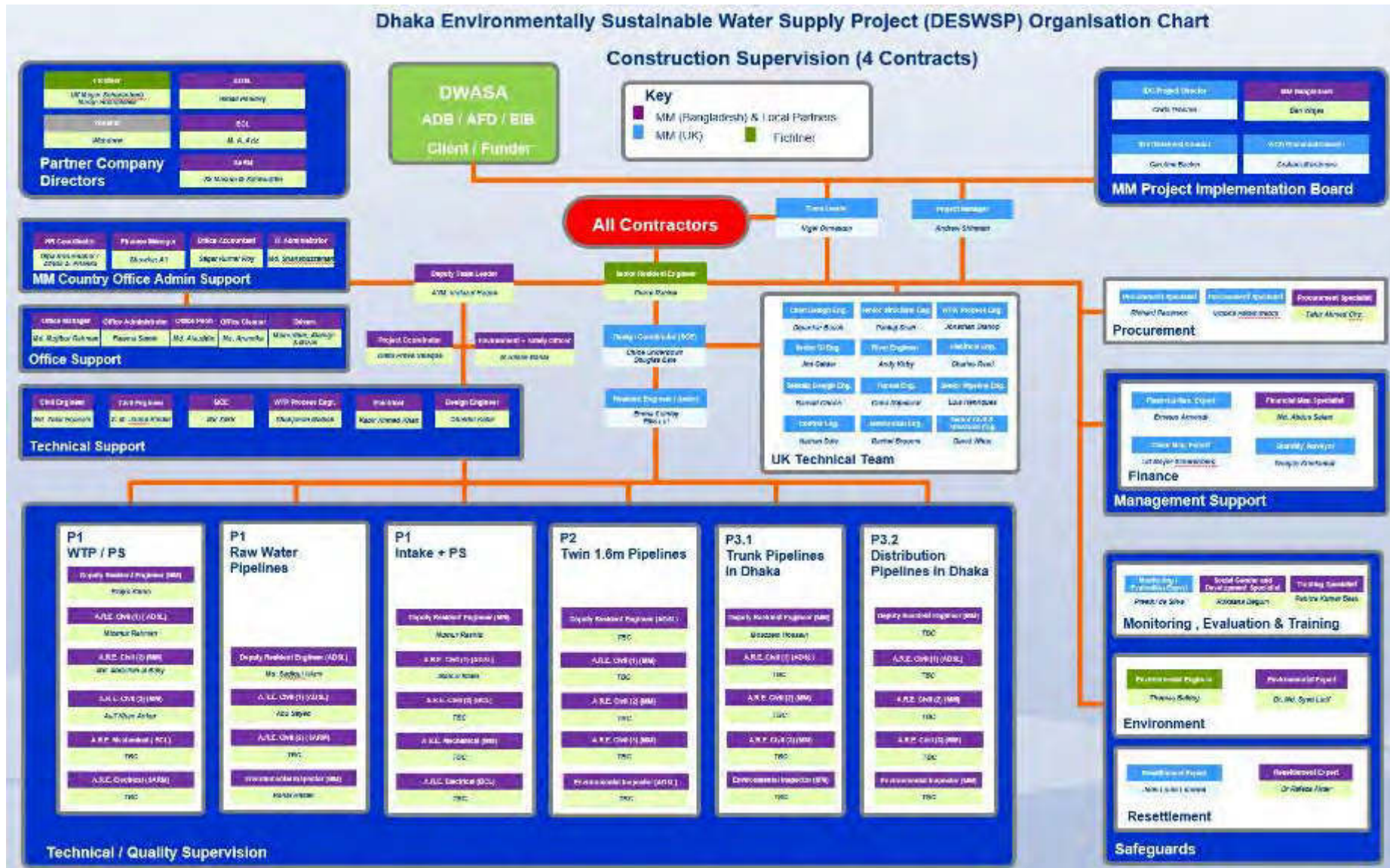
Table I.2: HSE Nodal Person Information

Sl	Name	Designation	Contact details		Unit
			Cell ph. No	Email	
01	Nwokedi Uchefuna	HSE manager	+8801300567751	nwokedi.uchefuna@gwtsnc.com	Contractor

² Project Management Unit (PMU) established in Dhaka to guide, supervise and overall monitoring of project implementation activities, supported by MDSC (MML).

20. However, during this period, no changes to the project organization structure occurred. There were no other changes to MDSC environmental team.

Figure I.2: Project Organization Chart



F. Relationships with Contractors, Owner and Lender

21. During this reporting period the DESWSP-DWASA closely collaborated with MDSC, ADB and Contractor of P1 (SUEZ) to review Environmental Reports for the Program. Contractor provided Monthly Reports, EMP, EMS, and Management Plan Health & Safety System. The communication with PMU is going directly and through Nigel A Osmaston, (Team Leader); Imtiazul Haque, (Deputy Team Leader), Pierre Racine (MDSC construction supervisor) and by e-mail exchange.

II. Consideration of Environmental Safeguards During Project Preparation

22. At the time of project preparation at feasibility stage, the PPTA consultants were deputed for the survey and preparation of IEE in 2013 covering all 3 components (P1, P2, and P3). The IEE P1, IEE P2, IEE P3 and EIA³ have been prepared during detailed project design by MDSC engaged by DWASA.

A. Environmental Monitoring Work Coordination

23. The responsible environmental safeguard Officer Md. Saidur Rahman of PMU Safeguard Implementation Unit, (SIU) 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 (Dr. Thomas Balling, Syed Latif, and Md. Mahmodul Hasan Rahat), The international environmental specialist is mobilized on an intermittent basis to undertake field audit. The information of the safeguard team is shown in a tabulated form below.

Table II.1: Information of Safeguard Team

Name	Designation/Office	Email Address	Contact Number
1. PMU			
Md. Saidur Rahman	Safeguard Officer (Environment) DESWSP, DWASA	saidur.r.m.plc@gmail.com	+880 1715149604
2. Consultant			
Md. Mahmodul	Environmental Inspector, MDSC	rahat.hasan@mottmac.com	+880 1818390189

³ IEE, DWASA 2013, Revised IEE P1; IEE P2; IEE P3.1; IEE P3.2, DESWSP-DWASA, 2019, & EIA, DESWSP- DWASA, December 2018

Name	Designation/Office	Email Address	Contact Number
Hasan Rahat			
Thomas Balling	Int. Environmental Specialist, MDSC	thomas.balling@fwt-mobil.de	+880 1833369964
Syed Muhammad Latif	National Environmental Specialist, MDSC	latifsyed_ny@yahoo.com	+880 1715004452
3. Contractor			
Nwokedi Uchefuna	HSE Manager, GWTSNC	nwokedi.uchefuna@gwtsnc.com	+8801300567751

24. The National Environmental Specialist, and the Environmental Field Inspector manage the unit and responsible for the services on environmental issues, compliance of the construction activities, related legislation and inspection visits to the intake site, raw water transmission route GWTP site, construction camp, material stockyard, and waste dumping sites and machinery equipment sites for safeguard evaluation purposes.

25. However, this is to ensure an efficient monitoring activity at all times. Environmental issues arising from the initial construction activities were immediately brought to the attention of the construction supervision team to coordinate efforts in order to immediately mitigate impacts, protect the environment, and safeguard health and welfare of the workers and local communities. All these issues were addressed within the framework of overall construction management and supervision. Aspects in the environmental monitoring are reported in semi-annual basis to PMU and ADB.

B. Preparation of Bid Documents

26. The Environmental Management Plan (EMP) covers the information of potential environmental impacts and the proposed mitigation measure for Package 1 (P1) has been provided in the bidding documents. In addition to the EMP that was provided to the contractors, the bidding document also includes some detailed instructions on subject that highlight in the EMP and environmental monitoring plan on the following:

- i. Precaution to be adopted during disposal of debris of solid wastes including disposal of organic debris generated during construction;
- ii. Precaution to be adopted at sanitation and housekeeping at the labor construction camp like toilets, hygiene, water supply, waste disposal, first aid, overall safety and maintenance etc.;
- iii. To measure and maintain the air quality standard;
- iv. To measure and maintain the noise and vibration quality standard and;
- v. To check the primary water quality standard including physical and chemical properties of drinking water and surface water.

27. The contractors' response on the instruction to include works for environmental impacts associated with the construction activities is expressed by the monitoring reports since beginning of the Project. As such, necessary budget had been allocated particular for Category 'B' projects to handle environmental problems. Additionally, the contractors' budget includes items of implementation of environmental management and monitoring plan included in the contract document. The contract document⁴ for the contractors includes detailed terms and conditions regarding the safeguard issues and implementation of the Environmental Management and Monitoring Plans that has to be adhered and implement by the P1 Contractor.

C. Environmental Statutory Clearances

Compliance with ADB Guidelines

28. 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.

29. 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 Environmental Management Plan (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 EMP which is used to work by contractors; and ensure that the EMP is 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 II.2: Status of Environmental Documents

Package	Subject	Status

⁴ Contract Documents (DWASA & P1 Contractor, date: 16 May, 2018)

P1	IEE Package 1, DESWSP, 2019	Prepared, under revision following ADB comments
		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		"N/A" at this stage
P3 (P3.1 & P3.2)		"N/A" at this stage

30. 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 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, Araihasar and Rugganj Upazillas of Narayanganj District where the alignment will pass (Detailed in IEE P1). ECC has been extended by DoE on 24 November 2019. ECC is valid for one more year (Appendix-E). It refers to all packages of the project.

Compliance Status with Environmental Loan Covenants

31. 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 II.3: Compliance Status with Environmental Loan Covenants

SL No	Reference	Details	Status	Remarks
2	Schedule 4	<p>Conditions for Issuance of Notice to Commence Works</p> <p>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>	For DBO: 8 (a) & (b) under Progress.	

SL No	Reference	Details	Status	Remarks
		(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	<p>Environment</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>	For DBO: 8 (a) & (b) under Progress	
4	Schedule 5	<p>Human and Financial Resources to Implement Safeguards Requirements</p> <p>The Borrower and DWASA shall make available necessary budgetary and human resources to fully implement the EMP and the RP.</p>	Complied	
5	Schedule 5	<p>Safeguards – Related Provisions in Bidding Documents and Works Contracts</p> <p>The Borrower and DWASA shall ensure that all bidding documents and contracts for Works contain provisions that require contractors to:</p> <p>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;</p> <p>Make available a budget for all such environmental and social measures;</p> <p>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;</p> <p>Adequately record the condition of roads, agricultural land and other infrastructure prior to starting to transport materials and construction; and</p>	a) Complied b) under Progress c) under Progress d) under Progress e) addressed as required	

SL No	Reference	Details	Status	Remarks
		Fully reinstate pathways, other local infrastructure, and agricultural land to at least their pre-project condition upon the completion of construction.		
6	Schedule 5	<p>Safeguards Monitoring and Reporting</p> <p>The Borrower shall do the following or cause DWASA to do the following:</p> <p>Submit semi-annual Safeguards Monitoring Reports to ADB and disclose relevant information from such reports to affected persons promptly upon submission;</p> <p>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</p> <p>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.</p> <p>The Contractor shall appoint its own environmental safeguards officer (EHS).</p>	<p>a) Sent to ADB on 7.1.16 and 18.1.16</p> <p>b) addressed in due time.</p> <p>c) will be addressed whenever situation arises.</p> <p>d) appointed.</p>	
		<p>Grievance Redress Mechanism</p> <p>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.</p>	GRC established GRM under progress	

32. List of no objection certificates for all packages.

Table II.4: List of no objection certificates for all packages.

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

33. For Package 1, EMP compliance includes securing clearances/permits from relevant agencies are provided in above Table L-1: List of no objection certificates for all packages.

D. Grievance Redress Mechanism

Complaints and Grievance Mechanism

34. 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.

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

36. 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.

Scope and Jurisdiction of GRC

37. The scope of work and Jurisdiction of GRC are:

- (i) The Grievance Redress Committees (GRCs) will be established to ensure stakeholders' participation in the implementation process and fair compensation to affected persons.
- (i) The APs can also call upon the resettlement NGO to assist them in presenting their grievances or queries to the GRC.
- (ii) The GRCs will receive grievance cases from the affected persons through the resettlement implementation NGO.
- (iii) Other than disputes relating to ownership right and award of compensation by the Deputy Commissioner under the Court of Law, GRCs will review grievances involving all resettlement assistances, relocation, and other supports. Grievances will be redressed within 21 days from the date of lodging the complaints. In cases of complicated cases requiring additional investigations it will be resolved within a period of one month.
- (iv) Grievances of indirectly displaced persons and/or persons displaced during project implementation will also be addressed by the GRC.
- (v) Where land acquisition will not be involved but relocation of structures or vacating land for cultivation will be required, the GRCs will facilitate resolution of complaints regarding categorization of vulnerable affected persons, types of structures, and eligibility for compensation and assistance within the set guidelines and provisions of the resettlement plan.
- (vi) Any complaints of ownership or other suits to be resolved by the judiciary system will not be resolved in GRCs. GRC will resolve all complaints, grievances related to compensation entitled by affected persons.
- (vii) The decisions of the GRC should be ideally be arrived at through consensus, failing which resolution will be based on majority vote. Any decision made by the GRC must be within the purview of social, resettlement and environmental policy framework.
- (viii) A minimum of 4 (four) members shall form the quorum for the meeting of GRC.
- (ix) If needed the GRC members may undertake field visit to verify and review the issues at dispute, including titles/share, reasons for any delay in payment or other related matters.
- (x) In case the resolution is not accepted by the AP, the grievance will be forwarded to Project Director for final decision.

Filing Grievance Cases and Documentation

38. APs will be able to file their grievances without any fear and intimidation. Where required, the implementing NGO will assist the APs in drafting the grievances. All grievances must be submitted in writing to the Convener, GRC. The complainant may be represented by APs him/herself or appointed agent such as locally elected officials/legal advisors. The judgment made by the GRC will be communicated to the concerned AP in writing. If dissatisfied, and with the agreement of the GRC, the AP may request a further review of the judgment of GRC by the Project Director. In such case, the case will be forwarded to the PD with all documents. If the disputant still remains unsatisfied, he/she can go to the court of law.
39. GRC procedures and operational rules will be publicized widely through community meetings and pamphlets in the local language so that APs are aware of their rights and obligation, and procedures of grievance redress.
40. To ensure access and fast response to any project-related grievances from the affected people and communities, contact numbers and names of focal persons in the DWASA

PMU/SIU responsible for any complaints and grievances will be posted in public areas, contractor's field offices, UP offices, and NGO field offices.

41. All GRC documents will be maintained by the INGO for review and verification by MDSC and ADB. DWASA field offices will act as secretariat to the GRCs. As a result, the record will be up-to-date and easily accessible on-site.
42. The GRC meeting will be held in the respective field office of DWASA, DORP Office or other location as agreed by the Committee. If needed, the GRC members may take field visits to verify and review the issues at dispute, including ownership/shares, reasons for any delay in payments or other relevant matters. The complaints and grievances from the AHs will be addressed through the process described in the Table 20 below.

Table II.5: Grievance Resolution Process

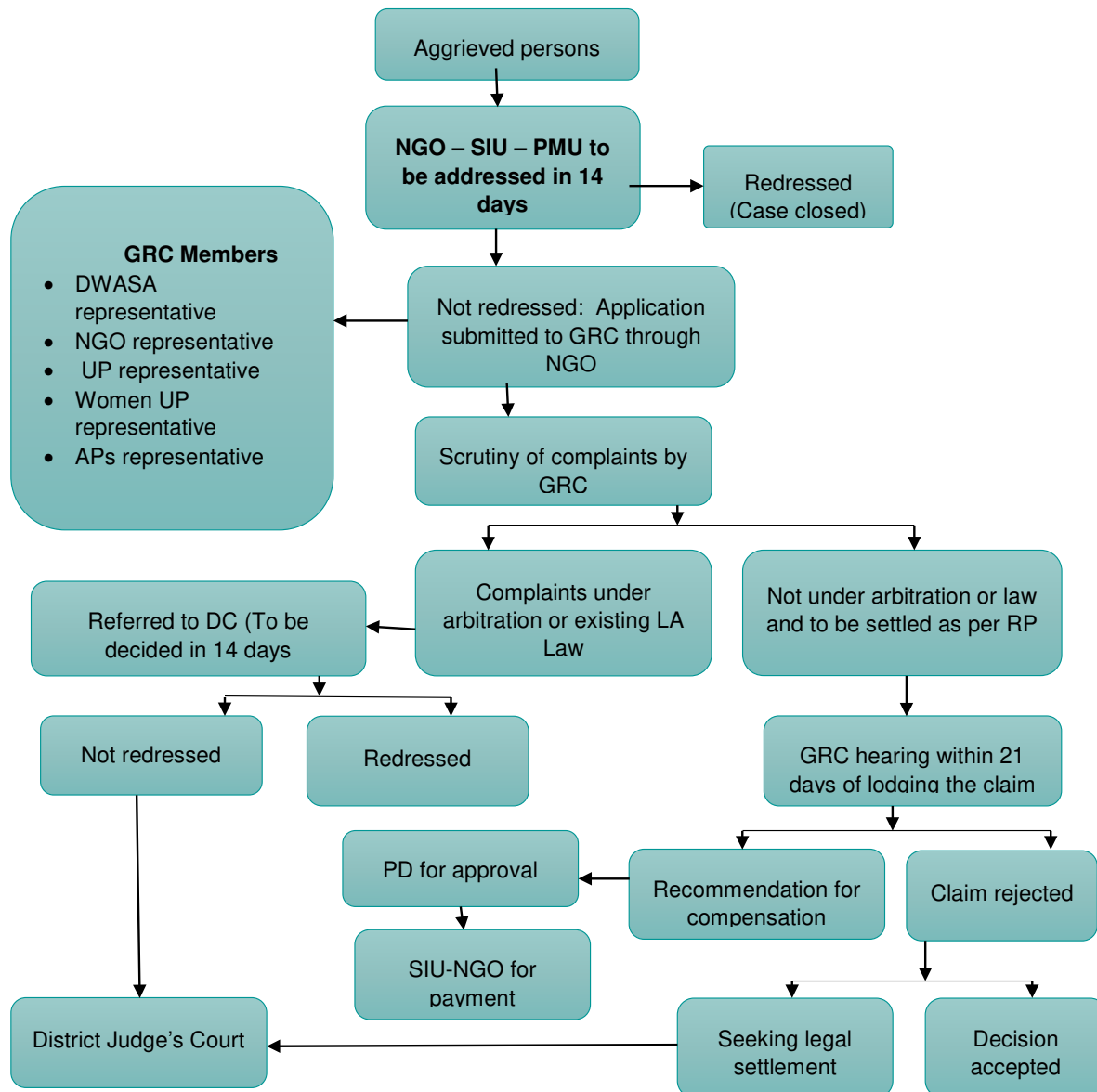
Steps	Action Level	Process
Step 1	Counselling	<p>The NGO will recommend that the DPs submit their complaints to the GRC. NGO staff assists the DPs filing the complaints (maximum 7 days);</p> <p>Complaints and grievances from displaced person will first be heard during personal contact and focus group discussion at the village level with the involvement of the SIU social safeguard officer. If not resolved within 14days;</p> <p>The DORP will counsel AHs for gaps in information about the policy and eligibility for compensation and resettlement assistances. The DPs 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 AHs 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 AHs 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. 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 AHs.</p> <p>On the date of hearing, the aggrieved AHs will appear before the GRC at a place set in consultation with the AHs 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 and signed by other members of the GRC. The case records will be updated and the decision will be communicated to the complainant AHs by the Member Secretary of the GRC at the village level.</p>
Step 3	Decision from PMU, DWASA	<p>If any aggrieved AHs is 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 AHs, in the complaint, must produce documents supporting his/her claim. The PD with the assistance of the Resettlement Experts, MDSC will review the proceedings of the GRC hearing and</p>

Steps	Action Level	Process
		convey its decisions to the aggrieved AHs within two weeks after receiving the complaint.
Step 4	Decision from PD	If the resolution from PMU fails to satisfy the aggrieved AHs, they will facilitate to forward their case for further review and settlement with the office of the Chief Engineer, DWASA at Dhaka. The aggrieved AHs 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 Communicating	The GRC minutes, approved by the project director, will be received at the conveners' office. The approved verdict is communicated to the complainant DP in writing.
Step 6	Decision from Court	If the grievance redress system fails to satisfy aggrieved AHs, they can go/pursue further action by submitting their case to the appropriate court of law at the District level.

Approval of GRC and Entitlements of GRC Members

43. Upon formation, all GRC members will attend a training and orientation meeting prior to commencement of their work. The training will be conducted by the project staff and consultants/Resettlements Experts.
44. The GRC members (except DWASA and DORP representative) will be entitled to Tk.1000/meeting as honorarium from the implementing budget. Light snacks/refreshments will be provided during the meetings under the RP budget. DORP will make necessary stationery and other logistic available.
45. The Project Director, PMU, DESWSP will finally approve any decisions and proceeding of the GRC meetings. The approved GRC decisions will be implemented on site within the framework of the Resettlement Plan.
46. The details procedures for redress of grievances and the appeals process will be shared and documented.
47. The GRC could hear the grievances once in 15 days. Since the entire resettlement, process has to be completed before construction works starts. The GRC could meet more than once in every 15 days depending upon the number of such cases. The GRC will inform the concerned AHs of their decisions within 21 days of the hearing of the grievances. The GRC will continue during the whole construction period.

Figure I.3: Grievance Redress Mechanism (GRM)



Grievance Redress Monitoring

48. The Deputy Project Director (Resettlement), PMU, DESWSP will keep records of all the grievances and their redress in monthly cumulative formats, which are to be signed by the Convener of the GRC. The format will contain information on the number of grievances received, resolved, and number of unresolved grievances. The monitoring information and findings on grievances will be included in the quarterly report to ADB.

Summary

49. The basic concern of the affected people is to get proper compensation for their lost land and livelihoods in a smooth manner without the interference of any middlemen. The discontents of

the locals can be mitigated following proper resettlement plan, which has already been prepared as a separate document.

50. The overall objective of the GRM is to create an effective communication channel between stakeholders to ensure a timely and effective bilateral feedback mechanism to address any environmental (terrestrial and aquatic) grievance redress submitted for the project, including from community members, construction workers and staff, local enterprises and other stakeholders, and awareness-raising the public about P1 project and the availability of the GR mechanism. The procedure for resolving grievance requires their resolution, conducted in the spirit of mediation between the parties, and must comply with the spirit of ADB standards and practices. The workers can also go the GRC for any issues and concerns during P1 project implementation.

E. Grievance Redress Committee Members in PMU

51. 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 un settle dispute, GRC through submission of formal reference from DWASA will resolve the problem.

Formation of GRC

52. Grievance Redress Committee (GRC) constituted comprising of a panel of five members; 1st is DWASA representative, 2nd MDSC representative 3rd DWASA Representative as well as the other two are also from DWASA Safe Guard Officer (Social & Gender) as member Secretary.

53. The GRC under ICB Package 1 is as below:

GRC Composition

S. I	Name	Designation at GRC	Institution	Designation
1	Executive Engineer, DESWSP	Convener	DWASA	EE, DESWSP
2	Resettlement Specialist	Member	Consultant (MDSC)	Resettlement and Awareness Expert
3	Assistant Engineer	Member	DESWSP DWASA	AE DESWSP
4	Assistant Engineer (Female)	Member	DESWSP DWASA	AE DESWSP
5	Safeguard officer (Social and Gender)	Member Secretary	DESWSP DWASA	Safeguard Officer (S&G) DESWSP

54. The composition of GRC members at PMU level is below:



Office of the Project Director
 Dhaka Environmentally Sustainable Water Supply Project (DESWSP)
 Dhaka Water Supply and Sewerage Authority
 WASA Bhaban, 98, Kazi Nazrul Islam Avenue (9th Floor)
 Kawran Bazar, Dhaka-1215

উন্নয়নের গণকণ্ঠ
 শেখ হাসিনার মহামন্ত্র

Web site- www.deswsp-dwasa.com , Email: pddeswspgwtg@gmail.com, Fax & Tel: 88-02-8189095

Memo no: 46.113.618.00.00. GN- 97/DESWSP/ 1234

Date- 22.08.2019

Office Order

Sub: Formation of Environmental Safeguard Grievance Redress Committee (GRC) for Gandharbpur Water Treatment Plant related works under DESWS Project, Dhaka WASA .

With due regards based on subject mentioned this is to notify you that Environmental Safeguard Grievance Redress Committee (GRC) for Gandharbpur Water Treatment Plant related works (WTP, Intake Raw water transmission main , Finish Water transmission and distribution Feeder line) of DESWSP the PMU has formed Environmental Safeguard Grievance Redress Committee (GRC) and approved the same by the competent authority.

Environmental Safeguard Grievance Redress Committee (GRC) for Gandharbpur Water Treatment Plant related works

Sl.	Name and Designation	Position in GRC
1.	Md. Shafiqur Rahman, DPD, DESWSP, DWASA.	Convener
2.	Mostafizur Rahman, Executive Engineer, DESWSP, DWASA.	Member
3.	Md. Al-Amin, Executive Engineer, DESWSP, DWASA.	Member
4.	National Environment Expert (Representative from MDSC), DESWSP, DWASA.	Member
5.	Md. Saidur Rahman, Safeguard Officer (Environment), DESWSP, DWASA.	Member Secretary
6.	Representative from contractor of WTP related works	Member

TOR of Environmental Safeguard Grievance Redress Committee (GRC) for Gandharbpur Water Treatment Plant related works:

1. Environmental Safeguard Grievance Redress Committee (GRC) will be established to ensure stakeholders' participation in the implementation process and fair compensation to vulnerable affected persons (APs) for environmental safeguard issues related effects.
2. The APs can also call upon the representative of contractor/ MDSC/ PMU to assist them in presenting their grievance or queries to the GRC.
3. The GRC will receive grievance cases from the affected persons through the representative of contractor/ MDSC/ PMU.



Office of the Project Director

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উন্নয়নের গণিত
শেখ হাসিনার মূলমন্ত্র

4. Other than disputes relating to ownership right and award of compensation by the Deputy Commissioner (DC) under the Court of Law, GRC will review grievances involving all environmental safeguard related resettlement assistances, relocation, and other supports. Grievances will be redressed within 21 days from the date of lodging the complaints. In case of complicated cases requiring additional investigations it will be resolved within a period of one month.
5. Grievance of indirectly displaced persons and/or persons displaced during project implementation due to environmental effect will also be addressed by the GRC.
6. Where relocation of structure or vacating land of cultivation will be required the GRC will facilitate resolution of complaints regarding categorization of vulnerable affected persons, type of structures, and eligibility for compensation and assistance within the set guidelines and provisions of the resettlement plan.
7. Any complaints of ownership or other suits to be resolved by the judiciary system will not be resolved in GRC. GRC will resolve all complaints, grievance related to compensation entitled by affected persons.
8. The decisions of the GRC should be ideally be arrived at through consensus, failing which resolution will be based on majority vote. Any decision made by the GRC must be within purview of environmental policy framework of GOB, ADB's Environmental Safeguard Policy Statement.
9. A minimum of 4 (four) members shall form the quorum for the meeting of GRC.
10. If needed the GRC members may undertake field visit to verify and review the issues at dispute, including titles/share, reasons for any delay in payment or other related matters.
11. In case of resolution is not accepted by the AP, the grievances will be forwarded to the Project Director for final decision.

Working Area of the GRC: The concern committee will administer the stated ToRs.

(Signature)
Md. Mahmudul Islam
Project Director
DESWSP Project, Dhaka WASA.

CC. (not order in seniority)

1. DPD-1/2, DESWS Project, Dhaka WASA
2. Executive Engineer-1/2/3, DESWS Project, Dhaka WASA
3. Assistant Engineer....., DESWS Project, Dhaka WASA
4. Safeguard Officer (Env)/ (S&G)....., DESWS Project, Dhaka WASA
5. Team Leader/ DTL , MDSC, DESWS Project, Dhaka WASA
6. National Resettlement Specialist/ Environmental Expert , MDSC, DESWS Project, Dhaka WASA
7. Team Leader, DORP, DESWS Project, Dhaka WASA
8. Team Leader EMA , DESWSP DWASA
9. Contractor Representative , GWT SNC

GRC File No:

F. Procedures of resolving grievances

Step 1

55. In case of any grievances, the complainant approaches to the Safeguard Implementation Unit (SIU) officials for clarification, or submits any formal complaints. The SIU will provide

clarification to the displaced 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

56. The SIU will recommend that APs submit their complaints to the GRC. The SIU will assist the DPs filing the complaints and organizes hearing within 14 days of receiving the complaints.

Step 3

57. GRC to scrutinize applications determine whether the submitted cases are within their mandate. Cases related to compensation under the Acquisition & Requisition of Immovable Property Ordinance (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

58. 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

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

Step 6

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

61. 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 SIU 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 SIU, PMU, and 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.

62. 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. 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.

63. The appeal procedure and conflict resolution:

- (xi) All complaints from the APs will be received at the field office of the resettlement awareness SIU the member secretary of the GRCs, with a copy for the concerned City Corporation Ward Commissioner's representatives.
- (xii) The representative of the SIU 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.
- (xiii) The GRC will review the proceedings and pass verdicts to convey to the concerned AP through the SIU. 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.
- (xiv) The GRC will settle the disputes within a maximum of 21 days of receiving the complaints from the APs.
 - (xv) 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.
 - (xvi) affected people can go to the GRC for any environmental concern
 - (xvii) all workers can go the GRC for any issues and concerns during project implementation

64. 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 Project Information Disclosure (PID) to be distributed to the affected communities, as part of the project GRM.

III. Information on the Progress and Quality Control

65. The Monthly and Quarterly Progress Reports of MDSC; The contractor's reports include MPR-July to December 2019, EMP, Environmental Management System, Management Plan Health and safety System, and Health and safety Plan provides detailed information on placement of construction objects, and measures for environmental protection, environmental monitoring, etc.

A. Salient Features of Project Implementation in Reporting Period

66. During this period, the following works have been performed:

- i. The Contractor has arranged for access to Intake Site up to the shore of River Meghna and at water treatment plant side.;
- ii. Mobilized equipment and the barge at the river shore;
- iii. Clearing and grubbing of the Intake and WTP site;
- iv. Dyke construction is in progress which will be filled by sand at both Intake and WTP site.
- v. Resolve the existing graveyard issue at WTP by relocation within the DWASA land.
- vi. Meetings with various utility authorities were initiated by the Engineer and discussions are continuing between the Contractor and the authorities regarding identification and relocation of services that will be affected by the works.

B. Construction Activities and Project Progress during the previous 6 Months

67. During this period, civil works progressed in the form of preliminary land preparation, grading, topsoil removal, workers camp, installed machinery and equipment to P1 intake and WTP.

Construction works

68. The construction works includes the following:

- i. Stripping of soils for the RWT Main and dismantling of rural asphalt road at Bisnondi, Araihasar, Narayanganj have commenced.
- ii. Land acquired for the RWT Main are mostly agricultural land
- iii. Relevant warning signs installed
- iv. Removal of the topsoil layer was conducted in proposed intake and GWTP areas and need to re-cultivation after construction.
- v. Drainage system ensured to avoid the formation of stagnant water, all the sites were equipped with proper drainage, watercourses and gateways
- vi. Removal of bushes

Offices, Construction camps and Settlement of Workers

69. The contractors have hired a two-story building for their workers and staff's accommodation adjacent to the intake site.

Construction sites and Facilities

70. Preparatory works continued during the reporting period. Earth works related to top soil removal and storage.

IV. Environmental Management and Monitoring

A. Air Quality

71. No air quality measurements were taken. GWT did not implement air quality monitoring although MDSC has reminded GWT several times in this regard. The contractor applied water spray to mitigate dust. They recorded these activities (Appendix-G).

B. Noise and Vibration

72. Noise monitoring has been implemented in December 2019 (Appendix-H). There was no construction activity during the monitoring. The detected noise reflects the existing background noise. Noise level exceeded the standard for mixed area.

C. Water Quality

73. Water quality survey was conducted by the firm Onushandhani Creeds Limited of Mohakhali, Dhaka on behalf of DWASA from July to November. The measurements were taken at Intake Point in Bishnondi of Meghna River, Araihasar at different depth. Measurement of physicochemical parameters were temperature, PH, salinity, conductivity, turbidity, dissolved oxygen (DO), total dissolved solids (TDS), Ammonia (NH₃), total hardness and color at field during weekly sampling. During monthly sampling, composite sample were sent to DPHE Central Laboratory for the analysis of a wide range of water quality parameter such as Nitrate, Nitrite, COD, TSS, BOD, Phosphate, Alkalinity, Ammonia, Total Hardness, Arsenic, Iron, Manganese and Aluminum. Field parameters were tested as same as weekly sample parameters. The BOD and COD values have been found 2mg/l and 8mg/l respectively during monthly sample analysis in November. The concentration of ammonia has dropped in the month of November. However, tendency of ammonia concentration to increase with respect to time has been found in the last four months. In conjunction, decreasing of dissolved oxygen (DO), reduction of pH value, increase of turbidity, increase of color unit were found. Water quality reports July – November have been attached to the Appendix I.

D. Flora and Fauna

74. During this period, at intake site a total number of 9 (nine) trees were cut to initiate earth works related to top soil removal.

E. Waste management

75. During this period, moderate amount of household waste was generated. Hazardous waste and non-hazardous waste have been disposed by licensed contractor in December 2019 (Appendix J).

F. Health and Safety

76. Initial safety briefing was conducted by contractor prior to preliminary works.

G. Activity of Emergency Crew

77. During this period, activity of emergency crew was not required.

H. Consultation and FGD meeting

78. The consultation process so far has solicited inputs from a range of stakeholders, including elected representatives, residents at the project locations, and project affected persons. Total four meeting was held during this period. The number of participants were:

Table IV.1: Summery of consultation and FGD meetings

PC Meeting Date	% Female	Total Participants
03-09-2019	6	19
24-08-2019	15	34
02-09-2019	23	27
02-09-2019	00	21

79. Details of Consultation meetings are provided in Appendix-B.

I. Trainings, Workshops, Seminars

80. Training on H&S has been implemented on 21 October, 2019 and 03 December, 2019. In that training session different topics were discussed such as basic safety, purpose of safety, history of major accidents in Bangladesh, factors concerning occupational safety, hazards impeding occupational safety and Safety measures. The participant lists are shown in Appendix C. Environmental training is anticipated for January / February 2020.

Table IV.2: Summery of Trainings

Training Date	% Female	Total Participants
21-10-2019	20	05
03-10-2019	00	05

J. Grievance Redress Mechanism - Complaints

81. The first meeting of the GRC took place on 31 October 2019. 15 grievances and complaints have been discussed and addressed. The minutes of meeting and participants list has attached in Appendix D.

K. Environmental Management System (EMS), Site-specific environmental management plan (SSEMP), and work plans

82. 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. Noise monitoring was implemented in addition by GWT (Appendix-H).

L. Site Inspections and Audits

83. During this period, temporary structure construction started., to P1 intake and WTP. The construction of temporary jetty and intake offshore has also started. Therefore, environmental inspector's site visit was done. The meeting details are attached in Appendix A.

M. Notice of Non-Compliance

84. During this period, not required.

N. Corrective Action Plan for next 6 Months

85. During this period, not required.

V. Conclusions

86. During this period from July to December, the Contractor mobilized and started preliminary works. Therefore, the environmental monitoring focused on contractor's initial activities only. As for this project, the "SAEMR for July-December 2019" was prepared by MDSC Consultant in January / February-2020. This report is based on available information of the project and periodic site inspection done during the initial construction stage.
87. Since mid-May, the Contractor started preparatory works related to mobilization in field, and no massive construction started therefore, actual monitoring was moderately possible.
88. Finally, the initial works carried out by the Contractor-SUEZ for environmental protection was assessed moderate by the environmental team of MDSC-MML. During field visit it was found that due to temporary work dust generates and GWT was requested to suppress dust by spraying water regularly. The chemical storage and handling were not properly maintained and also need to improve. However, the Contractor improved following issues (a) all relevant rules for protection of health and safety of the workers, and community was followed, and the Contractor was aware of his responsibility; (b) proper restriction signs and other methods have been applied to prevent unwanted entry of people to the construction area; (c) training for workers on appropriate methods for handling asbestos materials; (d) use of individual protection means, PPE, first-aid support; (d) prior health check-ups of workers involved in the construction works. Contractor shall appoint a Fire Officer who shall be responsible for ensuring immediate and appropriate actions in the event of a fire and shall ensure that employees are aware of the procedure to be followed; (e) smoking shall be permitted only in designated areas, etc. In addition, the Contractor should comply with EMP requirement.
89. However, no national law violation has been detected by the environmentalists of MDSC during this period. There was no serious environmental problem identified at this early construction works especially on establishment of construction camp, mobilization of resources, and land clearing.
90. Water quality monitoring and noise monitoring has been carried out. Dust suppression has been applied regularly by the contractor through water spray. Air quality monitoring is due.

Appendices

A. Findings of P1 Site Inspection, during July -December 2019	158
B. Site Meetings.....	165
C. Training Information H&S	181
D. MoM of GRC.....	184
E. Checklists	198
F. Environmental Clearances for DESWSP	206
G. Air Quality and Dust Suppression	226
H. Noise & Vibration.....	229
I. Water Quality.....	263
J. Waste Management (Hazardous and Non- Hazardous Waste).....	571

A. Findings of P1 Site Inspection, during July - December 2019

A.1 Disposal of waste

91. A discussion was held to local councillor office with GWT representative for collecting and disposing. The agreement document by local language is attached bellow.



তারাব পৌরসভা

রূপগঞ্জ, নারায়ণগঞ্জ।
স্থাপিতঃ ২০০২ খ্রীঃ

স্মারকসংখ্যা - ৩৩৭/১৯৭/১০১৯/৩৫৬২

তারিখঃ ১৯/১১/১৯

প্রত্যয়ন পত্র

এই মর্মে প্রত্যয়ন করা যাচ্ছে যে, ওয়াসা কর্তৃক গৃহিত প্রকল্প DESWTP এর অধীন G.W.T.P. বিভিন্ন কাজ Abdullah Trade International এর মাধ্যমে বাস্তবায়িত হচ্ছে। এরই অংশ হিসাবে Waste Management কাজটি ধার্যকৃত ফি পরিশোধ সাপেক্ষে উক্ত প্রকল্পের স্ট্র বর্জ্য তারাব পৌরসভার বাহন কর্তৃক সংগ্রহ পূর্বক অপসারণ করা হচ্ছে।

১৯.১১.১৯
মোঃ নূরুল ইসলাম
প্রধান নির্বাহী কর্মকর্তা
তারাব পৌরসভা, নারায়ণগঞ্জ।

A.2 Jetty construction

92. While constructing jetty, GWT was asked to maintain not mixing sedimentation of construction materials to the river.

Photo A.1: Jetty construction at intake Site, 25 September 2019



A.3 Temporary water passage system

93. Geo-textile bag was used to hold dyke and temporary road. GWT was asked to check and maintain servicing continuously to easy flow of water.

Photo A.2: Temporary road construction at intake Site, 25 September 2019



Photo A.3: Temporary road construction intake Site, 08 October 2019



A.4 Safety Inspections

94. Traffic controlling is missing at the entry point of Intake site. , GWT was requested to nominate personnel so as to have proper traffic management.

Photo A.4: Traffic management at road approach to intake Site, 08 October 2019



A.5 Fuel and hazardous material storage

95. Fuel and hazardous is poor at both sites., GWT was requested to nominate personnel so as to have proper traffic management.

Photo A.5: Storage of fuel and hazardous to WTP and intake Site, 08 October 2019(



A.6 Other issue

96. No log book or site diaries are being maintained on site. Site should maintain log sheet and safety forms to record any issue occurring on site. Site induction set up is present, but quality of premises needs to be improved. During this period, it was found that the due to temporary work

dust generates and asked to suppress by spraying water at regular interval. GWT sprays water twice per day. Asked to ensure minimum dust visibility. There is no water in toilet, also handwash soap is not available near toilet. Asked to ensure water and cleaning materials.

Photo A.6: Image of Intake Site, 22 December 2019



Photo A.7: Preparation of WTP, 22 December 2019



Photo A.8: Dyke construction works for WTP, 22 July 2019




Photo A.9: Dyke construction works for WTP, 07 August 2019



B. Site Meetings

B.1 Minutes of Site meeting, Bishnondi, 8.10.2019


	Dhaka Environmentally Sustainable Water Supply Project (DESWSP) Dhaka Water Supply and Sewerage Authority (DWASA)
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Supervision Minutes of Meeting – No. 003


Project Number:	MM Proj. No: 346152 / GWT Proj. No: 001464	
Project Title:	Dhaka Environmentally Sustainable Water Supply Project (DESWSP)	
Purpose:	Progress review	
Place / Date:	INTAKE / 2019-10-08	
Author:	Mr. Zakir Hossain	
Participants:	Company / Title MDSC Civil Engineer MDSC, Environmental Inspector GWT, Intake Construction Manager GWT, QA/QC Manager SWDP, HSE Manager SWDP, Project Manager	Name / Initial Zakir Hossain (ZH) Mahmudul Hasan Rahat (MHR) Youssef Najjar (YN) AV Rao (AR) Jahangir Alam (JA) Sun Jia Ming (SJM)

Distribution list:	Participants + MDSC Team Leader MDSC Sr. Res. Eng. MDSC Deputy Team Leader GWT Const. Project Manager GWT Contractor Representative DWASA, Project Director	Nigel Osmaston (NO) Pierre Raouf (PR) Intiaz Hecue (IH) Richard Savva (RS) Nour-Eddine Mesbah (NEM) Mahmudul Islam (MI)
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Item	Current topics	Responsible/Action
1	Review of Previous Meeting Minutes	
	<p>Fencing: Disputed fencing at North side is already rectified by GWT and there is around 10m at South-Western corner beyond the site boundary but no complain from local people. If complain is raised by local community then GWT will rectify that 10m immediately.</p> <p>Photographic Report: To know the number of tree cut by GWT for cleaning site. Pre-construction photograph report is must, GWT will submit pre-construction photograph report shortly.</p> <p>Temporary access road: Opening for water course is almost filled with sand and requested to clean sand and prepared free access for water course.</p>	<p>GWT to ensure</p> <p>GWT to submit</p> <p>GWT to ensure</p>
2	Progress of Works	
2.1	<p>Demarcation of Property line along access Road: On query of community land dispute, Joint field survey will be carried out by GWT & DORP to find land boundary demarcation at South side of temporary access road. If any land occupied by GWT beyond demarcation for placing sand bag or any sand pile went to adjacent land, GWT will remove all sand otherwise GWT will hire that land so that no complain is received by DWASA anymore.</p> <p>Container for PPE & Safe instruction: At approaching to intake site, PPEs are stored in a polythene roofed shade which is aesthetically not</p>	<p>GWT to ensure joint survey</p> <p>GWT to ensure</p>

	Dhaka Environmentally Sustainable Water Supply Project (DESWSP) Dhaka Water Supply and Sewerage Authority (DWASA)
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	<p>acceptable by visitor. Requested to install container, keep PPE in order, and organize safety instruction for every new visitor.</p> <p>On-going Temporary construction are:</p> <p>1) Foundation construction for batching plant is completed.</p> <p>2) Jetty construction filling and concreting is completed.</p> <p>3) Guard house brick work is running.</p> <p>4) Temporary site office's floor construction is completed.</p> <p>5) Dormitory floor construction is completed.</p> <p>6) Topo Survey for Permanent work area is ongoing.</p> <p>7) MENARD shed for materials storage construction is ongoing.</p> <p>8) Fencing construction for inclusion of graveyard is ongoing.</p>	<p>GWT to ensure quality construction.</p>
2.2	<p>Percentage of Tasks / Total of Works</p> <p>Only temporary works are ongoing not possible to calculate overall progress percentage.</p>	
2.3	<p>Tasks to be started</p> <p>See item 2 above.</p>	
3	Quality Control / Inspections	
3.1	<p>Inspections / Result Reports / In Progress</p> <p>Not discussed during this meeting.</p>	
3.2	<p>Inspections Due or Planned</p> <p>Not discussed during this meeting.</p>	
3.3	<p>Environmental Issues / Concerns</p> <p>This item is discussed and inquired by Mahmudul Hasan Rahat, Environmental inspector.</p>	
4	Submittals / Documentations	
4.1	Submitted by Contractor	
4.2	Approved or Commented by Engineer/Employer	
4.3	Due Date	
5	Safety & Security at Site	
5.1	<p>Safety Inspections</p> <p>Traffic control at road approach in row well managed.</p>	
5.2	<p>Accidents since last meeting</p> <p>There was no accident at site till date.</p>	
5.3	<p>Measures taken at the Moment</p> <p>Carried out joint survey to ascertain.</p>	
6	Problems, Concerns, Risks	
6.1	<p>Contractual</p> <p>Not discussed during this meeting.</p>	
6.2	<p>Technical / Engineering Instructions</p> <p>Not discussed during this meeting.</p>	
6.3	<p>Variations / Claims</p> <p>Not discussed during this meeting.</p>	
6.4	<p>Legal (Permissions, Residents, Authorities etc.)</p> <p>Complain from local community regarding sand deposition in their land is surveyed and issue is settled.</p>	
7	Any Other Business / Comments	

	<p>Dhaka Environmentally Sustainable Water Supply Project (DESWSP)</p> <p>Dhaka Water Supply and Sewerage Authority(DWASA)</p>
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Sand fill in adjacent land need to remove



Ongoing reinf. placement in temporary works



On going Jetty construction at River Side



Temporary access road construction completed

Signed By:



Md. Zakir Hossain
Civil Engineer, MDSC



Youssef Najjar
Construction Manager, GWT

B.2 Minutes of FGD consultation

SL No.	Date and Venue	Participants Discussion	No. of Participants	Project Response
1.	<u>03/09/2019</u> Dhaka Medical College compound water pump No.01	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.	19	WASA Representative informed: <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.

Attendance Sheet

Name of work: Meeting on Environmental/Social Safeguard Issues

Venue: Dhaka Medical College compound, Dhaka. Date: 03.09

SL No	Name	Designation/Org. & Cell No.	Signature
1.	Md. Saiful Islam	Asstt. Engineer, PMU Dhaka 81554-81552-343207	
2.	M. I. Akbar Ajanur Rassel	Agm (Tech) M/S. Mani Enterprise	
3.	MD: RAHUL Islam	Local people	
4	Md. Alomgir Bediha	Local people	
5	Jabida Begum	Flat women's	
6	Mafizul Islam	Job, Dhaka Medical	
7	Sohelul Islam	Business	
8	Abdul Haque	Business	
9	Sche.	Job holder	
10	Jahangir	Job	
11	Majibur Rahman	Rikba, malik	
12	Eulfor Rahman	Dokanda	
13	Mesud	Dokanda	
14	Hrisoy	Job, Dhaka Medical	
15	Sekander	Job	
16	Akter	Dokanda	
17	Eng. Saikat Hudaib	~	

2. House-78, Road-24/2, Protik Housing, South Bonosree, Dhaka

SL No.	Date and Venue	Participants Discussion	No. of Participants	Project Response
2	<u>24/08/2019</u> House-78, Road-24/2, Protik Housing, South Bonosree, Dhaka.	At the meeting the suggestions of the participant's implementing deep tube wells 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.	34	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 a bridge entering houses. - ensuring sufficient water supply



Office of the Project Director
 Dhaka Environmentally Sustainable Water Supply Project (DESWSP)
 Dhaka Water Supply and Sewerage Authority
 WASA Bhutan, 92, Kazi Nazrul Islam Avenue (9th Floor)
 Kawran Bazar, Dhaka-1215

Volume: H-23, R-24/19 Baidik housing, Boudha, Dhaka
 Name of work: Environmental/Social Safeguard Awareness meeting.

SL No	Name	Designation/Org.	Signature
1	Md. Saiful Islam	ASST Engineer, Dhaka WASA.	[Signature]
2	ASIF MOHAMMAD	PROTIR RUPROKEE ULN BUILDING, FLAT-D-7	[Signature]
3	Ms Nasim Isl.	Pratik Koparic, CS-BS	[Signature]
4	MO. AZIZUR RAHMAN	BUSINESS	[Signature]
5	MURSHED ALAMI	BUSINESS	[Signature]
6	MURAD	II	[Signature]
7	Mujam Doshin Khaton	Flat A/2, F/2 Sonia in Bata	[Signature]
8	SONIA HOMAİN	House wife	Sonia
9	Khalida Khaton	House wife	[Signature]
10	Moshfiqur Rahman	Adm. Sect. Officer	[Signature]
11	Maksuda	# C/2 B-5	[Signature]
12	ABU SHAKILAN	A2-68-	[Signature]
13	BIDAR KRISHNA	E-1, D-3	[Signature]
14	Syed Shamsuddin	F-2, B-8	[Signature]
15	Ismail Karim	E-1, F-7	[Signature]
16	Zahedul Karim	B-1-D7	[Signature]
17	Fahadul Haq	B-1 F-5	[Signature]

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 Dhaka Water Supply and Sewerage Authority
 WASA Bhasan, 98, Kazi Nazrul Islam Avenue (9th Floor)
 Kawra Bazar, Dhaka-1215

Ref No: R24/12-11/38, Protik housing, Bonasree, Dhaka.
 Name of work: Environmental/Social Safeguard issue meet

SL.No	Name	Designation/Org	Signature
18	Titas Roy	Coordinator, E1-C6	[Signature]
19	Md. Abu Tarik	GM-Coordination	[Signature]
20	Md. Kamrul Hassan	Project Director, dot D2-D	[Signature]
21	Md. Hasibul Alam	A1-C6	[Signature]
22	MASUD KHAN	B-2 B-3	[Signature]
23	Md. Hossain Md. Hossain	A-7-7-5	[Signature]
24	Md. Rafiqul Kabir	D-2 B3	[Signature]
25	Md. Rafiqul Kabir	B-2/C5	[Signature]
26	Md. Hafizur Rahman	Team Leader Samdhan	[Signature]
27	Titas Roy	Safeguard Officer (S/O)	[Signature]
28	Md. Abu Raihan	P.M (Sr. Hydrogeologist)	[Signature]
29	Md. Asim	A-1-D-2	[Signature]
30	Engr. Md. Masrur	S-1, B-1	[Signature]
31	Md. Shohidullah	C-2, F-2	[Signature]
32	Md. Masrur	E-1, E-2	[Signature]
33	HASINA	A-5	[Signature]
34	J. M. Prof. Dr. K. M.	B-1 F9	[Signature]

3. Plot-123, Road-14/5, Block-K, South Bonasree, Dhaka.

SL No.	Date and Venue	Participants Discussion	No. of Participants	Project Response
3	<u>02/09/2019</u> Plot-123, Road-14/5, Block-K, South Bonasree, Dhaka.	At the meeting the suggestions of the participant's implementing deep tube wells 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.	27	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.



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

Attendance Sheet

Name of work: Meeting on Environmental & Social Safeguard Studies.

Venue: House No. 125, Rd-14/5, Block-K, South Banasree, Dhaka. Date: 02.09.19

Sl. No	Name	Designation/Org. & Cell No.	Signature
1.	Rupabanjari Khan	Senior Consultant-Asst	Rupabanjari Khan
2.	Takujal Hossain	Social Safeguard Officer (SSG), DPWS-004148	Takujal Hossain
3.	MA. Sarwar Alam	Engineer Associated Engineer DPWS-930202	MA. Sarwar Alam
4.	M.A. S. Hossain	K-125/Block-K 0171-6816978	M.A. S. Hossain
5.	স্বাঃ সাজিদ	Block-K, Road-14/5	স্বাঃ সাজিদ
6.	স্বাঃ সাজিদ	"	স্বাঃ সাজিদ
7.	স্বাঃ সাজিদ	"	স্বাঃ সাজিদ
8.	স্বাঃ সাজিদ	"	স্বাঃ সাজিদ
9.	স্বাঃ সাজিদ	"	স্বাঃ সাজিদ
10.	স্বাঃ সাজিদ	"	স্বাঃ সাজিদ
11.	স্বাঃ সাজিদ	"	স্বাঃ সাজিদ
12.	স্বাঃ সাজিদ	"	স্বাঃ সাজিদ
13.	স্বাঃ সাজিদ	"	স্বাঃ সাজিদ
14.	স্বাঃ সাজিদ	"	স্বাঃ সাজিদ
15.	স্বাঃ সাজিদ	"	স্বাঃ সাজিদ
16.	স্বাঃ সাজিদ	"	স্বাঃ সাজিদ
17.	স্বাঃ সাজিদ	"	স্বাঃ সাজিদ



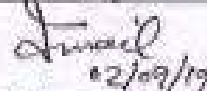
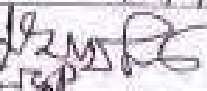



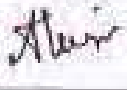
**Dhaka Environmentally Sustainable Water Supply Project (DESWSP)
Dhaka Water Supply and Sewerage Authority.**

Attendance Sheet

Name of work:

Venue :

Doc

SL No	Name	Designation/Org. & Cell No.	Signature
18.	Md. Razib Hossain	Site Engineer, Associated Engineers and Drillers, 0171224207	
19.	Md. Shafiqul	Site supervisor, AEDL 01716-309246	
20.	Md. Ismail Hossain	01764464445	
21.	Md. Saidur Rahman	Safeguard Officer (Env) 0171514964	
22.	MA. MERTANUL ALAM	Team Leader Somahar 0171847932	
23.	MD. ABU SAYED	HOUSE-09, RD-12/4 BLOCK-3 South Banaboo	
24.	Dazrul Islam	HOUSE-03A, BLC-3 RD-12, South Banaboo	HAZRUL ISLAM 0212118
25.	Shakabuddin Ahmad	H-62 Block-3, Road-12 South Banaboo, Dhaka	01916238390
26.	Md. Saiful Islam	Asst Engineer, PMU 01552-243207	
27.	MD. ALAMGIR HOSSAIN	AE, PMU, DESWSP, 0172-881766	

4. Plot-29, Road-8, Block-M, Bonasree, Dhaka.				
SL No.	Date and Venue	Participants Discussion	No. of Participants	Project Response
4	<u>02/09/2019</u> Plot-29, Road-8, Block-M, Bonasree, Dhaka.	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 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.	21	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 bridge entering houses. - ensuring sufficient water supply.- Enclosure will be ensured during construction work.



Attendance Sheet

Name of work: Meeting on Environmental & Social Safeguards Issues.

Venue: House No. 99, Rd.-08, Block-M,
Banabree, Dhaka.

Date: 02.09.1

SL No	Name	Designation/Org. & Cell No.	Signature
01	Md. Moktadirul Alam	T.L. Samadai 01743947932	
02.	Md. Saiful Islam	ASST. Engineer, PMU 01552-243207	
03.	Md. Alamgir Hossain	AE, PMU, DESNSP, DNAM 0172781246	
04	Engr. Shafiqul Islam	ASST. Engineer E.H.L 01711933132	
05	Engr. Amirul Islam	3rd Officer - E.H.L 01712231840	
06	SHOAIB MD. NOOR	Proprietor 01745118238 BS Corporation	
07	H.M. Kamrun Nesa		
08.	Md. Salim Miah	E.H.L	
09	MA. MAZDAL ISLAM	EA-L	
10	MD. TO KABBAR HOSSAIN	E.H.L	
11.	SARADINDU BISWAS (UZZAL)	Project Eng. 01755579816	
12.	Tota Miah	Driver BTCL	
13.	ANIS MIAH	BTCL	
14.	DHIB MIAH	BTCL	
15.	MUKTER HOSSAIN	NEL	
16.	Muhammad Ali	Foreman BTCL	
17.	Imam	BTCL	

C. Training Information H&S

**Management, Design & Supervision Consultant (MDSC)
Dhaka Environmentally Sustainable Water Supply Project (DESWSP), DWASA**

Project Office: House-14 [3rd floor], Road-31
Gulshan-1, Dhaka-1212

Telephone:

Date: 21.10.2019

Attendance Sheet

Sub: RE Safety Training

S/N	Name	Designation & Organization	Phone Number	Signature
1.	CHLOE UNDERDOWN	MDSC CIV. ENG.		
2.	Md. Haimul Islam	ARE (INTAKE)		
3.	MUINOR RASHID	DRE (INTAKE)		
4.	M. Miranur Rahman	ARE (COTP)	01798999734	
5.	Md. Mahmudul Hasan Rahat	HSSE Inspector		

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**Management, Design & Supervision Consultant (MDSC)
Dhaka Environmentally Sustainable Water Supply Project (DESWSP), DWASA**

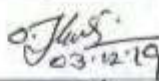



Project Office: House-14 (3rd floor), Road-32
Gulshan-1, Dhaka-1212

Telephone:

Date: 03.12.2019

Attendance Sheet

Sub: HSE Training

S/N	Name	Designation & Organization	Phone Number	Signature
01	Engr. Md. Obaidul Kabir P. Eng.	Design Engineer MDSC	01819244413	 03.12.19
02	Md. Abu Sayed	Asst. Resident Eng. MDSC	01717-014291	
03	Syed Ejazul Karim	Dy. Resident Engineer MDSC	01815-521564	
04	S.M. Jaglul Hossain	Civil Engineer, MDSC.	01712659011	
05	Md. Muhiyuddin + son Rabit	HSE Inspector.	01818390189	

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BEC Associates Limited (Bangladesh), SARM Associates Limited (Bangladesh), Associate for Development Services Limited (Bangladesh) in
Association with Mott MacDonald Limited (UK).

D. MoM of GRC

Minutes of Grievance Redress Meeting

Dhaka Water Supply and Sewerage Authority (DWASA) under Ministry of Local Government and Rural Development (LGRD) of Government of Bangladesh

Formed by Office Order No. 46.085.014.01.00.006.2013 (Part) 888 Date: 11.11.2015

Dhaka Environmentally Sustainable Water Supply Project

Dhaka WASA

Date: 31.10.2019

Time: 10.00 A.M.

Meeting Venue: Area Office of **Development of Rural Poor** (DORP), Arihazar, Narayangong

Discussion Topics:

A) Analysis/hearing of applicant's appeal at Grievance Redress Committee.

B) Steps Taken.

C) Quantity of applicant's acquisitioned land, section, Mouza and Cut-off Date: 03.01.2016, Section-2, included Mouza: Chatonkanda, Bijoy nagor, Aguandi, Atadi, Kumarbag, Kamaldi, Ranidi, Langurdi, Eidbardi and Baliapara.

Name and designation of attended Committee members:

1. Zunayed Abu Yasir, Executive Engineer, DESWSP, Dhaka WASA, Convener of the Committee and Chairman of the Meeting.
2. Dr. Rafiza Akhter, (National Resettlement Expert, MDSC), Selected Representative & Member of the Committee.
3. Zoynal Abydin, Member, Bisnondi Union Council, Arihazar, Selected Representative & Member of the Committee.
4. Kazi Hamida Akhter, Female Member, Brahmondi Union Council, Arihazar, Narayangonj, Selected Representative & Member of the Committee.
5. Md. Fazlul Haque, In fever of affected persons, Member of the Committee.
6. Md. Iqbal Hossain, Area Manager (Resettlement), DORP, Arihazar, Narayangonj.
- 2.

Other Attended Members:

7. Toffazol Hossain, Safeguard Officer (Social/ Gender), DESWSP, Dhaka WASA.
8. Jesmin Shahana, Deputy Team Leader, DORP, DESWSP.
9. Md. Shahadat Hossain, Cristian Commission for Development in Bangladesh (CCDB), External Monitoring Agency (EMA).

Introducing Speech of the Meeting:

Through the introducing speech of the meeting Mr. Zunayed Abu Yasir, Executive Engineer, DESWSP, Dhaka WASA, Convener of the Committee and Chairman of the Meeting welcome and thanks to all participants of the meeting & started the meeting activities. He requested everyone to introduce themselves.

Self-introduction:

All of the participants introduced themselves in response of request of the Chairperson of the meeting.

After introducing period chairperson told that all of you are informed Dhaka WASA is going to be implemented a project namely Dhaka Environmentally Sustainable Water Supply Project. Under the project water would be suctioned from Meghna River at the point of Bisnondhi of Arihazar Upazila of Narayangonj District & to be filtered at Gondhorobpur of Rupgonj Upazila at the proposed Water Treatment Plant (WTP) at own land of Dhaka WASA & this purified water is to be supplied through pipeline to all class of customers of the inhabitants of Dhaka North City Corporation by District Metered Area (DMA). By implementing this project about 35km Raw Water and Treated Water pipeline is to be installed. He added, for implementing it, about 131.52, 60.55 and 6.96 Acres of land are acquiring at Arihazar, Rupgonj Upazilas and Dhaka District areas respectively. According to Moveable Property Acquisition & Requisition Ordinance, 1982 & 2017 Deputy Commissioner (DC) to be paid the compensation of acquired lands, infrastructures and trees. As the project is implementing by the financial assistance of Asian Development Bank (ADB), European Investment Bank (EIB) and Agency Frances Development (AFD), so, in this project conditions are exist at Resettlement Plan implementation. If any complain of any affected persons of the project at the time of implementing the resettlement plan, Grievance Redress Committee has formed to diminish the excitement. He said, through analysis Committee will be taken step for them who were applied at GRC. Steps taken at meeting were observed by Dr. Rafeza, National Resettlement Expert, MDSC. Chairperson told that today's meeting discussion will be held with them only who were submitted complain particularly for Arihazar part's of the project. He requested to Mr. Md. Iqbal Hossain, Member Secretary, Grievance Redress Committee (GRC), Area Manager, DORP, Arihazar, Narayangonj to present files and grievance information.

Discussion and Decisions:

Sl. No	Name and Address of Complainant	Grievance Topics	Discussion & Analysis	Taken Steps	Decisions

01	Md. Idress Ali Aguandi Mouza, Arihazar, Narayang onj	At the time of Joint Verification residential house has been discarded, so he has claimed compensation. Dug R. S. 354, Mouza: Aguandi, House: Size-Length 21ft, Width 13ft. Fence: Tin, Chala-2, Floor:Paka.	Through discussion, analysis and investigation the members of the committee knew that the applicant has built infrastructure after cut-off date (03/01/2016) for the respective Mouza.	At the time of hearing defendant person acknowledged that infrastructure was made after cut-off date. According to the confession of the applicant & resettlement rules there is no scope to compensate. So, dismissed the application.	Dismissed.
02	Mofizul Islam, Bijoy Nagar Mouza, Arihazar, Narayang onj	At joint investigation showed that business of Sand has been discarded. So, demanded to compensate. Dug No. 55, Land quantity: Seven (7) Katha.	Through discussion, analysis and visit the members of the committee has been learnt that the limited Sand Business was in mentioned place.	Under resettlement law/ rules he can be compensated from DESWS Project. To be informed to PD, DESWSP about the discussed matter.	To be requested to PD, DESWSP to compensate the plaintiffs for ensuring the affected person's compensation to be provided.
03	Atiqur Rahman	At joint verification revealed that part of house has been	Through discussion, analysis and visit the members of the	Applicant has informed to communicate	Committee has decided that DC office

	Mouza: Aguandi, Arihazar, Narayang onj	discarded. So, he has claimed compensation. Dug R. S. 273 Mouza: Aguandi , Building House Size: Length 7ft and width 7ft.	committee has been shown that his residential home land's money has been taking away other person. Ownership of land not recognized.	to the relevant section of DC office with recognized documents and necessary papers.	has pictures, video and records of acquired areas. Accordingly, to be requested to DC to take necessary action to provide compensation in favor of affected person.
04	Md. Babul Hossain, Father: Abdul Malek	At joint verification his Cow Farmhouse has been discarded. He has claimed his farms business loss and compensation of house.	Through discussion, analysis and visit the members of the committee has been shown that in applicant's mentioned site no infrastructure of milk farm was there or the farm was not built for business purposes, rather infrastructure was built in limited space for keeping cows for agricultural cultivation.	Claimant has asked to communicate to the relevant section of DC office for compensation .	Committee has decided that DC office has pictures, video and records of acquired areas. Accordingly, to be requested to DC to take necessary steps to provide compensation in favor of affected person.
05	Md. Hossain	In joint verification applicant's cow	Through discussion, analysis and visit the	The Plaintiff has requested	Committee has decided

	<p>Ali, Father: Md. Mizanur Rahman, Sung: Chaitanka nda, Arihazar, Narayang onj.</p>	<p>keeping house at 3552 number Dug has been discarded including following infrastructures and he claimed compensation: 1) House (Size: Length 38ft, width 16.5ft), Fence: Tin, Floor: Paka, Chala: Tin. 2) Bath Room (Chalaless): (Size: Length 7.6ft, width 7.6.5ft), Fence: Tin, Chala: Nil. 3) Tube-well with Motor: Depth: 195ft.</p>	<p>members of the committee has been showed that applicant's mentioned structures were there.</p>	<p>to communicate to the relevant section of DC office.</p>	<p>that DC office has pictures, video and records of acquired areas. Accordingly, to be requested to DC to take necessary steps to provide compensation in favor of affected person.</p>
06	<p>Habibulla h, Father: Mirazuddi n, Mouza: Eidbardi, Arihazar, Narayang nj.</p>	<p>In joint verification applicant's kitchen has been discarded. Dug R.S. 73, So, he has been claimed compensation: 1) Kitchen (Size: Length 15ft, width 10ft), Fence: Tin, Chala: 1, Floor: Kacha.</p>	<p>Through discussion, analysis and visit the members of the committee has been showed that applicant's mentioned structures were in said place.</p>	<p>The applicant has asked to communicate to the relevant section of DC office.</p>	<p>Committee has decided that DC office has pictures, video and records of acquired areas. Accordingly, to be requested to DC to take necessary steps to provide compensation in favor of</p>

					affected person.
07	Md. Awlad Hossain, Father: Shabuddin Mia, Mouza: Baliapara, Arihazar, Narayangnj	At joint verification applicant's 4.5 decimal land, tin-shed house and cow farm at R.S Dug No. 617 has been discarded. So, he has been claimed compensation.	Through discussion, analysis and investigation the members of the committee has been showed that after cut-off date of 2017 the applicant aspiration to get compensation by self-motivation has made the mentioned infrastructure.	At the time of hearing appellant has been acknowledged that he has made infrastructure after cut-off date. According to resettlement rules, there is no scope to compensate the applicant. So, dismissed the appeal.	Settled.
08	Sufian, Father: Md. Matin, Mouza: Atadi, Arihazar, Narayangnj	In joint verification applicant's residential house with balcony has been discarded. So, he has been claimed for compensation. Dug R.S. 601. 1) House (Size: Length 21ft, width 13ft), Fence: Tin, Chala: 2, Floor: Kacha. 2) Balcony (Size: Length 9ft, width 7.5ft), Fence: Tin,	Through discussion, analysis and investigation the members of the committee has been showed that applicant's described structures were there.	The applicant has asked to communicate to the relevant section of DC office.	Committee has decided that DC office has pictures, video and records of acquired areas. Accordingly, to be requested to DC to take necessary steps to provide compensation in favor of

		Chala: 2, Floor: Kacha.			affected person.
09	Montaj Uddin, Father: Md. Miaz Uddin, Mouza: Baliapara, Arihazar, Narayang nj	At joint verification applicant's 2 balcony and Bathroom has been discarded. So, he has claimed for compensation. Dug: R.S. 73 1) House (Size: Length 15ft, width 10ft), Fence: Tin, Chala: 1, Floor: Kacha.	Through discussion, analysis and investigation the members of the committee has been showed that in said place applicant's mentioned structures were there.	The applicant has asked to communicate at the relevant section of DC office.	Committee has decided that DC office has pictures, video and records of acquired areas. Accordingly, to be requested to DC to take necessary steps to provide compensation in favor of affected person.
10	Jahangir Hossain, Mouza: East Atadi and Atadi, Arihazar, Narayang nj	At joint verification applicant's residential house with balcony has been discarded. So, he has been claimed for compensation. Dug R.S. 601. 1) House (Size: Length 20ft, width 13ft), Fence: Tin, Chala: 2, Floor: Kacha. 2) Balcony (Size: Length 8ft, width 8.5ft), Fence: Tin,	Through discussion, analysis and investigation the members of the committee has been showed that in said place applicant's mentioned structures were there.	The applicant has asked to communicate at the relevant section of DC office.	Committee has decided that DC office has pictures, video and records of acquired areas. Accordingly, to be requested to DC to take necessary steps to provide compensation

		Chala: 2, Floor: Kacha.			in favor of affected person.
11	Md. Fazlul Haque, Father: Late Sayed Ali Master, Mouza: Aguandi, Arihazar, Narayang onj	A semi-paka house has been discarded and a residential house was in risk. So, he has been claimed for compensation. Dug R.S. 354. 1) Room (Size: Length 60ft, width 20ft), Fence: Paka, Chala: 2, Floor: Paka. 2) House (Size: Length 3.6ft, width 2.5ft), Height:2ft..	Through discussion, analysis and investigation the members of the committee has been showed that in said place applicant's mentioned structures were there.	The applicant has asked to communicate at the relevant section of DC office.	Committee has decided that DC office has pictures, video and records of acquired areas. Accordingly, to be requested to DC to take necessary steps to provide compensation in favor of affected person.
12	Md. Helal Uddin, Father: :Late Ohab Ali, Mouza: Baliapara, Arihazar, Narayang nj	Very poor family. Application submitted to get something.	In acquisition & requisition law there is no scope to consider such case for compensation.	Appeal dismissed.	Settled.
13	Ajith Mohon Das, Mouza: Chaitanka	A pakha Bathroom has been discarded. So, he has claimed for compensation. Dug R.S. 3549.	Through discussion, analysis and investigation the members of the committee has been	The applicant has asked to communicate at the relevant	Committee has decided that DC office has pictures, video and

	nda, Arihazar, Narayang onj.	1) Toilet (Size: Length 8.8ft, width 4ft), Fence: Paka, Rooftop: Paka.	showed that in said place applicant's mentioned structure was there.	section of DC office.	records of acquired areas. Accordingly, to be requested to DC to take necessary steps to provide compensation in favor of affected person.
14	Shahin Ahmed Ridoy, Father: Abdul Baten, Mouza: Chaitanka nda, Arihazar, Narayang onj.	Appeal for compensation for loosing fish cultivation.	Through discussion, analysis and investigation the members of the committee has been showed that he has got money.	Appeal dismissed.	Settled.
15	Ayesa Begum, Husband: Late Md. Nanif, Vill: Shomvho pura, Arihazar, Narayang onj.	Dug: R.S. 106, 129 Applicant's deep tubewell has been discarded. Deep tubewell: 4 inches x 4 inches, Depth: 92ft.	Through discussion, analysis and investigation the members of the committee has been showed that in said place applicant's mentioned structure was there.	The applicant has requested to communicate at the relevant section of DC office.	Committee has decided that DC office has pictures, video and records of acquired areas. Accordingly, to be requested to

					DC to take necessary steps to provide compensation in favor of affected person.
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In the meeting there was no other discussion topics, so, chairperson declared close of the meeting by giving thanks to all.

Md. Iqbal Hossain, Area Manager (Resettlement), DORP, Arihazar, Narayangonj	Dr. Rafiza Akhter, (National Resettlement Expert, MDSC), Selected Representative & Member of the Committee	Zoynal Abydin, Member, Bisnondi Union Council, Arihazar, Selected Representative & Member of the Committee	Kazi Hamida Akhter, Female Member, Brahmondi Union Council, Arihazar, Narayangonj, Selected Representative & Member of the Committee	Md. Fazlul Haque, In fever of affected persons, Member of the Committee
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ক্রিয়াকর্মী সড়ক কার্যবিবরণী
গণপ্রজাতন্ত্রী বাংলাদেশ সরকারের এশিয়া-প্যাসিফিক সড়কসংস্কার অধিদপ্তর পানি সরবরাহ ও পরিষ্কারকর্ম কর্তৃপক্ষ
প্রজ্ঞাপন নং ৪৬.০৮৫.০১৪.০১.০০.০০৬.২০১৫ (অংশ) ৮৮৮ তারিখ ১১.১১.২০১৫-এর মাধ্যমে পরিষ্কার
ঢাকা এনভায়রনমেন্টালি সাসটেইনেবল ওয়াটার স্যাপ্লাই প্রজেক্ট
ঢাকা, গ্যাসা

তারিখ : ০১/১০/২০১৯

সময় : সকাল ১০টা

সভার স্থান : ডব্লু এরিয়া অফিস, আড়াইহাজার, নারায়ণগঞ্জ।

আলোচ্য বিষয় :

ক) ফোর নিরসন কমিটি (Grievance Redress Committee – GRC)আবেদন কৃতদের অভিতযোগ বিষয়ক পর্যালোচনা / শুনানি।

খ) পৃথীত পদক্ষেপ।

গ) কটি অক ডেট : ০৩/০১/২০১৫ইং

উপস্থিত কমিটি সদস্যদের নাম ও পদবী :

১. জনাব জুনায়েদ আবু ইয়াসির, নির্বাহী প্রকৌশলী, DESWSP, ঢাকা গ্যাসা। কমিটির আহ্বায়ক এবং সভার সভাপতি।
২. ড. রাসেল আলম (National Resettlement Expert, MDSC) মনোনীত প্রতিনিধি ও কমিটির সদস্য।
৩. জনাব আবদুল মেকর, বিশদী ইউনিয়ন পরিষদ, আড়াইহাজার, নারায়ণগঞ্জ। মনোনীত প্রতিনিধি ও কমিটির সদস্য।
৪. কাজি হামিদা আক্তার, মহিলা মেম্বর ব্রাঞ্চ-১ ইউনিয়ন পরিষদ, আড়াইহাজার, নারায়ণগঞ্জ। মনোনীত প্রতিনিধি ও কমিটির সদস্য।
৫. মোঃ ফজলুল হক, ক্রিয়াকর্মী ব্যক্তিদের পক্ষে, কমিটির সদস্য।
৬. মোঃ ইকবাল হোসেন, এরিয়া ম্যানেজার (Resettlement), ডব্লু, আড়াইহাজার, নারায়ণগঞ্জ। মনোনীত এনজিও প্রতিনিধি ও কমিটির সদস্য সচিব।

অন্যান্য উপস্থিত সদস্য :

৭. হোফাচ্ছল হোসেন, সেকেন্ড অফিসার (সোসাল/জোডার), DESWSP, ঢাকা গ্যাসা।
৮. জেপমিন সাহা, ডেপুটি টিম লিডার, ডব্লু, DESWSP.
৯. মোঃ শাহাদাত হোসেন, EMA.

সভার সূচনা করিয়া কমিটির আহ্বায়ক, জনাব জুনায়েদ আবু ইয়াসির, নির্বাহী প্রকৌশলী, DESWSP, ঢাকা গ্যাসা, সভার উপস্থিত সকলকে তত্ত্বাভ্যাসিত করিয়া সভার কাজ শুরু করেন। তিনি উপস্থিত সকলকে খালি জায়গায় সভার কাজ শুরু করেন এবং সকলকে নিজ নিজ পরিচয় লিখে বলেন।

পরিচয় সূচনা : সভাপতির আহ্বানে সভার অংশগ্রহণকারীরা স্ব স্ব পরিচয় তুলে ধরেন।

পরিচয় পূর্ব পক্ষে হলে সভাপতি মহোদয় বলেন অংশগ্রহণ অর্থাৎ অংশগ্রহণ করেন যে ঢাকা গ্যাসা তথা বাংলাদেশ সরকার, ঢাকা এনভায়রনমেন্টালি সাসটেইনেবল ওয়াটার স্যাপ্লাই প্রজেক্ট (DESWSP) নামে একটি মেগা প্রজেক্ট বাস্তবায়ন করতে যাচ্ছে। প্রকল্পটি নারায়ণগঞ্জ জেলার আড়াইহাজার উপজেলার বিশদী মেম্বর নদী থেকে অপরিশোধিত পানি উত্তোলন করে পাইপ লাইনের মাধ্যমে রূপগঞ্জ উপজেলার গর্ষপুর্বে ঢাকা গ্যাসার নিজস্ব জমিতে প্রস্তুত পানি পোষণার প্র্যাক্টি নিয়ে তা পরিশোধন করে পরিশোধিত/বিশুদ্ধ পানি ঢাকা উত্তর সিটি কর্পোরেশন অংশে বসবাসকারীদের মধ্যে সরবরাহ করবে। উক্ত প্রকল্প বাস্তবায়নে মোট ৩৫ কি. মি. পলির লাইন নির্মাণের পরিকল্পনা গ্রহণ করা হয়েছে।

তিনি আরও বলেন, এটি বাস্তবায়নের জন্য আড়াইহাজার ও রূপগঞ্জ উপজেলার যথাক্রমে ১০১.৫২ ও ৬০.৫৫ একর জমি অধিগ্রহণ করা হয়েছে। স্থাবর সম্পত্তি অধিগ্রহণ ও হ্রদনদপল অধ্যয়ন ১৯৮২ ও ২০১৭ মোতাবেক জেলা প্রশাসক অধিদপ্তর জমি, অবকাঠামো ও গাছপালা অধিদপ্তর প্রদান করবেন।

যেহেতু প্রকল্পটি Asian Development Bank (ADB) এর আর্থিক সহায়তা বাস্তবায়িত হচ্ছে তাই প্রকল্পটিকে পুনর্বাসন পরিকল্পনা (Resettlement plan) বাস্তবায়নের শর্ত রয়েছে। পুনর্বাসন পরিকল্পনা বাস্তবায়নে প্রকল্পের ক্রিয়াকর্মী ব্যক্তিদের কাজ ও কোন অভিযোগ থাকলে স্মার্ট নিরসন কমিটি (Grievance Redress Committee – GRC) করা বলা হয়েছে। তিনি বলেন, GRC বরাবর যাহারা আবেদন করেছেন তাহাদের বাণীরে কমিটি পর্যালোচনার মাধ্যমে পৃথীত পদক্ষেপ গ্রহণ করবেন। পুরো মিটিং ও পৃথীত পদক্ষেপ মনিটরিং করেন ড. রাসেল আলম (National Resettlement Expert, MDSC) কমিটির সদস্য।

সভাপতি মহোদয় বলেন, আজকের সভার মূলত প্রকল্পের আড়াইহাজার অংশের অধিদপ্তর জমি, অবকাঠামো, গাছপালা ও অন্যান্য বিষয়ে যাহারা অভিযোগগ্রহণ করা নিরয়েছেন তাহাদের প্রত্যেকের সাথে অভিযোগের বিষয়ে আলোচনা করা হবে। তিনি, ক্রিয়াকর্মী কমিটির সদস্য সচিব, মোঃ ইকবাল হোসেন, এরিয়া ম্যানেজার, ডব্লু, আড়াইহাজার, নারায়ণগঞ্জকে প্রত্যেকের কাছের ও অভিযোগের তথ্য উপস্থাপনের জন্য অনুরোধ করেন।

মিটিংয়ের আলোচনা ও সিদ্ধান্ত :

ক্রমিক নং	অভিযোগ করির নাম ও ঠিকানা	অভিযোগের বিবরণ	আলোচনা ও পর্যালোচনা	পৃথীত পদক্ষেপ	সিদ্ধান্ত
০১	মোঃ ইব্রাহিম আলী আড়াইহাজার মৌজা, আড়াইহাজার, নারায়ণগঞ্জ	মৌজা ভল্লভে বসত ঘর বালু পড়িয়ে, তাই তিনি স্বস্তি পূর্বের সবি করছেন। নাম : আর এল ৩০৫ মৌজা আড়াইহাজার , খণ্ড (১) ১নং ২১৬৫/১৯৯ ১০৬৫ , সেক্টর টি.৩.৩.৩। ১, ২, ৩, ৪, ৫। পাল	আলোচনা ও পর্যালোচনা ও কমিটি সরেজমিন ভল্লভে মধ্যমে জানা যায় তার অবকাঠামো আছে। খণ্ডের টিকা বাংলাদেশ সরকারের পক্ষে ডেপুটি কমিশনার অফিস প্রদান করে থাকবে।	তাহাকে ডেপুটি কমিশনার অফিসে বোঝানো করে জানা বলা হয়েছে।	কমিটি সিদ্ধান্ত গ্রহণ করেন যে, মনোনীত বেসামান্যিক পর্যালোচনার মাধ্যমে অভিযোগগ্রহণের প্রত্যেকের সবি ও খিতি ও প্রকল্পের বহি আছে। সে মোতাবেক সিদ্ধান্ত গ্রহণের জন্য মহোদয়ের কাছে অনুরোধ করছি। যাতে ক্রিয়াকর্মী ব্যক্তি তার প্রাপ্য স্বস্তি পূর্ণ পায় সে বাস্তব

					এহেনে জন্ম বিনিত অনুবোধ করি।
০২	মকিমুল ইসলাম, নিজর নগর মৌজা, আড়াইহাজার, নারায়ণগঞ্জ	বৌদি জনকে বাবুর ব্যবসা বান পড়বে, তাই তিনি ক্ষতিপূরণের দাবি করছেন।	আলোচনা ও পর্যালোচনার মাধ্যমে জানা যায় সেখানে বাবুর ব্যবসা আছে।	JVC সরেজমিনে পর্যবেক্ষণ করে বাবোলায়ীক ক্ষতিপূরণ পরার উপযুক্ত কিনা সিদ্ধান্ত নিলেন।	মুক্তকর্তা/বিচার্যকর্তা
০৩	অভিভূত রহমান, আমরাশী মৌজা, আড়াইহাজার, নারায়ণগঞ্জ	বৌদি জনকে বাবুর খালের আওতায় বান পড়বে, তাই তিনি ক্ষতিপূরণের দাবি করছেন। নাম: আর এন ২/৩ মৌজা আমরাশী	আলোচনা ও পর্যালোচনার মাধ্যমে জানা যায় তার বাবুর খালের জমির টিকা বান শোকজন তুলে নিয়ে গেছে। জমির মালিকানা টিক নাই। (বাবু মালিকানা টিক করতে হবে।)	তাকে আলোচনার মাধ্যমে সিদ্ধান্ত করতে বলা হয়েছে। কারণ মালিকানা নির্ধারণ করবেন। আলোচনা: আলোচনা পরিষ্কার করা হল।	নিষ্পত্তি করা হল
০৪	মেজা বাবুল হোসেন, পিলা : আশুপ মসজিদ আড়াইহাজার, নারায়ণগঞ্জ	বৌদি জনকে তার গরুর বাবুর বান পড়বে। তিনি বাবুরের ব্যবসায়িক ক্ষতিপূরণ এবং খালের টিকা দাবি করছেন। নাম: আর এন ৩৫৪, মৌজা আমরাশী, টার্ম: ১৯শুটি গ্রহ ১০শুটি, ঘাসা ১ টি, বেড়া টিন বর্ডমানে অবস্থা : ভালো	আলোচনা ও পর্যালোচনার ও কমিটি সরেজমিন জনকের মাধ্যমে জানা যায় তার গরুর বাবুর নাই। বাবুনে চানাবাসের জন্ম পলিত গরুর ঘর। অভিযুক্তের জামাতার তার অবকাঠামো আছে। খালের টিকা বাবোলায়ীক সরকারের পক্ষে ডেপুটি কমিশনার অফিস প্রদান করে থাকেন।	তাকে ডেপুটি কমিশনার অফিসে যোগাযোগ করার জন্য বলা হয়েছে।	কমিটি সিদ্ধান্ত গ্রহণ করেন যে, মালিকানা কোম্পানিশপক মহলেদের কাছে অভিযুক্তের এলাকার হ্রি ও ডিভিও ও রোডপেস বহি আছে। সে মোতাবেক সিদ্ধান্ত গ্রহণের জন্য মহলেদের কাছে অনুবোধ করি। যাতে অভিযুক্তের তার প্রাপ্ত ক্ষতিপূরণ পায় সে ব্যবস্থা এহেনে জন্ম বিনিত অনুবোধ করি।
০৫	মেজা হোসেন আলী, পিলা : মিজানুর রহমান মাং ঠাকুরকান্দা, আড়াইহাজার নারায়ণগঞ্জ	বৌদি জনকে ৩৩৫২, মাসে তাই তিনি ক্ষতিপূরণের দাবি করছেন। (ঘর ৪(১) টার্ম : ৩৬শুটি, গ্রহ ১৬.৫শুটি, বেড়া টিন, মেসে পক, ঘাসা ২ বর্ডমানে পক পলন করা হয় না। (২) মাসে বাবা : টার্ম ৭.৬ শুটি ও গ্রহ ৭.৬শুটি বেড়া টিন, ঘাসা : নাই, (৩) মীর সহ টিউবওয়েল ১৯৫শুটি গরুরঘর।	আলোচনা ও পর্যালোচনার ও কমিটি সরেজমিন জনকের মাধ্যমে জানা যায় তার সেখানে আয়েতির ভিনিকলো আছে। ক্ষতিপূরণের টিকা বাবোলায়ীক সরকারের পক্ষে ডেপুটি কমিশনার অফিস প্রদান করে থাকেন।	তাকে ডেপুটি কমিশনার অফিসে যোগাযোগ করার জন্য বলা হয়েছে।	কমিটি সিদ্ধান্ত গ্রহণ করেন যে, মালিকানা কোম্পানিশপক মহলেদের কাছে অভিযুক্তের এলাকার হ্রি ও ডিভিও ও রোডপেস বহি আছে। সে মোতাবেক সিদ্ধান্ত গ্রহণের জন্য মহলেদের কাছে অনুবোধ করি। যাতে অভিযুক্তের তার প্রাপ্ত ক্ষতিপূরণ পায় সে ব্যবস্থা এহেনে জন্ম বিনিত অনুবোধ করি।

		মৌজা ইংবাশি টার্ম ১০ শুটি ও গ্রহ ১০শুটি বেড়া : টিন, ঘাসা : ১ টি, মেসে : কাজ	কমিশনার অফিস প্রদান করে থাকেন।		রোডপেস বহি আছে। সে মোতাবেক সিদ্ধান্ত গ্রহণের জন্য মহলেদের কাছে অনুবোধ করি। যাতে অভিযুক্তের তার প্রাপ্ত ক্ষতিপূরণ পায় সে ব্যবস্থা এহেনে জন্ম বিনিত অনুবোধ করি।
১০	জাহাঙ্গীর হোসেন, পূর্ব আকদি, আকদি মৌজা, আড়াইহাজার, নারায়ণগঞ্জ	বৌদি জনকে বাবুলায়ীক বান ঘর বান পড়বে। তাই তিনি ক্ষতিপূরণের দাবি করছেন। নাম: আর এন ৬০১, মৌজা আমরাশি (১) টার্ম ২০শুটি, গ্রহ ১০শুটি বেড়া টিন, ঘাসা : ২, মেসে : কাজ (২) বাড়িমা টার্ম ৮ শুটি, গ্রহ ৮.৫শুটি বেড়া টিন, ঘাসা : ২, মেসে : কাজ	আলোচনা ও পর্যালোচনার ও কমিটি সরেজমিন জনকের মাধ্যমে জানা যায় তার সেখানে অবকাঠামো আছে। ক্ষতিপূরণের টিকা বাবোলায়ীক সরকারের পক্ষে ডেপুটি কমিশনার অফিস প্রদান করে থাকেন।	খালের টিকা ডেপুটি কমিশনার অফিস প্রদান করে থাকেন। তাই তাকে ডেপুটি কমিশনার অফিসে যোগাযোগ করার জন্য বলা হয়েছে।	কমিটি সিদ্ধান্ত গ্রহণ করেন যে, মালিকানা কোম্পানিশপক মহলেদের কাছে অভিযুক্তের এলাকার হ্রি ও ডিভিও ও রোডপেস বহি আছে। সে মোতাবেক সিদ্ধান্ত গ্রহণের জন্য মহলেদের কাছে অনুবোধ করি। যাতে অভিযুক্তের তার প্রাপ্ত ক্ষতিপূরণ পায় সে ব্যবস্থা এহেনে জন্ম বিনিত অনুবোধ করি।
১১	মেজা ফজলুল হক, পিলা : মুর হোসেন আলী হাট্টা, আমরাশি মৌজা, আড়াইহাজার, নারায়ণগঞ্জ	একটি সেমি পলন ঘর বান পড়বে ও একটি বনর ঘর ডুকিপূর্ণ অবস্থায় আছে। তাই তিনি ক্ষতিপূরণের দাবি করছেন। নাম: আর এন ৩৫৪, মৌজা আমরাশি(১) ঘর টার্ম ১০শুটি, গ্রহ ২০শুটি বেড়া পক, ঘাসা : ২, মেসে : পক (২) হাট্টা : টার্ম : ০.৯শুটি, গ্রহ : ২.৫শুটি, উজকা : ২শুটি = মেসে : ১২টি	আলোচনা ও পর্যালোচনার মাধ্যমে জানা যায় তার সেখানে ঘর ছিল। খালের টিকা ডেপুটি আলোচনা ও পর্যালোচনার ও কমিটি সরেজমিন জনকের মাধ্যমে জানা যায় তার সেখানে অবকাঠামো আছে। ক্ষতিপূরণের টিকা বাবোলায়ীক সরকারের পক্ষে ডেপুটি কমিশনার অফিস প্রদান করে থাকেন।	সরাজমিনে জনর পক্ষে ৩ ডিভিও ট্রিল মেসে সিদ্ধান্ত নেওয়া হবে। এবং তাকে ডেপুটি কমিশনার অফিসে যোগাযোগ করার জন্য বলা হয়েছে।	কমিটি সিদ্ধান্ত গ্রহণ করেন যে, মালিকানা কোম্পানিশপক মহলেদের কাছে অভিযুক্তের এলাকার হ্রি ও ডিভিও ও রোডপেস বহি আছে। সে মোতাবেক সিদ্ধান্ত গ্রহণের জন্য মহলেদের কাছে অনুবোধ করি। যাতে অভিযুক্তের তার প্রাপ্ত ক্ষতিপূরণ পায় সে ব্যবস্থা এহেনে জন্ম বিনিত অনুবোধ করি।
১২	মেজা বেলাল উদ্দিন, পিলা : মুর হোসেন আলী, মালিকানা মৌজা, আড়াইহাজার, নারায়ণগঞ্জ	মতি সন্ধি পরিষ্কার। কিছু পড়ারের জন্ম থাকেন।	আলোচনা ও পর্যালোচনার মাধ্যমে বলা হয় মনবিক বিষয় বিবেচনার কোন সুযোগ নেই।	আলোচনা পরিষ্কার করা হল।	নিষ্পত্তি করা হল
১৩	খাজির হোসেন নাম, ঠাকুরকান্দা মৌজা, আড়াইহাজার,	যারা ব্যবসায় বান পড়বে। তাই তিনি ক্ষতিপূরণের দাবি করছেন।	আলোচনা ও পর্যালোচনার ও কমিটি সরেজমিন জনকের মাধ্যমে জানা যায় তার	তাকে ডেপুটি কমিশনার অফিসে যোগাযোগ করার জন্য বলা হয়েছে।	কমিটি সিদ্ধান্ত গ্রহণ করেন যে, মালিকানা কোম্পানিশপক

	নারায়ণগঞ্জ	মাগা আর এল ৩৫৪৯, মৌজা ট্রান্সমিটন, (১) টিয়ার্টী ; সির্গ ১,১৮৫টি, এছাড়া ৩৬৫টি মেজা, পাক,হোল	সেখানে অবগতিরমো আছে । ক্ষতিপূরণের টাকা বাংলাদেশ সরকারের পক্ষে রেপুটী অধিনায় অফিস প্রদান করে থাকেন ।		মহাসেতের কাছে পরিষ্করণকৃত এলাকার ছবি ও ভিডিও ও ফটোগ্রাফ বহি আছে । সে মোহাবোক সিদ্ধান্ত এতেনের জন্য মহাসেতের কাছে অনুমোদন করছি । যাতে ক্ষতিপূরণকৃত তার প্রাপ্য ক্ষতিপূরণ পায় সে ব্যবস্থা এতেনের জন্য বিনিত অনুমোদন করছি ।	
১৪	মাদিন আব্বাস আল মাদিন, শিরাই আল বাবেন মৌজা-১০৯ মৌজা আড়াইহাজার, নারায়ণগঞ্জ	মহাসেতের ক্ষতিপূরণ পাতকের জন্য অনুমোদন ।	আমোদনা ও পর্যালোচনার মাধ্যমে জানা যায় কিনিস টাকার পেয়েছেন ।	অনুমোদন স্বাভাবিক করা হলে ।	নিষ্পত্তি করা হলে	
১৫	আমোদনা পোশ মাদিন: কুত মো: হালিক এম: শমসুন্না, আড়াইহাজার, নারায়ণগঞ্জ	সেকশন-১, ইমার্টিক পয়েন্টে গভীর মলকুল ৪'৬" x ৪'৬" গভীরতা ১২ ফুট মাগা আর এল ১০৯, ১২৯, মৌজা শমসুন্না, আড়াইহাজার, নারায়ণগঞ্জ	আমোদনা ও পর্যালোচনার মাধ্যমে জানা যায় আর দেখাচ্ছে গভীর মলকুল ছিল ।	কিনিস ক্ষতিপূরণ পাবার উপযুক্ত		যাতে ক্ষতিপূরণ প্রদান করা মেহের পারে ।

কমিটির দু'বারিশরতে পৃথীক সিদ্ধান্ত :

ফোক নিরসন কমিটি (Grievance Redress Committee – GRC) অনুলমকৃত মে পৃথীক সিদ্ধান্ত অফিকা একলগলে (সেতুক) করা হলে ।

মহাসে আর কেল আমোদনার বিবেচনা পাকের সতাপতি মহাসেতের সতককে ক্যাবলে জাণিয়ে মতায় সমাধি মেহেতা করেন ।

মেজা ইকাল মেহেত,
এফিকা মাহেতমের কবন,
DESWSP সতক
আড়াইহাজার, নারায়ণগঞ্জ

ড. মাহেতম মাহেত
(National Resettlement
Expert, MDSC),
DESWSP সতক


জামেল মাহেতম,
মেহেত/কিনিসী ইমার্টিক
পবিল, আড়াইহাজার, নারায়ণগঞ্জ

কাজি হালিক মাহেত,
মহিলা মেহেত, প্রাকশনী ইমার্টিক
পবিল, আড়াইহাজার, নারায়ণগঞ্জ

মেজা মলকুল মল,
ক্ষতিপূরণ পাতকের পাতক
মাহেতমের ইমার্টিক,
আড়াইহাজার, নারায়ণগঞ্জ

মুনায়েম মল ইমার্টিক,
কিনিসী মাহেতমের,
DESWSP, সতক মাহেত ও
মাহেতমের
পবিল GRC
DESWSP, সতক মাহেত

E. Checklists

	Dhaka Environmentally Sustainable Water Supply Project (DESWSP) Dhaka Water Supply and Sewerage Authority (DWASA)
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Environmental Supervision Minutes of Meeting – No. 001

Project Number: MM Proj. No: 346152 / GWT Proj. No: 001464
Project Title: Dhaka Environmentally Sustainable Water Supply Project (DESWSP)

Purpose: Progress review


Place / Date: Intake / 2019-10-08


Author: Mr. Md. Mahmudul Hasan Rahat

Participants:	Company / Title	Name / Initial
	MDSC, Environmental Inspector/ARE	Hasan Rahat (HR)
	GWT, Site Manager	Youssef Najjar (YN)
	GWT, QA/QC Manager	Alapati V Rao (AR)
	GWT, SSE Engineer	Dalil Mechravi (DM)
	SDWP, HSE Engineer	Jahangir Alam (JA)
	SDWP, Project Manager	Sun Jia Ming (SM)


Distribution list:	Participants +	Name / Initial
	MDSC Intl. Env. Expert	Thomas Bailing (TB)
	MDSC Local Env. Expert	Syed Latif (S.L)
	MDSC Team Leader	Nigel Osmaison (NO)
	MDSC Sr. Res. Eng.	Pierre Racine (PR)
	MDSC Deputy Team Leader	Imtiazul Haque (IH)
	GWT Conslr. Project Manager	Richard Sawa (RS)
	GWT Contractor Representative	Nour-Eddine Mesbah (NEM)
	DWASA, Project Director	Mahmudul Islam (MI)
	DWASA, Deputy Project Director 1	Bahrul Islam (BI)
	DWASA, Deputy Project Director 2	Shafiqur Rahman (SR)
	DWASA Environmental Officer	Saidur Rahman (SR)

Item	Current topics	Responsible/Action
1	Minutes of Previous Meeting – Not Applicable	
2	General Environmental Compliance	
2.1	Design and construction commitments in EA and EMP: Not discussed during this meeting	
2.2	Work does not cause environmental impacts not predicted in EA documentation. Temporary construction shall follow EMP	GWT to ensure
2.3	Compliance with environmental requirements and prohibitions of DoE legislation, and ADB Guidelines w.r.t. EMP: Not discussed during this meeting	
2.4	Compliance with environmental permits or approval: No permits required.	
2.5	Work is not undertaken that requires environmental permits or approvals have not been obtained: Right now, no permits required.	
3	Use of Waste Products or Materials in the Work	

		Dhaka Environmentally Sustainable Water Supply Project (DESWSP) Dhaka Water Supply and Sewerage Authority (DWASA)
3.1	Waste and product dust suppressants meet material and construction requirements:	GWT to ensure
3.2	Replacement of reclaimed excess: Not Applicable at this stage	
3.3	Management and disposal of waste according to waste management plan A discussion was held to local councillor with GWT representative. Waiting to confirm the place.	GWT to ensure the disposal location and get the clearance copy.
4 Management and Disposal of Excess Material		
4.1	Checking of excess materials: Not discussed during this meeting	
4.2	Disposal of excess material are submitted: Not discussed during this meeting	
4.3	Record location of excess material being disposed of: Not confirmed yet.	GWT to ensure
5 Work in, Adjacent to, and over Water bodies		
5.1	Sediment and deleterious material not gaining entry to water: Jetty construction area. Asked to maintain not mixing sedimentation of construction materials to the river	GWT to ensure
5.2	Work in watercourse, water bodies and their banks in compliance with EMP: Asked to follow EMP.	GWT to ensure
5.3	Temporary water passages systems, crossings, cofferdams and turbidity curtains in compliance with EMP: Geo-textile is used to hold dyke and temporary road. Asked to check and maintain servicing continuously.	GWT to ensure
5.4	Disturbance of water course, body and vegetation: Asked to Maintain the flow of water course for temporary road to entry at Intake.	GWT to ensure
6 Work in, Adjacent to Areas of trees not Designated for Removal		
6.1	Sediment and deleterious material not gaining entry to areas of trees:	
6.2	Limits of grading:	
6.3	Entry of equipment, construction materials and excess materials to areas of trees: Asked to maintain log book and write all	GWT to ensure
6.4	Check that critical habitats have not been affected, if required Not found any critical habitats.	
7 Control of Dust from the Work – pollution prevention		
7.1	Dust from exposed work Visible dust seen on exposed work. GWT sprays water twice per day. Asked to ensure minimum dust visibility.	GWT to ensure
7.2	Minimizing emissions from construction machinery	GWT to ensure

		Dhaka Environmentally Sustainable Water Supply Project (DESWSP) Dhaka Water Supply and Sewerage Authority (DWASA)
7.3	Hazardous material is stored in a tray but open to air space	GWT to take steps proper storage.
7.4	No use of banned hazardous material and pesticides	GWT to ensure
7.4	Control of waste generation	GWT to control or reduce waste
7.5	Prepare and Implementation of sewage management plan	GWT to provide and need to implement
8	Maintenance of Local Traffic Access Patterns	
8.1	Checking of local traffic access to different areas It has been found there is no traffic controlling at the entry point of Intake site. Asked deploy a flag man or women for traffic control.	GWT to ensure traffic control at entry point
8.2	Checking of any modification, redirection of local traffic access: Right now, no modification seen.	GWT to maintain
9.0	Consultation of affected persons	
9.1	A generator produces 70dB sound causing sound pollution to the local people	GWT to reduce sound pollution
10	Check H&S requirements, provision of H&S conditions, emergency preparedness has been established	
	Site should maintain log sheet and safety forms to record any issue occurring on site. Site induction set up is present, but quality of premises needs to improve.	GWT to ensure
11	Conservation of physical and cultural resources has been implemented, if required	
	Not required now.	
12	Any other Business/issues	
	Site dairy No log book or site diaries are being maintained on site to record environmental	GWT must maintain a log book and records




 <p>M MOTT MACDONALD</p>	<p>Dhaka Environmentally Sustainable Water Supply Project (DESWSP)</p> <p>Dhaka Water Supply and Sewerage Authority (DWASA)</p>
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Signed By:



Md. Mahmudul Hasan Rahat
Environmental Inspector, MDSC

Abdul Khadar
Construction Manager, GWT

	Dhaka Environmentally Sustainable Water Supply Project (DESWSP) Dhaka Water Supply and Sewerage Authority (DWASA)
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Environmental Supervision Minutes of Meeting – No. 001

Project Number: MM Proj. No: 346152 / GWT Proj. No: 001464
Project Title: Dhaka Environmentally Sustainable Water Supply Project (DESWSP)

Purpose: Environmental progress review


Place / Date: WTP / 2019-10-08

Author: Mr. Md. Mahmudul Hasan Rahat

Participants:	Company / Title	Name / Initial
	MDSC, Environmental Inspector	Hasan Rahat (HR)
	GWT, Site Manager	Youssef Najjar (YN)
	GWT, QA/QC Manager	Alapati V Rao (AR)
	GWT, SSE Engineer	Dalil Mechravi (DM)
	SDWP, HSE Engineer	Jahangir Alam (JA)
	SDWP, Project Manager	Sun Jia Ming (SM)

Distribution list:	Participants +	Name / Initial
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	MDSC Local Env. Expert	Syed Latif (S.L)
	MDSC Team Leader	Nigel Osmaison (NO)
	MDSC Sr. Res. Eng.	Pierre Racine (PR)
	MDSC Deputy Team Leader	Imtiazul Haque (IH)
	GWT Conslr. Project Manager	Richard Sawa (RS)
	GWT Contractor Representative	Nour-Eddine Mesbah (NEM)
	DWASA, Project Director	Mahmudul Islam (MI)
	DWASA, Deputy Project Director 1	Bahrul Islam (BI)
	DWASA, Deputy Project Director 2	Shafiqur Rahman (SR)
	DWASA Environmental Officer	Saidur Rahman (SR)

Item	Current topics	Responsible/Action
1	Minutes of Previous Meeting – Not Applicable	
2	General Environmental Compliance	
2.1	Design and construction commitments in EA and EMP: Not discussed during this meeting	
2.2	Work does not cause environmental impacts not predicted in EA documentation. Temporary construction shall follow EMP	GWT to ensure
2.3	Compliance with environmental requirements and prohibitions of DoE legislation, and ADB Guidelines w.r.t. EMP: Not discussed during this meeting	
2.4	Compliance with environmental permits or approval: No permits required.	
2.5	Work is not undertaken that requires environmental permits or approvals have not been obtained: Right now, no permits required.	
3	Use of Waste Products or Materials in the Work	

		Dhaka Environmentally Sustainable Water Supply Project (DESWSP) Dhaka Water Supply and Sewerage Authority (DWASA)
7.4	No use of banned hazardous material and pesticides	GWT to ensure
7.4	Control of waste generation	GWT to control or reduce waste
7.5	Prepare and Implementation of sewage management plan	GWT to provide and need to implement
8	Maintenance of Local Traffic Access Patterns	
8.1	Checking of local traffic access to different areas: Asked deploy a flag man or woman for traffic control.	GWT to ensure traffic control at entry point
8.2	Checking of any modification, redirection of local traffic access: Right now, no modification seen.	GWT to maintain
9.0	Consultation of affected persons	
9.1	Not discussed during this meeting	
10	Check H&S requirements, provision of H&S conditions, emergency preparedness has been established	
	Site should maintain log sheet and safety forms to record any issue occurring on site. Site induction set up is present, but quality of premises needs to improved.	GWT to ensure
11	Conservation of physical and cultural resources has been implemented, if required	
	Nothing Found	
12	Any other Business/issues	
	Fuel storage Fuel storage is poor at the storage area Site dairy No log book or site diaries are being maintained on site to record environmental	GWT must maintain a log book and records.



Fuel storage is poor


Signed By:

Md. Mahmudul Hasan Rahat
Environmental Inspector, MDSC




Hazardous material is stored in poor way

Abdul Khadar
Construction Manager, GWT

		Dhaka Environmentally Sustainable Water Supply Project (DESWSP) Dhaka Water Supply and Sewerage Authority (DWASA)
3.1	Waste and product dust suppressants meet material and construction requirements:	GWT to ensure
3.2	Replacement of reclaimed excess: Not Applicable at this stage	
3.3	Management and disposal of waste according to waste management plan A discussion was held to local councillor with GWT representative. Waiting to confirm the place.	GWT to ensure the disposal location
4	Management and Disposal of Excess Material	
4.1	Checking of excess materials: Not discussed during this meeting	
4.2	Disposal of excess material are submitted: Not discussed during this meeting	
4.3	Record location of excess material being disposed of: Not confirmed yet.	
5	Work in, Adjacent to, and over Water bodies	
5.1	Sediment and deleterious material not gaining entry to water: Not discussed during this meeting	
5.2	Work in watercourse, water bodies and their banks in compliance with EMP: Asked to follow EMP.	GWT to ensure
5.3	Temporary water passages systems, crossings, cofferdams and turbidity curtains in compliance with EMP: Geo-textile is used to hold dyke and temporary road. Asked to check and maintain servicing continuously.	GWT to ensure
5.4	Disturbance of water course, body and vegetation: Not discussed during this meeting	
6	Work in, Adjacent to Areas of trees not Designated for Removal	
6.1	Sediment and deleterious material not gaining entry to areas of trees: Not discussed during this meeting	
6.2	Limits of grading: Not discussed during this meeting	
6.3	Entry of equipment, construction materials and excess materials to areas of trees: Asked to maintain log book and write all information.	GWT to ensure
6.4	Check that critical habitats have not been affected, if required Not found any critical habitats.	
7	Control of Dust from the Work – pollution prevention	
7.1	Dust from exposed work Visible dust seen on exposed work. Asked to ensure dust suppression work regularly.	GWT to ensure
7.2	Minimizing emissions from construction machinery	GWT to ensure
7.3	Hazardous material is stored in poor way.	GWT to take steps proper storage.

F. Environmental Clearances for DESWSP

Valid upto 10/12/18



 Government of the People's Republic of Bangladesh
Department of Environment
 Head Office, Paribesh Bhavan
 E-16 Agargaon, Dhaka-1207
www.doe.gov.bd

Memo No: 22.02.6700.140.72.138.18. 114g Date: 11/12/2018


Subject: Environmental Clearance for Dhaka Environmentally Sustainable Water Supply Project under Dhaka WASA.

Ref: Your application dated 30/07/2018 and 28/11/2018.

Dear Sir,

Please refer to your letter of 30th July 2018 and 28th November 2018 on the captioned subject, I have the pleasure to convey the approval of Environmental Clearance in favor of Dhaka Environmentally Sustainable Water Supply Project under Dhaka WASA.

A copy of the said Environmental Clearance Certificate is attached herewith for your kind information and necessary action at your end.


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

Project Director
 Dhaka Environmentally Sustainable Water Supply Project
 Dhaka WASA, WASA Bhavan (9th Floor)
 98, Kazi Nazrul Islam Avenue, Kawran Bazar
 Dhaka-1215.

Copy Forwarded to :

- 1) Private Secretary to the Hon'ble Secretary, Ministry of Environment, Forest and Climate Change, Bangladesh Secretariat, Dhaka.
- 2) Director, Department of Environment, Dhaka Metropolitan/Regional office, Dhaka.
- 3) Assistant Director, Office of the Director General, Department of Environment, Head Office, Dhaka.

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

Environmental Clearance Certificate

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

Clearance Certificate Number: 1148

File number: 22.02.6700.140.72.138.18.

Clearance Certificate Issue Date: 11, December 2018

Renewal date not later than: 10, November 2018

A. Clearance Certificate Type

Environmental Clearance Certificate

B. Clearance Certificate Holder

Project Director

Dhaka Environmentally Sustainable Water Supply Project
 Dhaka WASA, WASA Bhaban (9th Floor)
 98, Kazi Nazrul Islam Avenue, Kawran Bazar
 Dhaka-1215.

C. Premises to which this Clearance Certificate Applies

Project Director

Dhaka Environmentally Sustainable Water Supply Project
 Dhaka WASA, WASA Bhaban (9th Floor)
 98, Kazi Nazrul Islam Avenue, Kawran Bazar
 Dhaka-1215.

D. Activities for which this Clearance Certificate Authorizes and Regulates

The following components will be implemented through Dhaka Environmentally Sustainable Water Supply Project under Dhaka WASA -
 Component 1 : Water Treatment Plant (WTP) (capacity 500MLD)
 Component 2 : Water Intake Structure (capacity 1050 MLD)
 Component 3 : 21.7 kilometer Raw Water Transmission Pipeline
 Component 4 : 13 kilometer Treated Water Transmission Pipeline
 Component 5 : 23 kilometer Distribution Reinforcement within the existing network
 Component 6 : 56 kilometer Distribution Reinforcement, small distribution pipe to DMA



Government of the People's Republic of Bangladesh
Department of Environment
 Head Office, Paribesh Bhavan
 E-16 Agargaon, Dhaka-1207
 www.doe.gov.bd

Memo No: 22.02.0000.018.72.124.19 - 541

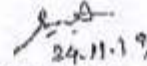
Date: 24/11/2019

Subject: Renewal of Environmental Clearance Certificate for Dhaka Environmentally Sustainable Water Supply Project.

Ref: Your Application dated 28/10/2019.

With reference to the above, the Department of Environment has decided to renew the Environmental Clearance Certificate for Dhaka Environmentally Sustainable Water Supply Project subject to following terms and conditions.

- i. The terms and conditions as stated in Environmental Clearance issued on 11/12/2018 vide 22.02.6700.140.72.138.18.1148 shall remain valid for the renewed period.
- ii. This renewal is valid upto 10/12/2020. Application for further renewal along with the renewal fee and Vat on renewal fee in separate treasury Chalan shall have to be submitted to the Director, Department of Environment, Dhaka Metropolitan Office, Dhaka with a copy to Head Office at least 30 days before the expiry.


24.11.19

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

Project Director
 Dhaka Environmentally Sustainable Water Supply Project
 Dhaka WASA, WASA Bhavan (9th floor)
 98, Kazi Nazrul Islam Avenue
 Kawran Bazar, Dhaka.

Copy Forwarded to :

- 1) Private Secretary to the Hon'ble Secretary, Ministry of Environment, Forest and Climate Change, Bangladesh Secretariat, Dhaka.
- 2) Director, Department of Environment, Dhaka Metropolitan Office, Dhaka.
- 3) Assistant Director, Office of the Director General, Department of Environment, Head Office, Dhaka.

APD-1
 File 2

 29/11/19

E. Terms and Conditions for Environmental Clearance Certificate

1. **Limit Condition for Discharges to Air and Water:** The Environmental Clearance Certificate must comply with schedule 2 and 10, rule 12 of the Environment Conservation Rules, 1997.
2. **Noise Limit:** The Environmental Clearance Certificate must comply with the Noise Pollution (Control) Rules, 2006.

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

3. Operating conditions:

- 3.1 Activities must be carried out in a competent manner. This includes:
 - (a) the processing, handling, movement and storage of materials and substances used to carry out the activity; and
 - (b) the treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity.
- 3.2 All plant and equipment installed at the premises or used in connection with the Environmental Clearance activity:
 - (a) must be maintained in a proper and efficient condition; and
 - (b) must be operated in a proper and efficient manner.
- 3.3 Construction works shall be restricted to day time hours so as to avoid/mitigate the disturbance of local lives as well as implementation schedules of the works shall be notified in advance to nearby residents.
- 3.4 Storage area for soils and other construction materials shall be carefully selected to avoid disturbance of the natural drainage.
- 3.5 This shall be ensured that soil is obtained from nearby areas, which are free of invasive plants. Re-vegetation and replanting shall be undertaken if rehabilitation works involve extensive vegetation clearance.
- 3.6 Vegetation clearance shall be minimizing at the construction phase as to minimize soil erosion. Soils for embankments shall be properly tested and compacted to ensure stability.
- 3.7 Proper construction practices shall be followed that minimize loss of habitats and fish breeding, feeding & nursery sites.
- 3.8 Proper and adequate sanitation facilities shall be ensured in labor camps throughout the proposed project period.
- 3.9 In order to control noise pollution, vehicles & equipment shall be maintained regularly; working during sensitive hours and locating machinery close to sensitive receptor shall be avoided.
- 3.10 No solid waste can be burnt in the project area. An environment friendly solid waste management should be in place during whole the period of the project in the field.
- 3.11 Proper and adequate on-site precautionary measures and safety measures shall be ensured so that no habitat of any flora and fauna would be demolished or destructed.
- 3.12 All the required mitigation measures suggested in the EIA report are to be strictly implemented and kept operative/functioning on a continuous basis.

- 3.13 Any heritage sight, ecological critical area, and other environmentally and/or religious sensitive places shall be avoided during project construction phase.
- 3.14 Resettlement plan should be properly implemented and people should be adequately compensated, where necessary.
- 3.15 Construction material should be properly disposed off after the construction work is over.
- 3.16 The Environmental Management Plan included in the EIA report shall strictly be implemented and kept functioning on a continuous basis.

4.1 Monitoring and Recording conditions:

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

4.2 Requirement to monitor concentration of pollutants discharged

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

- 5. **Reporting Conditions:** Environmental Monitoring Reports shall be made available simultaneously to Head quarters and Dhaka Metropolitan/Regional office of the Department of Environment on a quarterly basis during the whole period of the project.
- 6. **Notification of environmental harm:** The Clearance Certificate holder or its employees must notify the Department of Environment of incidents causing or threatening material harm to the environment as soon as practicable after the person becomes aware of the incident.

F. Recording of pollution complaints

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

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

WARPO
Water Resources Planning Organization

Water Resources Planning
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Ministry of Water Resources
Government of the People's Republic
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Website: www.warpo.gov.bd

Memo No.: 42.02.0000.004.36.001.18-34

Date: 15/01/2019

Managing Director
Dhaka Water Supply and Sewerage Authority
WASA Bhaban, Kazi Nazrul Islam Avenue
Kawran Bazar, Dhaka.

Subject: Regarding issuance of Clearance for proposed "Dhaka Environmentally Sustainable Water Supply"

Reference: Memo No.: 46.113.618.00.00.W-229(Vol-01)/DESWSP/354; dated: 26/11/2018
AD

In regard of the above subject and reference, this clearance is issued after evaluation of the submitted information and DPP for the proposed "Dhaka Environmentally Sustainable Water Supply" subject to the WARPO's comment and compliance with the comments.

Sd/-

(Md. Mahmudul Hasan)

Copy to

1. Secretary, Ministry of Water Resources, Government of the People's Republic of Bangladesh, Bangladesh Secretariat, Dhaka.
2. Project Director, DESWSP, Dhaka WASA, Dhaka (along with annexure).

WARPO

Water Resources Planning Organization

“WARPO’s clearance matrix on proposed development plan of “Dhaka Environmentally Sustainable Water Supply Project”.

Description of Project Clearance Controller	Ye s	No	Comments
1 Is the project compliant to the National Water Policy?	Ye s		See comment 3.1
2 Is the project compliant with the National Water Management Policy (NWMP)?	Ye s		See comment 3.2
3 Is the project compliant with the Water Resources Management 7 th 5-Year Plan and Sustainable Development Goal (SDG) together with other Poverty-Assisted Activities, Programme/ Goal of Principles/ Objectives?	Ye s		See comment 3.3
4 Is the project compliant with Bangladesh Water Law 2013 and Bangladesh Water Regulation 2018?	Ye s		See comment 3.4
5 Is the project compliant with the Integrated Water Resources Management (IWRM) concept?	Ye s		See comment 3.5
6 Is the project duplicate or repetition to a project under implementation or completed by other Organization, Person/Group or if so, whether synchronized with those Organization, Person/Group?	Ye s		See comment 3.6
7 Is the Environmental Impact Assessment of the Water Sectoral Projects completed?	Ye s		See comment 3.7
8 Is the project prepared giving importance to the important social aspects and women, children, poor and under-developed population?			See comment 3.8
9 Whether during project preparation (Feasibility Study) the project scheduling guide (GPA) was followed?			See comment 3.9

10 Is in preparation of the project suitable and tested process, evaluation, technic and tools used?	Ye s		See comment 3.10
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Comment on Clearance:

Clearance to the proposed project is given subject to the necessary amendment as commented.

Sd/- Principal Scientific Officer/ Superintending Engineer (Water Resources Branch	Sd/- Director (Planning/ Technical)
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WARPO

Water Resources Planning Organization

Comments on the submitted DPP (Part of it) and information for the proposed “Dhaka Environmentally Sustainable Water Supply” for issuance of Water Resources Planning Organization (WARPO) clearance.

Background:

Dhaka Water Supply and Sewerage Authority (Dhaka WASA) is an important organization engaged in supplying potable water to the people of Dhaka City. The Organization, currently, supplying potable water to 15 Million people spreading 400 sq. km. area of the Dhaka City. It is expected that the demand of potable water will increase every day with the increase of the area of the Dhaka City to 600 sq. km. by the year 2020. Presently, water is supplied to the city mainly through extracting ground water using deep tube well. On one hand, more and more water is in extraction from the underground; on the other hand, necessary amount of water recharge is not possible due to continuous urbanization and other human created shortage of open spaces. On top of that due to climatic changes, the rainfall is reducing every day. Due to these the level of the underground water is alarmingly diminishing every year. It necessitates declaring of 40-60 deep tube well abandoned in and around Dhaka City. This is causing failure to supply water through extracting underground water. On the other hand extracting underground water is not sustainable and environment friendly and distribution system is not based on sustainable technology. That is why, it is necessary to arrange supplying potable water according to the demand through treating surface water reducing dependency on extraction of underground water. At present, for a long time, supply of water to North-Western part of Dhaka City, that means, to Uttora, Gulshan, Banani, Nikunjo, Khilkhet, Badda, whole of Mirpur and adjacent areas is insufficient to the demand. A project for construction of Water Treatment Plant at Gandhabpur in Rupgonj of Narayangonj and its associated works are undertaken aiming to fulfil the increasing demand of 24 hour safe and uninterrupted pressurized water supply by this vast area.

As a first stage, under the project, water will be lifted constructing Intake at Bishnandi in Araihasar Upozila on the bank of the River Meghna, 30 km East of Narayangonj and will be brought to the proposed Treatment Plant at Gandhabpur, Rupgonj from Golkandail of Dhaka Sylhet road using 2 pipes. Later, this treated water will be brought to the injection point at Baridhara, Dhaka through Madani Avenue crossing the Sitalakhya and the Balu rivers and thereafter that will be supplied to Uttora, Rampura, Mirpur of Dhaka town; and to North-Eastern part of Dhaka. The Feasibility Study of the project is completed.

Project Objective:

The main objective of the project is to ensure water supply to the water crisis areas of Dhaka City collecting surface water and reducing dependency on the underground water.

Physical Works under the Project:

- Construction of Intake on the bank of the river Meghna at Bishnandi of Araihasar Upozila in Narayangong.
- Construction of 22 km Raw Water Transmission Line from Intake point to Treatment Plant.
- Construction of Treatment Plant at Gandharbpur of Rupgonj Upozila in Narayangonj.
- Construction of 14 km Finished Water Transmission Line from Gandharbpur Treatment Plant to Baridhara, Dhaka.

The estimated cost of the project is 5 248.06 Crore according to the DPP.

Project's Financial and Economic Analysis:

	Net Project Value (NPV) (lac taka)	Benefit – Cost Ratio (BCR)	Internal Rate of Return (IRR)
Financial	30129	1.08:1	12.54%
Economic	92274	1.29:1	14.99%

Comments:

3.1 In the National Water Policy-1999 household and municipal use of water is given the highest priority. Concurrent use of underground and surface water, taking steps in limiting use of underground water are mentioned in the Water Policy. Para 4.6 (Ka) of the Water Policy mentioned about government support in collecting rain water and ensuring supply of safe and easily accessible water through various way. Dhaka WASA is an organization engaged in ensuring supply of pure water and sanitation system of Dhaka City. The implementation of the project under discussion will play an important role in ensuring supply of safe water to people. On top of that it will reduce uncontrolled use of underground water. Considering all these the project is aligned with the National Water Policy.

3.2 The National Water Management Plan (NWMP) mentioned programs aiming supply of potable and dependable water for ensuring protection of public health. The project is aligned with the aim-objective and programs as mentioned in MC 002: Dhaka Bulk Water Supply and Distribution System of the National Water Management Plan.

3.3 The 7th 5-Year Plan was formulated targeting Vision 2020 goal. The 7th 5-Year Plan mentioned to ensure safe water in its Nutrition and Services Strategy. It is mentioned in the Plan that the government organizations would continue to work towards providing services to citizens. Dhaka WASA would plan to supply safe water to the city dwellers. Apart from that this project will assist in achieving SDG-6 goal.

3.4 It is mentioned in the National Water Law to ensure safe extraction of underground water. The project will play a role in reducing extraction of underground water to supply water to Dhaka

City. Clause 3 (2) of Water Law considered rights of water use for potable water and cleanliness and sanitation as the highest priority. Apart from that, the priority list of use of water resources of the Clause 18 of the Water Law has given the highest priority to drinking water. The objective of the project is using surface water instead of underground water to contribute in supplying water to Dhaka town that would be environmentally sustainable.

3.5 The National Water Policy (Para 4.5 Ka) suggests to develop water resources projects as much as possible diversified and complete these projects in an integrated and diversified fashion from project planning, implementation to project monitoring. The proposed project will play an important role in supplying safe water to Dhaka City and will help in reducing dependency on underground storage thereby will support to reduce environmental risks.

3.6 To stride for supplying water and development of sanitation system for Dhaka City is the main function of the Dhaka WASA. Water will be supplied from the river Meghna. It is necessary to consider whether within the vicinity of the collection point at Meghna river there is any irrigation or river embankment protection project has been completed or is under implementation by any other organization. It is necessary to show in the index map of the DPP any completed or implementing irrigation or river embankment protection project by any other organization in or near the project area.

3.7 It is compulsory to determine environmental impact for all Water Resources projects according to the para 4.12 of the National Water Law. The Feasibility Study of the proposed project was conducted in 2011. Later, Initial Environmental Examination (IEE) was completed for construction of the Water Treatment Plant under the Dhaka Environmentally Sustainable Water Supply Project and clearance certificate from the Department of Environment was obtained. The Environmental Impact Assessment was conducted further under the Dhaka Environmentally Sustainable Water Supply Project. The report mentioned that there would be no negative impact on the environment implementing the project. It would be necessary to follow the suggested Environmental Management Plan (EMP) that is included in the report. It is necessary to follow the instructions of the report about designing of the Intake Screen considering the fish and other aquatic animals near the Intake point.

3.8 To supply uninterrupted water to increased population of Dhaka City would be possible on completion of the project. The local people and stakeholders were consulted during the Environmental Impact Assessment. Socio-economic impact due to implementation of the project and rehabilitation plan were developed under the project.

3.9 It is necessary, during investing in water sector, to follow all the instructions related to assessment of project or GPA (GPA), people's participation and various other circular issued by the government at time to time during preparation of Feasibility Study Report for all Projects. The Financial and Economic Analysis of the project is completed.

3.10 Feasibility Study of the “Dhaka Environmentally Sustainable Water Supply Project” was completed in 2011. The report considered few locations of Meghna and Sitalakhya rivers for analysis of water quantity and quality and river hydrology and morphology. It is reported that there would be no environmental impact on the river as there would be extraction of 1% of water from the river Meghna during dry season under the project. The report didn't mention whether impact of the environmental change was considered. The Feasibility Study considered that the Water Treatment Plant would be constructed at Khilkhet. Later, it was decided to change to Gandharbpur and further study was conducted. The Feasibility Study reported that the river bank at Bishnandi is stable. But whether there will be any impact due to construction of the Intake or there will be any new possibility of river bank erosion need to be analyzed and necessary measures need to be adopted accordingly. Apart from that the report didn't consider climatic change and whether availability of water at intake point would be influenced by the construction of any obstruction, presently or in future. So, climatic change and availability of water due to construction of any obstruction in the upstream may be considered seriously.

Sd/- 14/1/19 Sd/- 14/01/209

Md. Jamal Haider Md. Jahid Hossain

Scientific Officer Senior Scientific Officer

Water Resources Planning Organization Water Resources Planning Organization

Ministry of Water Resources Ministry of Water Resources

WARPO
পানি সম্পদ পরিকল্পনা সংস্থা

PD/DESWSR
১২/১১/১৯

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স্মারক নং: ৪২.০২.০০০০.০০৪.০৬.০০১.১৮-৬৪

তারিখঃ ২৫/০১/২০১৯

✓ ব্যবস্থাপনা পরিচালক
ঢাকা পানি সরবরাহ ও পরিনিষ্কাশন কর্তৃপক্ষ
ওয়ার্ড ভবন, কাজী নজরুল ইসলাম এভিনিউ,
বাবুগান্ধী সড়ার, ঢাকা।

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বিষয়: প্রস্তাবিত "ঢাকা এনভায়রনমেন্টাল সাসটেইনেবল ওয়াটার সাগ্রাই" শীর্ষক প্রকল্পের ছাড়পত্র প্রদান প্রসঙ্গে।

সূত্র স্মারক নং: ৪৬.১১০.৬১৮.০০.০০.W-229(Vol-01)/DESWSR/354; তারিখ: ২০/১১/২০১৮ খ্রিঃ

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উপর্যুক্ত বিষয় ও সূত্র বর্ণিত পরের প্রেক্ষিতে প্রস্তাবিত "ঢাকা এনভায়রনমেন্টাল সাসটেইনেবল ওয়াটার সাগ্রাই" শীর্ষক প্রকল্পের উপস্থাপিত ভবিঃ এবং ডিপিপি (অংশবিশেষ) পর্যালোচনাতে ওয়ার্ডের সতামত ও উক্ত সতামত প্রতিপালন সাপেক্ষে ছাড়পত্র প্রদান করা হলো।

সংযুক্তি: বর্ণনামতে (০৩ শীত)।

৩১০
১৩/১১/১৯

মোঃ মাহমুদুল হাসান
মহাপরিচালক, ওয়ার্ডে

১৩/১১/১৯

- জনুসিপি:
- ১। সচিব, পানি সম্পদ মন্ত্রণালয়, গণপ্রজাতন্ত্রী বাংলাদেশ সরকার, বাংলাদেশ সচিবালয়, ঢাকা।
(কৃষ্টি অফিস: মুখ্য প্রধান, পানি সম্পদ মন্ত্রণালয়, গণপ্রজাতন্ত্রী বাংলাদেশ সরকার, বাংলাদেশ সচিবালয়, ঢাকা)
 - ২। প্রকল্প পরিচালক, DESWSR প্রকল্প, ঢাকা ওয়াসা, ঢাকা (সংযুক্তিসহ)।

TZ, MDSC
১৩/১১/১৯
Eggr. Md. Mahomudul Islam
Subsistinging Engineer &
Project Director
PAU, DESWSR Dhaka WASA

ক্রমিক	প্রাচীর	অন্য
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WARPO

পানি সম্পদ পরিচালনা সংস্থা

“ঢাকা এনভায়রনমেন্টালী সাসটেইনেবল ওয়াটার সাপ্লাই প্রজেক্ট” শীর্ষক উন্নয়ন প্রকল্প প্রজাবের উপর ওয়ারপোর ছাড়পত্র নির্ণায়ক ছক/ ম্যাট্রিক্স।

প্রকল্প ছাড়পত্র নিয়ন্ত্রকের বর্ণনা	হ্যাঁ	না	মন্তব্য
১ প্রকল্পটি জাতীয় পানি সীতি এর সাথে সামঞ্জস্যপূর্ণ কিনা	হ্যাঁ		মন্তব্য ৩.১ প্রটক
২ প্রকল্পটি জাতীয় পানি ব্যবস্থাপনা পরিচালনা (এনডিরিউএমপি) এর সহিত সামঞ্জস্যপূর্ণ কিনা	হ্যাঁ		মন্তব্য ৩.২ প্রটক
৩ প্রকল্পটি পানি সম্পদ ব্যবস্থাপনার ৭ম পঞ্চ বার্ষিকী পরিচালনা ও টেকসই উন্নয়ন গণক্যামারা (এসজিডি) সহ অন্যান্য দায়িত্ব-সহায়ক কর্মসূচি, কর্মসূচী/নীতিমালার লক্ষ্য/উদ্দেশ্যের সাথে সামঞ্জস্যপূর্ণ কিনা	হ্যাঁ		মন্তব্য ৩.৩ প্রটক
৪ প্রকল্পটি বাংলাদেশ পানি আইন ২০১৩ এবং বাংলাদেশ পানি বিধিমালা-২০১৮ এর সাথে সামঞ্জস্যপূর্ণ কিনা	হ্যাঁ		মন্তব্য ৩.৪ প্রটক
৫ প্রকল্পটি সমন্বিত পানি সম্পদ ব্যবস্থাপনা (আইডরিউআরএম) ধারণার সাথে সংগতিপূর্ণ কিনা			মন্তব্য ৩.৫ প্রটক
৬ অন্যান্য সংস্থা, ব্যক্তি/গোষ্ঠি কর্তৃক পরিচালিত বা সমাজ প্রকল্পসমূহের সহিত প্রস্তাবিত প্রকল্পটির কোন ঐক্যতা বা পুনরাবৃত্তি আছে কিনা বা ঝড়পেত সংস্থা, ব্যক্তি বা গোষ্ঠির সহিত সমন্বয় করা হয়েছে কিনা	হ্যাঁ		মন্তব্য ৩.৬ প্রটক
৭ পানি স্রবের প্রকল্পসমূহের পরিবেশগত প্রভাব (ইআইএ) নিরূপন করা হয়েছে কিনা	হ্যাঁ		মন্তব্য ৩.৭ প্রটক
৮ প্রকল্পটি পুরুষপূর্ণ সামাজিক বিচার্যদি এবং নারী, শিশু, দরিদ্র ও কন্যাসর অন্তর্গতীর প্রতি বিশেষ পুরুষ দিয়ে প্রকল্পটি প্রযুক্ত করা হয়েছে কিনা			মন্তব্য ৩.৮ প্রটক
৯ প্রকল্প প্রণয়নের ক্ষেত্রে (সম্ভাব্যতা যাচাই) প্রকল্প নির্ধারিত নির্দেশিকা (ডিপিএ) অনুসরণপূর্বক তৈরী করা হয়েছে কিনা			মন্তব্য ৩.৯ প্রটক
১০ প্রকল্পটি তৈরীতে উপযুক্ত ও পরীক্ষিত বিশ্লেষণ প্রক্রিয়া, মূল্যায়ন পদ্ধতি, কৌশল ও টেন্স ব্যবহার করা হয়েছে কিনা	হ্যাঁ		মন্তব্য ৩.১০ প্রটক

ছাড়পত্র মন্তব্যঃ

মতামতের আলোকে প্রয়োজনীয় সংশোধন সাপেক্ষে প্রস্তাবিত প্রকল্পটির ছাড়পত্র প্রদান করা হলো।

<p>১৪/১/১৯</p> <p>মুখ্য বৈজ্ঞানিক কর্মকর্তা/ তত্ত্বাবধায়ক প্রকৌশলী (পানি সম্পদ শাখা)</p>	<p>১৪/০১/১৯</p> <p>পরিচালক (পরিচালনা/কন্ট্রোল)</p>
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পানি সম্পদ পরিকল্পনা সংস্থা

ছাড়পত্র প্রদানের নিমিত্তে সরবরাহকৃত ডিপ্লিপি (অংশ বিশেষ) ও তথ্যের ভিত্তিতে “ঢাকা এনভায়রনমেন্টালী সাসটেইনেবল ওয়াটার সাপ্লাই প্রজেক্ট” শীর্ষক উন্নয়ন প্রকল্প প্রস্তাবের উপর পানি সম্পদ পরিকল্পনা সংস্থা (ওয়ারপো)’র মতামত

পটভূমিঃ

ঢাকা পানি সরবরাহ ও পায় নিষ্কাশন কর্তৃপক্ষ (ঢাকা ওয়াসা) ঢাকা মহানগরীতে জনসাধারণের কাছে সুপেয় পানি সরবরাহের কাজে নিয়োজিত একটি পুণ্ড্রপূর্ণ প্রতিষ্ঠান। প্রতিষ্ঠানটি বর্তমানে ৪০০ বর্ন কিঃমিঃ বিস্তৃত ঢাকা মহানগরী এলাকায় প্রায় ১৫ মিলিয়ন জনসাধারণকে সুপেয় পানি সরবরাহ করে যাচ্ছে। অংশ করঃ যায় যে, ২০২০ সালের মধ্যে ঢাকা মহানগরীর পরিমিঃ বৃদ্ধি পেয়ে ৬৩০ বর্ন কিঃমিঃ এ ঠিকভাবে একঃ সেই সাথে সুপেয় পানির চাহিদাও দিন দিন বৃদ্ধি পাবে। বর্তমানে নগরীতে পানি সরবরাহ করা হয় মূলতঃ পঃীর নলকূপের মাধ্যমে ভূ-গর্ভস্থ পানি উত্তোলন করে। একদিকে সুপেয় পানির চাহিদা মেটানোর জন্য অধিক সংখ্যক ভূ-গর্ভস্থ পানি উত্তোলন করা হচ্ছে, অন্যদিকে উত্তোরত্তর নগরায়ন ও অন্যান্য মানব সৃষ্ট কারণে প্রয়োজনীয় উন্মুক্ত জায়গার অভাবে প্রয়োজনীয় পরিমাণ পানি ভূগর্ভে পুনঃভরণ হচ্ছে না। অতুপরি জনবাহু পরিবর্তনের কারণে বৃষ্টিপাতের পরিমাণ ও দিন দিন হ্রাস পাচ্ছে। ফলে প্রতিবছরই ভূ-গর্ভস্থ পানির গুঃ অংশঃস্থানকঃ হারে নিঃ নেমে যাচ্ছে। ফলে ঢাকা নগরী ও আশেপাশের ৪০-৬০ টি পঃীর নলকূপ রাখঃ হয়ে পরিষ্কারঃ যোগ্য করার প্রয়োজন হচ্ছে। একে নলকূপের মাধ্যমে ভূ-গর্ভস্থ পানি উত্তোলন ও সরবরাহ ব্যবস্থা অকার্যকর হয়ে পড়ছে। তাছাড়া পঃীর নলকূপের মাধ্যমে ভূ-গর্ভস্থ পানি উত্তোলন টেকসই ও পরিবেশবান্ধব নয় এবং বিতরনঃ ব্যবস্থাও লাগসই প্রযুক্তিঃ নির্ভর নয়। এ কারণেই চাহিদা মোতাবেক সুপেয় পানি সরবরাহের লক্ষ্যে ভূ-গর্ভস্থ পানি উত্তোলনের উপর নির্ভরশীলতা বহিমিয়ে ভূ-পরিষ্থ পানি শোধন করে তা সরবরাহের ব্যবস্থা করা প্রয়োজন। বর্তমানে ঢাকা মহানগরীর উত্তর পশ্চিমাংশ অর্থাৎ উত্তরা, পুলশান, কানী, নিকুঞ্জ, ফিল্ডেভ, কান্ধা, সমগ্র মিরপুর ও তৎসংলগ্ন এলাকা সমুদ্রে দীর্ঘ দিন ধরে প্রয়োজনের তুলনায় পানি সরবরাহ অপ্রতুল। এই বাপক আঃবান এলাকায় তৎসংবর্তমান পানির চাহিদার পরিপ্রেক্ষিতে ২৪ ঘন্টা নিরাপদ ও নিরবিচ্ছিন্ন প্রেশরাইজড পানি সরবরাহ নিশ্চিত করার লক্ষ্যে টেকসই পরিকল্পনার অংশ হিসেবে নারায়ণগঞ্জের তুলসজ উপজেলার গর্ভবুঃ পানি শোধনাগার নির্মাণ ও অঃনুঃস্থিক কাজের জন্য প্রকল্পটি নেয়া হয়েছে।

উক্ত প্রকল্পের আওতাঃ মেঘনা নদীর শূঃ ঢাকা হতে ৩০ কিঃমিঃ পূর্বে নারায়ণগঞ্জ জেলার আঃস্থিঃখ্যার উপজেলার বিশনদী এলাকায় ইনটেক স্থাপনের মাধ্যমে পানি উত্তোলন করে প্রথম ধাপে ২ টি পঃইলের মাধ্যমে ঢাকা সিলেট রোডের গোলকর্ভাইল হতে তুলসজের গর্ভবুঃে প্রঃস্থিত পানিশোধনাগার এ স্থানা হবো। পরবর্তীতে এ পরিঃস্থিত পানি শীতলক্ষ্যা ও বাপু নদী অতিক্রম করে মাদানী এভিনিউ হতে ঢাকার বঃস্থিঃখ্যার ইনজেকশন পঃঃেতে ঢানা হবো এবং পরবর্তীতে তা ঢাকা শহরের উত্তর, রামপুরা মিরপুর, এবং ঢাকার উত্তর পূর্বাংশে সরবরাহ করা হবো। প্রকল্পটি প্রঃস্থে কিঃস্থিঃস্থিঃটি স্ট্যাডি সম্পন্ন করা হয়েছে।

প্রকল্পের উদ্দেশ্যঃ

প্রকল্পের মূল উদ্দেশ্য ভূ-পরিষ্থ পানি আঃস্থের মাধ্যমে ঢাকা মহানগরীতে পানি সংকটের এলাকায় নিরবিচ্ছিন্ন পানি সরবরাহ নিশ্চিত করা এবং ভূ-গর্ভস্থ পানি উপর নির্ভরশীলতা হ্রাস করা।

১১ ১১

WARPO

পানি সম্পদ পরিকল্পনা সংস্থা

প্রকল্পের আওতায় তীব্র কাজ

- মেঘনা নদীর পাড়ে নারায়ণগঞ্জ জেলার আড়াইহাজার উপজেলার বিশনদী এলাকার ইনটেক নির্মাণ।
- ইনটেক পয়েন্ট হতে পানি শেখনাগার পর্যন্ত ২২ কিমিঃ Raw Water Transmission Line নির্মাণ।
- নারায়ণগঞ্জের দুপগঞ্জ উপজেলার শর্ভবপুরে পানি শেখনাগার নির্মাণ।
- শর্ভবপুরের পানি শেখনাগার হতে ঢাকার বারিধারা পর্যন্ত ১৪ কিমিঃ Finished Water Transmission Line নির্মাণ।

ডিপিপি অনুযায়ী প্রকল্পটির প্রাকলিক ব্যয় ৫২৪৮.০৬ কোটি টাকা।

প্রকল্পের আর্থিক ও অর্থনৈতিক বিশ্লেষণ

	নেট প্রজেক্ট ভ্যালু (NPV) (লক্ষ টাকাঃ)	বেনিফিট কস্ট রেশিও (BCR)	ইন্টারনাল রেট অব রিটার্ন (IRR)
আর্থিক	৩০১২৯	১.০৮ : ১	১২.৫৪ %
অর্থনৈতিক	৯২২৭৪	১.২৯ : ১	১৪.৯৯ %

মতামতঃ

৩.১ জাতীয় পানি নীতি-১৯৯৯ তে পানির গার্হস্থ্য এবং শেঁর ব্যবহারকে সর্বাধিক গুরুত্ব প্রদান করা হয়েছে। পানি নীতিতে ভূ-গর্ভস্থ এবং ভূ-পরিষ্ক পানির সংযোজক ব্যবহার, ভূ-গর্ভস্থ পানির ব্যবহার সীমিত পর্যায়ে রাখার বন্দবস্তের কথা উল্লেখ করা হয়েছে। পানি নীতির ৪.৩ (ক) অনুচ্ছেদে বুটের পানি সংরক্ষণসহ বিভিন্ন উপায়ে নিরাপদ সহজ সজা করার পানির সুষ্ঠু যোগান নিশ্চিতকরণে সরকারের সমর্থতার কথা বলা হয়েছে। তবে ওয়াশা ঢাকা মহানগরীতে বিশুদ্ধ পানি সরবরাহ ও শয়নিষ্কাশন ব্যবস্থা নিশ্চিতকরণের কাজে নিয়োজিত প্রতিষ্ঠান। আলোচ্য প্রকল্প বাস্তবায়নে শহরের জনসাধারণের নিকট নিরাপদ পানি সরবরাহ নিশ্চিতকরণে গুরুত্বপূর্ণ ভূমিকা পালন করবে। তদুপরি ভূ-গর্ভস্থ পানির অনিয়ন্ত্রিত ব্যবহার হ্রাস করবে। এসব দিক বিবেচনায় প্রকল্পটি জাতীয় পানি নীতির সাথে সামঞ্জস্যপূর্ণ।

৩.২ জাতীয় পানি ব্যবস্থাপনা পরিকল্পনা (এনডব্লিউএমপি)তে প্রধান প্রধান শহরে জনসাধারণের সুরক্ষা নিশ্চিত করণের লক্ষ্যে সকলের জন্য নিরাপদ ও নির্ভরযোগ্য সুশেঁয় পানি সরবরাহের উদ্দেশ্যে কর্মসূচীর উল্লেখ রয়েছে। প্রকল্পটি জাতীয় পানি ব্যবস্থাপনা পরিকল্পনা (এনডব্লিউএমপি)র MC 002: Dhaka Bulk Water Supply and Distribution System প্রোগ্রামে বর্ণিত লক্ষ্য-উদ্দেশ্য এবং উল্লেখিত কর্মসূচীর সাথে সঙ্গতিপূর্ণ।

৩.৩ ডিশন-২০১১ এর লক্ষ্যমাত্রা কে সামনে রেখে সপ্তম পঞ্চবার্ষিকী পরিকল্পনা প্রণয়ন করা হয়। সপ্তম পঞ্চবার্ষিকী পরিকল্পনার পুষ্টি ও সেবামতে উন্নয়ন কৌশলে নিরাপদ পানি নিশ্চিতকরণের কথা বলা হয়েছে। পরিকল্পনায় উল্লেখ করা হয়েছে নাগরিক সেবা শেঁছে দেওয়ার লক্ষ্যে সরকারি সংস্থা সমূহ কাজ করে যাবে।

২৫/১১

WARPO

পানি সম্পদ পরিকল্পনা সংস্থা

ঢাকা ওয়াশা সকল নগরবাসীর নিম্নে নিরাপদ পানি সরবরাহের নিমিত্তে কার্যক্রম গ্রহণ করবে। তাছাড়া এনভিভি-৬ এর লক্ষ্য অর্জনে এই প্রকল্প সহায়ক ভূমিকা পালন করবে।

৩.৪ বাবেলদেশ পানি আইন-২০১৩ এর পঞ্চম অধ্যায়ের ধারা-১৯ এ কু-গর্ভস্থ পানির নিরূপণ আহরণ সীমা নিশ্চিত করণের কথা উল্লেখ করা হয়েছে। প্রকল্পটি ঢাকা মহানগরীতে পানি সরবরাহের জন্য কু-গর্ভস্থ পানির আহরণ সীমিত করতে ভূমিকা পালন করবে। পানি আইনের ৩ (২) নং ধারায় সুপের পানি এবং পরিষ্কৃতা ও পর্যায়নির্মাণের জন্য ব্যবহার্য পানির অধিকারকে সর্বাধিক হিসেবে বিবেচনা করা হয়েছে। তাছাড়া পানি আইনের ১৮ নং ধারায় পানি সম্পদের অগ্রাধিকার ভিত্তিক ব্যবহার এর ক্ষেত্র উল্লেখ করা হয়েছে যেখানে খাবার পানিকে সর্বোচ্চ অগ্রাধিকার দেওয়া হয়েছে। প্রকল্পটির উদ্দেশ্য হলো কু-গর্ভস্থ পানির পরিবর্তে কু-পরিষ্কৃ পানি ব্যবহার করে ঢাকা শহরের পানি সরবরাহ ব্যবস্থায় অবদান রাখা যা পরিবেশগতভাবে টেকসই হবে।

৩.৫ জাতীয় পানি নীতি (অনুচ্ছেদ ৪.৫.ক) অনুযায়ী পানি সম্পদ প্রকল্প, যতোটা সম্ভব কনসুর্ভ প্রকল্প হিসেবে গড়ে তোলা এবং এসব প্রকল্পের পরিকল্পনা ও বাস্তবায়ন থেকে পরিবেশকণ পর্যন্ত সব কিছুই একটি সমন্বিত বহু বিধকে দুটি ভঙ্গির ভিত্তিতে সম্পন্ন করা। প্রস্তাবিত প্রকল্পটি ঢাকা মহানগরীতে নিরাপদ পানি সরবরাহ নিশ্চিতকরণে গুরুত্বপূর্ণ ভূমিকা পালন করবে এবং কু-গর্ভস্থ পানি ধরকতরের উপর নির্ভরশীলতা হ্রাস করে পরিবেশগত ঝুঁকি কমাতে সহায়তা করবে।

৩.৬ ঢাকা মহানগরীতে পানি সরবরাহ এবং পর্যায়নির্মাণ ব্যবস্থা গ্রহণে পদক্ষেপ নেওয়া ঢাকা ওয়াশার মূল কার্যক্রমের অংশ। প্রকল্পের অধীনে মেঘনা নদী হতে পানি সরবরাহ করা হবে। মেঘনা নদীর পানি সংগ্রহ এলাকায় তাছাড়াই অন্য কোন সংস্থার কোন সেচ বা নদীর তীর সংরক্ষণ প্রকল্প বা অন্য কোন প্রকল্প বাস্তবায়ন হয়েছে কিনা বা চলমান রয়েছে কিনা তা বিবেচনা করা প্রয়োজন। প্রকল্পের বিশিষ্টতাই ইনভেস্টে মার্শে প্রকল্প এলাকায় অথবা তাছাড়াই অন্য সংস্থা কর্তৃক বাস্তবায়িত বা বাস্তবায়নহীন অন্য প্রকল্প সমূহের অবস্থান উল্লেখ করা আবশ্যিক।

৩.৭ জাতীয় পানি নীতি অনুচ্ছেদ ৪.১২ খ অনুযায়ী পানি সম্পদ খাতের সকল প্রকল্পে পরিবেশগত প্রভাব নিরূপণ করা অপরিহার্য। প্রস্তাবিত প্রকল্পে প্রাথমিক ভাবে ২০১১ সালে ফিজিভিলিটি স্টাডি করা হয়। পরবর্তীতে "ঢাকা এনভায়রনমেন্টাল সাসটেইনেবল ওয়াটার সাপ্লাই প্রজেক্ট" এর জাতিসংঘ পানি শোধনাগার স্থাপনের জন্য Initial Environmental Examination (IEE) সম্পন্ন করা হয় এবং পরিবেশ অধিদপ্তরের হাউসিং প্রদান করা হয়। "ঢাকা এনভায়রনমেন্টাল সাসটেইনেবল ওয়াটার সাপ্লাই প্রজেক্ট" প্রকল্পটির অধীনে পরবর্তীতে পরিবেশগত প্রতিক্রিয়া সমীক্ষা পরিচালনা করা হয়। সমীক্ষায় প্রকল্পের জৌত কাজ বাস্তবায়নের ফলে উল্লেখযোগ্য কোন পরিবেশগত নেতিবাচক প্রভাব পড়বে না বলে উল্লেখ করা হয়েছে। প্রতিবেদনে Environmental Management Plan (EMP) অন্তর্ভুক্ত করা হয়েছে যা কার্যকরভাবে অনুসরণ করা আবশ্যিক। পরিবেশগত সমীক্ষায় মেঘনা নদীর ইনটেক পয়েন্ট মাৎসহ অন্যান্য জলজ প্রাণীর প্রতি বিবেচনা করে Intake Screen নকশা প্রণয়নের কথা বলা হয়েছে যা গুলুতসহকারে বিবেচনা করা প্রয়োজন।

৩.৮ প্রকল্পটি বাস্তবায়িত হলে ঢাকা মহানগরীতে বর্ষিত জনসাধারণের নিকট নিরাপত্তি পানি সরবরাহ করা সম্ভব হবে। পরিবেশগত প্রতিক্রিয়া সমীক্ষা পরিচালনার সময় স্থানীয় জনগণ ও স্টেকহোল্ডারদের সঙ্গে

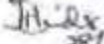
WARPO

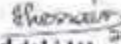
পানি সম্পদ পরিকল্পনা সংস্থা

আপেক্ষা করা হয়েছে। প্রকল্পের আওতায় প্রকল্প বাস্তবায়নের ফলে আর্থ-সামাজিক প্রভাব এবং পুনরীক্ষন পরিকল্পনা প্রণয়ন করা হয়েছে।

৩.৯ পানি ক্ষেত্রে বিনিয়োগের ক্ষেত্রে, সকল প্রকল্পের পরিকল্পনা সম্ভাব্যতঃ সমীক্ষা প্রণয়ন ক্ষেত্রে প্রকল্প মূল্যায়ন সংস্থায় নির্দেশনা বা জিপিএ (GPA), জনগণের অংশগ্রহণের নির্দেশনা এবং সরকার কর্তৃক বিভিন্ন সময়ে জারীকৃত অন্য সকল নির্দেশনা অনুসরণ করা প্রয়োজন। প্রকল্পের আর্থিক ও অর্থনৈতিক বিশ্লেষণ সম্পন্ন করা হয়েছে।

৩.১০ ২০১১ সালে "ঢাকা এনভায়রনমেন্টালী সাসটেইনেবল ওয়াটার সাপ্লাই প্রজেক্ট" এর ফিজিবিমিটি স্ট্যাডি সম্পন্ন করা হয়েছে। উক্ত সমীক্ষায় পানি আহরণের জন্য মেঘনা এবং শীতলক্ষ্যা নদীর তটদেশ স্থান বিবেচনায় নিয়ে পানির পরিমাণ, গুণগতমান ও অন্যান্য বিষয় বিবেচনায় নিয়ে বিশ্লেষণ করা হয় এবং নদীর হাইড্রোলজিক্যাল ও মরফোলজিক্যাল বিষয় বিবেচনা করা হয়েছে। মেঘনা নদী হতে প্রকল্পের আওতায় উভোগিত পানির পরিমাণ শূন্য সীমারে পানি প্রবাহের ১ শতাংশের কম হওয়ায় পানি আহরণের ফলে নদীতে কোন পরিবেশগত প্রভাব পড়বে কিনা উল্লেখ করা হয়েছে। সমীক্ষায় পরিবেশ পরিবর্তনগত প্রভাব বিবেচনা করা হয়েছে কিনা তা উল্লেখ করা হয়নি। সমীক্ষা প্রতিবেদনে পানি শোধনাগার স্থাপনের বিবেচনা করা হয়েছিল। পরবর্তীতে তা গড়বপুরে স্থানান্তরের বিষয়ে সিদ্ধান্ত হয় এবং পুনরায় স্ট্যাডি করা হয়। ফিজিবিমিটি স্ট্যাডিতে উল্লেখ করা হয়েছে বিশনদী নামক স্থানে নদীর তীর Stable রয়েছে। কিন্তু ইন্টেক স্থাপনের ফলে কোন প্রভাব পড়বে কিনা বা নতুন করে তীর ভাঙনের সম্ভাবনা তৈরি হবে কিনা তা বিশ্লেষণ করা প্রয়োজন এবং তদানুযায়ী ব্যবস্থা গ্রহণ করা আবশ্যিক। তাছাড়া সমীক্ষা কার্যক্রমে জলবায়ু পরিবর্তনের বিষয়টি বিবেচনা করা হয়নি এবং ইন্টেক পয়েন্টের উজানে বর্তমানে বা ভবিষ্যতে কোন প্রতিবন্ধক নির্মাণ করা হলে ইন্টেক পয়েন্টে পানির প্রাপ্যতা প্রভাবিত হবে কিনা তাও বিবেচনা করা হয়নি। তাই জলবায়ু পরিবর্তন ও উজানে প্রতিবন্ধক নির্মাণের ফলে পানির প্রাপ্যতার বিষয়টি গুরুত্বসহকারে বিবেচনা করা যেতে পারে।


 ১৪/১১/১১
 Md. Jamal Haider
 Scientific Officer
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G. Air Quality and Dust Suppression

Gandharbapur Water Treatment Register
Dust Suppression Monitoring Sheet

DECEMBER 2019 - January 2020



menard

S.N.	COMPANY	LOCATION OF DUST CONTROL	DIMENSION OF AREA CONTROLLED	DUST CONTROL RESPONSIBLE PERSON	START TIME	END TIME	SOURCE OF WATER FOR DUST SUPPRESSION	AREA DUST STATUS
1	Menard	BP Area	40x30m	Tucker	12:00 PM	13:10 PM	Deep Tube Well	Good condition
2	Menard	Open area	90x60m	Arif	09:00 PM	10:30 AM	"	"
3	"	BP Area	50x30m	Tucker	12:10 PM	01:50 PM	"	"
4	"	BP Area	40x40m	Tucker	12:30 PM	01:30 PM	"	"
5	Menard	BP Area	40x40m	Tucker	12:30 PM	01:50 PM	"	"
6	Menard	BP Area	50x30m	Tucker	12:30 PM	01:30 PM	Deep Tube Well	Good condition
7	Menard	BP Area	40x40m	Tucker	12:30 PM	01:30 PM	Deep Tube Well	"
8	Menard	BP Area	50x30m	Tucker	12:30 PM	1:30 PM	"	"
9	Menard	BP Area	50x40m	Tucker	12:30 PM	1:30 PM	"	"
10	Menard	-	-	-	-	-	-	-
11	Menard	BP Area	40x50m	Tucker	12:30 PM	1:50 PM	Deep Tube Well	Good condition
12	Menard	BP Area	40x60m	Tucker	12:40 PM	1:50 PM	"	"
13	Menard	Open Yard	90x70m	Tanvir	2:00 PM	4:00 PM	"	"
14	Menard	BP Area	30x60m	Tucker	12:30 PM	1:10 PM	"	"
15	Menard	BP Area	40x40m	Tucker	12:20 PM	1:30 PM	"	"
16	Menard	BP Area	50x30m	Tucker	12:30 PM	1:30 PM	"	"
17	-	-	-	-	-	-	-	-
18	Menard	BP Area	50x30m	Arif	12:30 PM	1:30 PM	Deep Tube Well	Good condition
19	Menard	BP Area	40x40m	Arif	12:30 PM	1:30 PM	"	"
20	Menard	BP Area	50x40m	Arif	12:30 PM	1:30 PM	"	"
21	Menard	BP Area	40x40m	Arif	12:30 PM	1:30 PM	"	"
22	Menard	BP Area	40x30m	Arif	12:30 PM	1:30 PM	"	"
23	Menard	BP Area	60x30m	Arif	12:15 PM	1:00 PM	"	"
24	-	-	-	-	-	-	-	-
25	Menard	Office Yard	40x70m	Arif	12:30 PM	1:25 PM	Deep Tube Well	Good condition
26	Menard	BP Area	40x30m	Arif	12:30 PM	1:10 PM	"	"
27	Menard	BP Area	50x40m	Arif	12:30 PM	1:20 PM	"	"
28	Menard	Open Yard	90x80m	Zahid	10 AM	12:30 PM	"	"
29	Menard	BP Area	40x30m	Arif	12:10 PM	1:30 PM	"	"
30	Menard	BP Area	50x30m	Arif	12:30 PM	1:30 PM	"	"
31	-	-	-	-	-	-	-	-

2

~~NOT VALID USE~~


Friday

Friday

Friday

Friday

H. Noise & Vibration

EMPLOYER					
 Dhaka Water Supply and Sewerage Authority					
PROJECT NAME					
Design and Build of Intake, Raw Water Pipeline, and 500 MLD Water Treatment Plant at Gandharbpur under Dhaka Environmentally Sustainable Water Supply Project (DESWSP)					
OWNER ENGINEER					
					
CONTRACTOR					
  <i>A Joint Venture of SUEZ INTERNATIONAL & QTV-VEOLIA</i>					
DOCUMENT TITLE					
NOISE LEVEL MONITORING REPORT (WTP AND INTAKE)					
B	01/30/20	Issued for Approval	Enviro Consultants Ltd	Alapati Rao	Richard Sawa
A	01/01/20	Issued for Approval	Enviro Consultants Ltd	Alapati Rao	Richard Sawa
Rev.	Date	Revision Description	Drawn Up By	Checked By	Approved By
Document Number				Revision	Document Status
B-001464-GWT-EN-MDS-RP-0001				B	IFA
Format:	* Key words for document status:			ALL RIGHTS RESERVED FOR ALL COUNTRIES	
A4	IFI - Issued for Information	IFA - Issued for Approval	INT - Internal	CAN - Cancelled	RFD - Ready for Quotation
	IPR - Issued for Review	IRC - Issued for Construction	ASB - As Built	SUP - Superseded	RFP - Ready for Purchase

Test Report

On

**Baseline Ambient Noise Quality Monitoring and Analysis of Data at Gandharbpur WTP
and Water Intake Sites under Dhaka Environmentally Sustainable Water Supply
Project (DESWSP)**

Gandharbpur Water Treatment SNC

House-10C (5th Floor), Road-90,
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Prepared by

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January – 2020**REV.B**

Contents

1.0 INTRODUCTION	1
1.1 Background	1
1.2 Objective of the Monitoring	1
1.3 Scope of Work	1
1.4 Methodology	1
1.5 Noise Level Monitoring Location	4
2.0 NOISE LEVEL MONITORING PROCEDURE	5
3.0 MONITORING RESULTS	5
3.1 Ambient Noise Level Data Monitoring	5
3.2 Field Observation	5
4.0 CONCLUSION	16

List of Table

Table 1: The GPS locations for WTP	2
Table 2: The GPS location for WTP Intake	3
Table 3: Detail of Monitoring Schedule	4
Table 4: Method of Analysis and Instrument Used for Noise Parameters	4
Table 5: Noise Quality Results of Gandharbpur WTP Site	6
Table 6: Noise Quality Results of Water Intake Site	6

List of Figure

Figure 1: General Layout of the Water Treatment Plant	2
Figure 2: General Layout of Water Intake	3
Figure 3: Graphical Presentation of Ambient Noise Monitoring Results of WTP Site	7
Figure 4: Graphical Presentation of Ambient Noise Monitoring Results of Intake	12

List of Annexure

Annex-1 Noise Sampling Location Map of WTP Site (for location 1-7)	17
Annex-2 Noise Sampling Location Map of Water Intake (for location 1-7)	17
Annex-3 Noise Level Report of Gandharbpur Water Treatment Site	18
Annex-4 Noise Level Report of Water Intake Site	19
Annex 5 Monitoring Time	20
Annex 6 Photos of Monitoring Activity	21

1.0 INTRODUCTION

1.1 Background

Gandharbpur Water Treatment SNC intend to monitor of noise level at two sites (Gandharbpur Water Treatment and Water Intake) to prepare a baseline information of the monitoring requirement.

Gandharbpur Water Treatment SNC authority has engaged Enviro Consultants Ltd. (ECL), a leading environmental monitoring and consulting firm in Bangladesh to conduct this noise monitoring on behalf of the company.

1.2 Objective of the Monitoring

The objective of the baseline noise study was to evaluate existing noise levels at selected noise monitoring locations.

- i) To establish a baseline environmental noise level quality before start the construction work.
- ii) To compare this baseline noise result with the operation time noise generation Rev.2

1.3 Scope of Work

The noise level monitoring covers two sites (Gandharbpur Water Treatment and Water Intake) for day and night time. The scope work broadly includes:

- i) To identify the Equivalent Continuous Sound Pressure Level, or Leq and convert it in NR- A weighted Rev.2
- ii) To report the test report analysis result in accordance with the applicable regulatory/company requirement

1.4 Methodology

The monitoring of environmental parameter was performed based on the primary data generation during the measurement of seven ambient noise level data at two sites at Gandharbpur Water Treatment and Intake premises.

For measurement of ambient noise level, the monitoring locations were selected at the sites by the Gandharbpur Water Treatment SNC team lead by Mr. Alapati V Rao with a view to get the detail ambient noise condition of the surrounding area of the facility.

Monitoring locations selected for ambient noise level monitoring at each site as per Gandharbpur Water Treatment SNC requirement. The locations were selected based on the following:

 Baseline Noise Quality Monitoring Gandharbpur WTP and Water Intake Sites Under DESWSP

- Sampling locations were at the boundary of the project as well as nearby settlement/area as decided by the client
- Location were selected at workers working areas.
- The noise monitoring stations were located at the ambient level away from the direct noise generation source as per standard procedure
- The noise monitoring locations were selected away from any obstruction means any wall or building.
- Location were open and clear space where no noise barrier between noise source and receptor.

From Figure 1 Yellow color locations were selected for which Noise level measurement have been measured

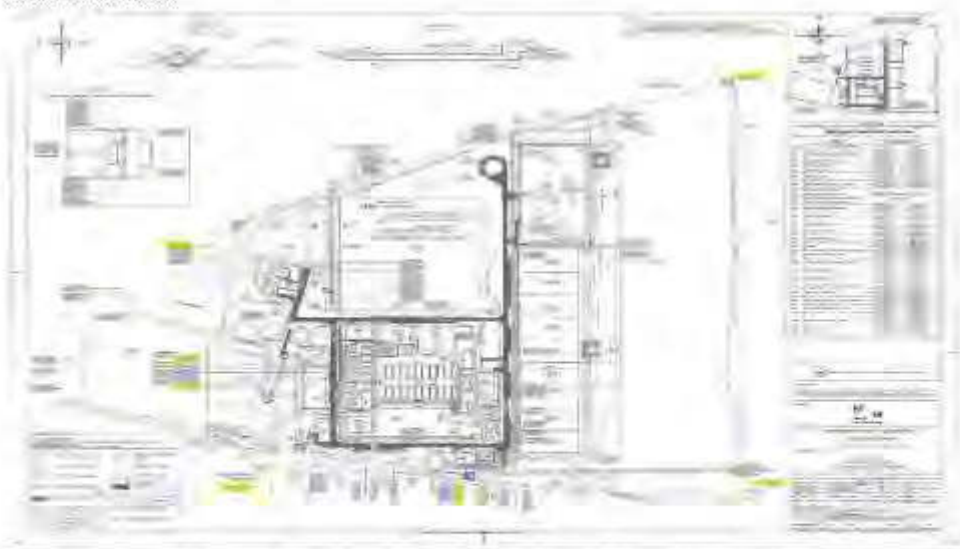


Figure 1: General Layout of the Water Treatment Plant

Table 1: The GPS locations for WTP

Location No	GPS Position	
	Northing	Easting
1	23°45'28.5"	90°30'43.9"
2	23°45'24.9"	90°30'48.0"
3	23°45'25.6"	90°30'51.8"
4	23°45'26.3"	90°30'57.4"
5	23°45'31.5"	90°30'54.2"
6	23°45'35.1"	90°30'49.5"
7	23°45'42.9"	90°30'42.7"

From Figure 2 Yellow color locations were selected for which Noise level measurement have been measured



Figure 2: General Layout of Water Intake

Table 2: The GPS location for WTP Intake

Location No	GPS Position	
	Northing	Easting
1	23°44'55.9"	90°42'48.9"
2	23°44'47.7"	90°42'52.8"
3	23°44'49.0"	90°42'58.9"
4	23°44'54.5"	90°42'56.1"
5	23°44'55.1"	90°42'52.1"
6	23°44'52.8"	90°42'47.6"
7	23°44'48.6"	90°42'46.0"

Monitoring Schedule

Detail of monitoring schedule is shown in Table-3.

Table 3: Detail of Monitoring Schedule

Monitoring	Travel Date for Service Vendor	Date of Monitoring	Facility
Ambient Noise	Gandharbpur Water Treatment Plant premises	14 th – 15 th December, 2019	Gandharbpur
	Water Intake premises	14 th – 15 th December, 2019	Water Intake location

Method of Analysis and Instrument Used for Noise Parameters

Method of analysis and instrument used for Noise parameters of ambient air quality shown in Table-4.

Table 4: Method of Analysis and Instrument Used for Noise Parameters

Parameter Analysis	Noise Level
Method of Analysis	Leq
Instrument Used	SL- 4033-SD

1.5 Noise Level Monitoring Location

Ambient Noise Level Monitoring: Two Sites – Gandharbpur WTP location (Seven noise level data collection locations), Water Intake location (Seven noise level data collection locations). Each monitoring locations are near the boundary and middle of the project where monitoring equipment were set up for noise data level collection.

2.0 NOISE LEVEL MONITORING PROCEDURE

Based on pre-defined noise level plan, well-trained field officers collected samples from selected locations of the project area to analysis noise parameter according to the standard method. All the equipment which were used were calibrated.

For measurement of noise level data microphone placed 1.2 -1.5m above the ground level using tripod stand. The instrument was isolated from strong vibration and shock. Noise level data were collected by SL-4033SD Noise meter with real time SD memory card data logger, with clock and calendar. Duration of monitoring 1 hour in the day time and 30 minutes in the night time in each location for both sites. Minimum noise data collection interval time was 30 seconds. After collecting, the data transferred into PC and processed and analyzed.

3.0 MONITORING RESULTS

3.1 Ambient Noise Level Data Monitoring

One-hour measurement data collected for the study are summarized in this section. Leq values were calculated based on 1 hour for the day and 30 min for night data. 30 seconds noise levels data are shown graphically in Figure-3 for WTP and Figure-4 for the Water Intake site. The figure illustrates the sources of isolated peaks.

The noise sampling location map are shown in Annex 1 (for location 1-7) for WTP and Annex 2 (for location 1-7) for Water Intake site. Scan copy of test reports is presented in Annex 3 for WTP and Annex 4 for Water Intake site. In Annex 5 & Annex 6, monitoring time and photos of monitoring activities is presented respectively.

Rev E Both the boundaries of the WTP and the Water Intake site are considered a mixed zone based on the EIA report that was completed in 2018 and approved by DoE. The DoE mixed zone noise standard is 60 dBA for daytime and 50 dBA for night time.

Rev B In addition to DoE standard, GWT is also follow the ER DB Vol.2, 3B, 4.6.4 during operation at the treatment plant site boundaries. The treatment plant site boundary limit is NR 60.

3.2 Field Observation

The day was sunny and the weather condition was good, during noise data collection in Gandharpur WTP and Water Intake locations.

Baseline Noise Quality Monitoring Gandharbpur WTP and Water Intake Sites Under DESWSP

Table 5: Noise Quality Results of Gandharbpur WTP Site

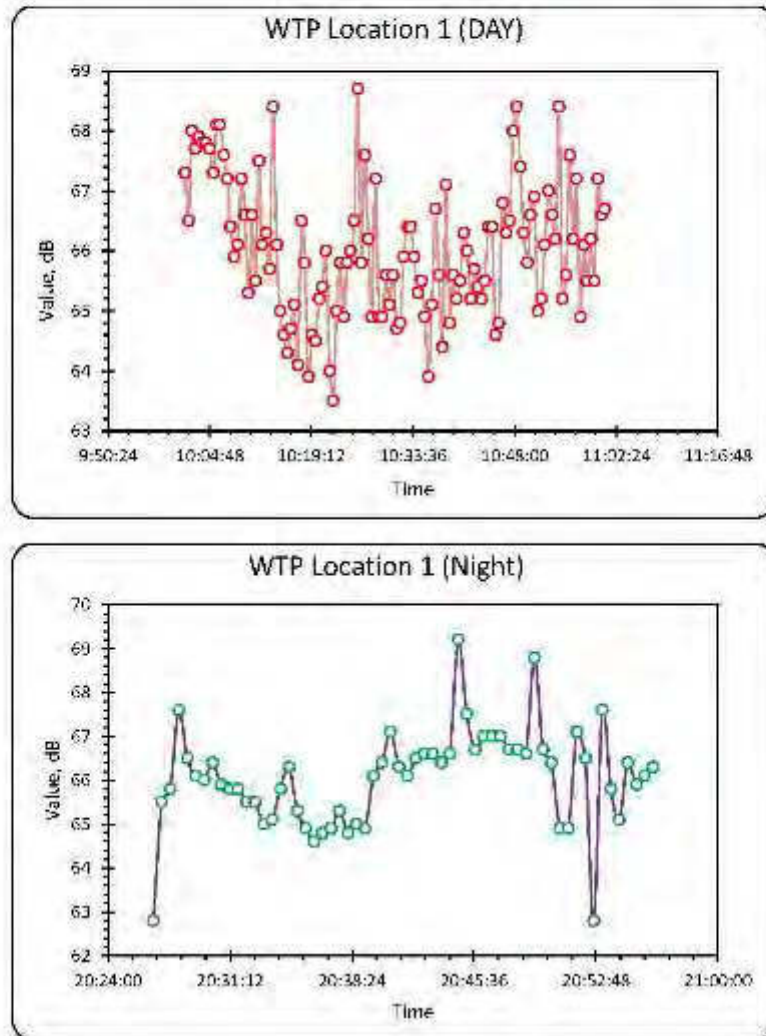
Site No	Date of Testing	Site Location	Leq (dBA)		NR		Leq (dBA) (Mixed Zone, DoE Standard)		ER at the Site Boundary NR
			Day Time	Night Time	Day Time	Night Time	Day Time	Night Time	
Gandharbpur WTP	14.12.2019 & 15.12.2019	1	66.19	66.17	67	67	60	50	60
		2	58.04	55.64	55	51			
		3	64.33	60.23	66	60			
		4	59.15	64.54	59	65			
		5	57.02	55.82	58	51			
		6	57.79	56.78	58	55			
		7	58.37	59.14	59	59			

Table 6: Noise Quality Results of Water Intake Site

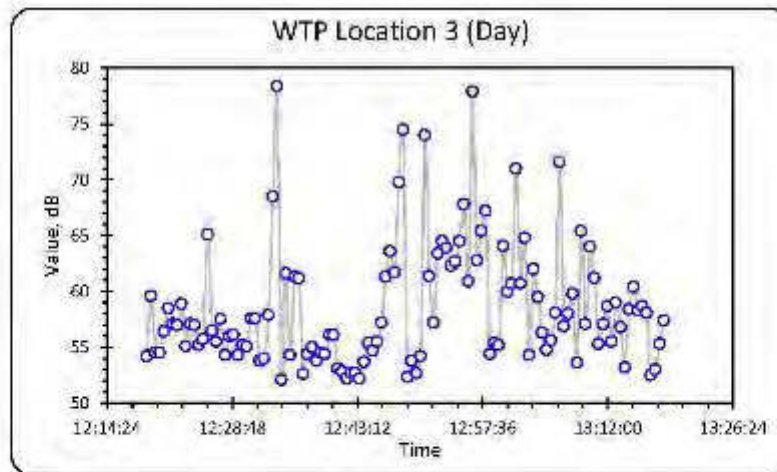
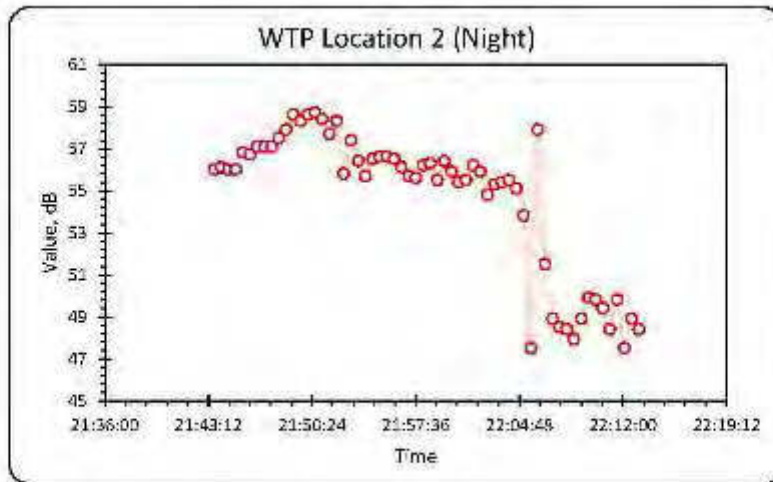
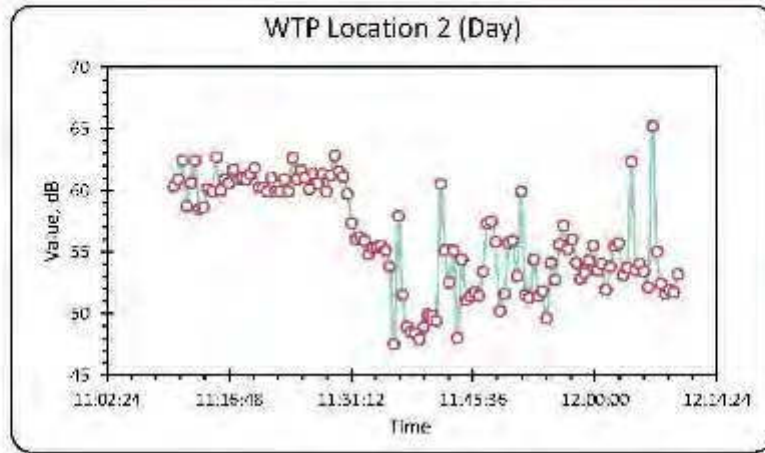
Site No	Date of Testing	Site Location	Leq (dBA)		NR		Leq (dBA) (Mixed Zone, DoE Standard)		ER at the Site Boundary NR
			Day Time	Night Time	Day Time	Night Time	Day Time	Night Time	
Water Intake	14.12.2019 & 15.12.2019	1	54.61	55.96	54	55	60	50	60
		2	57.93	58.06	59	58			
		3	73.57	70.06	70	70			
		4	62.07	64.83	63	66			
		5	57.75	57.75	59	59			
		6	75.03	57.13	70	59			
		7	55.15	61.27	55	63			

*As per Noise Pollution Control rule 2008

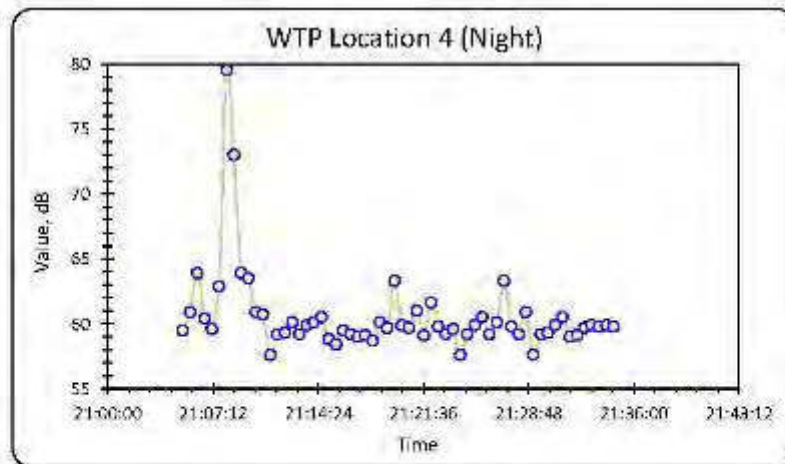
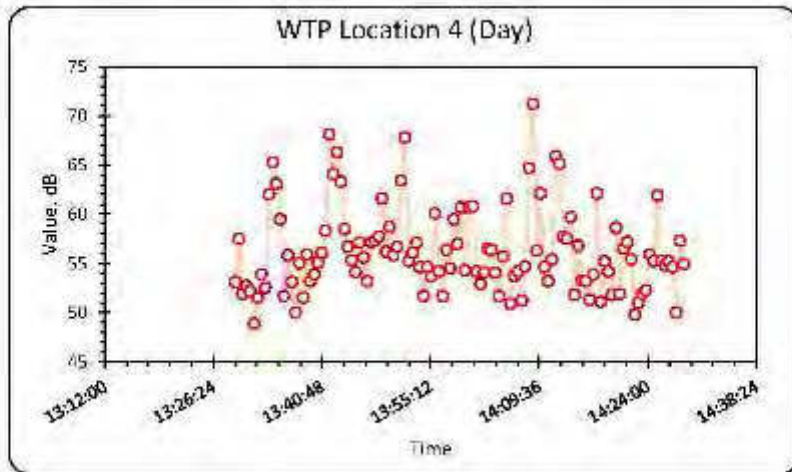
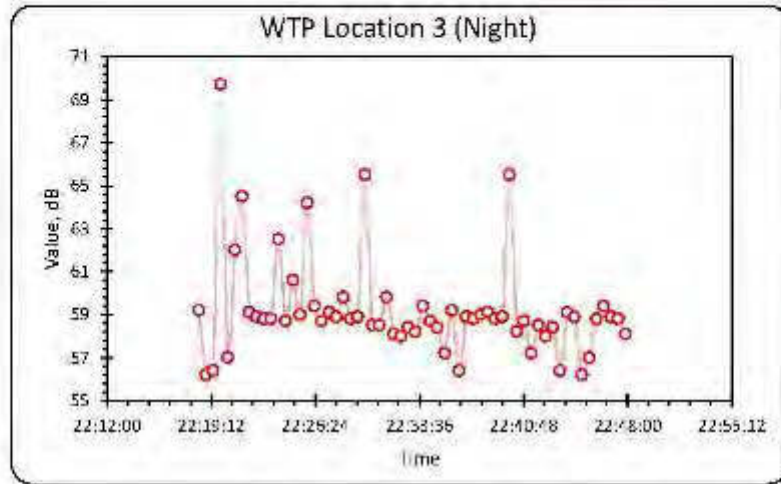
Figure 3: Graphical Presentation of Ambient Noise Monitoring Results of WTP Site



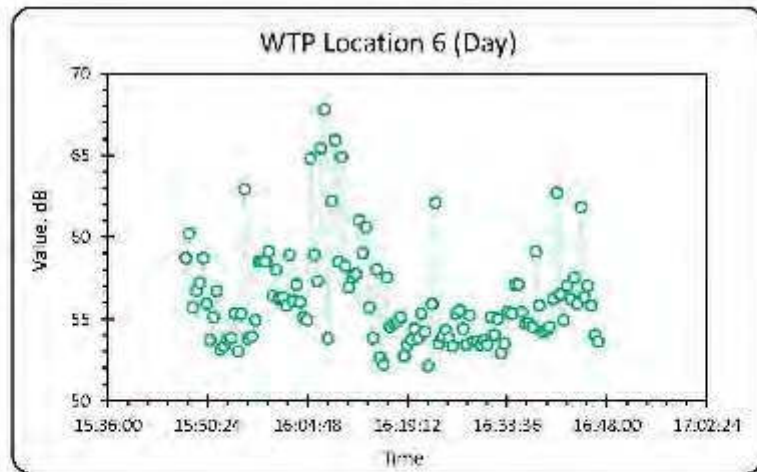
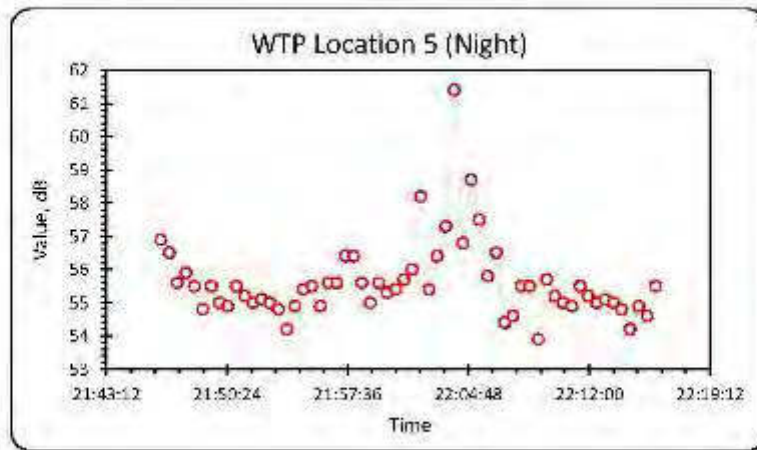
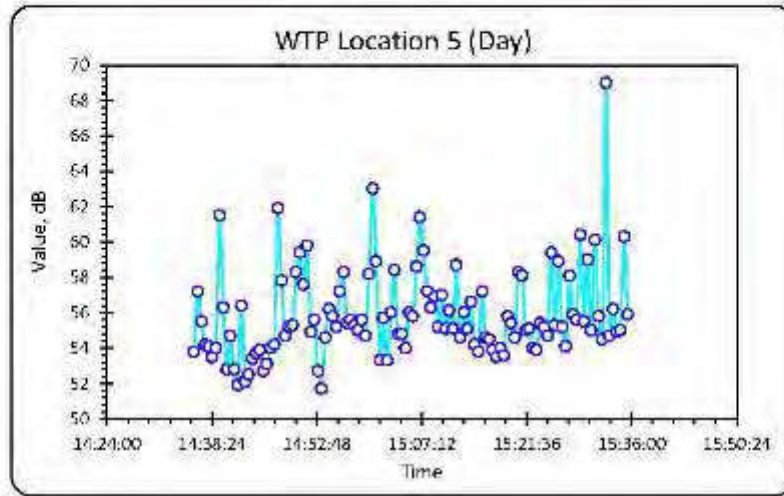
Baseline Noise Quality Monitoring Gandharbpur WTP and Water Intake Sites under DESWSP



Baseline Noise Quality Monitoring Gandharbpur WTP and Water Intake Sites under DESWSP



Baseline Noise Quality Monitoring Gandharbpur WTP and Water Intake Sites under DESWSP



Baseline Noise Quality Monitoring Gandharbpur WTP and Water Intake Sites under DESWSP

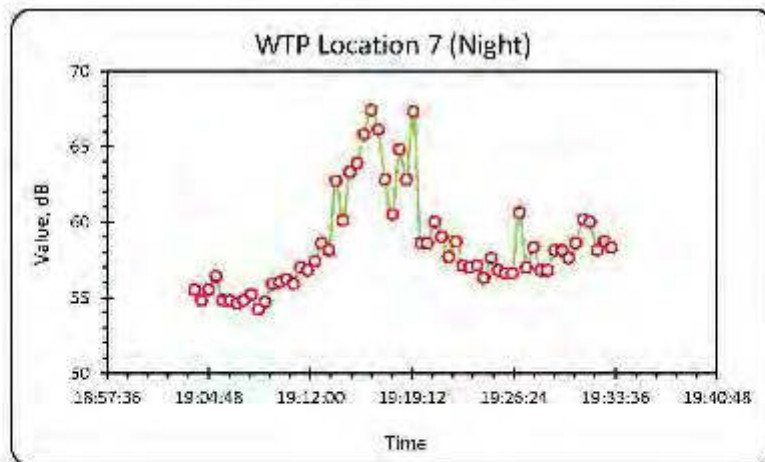
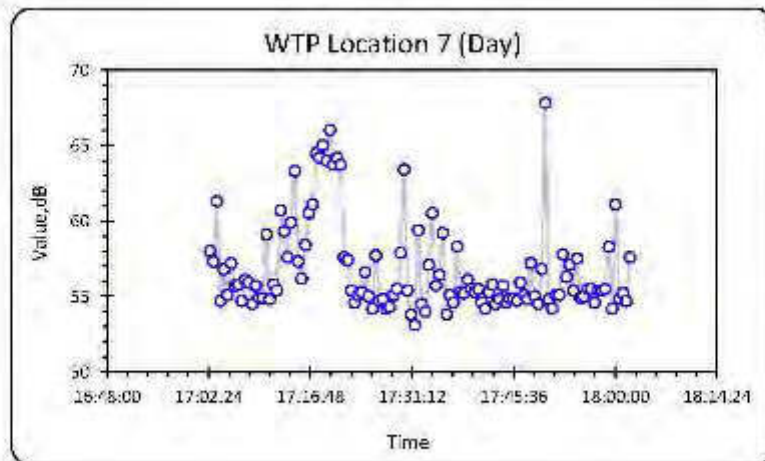
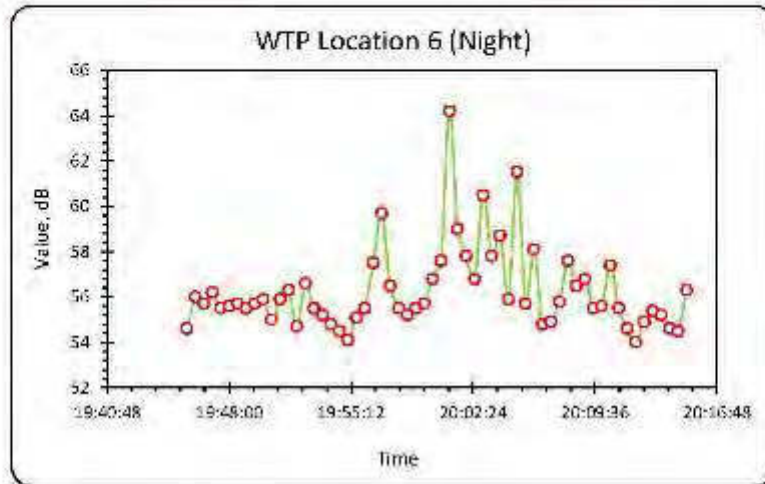
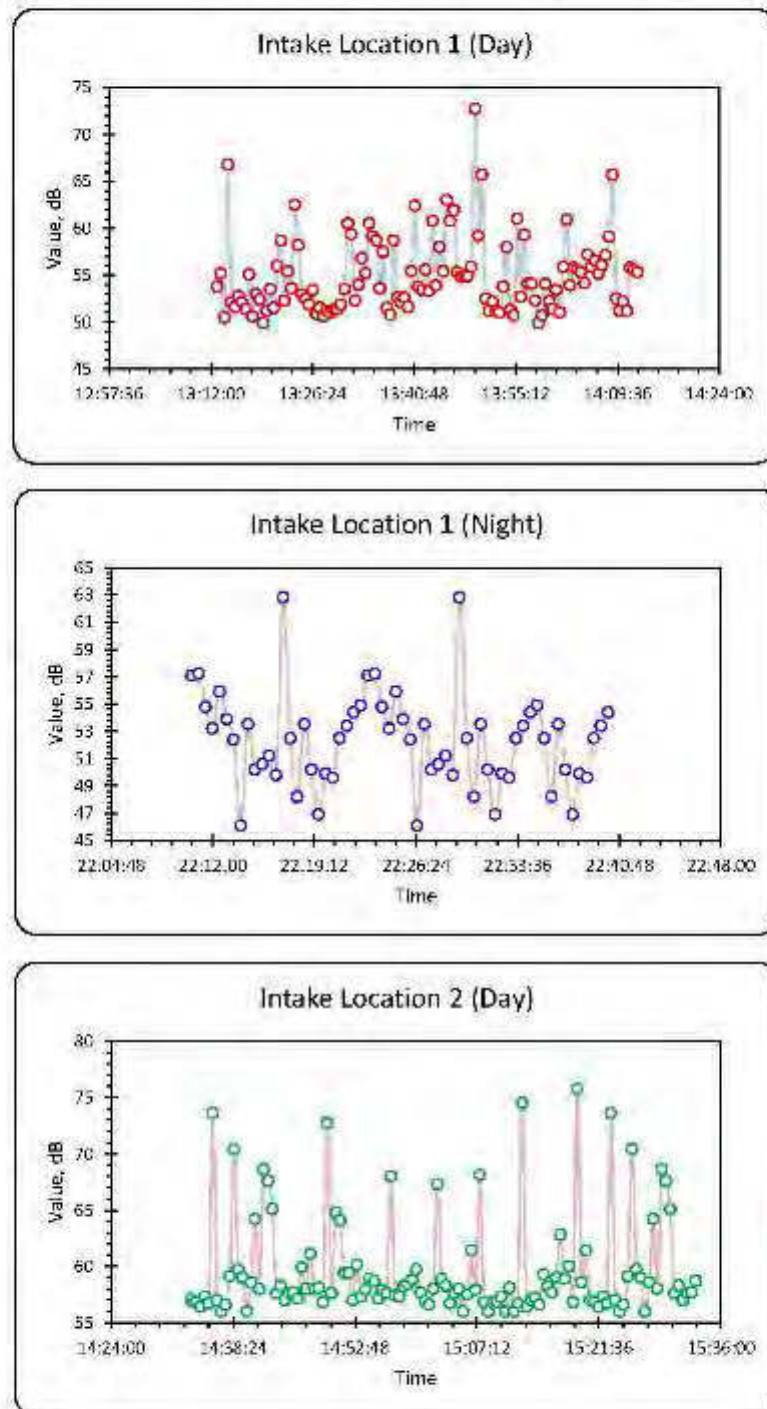
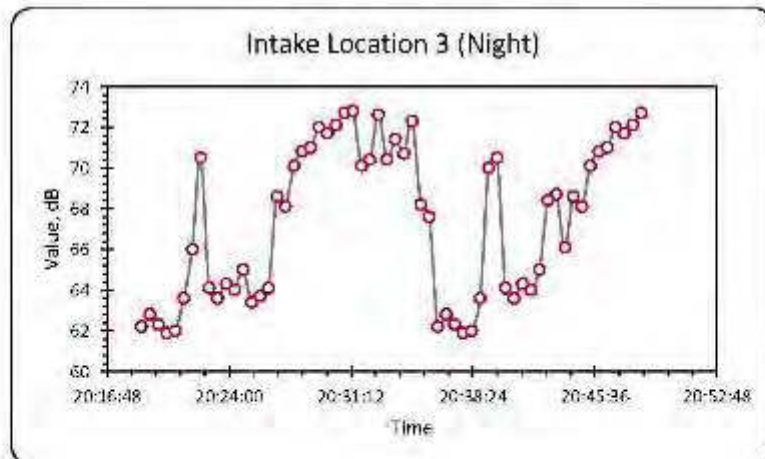
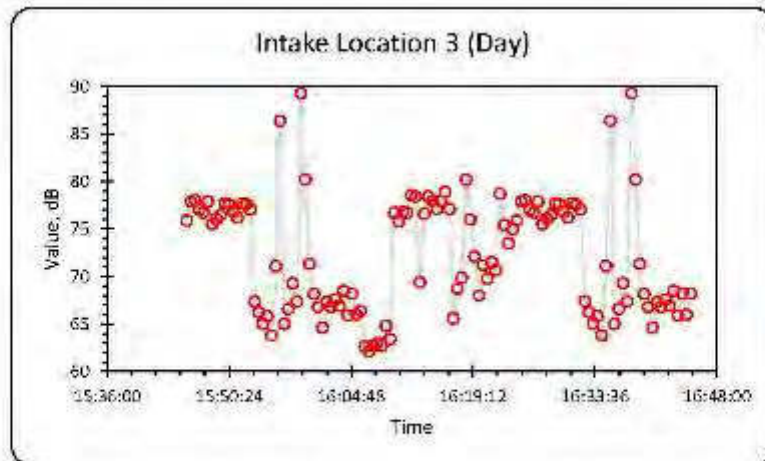
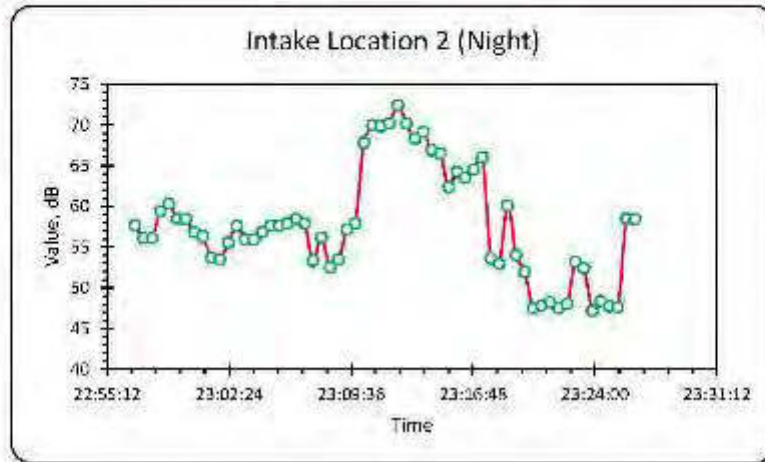
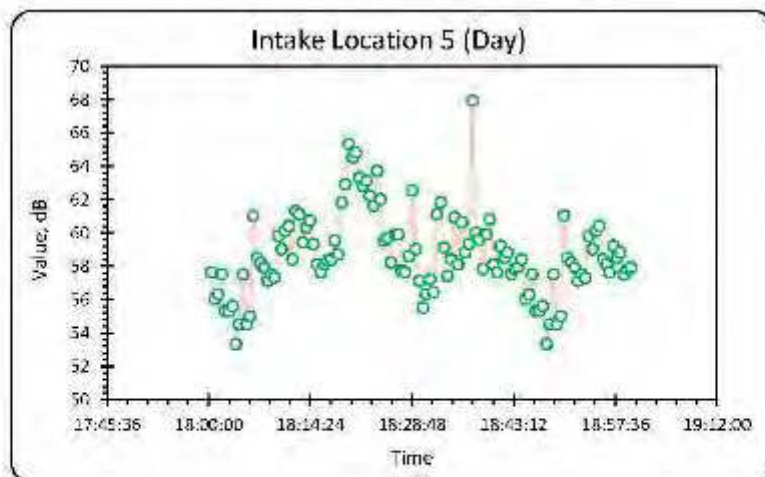
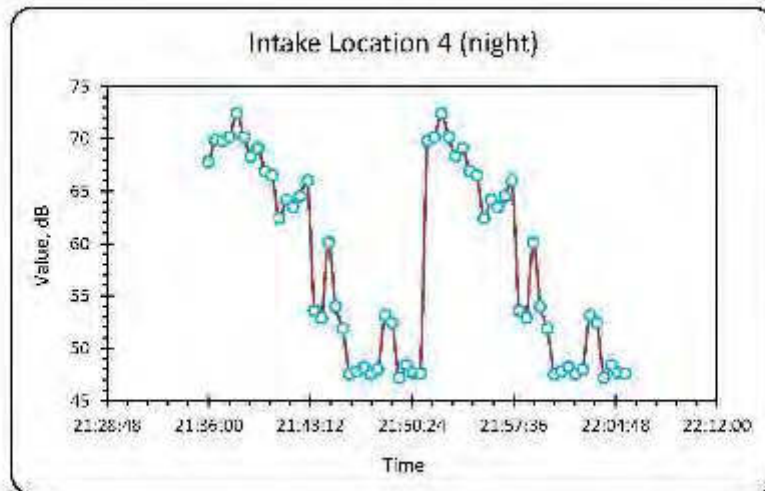
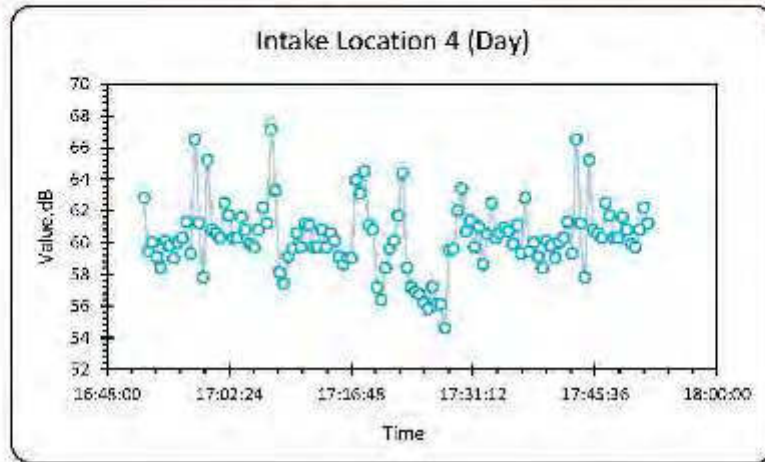


Figure 4: Graphical Presentation of Ambient Noise Monitoring Results of Intake

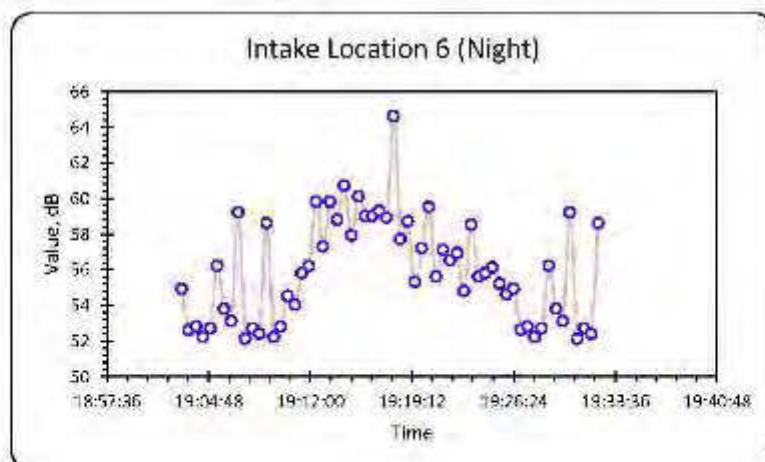
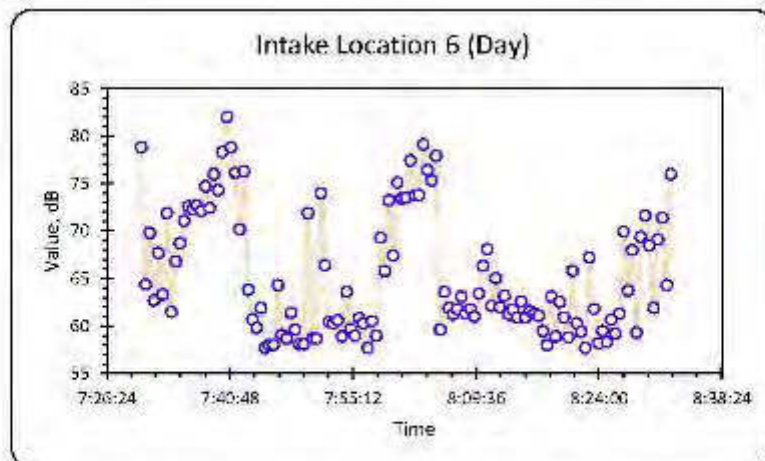
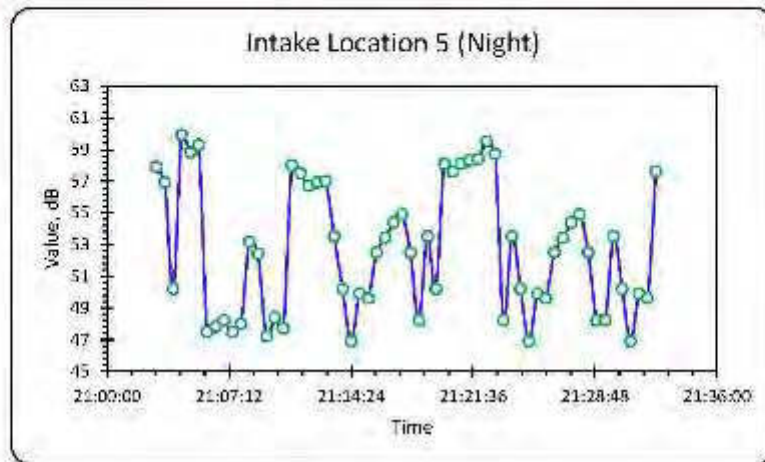
Baseline Noise Quality Monitoring Gandharbpur WTP and Water Intake Sites under DESWSP

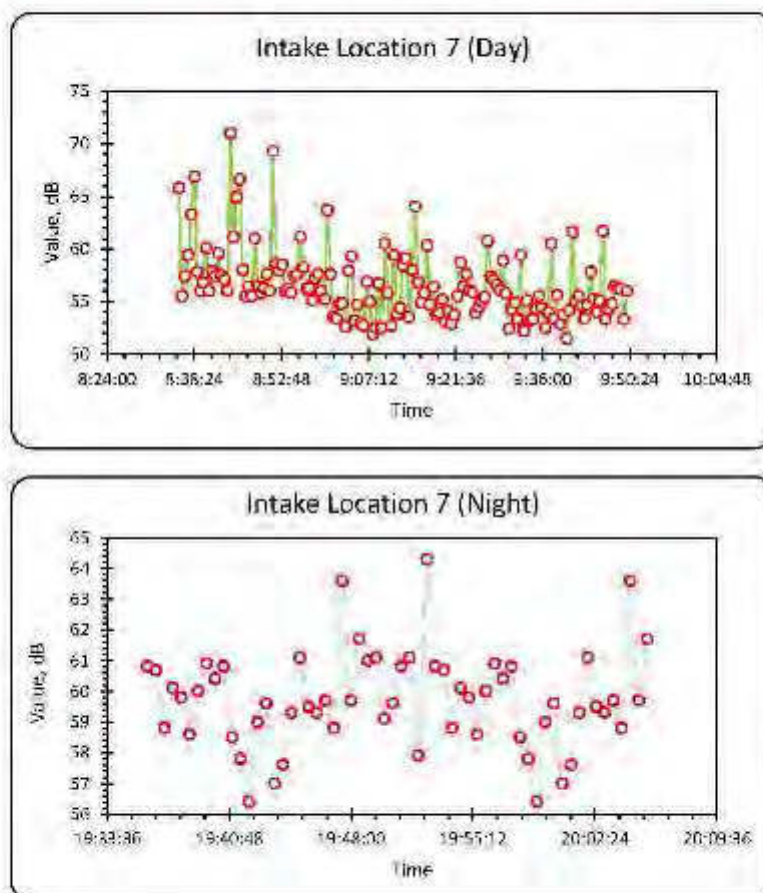


Baseline Noise Quality Monitoring Gandharbpur WTP and Water Intake Sites under DESWSP



Baseline Noise Quality Monitoring Gandharbpur WTP and Water Intake Sites under DESWSP





4.0 CONCLUSION

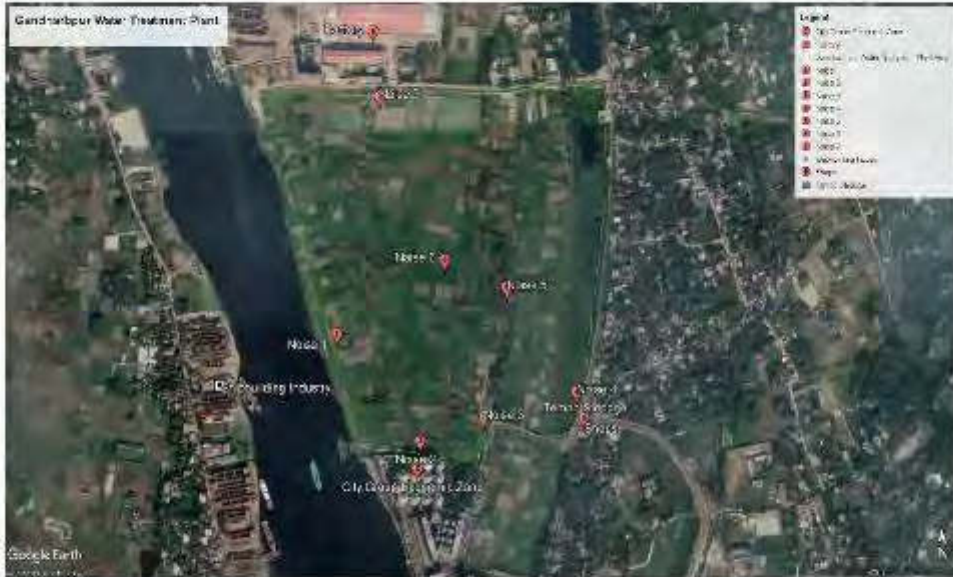
Environmental monitoring of ambient noise level data was collected from the Gandharbpur WTP and Water Intake facilities with the help of instrument SL 4033SD during the period 14th-15th December, 2019.

The results of the noise level test of Gandharbpur WTP presented in Table 5 shows that the Leq value is within the standard value for all locations except at locations 1 and 3 at daytime, but at night time all the seven values in the location 1-7 exceeded the DoE standard value. The standard for mix zone noise level is 60 dBA during the day and 50 dBA at night.

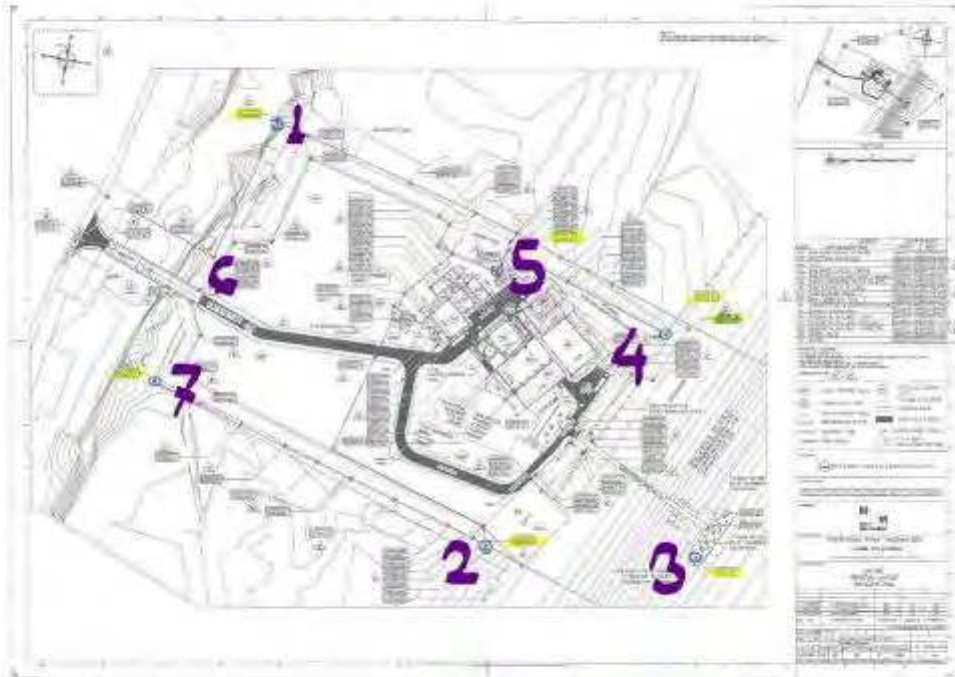
The results of the noise level test of Water Intake location presented in Table 6 shows that the Leq value is within the standard value for locations 1, 2, 5 and 7 and exceeded at locations 3, 4 and 6 at daytime, but at night time all the seven values in the location 1-7 exceeded the DoE standard value.

It can be concluded from the noise level data analysis: the measured noise levels are harmful for human health as well as surrounding environment for long term exposure. So, mitigation measure is required. NR values also calculated and is presented in Table 5 and Table 6.

Annex-1 Noise Sampling Location Map of WTP Site (for location 1-7)



Annex-2 Noise Sampling Location Map of Water Intake (for location 1-7)



Annex-3 Noise Level Report of Gandharbpur Water Treatment Site

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EQRL/Noise Level/1924/2019

Enviro Quality Laboratory**Results of Ambient Noise Level Measurement and Analysis**

Name of the Project	:	Baseline Ambient Noise Quality Monitoring and Analysis of Data at Gandharbpur WTP Sites under Dhaka Environmentally Sustainable Water Supply Project (DESWSP)
Address of the Project	:	Gandharbpur Water Treatment Plant premises, Gandharbpur, Rupshi, Narayanganj.
Description of Noise Data	:	Data were collected from the Selected Locations of the Project Area
Data Collector	:	Collected by ECL Personnel
Data Collection Date	:	14 th – 15 th December, 2019
Date of Analysis	:	17 th – 18 th December, 2019
Reporting Date	:	21 st December, 2019

Description of Analysis

Location	GPS Position		Results in dB-A (Leq)		DoE (Bangladesh) Noise Standard for Mixed Area (Schedule-1), Leq	
	Northing	Easting	Day Time	Night Time	Day Time (8 AM-9 PM)	Night Time (9 PM-6 AM)
1	23°45'26.5"	90°30'43.9"	66.19	66.17	80	50
2	23°45'24.9"	90°30'48.0"	58.04	55.64		
3	23°45'25.6"	90°30'51.8"	64.33	60.23		
4	23°45'26.3"	90°30'57.4"	59.15	64.54		
5	23°45'31.5"	90°30'54.2"	57.02	55.82		
6	23°45'35.1"	90°30'49.5"	57.79	56.79		
7	23°45'42.9"	90°30'42.7"	58.37	59.14		
Method/Instrument					Sound Level Meter Model: SL-4033SD	

Mohammad Saad
Mohammad Saad
(Chemist)



Annex-4 Noise Level Report of Water Intake Site



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EQRL/Noise Level/1923/2019

Enviro Quality Laboratory

Results of Ambient Noise Level Measurement and Analysis

Name of the Project	:	Baseline Ambient Noise Quality Monitoring and Analysis of Data at Water Intake Sites under Dhaka Environmentally Sustainable Water Supply Project (DESWSP)
Address of the Project	:	Water Intake premises, Bishnardi, Aralshazar, Narayanganj.
Description of Noise Data	:	Data were collected from the Selected Locations of the Project Area
Data Collector	:	Collected by ECL Personnel
Data Collection Date	:	14 th – 15 th December, 2019
Date of Analysis	:	17 th – 18 th December, 2019
Reporting Date	:	21 st December, 2019

Description of Analysis

Location	GPS Position		Results in dB-A (Leq)		DoE (Bangladesh) Noise Standard for Mixed Area (Schedule-1), Leq	
	Northing	Easting	Day Time	Night Time	Day Time (6 AM-9 PM)	Night Time (9 PM- 6 AM)
1	23°44'55.9"	90°42'48.9"	54.61	55.96	60	50
2	23°44'47.7"	90°42'52.8"	57.93	58.08		
3	23°44'49.0"	90°42'58.9"	73.57	70.06		
4	23°44'54.5"	90°42'56.1"	62.07	64.83		
5	23°44'55.1"	90°42'52.1"	57.75	57.75		
6	23°44'52.8"	90°42'47.6"	75.03	57.13		
7	23°44'48.8"	90°42'46.0"	55.15	61.27		
Method/Instrument					Sound Level Meter Model: SL - 40335D	

Mohammed Seed
Mohammed Seed
(Chemist)



Baseline Noise Quality Monitoring Gandharbpur WTP and Water Intake Sites under DESWSP

Annex 5 Monitoring Time Rev.3

Location Number	GPS Location	Day		Night	
		Start	End	Start	End
GWTP					
1	23°45'28.5" N 90°30'43.9" E	10:01:16	11:00:46	20:26:40	20:56:10
2	23°45'24.9" N 90°30'46.0" E	11:10:17	12:09:47	21:43:36	22:13:06
3	23°45'25.6" N 90°30'51.8" E	12:18:58	13:18:28	22:18:21	22:47:51
4	23°45'26.3" N 90°30'57.4" E	13:29:19	14:28:49	21:05:07	21:34:37
5	23°45'31.5" N 90°30'54.2" E	14:35:57	15:35:27	21:46:28	22:15:58
6	23°45'35.1" N 90°30'49.5" E	15:47:18	16:46:48	19:45:30	20:15:00
7	23°45'42.9" N 90°30'42.7" E	17:02:34	18:02:04	19:03:48	19:33:18
WTP Intake					
1	23°44'55.9" N 90°42'48.9" E	13:12:55	14:12:25	22:10:29	22:39:59
2	23°44'47.7" N 90°42'52.8" E	14:33:31	15:33:01	22:56:51	23:26:21
3	23°44'49.0" N 90°42'58.9" E	15:45:54	16:44:54	20:18:49	20:48:19
4	23°44'54.5" N 90°42'56.1" E	16:52:22	17:51:52	21:35:59	22:05:29
5	23°44'55.1" N 90°42'52.1" E	18:00:20	18:59:50	21:02:54	21:32:34
6	23°44'52.8" N 90°42'47.8" E	07:30:25	08:32:25	19:02:54	19:32:24
7	23°44'48.6" N 90°42'46.0" E	08:35:54	09:49:54	19:35:59	20:05:29

Annex 6 **Photos of Monitoring Activity** Rev.B



Location 1 at GWTP



Location 2 at GWTP

Baseline Noise Quality Monitoring Gandharbpur WTP and Water Intake Sites under DESWSP



Location 3 at GWTP



Location 4 at GWTP

Baseline Noise Quality Monitoring Gandharbpur WTP and Water Intake Sites under DESWSP



Location 5 at GWTP



Location 6 at GWTP

Baseline Noise Quality Monitoring Gandharbpur WTP and Water Intake Sites under DESWSP



Location 7 at GWTP



Group Picture at GWTP

Baseline Noise Quality Monitoring Gandharbpur WTP and Water Intake Sites under DESWSP



Location 1 at Water Intake



Location 2 at Water Intake

Baseline Noise Quality Monitoring Gandharbpur WTP and Water Intake Sites under DESWSP



Location 3 at Water Intake



Location 4 at Water Intake

Baseline Noise Quality Monitoring Gandharbpur WTP and Water Intake Sites under DESWSP



Location 5 at Water Intake



Location 6 at Water Intake

Baseline Noise Quality Monitoring Gandharbpur WTP and Water Intake Sites under DESWSP



Location 7 at Water Intake










Group Photo at Water Intake

Meeting attendance records are: Meeting at Intake:

In take .

LIST OF PARTICIPANTS

Sl.No	Name	Designation / Occupation	Organization	E-mail/ Cell No	Signature
1	AV Racy	COACH HSE (Adv)	GWTSNC	01315790888	
2	Md. Jahangir Alam	HSEM	SDWP	01703 435085	
3.	Sum Jia Mng	P.M	GDWP	01315039256	
4.	Youssef NAJJAR	B.M	GWTSnc	01313438502	
5	Dalil Mehtaoui	S.S.E	GWTSnc	01313-438505	
6	Md. Bahin Hossain	ELRIC ENGR	MoffMaadabid	01712-184516	
7	Md. Nazimul Hossain Dalil	ET &	MM	01218390289	
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ALAPPAITI.RAO @GWTSnc.com

Meeting at WTP:

File: Submission 07: DC/SWSP_MOSC- 08 October 2019

WTP

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