

# Semi-Annual Environmental Monitoring Report

---

Project Number: 49107-006

Period: May–October 2019

Submission Date: December 2019

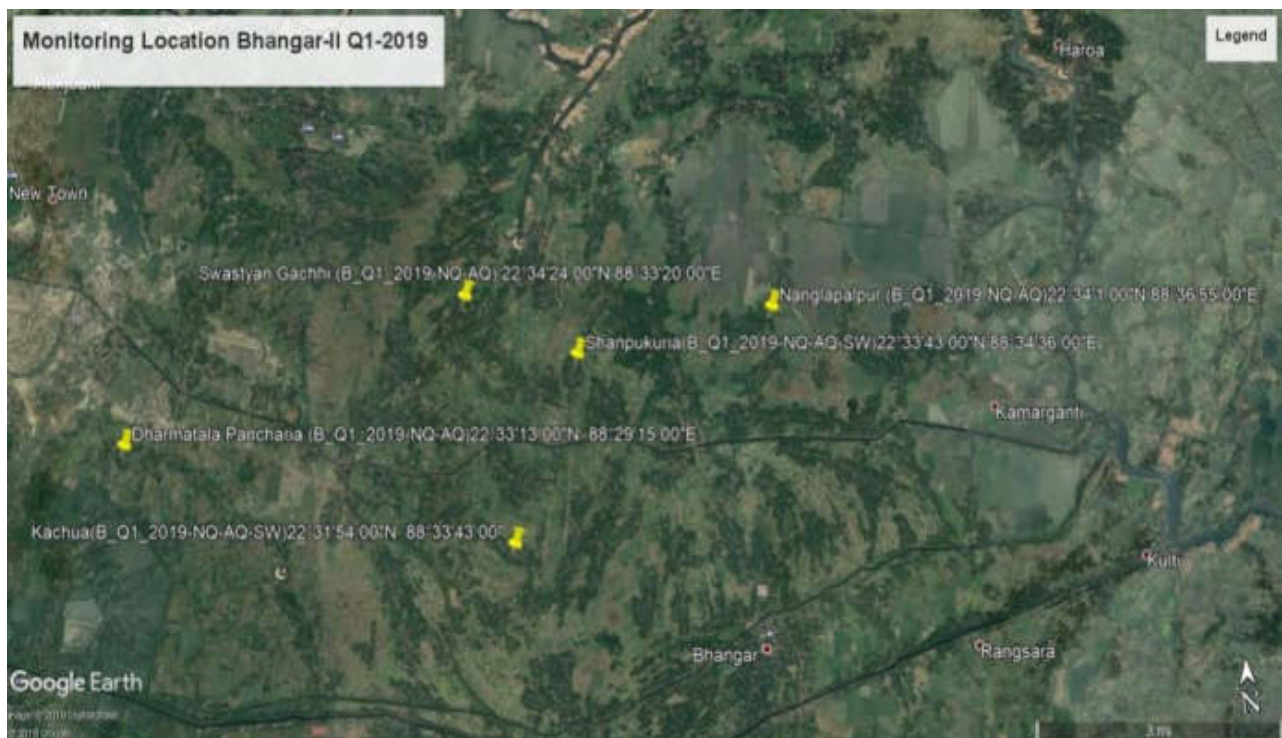
## IND: West Bengal Drinking Water Sector Improvement Project (PART C)

Prepared by Project Management Unit, Government of West Bengal for Asian Development Bank. This document is made publicly available in accordance with ADB's Access to Information Policy and does not necessarily reflect the views of ADB.

This environmental monitoring report is a document of the borrower. The views expressed herein do not necessarily represent those of ADB's Board of Directors, management, or staff, and may be preliminary in nature. Your attention is directed to the "terms of use" section of this website.

In preparing any country program or strategy, financing any project, or by making any designation of or reference to a particular territory or geographic area in this document, the Asian Development Bank does not intend to make any judgments as to the legal or other status of any territory or area.

## **Monitoring Locations on Google Earth**





### **List of Attachments**

- Attachment P1: Details of construction Work sites
- Attachment P2: Details of construction camp sites
- Attachment P3: List of clearances & statutory requirements
- Attachment P4: Contractor's OHS Policy & Organization
- Attachment P5: Utility shifting/relocation
- Attachment P6: Details of Construction Materials
- Attachment P7: Spoil Management Plan
- Attachment P8: Traffic Management Plan
- Attachment P9: Procedure for on-site Grievance Redressal Mechanism
- Attachment P10: Procedure for information disclosure prior to start of works

## Attachment P1: Details of construction Work sites

1. Zone 4: Pipeline construction Site							
Location- Sastyangachhi							
A	<b>Material storage</b> <ul style="list-style-type: none"> <li>• Pipe</li> <li>• Fittings</li> </ul>						
B	<b>Plant &amp; Machinery</b> <ul style="list-style-type: none"> <li>▪ Jointing Machin-1 Nos</li> <li>▪ DG (less than 5 kVA) – 1 Nos</li> <li>▪ JCB – 1 Nos</li> </ul>						
C	<b>Site office – No</b>						
D	<b>Laboratory – No</b>						
E	<b>Security cabin – No</b>						
F	<b>Labor welfare facilities at Site</b> <ul style="list-style-type: none"> <li>• Drinking water</li> <li>• First Aid Box.</li> </ul>						
G	<b>Road, agriculture land involvement and infrastructure facility</b> No agricultural land involved No as such underground infrastructure available. No record for village road <b>Details of pipeline, roads and construction methodology are presented below:</b>						
	<b>Pipe Diameter (mm)</b>	<b>Length (m)</b>	<b>Width of trench (m)</b>	<b>Depth of Trench (m)</b>	<b>Width of roads (m)</b>	<b>Type of roads (earthen/BT/CC)</b>	<b>Excavation method (manual/mechanical)</b>
	<b>DI Pipes ( 542m)</b>						
	400 mm	---	0.4- 0.8	1.250	2.0-6.0	CC/BT/Earthen	Manual/Mech
	350 mm	---	0.4- 0.8	1.140	2.0-6.0	CC/BT/Earthen	Manual/Mech
	300 mm	45	0.4- 0.8	1.30	2.0-6.0	CC/BT/Earthen	Manual/Mech
	250 mm	497	0.4- 0.8	1.25	2.0-6.0	CC/BT/Earthen	Manual/Mech
	<b>Distribution Network— HDPE Pipes(34743 m)</b>						
	200 mm	2484	0.4- 0.8	1.20	2.0-6.0	CC/BT/Earthen	Manual/Mech
	140 mm	4317	0.4- 0.8	1.14	2.0-6.0	CC/BT/Earthen	Manual/Mech
	110 mm	5072	0.4- 0.8	1.11	2.0-6.0	CC/BT/Earthen	Manual/Mech
	90 mm	1359	0.4- 0.8	1.09	2.0-6.0	CC/BT/Earthen	Manual/Mech
	75 mm	2154	0.4- 0.8	1.08	2.0-6.0	CC/BT/Earthen	Manual/Mech
	63 mm	19357	0.4- 0.8	1.06	2.0-6.0	CC/BT/Earthen	Manual/Mech

**Attachment P2: Details of construction camp sites**

1.	Labour Accommodation, Pipeline site – Zone 4	
Location- Anantapur, Polerhat - I (Latitude: 22°35'0", Longitude: 88°33'37")		
A	Accommodation – For 10 construction workers. No women / families in the camp Facilities provided at camp site <ul style="list-style-type: none"><li>• Type of living accommodation – Rented apartment</li><li>• Accommodation provided for 10 workers</li><li>• Separate cooking area</li><li>• Cooking gas</li><li>• Drinking water</li><li>• Bath rooms</li><li>• Toilets</li><li>• Drainage system</li><li>• First aid box</li></ul>	
B	Camp photographs	
Original site Photographs	Not applicable as rented house is being used as labour accommodation.	
Photos of camp and facilities provided		
	Rented house as labour accommodation	Sleeping area with electrical lights

**Attachment P3: List of clearances & statutory requirements**

Sl. No.	Project related	Status
<b>A</b>	<b>Construction/work related</b>	
1	Gram Panchayet and Other Authorities Permission	Obtained [Refer <b>Appendix – P.A</b> ]
<b>B</b>	<b>Labour Safety / Welfare Related</b>	
1	Labour license	Obtained [Refer <b>Appendix – P.B</b> ]
2	Workmen Compensation	Obtained [Refer <b>Appendix – P.C</b> ]
<b>C</b>	<b>Safety / liability safety related</b>	
1	Medical insurance	Tie-up with local hospital done
<b>D</b>	<b>Others</b>	
1	Fitness certificate for vehicles, equipment used in construction	Obtained
2	Pollution under control (PUC) certificates for vehicles and equipment	Available [Refer <b>Appendix – P.D</b> ]
3	Driving licenses for drivers	Obtained
4	Insurance for vehicles / equipment, as required	Obtained

## Attachment P4: Contractor's OHS Plan &amp; Organization

<b>1</b>	<b>Contractor agency has a OHS plan</b>	<b>Yes/No</b>
A	If yes, provide policy details: 1. Policy statement 2. OHS organization & responsibilities:	Yes [Refer Appendix O2] Yes
B	List safety risks anticipated in the project Area works (Pipeline Work) • Trips and falls • Slope failure / trench collapse • Road accidents Linear works (pipelines) • Accidents from open trenches	-
C	List personal protection equipment provided to workers • Boots- 10No. • Gloves-3no. • Helmet-10nos. • Safety jacket- 10nos. • Goggles- 2nos.	Yes
D	Preventive Measures	
	• Orientation of all workers on OSH	Done
	• Work permit system	No
	• Toolbox/safety meetings (how often will this be conducted, what are the minimum topics)	Twice Weekly on work inside trench, firefighting, first-aid, housekeeping, etc.
	• Safety signages	Displayed on site
	• Barricades (more than 1 m deep requires hard barricading)	Wherever road width permits
<b>2</b>	<b>Contractor emergency procedure</b>	
A	Detail what steps/procedure to be adopted in emergency situation (eg. accidents) • In case of emergency first aid treatment to injured labour/person shall be provided. • In case hospitalization is required, concerned site in-charge will immediately take necessary action for hospitalization and he will inform to our Project Manager. • Details of accident shall be reported in accident register and the same shall be informed to client also.	Yes
B	<b>Contact information, staff and responsibilities for emergency situations</b>	
	<b>Designation</b>	<b>Staff name &amp; contact</b>
	Site Engineer	Mr. Amlan Singh Roy Mob: 9734667934
	EHS Supervisor	Mr. Nitin Kumar Mob: 8971107720
	Project Manager Representative	Druga Prasad Mob: 9836803672
		Emergency responsibility
		Site Engineer shall be responsible for arranging of first aid treatment and other necessary action required in case of emergency. He will also be responsible for informing to EHS Supervisor.
		EHS Supervisor should assess the emergency situation and accordingly instruct the Site Engineer of appropriate actions. Depending on the gravity of the situation, he should also inform Project Manager Representative.
		Project Manager Representative shall be responsible for taking all necessary action and decisions.
C	<b>Reporting procedure in case of work accidents</b> • Details of accidents shall be recorded in accident register. • Copy of accident register shall be submitted to client at the end of every month. • In case of any major accidents client shall be informed immediately.	Yes
D	Mandatory Reporting to Authorities	Yes
E	Prohibited Acts and Penalties for Violations	Yes

**Attachment P5: Utility shifting/relocation**

Sl. No.	List work sites that require utility shifting, relocation, temporary shut off	Remarks
1	Area work sites (Pipeline)	Not Required




**Attachment P6: Details of Construction Materials**

Sl. No	Material	Approximate quantity required (m3) for project	Source	Indicate if source has all necessary government clearances
1	Earth	10915	From trench cutting	Not required

## Attachment P7: Spoil Management Plan


NCC LIMITED	Design and Construction of Reservoir Including Water Supply Distribution Network and Metering Work in Bhangar-II Block		Doc. No. NCC/ SMP /01 Revision No. 00 Revision Date : 00 Effective Date : Page 1 of 5		
	Spoil Management Plan				


  

<b>SPOIL MANAGEMENT PLAN (SMP)</b>					
<b>WBDWSIP BHANGAR-II BLOCK</b>					
<b>LOCATION – ZONE- 4,PIPE LAYING (Swastyan Gachhi)</b>					
0	16.07.2019				
REV	DATE	PREPARED BY	CHECKED BY	APPROVED BY DSISC	APPROVED BY PIU

Enviro. North 24 Parganas  
WBDWSI Project

  
Junior Engineer  
PIU-I, N-24Pgs., WBDWSIP, PHE Dte.  
Govt. Of West Bengal

  
Assistant Engineer-II (Civil)  
PIU, N-24 Pgs., WBDWSIP, PHE Dte.  
Govt. of West Bengal

may be approved

West Bengal Drinking Water Sector Improvement Project



### 1. INTRODUCTION OF SMP:

SMP is to describe how the project will manage the spoil generated and reuse related to design and construction works. This is an integral part of EMP. The objective of SMP is to reuse of spoil from works.

### 2. SCOPE:

This Spoil Management Plan developed for pipeline network laying in Zone (4). For this site, we do not anticipate any excess Spoil for disposal as all excavated material will be reused at site only.

### 3. LEGAL AND OTHER REQUIREMENTS:

In this project, there is no legal litigation at site for land and working area or site. Disposal of spoil will be conforming the Environmental Protection Rules and Regulations of Govt. of India and the State Govt.

### 4. ROLES AND RESPONSIBILITY:

#### SITE ENGINEER:

- Will strictly work as per drawing.
- Will stay at site during activity is going on.
- Will see excess earth is kept at a particular place after completion of backfilling.
- Will ensure quality of the work by discussing daily about the type of activity on that day with the workmen.
- Will check site drain outlets are not blocked due to excavated earth on the drain.

#### SAFETY PERSONNEL:

- Will constant Job Specific Tool Box Talk with Supervisor and Workmen.
- Will check excavated earth kept away from top.
- Will check if any underground pipeline is there or live electric cable there water should be sprayed to avoid dust hazard from excavation.
- Necessary Safety signage, Cones to be used.
- Vehicles reverse horn etc to be checked will ensure zero tolerance in safety.

#### WORKER:

- Workers will start activity only after job specific Tool Box Talk done by the job supervisor.
- They will wear job specific safety items before start of work.
- During working inside the excavated trench, they should use ladder for easy access.
- They should barricade the area of activity with Safety barricading tape/Safety cone/ Caution Boards at the start and end of a road under excavation
- Worker should be skilled to carry out the work.
- Workers should take care of the pedestrians and vehicles safe movement.

It is the responsibility of the Engineers and all department head to implement this procedure and ensure that delegated staff and worker under their supervision carry it out in this project. Major roles and responsibilities are mentioned below:

- Excavated earth should be utilized like refilling at site only.
- Traffic movement should not be obstructed by dumping soil during the work.
- No low land, pond, ditch etc. will be filled up by extra soil outside the work place.
- Ensuring no accident occurs during rainy season by excavated earth during or finished the work.
- All the drains, outlet should be free from excavated earth.

**5. IDENTIFICATION AND ASSESSMENT OF SPOIL ASPECTS AND IMPACTS:**

In this project, there are some places which will be assessed and identified jointly along with design engineer. Main places where the excavated earth can be utilized are the trench of pipes and backfilling location.

**6. SPOIL VOLUMES AND CHARACTERISTICS:**

In this project, approx. generation of excavated earth will be approx. 10915 cum. There is no excess earth in this project as the same earth is to be used to fill the low land area.

As per report from soil expert, excavated earth is cohesive in nature.

**7. SPOIL REUSES OPPORTUNITIES, IDENTIFICATION AND ASSESMENT:**

In this project, there is no excess quality of excavated earth; total excavated earth should be reused as per plan.

**8. ON SITE SPOIL MANAGMENT APPROACH:**

In this project, no need of the approach as there is no extra soil for disposal.

**9. SPOIL TRANSPORTATION METHODOLOGY:**

In this project, no need of transport as there is no extra soil for disposal.

**10. MONITORING, REPORTING, REVIEW AND IMPROVEMENTS:**

Monitoring, Reporting and all necessary improvements will be done as per requirements.

**Expected Spoil generated at Swastyangachhi (Zone 04) for Pipe laying**

Sl.	Dia	Length(m)	Width(m)	Depth(m)	Total(cum)
1	63	19350	0.3	1	5805
2	75	2155	0.3	1	646.5
3	90	1357	0.3	1	407.1
4	110	5074	0.3	1	1522.2
5	140	4318	0.3	1	1295.4
6	200	1999	0.4	1	799.6
7	200	483	0.4	1	193.2
8	250	497	0.45	1	223.65
9	300	45	0.5	1	22.5
12	Approx. generated total Spoil at ZONE-04				<b>10915</b>




## Attachment P8: Traffic Management Plan

NCC LIMITED	Design and Construction of Overhead Reservoir Including Water Supply Distribution Network and Metering Work in Bhargar-II Block	Doc. No. NCC/ TMP /01 Revision No. 00 Revision Date : 00 Effective Date : Page 1 of 7
	Traffic Management Plan	

**TRAFFIC MANAGEMENT PLAN (TMP)**  
**WBDWSIP BHANGAR-II BLOCK**  
**LOCATION – ZONE-4, PIPE LAYING (Swastyan Gachhi)**

0	16.07.2019				
REV	DATE	PREPARED BY	CHECKED BY	APPROVED BY DSISC	APPROVED BY PIU

Environmental Specialist, DSISC  
North 24 Parganas  
WBDWSI Project

Junior Engineer  
PIU, N-24Pgs., WBDWSIP, PHE Dte.  
Govt. Of West Bengal

Assistant Engineer-II (Civil)  
PIU, N-24 Pgs., WBDWSIP, PHE Dte.  
Govt. of West Bengal

may be approved

Junior Engineer  
PIU-I, N-24Pgs., WBDWSIP, PHE Dte.  
Govt. Of West Bengal

Counter Sign

West Bengal Drinking Water Sector Improvement Project

## **1. PURPOSE**

Main purpose is to prevent accident between vehicles, pedestrians and employees and also minimise inconvenience to the vehicle. To stop property damage and prevent injury to persons arising from site traffic and site transport.

## **2. SCOPE**

The procedure is applicable for HDPE/DI pipe laying area.

Pipelaying works not required full road closure but partial closure is required on all these roads and hence, traffic management plans have been developed accordingly.

## **3. RESPONSIBILITY**

It is the responsibility of the Engineers and all department head to implement this procedure and ensure that delegated staff under their supervision carries it out.

## **4. LEGAL REQUIREMENT**

The Building and Other Construction Workers (Regulations of Employment and Conditions of Service) Act 1996 and Central Rule 1998 Rule 48, 88 and 95, Motor Vehicle Act 1988

## **5. REQUIREMENTS**

### **5.1 General**

- All road works create inconvenience and are a potential hazard to the safety of all road users and those employed in carrying out the work.
- All the effects should be reduced to the minimum, and to ensure that the works are properly guarded, lighted and signed.
- A clear and early warning of any obstruction to all road users should be provided.
- All areas where work is going on should be clearly demarcated by proper barricading and entry into these areas should be restricted to only authorize personnel.
- Site access for local people.

### **5.2 Planning Stage**

Particular attention should be given to:

- Traffic signs
- Cones
- Barriers
- Road hazard warning lights
- Information boards and
- Site lighting
- Site access for local people
- Consider necessity to traffic control systems such as temporary traffic lights or Stop/Go boards.
- Access should be planned to eliminate dangerous movements of site traffic (e.g. reversing of vehicles) and personnel (e.g. crossing dual carriageways).
- Provision of adequate lighting while working at night.
- All persons working on the road shall wear high visibility jackets.

### **5.3 On Site**

The working space shall be defined and “A PLACE FOR EVERYTHING AND EVERYTHING IN ITS PLACE” to be follow.

#### **5.4 Operators/Drivers**

- Only Experienced operators and drivers with valid licensed has been appointed.
- One copy of license has been collected.
- Refreshment training conducted for all operators and drivers.
- Operators/Drivers authentication and validation to operate the particular machinery displayed in the machine/vehicles.

#### **5.5 Equipment**

- Drivers undertake a daily visual inspection of their vehicles include steering, brakes, mirrors, lights, horn, tyres and windshield wipers.
- Safety Department along with Plant and machinery department shall check the vehicles as a monthly basis.
- All vehicles have reverse horns and it is in working properly.
- All vehicles, preventive maintenance schedule has to be followed strictly.

#### **5.6 Roads**

- For safe operation we are following the below safety measure:
- Safe width of road has been provided.
- Flag man deployed at every traffic point to control the vehicles and pedestrians.
- Speed limits 10km/hr within the working area.
- Caution board has been placed in every location within the site.
- Workers are working with reflective jacket as well as required PPE's.
- Road for use of pedestrian has been identified.
- Reverse horn used in vehicles.
- While reverse vehicles ensuring Banks man.
- Do's and Don'ts displayed at site office.

#### **5.7 Loading and Unloading**

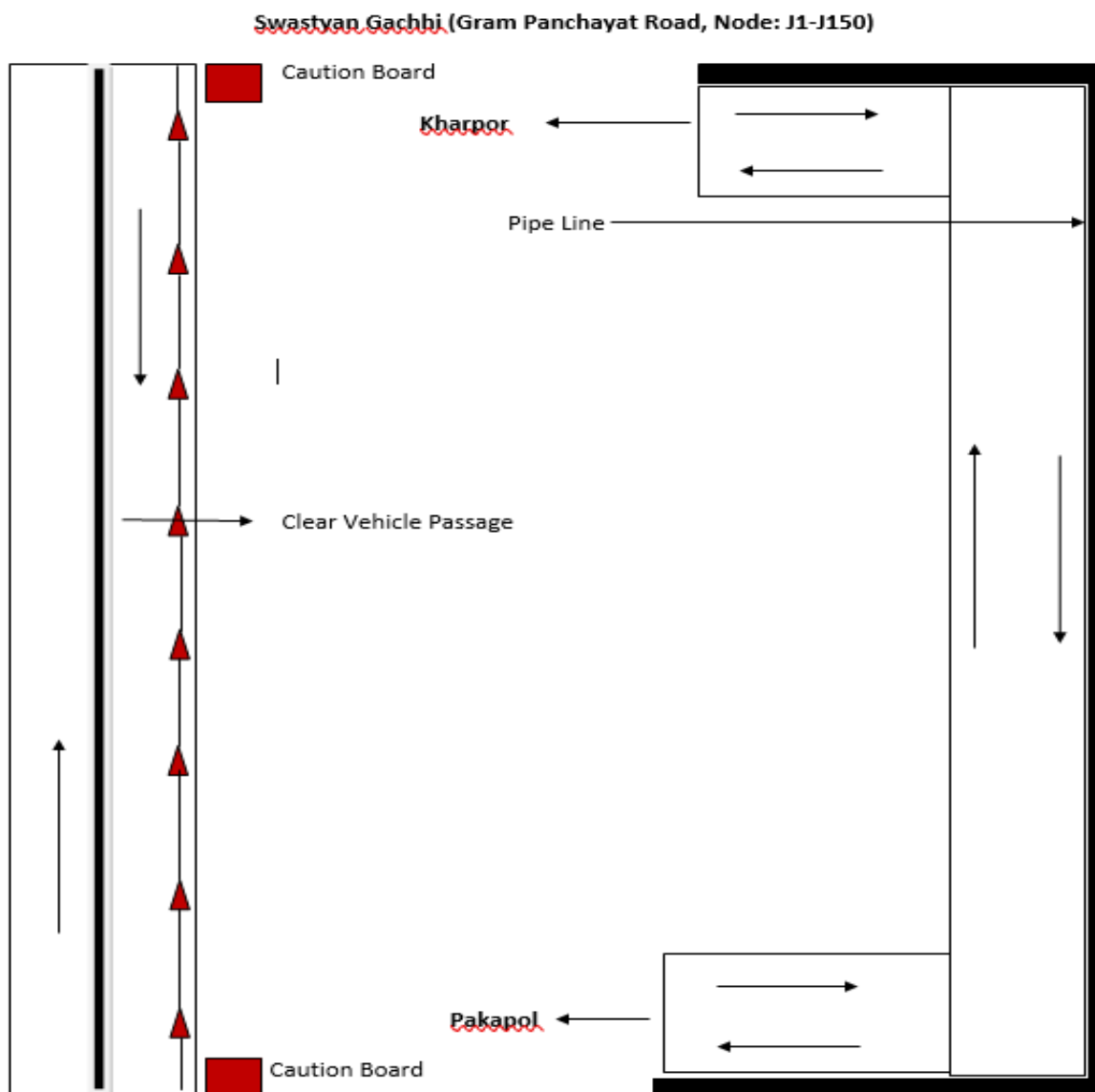
- Only authorized persons were engage loading/unloading.
- Materials loaded within the permitted safe weight limit (as per RTO) for the truck.
- Ensuring Soil and Sand loaded trucks are covered with tarpaulin while transporting
- During Toolbox talk's intimation has been delivered to all drivers/operators that when the drivers leave the driving seat, the engine of the truck shall be switched off, the gear engaged and parking brakes applied. On slopes, wheel blocks shall be applied.
- Helper has been provided with all vehicles.
- After unloading, the banks man ensuring that the tipper is lowered before moving.
- Turn buckle and side stoppers used while transporting as required.

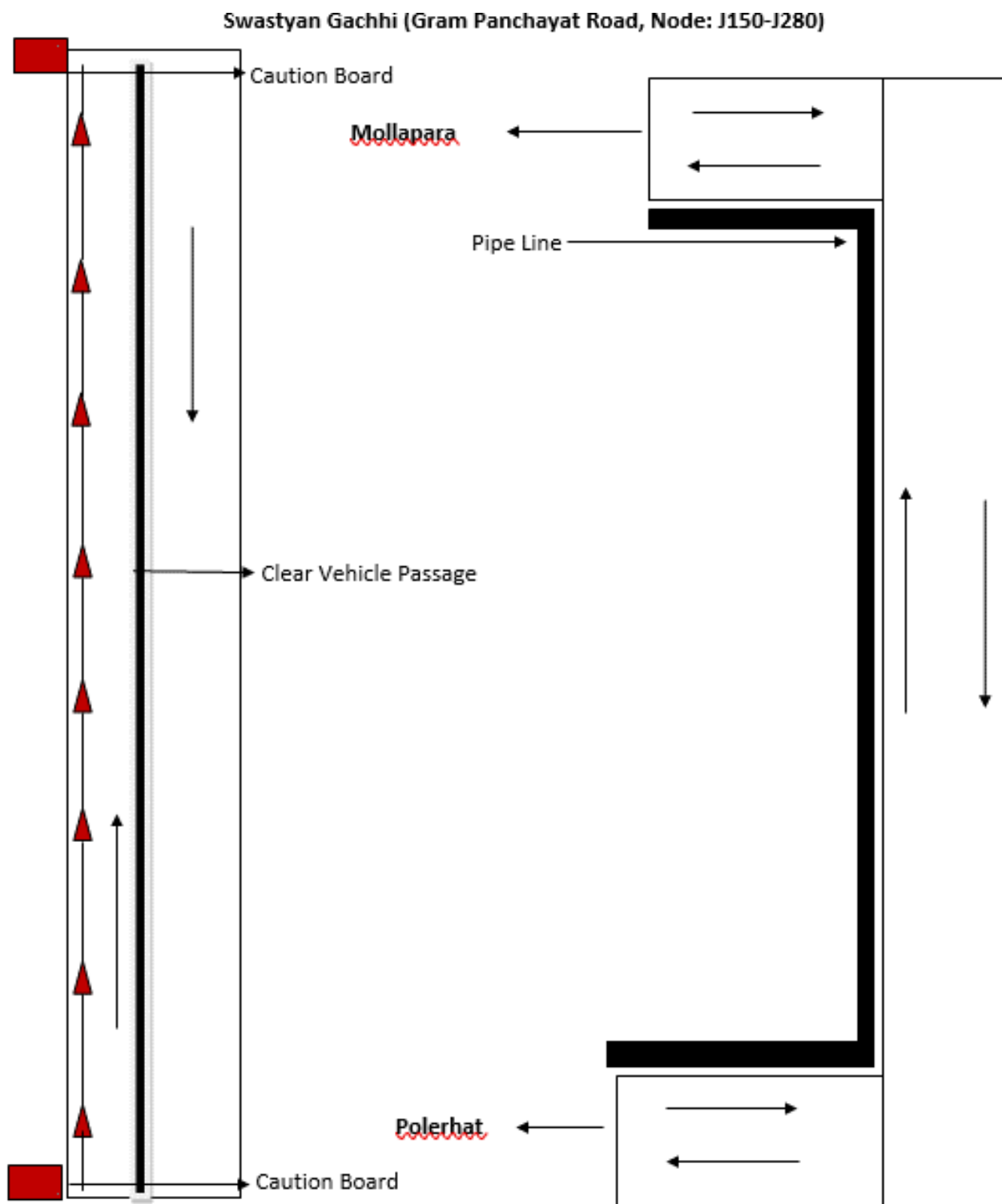
#### **5.8 Working Area**

- The working area has been restricted from unauthorized entry.
- The working space has been defined.

Particular attention has been taken in working area:

- Traffic signs
- Cones
- Barriers
- Information boards, and
- Site lighting
- Adequate lighting has been provided at working area at night.
- All persons wear high visibility jackets.

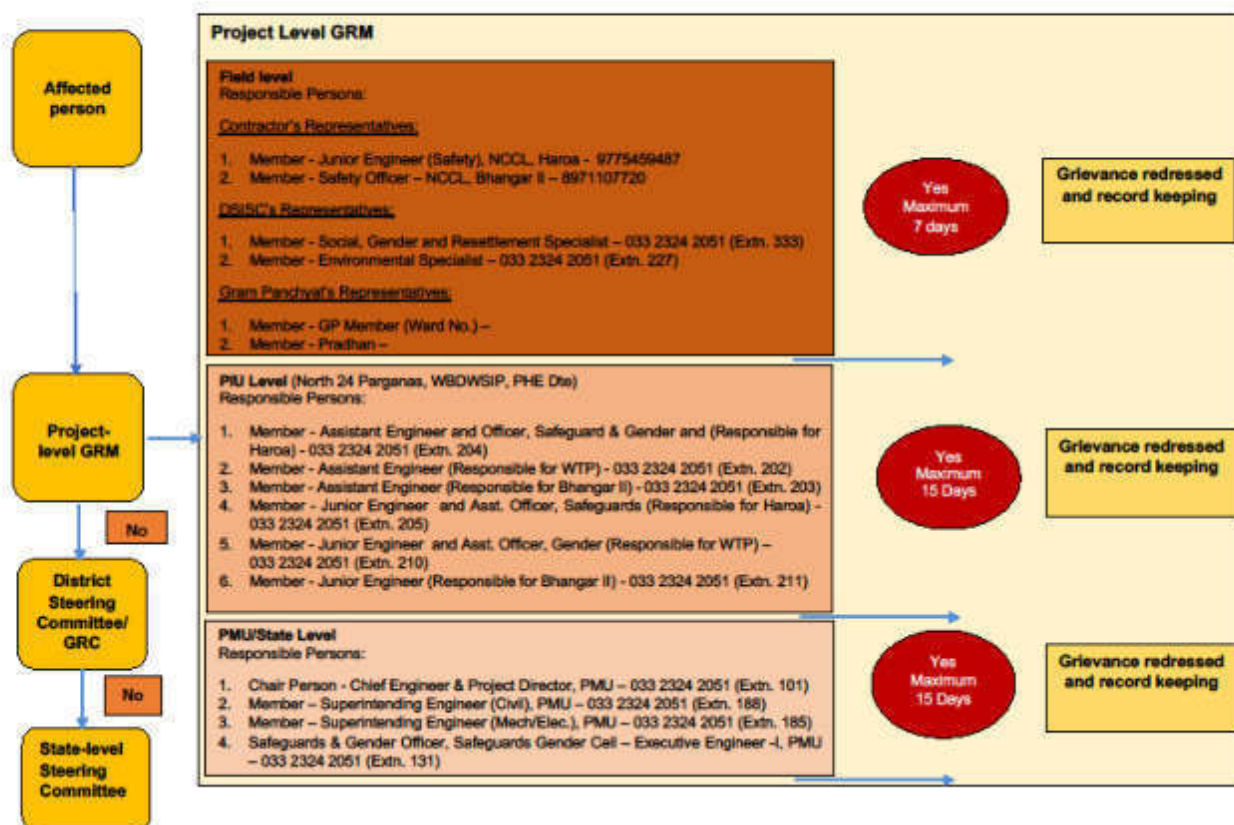




## Attachment P9: Procedure for on-site Grievance Redressal Mechanism

A common Grievance Redressal Mechanism (GRM) is in place to redress social, environmental or any other project and/or subproject related grievances. The GRM presented below has been developed in consultation with stakeholders. Public awareness campaign has been conducted to ensure that awareness on the project and its grievance redress procedures is generated. The campaign has ensured that the poor, vulnerable and others are made aware of grievance redress procedures and entitlements per project entitlement matrix, and PMU and PIU will ensure that their grievances are addressed in time.

### Grievance Redress Mechanism



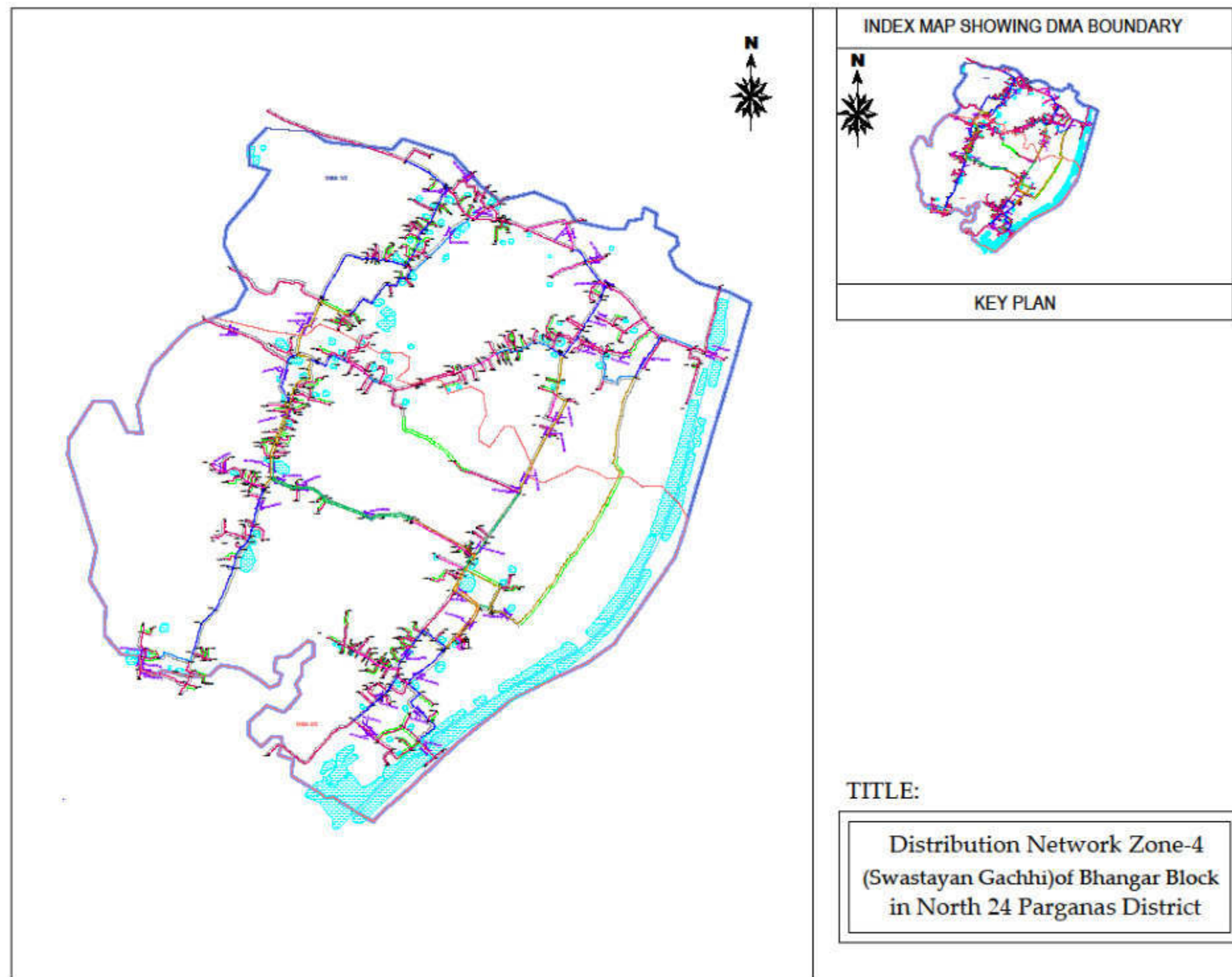
All grievances are recorded in site grievance register and resolved at the earliest. The sample grievance registration form is included in Appendix O3.

## Attachment P10: Procedure for information disclosure prior to start of works


- Local population is informed through community leaders as well as by visiting individual households of the locality.
- Information board is placed at construction site
- Stakeholder consultation carried out at Gram Panchayat level and work details including time period is informed.



Appendix P1: Map of Distribution Network



## Appendix P.A: Gram Panchayat and other Authorities Permission

  
**Government of West Bengal**  
**Office of the Executive Engineer**  
**North 24 Parganas W/S Division-II, P.H.E. Dte.**  
**Utility Building, Tank No.3, 2<sup>nd</sup> Floor, Block-AI, AA-IA, New Town, Kol.-156**  
**Phone No. : (033) 2324-2051, E-mail : ee\_n24\_div2@wbphed.gov.in**

---

Memo No. \_\_\_\_\_/N-24 PGSD-II, Dated, New Town, the, \_\_\_\_\_

To  
 The District Engineer,  
 South 24 Parganas Zilla Parishad,  
 Alipur, South 24 Parganas.

Sub : Design and construction of overhead reservoir including water supply distribution network & metering works in Bhargar-II Block.

Dear Sir,

This is to inform you that, PHE Dte. has undertaken a water supply project in the month of October'2018 in Bhargar-II block under the financial assistance of ADB and laying of foundation stone of the same was done by Hon'ble Chief Minister of West Bengal on 26<sup>th</sup> October'2018. Now the entrusted agency will start the laying of distribution network from 17.06.2019 in Polerhar-I Gram Panchayat along the road under your jurisdiction within the ROW and a copy of distribution network drawing is herewith enclosed for ready reference.

Your kind co-operation in this regard is requested.

Encls. : As stated.

Yours faithfully,

*sd/-*  
 Executive Engineer,  
 N-24 Pgs. W/S Divn.- II, P.H.E. Dte.  
 Dated, New Town, the, \_\_\_\_\_

Memo No. \_\_\_\_\_/N-24 PGSD-II,  
 Copy forwarded for information to :-

- 1) The Sabhadhipati, South 24 Parganas Zilla Parishad.
- 2) The District Magistrate, South 24 Parganas.
- 3) The Executive Engineer, WBSRDA, South 24 Parganas Unit.

*sd/-*  
 Executive Engineer,  
 N-24 Pgs. W/S Divn.- II, P.H.E. Dte.  
 Dated, New Town, the, 13-06-19

Memo No. 987/323/N-24 PGSD-II,  
 Copy forwarded for information to :-

- 1) The Superintending Engineer, P.L.U., North 24 Parganas, WBDWSIP, P.H.E. Dte.
- 2) The Assistant Engineer-II, North 24 Pgs. W/S Divn.-II, PHE Dte.
- ✓ 3) The Team Leader, DSISC:North 24 Parganas, WBDWSIP.

*sd/-*  
 Executive Engineer,  
 N-24 Pgs. W/S Divn.- II, P.H.E. Dte.

**DSISC / WBDWSIP**  
**Inward No. 1022**  
**RECEIVED**  
**Date 14/06/19**  
**Time 12:53 PM**

*File*  
*14/6*



**Government of West Bengal**  
**Office of the Executive Engineer**  
**North 24 Parganas W/S Division-II, P.H.E. Dte.**  
**Utility Building, Tank No.3, 2<sup>nd</sup> Floor, Block-A1, AA-1A, New Town, Kol-156**  
**Phone No. : (033) 2324-2051, E-mail : ee\_n24\_div2@wbphed.gov.in**

Memo No. \_\_\_\_\_/N-24 PGSD-II,

Dated, New Town, the, \_\_\_\_\_

To  
 The Executive Engineer,  
 WBSRDA,  
 South 24 Parganas Unit.

Sub. : Design and construction of overhead reservoir including water supply distribution network & metering works in Bhargar-II Block.

Dear Sir,

This is to inform you that, PHE Dte. has undertaken a water supply project in the month of October'2018 in Bhargar-II block under the financial assistance of ADB and laying of foundation stone of the same was done by Hon'ble Chief Minister of West Bengal on 26<sup>th</sup> October'2018. Now the entrusted agency will start the laying of distribution network from 17.06.2019 in **Polerhar-I Gram Panchayet** along the road under your jurisdiction within the ROW and a copy of distribution network drawing is herewith enclosed for ready reference.

Your kind co-operation in this regard is requested.

Encl. : As stated.

Yours faithfully,

*Sd/-*  
 Executive Engineer,  
 N-24 Pgs. W/S Divn.- II, P.H.E. Dte.

Memo No. \_\_\_\_\_/N-24 PGSD-II,

Dated, New Town, the, \_\_\_\_\_

Copy forwarded for information to :-

- 1) The Sabhadhipati, South 24 Parganas Zilla Parishad.
- 2) The District Magistrate, South 24 Parganas.
- 3) The District Engineer, South 24 Parganas Zilla Parishad.

*Sd/-*  
 Executive Engineer,  
 N-24 Pgs. W/S Divn.- II, P.H.E. Dte.

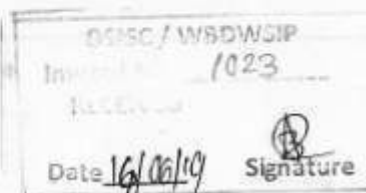
Memo No. 988/63-3/N-24 PGSD-II,

Dated, New Town, the, 13-06-19

Copy forwarded for information to :-


- 1) The Superintending Engineer, P.L.U., North 24 Parganas, WBDWSIP, P.H.E. Dte.
- 2) The Assistant Engineer-II, North 24 Pgs. W/S Divn.-II, PHE Dte.
- ✓ 3) The Team Leader, DSISC, North 24 Parganas, WBDWSIP.

*[Signature]*  
 Executive Engineer,  
 N-24 Pgs. W/S Divn.- II, P.H.E. Dte.



E:\WBWSIP\ADB Project\Bpgrs-01\WSD\KOL.doc

*File*  
*14/6*

  
**Government of West Bengal**  
**Office of the Executive Engineer**  
**North 24 Parganas W/S Division-II, P.H.E. Dte.**  
**Utility Building, Tank No.3, 2<sup>nd</sup> Floor, Block-AI, AA-IA, New Town, Kol.-156**  
**Phone No. : (033) 2324-2051, E-mail : ee\_n24\_div2@wbphed.gov.in**

---

Memo No. \_\_\_\_\_/N-24 PGSD-II, Dated, New Town, the, \_\_\_\_\_

To  
 The B.D.O. & Executive Officer,  
 Bhangar-II Development Block & Bhangar-II Panchayet Samiti,  
 South 24 Parganas.

Sub. : Design and construction of overhead reservoir including water supply distribution network & metering works in Bhangar-II Block.

Dear Sir,

You are well aware that the water supply project under reference is being going on within Bhangar-II block with financial assistance of ADB. Now the entrusted agency will start laying distribution pipe network from 17.06.2019 in **Polehat-I Gram Panchayet** along the road within ROW and a copy of drawing is herewith enclosed for your ready reference.

Your kind co-operation in this regard is requested.

Encls. : As stated.

Yours faithfully,  
  
*Sd/-*  
 Assistant Engineer-II  
 N-24 Pgs. W/S Divn.-II, PHE Dte.

Memo No. \_\_\_\_\_/N-24 PGSD-II, Dated, New Town, the, \_\_\_\_\_

Copy forwarded for information to :-
 

- 1) The Savapati, Bhangar-II Panchayet Samity.
- 2) The Pradhan, Polehat-I, Gram Panchayet.
- 3) The Officer in Charge, Kashipur Police Station.

*Sd/-*  
 Assistant Engineer-II  
 N-24 Pgs. W/S Divn.-II, PHE Dte.

Memo No. 989/3-1/N-24 PGSD-II, Dated, New Town, the, 13-06-19

Copy forwarded for information to :-
 


- 1) The Superintending Engineer, P.I.U., North 24 Parganas, WBDWSIP, P.H.E. Dte.
- 2) The Executive Engineer, North 24 Pgs. W/S Divn.-II, PHE Dte.
- 3) Sri Partha Chakraborty, Junior Engineer, N-24 Pgs. W/S Divn.-II, PHE Dte.
- 4) The Team Leader, DSISC-North 24 Parganas, WBDWSIP.

*File*  
*16/06/19*

W:\Gis\N24\Project\Bhangar-II\Letter to AS-II.doc

Inward No. 1024

Date 16/06/19

Signature 

*13/6/19*

Assistant Engineer-II  
N-24 Pgs. W/S Divn.-II, PHE Dte.





**Government of West Bengal**  
**Office of the Executive Engineer**  
**North 24 Parganas W/S Division-II, P.H.E. Dte.**  
**Utility Building, Tank No.3, 2<sup>nd</sup> Floor, Block-AI, AA-IA, New Town, Kol.-156**  
**Phone No. : (033) 2324-2051; E-mail : ee\_n24\_div2@wbphed.gov.in**

Memo No. \_\_\_\_\_/N-24 PGSD-II,

Dated, New Town, the, \_\_\_\_\_

To

- 1) The Station Manager,  
WBSEDCL, Bhangar, South 24 Parganas.
- 2) The Sub Divisional Engineer,  
BSNL, Canning Sub Division, Canning Telephone Exchange,  
South 24 Parganas.

Sub. : Design and construction of overhead reservoir including water supply distribution network & metering works in Bhangar-II Block.

Dear Sir,

This is to inform you that, PHE Dte. has undertaken a water supply project in the month of October'2018 in Bhangar-II block with financial assistance of ADB. Now the entrusted agency will start laying distribution network from 17.06.2019 in **Polerhat-I Gram Panchayet** along the road within ROW and a copy of drawing is herewith enclosed for your ready reference. In this matter you are requested to provide contract details of authorized person under your control regarding utilities & others if any during execution for smooth work progress without hampering existing services under your jurisdiction.

Your kind co-operation in this regard is requested.

Encls. : As stated.

Yours faithfully,

*Sd/-*  
Assistant Engineer-II  
N-24 Pgs. W/S Divn.-II, PHE Dte.

Memo No. \_\_\_\_\_/N-24 PGSD-II,

Dated, New Town, the, \_\_\_\_\_

Copy forwarded for information to :-

- 1) The Savapati, Bhangar-II Panchayet Samity.
- 2) The Executive Officer, Bhangar-II Panchayet Samity.

*Sd/-*  
Assistant Engineer-II  
N-24 Pgs. W/S Divn.-II, PHE Dte.  
Dated, New Town, the, *13/06/2019*

Memo No. *990-991* (2-1) /N-24 PGSD-II,

Copy forwarded for information to :-

- 1) The Superintending Engineer, P.I.U., North 24 Parganas, WBDWSIP, P.H.E. Dte.
- 2) The Executive Engineer, North 24 Pgs. W/S Divn.-II, PHE Dte.
- 3) Sri Partha Chakraborty, Junior Engineer, N-24 Pgs. W/S Divn.-II, PHE Dte.
- ✓ 4) The Team Leader, DSISC-North 24 Parganas, WBDWSIP.

Inward No. *1025*  
RECEIVED  
Date *19/06/19*

*13/6/2019*  
Assistant Engineer-II  
N-24 Pgs. W/S Divn.-II, PHE Dte.

## Appendix P.B: Labour License

*Labour Licence*  
*DWS Bhanganur II*  
*Expiry on 26/12/19*




**GOVERNMENT OF WEST BENGAL**  
 OFFICE OF THE DEPUTY LABOUR COMMISSIONER, BARUIPUR  
 South 24 Parganas, Nandarami Complex (1st & 2 nd Floor) (Opp. 218 Bus Stand) Holding No - 474, Kulpi Road,  
 Ward No - 5, Shibaniipith, Baruiপুর, Kolkata-700144

**FORM VI**  
 [ See Rule 25(1) ]

Licence No. : **BRP04/CLL/000191**
Date : **27th Dec, 2018**

Lic Fees	1000
S. Deposit	30000

**LICENCE**

Licence is hereby granted to **NCC LIMITED** at **Eco Space Business Park, Block 4A, 5th Floor, Action Area- II, Newtown - 700156, Patharghata, Block- Rajarhat , Barasat, PS - New Town, District - North 24 Parganas, Pin Code - 700156** under Section 12(1) of the Contract Labour (Regulation and Abolition) Act, 1970 subject to the conditions specified in Annexure.

The Licence shall remain in force till: **26th Dec, 2019.**

**Tapas Kumar Sinha Roy**  
 Digitally signed by Tapas Kumar Sinha Roy  
 Date: 2018.12.27 15:32:23 +05'30'  
 Licensing Officer  
 Under the Contract Labour(R&A) Act, 1970  
 &  
 Assistant Labour Commissioner  
 Baruiপুর, South 24 Parganas  
 (BRP04/CLL/000092)

**Establishment Information:**  
 Office of the Executive Engineer North 24 Parganas Water Supply Division II PHE Dte. (BRP04/CLL/000092)  
 W Site - Utility Building, Tank No.-3, 2nd Floor, Action Area-IA, New Town, Kolkata.  
 Bhogali-II, Block - Bhanganur - II , Baruiপুর - 700135, PS - Kashipur, South 24 Parganas

**Work site exact location:**  
 VII. Kantadanga, P.O. Shonepur  
 Bhogali-II, Block - Bhanganur - II , Baruiপুর  
 PS - Bhanganur , District - South 24 Parganas, Pin Code - 700135

1 of 2

## Appendix P.C: Workman Compensation

**FUTURE GENERALI**  
TOTAL INSURANCE SOLUTIONS

**Workmen's Compensation Policy- Policy Schedule**

Policy Serving Office :	Off Code-15, Future Generali India Insurance Co Ltd, 1st Floor D.No.7-1-21A, APDL Estate Opp Country Club, Baginipati, Hyderabad, Telangana, Pincode-500016, Tel. No : 940-66238600		
Policy No :	2019-LE129169-FWC	Period of Insurance :	From 00:00 04/02/2019 To Midnight of 03/02/2020
Insured :	NCC Limited	Intermediary Name/Code :	INDIA INSURE RISK MANAGEMENT AND INSURANCE BROKING SERVICES-90051521
Address :	BHANGAR II BLOCK, South Twenty Four Parganas, West Bengal, 743302	Telephone (Main, Off, Home) :	4017822990/8092390738/4827822990
		Fax No & Email Id :	02236791416 / PADMINI.SURYAKAIA@INDIAINSURE.COM
GETIN Number :	18AAACH333SCJ2M	PGI GETIN Number :	MAADCF019181ZA

In consideration of the Policy holder agreed herein paying to the Future Generali India Insurance Company Limited (herein after called the Insurer) the premium as noted in the Schedule and in release upon the statements made by the Policy holder in the proposal including its attachments or otherwise, and the material represented therein, the Insurer agrees to provide insurance against loss damage liability or expense to the extent and in the manner herein provided subject to all terms, conditions, exceptions and warranties hereinafter set forth.

Co-insurance Details		Schedule Of Premium ( ₹ )	
Insurer	Share (In %)	Gross Premium	134,304.36
FUTURE GENERALI INDIA INSURANCE COMPANY LIMITED	100%	Covers and Service Tax	24,174.78
		Total Premium	158,479.00

**Risk Details**

Nature of Business : Design and Construction of overhead reservoir including water supply distribution and metering works in Bhongar II Block  
Location : Design and Construction of overhead reservoir including water supply distribution and metering works in Bhongar II Block  
Contractor/Sub-Contractor Name : NCC LTD

No of Employees	Description of work done by Employees	Declared Wage during the Period of Insurance ( ₹ )
30	Highly Skilled workers	6,642,000.00
50	Skilled workers	6,948,000.00
50	Semi Skilled Workers	3,490,000.00
70	Unskilled Workers	4,580,000.00
<b>Total</b>		<b>21,660,000.00</b>

**Coverage Details**

The Policy covers Liability of the Insured under the following Law(s) shown as covered, subject to claim being otherwise admissible as per terms, conditions and exclusions of the Policy and subject to Limit of Indemnity as stipulated against each Law:

Law	Limit of Indemnity	Coverage
Employee's Compensation Act, 1923 and subsequent amendments thereon prior to the date of issue of this Policy	Subject otherwise, to the terms, conditions, scope, exclusions of the Policy, the extent of liability insured by the Insured	Yes
Common Law and Fatal Accident		Yes

**Law(s)**

WC Act 1923 and subsequent amendments of the said Act prior to the date of issue of the policy provided that the Insurance granted hereunder is not extended to include:

A. Any interest and/or penalty imposed on the Insured on account of his/her failure to comply with the requirements laid down under WC Act 1923

B. Occupational diseases of any kind.

**Additional Clauses, Conditions, Warranties, Scope, Exclusions**

Territorial is restricted from coverage.  
No cover for Medical Expenses, unless specifically allowed in the policy.  
No Cover for Medical Expenses.  
No Cover for occupational Diseases  
Exclusion of Territory: India  
Excluding War Risk, Rioting, Terrorism and Handling of Dry Ice  
Excluding any arising out of installation and erection of Drilling  
Warranted that safety practices are followed by the workers heights  
Contractors and sub-contractors employees are covered.

Important: 1. All other Terms, Conditions and Exclusions as per attached Policy Wording. 2. In case of payment by cheque, in the event of dishonour of cheque for any reason whatsoever, insurance provided under this document automatically stands cancelled from the inception irrespective of whether a separate communication is sent or not.

For Future Generali India Insurance Co. Ltd.

*Sharda*  
(Authorized Signatory)

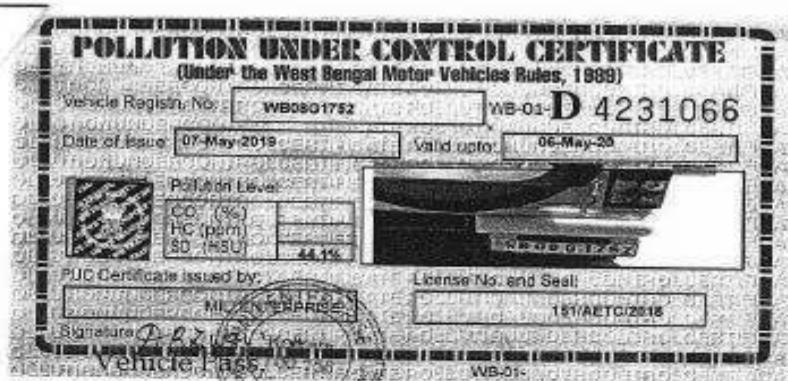
Receipt No : Z3665378  
Date of Issue : 07/02/2019  
Place of Issuance : Mumbai  
\*Address as mentioned below.

**Note: This document is digitally signed by Sharda Ramakrishnan, Authorised Signatory of Future Generali India Insurance Company Limited on 07/02/2019**

The stamp duty of Rs 67.15 paid by Letter Of Authorisation No. CSDN/18/2018/317918, dated 16/08/2018. A feedback - 2017/C.R.916-1, dated 09/01/2018.

Product IDN : IBDAN132P0012V01206708

Future Generali India Insurance Company Limited, Corporate & Registered Office: 8th Floor, Tower - 3, Indira Finance Centre, Ring Road, Baginipati, Hyderabad Road, Mumbai - 400013, Maharashtra. Call Line: 1800-720-213, 800-100-3333, 022-47837800, Email: sgsm@fmgindia.co.in, Website: www.fmgindia.co.in. IRDA Reg.No. 131, CIN: U68010G02000PLC161387.



Transport Department	<b>POLLUTION UNDER CONTROL CERTIFICATE</b> (Under the West Bengal Motor Vehicles Rules, 1989)																																																																														
<b>Label Code: WB</b>	<b>MIL ENTERPRISE</b> <b>BP RAJARHAT NEW TOWN, KOLKATA - 700156, WEST</b> <b>PH: 9432010995</b>																																																																														
<b>Vehicle Reg No: WB08G1752</b>	<b>License No: 151/AETC/2018</b>																																																																														
<b>Category: car</b>	<b>Test Station Code: 0001</b>																																																																														
<b>Make: MAHINDRA</b>	<b>PUC No.: FWB0001000006</b>																																																																														
<b>Model: BOLERO</b>	<b>Name: NCC LIMITED</b>																																																																														
<b>Date of Reg.: 2019</b>	<b>Address: NEW TOWN</b>																																																																														
<b>Speedo mtr Rdg: 252</b>	<b>KOL-156</b>																																																																														
<b>Engine No.: 16280</b>	<b>Mobile: 9830728872</b>																																																																														
<b>Chassis No.: 32097</b>	<b>Date: 07-May-2019</b>																																																																														
<b>Emission Norms: BS-IV or Onwards</b>	<b>Time: 11:17 AM</b>																																																																														
<b>Vehicle Type: BS4 - 4 Wheeler</b>	<b>Fuel: Diesel</b>																																																																														
<b>RPM Max: 1923</b>	<b>Flushing Cycle Mean: RPM Min: 0820</b>																																																																														
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 10%;">SNo.</th> <th style="width: 15%;">RPM min</th> <th style="width: 15%;">RPM max</th> <th style="width: 15%;">K m-1</th> <th style="width: 15%;">HSU %</th> <th style="width: 10%;">OTP C</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>0710</td> <td>2050</td> <td>01.23</td> <td>41.2</td> <td>042.00</td> </tr> <tr> <td>2</td> <td>0720</td> <td>2110</td> <td>01.47</td> <td>46.9</td> <td>043.00</td> </tr> <tr> <td>3</td> <td>0720</td> <td>2080</td> <td>01.38</td> <td>44.2</td> <td>041.00</td> </tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr> <td>Mean</td> <td>0716</td> <td>2080</td> <td>01.35</td> <td>44.1%</td> <td>041.33</td> </tr> </tbody> </table>		SNo.	RPM min	RPM max	K m-1	HSU %	OTP C	1	0710	2050	01.23	41.2	042.00	2	0720	2110	01.47	46.9	043.00	3	0720	2080	01.38	44.2	041.00																																																	Mean	0716	2080	01.35	44.1%	041.33
SNo.	RPM min	RPM max	K m-1	HSU %	OTP C																																																																										
1	0710	2050	01.23	41.2	042.00																																																																										
2	0720	2110	01.47	46.9	043.00																																																																										
3	0720	2080	01.38	44.2	041.00																																																																										
Mean	0716	2080	01.35	44.1%	041.33																																																																										
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 30%;">Standard</th> <th style="width: 10%;">Measured</th> </tr> </thead> <tbody> <tr> <td>K m-1</td> <td>1.62 01.35</td> </tr> <tr> <td>HSU %</td> <td>60 44.1</td> </tr> </tbody> </table>		Standard	Measured	K m-1	1.62 01.35	HSU %	60 44.1																																																																								
Standard	Measured																																																																														
K m-1	1.62 01.35																																																																														
HSU %	60 44.1																																																																														
<b>Valid upto: 06-May-20</b>																																																																															
<b>Grade: B</b>																																																																															
<b>Test Fee: 100</b>																																																																															

This vehicle meets Emission Standards Prescribed under Rule 115(2) of Central Motor Vehicle Rule's 1959.

Seal of Testing Centre

Authorized Signatory

JNDUS DiesX 2.8.6/0000-0000V4680



**POLLUTION UNDER CONTROL CERTIFICATE**  
(Under the West Bengal Motor Vehicles Rules, 1989)

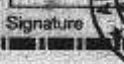
Vehicle Registrn. No. **PB02BL7373** WB-01-**D 5679142**

Date of Issue: **16-08-2019** Valid upto **15-02-2020**

Pollution Level


CO (%)	
HC (ppm)	
PM <sub>10</sub> (µg/m <sup>3</sup> )	45.83

PUC Certificate No. **32/D**

Signature 


WB-01-**D 5679142**

**COMPUTERISED EMISSION TEST CERTIFICATE**  
CMVR AUTHORISED BY : Govt. of we  
AKBAR AUTO EMISSION TESTING CENTRE  
BASANTI HIGHWAY, CHATAKPUKUR, PO/PS-BHAGAR, 24 PGS (S), W.B-743502

I.D Number : WB32D3647572 Licence No: 32/D  
Year Of Registration= 2011 Date : 16-08-2019  
vehicle registration no = PB02BL7373 TIME= 02:47:14  
Spedometer Reading[kms] =21522 Owner= N C C CO  
Engine Number=9218 Driver= SELF  
chasis Number=G2011 Test Fee : Rs.100/-  
Vehicle Colour = YELLOW Fule : Diesel  
Vehicle Make : JCB Smk cell Temp : 00  
Vehicle Model : 3DX Oil Temo : 93.0  
Type Of Engine : OTHERS Valid Up To : 15-02-2020  
Type OF Vehicle: OTHERS Grade : 

Test Reasult : Free Acceleration Validity 6Months

	ideal Rpm	max Rpm	K. Value	Hsu. val	Oil Temp
1	860	2900	5.37	90.06	61
2	860	2900	0.17	6.9	68
3	852	2700	0.12	6.9	68
Avg	860	2930	1.9	55.83	



Seal Of Testing Center

Certified that this Vehicle's K-Mean and hsu% value conforms to the standards

**POLLUTION UNDER CONTROL CERTIFICATE**  
(Under the West Bengal Motor Vehicles Rules, 1989)

Vehicle Registrn. No. **WB-30P-5178** WB-01-**D 4448893**

Date of issue: **26-Jun-2019** Valid upto: **25-Dec-2019**

Pollution Level

CO (%)	2.527
HC (ppm)	1490
SD (HSU)	

PCC Certificate issued by: **M/S ZAMAN ENTERPRISE** License No. and Seal: **94/AETC/2016/PETROL**

Signature: *[Signature]* **26/06/19**

**WB-30P-5178**

**POLLUTION UNDER CONTROL CERTIFICATE**  
(Under the West Bengal Motor Vehicles Rules, 1989)

**M/S ZAMAN ENTERPRISE**  
DHANPOTABAZAR, KHAUSADY, HAROA, 24PGS(N)

Label Code: 00 License Number: 94/AETC/2016/PETROL Label Code: 00

PUC Number: P000000001437 Vehicle Type: 2 Wheeler

Name: NCC LTD Reg. No.: WB-30P-5178

Address: Reg. Date: Nov-2013

Manufacturer: Bajaj

Model: Discover

Engine Type: 4 Stroke

Test Date/Time: 26-Jun-2019 10:16 Odometer Reading: 0

Catalyst: No Engine Number: 05086

Chassis Number: 75215

Fuel -->	Petrol			
	Regulation	Measured	Regulation	Measured
CO (%)	3.5	2.527		
HC* (ppm)	4500	1490		
CO2 (%)		2.53		
O2 (%)		14.9		
NOx (ppm)		0		
RPM:		0		
OT (°C):		0		
AFR:		-		
Lambda:		-		
PEF:		0.501		
CO-Act (%)		7.495		

\* Read as RHC for LPG and HHC for CNG

Certified that this vehicle's emission levels are within the limits under 115(2) of CMV Rules, 1989.

Test **PASS**

Result:

Grade: ☐

Valid Upto: **25-Dec-2019**

Test Fee: Rs. 80

## APPENDIX 8: SAMPLE SITE INSPECTION REPORT

North 24 pgs

ENVIRONMENTAL SITE INSPECTION REPORT

Project Name: WBDWSIP  
Contract Number: WBDWSIP/DWW/NC&N24P02A/2017-13

Block: Hard KTP - (FILL) DATE: 21/19/19

Zone: \_\_\_\_\_

WEATHER: Cloudy

Project Activity Stage	Survey	
	Design	
	Implementation	✓
	Pre-Commissioning	
	Guarantee Period	

Sr. No.	Monitoring Items	
	<b>Compliance marked as Yes/No/Not Applicable/Partially Implemented (PI)</b>	
1	Environment, Health and Safety supervisor appointed by Contractor and available on site	Yes
2	Construction site management plan (spoils, safety, schedule, equipment etc.) prepared	Yes
3	Traffic Management Plan Prepared	N/A
4	Dust is under control	Yes
5	Excavated soil properly placed within minimum space	PI
6	Construction area is confined no traffic/pedestrian entry observed	PI
7	Surplus soil/debris/waste is disposed without delay	PI
8	Construction material (sand/gravel/aggregate) brought to site as and when required only	PI
9	Tarpaulins used to cover sand and other loose material when transported by vehicles	Yes
10	After unloading, wheels and undercarriage of vehicles cleaned prior to leaving the site	PI - Excavation
11	No AC pipes disturbed/removed during excavation	NR
12	No chance finds encountered during excavation	NR
13	Work is planned in consultation with traffic police	NR
14	Work is not being conducted during heavy traffic	NR
15	Work at a stretch is completed within a day (excavation, pipe laying and backfilling)	NR
16	Pipe trenches are not kept open unduly	NR
17	Road is not completely closed work is conducted on edge at least one line is kept open	NR
18	Road is closed, alternative route provided and public informed, information board provided	NR
19	Pedestrian access to houses is not blocked due to pipe laying	NR
20	Spaces left in between trenches for access	NR
21	Wooden planks/metal sheets provided across trench for pedestrian	NR
22	No public/unauthorized entry observed in work site	PI
23	Children safety measures (barricades, security) in place at works in residential areas	PI
24	Prior public information provided about the work, schedule and disturbances	Yes
25	Caution/warning board provided on site	Yes
26	Guards with red flag provided during work at busy roads	NR
27	Workers using appropriate PPE (boots, gloves, helmets, ear muffs etc.)	Yes
28	Workers conducting or near heavy noise work is provided with ear muffs	NR
29	Contractor is following standard and safe construction practices	PI
30	Deep excavation is conducted with land slip/protection measures	NR
31	First aid facilities are available on site and workers informed	Yes
32	Drinking water provided at the site	PI
33	Toilet facility provided at the site	PI
34	Separate toilet facility is provided for women workers	NR



35	Workers camps are are maintain cleanly	PI
36	Adequate toilet and bath facilities provided	PI
37	Contractor employed local workers as far as possible	PI
38	Workers camp set up with the permission of PIU	PI
39	Adequate housing provided	PI
40	Sufficient water provided for drinking/washing/bath	PI
41	No noisy work is conducted in the nights	PI
42	Local people informed of noisy work	NR
43	No blasting activity conducted	NR
44	Pneumatic drills or other equipment creating vibration is not used near old/misly building	NR
45	Funeral activity till date on site	NR
46	Waste water discharge from site	Yes - CW
48	Tree cutting/Trimming	Yes - Camp
49	Solid waste disposal from site under norms	NO
50		PI - Stored at site

Signature	
Sign off	
21-09-2019	
Name	KAUSTAV SAIN
Position	Resident Engineer - Civil
Name	Rohan Kumar / 21/09/19.
Position	Environmental Safeguard (BS/SC)

- \* - During visit no work has been seen in piling activity, only chemical house work in progress.
- \* 37 - % varies depends upon work.
- \* 38 - verbally informed.

## ENVIRONMENTAL SITE INSPECTION REPORT

Project Name: WBDWSIP  
Contract Number: WBDWSIP/DWW/NCB/N24P/03/2017-18.

Block: Bhanger-HarveDATE: 12/12/17Zone: -1 (Pipe line work)WEATHER: Clear - Sunny

Project	Survey	
Activity	Design	
Stage	Implementation	✓
	Pre-Commissioning	
	Guarantee Period	

Sr. No.	Monitoring Items	
Compliance marked as Yes/No/Not Applicable/Partially Implemented (PI)		
1	Environment, Health and Safety supervisor appointed by Contractor and available on site	Yes
2	Construction site management plan (spoils, safety, schedule, equipment etc.) prepared	Yes
3	Traffic Management Plan Prepared	Yes
4	Dust is under control	Yes
5	Excavated soil properly placed within minimum space	Yes
6	Construction area is confined, no traffic/pedestrian entry observed	PI
7	Surplus soil/debris/waste is disposed without delay	No
8	Construction material (sand/gravel/aggregate) brought to site as and when required only	PI
9	Tarpaulins used to cover sand and other loose material when transported by vehicles	PI
10	After unloading, wheels and undercarriage of vehicles cleaned prior to leaving the site	PI
11	No AC pipes disturbed/removed during excavation	No
12	No chance finds encountered during excavation	No
13	Work is planned in consultation with traffic police	No
14	Work is not being conducted during heavy traffic	No
15	Work at a stretch is completed within a day (excavation, pipe laying and backfilling)	Yes
16	Pipe trenches are not kept open unduly	PI
17	Road is not completely closed, work is conducted on edge, at least one line is kept open	Yes
18	Road is closed, alternative route provided and public informed, information board provided	No
19	Pedestrian access to houses is not blocked due to pipe laying	Yes
20	Spaces left in between trenches for access	Yes
21	Wooden planks/metal sheets provided across trench for pedestrian	No
22	No public/unauthorized entry observed in work site	No
23	Children safety measures (barricades, security) in place at works in residential areas	PI
24	Prior public information provided about the work, schedule and disturbances	PI
25	Caution/warning board provided on site	No
26	Guards with red flag provided during work at busy roads	No
27	Workers using appropriate PPE (boots, gloves, helmets, ear muffs etc.)	No
28	Workers conducting or near heavy noise work is provided with ear muffs	No
29	Contractor is following standard and safe construction practices	No
30	Deep excavation is conducted with land slip/protection measures	PI
31	First aid facilities are available on site and workers informed	No
32	Drinking water provided at the site	No
33	Toilet facility provided at the site	PI - Farukh
34	Separate toilet facility is provided for women workers	PI - Camp Site

35	Workers camps are maintain cleanly	PI
36	Adequate toilet and bath facilities provided	Yes
37	Contractor employed local workers as far as possible	PI
38	Workers camp set up with the permission of PIU	—
39	Adequate housing provided	PI
40	Sufficient water provided for drinking/washing/bath	Yes
41	No noisy work is conducted in the nights	NR
42	Local people informed of noisy work	NR
43	No blasting activity conducted	NR
44	Pneumatic drills or other equipment creating vibration is not used near old/inhabited building	NR
45	Funeral activity till date on site	NO
46	Waste water discharge from site	NO
48	Tree cutting/Trimming	NO
49	Solid waste disposal from site under norms	NO
50		Yes / Borewell

Signature <u>[Signature]</u> <u>18/07/19</u>	
Sign off	
Name <u>Ujjwal Bhattacharya</u>	Name <u>Rohan Kumar (18/07/19)</u>
Position <u>Sit Supervisor (NCC)</u>	Position <u>Environmental Safeguard (DS/SC)</u>

## ENVIRONMENTAL SITE INSPECTION REPORT

Project Name: WBDWSIP  
Contract Number: WBDWSIP/DWW/NCB/N24P/028/2017-18

Block: Bhargar

DATE: 25/07/19

Zone - 12 (Bhargarhwa) (BHR)

WEATHER - Clear - Sunny

Project Activity Stage	Survey	
	Design	
	Implementation	✓
	Pre-Commissioning	
	Guarantee Period	

Sr. No.	Monitoring Items	
Compliance marked as Yes/No/Not Applicable/Partially Implemented (PI)		
1.	Environment, Health and Safety supervisor appointed by Contractor and available on site	Yes
2.	Construction site management plan (spoils safety, schedule equipment etc.) prepared	Yes
3.	Traffic Management Plan Prepared	NR
4.	Dust is under control	Yes
5.	Excavated soil properly placed within minimum space	NR
6.	Construction area is confined no traffic/pedestrian entry observed	NR
7.	Surplus soil/debris/waste is disposed without delay	PI
8.	Construction material (sand/gravel/aggregate) brought to site as and when required only	PI
9.	Tarpaulins used to cover sand and other loose material when transported by vehicles	PI
10.	After unloading, wheels and undercarriage of vehicles cleaned prior to leaving the site	Yes (Dusting done)
11.	No AC pipes disturbed/removed during excavation	NR
12.	No chance finds encountered during excavation	NR
13.	Work is planned in consultation with traffic police	NR
14.	Work is not being conducted during heavy traffic	NR
15.	Work at a stretch is completed within a day (excavation pipe laying and backfilling)	NR
16.	Pipe trenches are not kept open unduly	NR
17.	Road is not completely closed work is conducted on edge at least one line is kept open	NR
18.	Road is closed alternative route provided and public informed information board provided	NR
19.	Pedestrian access to houses is not blocked due to pipe laying	NR
20.	Spaces left in between trenches for access	Yes
21.	Wooden planks/metal sheets provided across trench for pedestrian	PI
22.	No public/unauthorized entry observed in work site	NR
23.	Children safety measures (barricades, security) in place at works in residential areas	Yes
24.	Prior public information provided about the work, schedule and disturbances	Yes
25.	Caution/warning board provided on site	Yes
26.	Guards with red flag provided during work at busy roads	NR
27.	Workers using appropriate PPE (boots, gloves, helmets ear muffs etc.)	Yes
28.	Workers conducting or near heavy noise work is provided with ear muffs	NR
29.	Contractor is following standard and safe construction practices	PI
30.	Deep excavation is conducted with land slip/protection measures	PI
31.	First aid facilities are available on site and workers informed	Yes
32.	Drinking water provided at the site	Yes (Bottle water)
33.	Toilet facility provided at the site	Yes (Camp Toilet)
34.	Separate toilet facility is provided for women workers	NR

35	Workers camps are are maintain cleanly	PI
36	Adequate toilet and bath facilities provided	PI
37	Contractor employed local workers as far as possible	PI
38	Workers camp set up with the permission of PIU	PI
39	Adequate housing provided	PI
40	Sufficient water provided for drinking/washing/bath	PI
41	No noisy work is conducted in the nights	NR
42	Local people informed of noisy work	NR
43	No blasting activity conducted	NR
44	Pneumatic drills or other equipment creating vibration is not used near old/insly building	NR
45	Funai activity till date on site	NR
46	Waste water discharge from site	No
48	Tree cutting/Trimming	No
49	Solid waste disposal from site under norms	No
50		PI - (Storage at Camp)
Signature <u>DL</u>		
Sign off:		
Name <u>Nitin</u>		
Position <u>Safety officer</u> <u>NCC</u>		
Name <u>Rohan Kumar</u> 23/03/19.		
Position <u>Environmental Safeguard</u>		



## APPENDIX 8A: SAMPLE MONTHLY ENVIRONMENTAL COMPLIANCE MONITORING RECORDS

### 1. PACKAGE : WBDWSIP/DWW/NCB/N24P/01

MONITORING FORMAT WBDWSIP-MONTHLY (AFTER SITE VISIT ATLEAST 2 TIMES IN A MONTH) - FILLING UP JOINTLY BY SAFETY OFFICER/PM/DY PM OF CONTRACTOR AND FIELD SUPERVISOR/ENGINEER/PROJECT MANAGER/ENVIRONMENT SPECIALIST OF DSISC VERIFICATION FROM RIU/PMU

#### ENVIRONMENTAL MONITORING AND EVALUATION MONTHLY ENVIRONMENTAL COMPLIANCE MONITORING FORMAT FOR SUB-PROJECT

SECTOR : WTP

MONTH/YEAR : December, 2019



PROJECT (PACKAGE) : WBN24P/01

WORKING LOCATION : WTP-Rajamat

DATE OF OBSERVATION : 31.12.19

NAME OF THE MONITORING PERSON FROM DSISC (DESIGNATION Swarnabha Sanyopadhyay / Environmental Expert, Rohan Kumar/Environmental Support staff

FROM CONTRACTOR (DESIGNATION) : Suthankar Chattopadhyay/G.E. (Safety)

Project: CWR for ROR (Debari) (ROR) - Gaurikar Charanpur (ROR) (Debari)									
Sl. No.	Environmental Issues	Level of application of EMP				Whether improvement noted in compared to last month (Yes/No)	Action Plan for Improvement	Remarks	Photographic evidence
		Below satisfactory	Partially satisfactory	Satisfactory	Excellent				
1	Mitigation/Protection of Land, Health and Safety Environment								
1(a)	Partially satisfactory use of PPEs in Flocculation tank piping activity seen during visit, however use of safety jacket and hand gloves found missing		✓			1st observation	Must provide safety jacket and hand gloves, specially while working on rod cutting and binding to prevent any unexpected accidental hazards	Site observation	
1(b)	Partially satisfactory use of PPEs in chemical house shattering activity seen during visit, however use of safety jacket found missing		✓			1st observation	Must provide safety jacket to all labour specially while working on height, so that Labour appearance should visible at any distance to prevent any unexpected accidental hazards	Site observation	
1(c)	Excavation work with hard barricade for CWR has been seen during visit		✓			1st observation	near to Labour camp so must take care about access area of Labour camp and maintain the safety while construction activity carried out	Site observation	

## 2. PACKAGE :WBDWSIP/DWW/NCB/N24P/02A

MONITORING FORMAT WBDWSIP-MONTHLY (AFTER SITE VISIT ATLEAST 2 TIMES IN A MONTH) - FILLING UP JOINTLY BY SAFETY OFFICER/PMD/ PM OF CONTRACTOR AND FIELD SUPERVISOR ENGINEER/PROJECT MANAGER/ENVIRONMENT SPECIALIST OF DSISC VERIFICATION FROM PIU/PMU

### ENVIRONMENTAL MONITORING AND EVALUATION MONTHLY ENVIRONMENTAL COMPLIANCE MONITORING FORMAT FOR SUB-PROJECT

SECTOR : Haroa

MONTH/YEAR : December, 2019

PROJECT (PACKAGE) :WBDWSIP/DWW/NCB/N24P/02A/2017-15

WORKING LOCATION : Zone -5 (Puratan kamargant)-Pipe Line Work

DATE OF OBSERVATION :31.12.19

NAME OF THE MONITORING PERSON FROM DSISC (DESIGNATION) :Swamabha Bandyopadhyay / Environmental Expert, Rohan Kumar/Environmental Support Staff

FROM CONTRACTOR (DESIGNATION) :Saradindu Gain/J.E (Safety)

FROM GOMTAN FOR (Jalpaiguri) (Jalpaiguri

### 3. PACKAGE :WBDWSIP/DWW/NCB/N24P/02B

MONITORING FORMAT WBDWSIP-MONTHLY (AFTER SITE VISIT ATLEAST 2 TIMES IN A MONTH) - FILLING UP JOINTLY BY SAFETY OFFICER/PMOY PM OF CONTRACTOR AND FIELD SUPERVISOR ENGINEER/PROJECT MANAGER/ENVIRONMENT SPECIALIST OF DSISC VERIFICATION FROM PIU/PMU

ENVIRONMENTAL MONITORING AND EVALUATION  
MONTHLY ENVIRONMENTAL COMPLIANCE MONITORING FORMAT FOR SUB-PROJECT

SECTOR : Bhangar Block-II

MONTH/YEAR : December, 2019




PROJECT (PACKAGE) :WBDWSIP/DWW/NCB/N24P/02B/2017-18

WORKING LOCATION : Zone-4(Swestayan Gachhi)-OHR

DATE OF OBSERVATION :31.12.19

NAME OF THE MONITORING PERSON FROM DSISC (DESIGNATION) : Swamabha Bandyopadhyay / Environmental Expert, Rohan Kumar/Environmental Support Staff

FROM CONTRACTOR (DESIGNATION) : Nitin Sartape-IG E. (Safety)

Sl. No.	Environmental Issues	Level of application of EMP				Whether improvement noted in compared to last month (Yes/No)	Action Plan for improvement	Remarks	Photographic evidence
		Below satisfactory	Partially satisfactory	Satisfactory	Excellent				
1	Mitigation/Protection of water and land Environment								
1(a)	Labourers were reported without helmet, safety belt and proper footwear, while working on superstructure at height	√				No/2nd observation	Strongly recommended work with proper safety gears specially while working on height, for the prevention of any unexpected accidental hazards.	Site observation	
1(b)	In spite of repeated instruction scaffolding, still construction is going on using bamboo staging	√				No/2nd observation	Must use scaffolding in the construction of superstructure as prescribe in contract	Site observation	
1(c)	Some safety signage and barricaded area for waste construction material seen during visit		√			Yes/2nd observation	Must replace old signage if damaged and maintain the barricaded area in future work	Site observation	

## APPENDIX 9: SAMPLE EMP IMPLEMENTATION CHECKLIST

**Monitoring Format - Monthly \* (After site visit at least 4 times in a month)** Filling up by Environment-safety officer/ PM/ Dy PM of contractor in presence of Environment Spl/ Environment Support staff of DSISC

## MONTHLY ENVIRONMENTAL COMPLIANCE MONITORING FORMAT FOR SUB-PROJECT

MONTH/YEAR: September; 2019
PROJECT (PACKAGE): WBDWSIP/DWW/NCB/N24P/02A/2017-18
WORKING LOCATION: Haroa, (OHR)
DATE OF OBSERVATION: 30.09.2019
NAME OF THE MONITORING PERSON FROM DSISC (Designation): Rohan Kumar/Environmental Safeguard
NAME OF THE MONITORING PERSON FROM CONTRACTOR (Designation): Nitin Sartape/G.E. (Safety)

Sr. No.	Environmental Issues	Level of application of EMP					Remarks / Action plan
		Poor	Below Satisfactory	Partially satisfactory	Satisfactory	Excellent	
1	Pre- Construction activity						
1a	Shifting of Telephone lines, electric poles and wires, water lines within proposed project area				√		No issues reported/ observed
1b	Procurement of materials from licensed source			√			Verbally confirmed waiting for documents
2.	Mitigation/protection of Land Environment- maintaining aesthetic						
2a	Proper storage of construction materials and petroleum products – avoidance of land pollution			√			Procured materials e.g. iron rods, cement bags were stored in a storage yard outside from site in Zone 12, 15, and zone 18 only other OHR have no facility of storage yard at zone 1 and zone 17, some display board

H-OHR-SEP-1

Sr. No.	Environmental Issues	Level of application of EMP					Remarks / Action plan
		Poor	Below Satisfactory	Partially satisfactory	Satisfactory	Excellent	
							introduced for designating the location at zone 1 and 17.
2b	Proper disposal of unusable soils and spoils to pre-approved disposal sites			√			Presently stored inside the working site and utilized for labelling at zone 1,12,15,17 and 18 but no location has been selected yet for final disposal in future work. Contractor is discussing the issue with local Panchayat.  An appropriate location should be allocated through the local Panchayat for disposal of these wastes. The site selected should be in accordance with guidance provided in the IEE.
2c	Follow waste management plan				√		Spoil management plan submitted for zone 1,12,15,17 and 18. Work not started for boundary wall at zone 12 and 15, brick work completed by 3 side at zone 17 and zone 18 and continue at zone 1.
2d	Storm water control and wind screening to prevent land contamination from sludge/ drainage silt			√			There is a pond outside and inside at zone 17 and zone 1 respectively. Drain facility at zone 18 present. This been the lowest point of the site, storm water is naturally drained in to this pond. Except zone 12 and 15 has a paddy and cultivation field outside the working site with no proper drain system and it is a lower point where storm water drained. In order to prevent silt contamination, a silt trap will be constructed at point prior to the discharge in to the pond.



Sr. No.	Environmental Issues	Level of application of EMP					Remarks / Action plan
		Poor	Below Satisfactory	Partially satisfactory	Satisfactory	Excellent	
							Although wind screening has not been provided but water sprinkling is done on excavated soil and sand if require to prevent dust.
2e	Residual and hazardous wastes such as oils, fuels, and lubricants shall be disposed of in disposal sites approved by local authorities/West Bengal Pollution Control Board (WBPCB)			√			Hazardous wastes are sent to contractor's central store from each OHR. Contractor informed that from there it is sold to approved vendors. Vendor details and transport manifests have been requested from the Contractor.
<b>3.</b>	<b>Mitigation/protection of Air Environment</b>						
3a	Water sprinkling at construction site for arresting dust (if any during dry period)				√		No dust problem was seen on-site at any zone.
3b	Cover or damp down sand stockpiled at site				√		Sand stock piled on each site was found damp.
3c	Provision of dust screen/high compound wall around the construction sites (overhead reservoirs)				√		Boundary wall under construction as part of the project at each OHR. Presently water sprinkling is done to prevent dust hazard.
3d	Keep vehicles and machinery in good working order and meet manufacturers specifications for safety, fuel consumption etc.				√		No breakdown of machineries was observed at any site.
3e	Covering of materials carrying vehicles-reducing dust hazard			√			Covering of materials during transport were not seen always in every OHR.
3f	Vehicles and Equipments having Pollution Under Control Certificate			√			PUCs are available and needs updation. It may be noted that sometimes the JCB from Bhargar is also used in Haroa block. However

Sr. No.	Environmental Issues	Level of application of EMP					Remarks / Action plan
		Poor	Below Satisfactory	Partially satisfactory	Satisfactory	Excellent	
							PUC for generator set of capacity > 5KV still not submitted till this month.
3g	Limit the stocking of excavated material at the site; remove the excess soil from the site immediately to the designated disposal area for controlling dust			√			Disposal land location and selection not completed/Still planning for selection
3h	Fires not allowed at site				√		The labour camp is situated outside the construction site at zone 12 and 15 and inside at zone 1, 17 and 18; cooking is done there only. However, the camp location is little away from the main construction area. No fire reported/observed at site
3i	Carrying out air quality monitoring				√		Baseline and during construction air quality monitoring as per IEE has been completed/Planning for next quarter monitoring
<b>4.</b>	<b>Mitigation of Noise</b>						
4a.	Regular maintenance of noise producing equipment				√		No complaints received due to high noise.
4b.	At sensitive locations enclosures provided around generator set and other noise producing machinery				√		There is no sensitive receptor e.g., school, hospital, etc. near this site. However one ICDS centre and school located nearby zone 17.
4c.	Use of ear plug by the workers at noise generating location – road cutting time				√		No high noise generating activities at site.
4d	Locate concrete batching, asphalt, crushing plants, lay down areas and				√		There is no sensitive receptor e.g., school, hospital, etc. near this site.

Sr. No.	Environmental Issues	Level of application of EMP					Remarks / Action plan
		Poor	Below Satisfactory	Partially satisfactory	Satisfactory	Excellent	
	construction camps away from sensitive receptors						
4e	Plan construction activities to reasonable working hours where near sensitive receptors.				√		There is no sensitive receptor e.g. school, hospital, etc. near this site. Except zone 17 has school and ICDS centre nearby site
4f	Fit and maintain silencers to all machinery on site				√		Machineries are fitted with silencers.
4g	Consult local community before start of work and inform about the work				√		Practicing to communicate verbally/ Proper communication with leaflets in Bengali to be issued to local people at least 7 days before start of work.
4h	Monitor noise levels at working area (specifically near sensitive areas)				√		There is no sensitive receptor e.g. school, hospital, etc. nearby all sites except zone 17. However noise monitoring of pre construction and during construction period has been done according to IEE.
5.	<b>Mitigation/protection of Water Environment</b>						
5a.	Protection of water bodies nearby the project site by application of suitable mitigation measures- not to discharge waste water in nearby water body			√			Absence of well-maintained drain in OHR site for waste water disposal at zone 1, 12, 15 reported, however a cemented drain system present at zone 17 and 18 / Still arranging proper drain and soak pit facility on the sites at zone 1, 12 and 15.
5b	Chemicals or hazardous substances do not contaminate the water body or ground water at site			√			Presently there is Bentonite powder, plasticizers fluid and diesel are utilizing at zone 1 and 18. Diesel is not stored on site; filled directly in the equipment as per need and other chemicals are



Sr. No.	Environmental Issues	Level of application of EMP					Remarks / Action plan
		Poor	Below Satisfactory	Partially satisfactory	Satisfactory	Excellent	
							stored in store yard with proper metal sheet base./ Store yard should must have a cemented floor.
5c	Install temporary silt traps or sedimentation basins along the drainage leading to the water bodies			√			Presently there is no discharge of silt containing effluents, although the earthen tank has been made for the bentonite mixture and sludge in piling activity at zone 1 and 18. Piling activity in zone 15 and 17 has been finished and on hold at zone 12/Planning for installation of silt trap if require.
5d	Place storage areas for fuels and lubricants away from any drainage leading to water bodies				√		No issues reported/ observed
5e	Store fuel, construction chemicals etc., on an impervious floor, also avoid spillage by careful handling				√		No issues reported/ observed
5f	All earthworks be conducted during the dry season to prevent the problem of soil run-off during monsoon season				√		No issues reported/ observed
5g	Pump out the water collected in the pits / excavations to a temporary sedimentation pond			√			Water logging condition has been seen at zone 1 and zone 12 due to heavy rain./ Separate arrangement for removal of excess water according to guideline should be done
5h	Surface water quality inspection according to the environmental management plan (EMP)			√			No issues reported due to work on hold at zone 12, 15 and 17 during last month. However the rain water discharge due to heavy rain has been seen at zone 1 and zone 18.

Sr. No.	Environmental Issues	Level of application of EMP					Remarks / Action plan
		Poor	Below Satisfactory	Partially satisfactory	Satisfactory	Excellent	
<b>6.</b>	<b>Mitigation/protection of Biological Environment</b>						
6a.	Vegetation clearing and tree-felling have prior permission as the work front progresses.				√		No any permission required in this month
6b.	Plant and maintain five trees for every one removed- in case of tree felling (if any)			√			11 no of trees were cuted from perposed OHR working area at zone 18 with permission /planning to plant and maintain the cuted tree as 1:5 ratio according to IEE
6c.	Clearing of indigenous vegetation is kept in a nursery for use at a later stage (such as site rehabilitation process)						NR
<b>7.</b>	<b>Mitigation of Socio-economic Environment</b>						
7a.	Level of mitigation measures for local people- placement of caution tape and barricade at excavated area			√			Partial improvement in use of caution tape seen there so need to implement on regular basis, however boundary work by 3 side has been completed at zone 17 and zone 18 OHR.
7b.	Avoidance of pick traffic hour for carrying of materials like pipe						NR
7c.	Arrangement of employment at least 50% of workforce from communities near sites			√			Percentage varies, depends upon nature of work/practicing for more involvement, however no local labour reported at zone 1 and 14 during last month visit.
<b>8.</b>	<b>Mitigation of overall environment, safety and health</b>						

Sr. No.	Environmental Issues	Level of application of EMP					Remarks / Action plan
		Poor	Below Satisfactory	Partially satisfactory	Satisfactory	Excellent	
8a.	Use of Personal Protective Equipment like helmet, gumboot, shoes, gloves, nose mask, safety belt and earplugs at working place			√			Regular use of Equipment not seen yet, so need to implement on regular basis, however work was on hold during full month at zone 12, 15 and 17 and for few days at zone 1 and 18.
8b.	Provision of warning signs of hazardous working areas			√			Not done yet/ implementing in future
8c.	Availability of suitable access at working site			√			Dry access area after water logging condition due to heavy rain has been seen at zone 1 while Zone 12 reported partially water logged in site and access area
8d.	Restrict construction vehicle movements to defined access				√		
8e.	Visibility of workers through their use of high visibility vests when working in or walking through traffic/ equipment movement areas				√		
8f.	Maintaining safety during movement of equipment-  Temporary traffic control (e.g. flagmen) and signs will be provided where necessary to improve safety and provide directions						NR
8g.	Arrangement of First Aid box and fire extinguisher at Labour camp and site office and First Aid box at all working sites				√		

Sr. No.	Environmental Issues	Level of application of EMP					Remarks / Action plan
		Poor	Below Satisfactory	Partially satisfactory	Satisfactory	Excellent	
8h.	Arrangement of drinking water at work space			√			Lab. report of drinking water of zone 1, and 17 has been submitted and it is found as potable water/Planning for testing at zone 12, 15 and 18
8i.	Arrangement of temporary toilet at work space		√				Constructed latrine in the site at zone 12 and 15 is a single tank pit latrine. Other site has old toiletry system at zone 1 and 18, while no toilet facility yet arranged at zone 17 at site. Highly recommended a well-established latrine for the prevention of ground water pollution.
8j.	Use of modern vehicles and machinery and maintain as specified						NR
8k.	Ensure moving equipment is outfitted with audible back-up alarms						NR
8l.	Demarcation of excavations and provide barriers (not just danger tape) to protect pedestrians from open trenches.						NR
8m.	Enclosure at construction site				√		
8n.	Placement of public information board with mention of safety requirement at working places				√		
8o.	Boards for hazardous areas such as energized electrical devices and lines, service rooms housing high voltage equipment, and areas for storage and disposal. Signage			√			Other than site display board, some signage like store yard, toilet, emergency contact no and some safety signage introduced at all OHR. Some hording on HIV and dengue now planning to introduce.
9	<b>Material Management</b>						



Sr. No.	Environmental Issues	Level of application of EMP					Remarks / Action plan
		Poor	Below Satisfactory	Partially satisfactory	Satisfactory	Excellent	
9a	Storage of stockpiles. Stockpiles do not obstruct natural water pathways				√		
9b	Exposure of stockpile to windy conditions or heavy rain with vegetation, cloth, or traps.				√		Small stockpile of generated spoils are maintained at site. However, these are mostly controlled with water sprinkling.
9c	Proper transportation of hazardous materials				√		No issues reported/ observed
10.	<b>Camp site Management</b>						
10a	Camp and working areas are kept clean and tidy			√			Bad housekeeping and muddy condition in piling work reported during inspection at zone 12 in last month /Housekeeping needs to be improved in all OHR.
10b	Proper drainage of the camp site			√			Absence of well-maintained drain in all site for waste water disposal/Still arranging drain and soak pit facility on the site,however labour camp are situated outside the site at zone 12, and 15.
10c	Arrangement of bed			√			The beds are placed on bare earth having vegetation at zone 1,12 and 15 and on floor at zone 17 and 18 / The accommodation area should have proper flooring
10d	Arrangement of electricity			√			A separate meter has been installed for zone 1,17 and 18.Trying to install separate meter at zone 12 and 15
10e	Maintenance of toilets in a clean state		√				Regular basis cleaning not done/should ensure hygienic condition at all OHR.

Sr. No.	Environmental Issues	Level of application of EMP					Remarks / Action plan
		Poor	Below Satisfactory	Partially satisfactory	Satisfactory	Excellent	
10f	Maintenance of eating area			√			There is no separate eating area at all OHR /planning to provide an eating place in site or in labour camp
10g	Arrangement of solid waste collection bin, dispose wastes at the pre-approved sites			√			Temporarily stored on site and camp area, In discussion with local Panchayat for allocation of an appropriate location
10h	Collection of litter from the work and camp areas			√			Arrangement of dust bin not done at all camp area like zone 12,15 and 18 and disposal location still not finalise
<b>11.</b>	<b>Mitigation of Sensitive environment</b>						
11a.	Level of protection at religious, cultural and historic sites if any nearby			√			Old structure of Eidgah present within site at zone 17 ,Safely working done without interrupting it, further informed to PIU members about this issue
11b.	Maintaining working schedule by avoiding sensitive time						NA

**Note:** Put ✓ mark in EMP application column

Remarks / action plan column need to be filled up considering present state along with action plan (how and when it will be done)

For each sub-project monitoring should be done at all the working sites, Suggestion should be provided against EMP application level, in case of non applicable – please write NA/NR in Remarks column

SARADINDU SAIN SAIN

(Name & Signature of Safety Officer of Contractor)

31/9/19

Rohan Kumar 31/09/19

(Name & Signature of monitoring person of DSISC) (

Name & Signature of Environment Officer/ Engineer of PIU)

**APPENDIX 10: MONITORING RESULTS****Contract Package WBDWSIP/DWW/NCB/N24P/02A/2017-18**

**Qualissure Laboratory Services**

361, Prantik Pally, 45/361, Bose Pukur Road, Kolkata -700107  
Email : qualissure@gmail.com; info@qualissure.com ; Mob.No. 98312 87086 ; 9830093976



DOC NO : QLS/SAMP/08-C/00

**TEST REPORT**

Name & Address Of the Customer :	Report No. : QLS/A/19-20/C/N-335
M/s - NCC Limited	Date : 06.07.2019
VIII - Adampur	Sample No. : QLS/A/19-20/N-335
P.O + P.S – Haroa	Sample Description : Noise
Dist – North 24 Parganas	Date of performance : 15 –20.06.2019
West Bengal - 743425	Ref No. Date : Verbal
Ref No. & Date : NCC-W&F/Bhangan-II/Wo/2018-19/02, Dated - 10.02.2019	

**Monitoring Result of Noise**

Sampling Done By: P.Adinarayana/I.Sahana					
Sampling Guideline : As per IS: 9876: 1981 (RA-2001)					
Sample No	Date of Monitoring	Location	NABL Certificate No./Valid Upto	Leq dB (A) Day Time	Leq dB (A) Night Time
N-578A	10-11.06.2019	Near Majanpur High School (Zone-17)	TC-6271/17.09.19	58.3	47.4
N-578B		Near Paschim Bhoira (Zone-13)		53.5	48.8
N-583	11-12.06.2019	Near Haroa Market (Zone-21)		61.2	52.6
N-585		Near Nebutala Abad (Zone-2)		58.8	49.7
N-589	12-13.06.2019	Near Kulti Uposasthya Kendra (Zone-5)		57.0	48.6
Code/ Category	Leq dB Day Time(A)	Leq dB Night Time(A)	<b>NOTE:</b> Day Time : 06.00 Hr. – 22.00 Hr. Night Time : 22.00 Hr. – 06.00 Hr.		
A/Industrial	75	70			
B/Commercial	65	55			
C/Residential	55	45			
D/Ecological Sensitive	50	40			

Report Prepared By : R. Roy

for Qualissure Laboratory Services

(Benimadhab Gorai)  
Authorised Signatory

- The results relate only to the item(s) tested.
- This Test Report shall not be reproduced without the permission of Qualissure Laboratory Services.
- The reserved part of sample(s), except perishable sample(s), shall be retained for 30 days from the date of issue of the Test Report.





# Qualissure Laboratory Services

361, Prantik Pally, 45/361, Bose Pukur Road, Kolkata - 700107  
Email: qualissure@gmail.com; info@qualissure.com; Mob.No. 98312 87086; 9830093976



TC-6271

DOC NO : QLS/SAMP/01-A/00

## TEST REPORT

Name & Address Of the Customer :	Report No. : QLS/A/19-20/C/N-334
M/s - NCC Limited	Date : 06.07.2019
Vill - Adampur	Sample No. : QLS/A/19-20/N-334
P.O + P.S – Haroa	Sample Description : Ambient Air
Dist – North 24 Parganas	Date of performance : 15 – 20.06.2019
West Bengal - 743425	
Ref No. & Date : NCC-W&E/Bhangar-II/Wo/2018-19/02, Dated - 10.02.2019	

## Analysis Result

Location : Near Kulti Uposasthya Kendra (Zone-5)			Date of sampling : 12-13.06.2019	
GPS Coordinates: N-22°31'28.6", E-88°41'11.9"			Sampling done as per : CPCB Guidelines (Volume-1)	
Sampling Done by: P.Adinarayana/J.Sahana			Environmental Condition : Clear & Sunny	
Sl. No.	Pollutants	Result	Limit	Method of Test Reference
1	Particulate matter (PM <sub>10</sub> ) in µg/m <sup>3</sup>	117	100	IS: 5182 (Part-23), RA-2017
2	Particulate matter (PM <sub>2.5</sub> ) in µg/m <sup>3</sup>	59	60	USEPA CFR-40,Part-50, Appendix-L
3	Sulphur dioxide (SO <sub>2</sub> ) in µg/m <sup>3</sup>	8.8	80	IS: 5182 (Part-2)-2001, RA-2017
4	Nitrogen dioxide (NO <sub>2</sub> ) in µg/m <sup>3</sup>	30.0	80	IS: 5182 (Part- 6)-2006, RA-2017
<b>NOTE:</b> Limit as per CPCB notification, New Delhi, 18th November 2009, for Ambient air quality				
<b>Equipment Details:</b>				
1) Equipment Name/ID			: Respirable Dust Sampler/Fine Dust Sampler	
2) Model No			: APM-860/APM-154	
3) Make-			: Lata Envirotech Services	
4) Si No-			: 208-DTF-2016, 407-DTF-2016/255-DTS-2017	
5) Calibration valid Up to			: 28.06.2019/02.07.2019	

Report prepared By : R. Roy

for Qualissure Laboratory Services

(Benimadhab Gorai)  
Authorised Signatory

- The results relate only to the item(s) tested.
- This Test Report shall not be reproduced without the permission of Qualissure Laboratory Services.
- The reserved part of sample(s), except perishable sample(s), shall be retained for 30 days from the date of issue of the Test Report.



# Qualissure Laboratory Services

36/1, Prantik Pally, 43/26/1, Base Pukur Road, Kolkata - 700107  
Email: qualissure@gmail.com; info@qualissure.com; Mob.No. 98312 87085; 9830093976



TC-6271

DOC NO : QLS/SAMP/01-A/00

## TEST REPORT

Name & Address Of the Customer :	Report No. : QLS/A/19-20/C/N-333
M/s - NCC Limited	Date : 06.07.2019
Vill - Adampur	Sample No. : QLS/A/19-20/N-333
P.O + P.S - Haroa	Sample Description : Ambient Air
Dist - North 24 Parganas	Date of performance : 15 - 20.06.2019
West Bengal - 743425	
Ref No. & Date : NCC-W&E/Bhangar-II/Wo/2018-19/02, Dated - 10.02.2019	

## Analysis Result

Location : Near Nebutala Abad (Zone-2)			Date of sampling : 11-12.06.2019	
GPS Coordinates: N-22°35'44.3", E-88°45'3.8"			Sampling done as per : CPCB Guidelines (Volume-1)	
Sampling Done by: P.Adnarayana/J.Sahana			Environmental Condition : Clear & Sunny	
Sl. No.	Pollutants	Result	Limit	Method of Test Reference
1	Particulate matter (PM <sub>10</sub> ) in µg/m <sup>3</sup>	133	100	IS: 5182 (Part-23), RA-2017
2	Particulate matter (PM <sub>2.5</sub> ) in µg/m <sup>3</sup>	71	60	USEPA CFR-40, Part-50, Appendix-L
3	Sulphur dioxide (SO <sub>2</sub> ) in µg/m <sup>3</sup>	9.2	80	IS: 5182 (Part-2) 2001, RA-2017
4	Nitrogen dioxide (NO <sub>2</sub> ) in µg/m <sup>3</sup>	32.2	80	IS: 5182 (Part-6) 2006, RA-2017
NOTE: Limit as per CPCB notification, New Delhi, 18th November 2009, for Ambient air quality				
Equipment Details:				
1) Equipment Name/ID		: Respirable Dust Sampler/Fine Dust Sampler		
2) Model No		: APM-860/APM-154		
3) Make-		: Lata Envirotech Services		
4) SI No-		: 208-DTF-2016, 407-DTF-2016/255-DTS-2017		
5) Calibration valid Up to		: 28.06.2019/02.07.2019		

Report prepared By : R. Roy

for Qualissure Laboratory Services

(Benimadhab Gorai)  
Authorised Signatory

- The results relate only to the item(s) tested.
- This Test Report shall not be reproduced without the permission of Qualissure Laboratory Services.
- The reserved part of sample(s), except perishable sample(s), shall be retained for 30 days from the date of issue of the Test Report.



# Qualissure Laboratory Services

361, Prantik Pally, 45/361, Bose Pukur Road, Kolkata - 700107  
Email : qualissure@gmail.com, info@qualissure.com ; Mob.No. 98312 87086 ; 9830093976



TC-6271

DOC NO : QLS/SAMP/01-A/00

## TEST REPORT

Name & Address Of the Customer :	Report No. : QLS/A/19-20/C/N-332
M/s - NCC Limited	Date : 06.07.2019
Vill - Adampur	Sample No. : QLS/A/19-20/N-332
P.O + P.S – Haroa	Sample Description : Ambient Air
Dist – North 24 Parganas	Date of performance : 15 – 20.06.2019
West Bengal – 743425	
Ref No. & Date : NCC-W&E/Bhanga-II/Wo/2018-19/02, Dated - 10.02.2019	

## Analysis Result

Location : Near Haroa Market (Zone-21)		Date of sampling : 11-12.06.2019		
GPS Coordinates : N-22°36'15.3", E-88°40'40.7"		Sampling done as per : CPCB Guidelines (Volume-1)		
Sampling Done by : P. Adinarayana/J. Sahana		Environmental Condition : Clear & Sunny		
Sl. No.	Pollutants	Result	Limit	Method of Test Reference
1	Particulate matter (PM <sub>10</sub> ) in µg/m <sup>3</sup>	120	100	IS: 5182 (Part-23), RA-2017
2	Particulate matter (PM <sub>2.5</sub> ) in µg/m <sup>3</sup>	65	60	USEPA CFR-40, Part-50, Appendix-L
3	Sulphur dioxide (SO <sub>2</sub> ) in µg/m <sup>3</sup>	8.9	80	IS: 5182 (Part-2)-2001, RA-2017
4	Nitrogen dioxide (NO <sub>2</sub> ) in µg/m <sup>3</sup>	31.8	80	IS: 5182 (Part-6)-2006, RA-2017
<b>NOTE:</b> Limit as per CPCB notification, New Delhi, 18th November 2009, for Ambient air quality				
<b>Equipment Details:</b>				
1) Equipment Name/ID		: Respirable Dust Sampler/Fine Dust Sampler		
2) Model No		: APM-860/APM-154		
3) Make-		: Lata Envirotech Services		
4) SI No-		: 309-DTL-2017, 509-DTL-2017/184-DTG-2015		
5) Calibration valid Up to		: 08.12.2019/28.06.2019		

Report prepared By : P. R. R. R.

for Qualissure Laboratory Services

(Benimadhab Gorai)  
Authorised Signatory

- The results relate only to the item(s) tested.
- This Test Report shall not be reproduced without the permission of Qualissure Laboratory Services.
- The reserved part of sample(s), except perishable sample(s), shall be retained for 30 days from the date of issue of the Test Report.



# Qualissure Laboratory Services

361, Prantik Pally, 45/361, Bose Pukur Road, Kolkata - 700107  
Email: qualissure@gmail.com; info@qualissure.com; Mob.No. 98312 87086; 9830093976



DOC NO : QLS/SAMP/01-A/00

## TEST REPORT

Name & Address Of the Customer :	Report No. : QLS/A/19-20/C/N-331
M/s - NCC Limited	Date : 06.07.2019
Vill - Adampur	Sample No. : QLS/A/19-20/N-331
P.O + P.S - Haroa	Sample Description : Ambient Air
Dist - North 24 Parganas	Date of performance : 15 - 20.06.2019
West Bengal - 743425	
Ref No. & Date : NCC-W&E/Bhangar-II/Wo/2018-19/02, Dated - 10.02.2019	

## Analysis Result

Location Near Paschim Bhoira (Zone-13)			Date of sampling : 10-11.06.2019	
GPS Coordinates: N-22°36'56.1", E-88°36'22.6"			Sampling done as per : CPCB Guidelines (Volume-1)	
Sampling Done by: P.Adinarayana/J.Sahana			Environmental Condition : Clear & Sunny	
Sl. No.	Pollutants	Result	Limit	Method of Test Reference
1	Particulate matter (PM <sub>10</sub> ) in µg/m <sup>3</sup>	139	100	IS: 5182 (Part-23), RA-2017
2	Particulate matter (PM <sub>2.5</sub> ) in µg/m <sup>3</sup>	75	60	USEPA CFR-40, Part-50, Appendix-L
3	Sulphur dioxide (SO <sub>2</sub> ) in µg/m <sup>3</sup>	8.3	80	IS: 5182 (Part-2)-2001, RA-2017
4	Nitrogen dioxide (NO <sub>2</sub> ) in µg/m <sup>3</sup>	34.0	80	IS: 5182 (Part-6)-2006, RA-2017
<b>NOTE:</b> Limit as per CPCB notification, New Delhi, 18th November 2009, for Ambient air quality				
<b>Equipment Details:</b>				
1) Equipment Name/ID		: Respirable Dust Sampler/Fine Dust Sampler		
2) Model No		: APM-860/APM-154		
3) Make-		: Lata Envirotech Services		
4) SI No-		: 208-DTF-2016, 407-DTF-2016/255-DTS-2017		
5) Calibration valid Up to		: 28.06.2019/02.07.2019		

Report prepared By : R. Roy

for Qualissure Laboratory Services

(Benimadhab Gorai)  
Authorised Signatory

- The results relate only to the item(s) tested.
- This Test Report shall not be reproduced without the permission of Qualissure Laboratory Services.
- The reserved part of sample(s), except perishable sample(s), shall be retained for 30 days from the date of issue of the Test Report.





# Qualissure Laboratory Services

361, Prantik Pally, 45/361, Dose Pukur Road, Kolkata - 700107  
Email: qualissure@gmail.com; info@qualissure.com; Mob.No. 98312 87086 ; 9830091976



TC-6271

DOC NO : QLS/SAMP/01-A/00

## TEST REPORT

Name & Address Of the Customer :	Report No. : QLS/A/19-20/C/N-330
M/s - NCC Limited	Date : 06.07.2019
VIII - Adampur	Sample No. : QLS/A/19-20/N-330
P.O + P.S – Haroa	Sample Description : Ambient Air
Dist – North 24 Parganas	Date of performance : 15 – 20.06.2019
West Bengal - 743425	
Ref No. & Date : NCC-W&E/Bhangar-II/Wo/2018-19/02, Dated - 10.02.2019	

## Analysis Result

Location : Near Majanpur High School (Zone-17)			Date of sampling : 10-11.06.2019	
GPS Coordinates: N-22°36'10.5", E-88°38'46.6"			Sampling done as per : CPCB Guidelines (Volume-1)	
Sampling Done by: P.Adinarayana/J.Sahana			Environmental Condition : Clear & Sunny	
Sl. No.	Pollutants	Result	Limit	Method of Test Reference
1	Particulate matter (PM <sub>10</sub> ) in µg/m <sup>3</sup>	155	100	IS: 5182 (Part-23), RA-2017
2	Particulate matter (PM <sub>2.5</sub> ) in µg/m <sup>3</sup>	81	60	USEPA CFR-40,Part-50, Appendix L
3	Sulphur dioxide (SO <sub>2</sub> ) in µg/m <sup>3</sup>	9.3	80	IS: 5182 (Part-2)-2001, RA-2017
4	Nitrogen dioxide (NO <sub>2</sub> ) in µg/m <sup>3</sup>	33.7	80	IS: 5182 (Part- 6)-2006, RA-2017
NOTE: Limit as per CPCB notification, New Delhi, 18th November 2009, for Ambient air quality				
Equipment Details:				
1) Equipment Name/ID			: Respirable Dust Sampler/Fine Dust Sampler	
2) Model No			: APM-860/APM-154	
3) Make-			: Lata Envirotech Services	
4) SI No-			: 309-DTL-2017, 509-DTL-2017/184-DTG-2015	
5) Calibration valid Up to			: 08.12.2019/28.06.2019	

Report prepared By : P. Roy

for Qualissure Laboratory Services

(Benimadhab Gorai)  
Authorised Signatory

- The results relate only to the item(s) tested.
- This Test Report shall not be reproduced without the permission of Qualissure Laboratory Services.
- The reserved part of sample(s), except perishable sample(s), shall be retained for 30 days from the date of issue of the Test Report.




**ENVIROCHECK**

 Recognised by MoEF&CC, WBPCB, ISPCB & OSPCB  
 Accredited by NABL (ISO/IEC 17025:2005)  
 Certified by ISO 9001:2015, ISO 14001:2015 & OHSAS 18001:2007


DOC NO : QLS/SAMP/01-A/00

### TEST REPORT

Name & Address Of the Customer :	Report No. : ENV/391B/M
M/s - NCC Limited	Date : 06.07.2019
Vill - Adampur	Sample No. : QLS/A/19-20/N-330-334
P.O + P.S – Haroa	Sample Description : Ambient Air
Dist – North 24 Parganas	Date of performance : 16 – 26.02.2019
West Bengal - 743425	

### Analysis Result

Sl. No.	Pollutants	Result	Limit	Date of Sampling	Location
1	Carbon Monoxide (CO) in $\mu\text{g}/\text{m}^3$	597.1	2000	10-11.06.2019	Near Majanpur High School (Zone-17)
2	Carbon Monoxide (CO) in $\mu\text{g}/\text{m}^3$	607.1	2000	10-11.06.2019	Near Paschim Bhoira (Zone-13)
3	Carbon Monoxide (CO) in $\mu\text{g}/\text{m}^3$	680.7	2000	11-12.06.2019	Near Haroa Market (Zone-21)
4	Carbon Monoxide (CO) in $\mu\text{g}/\text{m}^3$	694	2000	11-12.06.2019	Near Nebutala Abad (Zone-2)
5	Carbon Monoxide (CO) in $\mu\text{g}/\text{m}^3$	600	2000	12-13.06.2019	Near Kulti Uposasthya Kendra (Zone-5)
Method of Test Reference : IS: 5182 (Part-10):1999,RA-2014					
Equipment Details: 208-DTF-2016, Calibration valid Up to: 28.06.2019, 255-DTS-2017, Calibration valid Up to: 02.07.2019, 309-DTL-2017, Calibration valid Up to: 08.12.2019 & 184-DTG-2015, Calibration valid Up to: 28.06.2019					

Authorized Signatory with Stamp



... End of The Test Report ...

H.O. : 63/B, Rastraguru Avenue, Kolkata - 700028 • Ph. 033 25792891 / 25497490 • Fax : 033 26299141  
 Laboratory : 189, 190 & 192, Rastraguru Avenue, Kolkata - 700028 • Ph. 033 25792889  
 E-mail : envirocheck@cal2.vsnl.net.in/envirocheck50@gmail.com • Website : www.envirocheck.org  
 Branch Office : Siliguri • Haldia • Durgapur • Dhanbad • Gangtok • Port Blair • Dehradun • New Delhi  
 Overseas : UAE • Qatar • Netherlands



/08-D/00



DOC NO: QLS//SAMP/08-D/00

one-3

**TEST REPORT**

Name & Address Of the Customer :	Report No. : QLS/W/19-20/C/N-153
M/s - NCC Limited	Date : 05.11.2019
Vill - Adampur	Sample No. : QLS/W/19-20/N-153
P.O + P.S - Haroa	Sample Description : Surface Water
Dist - North 24 Parganas	Sample Source / Location : Pond Water in Zone 13
West Bengal - 743425	Sample Drawn On : 17.10.2019
	Date of Performance(s) : 18.10.2019-04.11.2019
	Ref No. Date : NCC-W&E/Harua/WO/2018-19/02,
	Dated - 10.02.2019

**Analysis Result****A) Microbiological Analysis**

Sl. No.	Test Parameter	NABL Certificate No./Valid Upto	Test Method	Surface water quality criteria by CPCB for Class B [Out door bathing (organised)]	Result
1.	Total Coliform MPN/ 100 ml	TC-6271 / 23.10.21	APHA 23rd Edition 2017, 9222 B	500	9.4
2.	Faecal Coliform MPN/100 ml	TC-6271 / 23.10.21	APHA 23rd Edition 2017, 9222 D	---	3.6

**B) Chemical Analysis**

Sl. No.	Test Parameter	NABL Certificate No./Valid Upto	Test Method	Surface water quality criteria by CPCB for Class B [Out door bathing (organised)]	Result
1.	pH Value at 25°C	TC-6271 / 23.10.21	APHA 23 <sup>rd</sup> Edition-2017, 4500 H+	6.5-8.5	7.48
2.	Turbidity in NTU	TC-6271 / 23.10.21	APHA 23 <sup>rd</sup> Edition-2017, 2130B	---	9.4
3.	Chloride(as Cl) in mg/l	TC-6271 / 23.10.21	APHA 23 <sup>rd</sup> Edition-2017, 2130B	---	86.44
4.	Fluoride(as F) in mg/l	TC-6271 / 23.10.21	APHA 23 <sup>rd</sup> Ed., 4500 F D : 2017	1.5	0.36
5.	Nitrate (as NO <sub>3</sub> ) in mg/l	TC-6271 / 23.10.21	APHA 23 <sup>rd</sup> Edition-2017 4500NO <sub>3</sub> E	---	<0.5
6.	Chemical Oxygen Demand (as COD) mg/l	TC-6271 / 23.10.21	APHA 23 <sup>rd</sup> Edition-2017, 5220B	---	20
7.	Biochemical Oxygen Demand (as BOD) mg/l	TC-6271 / 23.10.21	IS 3025 (Part 44)-1993, RA:2014	3	5.6
8.	Dissolved Oxygen in mg/l	TC-6271 / 23.10.21	APHA 23 <sup>rd</sup> Edition-2017, 4500-O-C	5	4.6
9.	Total Alkalinity(as CaCO <sub>3</sub> ) in mg/l	TC-6271 / 23.10.21	APHA 23 <sup>rd</sup> Edition-2017, 2320B	---	192
10.	Hardness (as CaCO <sub>3</sub> ) in mg/l	TC-6271 / 23.10.21	APHA 23 <sup>rd</sup> Edition-2017,2340 C	---	226
11.	Oil & Grease in mg/l	TC-6271 / 23.10.21	APHA 23 <sup>rd</sup> Edition-2017, 5520A	---	6.2

Report Reviewed By :



for Qualissure Laboratory Services

R. Roy  
(Rajiv Roy)

Authorized Signatory

- The results relate only to the item(s) tested.
- This Test Report shall not be reproduced without the permission of Qualissure Laboratory Services.
- The reserved part of sample(s), except perishable sample(s), shall be retained for 30 days from the date of issue of the Test Report.

**Contract Package WBDWSIP/DWW/NCB/N24P/02B/2017-18**


**Qualissure Laboratory Services**


361, Purush Path, 45/361, Near Pulis Road, Kolkata - 700107  
Email: qualissure@gmail.com, info@qualissure.com, Mob.No. 98312 87086, 983080476  
TC-6271

---

DOC NO : QLS/SAMP/08-C/00

**TEST REPORT**

<b>Name &amp; Address Of the Customer :</b> <b>M/s - NCC Limited (WBDWSIP Project)</b> Bhanganar - 2 Block, Arangachi, Hataala Dist - South 24 Parganas West Bengal		<b>Report No. :</b> QLS/A/19-20/C/N-343 <b>Date :</b> 06.07.2019 <b>Sample No. :</b> QLS/A/19-20/N-541(A-E) <b>Sample Description :</b> Noise <b>Date of performance :</b> 22 - 28.02.2019 <b>Ref No. Date :</b> Verbal
--	--	--

Ref No. & Date : NCC-W&E/Bhanganar-II/Wo/2018-19/02, Dated - 10.02.2019

**Monitoring Result of Noise**


Sampling Done By: P.Adnikayana/Sahana  
Sampling Guideline : As per IS: 9876: 1981 (RA-2001)

Sample No	Date of Monitoring	Location	Leq dB (A) Day Time	Leq dB (A) Night Time
341-A	13-14.06.2019	Swastayan Guchh Near School (Zone-4)	56.6	47.8
341-B	14-15.06.2019	Dharmatala Pachua(Zone-1)	53.3	49.2
341-C	15-16.06.2019	Near Baniara (Zone-13)	57.4	50.1
341-D		Near Shan Pokur (Zone-10)	57.3	50.3
341-E	18-19.06.2019	Near Borikochua (Zone-12)	55.2	48.9


<b>Equipment details:</b>		<b>SI No.</b>	<b>Make</b>	<b>Model No.</b>	<b>Calibration Valid Upto</b>
		Q621819	Lutron	SI-4001	23.06.2019
		Q638616	Lutron	SI-40235D	26.07.2019

Code/ Category	Leq dB Day Time(A)	Leq dB Night Time(A)
A/Industrial	75	70
B/Commercial	65	55
C/Residential	55	45
D/Ecological Sensitive	50	40

Report Prepared By: *P. R. Roy*



for Qualissure Laboratory Services

  
**(Benimadhab Gurai)**  
**Authorised Signatory**

• The results relate only to the item(s) tested.

• This Test Report shall not be reproduced without the permission of Qualissure Laboratory Services.

• The reserved part of sample(s), except perishable sample(s), shall be retained for 30 days from the date of issue of the Test Report.



# Qualissure Laboratory Services

361, Prantik Pally, 45/361, Bose Pukur Road, Kolkata - 700107  
Email : qualissure@gmail.com, info@qualissure.com ; Mob.No. 98312 87086 ; 9830093976



TC-6271

DOC NO : QLS/SAMP/D1-A/00

## TEST REPORT

Name & Address Of the Customer :	Report No. :
M/s - NCC Limited (WBDWSIP Project)	QLS/A/19-20/C/N-337
Bhangan - 2 Block,	Date :
Jirangachi, Hatisala	06.07.2019
Dist - South 24 Parganas	Sample No. :
West Bengal	QLS/A/19-20/N-337
	Sample Description :
	Ambient Air
	Date of performance :
	17 - 22.06.2019
Ref No. & Date :	
NCC-W&E/Bhangan-II/VO/2018-19/02, Dated - 10.02.2019	

## Analysis Result

Location : Dharmatala Pachuna (Zone-1)		Date of sampling : 14-15.06.2019		
GPS Coordinates: N-22°33'11.2", E-88°28'51.2"		Sampling done as per : CPCB Guidelines (Volume-1)		
Sampling Done by: P. Adinarayana/J. Sahana		Environmental Condition : Clear & Sunny		
Sl. No.	Pollutants	Result	Limit	Method of Test Reference
1	Particulate matter (PM <sub>10</sub> ) in µg/m <sup>3</sup>	147	100	IS: 5182 (Part-23), RA-2017
2	Particulate matter (PM <sub>2.5</sub> ) in µg/m <sup>3</sup>	86	60	USEPA CFR-40, Part-50, Appendix-L
3	Sulphur dioxide (SO <sub>2</sub> ) in µg/m <sup>3</sup>	10.6	80	IS: 5182 (Part-2) 2001, RA-2017
4	Nitrogen dioxide (NO <sub>2</sub> ) in µg/m <sup>3</sup>	33.8	80	IS: 5182 (Part-6) 2006, RA-2017
<b>NOTE:</b> Limit as per CPCB notification, New Delhi, 18th November 2009, for Ambient air quality				
<b>Equipment Details:</b>				
1) Equipment Name/ID	: Respirable Dust Sampler/Fine Dust Sampler			
2) Model No	: APM-860/APM-154			
3) Make-	: Lata Envirotech Services			
4) SI No-	: 208-DTF-2016, 407-DTF-2016/255-DTS-2017			
5) Calibration valid Up to	: 28.06.2019/02.07.2019			

Report prepared By : R. Roy

for Qualissure Laboratory Services



(Benimadhab Gorai)  
Authorised Signatory

- The results relate only to the item(s) tested.
- This Test Report shall not be reproduced without the permission of Qualissure Laboratory Services.
- The reserved part of sample(s), except perishable sample(s), shall be retained for 30 days from the date of issue of the Test Report.





# Qualissure Laboratory Services

361, Prantik Pally, 45/361, Bose Pukur Road, Kolkata - 700107  
Email : qualissure@gmail.com; info@qualissure.com ; Mob.No. 98312 87086 ; 9830093976



TC-6271

DOC NO : QLS/SAMP/01-A/00

## TEST REPORT

Name & Address Of the Customer ;	Report No. : QLS/A/19-20/C/N-336
M/s - NCC Limited (WBDWSIP Project)	Date : 06.07.2019
Bhangar – 2 Block,	Sample No. : QLS/A/19-20/N-336
Jirangachi, Hatisala	Sample Description : Ambient Air
Dist – South 24 Parganas	Date of performance : 17 – 22.06.2019
West Bengal	
Ref No. & Date : NCC-W&E/Bhangar-II/Wo/2018-19/02, Dated - 10.02.2019	

## Analysis Result

Location : Swastayan Gacchi Near School (Zone-4)		Date of sampling : 13-14.06.2019		
GPS Coordinates: N-22°34'24.4", E-88°33'20.2"		Sampling done as per : CPCB Guidelines (Volume-1)		
Sampling Done by: P.Adinarayana/I.Sahana		Environmental Condition : Clear & Sunny		
Sl. No.	Pollutants	Result	Limit	Method of Test Reference
1	Particulate matter (PM <sub>10</sub> ) in µg/m <sup>3</sup>	142	100	IS: 5182 (Part-23), RA-2017
2	Particulate matter (PM <sub>2.5</sub> ) in µg/m <sup>3</sup>	79	60	USEPA CFR-40, Part-50, Appendix-I.
3	Sulphur dioxide (SO <sub>2</sub> ) in µg/m <sup>3</sup>	9.5	80	IS: 5182 (Part-2)-2001, RA-2017
4	Nitrogen dioxide (NO <sub>2</sub> ) in µg/m <sup>3</sup>	34.5	80	IS: 5182 (Part-6)-2006, RA-2017
NOTE: Limit as per CPCB notification, New Delhi, 18th November 2009, for Ambient air quality				
Equipment Details:				
1) Equipment Name/ID		: Respirable Dust Sampler/Fine Dust Sampler		
2) Model No		: APM-860/APM-154		
3) Make-		: Lata Envirotech Services		
4) SI No-		: 208-DTF-2016, 407-DTF-2016/255-DTS-2017		
5) Calibration valid Up to		: 28.06.2019/02.07.2019		

Report prepared By : R. Roy

for Qualissure Laboratory Services



(Benimadhab Gorai)  
Authorised Signatory

- The results relate only to the item(s) tested.
- This Test Report shall not be reproduced without the permission of Qualissure Laboratory Services.
- The reserved part of sample(s), except perishable sample(s), shall be retained for 30 days from the date of issue of the Test Report.





# Qualissure Laboratory Services

361, Prantik Pally, 45/361, Bose Pukur Road, Kolkata - 700107  
Email: qualissure@gmail.com; info@qualissure.com; Mob.No. 98312 87086 ; 9830093976



TC-6271

DOC NO : QLS/SAMP/01-A/00

## TEST REPORT

Name & Address Of the Customer :	Report No. :
M/s - NCC Limited (WBDWSIP Project)	Date :
Bhangar – 2 Block,	Sample No. :
Jirangachi, Hatisala	Sample Description :
Dist – South 24 Parganas	Date of performance :
West Bengal	
Ref No. & Date : NCC-W&E/Bhangar-II/VO/2018-19/02, Dated - 10.02.2019	

## Analysis Result

Location : Near Shan Pukur (Zone-10)			Date of sampling : 15-16.06.2019	
GPS Coordinates: N-22°32'17.0", E-88°34'58.0"			Sampling done as per : CPCB Guidelines (Volume-1)	
Sampling Done by: P. Adinarayana/J. Sahana			Environmental Condition : Clear & Sunny	
Sl. No.	Pollutants	Result	Limit	Method of Test Reference
1	Particulate matter (PM <sub>10</sub> ) in µg/m <sup>3</sup>	123	100	IS: 5182 (Part-23), RA-2017
2	Particulate matter (PM <sub>2.5</sub> ) in µg/m <sup>3</sup>	65	60	USEPA CFR-40, Part-50, Appendix-L
3	Sulphur dioxide (SO <sub>2</sub> ) in µg/m <sup>3</sup>	9.7	80	IS: 5182 (Part-2)-2001, RA-2017
4	Nitrogen dioxide (NO <sub>2</sub> ) in µg/m <sup>3</sup>	30.3	80	IS: 5182 (Part-6)-2006, RA-2017
<b>NOTE:</b> Limit as per CPCB notification, New Delhi, 18th November 2009, for Ambient air quality				
<b>Equipment Details:</b>				
1) Equipment Name/iD		: Respirable Dust Sampler/Fine Dust Sampler		
2) Model No		: APM-860/APM-154		
3) Make-		: Lata Envirotech Services		
4) SI No-		: 208-DTF-2016, 407-DTF-2016/255-DTS-2017		
5) Calibration valid Up to		: 28.06.2019/02.07.2019		

Report prepared By : P. Roy

for Qualissure Laboratory Services



(Benimadhab Gorai)  
Authorised Signatory

- The results relate only to the item(s) tested.
- This Test Report shall not be reproduced without the permission of Qualissure Laboratory Services.
- The reserved part of sample(s), except perishable sample(s), shall be retained for 30 days from the date of issue of the Test Report.



# Qualissure Laboratory Services

361, Prantik Pally, 45/361, Bose Pakur Road, Kolkata - 700107  
Email: qualissure@gmail.com; info@qualissure.com; Mob.No. 98312 87086; 9830093976



TC-6271

DOC NO : QLS/SAMP/01-A/00

## TEST REPORT

Name & Address Of the Customer :	Report No. : QLS/A/19-20/C/N-340
M/s - NCC Limited (WBDWSIP Project)	Date : 06.07.2019
Bhangar – 2 Block,	Sample No. : QLS/A/19-20/N-340
Jirangachi, Hatisala	Sample Description : Ambient Air
Dist – South 24 Parganas	Date of performance : 17 – 22.06.2019
West Bengal	
Ref No. & Date : NCC-W&E/Bhangar-II/WO/2018-19/02, Dated - 10.02.2019	

## Analysis Result

Location : Near Bonkochua (Zone-12)			Date of sampling : 18-19.06.2019	
GPS Coordinates: N-22°32'29.9", E-88°36'14.5"			Sampling done as per : CPCB Guidelines (Volume-1)	
Sampling Done by: P.Adinarayana/J.Sahana			Environmental Condition : Clear & Sunny	
Sl No.	Pollutants	Result	Limit	Method of Test Reference
1	Particulate matter (PM <sub>10</sub> ) in µg/m <sup>3</sup>	109	100	IS: 5182 (Part-23), RA-2017
2	Particulate matter (PM <sub>2.5</sub> ) in µg/m <sup>3</sup>	58	60	USEPA CFR-40, Part-50, Appendix-L
3	Sulphur dioxide (SO <sub>2</sub> ) in µg/m <sup>3</sup>	8.9	80	IS: 5182 (Part-2)-2001, RA-2017
4	Nitrogen dioxide (NO <sub>2</sub> ) in µg/m <sup>3</sup>	28.4	80	IS: 5182 (Part-6)-2006, RA-2017
NOTE: Limit as per CPCB notification, New Delhi, 18th November 2009, for Ambient air quality				
Equipment Details:				
1) Equipment Name/ID		: Respirable Dust Sampler/Fine Dust Sampler		
2) Model No		: APM-860/APM-154		
3) Make-		: Lata Envirotech Services		
4) Sl No-		: 208-DTF-2016, 407-DTF-2016/255-DTS-2017		
5) Calibration valid Up to		: 28.06.2019/02.07.2019		

Report prepared By : R. Roy

for Qualissure Laboratory Services



(Benimadhab Gorai)  
Authorised Signatory

- The results relate only to the item(s) tested.
- This Test Report shall not be reproduced without the permission of Qualissure Laboratory Services.
- The reserved part of sample(s), except perishable sample(s), shall be retained for 30 days from the date of issue of the Test Report.



# Qualissure Laboratory Services

361, Prantik Pathy, 45/361, Bose Pukur Road, Kolkata - 700107  
Email: qualissure@gmail.com, info@qualissure.com; Mob.No. 98312 87086; 9830093976



TC-6271

DOC NO : QLS/SAMP/01-A/00

## TEST REPORT

Name & Address Of the Customer;	Report No. : QLS/A/19-20/C/N-338
M/s - NCC Limited (WBDWSIP Project)	Date : 06.07.2019
Bhangar – 2 Block,	Sample No. : QLS/A/19-20/N-338
Jirangachi, Hatisala	Sample Description : Ambient Air
Dist – South 24 Parganas	Date of performance : 17 – 22.06.2019
West Bengal	
Ref No. & Date : NCC-W&E/Bhangar-II/VO/2018-19/02, Dated : 10.02.2019	

## Analysis Result

Location : Near Baniara (Zone-13)		Date of sampling : 15-16.06.2019		
GPS Coordinates: N-22°32'26.9", E-88°38'3.6"		Sampling done as per : CPCB Guidelines (Volume-1)		
Sampling Done by: P.Adinarayana/J.Sahana		Environmental Condition : Clear & Sunny		
Sl. No.	Pollutants	Result	Limit	Method of Test Reference
1	Particulate matter (PM <sub>10</sub> ) in µg/m <sup>3</sup>	125	100	IS: 5182 (Part-23), RA-2017
2	Particulate matter (PM <sub>2.5</sub> ) in µg/m <sup>3</sup>	70	60	USEPA CFR-40, Part-50, Appendix-L
3	Sulphur dioxide (SO <sub>2</sub> ) in µg/m <sup>3</sup>	10.1	80	IS: 5182 (Part-2)-2001, RA-2017
4	Nitrogen dioxide (NO <sub>2</sub> ) in µg/m <sup>3</sup>	32.1	80	IS: 5182 (Part-6)-2006, RA-2017
NOTE: Limit as per CPCB notification, New Delhi, 18th November 2009, for Ambient air quality				
Equipment Details:				
1) Equipment Name/ID		: Respirable Dust Sampler/Fine Dust Sampler		
2) Model No		: APM-860/APM-154		
3) Make-		: Lata Envirotech Services		
4) SI No-		: 309-DTL-2017, 509-DTL-2017/184-DTG-2015		
5) Calibration valid Up to		: 08.12.2019/28.06.2019		

Report prepared By : R. Roy

for Qualissure Laboratory Services



(Benimadhab Gorai)  
Authorised Signatory

- The results relate only to the item(s) tested.
- This Test Report shall not be reproduced without the permission of Qualissure Laboratory Services.
- The reserved part of sample(s), except perishable sample(s), shall be retained for 30 days from the date of issue of the Test Report.


**ENVIROCHECK**

 Recognised by MoEF&CC, WBPCB, JSPCB & OSPCB  
 Accredited by NABL (ISO/IEC 17025:2005)  
 Certified by ISO 9001: 2015, ISO 14001: 2015 & OHSAS 18001:2007


DOC NO : QLS/SAMP/01-A/00

### TEST REPORT

Name & Address Of the Customer :	Report No. : ENV/391A/M
M/s - NCC Limited (WBDWSIP Project)	Date : 06.07.2019
Bhangar - 2 Block,	Sample No. : QLS/A/19-20/N-336-340
Jirangachi, Hatisala	Sample Description : Ambient Air
Dist - South 24 Parganas	Date of performance : 16 - 22.06.2019
West Bengal	

### Analysis Result

Sl. No.	Pollutants	Result	Limit	Date of Sampling	Location
1	Carbon Monoxide (CO) in $\mu\text{g}/\text{m}^3$	588	2000	13-14.06.2019	Swastayan Gacchi Near School (Zone-4)
2	Carbon Monoxide (CO) in $\mu\text{g}/\text{m}^3$	579	2000	14-15.06.2019	Dharmatala Pachuria (Zone-1)
3	Carbon Monoxide (CO) in $\mu\text{g}/\text{m}^3$	675	2000	15-16.06.2019	Near Baniara (Zone-13)
4	Carbon Monoxide (CO) in $\mu\text{g}/\text{m}^3$	693	2000	15-16.06.2019	Near Shan Pukur (Zone-10)
5	Carbon Monoxide (CO) in $\mu\text{g}/\text{m}^3$	702	2000	18-19.06.2019	Near Bonkochua (Zone-12)

Method of Test Reference : IS: 5182 (Part-10):1999, RA-2014

Equipment Details: 208-DTF-2016, Calibration valid Up to: 28.06.2019, 255-DTS-2017, Calibration valid Up to: 02.07.2019, 309-DTL-2017, Calibration valid Up to: 08.12.2019 &amp; 184-DTG-2015, Calibration valid Up to: 28.06.2019



... End of The Test Report ...

Authorized Signatory with Stamp


 H.O. : 63/B, Rastraguru Avenue, Kolkata - 700028 • Ph. 033 25792891 / 25497490 • Fax : 033 25299141  
 Laboratory : 189, 190 & 192, Rastraguru Avenue, Kolkata - 700028 • Ph. 033 25792889  
 E-mail : envcheck@cal2.vsnl.net.in/envirocheck50@gmail.com • Website : www.envirocheck.org  
 Branch Office : Siliguri • Haldia • Durgapur • Dhanbad • Gangtok • Port Blair • Dehradun • New Delhi  
 Overseas : UAE • Qatar • Netherlands





# Qualissure Laboratory Services

361, Prantik Pally, 45/361, Bose Pukur Road, Kolkata - 700107  
Email : qualissure@gmail.com, info@qualissure.com ; Mob.No. 98312 87086 ; 9830093976



TC-6271

DOC NO: QLS/SAMP/08-D/00

## TEST REPORT

Name & Address Of the Customer :	Report No. : QLS/W/19-20/C/N-155
<b>M/s - NCC Limited (WBDWSIP Project)</b>	Date : 05.11.2019
Bhangar – 2 Block,	Sample No. : QLS/W/19-20/N-155
Jirangachi, Hatisala	Sample Description : Surface Water
Dist – South 24 Parganas	Sample Source / Location : <b>Pond Water of Zone 12 (Bankachua)</b>
West Bengal	Sample Drawn On : 17.10.2019
	Date of Performance(s) : 18.10.2019-04.11.2019
	Ref No. Date : NCC-W&E/Bhangar-II/Wo/2018-19/02,
	Dated - 10.02.2019

## Analysis Result

### A) Microbiological Analysis

Sl. No.	Test Parameter	NABL Certificate No./Valid Upto	Test Method	Surface water quality criteria by CPCB for Class B [Out door bathing (organized)]	Result
1.	Total Coliform MPN/ 100 ml	TC-6271 / 23.10.21	APHA 23rd Edition 2017, 9222 B	500	4.2
2.	Faecal Coliform MPN/100 ml	TC-6271 / 23.10.21	APHA 23rd Edition 2017, 9222 D	—	6.8

### B) Chemical Analysis

Sl. No.	Test Parameter	NABL Certificate No./Valid Upto	Test Method	Surface water quality criteria by CPCB for Class B [Out door bathing (organized)]	Result
1.	pH Value at 25°C	TC-6271 / 17.09.19	APHA 23 <sup>rd</sup> Edition-2017, 4500 H+	6.5-8.5	7.59
2.	Turbidity in NTU	TC-6271 / 17.09.19	APHA 23 <sup>rd</sup> Edition-2017, 2130B	—	9.8
3.	Chloride(as Cl) in mg/l	TC-6271 / 17.09.19	APHA 23 <sup>rd</sup> Edition-2017, 2130B	—	56.34
4.	Fluoride(as F) in mg/l	TC-6271 / 17.09.19	APHA 23 <sup>rd</sup> Ed., 4500 F D : 2017	1.5	<0.10
5.	Nitrate (as NO <sub>3</sub> ) in mg/l	TC-6271 / 17.09.19	APHA 23 <sup>rd</sup> Edition-2017 4500NO <sub>3</sub> E	—	<0.5
6.	Chemical Oxygen Demand (as COD) mg/l	TC-6271 / 17.09.19	APHA 23 <sup>rd</sup> Edition-2017, 5220B	—	39.2
7.	Biochemical Oxygen Demand (as BOD) mg/l	TC-6271 / 17.09.19	IS 3025 (Part 44)-1993, RA:2014	3	10.3
8.	Dissolved Oxygen in mg/l	TC-6271 / 17.09.19	APHA 23 <sup>rd</sup> Edition-2017, 4500-O-C	5	5.2
9.	Total Alkalinity(as CaCO <sub>3</sub> ) in mg/l	TC-6271 / 17.09.19	APHA 23 <sup>rd</sup> Edition-2017, 2320B	—	198
10.	Hardness (as CaCO <sub>3</sub> ) in mg/l	TC-6271 / 17.09.19	APHA 23 <sup>rd</sup> Edition-2017,2340 C	—	220
11.	Oil & Grease in mg/l	TC-6271 / 23.10.21	APHA 23 <sup>rd</sup> Edition-2017, 5520A	—	4.6

Report Reviewed By :

for Qualissure Laboratory Services

(Rajiv Roy)  
Authorized Signatory

- The results relate only to the item(s) tested.
- This Test Report shall not be reproduced without the permission of Qualissure Laboratory Services.
- The reserved part of sample(s), except perishable sample(s), shall be retained for 30 days from the date of issue of the Test Report.





# Qualissure Laboratory Services

361, Prantik Pally, 45/361, Bose Pukur Road, Kolkata -700107  
Email : qualissure@gmail.com; info@qualissure.com ; Mob No. 98312 87086 ; 9830093976



TC-6271

DOC NO: QLS/SAMP/08-D/00

## TEST REPORT

Name & Address Of the Customer :	Report No. : QLS/W/19-20/C/N-154
<b>M/s - NCC Limited (WBDWSIP Project)</b>	Date : 05.11.2019
Bhangar – 2 Block,	Sample No. : QLS/W/19-20/N-154
Jirangachi, Hatisala	Sample Description : Surface Water
Dist – South 24 Parganas	Sample Source / Location : Pond Water in Zone 4 (Swastayan Gacchi)
West Bengal	Sample Drawn On : 17.10.2019
	Date of Performance(s) : 18.10.2019-04.11.2019
	Ref No. Date : NCC-W&E/Bhangar-II/Wo/2018-19/02, Dated - 10.02.2019

## Analysis Result

### A) Microbiological Analysis

Sl. No.	Test Parameter	NABL Certificate No./Valid Upto	Test Method	Surface water quality criteria by CPCB for Class B [Out door bathing (organised)]	Result
1.	Total Coliform MPN/ 100 ml	TC-6271 / 23.10.21	APHA 23rd Edition 2017, 9222 B	500	4.6
2.	Faecal Coliform MPN/100 ml	TC-6271 / 23.10.21	APHA 23rd Edition 2017, 9222 D	---	Not Detected

### B) Chemical Analysis

Sl. No.	Test Parameter	NABL Certificate No./Valid Upto	Test Method	Surface water quality criteria by CPCB for Class B [Out door bathing (organised)]	Result
1.	pH Value at 25°C	TC-6271 / 23.10.21	APHA 23 <sup>rd</sup> Edition-2017, 4500 H+	6.5-8.5	7.62
2.	Turbidity in NTU	TC-6271 / 23.10.21	APHA 23 <sup>rd</sup> Edition-2017, 2130B	---	6.2
3.	Chloride(as Cl) in mg/l	TC-6271 / 23.10.21	APHA 23 <sup>rd</sup> Edition-2017, 2130B	---	86.4
4.	Fluoride(as F) in mg/l	TC-6271 / 23.10.21	APHA 23 <sup>rd</sup> Ed., 4500 F D : 2017	1.5	<0.1
5.	Nitrate (as NO <sub>3</sub> ) in mg/l	TC-6271 / 23.10.21	APHA 23 <sup>rd</sup> Edition-2017 4500NO <sub>3</sub> E	---	<0.5
6.	Chemical Oxygen Demand (as COD) mg/l	TC-6271 / 23.10.21	APHA 23 <sup>rd</sup> Edition-2017, 5220B	---	58.8
7.	Biochemical Oxygen Demand (as BOD) mg/l	TC-6271 / 23.10.21	IS 3025 (Part 44)-1993, RA:2014	3	15.9
8.	Dissolved Oxygen in mg/l	TC-6271 / 23.10.21	APHA 23 <sup>rd</sup> Edition-2017, 4500-O-C	5	4.6
9.	Total Alkalinity(as CaCO <sub>3</sub> )in mg/l	TC-6271 / 23.10.21	APHA 23 <sup>rd</sup> Edition-2017, 2320B	---	236
10.	Hardness (as CaCO <sub>3</sub> ) in mg/l	TC-6271 / 23.10.21	APHA 23 <sup>rd</sup> Edition-2017,2340 C	---	228
11.	Oil & Grease in mg/l	TC-6271 / 23.10.21	APHA 23 <sup>rd</sup> Edition-2017, 5520A	---	4.2

Report Reviewed By :

for Qualissure Laboratory Services

(Rajiv Roy)

Authorized Signatory

- The results relate only to the item(s) tested.
- This Test Report shall not be reproduced without the permission of Qualissure Laboratory Services.
- The reserved part of sample(s), except perishable sample(s), shall be retained for 30 days from the date of issue of the Test Report.

**Contract Package: WBDWSIP/DWW/NCB/N24P/01/2017-18**



# Qualissure Laboratory Services

361, Prantik Pally,  
45/361, Bose Park Road,  
Kolkata - 700107  
Email : qualissure@gmail.com  
Mob. No. : 9831287086  
9830093976

DOC NO : QLS/SAMP/08-A/00

## TEST REPORT

Name & Address Of the Customer :	Report No. : QLS/A/19-20/C/147
M/s. Furnace Fabrica (India ) Ltd.	Date : 25.05.2019
Site: Construction 22 MGD Water Treatment Plant	Sample No. : QLS/A/19-20/147
1582, Rajdanga Main Road,	Sample Description : Ambient Air
Kasba New Market,	Date of performance : 17-25.05.2019
7 <sup>th</sup> Floor,	Ref No. Date : FFIL/WO/K201810003/18-19/259,
Kolkata-700107	Dated - 28.02.19

## Analysis Result

Location : Water Treatment Plant at Tank No -1		Date of sampling : 16 - 17.05.2019		
Sampling Done by: J.Sahana		Sampling done as per : CPCB Guidelines (Volume-1)		
Environmental Condition : Clear/sunny				
Sl. No.	Pollutants	Result	Limit as per CPCB	Method of Test Reference
1	Particulate matter (PM <sub>10</sub> ) in µg/m <sup>3</sup>	189	100	IS: 5182 (Part-23)- (RA-2017)
2	Particulate matter (PM <sub>2.5</sub> ) in µg/m <sup>3</sup>	91	60	USEPA CFR-40,Part-50, Appendix-L
3	Sulphur dioxide (SO <sub>2</sub> ) in µg/ m <sup>3</sup>	8.7	80	IS: 5182 (Part-2)-2001,(RA-2017)
4	Nitrogen dioxide (NO <sub>2</sub> ) in µg/ m <sup>3</sup>	35.5	80	IS: 5182 (Part- 6)- (RA-2017)
NOTE: Limit as per CPCB notification, New Delhi, 18th November 2009, for Ambient air quality				
Remarks : Nil				

Report prepared By : R. Roy

for Qualissure Laboratory Services

  
(Benimadhab Gorai)  
Authorised Signatory

- The results relate only to the item(s) tested.
- This Test Report shall not be reproduced without the permission of Qualissure Laboratory Services



# Qualissure Laboratory Services

361, Prantik Pally,  
45/361, Bose Pukur Road,  
Kolkata - 700107  
Email : qualissure@gmail.com  
Mob. No. : 9831287086  
9830093976

DOC NO : QLS/SAMP/08-A/00

## TEST REPORT

<b>Name &amp; Address Of the Customer :</b>  <b>M/s. Furnace Fabrica (India ) Ltd.</b> <b>Site: Construction 22 MGD Water Treatment Plant</b> 1582, Rajdanga Main Road, Kasba New Market, 7 <sup>th</sup> Floor, Kolkata-700107	<b>Report No.</b> : QLS/A/19-20/C/148 <b>Date</b> : 25.05.2019 <b>Sample No.</b> : QLS/A/19-20/148 <b>Sample Description</b> : Ambient Air <b>Date of performance</b> : 17-25.05.2019 <b>Ref No. Date</b> : FFIL/WO/K201810003/18-19/259, Dated - 28.02.19
--	--

## Analysis Result

Location : Boosting Station -1		Date of sampling : 16 - 17.05.2019		
Sampling Done by: J.Sahana		Sampling done as per : CPCB Guidelines (Volume-1)		
Environmental Condition : Clear/sunny				
Sl. No.	Pollutants	Result	Limit as per CPCB	Method of Test Reference
1	Particulate matter (PM <sub>10</sub> ) in µg/m <sup>3</sup>	149	100	IS: 5182 (Part-23)- (RA-2017)
2	Particulate matter (PM <sub>2.5</sub> ) in µg/m <sup>3</sup>	84	60	USEPA CFR-40,Part-50, Appendix-L
3	Sulphur dioxide (SO <sub>2</sub> ) in µg/ m <sup>3</sup>	8.3	80	IS: 5182 (Part-2)-2001,(RA-2017)
4	Nitrogen dioxide (NO <sub>2</sub> ) in µg/ m <sup>3</sup>	35.1	80	IS: 5182 (Part- 6)- (RA-2017)
NOTE: Limit as per CPCB notification, New Delhi, 18th November 2009, for Ambient air quality				
Remarks : Nil				

Report prepared By : R. Roy

for Qualissure Laboratory Services

  
(Benimadhab Gorai)  
Authorised Signatory

- The results relate only to the item(s) tested.
  - This Test Report shall not be reproduced without the permission of Qualissure Laboratory Services
- . . . . . shall be retained for 20 days from the date of issue of the Test Report



# ENVIROCHECK

Recognised by MoEF&CC, WBPCB, JSPCB & OSPCB  
Accredited by NABL (ISO/IEC 17025:2005)  
Certified by ISO 9001:2015, ISO 14001:2015 & OHSAS 18001:2007



## Analysis Report

Report No.: ENV/352/M

Reporting Date: 25/05/2019

Name of Customer

M/s. Furnace Fabrica (India) Ltd.  
Site: Construction 22 MGD Water Treatment Plant

Address

15B2, Rajdanga Main Road, Kasba New Market, 7<sup>th</sup> Floor, Kolkata - 700107

Type of Sample

Ambient Air

Date of Sampling

16-17/05/2019

Analysis Completed on

25/05/2019

Sample mark

QIS/A/19-20/N-147-148

Sample No.	Test Parameters	Test Method	Unit	Result	Limit	Location
147	Carbon Monoxide (CO)	IS: 5182 (Part10):1999	µg/m <sup>3</sup>	469	2000	Water Treatment Plant at Tank No -1
148	Carbon Monoxide (CO)	RA-2014		446		Boosting Station -1

Equipment Details: RDS-1902-702, Calibration valid Up to: 05.04.2020 & 161-DTG-2015, Calibration valid Up to: 02.07.2019.

Authorized Signatory with Stamp

- End of the Test Report -



H.O.: 63/B, Rastraguru Avenue, Kolkata - 700028 • Ph. 033 25792891 / 25497490 • Fax: 033 25289141  
Laboratory: 189, 190 & 192 Rastraguru Avenue, Kolkata - 700028 • Ph. 033 25792889  
E-mail: info@envirocheck.org / envirocheck50@gmail.com • Website: www.envirocheck.org  
Branch Office: Siliguri • Haldia • Durgapur • Dhanbad • Gangtok • Port Blair • Dehradun • New Delhi  
Overseas: UAE • Qatar • Netherlands





# Qualissure Laboratory Services

361, Prantik Pally,  
45/361, Bose Pukur Road,  
Kolkata - 700107  
Email : qualissure@gmail.com  
Mob. No. : 9831287086  
9830093976

DOC NO : QLS/SAMP/08-C/00

## TEST REPORT

Name & Address Of the Customer :	Report No. : QLS/A/19-20/C/149
M/s. Furnace Fabrica (India ) Ltd.	Date : 25.05.2019
Site: <u>Construction 22 MGD Water Treatment Plant</u>	Sample No. : QLS/A/19-20/149(A-B)
1582, Rajdanga Main Road,	Sample Description : Noise Monitoring
Kasba New Market,	Date of performance : 17 - 25.05.2019
7 <sup>th</sup> Floor,	Ref No. Date : FFIL/WO/K201810003/18-19/259,
Kolkata-700107	Dated - 28.02.19,

## Monitoring Result of Noise

Sampling Done By: J.Sahana				
Sampling Guideline : As per IS: 9876: 1981 (RA-2001)				
Sample No	Date of Monitoring	Location	Leq dB (A) Day Time	Leq dB (A) Night Time
A	16-17.05.2019	Boosting Station-1	65.1	56.0
B		Water Treatment Plant at Tank no-1	66.5	58.5

Code/ Category	Leq dB Day Time(A)	Leq dB Night Time(A)	<b>NOTE:</b> Day Time : 06.00 Hr. - 22.00 Hr. Night Time : 22.00 Hr. - 06.00 Hr.
A/Industrial	75	70	
B/Commercial	65	55	
C/Residential	55	45	
D/Ecological Sensitive	50	40	

Report Prepared By : *ld*

for Qualissure Laboratory Services

(Benimadhab Gorai)  
Authorised Signatory



- The results relate only to the item(s) tested.
- This Test Report shall not be reproduced without the permission of Qualissure Laboratory Services
- The reserved part of sample(s), except perishable sample(s), shall be retained for 30 days from the date of issue of the Test Report





# Qualissure Laboratory Services

361, Prantik Pally,  
45/361, Bose Pukur Road,  
Kolkata - 700107  
Email : qualissure@gmail.com  
Mob. No. : 9831287086  
9830093976

DOC NO : QLS/SAMP/08-A/00

## TEST REPORT

Name & Address Of the Customer :	Report No. : QLS/A/19-20/864
M/s. Furnace Fabrica (India ) Ltd.	Date : 04.11.2019
Site: Construction 22 MGD Water Treatment Plant	Sample No. : QLS/A/19-20/864
1582, Rajdanga Main Road,	Sample Description : Ambient Air
Kasba New Market,	Date of performance : 23.10-04.11.2019
7 <sup>th</sup> Floor,	Ref No. Date : FFIL/WO/K201810003/18-19/259,
Kolkata-700107	Dated - 28.02.19

## Analysis Result

Location : Near Admin Building			Date of sampling : 22 - 23.10.2019	
Sampling Done by: C.Sahoo			Sampling done as per : CPCB Guidelines (Volume-1)	
Environmental Condition : Clear/sunny				
Sl. No.	Pollutants	Result	Limit as per CPCB	Method of Test Reference
1	Particulate matter (PM <sub>10</sub> ) in µg/m <sup>3</sup>	117	100	IS: 5182 (Part-23)- (RA-2017)
2	Particulate matter (PM <sub>2.5</sub> ) in µg/m <sup>3</sup>	73	60	USEPA CFR-40,Part-50, Appendix-L
3	Sulphur dioxide (SO <sub>2</sub> ) in µg/ m <sup>3</sup>	10.9	80	IS: 5182 (Part-2)- 2001,(RA-2017)
4	Nitrogen dioxide (NO <sub>2</sub> ) in µg/ m <sup>3</sup>	39.5	80	IS: 5182 (Part- 6)- (RA-2017)
5	Carbon Monoxide (CO) in µg/m <sup>3</sup>	572	2000	IS: 5182 (Part-10):1999,RA-2014
NOTE: Limit as per CPCB notification, New Delhi, 18th November 2009, for Ambient air quality				
Remarks : Nil				

Report prepared By

*(Signature)*

for Qualissure Laboratory Services



(Benimadhab Goral)  
Authorised Signatory

- The results relate only to the item(s) tested.
- This Test Report shall not be reproduced without the permission of Qualissure Laboratory Services.
- The reserved part of sample(s), except perishable sample(s), shall be retained for 30 days from the date of issue of the Test Report.



CamScanner



# Qualissure Laboratory Services

361, Prantik Pally,  
45/361, Bose Pukur Road,  
Kolkata - 700107  
Email : qualissure@gmail.com  
Mob. No. : 9831287086  
9830093976

DOC NO : QLS/SAMP/08-C/00

## TEST REPORT

Name & Address Of the Customer :	Report No. :
M/s. Furnace Fabrica (India ) Ltd.	Date :
Site: Construction 22 MGD Water Treatment Plant	Sample No. :
1582, Rajdanga Main Road,	Sample Description :
Kasba New Market,	Date of performance :
7 <sup>th</sup> Floor,	Ref No. Date :
Kolkata-700107	Dated – 28.02.19,

## Monitoring Result of Noise

Sampling Done By: C.Sahoo				
Sampling Guideline : As per IS: 9876: 1981 (RA-2001)				
Sample No	Date of Monitoring	Location	Leq dB (A) Day Time	Leq dB (A) Night Time
865	22-23.10.2019	Near Admin Building	63.4	54.2

Code/ Category	Leq dB Day Time(A)	Leq dB Night Time(A)	<b>NOTE:</b> Day Time : 06.00 Hr. – 22.00 Hr. Night Time : 22.00 Hr. – 06.00 Hr.
A/Industrial	75	70	
B/Commercial	65	55	
C/Residential	55	45	
D/Ecological Sensitive	50	40	

Report Prepared By : *S. Chakraborty*

for Qualissure Laboratory Services

*(Benimadhab Gorai)*  
 Authorised Signatory

BANKURA

Package: WBDWSIP/DWW/NCB/BK/01/2017-18



Qualissure Laboratory Services

361, Prantik Pally, 45/361, Dose Pakur Road, Kolkata - 700107  
Email : qualissure@gmail.com; info@qualissure.com ; Mob.No. 98312 87086 ; 9830093976



DOC NO : QLS/SAMP/08-A/00

**TEST REPORT**

<b>Name &amp; Address Of the Customer :</b>	<b>Report No.</b>	: QLS/A/19-20/C/N-77
M/s. Technofab Engineering Limited	<b>Date</b>	: 10.06.2019
G-15, S.Sarani, Bidhdannagar	<b>Sample No.</b>	: QLS/A/19-20/N-77
Durgapur,	<b>Sample Description</b>	: Ambient Air
Bardhaman(West) - 713 212	<b>Date of performance</b>	: 06 - 10.06.2019
	<b>Sample Mark</b>	: Project Site (Gobindpur)
	<b>Ref No. Date</b>	: P3613/WO/16, Dt. 29.05.2019

**Analysis Result**

Location	: Project Site (Gobindpur)			
Date of sampling	: 04.06.2019			
Sampling Done by	: J.Sahana			
Sampling done as per	: CPCB Guidelines (Volume-I)			
GPS Co-Ordination	: N-23°04'21.1" E-86°54'17.6"			
Environmental Condition	: Clear & Sunny			
Sl. No.	Pollutants	Result	Limit	Method of Test Reference
1	Particulate matter (<10µm) in µg/m <sup>3</sup>	118	100	IS: 5182 (Part-23)-(RA-2017)
2	Particulate matter (<2.5µm) in µg/m <sup>3</sup>	64	60	USEPA CFR-40,Part-50, Appendix-L
3	Sulphur dioxide (SO <sub>2</sub> ) in µg/m <sup>3</sup>	5.7	80	IS: 5182 (Part-2)-2001,(RA-2017)
4	Nitrogen dioxide (NO <sub>2</sub> ) in µg/m <sup>3</sup>	26.0	80	IS: 5182 (Part- 6)-2006,(RA-2017)
5	Carbon monoxide (CO) in µg/m <sup>3</sup>	389.0	2000	IS: 5182 (Part-10)-1999,(RA-2014)
NOTE: Limit as per CPCB notification, New Delhi, 18th November 2009, for Ambient air quality				

Report prepared By :

for Qualissure Laboratory Services  
  
(Sudip Mukhuty)  
Authorised Signatory





# Qualissure Laboratory Services

361, Prantik Pally, 43/361, Bose P. kur Road, Kolkata -700107  
Email : qualissure@gmail.com; info@qualissure.com; Mob.No. 98312 87086 ; 9830093976



DOC NO : QLS/SAMP/08-A/00

## TEST REPORT

<b>Name &amp; Address Of the Customer :</b>	<b>Report No.</b>	: QLS/A/19-20/C/N-78
M/s. Technofab Engineering Limited	<b>Date</b>	: 10.06.2019
G-15, S.Saran, Bidhannagar	<b>Sample No.</b>	: QLS/A/19-20/N-78
Durgapur,	<b>Sample Description</b>	: Ambient Air
Bardhaman(West) - 713 212	<b>Date of performance</b>	: 06 – 10.06.2019
	<b>Sample Mark</b>	: Loyadihi
	<b>Ref No. Date</b>	: P3613/WO/16, Dt. 29.05.2019

## Analysis Result

Location	: Loyadihi
Date of sampling	: 04.06.2019
Sampling Done by	: J.Sahana
Sampling done as per	: CPCB Guidelines (Volume-1)
GPS Co-Ordination	: N-22°59'49.9" E-86°46'17.5"
Environmental Condition	: Clear & Sunny

Sl. No.	Pollutants	Result	Limit	Method of Test Reference
1	Particulate matter (<10µm) in µg/m <sup>3</sup>	109	100	IS: 5182 (Part-23)-(RA-2017)
2	Particulate matter (<2.5µm) in µg/m <sup>3</sup>	58	60	USEPA CFR-40,Part-50, Appendix-L
3	Sulphur dioxide (SO <sub>2</sub> ) in µg/m <sup>3</sup>	6.0	80	IS: 5182 (Part-2)-2001,(RA-2017)
4	Nitrogen dioxide (NO <sub>2</sub> ) in µg/m <sup>3</sup>	23.5	80	IS: 5182 (Part- 6)-2006,(RA-2017)
5	Carbon monoxide (CO) in µg/m <sup>3</sup>	366.1	2000	IS: 5182 (Part-10)-1999,(RA-2014)

**NOTE:** Limit as per CPCB notification, New Delhi, 18th November 2009, for Ambient air quality.

Report prepared By : *[Signature]*

for Qualissure Laboratory Services

*[Signature]*  
(Sudip Mukhuty)  
Authorised Signatory





# Qualissure Laboratory Services

361, Prantik Pally, 45/361, Bore Pukur Road, Kolkata - 700107  
Email : qualissure@gmail.com; info@qualissure.com ; Mob.No. 98312 87086 ; 9830093976



TC-6271

DOC NO : QLS/SAMP/08-C/00

## TEST REPORT

<b>Name &amp; Address Of the Customer :</b>	<b>Report No.</b>	: QLS/A/19-20/C/N-79
M/s. Technofab Engineering Limited	<b>Date</b>	: 10.06.2019
G-15, S.Sarani, Bidhdannagar	<b>Sample No.</b>	: QLS/A/19-20/N-79(A-C)
Durgapur,	<b>Date of performance</b>	: 06 – 10.06.2019
Bardhaman(West) - 713 212	<b>Sample Description</b>	: Noise Monitoring
	<b>Ref No. Date</b>	: P3613/WO/16, Dt. 29.05.2019

## Analysis Result of Noise

Sampling Done By: J.Sahana				
Sampling Guideline : As per IS: 9876: 1981 (RA-2001)				
Sample No	Date of Monitoring	Location	Leq dB (A) Day Time	Leq dB (A) Night Time
79A	04-05.06.2019	Kumor Bohal	51.1	44.7
79B		Project Site (Gobindpur)	60.1	52.9
79C		Loyacahi	53.2	44.8

## Permissible Limit

Category	Leq dB Day Time(A)	Leq dB Night Time(A)	<b>NOTE:</b> Day Time : 06.00 Hr. – 22.00 Hr. Night Time : 22.00 Hr. – 06.00 Hr.
Industrial	75	70	
Commercial	65	55	
Residential	55	45	
Ecological Sensitive	50	40	

Report Prepared By : *JS*

for Qualissure Laboratory Services

(Sudip Mukhuty)  
Authorised Signatory



**Package: WBDWSIP/DWW/NCB/ BK/02A/2018-19**

# Qualissure Laboratory Services



361, Prantik Pally, 45/361, Bose Pukur Road, Kolkata - 700107  
Email : qualissure@gmail.com; info@qualissure.com ; Mob.No. 98312 87086 ; 9830093976

TC-6271

DOC NO : QLS/SAMP/08-A/00

**TEST REPORT**

<b>Name &amp; Address Of the Customer :</b>	<b>Report No.</b>	: QLS/A/19-20/C/N-131
M/s. Larsen & Toubro Limited	<b>Date</b>	: 22.07.2019
Bankura Packages, C/o. Shila Dey,	<b>Sample No.</b>	: QLS/A/19-20/N-131
Ward No.9, Holding No.95/B/11,	<b>Sample Description</b>	: Ambient Air
Uttar Aurobindo Nagar, Junbedia More,	<b>Sample Mark</b>	: Raghunathpur-Indpur Block
P.O. + P.S.-Bankura, Dist.: Bankura,	<b>Ref. No. Date</b>	: Verbal
West Bengal-722 101		

**Analysis Result**

Location : Raghunathpur-Indpur Block			Date of sampling : 02-03.07.2019	
Sampling Done by: J.Sahana / S.Ghosh			Sampling done as per : CPCB Guidelines (Volume-1)	
Environmental Condition : Cloudy & Rainy			Average Temperature : 31°C	
Sl. No.	POLLUTANT	RESULT	LIMIT	METHOD OF TEST REFERENCE
1	Particulate matter (<10µm) in µg/m <sup>3</sup>	54	100	IS: 5182 (Part-23)- (RA-2017)
2	Particulate matter (<2.5µm) in µg/m <sup>3</sup>	31	60	USEPA CFR-40,Part-50, Appendix-L
3	Sulphur dioxide (SO <sub>2</sub> ) in µg/m <sup>3</sup>	5.0	80	IS: 5182 (Part-2)-2001, (RA-2017)
4	Nitrogen dioxide (NO <sub>2</sub> ) in µg/m <sup>3</sup>	16.4	80	IS: 5182 (Part- 6)- 2001, (RA-2017)
5*	Carbon Monoxide (CO) in mg/m <sup>3</sup>	0.185	2	IS: 5182 (Part- 10) :1999, (RA-2014)
6	Ammonia (NH <sub>3</sub> ) in µg/m <sup>3</sup>	<10.0	400	Air Sampling , 3 <sup>rd</sup> Edn -Method-401
7	Ozone (O <sub>3</sub> ) in µg/m <sup>3</sup>	<19.62	180	Air Sampling , 3 <sup>rd</sup> Edn -Method-411
8*	Lead (Pb) in µg/m <sup>3</sup>	<0.5	1	EPA IO-3.2 & 5.0
9*	Nickel (Ni) in µg/m <sup>3</sup>	<4.0	20	EPA IO-3.2
10*	Arsenic (As) in µg/m <sup>3</sup>	<1.0	6	Air Sampling , 3 <sup>rd</sup> Edn.Method 402 and APHA 22 <sup>nd</sup> Edition Part 3114B
11*	Benzene (C <sub>6</sub> H <sub>6</sub> ) in µg/m <sup>3</sup>	<2.08	5	IS: 5182 (Part- 11)
12*	Benzo (a) pyrene in µg/m <sup>3</sup>	<0.4	1	IS: 5182 (Part- 12)
<b>NOTE:</b> Limit as per CPCB notification, New Delhi, 18th November 2009, for Ambient air quality.				
* Not In Our NABL Scope				
Note: 1) Equipment Name/ID			: Respirable Dust Sampler	
2) Model No			: APM-860	
3) Make-			: Lata Envirotech Services	
4) SI No-			: 309-DTL-2017, S09-DTL-2017	
5) Calibration valid Up to			: 04.12.2019	

Report prepared By :

for Qualissure Laboratory Services

(Benimadhab Gorai)  
Authorized Signatory



# Qualissure Laboratory Services

361, Prantik Pally, 45/361, Bose Pukur Road, Kolkata - 700107  
Email : qualissure@gmail.com; info@qualissure.com; Mob.No. 98312 87086 ; 9830093976



TC-6271

DOC NO : QLS/SAMP/08-C/00

## TEST REPORT

<b>Name &amp; Address Of the Customer :</b>	Report No. : QLS/A/19-20/C/N-133C ✓
M/s. Larsen & Toubro Limited	Date : 22.07.2019 ✓
Bankura Packages, C/o. Shila Dey,	Sample No. : QLS/A/19-20/N-133C ✓
Ward No.9, Holding No.95/B/11,	Sample Description : Noise Monitoring ✓
Uttar Aurobindo Nagar, Junbedia More,	Ref No. Date : Verbal
P.O. + P.S.-Bankura, Dist.: Bankura,	
West Bengal-722 101	

## Monitoring Result of Noise

Sampling Done By: J.Sahana / S.Ghosh			
Sampling Guideline : As per IS: 9876: 1981 (RA-2001)			
Date of Monitoring	Location	Leq dB (A) Day Time	Leq dB (A) Night Time
02-03.07.2019	Raghunathpur-Indpur Block	41.6 ✓	35.3 ✓

Code/ Category	Leq dB Day Time(A)	Leq dB Night Time(A)	<b>NOTE:</b> Day Time : 06.00 Hr. – 22.00 Hr. Night Time : 22.00 Hr. – 06.00 Hr.
A/Industrial	75	70	
B/Commercial	65	55	
C/Residential	55 ✓	45 ✓	
D/Ecological Sensitive	50	40	

Report Prepared By

*Id*

for Qualissure Laboratory Services



(Benimadhab Gorai)  
Authorized Signatory



# Qualissure Laboratory Services

361, Pramick Pathy, 45/361, Bose Pukur Road, Kolkata - 700107  
Email : qualissure@gmail.com, info@qualissure.com : Mob.No. 98312 87086 : 9830093976



ULR No.: TC627119000000083P

DOC NO: QLS//SAMP/08-D/00

## TEST REPORT

<b>Name &amp; Address Of the Customer :</b>	Report No.	: QLS/W/19-20/C/N-54.
	Date	: 22.07.2019
M/s. Larsen & Toubro Limited Bankura Packages, C/o. Shila Dey, Ward No.9, Holding No.95/B/11, Uttar Aurobindo Nagar, Junbedia More, P.O. + P.S.-Bankura, Dist.: Bankura, West Bengal-722 101	Sample No.	: QLS/W/19-20/N-54
	Sample Description	: Drinking Water
	Sample Location	: Bankura,,Indpur (02A) -
	Sample Mark	: GLSR/BLOCK-Indpur ( 02A)/Raghunathpur
	Sample Drawn On	: 27.06.2019
	Date of Performance	: 28.06.2019-22.07.2019
	Ref No. Date	: Verbal

## Analysis Result

Sl. No.	Test Parameter	Test Method	IS 10500:2012		Result
			Acceptable Limit	Permissible Limit	
1	Colour in Hazen Units*	IS 3025 (Part 4): 1983 (RA 2012)	5	15	<1.0
2	Odour	IS 3025 (Part 5): 1983 (RA 2012)	Agreeable	Agreeable	Agreeable
3	pH Value at 25°C	IS 3025 (Part 11): 1984 (RA 2012)	6.5-8.5	No Relaxation	7.72
4	Taste	IS 3025 (Part 7 & 8): 1984 (RA 2002)	Agreeable	Agreeable	Agreeable
5	Turbidity in NTU	IS 3025 (Part 10): 1984 (RA 2012)	1	5	<1.0
6	Total Dissolved Solids (as TDS) in mg/l	IS 3025 (Part 16): 1984 (RA 2012)	500	2000	420
7	Aluminium (as Al) in mg/l*	IS 3025 (Part 55): 2003 (RA 2014)	0.03	0.2	<0.02
8	Ammonia (as NH <sub>3</sub> ) in mg/l	IS 3025 (Part 34): 1988(RA 2014)	0.5	No Relaxation	<0.5
9	Anionic Detergents(as MBAS) in mg/l	IS 13428-2005(Annex K)	0.2	1.0	<0.02
10	Barium (as Ba) in mg/l*	IS 15302:2003 RA 2014	0.7	No Relaxation	<0.1
11	Boron(as B) in mg/l	IS 13428-2005(Annex L)	0.5	1.0	<0.5
12	Calcium(as Ca) in mg/l	IS 3025 (Part 40): 1991(RA 2014)	75	200	57.6
13	Chloramines (as Cl <sub>2</sub> ) in mg/l*	IS 3025 (Part 26): 1986 (RA 2014)	4.0	No Relaxation	<0.1
14	Chloride(as Cl) in mg/l	IS 3025 (Part 32): 1988 (RA 2014)	250	1000	105.3
15	Copper(as Cu) in mg/l*	IS 3025 (Part 42): 1992(RA 2014)	0.05	1.5	<0.04
16	Fluoride(as F) in mg/l	IS 3025 (Part 60): 2008(RA 2013)	1.0	1.5	0.41
17	Free Residual Chlorine in mg/l	IS 3025 (Part 26): 1986(RA 2014)	0.2 (min.)	1.0 (min.)	0.2
18	Iron (as Fe) in mg/l	IS 3025 (Part 53): 1988(RA 2014)	0.3	No Relaxation	<0.05
19	Magnesium(as Mg) in mg/l	IS 3025 (Part 46): 1994(RA 2014)	30	100	28.8
20	Manganese (as Mn) in mg/l*	IS 3025 (Part 59): 2006 (RA 2014)	0.1	0.3	<0.05
21	Mineral Oil in mg/l*	IS 3025 (Part 39): 1991 (RA 2014)	0.5	No Relaxation	<0.5
22	Nitrate (as NO <sub>3</sub> ) in mg/l	IS 3025 (Part 34): 1988(RA 2014)	45	No Relaxation	3.37
23	Phenolic Compounds(as C <sub>6</sub> H <sub>5</sub> OH) in mg/l	IS 3025 (Part 43): 1992(RA 2014)	0.001	0.002	<0.001
24	Selenium(as Se) in mg/l*	IS 15303: 2003 (RA 2013)	0.01	No Relaxation	<0.01
25	Silver (as Ag) in mg/l*	IS 13428-2005 Annex J	0.1	No Relaxation	<0.005
26	Sulphate (as SO <sub>4</sub> ) in mg/l	IS 3025 (Part 24): 1986 (RA 2014)	200	400	25.73
27	Sulphide (as H <sub>2</sub> S) in mg/l	IS 3025 (Part 29): 1991 (RA 2014)	0.05	No Relaxation	<0.05
28	Total Alkalinity(as CaCO <sub>3</sub> ) in mg/l	IS 3025 (Part 23): 1986(RA 2014)	200	600	202
29	Total Hardness (as CaCO <sub>3</sub> ) in mg/l	IS 3025 (Part 21): 2013	200	600	364
30	Zinc(as Zn) in mg/l*	IS 3025 (Part 49): 1994 (RA 2014)	5	15	0.48





# Qualissure Laboratory Services

361, Prantik Pally, 45/361, Bose Pukur Road, Kolkata -700107  
Email: qualissure@gmail.com; info@qualissure.com; Mob.No. 98312 87086 ; 9830093976



Report No.	: QLS/W/19-20/C/N-54
Date	: 22.07.2019

31	Cadmium(as Cd) in mg/l*	IS 3025 (Part 41): 1992(RA 2014)	0.003	No Relaxation	<0.002
32	Cyanide(as Cn) in mg/l*	IS 3025 (Part 27): 1986(RA 2014)	0.05	No Relaxation	<0.01
33	Lead(as Pb) in mg/l*	IS 3025 (Part 47): 1994 (RA 2014)	0.01	No Relaxation	<0.005
34	Mercury(as Hg) in mg/l*	IS 3025 (Part 48): 1994(RA 2014)	0.001	No Relaxation	<0.001
35	Molybdenum as Mo in mg/l*	APHA 23rd Edition, 2017, 31138	0.07	No Relaxation	<0.05
36	Nickel as Ni in mg/l*	IS 3025(Part 54):2003 RA 2014	0.02	No Relaxation	<0.01
37	Polychlorinated biphenyls as PCBs in mg/l*	ASTMD 5175-91, RA 2003	0.0005	No Relaxation	<0.0004
38	Polynuclear hydrocarbons as PAH in mg/l*	APHA 23rd Edition, 6440:2017	0.0001	No Relaxation	<0.0001
39	Total Arsenic(as As) in mg/l	IS 3025 (Part 37): 1988 (RA 2014)	0.01	0.05	<0.01
40	Total Chromium (as Cr) in mg/l*	IS 3025 (Part 52): 2014( RA 2014)	0.05	No Relaxation	<0.02
41	Bromoform in mg/l*	APHA 6232	0.1	No Relaxation	<0.05
42	Dibromochloromethane in mg/l*	APHA 6232	0.1	No Relaxation	<0.05
43	Bromodichloromethane in mg/l*	APHA 6232	0.06	No Relaxation	<0.05
44	Chloroform in mg/l*	APHA 6232	0.2	No Relaxation	<0.05

\*Not in Our NABL Scope

Report prepared By : R. R. Roy

for Qualissure Laboratory Services

(Dr. Sutapa Bhowmik)  
Authorized Signatory



**Package: WBDWSIP/DWW/NCB/ BK/02B/2018-19**

# Qualissure Laboratory Services

361, Prantik Pally, 45/361, Bose Pukur Road, Kolkata -700107  
Email : qualissure@gmail.com; info@qualissure.com; Mob.No. 98312 87086 ; 9830093976



TC-6271

DOC NO : QLS/SAMP/08-A/00

**TEST REPORT**

<b>Name &amp; Address Of the Customer :</b>	Report No. : QLS/A/19-20/C/N-132
M/s. Larsen & Toubro Limited	Date : 22.07.2019
Bankura Packages, C/o. Shila Dey,	Sample No. : QLS/A/19-20/N-132
Ward No.9, Holding No.95/B/11,	Sample Description : Ambient Air
Uttar Aurobindo Nagar, Junbedia More,	Sample Mark : Taldangra-O.H.S.R. Sagarghati
P.O. + P.S.-Bankura, Dist.: Bankura,	Ref No. Date : Verbal
West Bengal-722 101	

**Analysis Result**

Location : Taldangra-O.H.S.R. Sagarghati		Date of sampling : 02-03.07.2019		
Sampling Done by: J.Sahana / S.Ghosh		Sampling done as per : CPCB Guidelines (Volume-1)		
Environmental Condition : Cloudy & Rainy		Average Temperature : 30°C		
Sl. No.	POLLUTANT	RESULT	LIMIT	METHOD OF TEST REFERENCE
1	Particulate matter (<10µm) in µg/m <sup>3</sup>	48 ✓	100	IS: 5182 (Part-23)- (RA-2017)
2	Particulate matter (<2.5µm) in µg/m <sup>3</sup>	26 ✓	60	USEPA CFR-40,Part-50, Appendix-L
3	Sulphur dioxide (SO <sub>2</sub> ) in µg/m <sup>3</sup>	4.5 ✓	80	IS: 5182 (Part-2)-2001, (RA-2017)
4	Nitrogen dioxide (NO <sub>2</sub> ) in µg/m <sup>3</sup>	15.8 ✓	80	IS: 5182 (Part- 6)- 2001, (RA-2017)
5*	Carbon Monoxide (CO) in mg/m <sup>3</sup>	0.168 ✓	2	IS: 5182 (Part- 10) :1999, (RA-2014)
6	Ammonia (NH <sub>3</sub> ) in µg/m <sup>3</sup>	<10.0	400	Air Sampling , 3 <sup>rd</sup> Edn -Method-401
7	Ozone (O <sub>3</sub> ) in µg/m <sup>3</sup>	<19.62	180	Air Sampling , 3 <sup>rd</sup> Edn -Method-411
8*	Lead (Pb) in µg/m <sup>3</sup>	<0.5 ✓	1	EPA IO-3.2 & 5.0
9*	Nickel (Ni) in µg/m <sup>3</sup>	<4.0	20	EPA IO-3.2
10*	Arsenic (As) in µg/m <sup>3</sup>	<1.0	6	Air Sampling , 3rd Edn.Method 402 and APHA 22 <sup>nd</sup> Edition Part 3114B
11*	Benzene (C <sub>6</sub> H <sub>6</sub> ) in µg/m <sup>3</sup>	<2.08	5	IS: 5182 (Part- 11)
12*	Benzo (a) pyrene in µg/m <sup>3</sup>	<0.4 ✓	1	IS: 5182 (Part- 12)
<b>NOTE:</b> Limit as per CPCB notification, New Delhi, 18th November 2009, for Ambient air quality. * Not In Our NABL Scope				
Note: 1) Equipment Name/ID 2) Model No 3) Make- 4) SI No- 5) Calibration valid Up to		: Respirable Dust Sampler : EC/RDS 1910, EC/GSA 1910 : Environment Care : RDS 1903-702,GSA 1903-702 : 05.04.2020 ✓		

Report prepared By

for Qualissure Laboratory Services

(Benimadhab Gorai)  
Authorized Signatory



# Qualissure Laboratory Services

361, Prantik Pally, 45/361, Bose Pukur Road, Kolkata - 700107  
Email: qualissure@gmail.com; info@qualissure.com; Mob.No. 98312 87086 ; 9830093976



TC-6271

DOC NO : QLS/SAMP/08-C/00

## TEST REPORT

<b>Name &amp; Address Of the Customer :</b>	<b>Report No. :</b>	QLS/A/19-20/C/N-133D
M/s. Larsen & Toubro Limited	<b>Date :</b>	22.07.2019
Bankura Packages, C/o. Shila Dey,	<b>Sample No. :</b>	QLS/A/19-20/N-133D
Ward No.9, Holding No.95/B/11,	<b>Sample Description :</b>	Noise Monitoring
Uttar Aurobindo Nagar, Junbedia More,	<b>Ref No. Date :</b>	Verbal
P.O. + P.S.-Bankura, Dist.: Bankura,		
West Bengal-722 101		

## Monitoring Result of Noise

Sampling Done By: J.Sahana / S.Ghosh			
Sampling Guideline : As per IS: 9876: 1981 (RA-2001)			
Date of Monitoring	Location	Leq dB (A) Day Time	Leq dB (A) Night Time
02-03.07.2019	Taldangra-O.H.S.R. Sagarghati	57.6	64.8

Code/ Category	Leq dB Day Time(A)	Leq dB Night Time(A)	<b>NOTE:</b> Day Time : 06.00 Hr. – 22.00 Hr. Night Time : 22.00 Hr. – 06.00 Hr.
A/Industrial	75	70	
B/Commercial	65	55	
C/Residential	55	45	
D/Ecological Sensitive	50	40	

Report Prepared By :

for Qualissure Laboratory Services



(Benimadhab Gorai)  
Authorized Signatory



# Qualissure Laboratory Services

361, Prantik Pally, 45/361, Bose, Pukur Road, Kolkata - 700107  
Email : qualissure@gmail.com, info@qualissure.com ; Mob No. 98312 87086 ; 9830093976



ULR No.: TC627119000000078P

DOC NO: QLS//SAMP/08-D/00

## TEST REPORT

<b>Name &amp; Address Of the Customer :</b>	<b>Report No.</b> : QLS/W/19-20/C/N-53
M/s. Larsen & Toubro Limited	<b>Date</b> : 10.07.2019
Bankura Packages, C/o. Shila Dey,	<b>Sample No.</b> : QLS/W/19-20/N-53
Ward No.9, Holding No.95/B/11,	<b>Sample Description</b> : Drinking Water
Uttar Aurobindo Nagar, Junbedia More,	<b>Sample Location</b> : Chenchurya, Taldangra(02B) ✓
P.O. + P.S.-Bankura, Dist.: Bankura,	<b>Sample Mark</b> : GLSR/BLOCK-Taldangra/Chenchurya
West Bengal-722 101	<b>Sample Drawn On</b> : 27.06.2019
	<b>Date of Performance</b> : 28.06.2019-10.07.2019
	<b>Ref No. Date</b> : Verbal


## Analysis Result

Sl. No.	Test Parameter	Test Method	IS 10500:2012		Result
			Acceptable Limit	Permissible Limit	
1	Colour in Hazen Units*	IS 3025 (Part 4): 1983 (RA 2012)	5	15	<1.0
2	Odour	IS 3025 (Part 5): 1983 (RA 2012)	Agreeable	Agreeable	Agreeable
3	pH Value at 25°C	IS 3025 (Part 11): 1984 (RA 2012)	6.5-8.5	No Relaxation	7.43
4	Taste	IS 3025 (Part 7 & 8): 1984 (RA 2002)	Agreeable	Agreeable	Agreeable
5	Turbidity in NTU	IS 3025 (Part 10): 1984 (RA 2012)	1	5	<1.0
6	Total Dissolved Solids (as TDS) in mg/l	IS 3025 (Part 16): 1984 (RA 2012)	500	2000	142
7	Aluminium (as Al) in mg/l*	IS 3025 (Part 55): 2003 (RA 2014)	0.03	0.2	<0.02
8	Ammonia (as NH <sub>3</sub> ) in mg/l	IS 3025 (Part 34): 1988 (RA 2014)	0.5	No Relaxation	<0.5
9	Anionic Detergents (as MBAS) in mg/l	IS 13428-2005 (Annex K)	0.2	1.0	<0.02
10	Barium (as Ba) in mg/l*	IS 15302:2003 RA 2014	0.7	No Relaxation	<0.1
11	Boron (as B) in mg/l	IS 13428-2005 (Annex L)	0.5	1.0	<0.5
12	Calcium (as Ca) in mg/l	IS 3025 (Part 40): 1993 (RA 2014)	75	200	19.2
13	Chloramines (as Cl <sub>2</sub> ) in mg/l*	IS 3025 (Part 26): 1986 (RA 2014)	4.0	No Relaxation	<0.1
14	Chloride (as Cl) in mg/l	IS 3025 (Part 32): 1988 (RA 2014)	250	1000	9.57
15	Copper (as Cu) in mg/l*	IS 3025 (Part 42): 1992 (RA 2014)	0.05	1.5	<0.04
16	Fluoride (as F) in mg/l	IS 3025 (Part 60): 2008 (RA 2013)	1.0	1.5	0.13
17	Free Residual Chlorine in mg/l	IS 3025 (Part 26): 1986 (RA 2014)	0.2 (min.)	1.0 (min.)	0.2
18	Iron (as Fe) in mg/l	IS 3025 (Part 53): 1988 (RA 2014)	0.3	No Relaxation	<0.05
19	Magnesium (as Mg) in mg/l	IS 3025 (Part 46): 1994 (RA 2014)	30	100	1.92
20	Manganese (as Mn) in mg/l*	IS 3025 (Part 59): 2006 (RA 2014)	0.1	0.3	<0.05
21	Mineral Oil in mg/l*	IS 3025 (Part 39): 1991 (RA 2014)	0.5	No Relaxation	<0.5
22	Nitrate (as NO <sub>3</sub> ) in mg/l	IS 3025 (Part 34): 1988 (RA 2014)	45	No Relaxation	0.51
23	Phenolic Compounds (as C <sub>6</sub> H <sub>5</sub> OH) in mg/l	IS 3025 (Part 43): 1992 (RA 2014)	0.001	0.002	<0.001
24	Selenium (as Se) in mg/l*	IS 15303: 2003 (RA 2013)	0.01	No Relaxation	<0.01
25	Silver (as Ag) in mg/l*	IS 13428-2005 Annex I	0.1	No Relaxation	<0.005
26	Sulphate (as SO <sub>4</sub> ) in mg/l	IS 3025 (Part 24): 1986 (RA 2014)	200	400	8.11
27	Sulphide (as H <sub>2</sub> S) in mg/l	IS 3025 (Part 29): 1991 (RA 2014)	0.05	No Relaxation	<0.05
28	Total Alkalinity (as CaCO <sub>3</sub> ) in mg/l	IS 3025 (Part 23): 1986 (RA 2014)	200	600	42
29	Total Hardness (as CaCO <sub>3</sub> ) in mg/l	IS 3025 (Part 21): 2013	200	600	56
30	Zinc (as Zn) in mg/l*	IS 3025 (Part 49): 1994 (RA 2014)	5	15	0.48

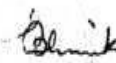
Report No.	: QLS/W/19-20/C/N-53
Date	: 10.07.2019

31	Cadmium(as Cd) in mg/l*	IS 3025 (Part 41): 1992(RA 2014)	0.003	No Relaxation	<0.002
32	Cyanide(as Cn) in mg/l*	IS 3025 (Part 27): 1986(RA 2014)	0.05	No Relaxation	<0.01
33	Lead(as Pb) in mg/l*	IS 3025 (Part 47): 1994 (RA 2014)	0.01	No Relaxation	<0.005
34	Mercury(as Hg) in mg/l*	IS 3025 (Part 48): 1994(RA 2014)	0.001	No Relaxation	<0.001
35	Molybdenum as Mo in mg/l*	APHA 23rd Edition, 2017, 3113B	0.07	No Relaxation	<0.05
36	Nickel as Ni in mg/l*	IS 3025(Part 54):2003 RA 2014	0.02	No Relaxation	<0.01
37	Polychlorinated biphenyls as PCBs in mg/l*	ASTMD 5175-91, RA 2003	0.0005	No Relaxation	<0.0004
38	Polynuclear hydrocarbons as PAH in mg/l*	APHA 23rd Edition, 6440:2017	0.0001	No Relaxation	<0.0001
39	Total Arsenic(as As) in mg/l	IS 3025 (Part 37): 1988 (RA 2014)	0.01	0.05	<0.01
40	Total Chromium (as Cr) in mg/l*	IS 3025 (Part 52): 2014( RA 2014)	0.05	No Relaxation	<0.02
41	Bromoform in mg/l*	APHA 6232	0.1	No Relaxation	<0.05
42	Dibromochloromethane in mg/l*	APHA 6232	0.1	No Relaxation	<0.05
43	Bromodichloromethane in mg/l*	APHA 6232	0.06	No Relaxation	<0.05
44	Chloroform in mg/l*	APHA 6232	0.2	No Relaxation	<0.05

\*Not in Our NABL Scope

Report prepared By : 

for Qualissure Laboratory Services

  
 (Dr. Sutapa Bhowmik)  
 Authorized Signatory



**Package: WBDWSIP/DWW/NCB/ BK/03/ 2018-19**

# Qualissure Laboratory Services

361, Prantik Pally, 45/361, Bose Pukur Road, Kolkata -700107  
Email: qualissure@gmail.com, info@qualissure.com : Mob.No. 98312 87086 : 9830093976



DOC NO : QLS/SAMP/08-A/00

**TEST REPORT**

<b>Name &amp; Address Of the Customer :</b>	Report No. : QLS/A/19-20/C/N-129
M/s. Larsen & Toubro Limited	Date : 10.07.2019
Bankura Packages, C/o. Shila Dey,	Sample No. : QLS/A/19-20/N-129
Ward No.9, Holding No.95/B/11,	Sample Description : Ambient Air
Uttar Aurobindo Nagar, Junbedia More,	Sample Mark : WTP Radhmadhabpur
P.O. + P.S.-Bankura, Dist.: Bankura,	Ref No. Date : Verbal
West Bengal-722 101	

**Analysis Result**

Location : WTP Radhmadhabpur-Gangajalghati			Date of sampling : 01-02.07.2019	
Sampling Done by: J.Sahana / S.Ghosh			Sampling done as per : CPCB Guidelines (Volume-1)	
Environmental Condition : Cloudy & Rainy			Average Temperature : 32°C	
Sl. No.	POLLUTANT	RESULT	LIMIT	METHOD OF TEST REFERENCE
1	Particulate matter (<10µm) in µg/m <sup>3</sup>	57 ✓	100	IS: 5182 (Part-23)- (RA-2017)
2	Particulate matter (<2.5µm) in µg/m <sup>3</sup>	31 ✓	60	USEPA CFR-40, Part-50, Appendix-L
3	Sulphur dioxide (SO <sub>2</sub> ) in µg/m <sup>3</sup>	5.3 ✓	80	IS: 5182 (Part-2)-2001, (RA-2017)
4	Nitrogen dioxide (NO <sub>2</sub> ) in µg/m <sup>3</sup>	20.4 ✓	80	IS: 5182 (Part- 6)- 2001, (RA-2017)
5*	Carbon Monoxide (CO) in mg/m <sup>3</sup>	0.184 ✓	2	IS: 5182 (Part- 10) :1999, (RA-2014)
6	Ammonia (NH <sub>3</sub> ) in µg/m <sup>3</sup>	<10.0 ✓	400	Air Sampling , 3 <sup>rd</sup> Edn -Method-401
7	Ozone (O <sub>3</sub> ) in µg/m <sup>3</sup>	<19.62 ✓	180	Air Sampling , 3 <sup>rd</sup> Edn -Method-411
8*	Lead (Pb) in µg/m <sup>3</sup>	<0.5 ✓	1	EPA IO-3.2 & 5.0
9*	Nickel (Ni) in µg/m <sup>3</sup>	<4.0 ✓	20	EPA IO-3.2
10*	Arsenic (As) in µg/m <sup>3</sup>	<1.0 ✓	6	Air Sampling , 3 <sup>rd</sup> Edn Method 402 and APHA 22 <sup>nd</sup> Edition Part 3114B
11*	Benzene (C <sub>6</sub> H <sub>6</sub> ) in µg/m <sup>3</sup>	<2.08 ✓	5	IS: 5182 (Part- 11)
12*	Benzo (a) pyrene in µg/m <sup>3</sup>	<0.4 ✓	1	IS: 5182 (Part- 12)
<b>NOTE:</b> Limit as per CPCB notification, New Delhi, 18th November 2009, for Ambient air quality.				
* Not In Our NABL Scope				
Note: 1) Equipment Name/ID			: Respirable Dust Sampler	
2) Model No			: APM-860	
3) Make-			: Lata Envirotech Services	
4) SI No-			: 309-DTL-2017, 509-DTL-2017	
5) Calibration valid Up to			: 04.12.2019 ✓	

Report prepared By

for Qualissure Laboratory Services

(Benimadhab Gorai)  
Authorized Signatory

- The results relate only to the item(s) tested.
- This Test Report shall not be reproduced without the permission of Qualissure Laboratory Services.
- The reserved part of sample(s), except perishable sample(s), shall be retained for 30 days from the date of issue of the Test Report.



# Qualissure Laboratory Services

361, Prantik Pally, 45/361, Bose Pukur Road, Kolkata - 700107  
Email : qualissure@gmail.com; info@qualissure.com; Mob.No. 98312 87086 ; 9830093976



TC-6271

DOC NO : QLS/SAMP/08-C/00

## TEST REPORT

<b>Name &amp; Address Of the Customer :</b>	<b>Report No.</b>	: QLS/A/19-20/C/N-133A
M/s. Larsen & Toubro Limited	<b>Date</b>	: 10.07.2019
Bankura Packages, C/o. Shila Dey,	<b>Sample No.</b>	: QLS/A/19-20/N-133A ✓
Ward No.9, Holding No.95/B/11,	<b>Sample Description</b>	: Noise Monitoring ✓
Uttar Aurobindo Nagar, Junbedia More,	<b>Ref No. Date</b>	: Verbal
P.O. + P.S.-Bankura, Dist.: Bankura,		
West Bengal-722 101		

## Monitoring Result of Noise

Sampling Done By: J.Sahana / S.Ghosh			
Sampling Guideline : As per IS: 9876: 1981 (RA-2001)			
Date of Monitoring	Location	Leq dB (A) Day Time	Leq dB (A) Night Time
01.07.2019	WTP Radhmadhabpur- Gangajalghati ✓	51.6 ✓	40.7 ✓

Code/ Category	Leq dB Day Time(A)	Leq dB Night Time(A)	<b>NOTE:</b> Day Time : 06.00 Hr. – 22.00 Hr. ✓ Night Time : 22.00 Hr. – 06.00 Hr. ✓
A/Industrial	75	70	
B/Commercial	65	55	
C/Residential ✓	55	45 ✓	
D/Ecological Sensitive	50	40	

Report Prepared By :

for Qualissure Laboratory Services

(Benimadhab Gorai)  
Authorized Signatory

**Package: WBDWSIP/DWW/NCB/BK/04/2018-19**

# Qualissure Laboratory Services

361, Prantik Pally, 45/361, Bose Pukur Road, Kolkata -700107  
Email: qualissure@gmail.com; info@qualissure.com; Mob.No. 98312 87086 ; 9830093976



TC-6271

DOC NO : QLS/SAMP/08-A/00

**TEST REPORT**

<b>Name &amp; Address Of the Customer :</b> M/s. Larsen & Toubro Limited Bankura Packages, C/o. Shila Dey, Ward No.9, Holding No.95/B/11, Uttar Aurobindo Nagar, Junbedia More, P.O. + P.S.-Bankura, Dist.: Bankura, West Bengal-722 101	<b>Report No.</b> : QLS/A/19-20/C/N-130 <b>Date</b> : 22.07.2019 <b>Sample No.</b> : QLS/A/19-20/N-130 <b>Sample Description</b> : Ambient Air <b>Sample Mark</b> : Desuriya Primary School <b>Ref No. Date</b> : Verbal
--	---

**Analysis Result**

Location : Desuriya Primary School	Date of sampling : 01-02.07.2019			
Sampling Done by: J.Sahana / S.Ghosh	Sampling done as per : CPCB Guidelines (Volume-1)			
Environmental Condition : Cloudy & Rainy	Average Temperature : 32°C			
Sl. No.	POLLUTANT	RESULT	LIMIT	METHOD OF TEST REFERENCE
1	Particulate matter (<10µm) in µg/m <sup>3</sup>	62	100	IS: 5182 (Part-23)- (RA-2017)
2	Particulate matter (<2.5µm) in µg/m <sup>3</sup>	34	60	USEPA CFR-40,Part-50, Appendix-I.
3	Sulphur dioxide (SO <sub>2</sub> ) in µg/m <sup>3</sup>	5.7	80	IS: 5182 (Part-2)-2001, (RA-2017)
4	Nitrogen dioxide (NO <sub>2</sub> ) in µg/m <sup>3</sup>	21.1	80	IS: 5182 (Part- 6)- 2001, (RA-2017)
5*	Carbon Monoxide (CO) in mg/m <sup>3</sup>	0.198	2	IS: 5182 (Part- 10) :1999, (RA-2014)
6	Ammonia (NH <sub>3</sub> ) in µg/m <sup>3</sup>	<10.0	400	Air Sampling , 3 <sup>rd</sup> Edn -Method-401
7	Ozone (O <sub>3</sub> ) in µg/m <sup>3</sup>	<19.62	180	Air Sampling , 3 <sup>rd</sup> Edn -Method-411
8*	Lead (Pb) in µg/m <sup>3</sup>	<0.05	1	EPA IO-3.2 & 5.0
9*	Nickel (Ni) in µg/m <sup>3</sup>	<4.0	20	EPA IO-3.2
10*	Arsenic (As) in µg/m <sup>3</sup>	<1.0	6	Air Sampling , 3 <sup>rd</sup> Edn.Method 402 and APHA 22 <sup>nd</sup> Edition Part 31148
11*	Benzene (C <sub>6</sub> H <sub>6</sub> ) in µg/m <sup>3</sup>	<2.08	5	IS: 5182 (Part- 11)
12*	Benzo (a) pyrene in µg/m <sup>3</sup>	<0.4	1	IS: 5182 (Part- 12)
<b>NOTE:</b> Limit as per CPCB notification, New Delhi, 18th November 2009, for Ambient air quality.				
* Not In Our NABL Scope				
Note: 1) Equipment Name/ID		: Respirable Dust Sampler		
2) Model No		: EC/RDS 1910, EC/GSA 1910		
3) Make-		: Environment Care		
4) SI No-		: RDS 1903-702,GSA 1903-702		
5) Calibration valid Up to		: 05.04.2020		

Report prepared By :

for Qualissure Laboratory Services



(Benimadhab Gorai)  
Authorized Signatory



# Qualissure Laboratory Services

361, Prantik Pally, 45/361, Bose Pukur Road, Kolkata-700107  
Email: [qualissure@gmail.com](mailto:qualissure@gmail.com); [info@qualissure.com](mailto:info@qualissure.com); Mob.No. 98312 87086 ; 9830093976



TC-6271

DOC NO : QLS/SAMP/08-C/00

## TEST REPORT

<b>Name &amp; Address Of the Customer :</b>	Report No.	: QLS/A/19-20/C/N-133B
M/s. Larsen & Toubro Limited	Date	: 22.07.2019
Bankura Packages, C/o. Shila Dey,	Sample No.	: QLS/A/19-20/N-133B
Ward No.9, Holding No.95/B/11,	Sample Description	: Noise Monitoring
Uttar Aurobindo Nagar, Junbedia More,	Ref No. Date	: Verbal
P.O. + P.S.-Bankura, Dist.: Bankura,		
West Bengal-722 101		

## Monitoring Result of Noise

Sampling Done By: J.Sahana / S.Ghosh			
Sampling Guideline : As per IS: 9876: 1981 (RA-2001)			
Date of Monitoring	Location	Leq dB (A) Day Time	Leq dB (A) Night Time
01-02.07.2019	Desuriya Primary School	45.1	36.1

Code/ Category	Leq dB Day Time(A)	Leq dB Night Time(A)	<b>NOTE:</b> Day Time : 06.00 Hr. – 22.00 Hr. Night Time : 22.00 Hr. – 06.00 Hr.
A/Industrial	75	70	
B/Commercial	65	55	
C/Residential	55	45	
D/Ecological Sensitive	50	40	

Report Prepared By :

for Qualissure Laboratory Services



(Benimadhab Gorai)  
Authorized Signatory



## **APPENDIX 11: FIELD LEVEL TRAININGS CONDUCTED DURING REPORTING PERIOD**

**Package - Design, Construction and Operation of Water Treatment Plant, Reservoirs, Transmission Mains and Pumping Stations works in Haroa, Rajarhat, and Bhangar II. (WBDWSIP/DWW/N-24P/NCB/01/2017-18)**

Toll Box Talk, WTP (5.09.19)

General tool box talk in shuttering and reinforcement work were discussed by the contractors to the attendee Labour, main discussion as in the following points

A. Potential Hazards:

1. Falling Hazards.
2. Electrical Hazards.

B. Control Measure

1. Properly used full body harness.
2. All electrical connection properly used and in case of emergency use RCCB.

**SAFETY TOOL BOX TALK TRAINING**  
Furnace Fabrica India Ltd.

LOCATION: Chemical Building DATE: 25/10/19  
NAME OF SUPERVISOR/ENGINEER: Sudipta Das  
NO OF WORKERS: (11)

ACTIVITIES	POTENTIAL HAZARDS	CONTROL MEASURES
1. Shuttering work.	1. Falling hazards	1. Properly used full body harness
2. Reinforcement work	2. Electrical hazards	2. All electrical connection checked properly and also used PPEs.

MANDATORY PPEs - SAFETY HELMET, SHOE, REFLECTIVE JACKETS, GLOVES, GOGGLES, NOSE MASK, SAFETY BELTS, APRONS

SL NO	NAME	DESIGNATION	SEX	SIGNATURE
1	Indranil SK	Helper	M	
2	Kamrul SK	Helper	M	
3	Apel SK	Helper	M	
4	Sahabul SK	Helper	M	
5	Mijanul SK	Helper	M	
6	Sadful SK	Helper	M	
7	Subir Das	Helper	M	
8	Rabiul SK	SUP	M	
9	Jijarul Mandal	Helper	M	
10	Alam SK	Helper	M	
11	Raju SK	Helper	M	
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				

CONTRACTOR SITE ENGINEER: Sudipta Das  
CONTRACTOR SAFETY OFFICER: Sudipta Das

**Package: Construction program for Design and Construction of Over Head Reservoir Including Water Supply Distribution Network and Metering work in Haroa Block (Contract Package-WBDWSIP/DWW/NCB/N24P/02A/2017)**

Induction Training zone-18(OHR)-Haroa (28.10.19)

General induction on housekeeping and safety during excavation work discussed by the contractors to the attendee Labour, main discussion was on the following points:

1. No horseplay on the job. Injury or termination or both can be the result.

2. Personal safety equipment must be worn as prescribed for each job, such as: safety glasses for eye protection, helmet at all times within the confines of the construction area where there is a potential for falling materials or tools, gloves when handling materials, and safety shoes are necessary for protection against foot injuries.
3. Sanitation facilities have been or will be provided for your use. Defacing or damaging these facilities is forbidden.
4. A good job is a clean job, and a clean job is the start of a safe job. So, keep your working area free from rubbish and debris.
5. Trenches over five feet deep must be shored or sloped as required. Keep out of trenches or cuts that have not been properly shored or sloped. Excavated or other material shall not be stored nearer than two feet from the edge of the excavation

INDUCTION/TOOL BOX TALK FORMAT			
Name of the Project : DWS HAROA			
Location : <u>GOPALPUR (Z-12)</u>			
Date & Time : <u>28.10.2019</u>			
Trainer : <u>Dr. Bhowmik</u>			
Topics Discussed : Masonry Work/ Pipe laying/ Rod Cutting and Bending/ Shuttering/ Concreting/ Excavation/ Grinding and Welding/ Housekeeping/ Electrical hazards/ ICB and Hydras			
Sl. No.	Name / Age / Sex	Position	Signature
1	SHARUL SK / 30 / M	Helper	[Signature]
2	SHAFIKUR SK / 37 / M	-do-	[Signature]
3	MASUMUL SK / 32 / M	-do-	[Signature]
4	SABIR SK / 35 / M	-do-	[Signature]
5	SHAKIB SK / 35 / M	-do-	[Signature]
6	MASUMUL SK / 24 / M	-do-	[Signature]
7	SABIR SK / 28 / M	-do-	[Signature]
8	SABIRUN HASSE / 24 / M	-do-	[Signature]
9	KANTU SK / 41 / M	-do-	[Signature]
10	SUNNAT SK / 21 / M	-do-	[Signature]
11	NATIBUL SK / 32 / M	-do-	[Signature]
12	NILAN SK / 27 / M	-do-	[Signature]
13	SALU SK / 36 / M	Helper	[Signature]
14	TIARUL SK / 29 / M	-do-	[Signature]
15	PANTU SK / 30 / M	-do-	[Signature]
16	MASUMUL SK / 35 / M	-do-	[Signature]
17	SILON / 21 / M	-do-	[Signature]
18	BERARUL HASSE / 41 / M	Cook	[Signature]
<div style="display: flex; justify-content: space-between;"> <div> <p>Name and Signature of Safety Officer- <u>[Signature]</u></p> <p>Signature of Trainer- <u>[Signature]</u></p> </div> <div> <p>Name and Signature of Site Supervisor/Site Incharge <u>[Signature]</u></p> </div> </div>			

**Package: Construction program for Design and Construction of Over Head Reservoir Including Water Supply Distribution Network and Metering work in Bhargar Block- II (Contract Package- WBDWSIP/DWW/NCB/N24P/02B/2017)**

Tool Box Talk, zone-10(Pipe Line)-Bhargar-II (5.09.19)

General tool box talk in construction of superstructure at zone 4 (OHR) work discussed by the contractors to the attendee Labour, main discussion was on the following points:



1. Goggles: Goggles are used when there is a possibility of having a substance splashed in the eyes or airborne particles.
2. Face Shields: Face Shields are used to protect the face and eyes from flying objects but may require additional protection against high impact objects for the eyes, Such as; Goggles or Safety Glasses.
3. Cutting / Welding: When cutting with a torch you should use Shade 5 or greater eye protection and when welding, a welding helmet with an appropriate lens should be worn.
4. Barricade: Barricade danger areas. Guard rails or perimeter cables may be required
5. Ladder: Portable ladders in use shall be equipped with safety feet unless ladder is tied, blocked otherwise secured. Step ladders shall not be used as a straight ladder

NCC		INDUCTION/TOOL BOX TALK FORMAT ✓	
<b>Name of the Project:</b> Design and Construction of Overhead Reservoir including Water Supply Distribution Network and Metering Works in Bhanganil Block.			
<b>Location:</b>		ZONE- 04 OHR	
<b>Date &amp; Time:</b>		16/9/19	
<b>Trainer:</b>		Nitin	
<b>Topics Discussed:</b> Pipe Laying/Rod cutting and Bending/Shuttering/Concreting/Excavation/Grinding and Welding/Housekeeping/Electrical Hazards/ICB and Hydra/piling.			
Sl. No.	Name	Position	Signature
1	Charan Bhatnagar	Supervisor	[Signature]
2	Tahin Samanta	Helper	Tahin
3	Anand Bera	Fitter	[Signature]
4	Ranait Adak	Helper	[Signature]
5	Hari Puri Samanta	Helper	[Signature]
6	Gauranga Samanta	Helper	[Signature]
7	Mahadev Paul	Helper	[Signature]
8	Raju	Fitter	[Signature]
9	Visay	Fitter	[Signature]
10	Geopriyath Maiti	Helper	[Signature]
<b>Name and Signature of Safety Officer:</b> _____ <b>Signature of Trainer:</b> [Signature] <b>Name and Signature of Site Supervisor/Site Incharge:</b> [Signature]			

## NCC LIMITED

## DWS HAROA

SUBJECT: Tool Box Talk

PLACE: Zone-01 Amta

DATE &amp; TIME: 20-03-19

NAME OF FACULTY: SARADINBU SAIN

Sl No	Name of Participants	Age	Design	Sign
1	Bikayh mahato	22	Helper	
2	monirul sk	20	Mistini	MONIRUL SK
3	Sudipta Bhowmik	31	Carpenler	Bhowmik
4	Pankaj Mandal	23	Carpenler	
5	Asi Atit pusad mahato	36	Laber-fitter	A Mahato
6	Ekbal Hossan	25	Mistini	E Kbal Hossan
7	Safik Sk	18	Laber	SAFIK-SK
8	Gona S mahato	45	Laber	Gona S
9	kamu Sk	19	Laber	
10	Motazun Rahman	50	Laber	M. Rahman
11	USEN Sk	19	Laber	
12	Bangshwan Mapanu	42	Supervisor	Bangshwan
13				
14				
15				
16				
17				
18				
19				
20				



Sign of faculty



Sign of Site Engineer



Sign of Safety Engineer

Date: APR 27<sup>th</sup> 2019

## DWS HAROA

Sl. No	Name	Designation	Sign
1	Mr. Ramesh Kumar Singh	PM	
2	Mr. Ashok Kumar	DPM	
3	Mr. Sharan Kumar Bose	Safety Manager	
4	Mr. Sanjay Bharti	SE(QS)	
5	Mr. Sanjeev Kumar Singh	SE	
6	Mr. Sanjoy Kumar Meur	Dpty. Manager(Account)	
7	Mr. Kalyan Nag	Asst. Manager(Admin)	
8	Mr. Arvind Kumar	Asst. Manager(Store)	
9	Mr. Mukesh Pandey	Asst. Manager(EDP)	
10	Mr. Malay Sain	Survey-IV	
11	Mr. Souvik Sarkar	JE	
12	Mr. Saradindu Gain	JE-Safety	
13	Mr. Ankush Ghosh	JE-QC	
14	Mr. Satyam Singh	JE	
15	Mr. Soham Roy	JE	
16	Mr. Sourav Sarder	Office Store	
17	Mr. Suman Paul	GET	
18	Mr. Gulam Murtuja Mandal	Supervisor	
19	Mr. Krisna Pada Shingha	Forman	
20	Mr. Mosatafa Kumar Mandal	Feild Supervisor	
21	Mr. Tapendu Pramanik	Supervisor	
22	Mr. Pratap Kumar Sahoo	Mechanic	
23	Mr. Markhendey Giri	Supervisor	
24	Mr. Ramesh Kumar	Hydra Operator	
25	Mr. Sanjit Kumar Kundu	Driver	
26	Mr. Md Hanif	Driver Helper	

Safety Induction Training  
Completed by  
Date  
(Signature)



**Package: Construction program for Design and Construction of Over Head Reservoir Including Water Supply Distribution Network and Metering work in Bhangar Block- II (Contract Package- WBDWSIP/DWW/NCB/N24P/02B/2017)**

**NCC LIMITED**

**DWSIP BHANGAR II BLOCK**

**SUBJECT: TOOL BOX TALK TRAINING**


**PLACE:** Swasthyan Gach, Bhangar-II, Zone-4

**DATE & TIME:** 29/04/19, 12:00PM

**NAME OF FACULTY:** Chinmaya Kar

Sl No	Name of Participants	Age	Design	Sign
1	Sundarp Mazumdar	22	G.E.T	Sundarp
2	Mirza	24	ICB driver	Mirza
3	Rajiv Kumar	38	ICB driver	Rajiv Kumar
4	Atim - Head labor	25	Head labor	Atim
5	Munirul	20	Helper	Munirul
6	Shamirul	26	Helper	Shamirul
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

Sign of faculty:  29/04/19

Sign of Site Engineer:  29/04/19

Location: DW5 BHANGAR II

STAFFS ATTENDED THE TRAINING:-

Sl. No	Name	Designation	Sign
1	Arunaba Mandal	QA/QC, JE	
2	Sulimayy Chulap	Store Officer	
3	Ankush Singh	A.E	
4	Bhupendra Prasad	Superintendent (Survey)	
5	Avish Paul	Q.S. JE	
6	Shashilek Kumar	Asst Manager - stores	
7	K.K. Chatterjee	D.M. - P.C.S.	
8	Chinnappa Rao	Asst. Supt.	
9	Abhinav Kumar (funder)	Asst Manager - Admin	
10	Ganesh Paul	D.P.M.	
11	Sunil Kumar	G.E.-I	
12	S.A. Ansari	D.P.M.	
13	M.D. Sengupta	A.E	
14	Shubhendra Sharma	Asst. Field Asst.	

Name: MR. GOUTAM PAUL  
Site Incharge, Bahangar II (NCC)

Name: SHARAN KR. BOSE.  
Induction Training Imparted By: (NCC)

**Training conducted by DSISC**

**Package: Construction program for Design and Construction of Over Head Reservoir Including Water Supply Distribution Network and Metering work in Haroa Block (Contract Package-WBDWSIP/DWW/NCB/N24P/02A/2017)**

**Report of the First Aid Training Programme**

**Conducted by the DSISC Safeguard Team**

**Date: 20th September 2019**

**Venue: Site of the Distribution Pipeline works at Zone 5, Haroa**

Issues:

Handholding Training on the basics of First Aid

The participants were imparted handholding training and orientation on how to provide First-aid when necessary. Mainly discussed on a) what is First Aid and why First Aid; b) different types of wounds – Contused, Lacerated, Incised and Punctured and the concept of CLIP the Wound; c) for remedies to know the Direct and Indirect Pressure and Pressure Points – Carotid, Sub clavian, Brachial & Femoral; d) Practical session on Concept and use of Roller bandage, narrow and broad bandage using Triangular bandage; e) Reef Knot/Doctor's Knot; f) Simple Spiral & Reverse Spiral; g) Figure of 8 bandage; h) Chin & Head Bandage; i) Arm Sling, Triangular Sling, Collar & Cuff Sling; j) Use of Splint; They were given hand holding training on use of Roller bandage and Triangular bandage.

Sl. No	Name	Designation	Contact No
1	Lal Md. Sk	Supervisor	8372828837
2	Sakil Khan	Labour	
3	Kabir Sk	Labour	8158855346
4	Sattar Sk	Labour	7063372497
5	Heral Khan	Labour	
6	Ashadul Sk	Labour	7319348592
7	Humayun Sk	Labour	7667977749
8	Mintu Sk	Labour	
9	Mujibar Sk	Labour	7586867635
10	Saruddin Sk	Labour	
11	Moshbbor Khan	Labour	
12	Krishnapada Sing	Foreman, NCC	9735949496
13	Abhijit Sengupta	Labour Contractor	9836980302
14	Arijit Saha	AE, NCCL, Haroa	9732756414
15	Sharadindu Gain	Safety Officer, NCCL, Haroa	9775459481
16	Rohan Kumar	Support Staff, Environmental Safeguard	7364804746
17	Dilip Kumar Roy	Support Staff, Social Safeguard	9933996977
18	Rekha Dubey	Support Staff, Social Safeguard	9903325701

**Package: Construction program for Design and Construction of Over Head Reservoir Including Water Supply Distribution Network and Metering work in Bhangar Block- II (Contract Package- WBDWSIP/DWW/NCB/N24P/02B/2017)**

**Report of the HIV/AIDS Awareness Programme****Conducted by DSISC Safeguard Team,****Date: 23<sup>rd</sup> September 2019****Venue: Site of the Distribution Pipeline works at Zone 12, Bhangar II****Members present:**

Sl.	Name	Designation
01.	Md. Ashraf Hossin	Labour
02.	Laltu Sk	Labour
03.	Safikul Sk	Labour
04.	Asharul Mallick	Labour
05.	Jamjam Sk	Labour
06.	Abu Hanif Sk	Labour
07.	Swapan Das	Labour
08.	Balajan Sk	Labour
09.	Jaynul Sk	Labour
10.	Hivaddul Haque	Labour
11.	Sarikul Sk	Labour
12.	Sahajamal Sk	Labour
13.	Ohab Ali Molla	Labour
14.	Sher Ali Sk	Labour
15.	Chand Sk	Labour
16.	Sahil Sk	Labour
17.	Titu Sk	Labour
18.	Akbar Sk	Labour
19.	Nitin Sarapate	Safety Officer, NCCL
20.	Ramver Yadav	Supervisor, NCCL
21.	Mr Rohan Kumar	Support Staff, Environment Safeguard Team
22.	Ms Rekha Dubay	Support Staff, Social Safeguard Team
23.	Mr Dilip Kumar Roy	Support Staff, Social Safeguard Team
24.	Swarup Saha	Labour
25.	Nayan Sk	Labour
26.	Ajharuddin Sk	Labour
27.	Remaul Sk	Labour
28.	S V S Swamy	NCCL
29.	S K Bose	Safety Manager, NCCL

**Issues:**

Orientation has given to the participants on AIDS and HIV, and explained what it is.

This disease damages immune system's ability to fight off other infections.

HIV is found in certain body fluids. It has been discussed that, the specific ways of transmitted HIV through 1) Unsafe sex - the most common route of infection, 2) Infection from mother to child - HIV can pass from a pregnant woman to her child during the pregnancy, birth or breastfeeding, 3) Contact with infected blood (Shares needles, syringes and other items for injecting drugs, Contact with infected blood or other fluids through needle sticks or cuts)

It also has been highlighted that, they can prevent HIV / AIDS by reducing sexual risk and drug education.

- He/she can reduce risk by just practicing intercourse with each other only. A condom is the most effective form of HIV prevention, if any of the partner have physical relation with more than one.



- For drug addicts, the best way to quit addiction, not to share needless & syringe with any other. Always be careful not to contact the infected blood or other fluids through needle sticks or cuts.
- HIV Screening During Pregnancy - All pregnant women should have a blood test to check if they have HIV as part of regular antenatal screening.
- Ask the barber to use new blade for every single user.
- Be sure that always new needle is being used for injection.

As an HIV-positive person, he/she cannot transfer AIDS by kissing, hugging, shaking hands, sporting or exercising, eating and drinking, sharing office equipment or using the same bath or toilet. (Deep kissing or French kiss can go to HIV if he/she have a bleeding mouth)

**Package: Construction program for Design and Construction of Over Head Reservoir Including Water Supply Distribution Network and Metering work in WTP (Contract Package WBDWSIP/DWW/NCB/N24P/01/2017)**

**Report of the First Aid Training Programme  
Conducted by DSISC Safeguard Team**

**Date: 21<sup>st</sup> September 2019**

Venue: Site of the Distribution Pipeline works at WTP Site, Rajarhat

**Members present:**

Sl.	Name	Designation	Contact No
01.	Subhankar Chattopadhyay	Safety Manager, FFIL	6290016411
02.	Injamanul Sk	Labour	-
03.	Robiul Sk	Labour	-
04.	Alam Sk	Labour	-
05.	Mijarul Sk	Labour	-
06.	Kamrul Sk	Labour	-
07.	Apel Sk	Labour	-
08.	Sahabul Sk	Labour	-
09.	Jahirul Sk	Labour	-
10.	Saiful Sk	Labour	-
11.	Golam Gaus	Labour	-
12.	Jiyarul	Labour	-
13.	Raju Sk	Labour	-
14.	S Das	Civil Engineer, FFIL- RIL	9046970333
15.	Ardhendu Basak	Planning Engineer, FFIL- RIL	8320423346
16.	Kaustav Sain	Civil Engineer, FFIL- RIL	6292128008
17.	Dibakar Ghosh	Surveyor, FFIL- RIL	8759214040
18.	Kalyan Basu	Support Engineer, DSISC	8981047556
19.	Partha Sarathi Das	Support Engineer, DSISC	9735531384
20.	Dilip Kumar roy	Support Staff, social safeguard, DSISC	9933996977
21.	Rekha Dubay	Support Staff, social safeguard, DSISC	9903325701
22.	Rohan Kumar	Support Staff, environment safeguard, DSISC	7364804746

**Issues:**

Handholding Training on the basics of First Aid

The participants were imparted handholding training and orientation on how to provide

First-aid when necessary. Mainly discussed on a) what is First Aid and why First Aid; b) different types of wounds – Contused, Lacerated, Incised and Punctured and the concept of CLIP the Wound; c) for remedies to know the Direct and Indirect Pressure and Pressure Points – Carotid, Subclavian, Brachial & Femoral; d) Practical session on Concept and use of Roller bandage, narrow and broad bandage using Triangular bandage; e) Reef Knot/Doctor's Knot; f) Simple Spiral & Reverse Spiral; g) Figure of 8 bandage; h) Chin & Head Bandage; i) Arm Sling, Triangular Sling, Collar & Cuff Sling; j) Use of Splint; They were given hand holding training on use of Roller bandage and Triangular bandage

**ENVIRONMENTAL SAFEGUARD – INSPECTION CUM ENVIRONMENT,  
HEALTH & SAFETY TRAINING PROGRAM FOR CONTRACTORS  
ZONE-5 (Tegharia), HAROA BLOCK**

Inspection cum orientation training program has been conducted on safeguard compliance issues and application of Environmental Management Plan (EMP) during Implementation of the project. Inspection cum Safeguard orientation program has been arranged on the site of pipeline laying at zone-5 (Tegharia) of Haroa block on 2<sup>nd</sup> of August 2019. Program has been conducted by Environment Specialist of DSISC. During the awareness session following issues were discussed with site supervisor and workers for compliance as below.

**Health & Safety requirement**

1. Currently valid PUC Certificate for all vehicles and equipment's engaged in the project
2. Grievance/complaint register at all work sites/camp office as per standard format. We know that grievance register available at site office but now supervisor engineer of concerned contractor to carry that register for recording of local complaint
3. Board showing name and address of Contractor and Emergency Contacts at all work sites
4. Accident register at site along with first-aid box.
5. Display of Safety Officers' name and telephone number at work sites
6. First aid boxes with prescribed items only at all work sites/camp site offices. Standardization of first aid box is required.
7. Toilet & Drinking water facilities for workers at site.

**Instructions for Contractor/ Supervisor- Environmental Safeguard**

- Setting up labour camp with proper sanitation condition, solid waste management facility and sufficient drinking water supply.
- Proper disposal of other construction waste –Reuse in other projects
- Labour camp locations should be selected in consultation with PIU and concerned Supervisor Engineer of DSISC
- Proper storage of construction materials - wastage of materials to be checked. Slope should be avoided
- Scheduling of work without any social impact – movement of pedestrian (particularly during festive seasons) or other disturbances etc.
- Regular water sprinkling (at least 2-3 times in a day during dry period) at pipelaying site for arresting of dust – record should be maintained at site
- Personnel safety of workforce – nose mask (dust producing area), helmet, gloves, gumboots, at working sites (as per site condition).
- Instruction to material supplier/ contractor to arrange pollution under control (PUC) certificate for material carrying vehicles, equipment and machinery – Timely Renewal of PUC
- If DG set is installed at site having capacity more than 5 KVA then no objection certificate from West Bengal Pollution Control Board should be obtained
- Regular maintenance of noise producing machinery
- Use of safety tape/ barricade/ caution board at working sites with proper signages
- Proper drainage of waste water/ rain water from working sites

- Arrangement of First Aid box at site, site office and working area
- At all working sites there should be a display board which shows location and contact phone number of Contractor and Emergency Contacts.
- Awareness program on HIV/AIDS
- Maintain chance find protocol for archeological objects
- No employment of child Labour below 18 yrs. age
- Carry out monitoring work baseline & during construction (air, water, noise) as per schedule in EMP
- Regular public consultation at all sensitive receptor within project influence area

**ENVIRONMENTAL SAFEGUARD – REVIEW MEETING AND ENVIRONMENT,  
HEALTH & SAFETY TRAINING PROGRAM FOR CONTRACTORS  
ZONE-4 (SWASTANGACHI), BHANGAR BLOCK-II**

Safeguard review meeting cum safeguard orientation training program has been conducted on safeguard compliance issues and application of Environmental Management Plan (EMP) during Implementation of the project.

Meeting cum Safeguard orientation program has been arranged in the premises of operated site zone-13 (Swastangachi) of Bhangar block on 22nd of October 2019. Awareness training was conducted by Environment Specialist of DSISC. In that review meeting cum safeguard orientation training program Environment- safety officer and labours of contractor were present. Issues discussed for compliance as below.

**Health & Safety requirement**

1. Currently valid PUC Certificate for all vehicles and equipment's engaged in the project
2. Grievance/complaint register at all work sites/camp office as per standard format. We know that grievance register available at site office but now supervisor engineer of concerned contractor to carry that register for recording of local complaint
3. Billboard showing name and address of Contractor and Emergency Contacts at all work sites
4. Accident register at camp office
5. Medical examination report of workmen every six month.
6. Display of Safety Officers' name and telephone number at work sites
7. First aid boxes with prescribed items only at all work sites/camp site offices. Standardization of first aid box is required.
11. Toilet & Drinking water facilities at work sites/camps
12. Firefighting facilities at vulnerable work sites/camp office site/combustible material storage site
13. Rubber mat at high voltage electrical switch board area
14. Drawing showing locations of first aid boxes, firefighting facilities, etc. updated every Month

**Instructions for Contractor/ Supervisor- Environmental Safeguard**

- Setting up camp office with proper sanitation condition, solid waste management facility and sufficient drinking water supply.
- Removal / disposal of overburden/surplus earth/ stone, sludge materials at earliest without any accumulation at working sites - Use of overburden materials at site (preferred option)
- Proper disposal of other construction waste –Reuse in other projects
- Labour camp should be selected in consultation with PIU and concerned Supervisor Engineer of DSISC
- Proper storage of construction materials - wastage of materials to be checked. Slope should be avoided
- Scheduling of work without any social impact – movement of pedestrian (particularly during festive seasons) or other disturbances etc.
- Regular water sprinkling (at least 2-3 times in a day during dry period) at construction site for arresting of dust – record should be maintain at site

- Covering of materials carrying vehicles in case of transportation of wind- blown material like sand
- Personnel safety of workforce – use of ear plugs (noise producing area), nose mask (dust producing area), helmet, gloves, gumboots, safety belt etc. at working sites (as per site condition).
- Instruction to material supplier/ contractor to arrange pollution under control (PUC) certificate for material carrying vehicles, equipment and machinery – Timely Renewal of PUC
- In case of purchase of stone aggregates consent to establish and operate of stone crusher should be collected from supplier
- If DG set is installed at site having capacity more than 5 KVA then no objection certificate from West Bengal Pollution Control Board should be obtained
- Regular maintenance of noise producing machinery
- Arrangement of enclosure for noise producing equipment like generator, concrete mixture
- Use of safety tape/ barricade/ caution board at working sites with proper signages
- Proper drainage of waste water/ rain water from working sites
- Arrangement of First Aid box at camp site, site office and working area
- At all working sites there should be a display board which shows location and contact phone number of Contractor and Emergency Contacts.
- Awareness program on HIV/AIDS
- Maintain chance find protocol for archeological objects
- No employment of child Labour below 18 yrs. age
- Carry out monitoring work base line & during construction (air, water, noise) as per schedule in EMP
- Regular public consultation at all sensitive receptor within project influence area



**West Bengal Drinking Water Sector Improvement Project**

Environmental and Social Safeguard Training & Awareness – Participant List

Venue: ZONE-15 (JHINKIA), HAROA BLOCK  
2019

Date: 27 June

Issues:- Training on First Aid

The participants were given training and orientation on how will be handle the any accidental situation in field. There some given hand holding training on uses of Roller bandage and Triangular bandage.



Discuss on First Aid

Dt: 27.6.2019.

## FIRST AID TRAINING PROGRAMME

PLACE ZONG-15

CONDUCTED BY: DSISC

PERSONS ATTENDED THE PROGRAMME

SL. NO.	NAME OF THE STAFF/WORKMEN	DESIGNATION	SIGNATURE
1	SOLAIM SK.	HELPER	for SK
2	KALU SK.	-do-	SK
3	ILLIAS SK.	-do-	ILLIAS SK
4	ITTON SK.	-do-	ITTON SK
5	DABLU SK.	-do-	Dablu
6	BABU SK.	-do-	
7	ZAMAN SK.	MISSTRI	27.6.2019
8	SARADINDU GARD	Safety Officer	
9	MOSTAFA KAMAR	SUP RCC	Mommu
10	S. N. BOSE	Safety Manager	for base
11	ROHAN K.P.	for Kanchan	for base
12	DILIP ROY.	Support Staff	for base
13		Support Staff	for base
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			
26			

**Report of the First Aid Training Programme  
Conducted by the Social and Environmental Safeguard Team**

**Date: 25th September 2019**

**Venue: Site of the Distribution Pipeline works at Zone 12, Bhangar II  
By Dilip Kumar Roy, Rekha Dubey and Rohan Kumar (Support Staff – Social &  
Environment Safeguard Team)**

**Prepared by Dilip Kumar Roy, Support Staff – Social Safeguard Team**

Sl. No	Name	Designation
1	Md. Ashraf Hossain	Labour
2	Laltu Sk.	Labour
3	Safikul Sk	Labour
4	Asharul Mallick	Labour
5	Jamjam Sk	Labour
6	Abu Hanif Sk	Labour
7	Swapan Das	Labour
8	Balajaw Sk	Labour
9	Jaynal Sk	Labour
10	Hivadul Haque	Labour
11	Sarikul Sk	Labour
12	Sahajamal Sk	Labour
13	Ohab Ali Molla	Labour
14	Sher Ali Molla	Labour
15	Chand Sk	Labour
16	Sahil Sk	Labour
17	Titu Sk	Labour
18	Akbar Sk	Labour
19	Nitin Sarpdy	Safety Offocer, Bhangar II, NCCL
20	Ramver Jadav	SOP, Bhangar II, NCCL
21	Rohan Kumar	Support Staff, Environment Safeguard
22	Rekha Dubey	Support Staff, Social Safeguard
23	Dilip Kumar Roy	Support Staff, Social Safeguard
24	Swarup Saha	Labour
25	Nayan Saha	Labour
26	Ajharuddin Sk	Labour
27	Remaul Sk	Labour
28	S V S Swamy	SOP, NCCL
29	S K Bose	Safety Manager, NCCL

Issues:

Handholding Training on the basics of First Aid

The participants were imparted handholding training and orientation on how to provide First-aid when necessary. Mainly discussed on a) what is First Aid and why First Aid; b) different types of wounds – Contused, Lacerated, Incised and Punctured and the concept of CLIP the Wound; c) for remedies to know the Direct and Indirect Pressure and Pressure Points – Carotid, Sub clavian, Brachial & Femoral; d) Practical session on Concept and use of Roller bandage, narrow and broad bandage using Triangular bandage; e) Reef Knot/Doctor's Knot; f) Simple Spiral &

Reverse Spiral; g) Figure of 8 bandage; h) Chin & Head Bandage; i) Arm Sling, Triangular Sling, Collar & Cuff Sling; j) Use of Splint; They were given hand holding training on use of Roller bandage and Triangular bandage.

### Photographs:



**Photo 1:** Awareness Training on First Aid



**Photo 2:** Hand holding training in case of wound in finger with the help of Roller Bandage



**Photo 3:** Hand holding training on knot which is use in any bandage.

### Issues:

The participants were imparted handholding training and orientation on how to provide First-aid when necessary. Mainly discussed on a) what is First Aid and why First Aid; b) different types of wounds – Contused, Lacerated, Incised and Punctured and the concept of CLIP the Wound; c) for remedies to know the Direct and Indirect Pressure and Pressure Points – Carotid, Subclavian, Brachial & Femoral; d) Practical session on Concept and use of Roller bandage, narrow and broad bandage using Triangular bandage; e) Reef Knot/Doctor's Knot; f) Simple Spiral & Reverse Spiral; g) Figure of 8 bandage; h) Chin & Head Bandage; i) Arm Sling, Triangular Sling, Collar & Cuff Sling; j) Use of Splint; They were given hand holding training on use of Roller bandage and Triangular bandage.

[illegible]

---

217



## FIRST AID TRAINING PROGRAMME

CONDUCTED BY:- DSISC FOR BHANGAR-II

PLACE:- ZONE-04 Swasthargachi [Pipeline] DATE & TIME:- 26/9/19

### PERSONS WHO ATTENDED THE PROGRAMME

SL. NO.	NAME OF THE STAFF/WORKMEN	DESIGNATION	SIGNATURE
1	Mittu S.K.	Supervisor	[Signature]
2	Inam S.K.	Helper	[Signature]
3	Akumbar S.K.	Helper	[Signature]
4	IS Rai S.K.	—	[Signature]
5	Jewel S.K.	—	[Signature]
6	Arjun S.K.	—	[Signature]
7	Milham S.K.	—	[Signature]
8	NCDR S.K.	—	[Signature]
9	Alleen S.K.	—	[Signature]
10			
11	Mr. Behem Kumar	DSISC	[Signature]
12	Mr. Dimp Ray	DSISC	[Signature]
13			
14	Mr. Anil Kumar Singh	AF- NCC	[Signature]
15	Mr. Nitin	NCC	[Signature]
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			
26			

**Report of the First Aid Training Programme**  
**Venue: Site of the Distribution Pipeline works at WTP Site, Rajarhat**

Date- 21.09.2019

**Issues:**

Handholding Training on the basics of First Aid

The participants were imparted handholding training and orientation on how to provide First-aid when necessary. Mainly discussed on a) what is First Aid and why First Aid; b) different types of wounds – Contused, Lacerated, Incised and Punctured and the concept of CLIP the Wound; c) for remedies to know the Direct and Indirect Pressure and Pressure Points – Carotid, Subclavian, Brachial & Femoral; d) Practical session on Concept and use of Roller bandage, narrow and broad bandage using Triangular bandage; e) Reef Knot/Doctor's Knot; f) Simple Spiral & Reverse Spiral; g) Figure of 8 bandage; h) Chin & Head Bandage; i) Arm Sling, Triangular Sling, Collar & Cuff Sling; j) Use of Splint; They were given hand holding training on use of Roller bandage and Triangular bandage.

**Photographs:**



**Photo 1: Awareness Training on First Aid**



**Photo 2: Orientation on First Aid**

## ATTENDANCE SHEET

Programme - First Aid Training  
 Venue - NTP, Rajarhat  
 Date - 21/09/19  
 Time - 12.15 pm

Sl.	Name	Designation	Contact No.	Signature
01	SHUBANKAR CHATTERJEE	SAFETY Engrg	629021644	Shankar
02	Injamamul SK	Labor	-	JSK
03	Robimul SK	"	-	RSK
04	Alan SK	"	-	Alan SK
05	Mizbanul SK	"	-	Mizbanul SK
06	Kamrul SK	"	-	Kamrul SK
07	Giribor Chatter	"	-	Giribor Chatter
08	Sakibul SK	"	-	Sakibul SK
09	JAHIRUL SK	"	-	JAHIRUL SK
10	Saifur SK	"	-	SVSK
11	Gulam Gauri	"	-	Gulam Gauri
12	Giribor	"	-	Giribor
13	RAVUSK	"	-	RAVUSK
14	Sudipati Das	Civil Engrg.	9046970338	Das
15	Ashutosh Basak	Planning Engr.	8320423346	Basak
16	Kanstar Sain	Engineer-Civil	6292128008	Sain
17	Dibakar Ghosh	Surveyor	8759214040	Ghosh
18	KALYAN DASU	Subp. ENGR (BASE)	8981097551	Dasu
19	Panthera Sanyathi Das	Subp. Engr. (BASE)	9735531784	Das
20	Dilip KR. Roy	DSISC-Social Safety-guard, support-staff	9933996977	Roy

Sl.	Name	Designation	Contact No.	Signature
21	Rekha Dubay	DSISE, Social Safeguard Support Staff	9903325701	<i>[Signature]</i>
22	Rohan Kumar	Support Staff Env. Safeguard (DSISE)	7369804746	<i>[Signature]</i>
23				
24				
25				
26				
27				
28				
29				
30				
31				
32				
33				
34				
35				
36				
37				
38				
39				
40				



**Report of the HIV/AIDS Awareness Programme  
Conducted by the Social and Environment Safeguard Team, DSISC**

**Date: 23<sup>rd</sup> September 2019**

**Venue: Site of the Distribution Pipeline works at Zone 18 (Gopalpur), Haroa**

**Issues:**

Orientation has given to the participants on AIDS and HIV, and explained what it is.

This disease damages immune system's ability to fight off other infections.

HIV is found in certain body fluids. It has been discussed that, the specific ways of transmitted HIV through 1) Unsafe sex - the most common route of infection, 2) Infection from mother to child - HIV can pass from a pregnant woman to her child during the pregnancy, birth or breastfeeding, 3) Contact with infected blood (Shares needles, syringes and other items for injecting drugs, Contact with infected blood or other fluids through needle sticks or cuts)

It also has been highlighted that, they can prevent HIV / AIDS by reducing sexual risk and drug education.

- He/she can reduce risk by just practicing intercourse with each other only. A condom is the most effective form of HIV prevention, if any of the partner have physical relation with more than one.
- For drug addicts, the best way to quit addiction, not to share needles & syringe with any other. Always be careful not to contact the infected blood or other fluids through needle sticks or cuts.
- HIV Screening During Pregnancy - All pregnant women should have a blood test to check if they have HIV as part of regular antenatal screening.
- Ask the barber to use new blade for every single user.
- Be sure that always new needle is being used for injection.

As an HIV-positive person, he/she cannot transfer AIDS by kissing, hugging, shaking hands, sporting or exercising, eating and drinking, sharing office equipment or using the same bath or toilet. (Deep kissing or French kiss can go to HIV if he/she have a bleeding mouth)

**Photographs:**



**Photo 1: Information-Education-Communication (IEC) for better understanding to the attendees**





Photo 2: Before starting the Awareness program on HIV/AIDS

**HIV/AIDS AWARENESS PROGRAMME**

PLACE: GOPALPUR (ZONE-18) DATE & TIME: 23-9-2019 / 3-30 pm

CONDUCTED BY: DSISC & NCC for HAROA BLOCK PROJECT.

PERSONS WHO ATTENDED THE PROGRAMME:

SL. NO.	NAME OF THE STAFF/WORKMEN/Asst.	DESIGNATION	SIGNATURE
1	ISHAB SK / 34 / M	HELPER	[Signature]
2	SAHEL SK / 35 / M	- do -	[Signature]
3	SAMEER SK / 26 / M	- do -	[Signature]
4	ANARUL ISLAM / 35 / M	- do -	[Signature]
5	AKKASH ALI / 36 / M	- do -	[Signature]
6	MAGDOL HASQUE / 25 / M	- do -	[Signature]
7	LALU SK / 40 / M	- do -	[Signature]
8	LALU SK / 34 / M	- do -	[Signature]
9	ERSHAD ALI / 35 / M	- do -	[Signature]
10	TIARUL SK / 35 / M	- do -	[Signature]
11	KANTU SK / 40 / M	- do -	[Signature]
12	RUBEL SK / 27 / M	- do -	[Signature]
13	ALAMSK SK / 28 / M	- do -	[Signature]
14	JOEWEL SK / 24 / M	- do -	[Signature]
15	MORTAZA GOLAN / 30 / M	SUP. (NCC)	[Signature]
16	SARADINDU GANJ / 30 / M	JE (NCC)	[Signature]
17	ROHANT	DSISC	[Signature]
18	AKREKA DUBEY	DSISC	[Signature]
19	DILIP ROY	DSISC	[Signature]
20			
21			
22			
23			
24			
25			
26			

Name & Signature of Safety Person: [Signature]

Name & Signature of Site Head: [Signature]

**Report of the HIV/AIDS Awareness Programme  
Conducted by the Social and Environment Safeguard Team, DSISC  
Date: 23<sup>rd</sup> September 2019**

**Venue: Site of the Distribution Pipeline works at Zone 12, Bhangar II**

**Issues:**

Orientation has given to the participants on AIDS and HIV, and explained what it is.

This disease damages immune system's ability to fight off other infections.

HIV is found in certain body fluids. It has been discussed that, the specific ways of transmitted HIV through 1) Unsafe sex - the most common route of infection, 2) Infection from mother to child - HIV can pass from a pregnant woman to her child during the pregnancy, birth or breastfeeding, 3) Contact with infected blood (Shares needles, syringes and other items for injecting drugs, Contact with infected blood or other fluids through needle sticks or cuts)

It also has been highlighted that, they can prevent HIV / AIDS by reducing sexual risk and drug education.

- He/she can reduce risk by just practicing intercourse with each other only. A condom is the most effective form of HIV prevention, if any of the partner have physical relation with more than one.
- For dug addicts, the best way to quit addiction, not to share needles & syringe with any other. Always be careful not to contact the infected blood or other fluids through needle sticks or cuts.
- HIV Screening During Pregnancy - All pregnant women should have a blood test to check if they have HIV as part of regular antenatal screening.
- Ask the barber to use new blade for every single user.
- Be sure that always new needle is being used for injection.

As an HIV-positive person, he/she cannot transfer AIDS by kissing, hugging, shaking hands, sporting or exercising, eating and drinking, sharing office equipment or using the same bath or toilet. (Deep kissing or French kiss can go to HIV if he/she have a bleeding mouth)

**Photographs:**



**Photo 1: IEC Material used in Awareness program on HIV/AIDS**



Photo 2: Awareness program on HIV/AIDS

### HIV & AIDS AWARENESS PROGRAMME

CONDUCTED BY: - DSISC & NCC FOR BHANGAR-II

PLACE: - ZONE- 12 Bankachua DATE & TIME: - 25/09/2019

#### PERSONS WHO ATTENDED THE PROGRAMME

Sl. NO.	NAME OF THE STAFF/WORKMEN	DESIGNATION	SIGNATURE
1	MO ASHRAF HOSSEN / 28 / M	HELPER	[Signature]
2	LATU SR. / 30 / M	-do-	[Signature]
3	SATKUL SR. / 35 / M	-do-	[Signature]
4	ASHARUL NAJIB / 28 / M	-do-	[Signature]
5	JANTAN SR. / 38 / M	FORMER	[Signature]
6	ABU HANIF SR. / 33 / M	HELPER	[Signature]
7	CHADAN DAS / 45 / M	-do-	[Signature]
8	BALAJAN SR. / 40 / M	-do-	[Signature]
9	JAYMAL SR. / 35 / M	-do-	[Signature]
10	HIVADOL HAQUE / 36 / M	-do-	[Signature]
11	SARKUL SR. / 27 / M	-do-	[Signature]
12	SAHATMAL SR. / 22 / M	-do-	[Signature]
13	CHABALI MOHA / 32 / M	-do-	[Signature]
14	SHERALI SR. / 33 / M	-do-	[Signature]
15	CHAND SR. / 50 / M	-do-	[Signature]
16	SAHIL SR. / 24 / M	-do-	[Signature]
17	TITU SR. / 30 / M	FITTER	[Signature]
18	IKBAR SR. / 25 / M	HELPER	[Signature]
19	NITAN	SAFETY (NCC)	[Signature]
20	RENTINUS MOHAMMAD	OPP (NCC)	[Signature]
21	ROBAT	DSISC	[Signature]
22	MRS. PANKA DUBEY	DSISC	[Signature]
23	DEEPTI ROY	DSISC	[Signature]
24	SHARUP LATA / 20 / M	HELPER	[Signature]
25	NAVAN SR. / 50 / M	-do-	[Signature]
26	ASHARUDDIN SR. / 30 / M	-do-	[Signature]
27	REMAN SR. / 30 / M	-do-	[Signature]
28)	S.V.S. Swamy	NCC	[Signature]
29)	Mr. S.K. Bose	NCC	[Signature]



**APPENDIX 12: SAMPLE ACCIDENT / FIRST AID RECORD****Package: N-24P/NCB/02A/2017-18 – Haroa- Sample Record**

RECORD OF ACCIDENT/FIRST AID													
Package		WBDWSIP/DWW/NCB/N24/02A/2017-18(OHR)										Month	1 August 2019
Sl. No.	Date	Name of Person	Sex	Age	Time	Design.	Company/ Sub contractor	Agency	Type of Accident	Nature of Injury	Location of Injury	Root Cause	Action Taken
1	01.08.2019	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
2	02.08.2019	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
3	03.08.2019	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
4	04.08.2019	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
5	05.08.2019	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
6	06.08.2019	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
7	07.08.2019	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
8	08.08.2019	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
9	09.08.2019	Ashok Kumar	Male	37	10.55 am	Harper	Sub contractor	N/A	Minor	Head injury	OHK	First Aid	Give first aid
10	10.08.2019	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
11	11.08.2019	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
12	12.08.2019	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
13	13.08.2019	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
14	14.08.2019	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
15	15.08.2019	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
16	16.08.2019	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
17	17.08.2019	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
18	18.08.2019	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
19	19.08.2019	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
20	20.08.2019	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
21	21.08.2019	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
22	22.08.2019	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
23	23.08.2019	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
24	24.08.2019	Murali AB Mondal	Male	36	11.56 am	Filter	Sub contractor	N/A	Minor	Finger injury	OHK	First Aid	Give first aid
25	25.08.2019	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
26	26.08.2019	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
27	27.08.2019	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
28	28.08.2019	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
29	29.08.2019	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
30	30.08.2019	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
31	31.08.2019	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI

Name & Sign of Safety Officer of Contractor

*SARADHAN GAIN*

*31/8/19*

Verification by DSISC sample basis

*Rohan Kumar*



RECORD OF ACCIDENT/ FIRST AID													
Package: WBDWSIP/DWW/NCB/N2A/62A/2017-18(PIPELINE)													
Sl. No.	Date	Name of Person	Sex	Age	Time	Design.	Company/ Sub contractor	Agency	Type of Accident	Nature of Injury	Location of Injury	Root Cause	Action Taken
1	01.10.2019	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
2	02.10.2019	"	"	"	"	"	"	"	"	"	"	"	"
3	03.10.2019	"	"	"	"	"	"	"	"	"	"	"	"
4	04.10.2019	"	"	"	"	"	"	"	"	"	"	"	"
5	05.10.2019	Sarkar Islam	Male	41	9:45 pm	Helper	Sub contractor	NA	Minor	Toe entrapment	Pipeline	Said having	Give him first aid
6	06.10.2019	"	"	"	"	"	"	"	"	"	"	"	"
7	07.10.2019	"	"	"	"	"	"	"	"	"	"	"	"
8	08.10.2019	"	"	"	"	"	"	"	"	"	"	"	"
9	09.10.2019	"	"	"	"	"	"	"	"	"	"	"	"
10	10.10.2019	"	"	"	"	"	"	"	"	"	"	"	"
11	11.10.2019	"	"	"	"	"	"	"	"	"	"	"	"
12	12.10.2019	Pakul Islam	Male	35	11:57 pm	Helper	Sub contractor	NA	Minor	NA	Pipeline	Heat and hemolysis	Taking rest and drinking water
13	13.10.2019	"	"	"	"	"	"	"	"	"	"	"	"
14	14.10.2019	"	"	"	"	"	"	"	"	"	"	"	"
15	15.10.2019	Samad Ali	Male	40	10:54 am	Helper	Sub contractor	NA	Minor	Hand injury	Pipeline	Slipping hand	Give him first aid
16	16.10.2019	"	"	"	"	"	"	"	"	"	"	"	"
17	17.10.2019	"	"	"	"	"	"	"	"	"	"	"	"
18	18.10.2019	"	"	"	"	"	"	"	"	"	"	"	"
19	19.10.2019	Saim Hassan	Male	36	4:32 pm	Helper	Sub contractor	NA	Minor	Hand injury	Pipeline	Slipping hand	Give him first aid
20	20.10.2019	"	"	"	"	"	"	"	"	"	"	"	"
21	21.10.2019	Jamil Ali	Male	36	2:19 pm	Helper	Sub contractor	NA	Minor	Gag injury	Pipeline	Blocker falling leg	Give him first aid
22	22.10.2019	"	"	"	"	"	"	"	"	"	"	"	"
23	23.10.2019	"	"	"	"	"	"	"	"	"	"	"	"
24	24.10.2019	Samad Ali	Male	39	11:46 am	Helper	Sub contractor	NA	Minor	Leg injury	Pipeline	Wet soil	Give him first aid
25	25.10.2019	"	"	"	"	"	"	"	"	"	"	"	"
26	26.10.2019	"	"	"	"	"	"	"	"	"	"	"	"
27	27.10.2019	"	"	"	"	"	"	"	"	"	"	"	"
28	28.10.2019	"	"	"	"	"	"	"	"	"	"	"	"
29	29.10.2019	"	"	"	"	"	"	"	"	"	"	"	"
30	30.10.2019	"	"	"	"	"	"	"	"	"	"	"	"
31	31.10.2019	"	"	"	"	"	"	"	"	"	"	"	"

**SARADINDU GAIN** *S.G.*

Name & Sign of Safety officer of Contractor

21/11/19

*Rohan Kumar*

Verification by DSISC sample basis

## Package: N-24P/NCB/02B/2017-18 – Bhargar – Sample record

Form No-06 RECORD OF ACCIDENT/FIRST AID													
Package	WBDWSIP/DWW/NCB/02B/2017-18 (MPC LINE)											Month	Sept-2019
Sl. No.	Date	Name of Person	Sex	Age	Time	Design.	Company/ Sub contractor	Agency	Type of Accident	Nature of Injury	Location of Injury	Root Cause	Action Taken
1		NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL
2													
3													
4													
5	05.09.2019	Tapan Das	m	32	3	Driver	NCC	Sub agency	Left Hand Thumbs	Minor	Zone-4	Pipe joint time	First Aid
6													
7													
8													
9	05.09.2019	Rahim Mandal	m	58	0	Helper	NCC	Sub agency	Eye Wash	Minor	Zone-4	Backfilling time	First Aid
10													
11													
12	12.09.2019	Kutub Shakil	m	35	0	Driver	NCC	Sub agency	Left Hand	Minor	Zone-10	Pipe joint time	First Aid
13	13.09.2019	Ashok Sarker	m	19	0	Helper	NCC	Sub agency	Witness	Minor	Zone-4	Drinking Water	First Aid
14													
15													
16													
17													
18													
19													
20													
21													
22													
23	23.09.2019	Lituan Sa	m	28	0	Helper	NCC	Sub agency	Eye Wash	Minor	Zone-10	Excavation time	First Aid
24	24.09.2019	Ekmal Sa	m	28	0	Helper	NCC	Sub agency	Thumbs injury	Minor	Zone-1	Backfilling Time	First Aid
25													
26	18.09.2019	Tapan Ghosh	m	27	0	Helper	NCC	Sub agency	Body Pain	Minor	Zone-10		First Aid
27													
28													
29													
30													
31													

Name & Sign of Safety Officer of Contractor: *[Signature]*

Verification by DSISC sample basis: *Rohan Kumar*

Form No-06 RECORD OF ACCIDENT/FIRST AID													
Package	WBDWSIP/DWW/NCB/H24/02B/2017-18 (DHR)										Month	Oct-2019	
Sr- No-	Date	Name of Person	Sex	Age	Time	Design	Company/ Sub-contractor	Agency	Type of Accident	Nature of Injury	Location of Injury	Root Cause	Action Taken
1	01-10-2019	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL
2	02-10-2019	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL
3	03-10-2019	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL
4	04-10-2019	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL
5	05-10-2019	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL
6	06-10-2019	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL
7	07-10-2019	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL
8	08-10-2019	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL
9	09-10-2019	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL
10	10-10-2019	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL
11	11-10-2019	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL
12	12-10-2019	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL
13	13-10-2019	Chandan	Male	24		Fitter	NCC LTD	Sub agency	Body Pain	Minor	Zone-4	While Working at site sudden body pain	First aid
14	14-10-2019	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL
15	15-10-2019	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL
16	16-10-2019	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL
17	17-10-2019	Arunth	Male	28		Fitter	NCC LTD	Sub agency	Lag	Minor Injury	Zone-4	While working at site during the concrete working Time Lag injured	First aid
18	18-10-2019	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL
19	19-10-2019	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL
20	20-10-2019	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL
21	21-10-2019	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL
22	22-10-2019	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL
23	23-10-2019	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL
24	24-10-2019	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL
25	25-10-2019	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL
26	26-10-2019	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL
27	27-10-2019	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL
28	28-10-2019	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL
29	29-10-2019	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL
30	30-10-2019	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL
31	31-10-2019	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL

Name & Sign of Safety Officer of Contractor: *[Signature]*

Verification by DSISC sample basis: *[Signature]*