

# Site-Specific Environmental Management Plan

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Project number: 49107-006  
May 2019

IND: West Bengal Drinking Water Sector Improvement Project – Design and Construction of Overhead Reservoir Including Water Supply Distribution Network and Metering Work in Bhangar-II Block (Zone 13: OHR - Baniara)

Package No: N24P/02B

Prepared by Public Health Engineering Department, Government of West Bengal for the Asian Development Bank.

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**NCC  
LIMITED**

Design and Construction of Overhead  
Reservoir Including Water Supply  
Distribution Network and Metering  
Work in Bhargar-II Block

**Site Specific Environmental  
Management Plan**

Doc. No. NCC/SEMP/01

Revision No. 00

Revision Date : 00

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## **SITE SPECIFIC ENVIRONMENTAL MANAGEMENT PLAN**


**WBDWSIP BHANGAR-II BLOCK**


**LOCATION – ZONE- 13,OHR (Baniara)**

0	07.05.2019				
REV	DATE	PREPARED BY	CHECKED BY	APPROVED BY DEISC	APPROVED BY PIU

Environmental Specialist, DEISC  
North 24 Parganas  
WBDWSI Project

*may be approved*  
Junior Engineer  
PIU, N-24Pgs., WBDWSIP, P.  
Govt. Of West Bengal

  
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

<b>NCC LIMITED</b>	<b>Design and Construction of Overhead Reservoir Including Water Supply Distribution Network and Metering Work in Bhangar-II Block</b>	<b>Doc. No. NCC/ SEMP /01</b> <b>Last Revision No. 00</b> <b>Last Revision Date : 00</b> <b>Page 2 of 79</b> <b>Original Issue Date :</b>
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<b>Package No</b>	Package No : N24P/02B Zone 13- OHR (Baniara) under <a href="#">PIU North 24 Parganas</a>
<b>Package title</b>	Design and Construction of Overhead Reservoir Including Water Supply Distribution Network and Metering Work in Bhangar-II Block. SEMP is as per requirement of the Draft IEE covering package no. N24P/02B
<b>Contractor</b>	<b>NCC Pvt. Ltd.</b>
<b>Date of Contract Award</b>	19/09/2018
<b>Date of works commencement</b>	28/05/2019
<b>Contract period</b>	Construction: 3 Years ; O&M: 2 Years
<b>SEMP Component</b>	Construction of Overhead Reservoir – 500 KL
	No demolition activity involved
<b>Project area</b>	Baniara village , Bhogali II <b>Gram Panchayats</b> of Bhangar II block
<b>Project Description</b>	Individual household water supply schemes for the project Gram Panchayats
<b>Indicative Budget for EMP Implementation for the entire package</b>	INR 21,42,500/-
<b>Project Components</b>	As per project detailed design
<b>Gram Panchayet: Bhogali II</b>	
<b>Land Status</b>	Private and Transferred
<b>OHR Capacity</b>	500 KL
<b>Location</b>	



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<b>Details of contractors on-site-personnel and workers</b>	Zone-13 OHR (Baniara), Bhogali II Gram Panchayats of Bhangar II block
Project Manager	Mr. Ansari; 7417526845
Site Engineer	Mr. Md. Sukur Ali; 8327043932
Site Supervisor	Mr. SK Sharma; 9754981670
EHS Supervisor	Mr. Nitin Kumar; Mob: 8971107720
Archeological supervisor	NA
Skilled / semi-skilled workers	2 skilled and Semi-skilled
Unskilled workers	8
Women workers	Nil
Workers – local / migrant	Local-Nil / Migrant-10 (from other districts within West Bengal)
<b>Details of facilities</b>	
Construction camps, (no's and locations)	One labor accommodation adjacent to OHR site on a leased land _[ Ref. Attachment O 2]

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**Table 1: Anticipated Impacts and Mitigation Measures – Pre-construction Environmental Mitigation Plan**

<b>Field/ Issues (1)</b>	<b>Anticipated Impact (2)</b>	<b>Recommended Mitigation Measures (3)</b>	<b>Actions Taken/ Status (4)</b>	<b>Responsibility of Implementation (5)</b>	<b>Monitoring of mitigation (6)</b>	<b>Cost and source of fund (7)</b>
Infrastructure and Services	Electric poles and wires, water lines within proposed project area of OHR site.	<ul style="list-style-type: none"> <li>Locations and operators of these utilities to be identified as per detailed design documents to prevent unnecessary disruption of services during construction phase.</li> <li>Prepare spoils(Waste) management plan.</li> </ul>	<ul style="list-style-type: none"> <li>Contingency Plan has been developed by informing to emergency services like WBSEDCL, Telecommunication, local administration and police etc.</li> <li>First we are digging the trial pit manually, if any obstruction arise the same is removed as per direction of end user</li> <li>The construction work to continue without disturbing the existing pipeline and electric poles.</li> <li>Spoil Management Plan is included in <b>Attachment 07</b> included with this SEMP</li> </ul>	Contractor and PIU	DSISC observation at site and document checking	Project cost
Climate	The nature and intensity of rainfall events in an area, has implications for surface water management.	<ul style="list-style-type: none"> <li>Seasonal climatic variations should be taken into account during scheduling of construction in the area.</li> </ul>	<ul style="list-style-type: none"> <li>Excavation works schedule during dry season have been approved by PMU.</li> <li>If excavation work is to be conducted during rainy season then preventive measures will be taken as per PMU approved method.</li> </ul>	Contractor and PIU	DSISC observation at site	Project cost
Sources of Materials	Extraction of materials can disrupt natural land contours and vegetation resulting in accelerated erosion,	<ul style="list-style-type: none"> <li>Obtain construction materials only from government approved quarries with prior approval of PIU.</li> <li>On a monthly basis documentation on material obtained from each source</li> </ul>	<ul style="list-style-type: none"> <li>No involvement of any new borrow area or quarry is anticipated.</li> </ul>	Contractor and PIU	DSISC observation at site and document checking	Project cost

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<b>Field/ Issues (1)</b>	<b>Anticipated Impact (2)</b>	<b>Recommended Mitigation Measures (3)</b>	<b>Actions Taken/ Status (4)</b>	<b>Responsibility of Implementation (5)</b>	<b>Monitoring of mitigation (6)</b>	<b>Cost and source of fund (7)</b>
	disturbance in natural drainage patterns, ponding and water logging, and water pollution.	(quarry/borrow pit) should be submitted. <ul style="list-style-type: none"> <li>In case of involvement of new quarries/ borrow areas, prior steps will follow for all clearances and permissions as required under law.</li> </ul>				
Consents, permits, clearances, no objection certificates(NOCs), etc.	Failure to obtain necessary consents, permits, NOCs, etc can result to design revisions and/or stoppage of works.	<ul style="list-style-type: none"> <li>All necessary consents, permits, clearance, NOCs, etc prior to award of civil works should be obtained.</li> <li>All necessary approvals for construction to be obtained before start of construction.</li> <li>Acknowledge in writing and report on compliance consents, permits, clearance, NOCs etc. obtained.</li> </ul>	<ul style="list-style-type: none"> <li>Already done land requisition, electric connection, water source etc.</li> <li>Tree felling requirement for this site is not anticipated.</li> <li>Made provision for detailed design drawing and documented all conditions</li> <li>Please refer <b>Attachment O3</b> for list of relevant permits and clearances.</li> </ul>	Contractor and PIU	DSISC observation at site and document checking	Project cost

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**Table 2: Anticipated Impacts and Mitigation Measures – Construction Environmental Mitigation Plan**

<b>Field/ Issues</b>	<b>Anticipated Impact</b>	<b>Recommended Mitigation Measures</b>	<b>Actions Taken/ Status</b>	<b>Responsibility of Implementation</b>	<b>Monitoring of mitigation</b>	<b>Cost and source of fund</b>
Air Quality	Emissions from construction vehicles, equipment, machinery and DG set used for excavation and construction resulting in dust and increase in concentration of vehicle-related pollutants such as carbon monoxide, sulphur dioxides, particulate matter, nitrogen oxides, and hydrocarbons	<ul style="list-style-type: none"> <li>Following air pollution/dust control measures for construction activities stipulated by the "Direction of West Bengal Department of Environment under the Air Act, 1981 Direction No. EN/3170/T-IV-7/001/2009 dated: 10 December 2009": <ul style="list-style-type: none"> <li>Only vehicles having valid Pollution Under Control Certificates should be engaged in the project.</li> <li>Vehicles transporting (cement, sands etc) should be covered and cleaned prior to release at site, sprinkling of water and stabilization of soil for dust hazards to be carried out on site.</li> </ul> </li> <li>Damp down soil, sand/ earth stockpiled at site should be maintained as per site condition.</li> <li>Control unnecessary movement of vehicle, public trespassing into work areas for control of dust generation.</li> <li>If required, then provide a dust screen/high compound wall around the construction sites (OHR).</li> </ul>	<ul style="list-style-type: none"> <li>Only vehicles having valid PUC certificate have been engaged in the project.</li> <li>Mixer machine, winch machine and DG set used for concreting and pilling are not left for idling, after completion of work.</li> <li>Sprinkling and dust screen arrangement have been made, and will be used when required.</li> <li>Site has been access controlled to prevent trespassing.</li> <li>Stock piles will be maintained in such a way to minimise dust rising.</li> <li>Air quality Monitoring has been conducted at following five places <b>(Near School Swastayangachhi. Zone-04, Near Paschim Majarhat primary school Sanpukuria. Zone-10, Dharmatala Pachuria Zone:-01 Nangla Palpur Zone:-09)</b> in the Bhangar II Package.</li> </ul>	Contractor	PIU through DSISC observation at site and document checking	Project cost
Drainage and hydrology	Due to the nature and locality of the projects there is unlikely to be any significant impacts	<ul style="list-style-type: none"> <li>The effluent should be discharged into local drains after passing through a sediment basin to prevent contamination of existing drains and local water bodies.</li> </ul>	<ul style="list-style-type: none"> <li>The site surface has been engineered and shaped in such a way that rapid and efficient evacuation of runoff is achieved.</li> <li>Arrangements have been</li> </ul>	Contractor	PIU through DSISC observation at site	Project cost

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Field/ Issues	Anticipated Impact	Recommended Mitigation Measures	Actions Taken/ Status	Responsibility of Implementation	Monitoring of mitigation	Cost and source of fund
	on water resources within the immediate area.	<ul style="list-style-type: none"> <li>Where no local drains are available, a soak pit will be created on-site away from water bodies .</li> </ul>	made to release effluent from the site to a local drain after passing through a sedimentation basin, so that it does not contaminate existing drain and pond around the project site			
River/ Surface water quality	Mobilization of settled silt materials, run-off from stockpiled materials, and chemical contamination from fuels and lubricants during construction works can contaminate nearby surface water quality.	<ul style="list-style-type: none"> <li>Avoid stockpiling of earth fill; especially in monsoon season, cover it with tarpaulins or plastic sheets.</li> <li>Prioritize and implement reuse of excess spoil and materials in the construction work; if necessary, dispose in designated disposal area.</li> <li>Storage locations should have impervious floors</li> <li>Fuels and lubricants should be stored away from drainage and spillage protection should be provided</li> <li>Provision for temporary silt traps or sedimentation basins along the drainage leading to the water bodies should be provided, according to situation.</li> <li>Temporary drainage channel around the work area should be made to accumulate the entry of runoff from upper areas into the work area.</li> <li>Provision of pumping out of the water from the pits/excavations to a temporary sedimentation pond or disposal after sedimentation should be taken into consideration.</li> </ul>	<ul style="list-style-type: none"> <li>No stockpiles have been planned near drainage locations/ nearby water bodies.</li> <li>Storage areas are compacted and made impervious.</li> <li>Locations for fuels and lubricants store is away from drainage path and spill kits have been obtained.</li> <li>All excavated materials expected to be utilized on-site only. No excess spoil anticipated.</li> <li>Surface water monitoring has been conducted already following two places <b>(Koach Pukur Zone:-15, and (Majer hat) Zone-10, Sanpukuria)</b> in the Bhangar II project as per Environmental Monitoring Plan recommended in the IEE.</li> </ul>	Contractor	PIU through DSISC observation at site and document checking	Project cost



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<b>Field/ Issues</b>	<b>Anticipated Impact</b>	<b>Recommended Mitigation Measures</b>	<b>Actions Taken/ Status</b>	<b>Responsibility of Implementation</b>	<b>Monitoring of mitigation</b>	<b>Cost and source of fund</b>
Biodiversity Fauna and Flora	Due to the nature and locality of the project there is unlikely to be any significant impacts on bio-diversity within the area.	<ul style="list-style-type: none"> <li>For flora protection, tree cutting is strictly prohibited; if necessary, then obtain permission through proper channel.</li> <li>For faunal activity, instruction should be given to everyone to inform site EHS Coordinator who should take appropriate action for their protection and safe rescue.</li> </ul>	<ul style="list-style-type: none"> <li>So far no faunal movement has been observed in this site.</li> <li>Some trees are present along the existing boundary wall of the site however felling of tree is not envisaged at this site.</li> </ul>	Contractor	PIU through DSISC observation at site and document checking	Project cost
Noise Levels	Increase in noise level due to earth-moving and excavation equipment, and the transportation of equipment, materials by labours	<ul style="list-style-type: none"> <li>Minimize noise from construction equipment by using vehicle silencers, fitting jackhammers with noise-reducing mufflers minimising the sound impact to surrounding sensitive receptor;</li> <li>Horns not to be used unless it is necessary to warn other road users;</li> <li>Ensure maximum work place noise level exposure not exceeding 85 decibels (dbA);</li> <li>Ensure noise level at site boundary comply with standard prescribed for local landuse; and</li> <li>Baseline and construction phase Noise Monitoring (Day &amp; Night time) should be conducted.</li> </ul>	<ul style="list-style-type: none"> <li>Consultation made with local communities in advance of the work to identify and avoid working at sensitive times, such as religious and cultural festivals.</li> <li>Planned activities in consultation with DSISC so that activities with the greatest potential to generate noise are conducted during periods of the day which will result in least disturbance.</li> <li>Mixer machine, winch machine and DG sets used for concreting and pilling are properly maintained and stopped immediately after completion of work.</li> <li>Baseline monitoring has been conducted.</li> <li>Noise quality Monitoring has been conducted at following five places (<b>Majerhat Sanpukuria</b></li> </ul>	Contractor	PIU through DSISC observation at site and document checking	Project cost

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Field/ Issues	Anticipated Impact	Recommended Mitigation Measures	Actions Taken/ Status	Responsibility of Implementation	Monitoring of mitigation	Cost and source of fund
			<b>Zone:-10, Near Swastayan Gachhi School Zone :-04, Dharmatala Pachuria School Zone:-01, Nangla Palpur Zone:-09, Near Koach Pukur Primary School Zone:-15)</b> in the Bhangar II Block as per requirements prescribed in IEE.			
Landscap e and Aesthetics character, and sense of place	Construction wastes as well as excess construction materials may show some impact.	<ul style="list-style-type: none"> <li>• Prepare a construction waste management plan for site.</li> <li>• Hazardous wastes e.g. waste oil, empty paint cans, etc. should be stored on site and then shifted to a central location from where these will be disposed in accordance with Hazardous Wastes Management Rule, 2016.</li> <li>• As far as possible utilize the debris and excess soil in construction purpose such as for site filling and labelling purpose.</li> <li>• Avoid stockpiling any excess spoils at the site for long time, if required, dispose at the site selected, in consultation with local GP preferably from barren, infertile land, which is located away from any sensitive area.</li> </ul>	<ul style="list-style-type: none"> <li>• Spoil management plan has been developed</li> <li>• Waste/construction waste is being managed according to the following preferential hierarchy: reuse and dispose.</li> <li>• Waste material like concrete and excavated soils are utilized for reuse and filling purpose. Also, other solid waste like cement bags are collected in a place on site and then shifted to our godown, from where these are disposed as per law.</li> </ul>	Contractor	PIU through DSISC observation at site and document checking	Project cost
Occupatio nal Health and Safety	Occupational hazards which can arise during work	Develop and implement a site specific occupational health and safety(OHS) plan which will include measures such as: (a) excluding public from the site;	<ul style="list-style-type: none"> <li>• Based on NCC's OHS Plan, a site specific OHS plan has been developed.</li> <li>• Site OHS plan is attached at <b>Attachment - 04.</b></li> </ul>	Contractor	PIU through DSISC observation at site and document	Project cost

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Field/ Issues	Anticipated Impact	Recommended Mitigation Measures	Actions Taken/ Status	Responsibility of Implementation	Monitoring of mitigation	Cost and source of fund
		(b) ensuring all workers are provided with and use personal protective equipment like Helmet, Gumboot, Safety Belt, Gloves, Nose mask etc. (c) documentation of work related accidents. (d) Providing qualified first aider at all times. (e) Providing to all workers reflective jacket, (f) Marking and providing sign boards for most of hazardous areas such as high voltage equipment, (g) Workers allowed exposure to noise level up to 85 dB (A) only.	<ul style="list-style-type: none"> <li>All workers have been provided with and made to use Personal Protective Equipment like helmet, gumboot, safety belt, gloves, nose mask and ear plugs;</li> <li>H&amp;S Training for all site personnel has been arranged and it will be continued;</li> <li>H&amp;S orientation training provided to all new workers to ensure that they are apprised of the basic site rules of work at the site, personal protective protection, and preventing injuries to fellow workers;</li> <li>Documented procedures are followed for all site activities;</li> <li>Work-related accidents will be recorded;</li> <li>Drinking water provided after proper testing.</li> <li>First Aid box provided at working sites;</li> <li>Clean eating areas provided to workers;</li> <li>Moving equipment maintained with audible back-up alarms</li> </ul>		checking	
Socio Economic Employment	Generation of temporary employment and increase in local revenue	<ul style="list-style-type: none"> <li>Employ local labour force as far as possible</li> <li>Comply with labour laws</li> </ul>	<ul style="list-style-type: none"> <li>Local labours are employed, on priority, whenever available.</li> <li>Refer <b>Attachment 03</b> for documents relating to statutory compliances</li> </ul>	Contractor	PIU through DSISC observation at site and	Project cost

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Field/ Issues	Anticipated Impact	Recommended Mitigation Measures	Actions Taken/ Status	Responsibility of Implementation	Monitoring of mitigation	Cost and source of fund
					document checking	
Environmental Management Plan (EMP) Implementation Training	Irreversible impact to the environment, workers, and community	1. Project Manager and all key workers will be required to undergo training on EMP implementation including spoils/waste management, Standard operating procedures (SOP) for construction works; occupational health and safety (OHS), core labour laws, applicable environmental laws etc.	Training session for all employees has been arranged.	Contractor	PIU through DSISC observation at site and document checking	Project cost
Construction Camps	Temporary air, noise, land and water pollution from machine operation and after establishment of habitation	<ul style="list-style-type: none"> <li>• Camp sites shall be away from residential areas (100 m), sensitive areas (schools, hospitals, etc. 250 m.), water bodies (500 m) and forests (more than 1 km)</li> <li>• Use unused, vacant lands; no trees shall be cut</li> <li>• Provide a proper fencing/compound wall</li> <li>• Prepare a site layout plan &amp; display at the site; uniformly label (name boards) all the places in the facility</li> <li>• Entire site/facility area shall be provided with hard levelled surface as appropriate; no loose soil, slush, water logging etc.,</li> <li>• Living quarters and construction camps shall be provided with standard materials; no shacks or huts</li> <li>• Adequate lighting and ventilation</li> <li>• Provide drinking water, water for</li> </ul>	<ul style="list-style-type: none"> <li>• Before locating project offices, sheds, and construction plants we discussed with DSISC and within or nearest place has been selected,</li> <li>• Till date no trees have been cut and no any destruction of property, irrigation and drinking water supply systems observed,</li> <li>• Employees are trained for storage and handling of materials which can potentially cause soil contamination and water contamination;</li> <li>• Solid waste managed according to the following preferential hierarchy: reuse, and disposal to designated areas; Kitchen wastes collected in a dustbin then it is disposed outside from area to designated disposal</li> </ul>	Contractor	PIU through DSISC observation at site and document checking	Project cost

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Field/ Issues	Anticipated Impact	Recommended Mitigation Measures	Actions Taken/ Status	Responsibility of Implementation	Monitoring of mitigation	Cost and source of fund
		other uses, and sanitation facilities; drinking water should be regularly tested • Provide clear pathways for safe movement • Provide cooking fuel (cooking gas); and a separate safe place to cook; fire wood not allowed • Construct septic tanks and soak pit arrangement for wastewater disposal • Solid waste shall be properly managed – provide separate bins, compost biodegradable waste; sell recyclable waste • According to rule and regulation camp will be vacated and restored to pre-project conditions before acceptance of work.	location, • Daily generated effluent disposed by arrangements already present in camp/ household. • The details of labour accommodation is presented in <b>Attachment O2.</b>			
Archaeological and Cultural characteristics	Risk of archaeological chance finds	• Strictly follow the protocol for chance finds in any excavation work; • Construction staff members should be made aware of the likelihood of heritage resources being unearthed and of the scientific importance of such discoveries.	• No archaeological chance finds are reported at project sites till date. • If there is any such finding, action will be taken up as per requirement.	Contractor	PIU through DSISC observation at site and document checking	Project cost

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**Table 3: Construction Phase Environmental Monitoring Plan for Entire Package**

<b>Monitoring Field</b>	<b>Monitoring Location</b>	<b>Monitoring Parameters</b>	<b>Frequency</b>	<b>Locations*</b>	<b>Cost as per budget (in Rs.)</b>
Ambient air quality	5 locations (to be selected during implementation to represent the overall project area)	<ul style="list-style-type: none"> <li>PM<sub>10</sub>, PM<sub>2.5</sub> NO<sub>2</sub>, SO<sub>2</sub>, CO</li> </ul>	Once before start of construction Quarterly (yearly 4- times) during construction (2-year period considered)	Near School Swastayangachhi. Zone-04, Near Paschim Majarhat primary school Sanpukuria. Zone-10, Dharmatala Pachuria Zone:-01 Nangla Palpur Zone:-09	225,000
Ambient noise	5 locations (same as air quality monitoring)	<ul style="list-style-type: none"> <li>Day time and night time noise levels (24 hours)</li> </ul>	Once before start of construction Quarterly (yearly 4- times) during construction (2-year period considered)	Majerhat Sanpukuria Zone:-10, Near Swastayan Gachhi School Zone :-04, Dharmatala Pachuria School Zone:-01, Nangla Palpur Zone:-09, Near Coch Pukur Primary School Zone:-15	67,500
Surface water quality	2 locations (to be selected during implementation)	<ul style="list-style-type: none"> <li>pH, Oil and grease, Cl, F, NO<sub>3</sub>, TC, FC, Hardness, Turbidity BOD, COD, DO, Total Alkalinity</li> </ul>	Once before start of construction Half yearly during construction (2-year construction period considered)	Koach Pukur Zone:-15, and Majerhat, Sanpukuria Zone-10	40,000
Chance Finds	Areas protected by ASI or West Bengal State Archaeology Department	<ul style="list-style-type: none"> <li>Chance finds protocol</li> </ul>	Before finalization of detailed design, consult with ASI or West Bengal State Archaeology Department		-

Note: \* It should be noted that every quarter only 5 locations in the entire package is monitored for air and noise while two locations are monitored for surface water every half-yearly. Locations are changeable with progress of work. Present locations as mentioned in mitigation tables are base line monitoring conducted as per EMP provision. The exact locations of these monitoring are reported in SEMR over google earth image. For all the packages conduct of these monitoring is responsibility of concerned Contractor and cost for such already budgeted in the IEE



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### **List of Attachments**

Attachment O1: Details of construction Work sites  
Attachment O2: Details of construction camp sites  
Attachment O3: List of clearances & statutory requirements  
Attachment O4: Contractor's OHS Policy & Organization  
Attachment O5: Utility shifting/relocation  
Attachment O6: Details of Construction Materials  
Attachment O7: Spoil Management Plan  
Attachment O8: Procedure for on-site Grievance Redressal Mechanism  
Attachment O9: Procedure for information disclosure prior to start of works

[Appendix O.1: Site Layout Plan](#)

[Appendix O.A: Labour License](#)

[Appendix O.B: Workman Compensation](#)

[Appendix O.C: PUC Certificates](#)

[Appendix O.2: Contractor's OHS Policy Statement](#)


[Appendix O.3: Sample Grievance Registration Form](#)

Enclosure 1 : Health\_Safety\_Management\_Plan of Pkg.N24PGS/02B\_Bhangar II block, \_



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### Attachment O1: Details of construction Work sites

<b>1. Zone 13: OHR construction Site</b>	
<b>Location- Baniara</b>	
A	<b>Material storage</b> • Cement • Steel • Fine Aggregate • Coarse Aggregate • Shuttering Material • Shuttering Oil
B	<b>Plant &amp; Machinery</b> • Concrete Mixer – 1 Nos • Needle Vibrator – 1 Nos
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> • Labor rest area • Toilets • Drinking water • First Aid Box.
G	<b>Site Layout Plan</b> <i>Refer Appendix O.1</i>
H	<b>Site photographs</b>
Original site photographs	
	OHR before Construction

Project facilities  
at Site



Display of emergency contact number




First Aid program conducted for labours

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	Designated scrap yard	

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#### Attachment O2: Details of construction camp sites

<b>1.</b>	<b>Labour accommodation, OHR site – Zone 13: Baniara</b>
<b>Location- Baniara, Bhogali II (Latitude: 22°32'25", Longitude: 88°38'1")</b>	
<b>A</b>	Accommodation – For 10 Nos construction workers No women / families in the camp Facilities provided at camp site <ul style="list-style-type: none"> <li>• Type of living accommodation – Camp Accommodation at OHR site</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>B</b>	<b>Camp photographs</b>
Original site Photographs	Adjacent to OHR Site
Photos of camp and facilities provided	
	Labour accommodation at OHR Zone-12





Toilet facility

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### Attachment O3: List of clearances & statutory requirements

Sl. No.	Project related	Status
<b>A</b>	<b>Construction/work related</b>	
1	Possession of land	Available
2	Notice to Proceed from PIU	Available
<b>B</b>	<b>Labour Safety / Welfare Related</b>	
1	Labour license	Obtained [Refer <b>Appendix – O.A</b> ]
2	Workmen Compensation	Obtained [Refer <b>Appendix – O.B</b> ]
<b>C</b>	<b>Safety / liability safety related</b>	
1	Medical Insurance	Tie-up with local hospital made
<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 – O.C</b> ]
3	Driving licenses for drivers	Obtained
4	Insurance for vehicles / equipment, as required	Obtained

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#### Attachment O4: Contractor's OHS Policy & Organization

<b>1</b>	<b>Contractor agency has a OHS policy</b>	<b>Yes/ No</b>
A	If yes, provide policy details 1. Policy statement: 2. EHS organization & responsibilities:	Yes [Refer Appendix O2] Yes
A	List safety risks anticipated in the project Work area (OHR) • Trips and falls • Head injury from falling objects • Confined work space • Slope failure / trench collapse • Accidents from open excavations	-
C	List personal protection equipment provided to workers • Boots- 10 nos. • Gloves-2 nos. • Helmet-10 nos. • Safety jacket- 15 nos. • Goggles- 2 nos.	Yes
D	Preventive Measures	
	Orientation of all workers on OSH	Done
	Work permit system	Yes – for work at height
	Toolbox/safety meetings (how often will this be conducted, what are the minimum topics)	Twice Weekly on work at height, firefighting, first-aid, housekeeping, etc.
	Safety signage	Displayed on site
	Barricades (more than 1 m deep requires hard barricading)	Yes
<b>2</b>	<b>Contractor emergency procedure</b>	
A	• In case of accident, 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.	
B	<b>Contact information, staff and responsibilities for emergency situations</b>	
	<b>Designation</b>	<b>Staff name &amp; contact</b>
	Site Engineer	Mr. Md Sukur Ali Mob: 8327043932
	EHS Supervisor	Mr. Nitin Kumar Mob: 8971107720
	Project Manager Representative	Mr. Ansari Mob: 7417526845
		<b>Emergency responsibility</b>
		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 accident client shall be informed immediately.	Yes
D	Mandatory Reporting to Authorities	Yes
E	Prohibited Acts and Penalties for Violations	Yes

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#### Attachment O5: Utility shifting/relocation

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

#### Attachment O6: Details of Construction Materials

Sl. No	Material	Approximate quantity required (MT) for project	Source	Indicate if source has all necessary government clearances
1	Aggregate	500.94	Nalhati/Rampurhat	Yes
2	Sand	260.25	Gopi Ballavpur/ Bardhaman	Yes
3	Steel	56.56	Approved supplier	Yes
4	Cement	172.52	Approved supplier	Yes



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### Attachment O7: Spoil Management Plan

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<b>Spoil Management Plan</b>		




  

**SPOIL MANAGEMENT PLAN (SMP)**

**WBDWSIP BHANGAR-II BLOCK**

**LOCATION – ZONE- 13,OHR (Banlara)**

0	13.05.2019				
REV	DATE	PREPARED BY	CHECKED BY	APPROVED BY DSISC	APPROVED BY PIU

Environmental Specialist, DSISC  
North 24 Parganas  
WBDWSI Project

*may be approved*

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

Junior Engineer  
PIU-1, N-24Pgs., WBDWSIP, PHE Dte.  
Govt. Of West Bengal

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

West Bengal Drinking Water Sector Improvement Project

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#### 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 OHR site in Zone (13). For the OHR 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 confirming 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:

- They will start activity only after Tool Box Talk done.
- 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.
- Worker should be skilled to carry out the work.

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.

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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. 130.853 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 reuse 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 the 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.

**SPOIL DITAILS**

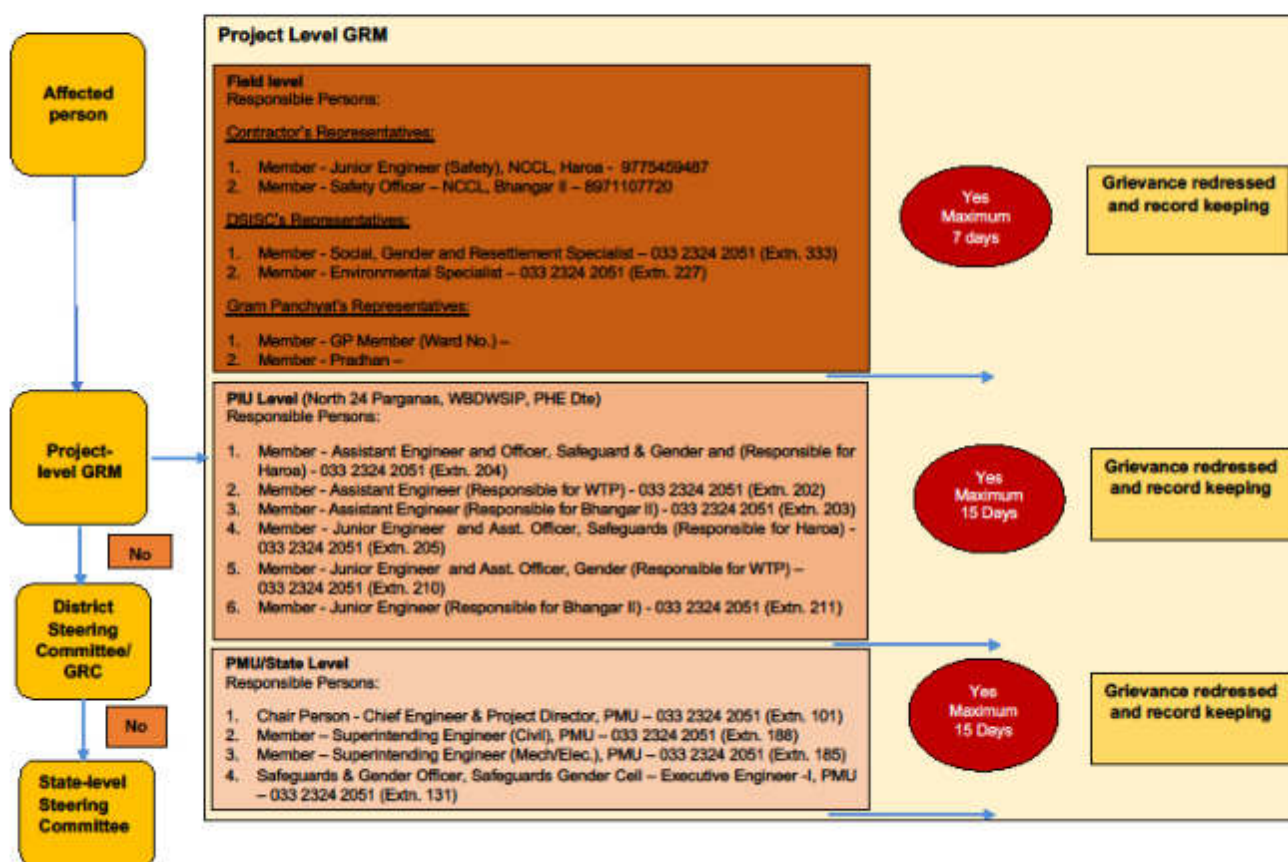
Sl. No.	ZONE	NAME OF STRUCTURE	EXCAVATON TOTAL QTY (C.U.M)	BACK FILLING TOTAL QTY (C.U.M)	REUSE EXECES QTY(C.U.M)
1.	13	Boundary wall	130.853	99.392	31.461

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### Attachment O8: 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



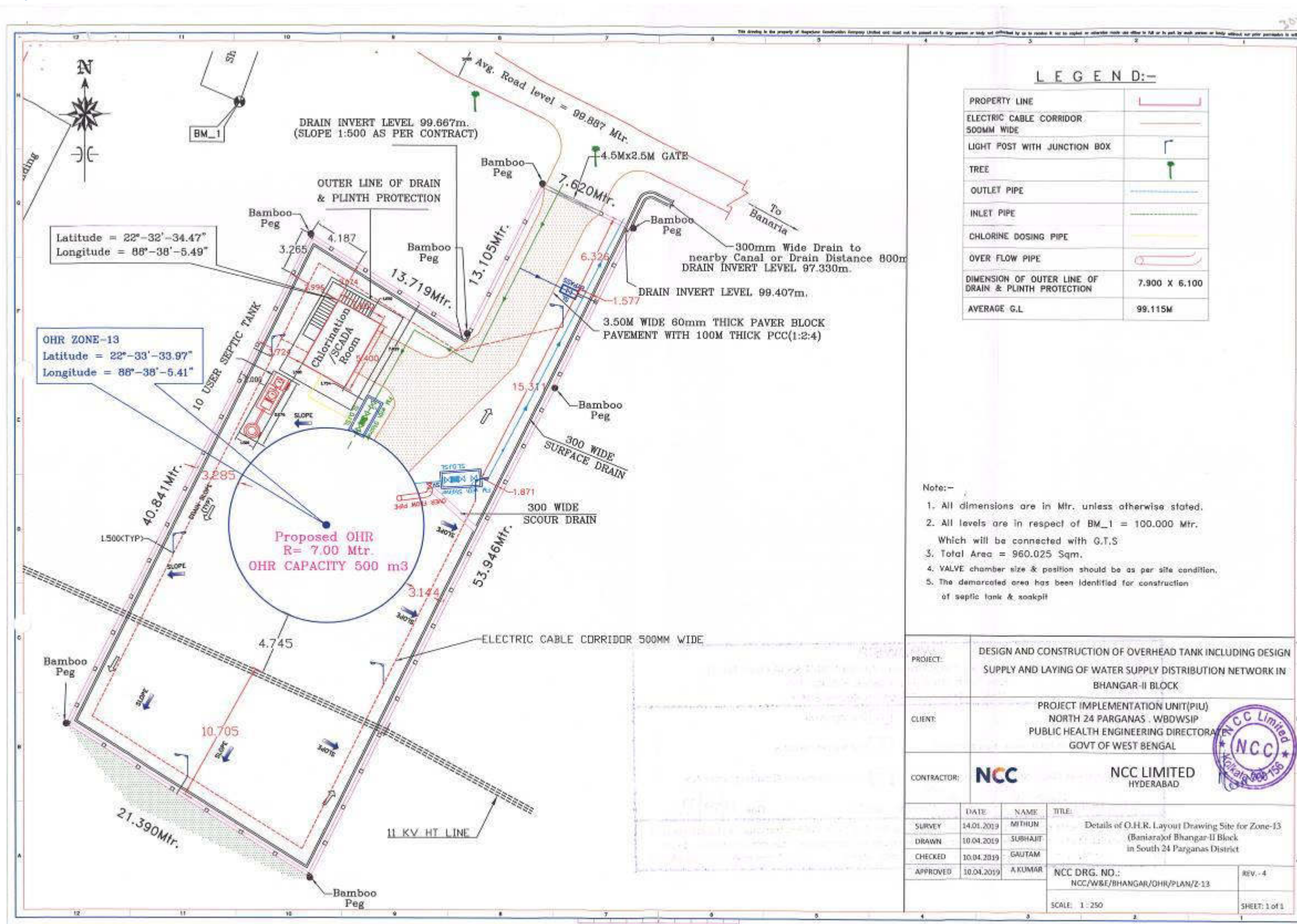
All grievances are recorded in site grievance register and resolved at the earliest. The sample grievance registration form is included in Appendix O3.

### Attachment O9: 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 Panchyat level and work details including time period is informed.





## Appendix O.1: Site Layout Plan



<b>NCC LIMITED</b>	<b>Design and Construction of Overhead Reservoir Including Water Supply Distribution Network and Metering Work in Bhangar-II Block</b>	<b>Doc. No. NCC/ SEMP /01 Last Revision No. 00 Last Revision Date : 00 Page 29 of 79 Original Issue Date :</b>
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## Appendix O.A: Labour License

**GOVERNMENT OF WEST BENGAL**  
**OFFICE OF THE DEPUTY LABOUR COMMISSIONER, BARUIPUR**  
*South 24 Parganas, Nandarani 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) ]

**License No. : BRP04/CLL/000191**

**Date : 27th Dec, 2018**

Lic Fees	1000
S.Deposit	30000

**LICENSE**

License is hereby granted to **NCC LIMITED** at **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 condition specified in Annexure.

The License shall remain till:-26th Dec, 2019

sd/-  
Signature & Seal  
**Licensing Officer**

**RENEWAL**

[Rule 29]

Renewal vide AIN No.

1.Date of Renewal

2.Fees paid for Renewal

3.Date of Expiry

RENEWAL-LIC-009474-008133-26939-2019

21st Nov, 2019

₹ 1250 (One Thousand Two Hundred Fifty rupees only)

26th Dec, 2020

**SHREEJITA  
SAHA**



Digitally signed by  
SHREEJITA SAHA  
Date: 2019.11.21 00:57:44  
+05'30'

Signature & Seal  
**Licensing Officer**



<b>NCC LIMITED</b>	<b>Design and Construction of Overhead Reservoir Including Water Supply Distribution Network and Metering Work in Bhangar-II Block</b>	<b>Doc. No. NCC/ SEMP /01 Last Revision No. 00 Last Revision Date : 00 Page 30 of 79 Original Issue Date :</b>
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*Labour Licence  
DWS Bhangar-II  
Expire on 26/12/19*

**GOVERNMENT OF WEST BENGAL**  
OFFICE OF THE DEPUTY LABOUR COMMISSIONER, BARUIPUR  
South 24 Parganas, Nandaram Complex (1st & 2nd Floor) (Opp. 218 Bus Stand) Holding No - 474, Kulpi Road,  
Ward No - 5, Shibaniipith, Barulpur, 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**  
Licensing Officer  
Under the Contract Labour(R&A) Act, 1970  
&  
Assistant Labour Commissioner  
Barulpur, South 24 Parganas

Digitally signed by  
Tapas Kumar Sinha  
Roy  
Date: 2018.12.27  
15:32:23 +05'30'

**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,  
Bhogail-II, Block - Bhangar - II, Barulpur - 700135, PS - Kashiapur, South 24 Parganas

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

1 of 2

**Appendix O.B: Workman Compensation**



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, APOL Estate Opp Country Club, Begumpet, Hyderabad, Telangana, Pincode-500016, Tel. No : 040-55038600			
Policy No	2519-L0129160-FWC	Period of Insurance	From 02-09-2019 To Midnight of 31/03/2020
Insured	NCC Limited	Intermediary Name/Code	INDIA INSURE RISK MANAGEMENT AND INSURANCE BROKING SERVICES/60011521
Address	BHANGAR II BLOCK, South Twenty Four Parganas, West Bengal, 743302	Telephone(Mob,Off,Home)	4027823950/0692590136/027822990
		Fax No & Email Id	02256791416 / PADMAJA SURYARAJAN@INDIAINSURE.COM
GETEN Number	19AAACH7333C/ZME	PGI GETEN Number	36AACHP01011ZA
In consideration of the Policy holder's payment to the Future Generali India Insurance Company Limited (herein after called the Insurer) the premium as stated in the Schedule and in reliance upon the statements made by the Policy holder in the proposal including its attachments or otherwise, and the material representation therein, the Insurer agrees to provide insurance against loss/damage liability or exposure to the extent and in the manner herein provided subject to all terms, conditions, exceptions and warranties hereinafter set forth.			
Insurance Details		Schedule Of Premium (₹)	
Insurer	FUTURE GENERALI INDIA INSURANCE COMPANY LIMITED	Share (In %)	100%
		Core Premium	134,304.34
		Goods and Service Tax	24,174.78
		Total Premium	158,479.00
Risk Details			
Plants of Business : Design and Construction of overhead reservoir including water supply distribution and metering works in Bhangar II Block			
Location : Design and Construction of overhead reservoir including water supply distribution and metering works in Bhangar II Block			
Construction/Job Construction Name : NCC LTD			
No of Employees	Description of work done by Employees	Declared Wage during the Period of Insurance (₹)	
50	Highly Skilled workmen	8,647,000.00	
50	Skilled workers	5,248,000.00	
50	Semi Skilled Workers	3,470,000.00	
50	Unskilled Workers	4,989,000.00	
Total		22,354,000.00	
Coverage Details			
The Policy covers Liability of the Insured under the following Law(s) shown as annexed, 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	Subject otherwise, in the terms, conditions and scope of Exclusions of the Policy, the amount of liability incurred for the Insured	Yes	
Workmen's Compensation Act, 1923 and subsequent amendments	Subject otherwise, in the terms, conditions and scope of Exclusions of the Policy, the amount of liability incurred for the Insured	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			
I. Any interest and/or penalty imposed on the Insured on account of late/their failure to comply with the requirements laid down under WC Act 1923			
II. Occupational disease of any kind.			
Additional Clauses, Conditions, Warranties & Exclusions			
Termination is excluded from coverage.			
No cover for Medical Expenses, Unless specifically allowed in the policy.			
No Cover for Medical Expenses.			
No Cover for occupational Diseases			
Jurisdiction/ Territory : India			
Excluding War Risk, Blasting, Tunneling and Handling of Exp. Involves			
Excluding loss arising out of installation and erection of live wiring.			
Warranted that safety practices are followed by the workers/agents			
Contractors and sub-contractors/employees are covered.			
Important:- I. 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, Insurer 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.			
Receipt No :	29465378		
Date of Issue :	07/02/2019		
Place of Insurance :	Mumbai*		
*Address mentioned below.		(Authorized Signatory)	
Note: This document is digitally signed by Sharada Rameshkrishnan, Authorised Signatory of Future Generali India Insurance Company Limited on 07/02/2019.			

The stamp duty of Rs 67.13 paid by Letter Of Authorisation No. CSE/118/2018/3179/18, dated 18/08/2018, Madras - 2017/C.B.9161-1, dated 09/01/2018.  
Policy UIN : INDANI32P0012V01200708



Future Generali India Insurance Company Limited, Corporate & Regional Offices: 6th Floor, Tower - 3, Indian Finance Centre, Begumpet Begumpet  
Mang. Hyderabad Road, Mumbai - 400013, Maharashtra. Call Line - 1800-226-233, 1800-308-3331, 022-47827800, Email: [geni@futuregeneralilife.com](mailto:geni@futuregeneralilife.com),  
Website: [www.futuregeneralilife.com](http://www.futuregeneralilife.com), Reg. No. 132, CIN - 0660104012000PLC103181.



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### Appendix O.C: PUC Certificates


**POLLUTION UNDER CONTROL CERTIFICATE**  
(Under the West Bengal Motor Vehicles Rules, 1988)


Vehicle Registr. No. **WB 08G 5386** WB-01-**D 5679131**

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

Pollution Level

CO (%)	0.000
HC (ppm)	554
SO (HSU)	

PUC Certificate issued by:  License No. **SP-32/P**

Signature 

**COMPUTERISED EMISSION TEST CERTIFICATE**  
Authorised by Transport Dept. of West Bengal  
**AKBAR AUTO EMISSION TESTING CENTRE**  
BASANTI HIGHWAY, GHATAKPUKUR, PO/PS-BHANGAR, 24PGS(S), PIN-743502



PUC No:- 008431 Licence No:- 32/P  
Vehicle No:- WB 08G 5386 Test Date:- 16/08/2019  
Year Of Reg:- 2019 Test Time:- 10:26:44 AM  
Speedo Meter:- 1205 Fuel:- Petrol  
Vehicle Make:- HERO Test Fee:- 80  
Vehicle Model:- HF DELUXE Vehicle Type:- 2W  
Engine Number:- 10845 Engine Type:- 4S  
Chassis Number:- 05724 Result:- Pass  
Vehicle Color:- BLACK Valid Upto:- 15/08/2020  
Compliant:- BS-IV  
Contact:- 8755017446  
Owner:- NCC LIMITED

**IDLE EMISSION**

Regulation	Actual	
Ideal CO:- 3.5	0.000	%VOL
Corrected:- 3.5	0.000	%VOL
Ideal HC:- 4500	554	PPM
CO2:-	0.00	%VOL
O2:-	36.05	%VOL
NOx:-	5	%VOL
Lambda:-	0.000	
PEF:-	0.542	
RPM:-	00000	
AFR:-	00000	
Oil Temp:-	00000	°C

**HIGH IDLE EMISSION**

Regulation	Actual	
CO:- 0.2		%VOL
CO2:-		%VOL
O2:-		%VOL
Lambda:-		
RPM:-		

Name of Authorised Signatory   
with Seal of Testing Centre 

*WB 08G 5386*  
*23/08/19*

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

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

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

Pollution Level

CO (%)	5.83
HC (ppm)	5.83

PUC Certificate No. **32/D**

Signature **32/D**

WB-01-**D 5679142**

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

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

Test Result : Free Acceleration Validity **6 Months**

	Ideal Rpm	max Rpm	K Value	Hsu val	Oil Temp
1	860	2900	5.37	90.06	81
2	860	2900	0.17	8.9	66
3	852	2700	0.12	8.9	66
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 prescribed under rule 113(2) of CMB rules 1989, Operator: MD RAMIZ RANA

**POLLUTION UNDER CONTROL CERTIFICATE**  
(Under the West Bengal Motor Vehicles Rules, 1988)

Vehicle Registr. No. **WB15B2529** WB-01-**D 5678745**

Date of issue: **23-07-2019** Valid upto: **22-01-2020**

Pollution Level  
CO (%) **55.83**  
HC (ppm) **55.83**  
SD (HSU) **55.83**

PUC Certificate issued by: **AKBAR AUTO EMISSION TESTING CENTRE**

Signature: **[Signature]**

32/D

WB-01-**D 5678745**

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

I.D Number **WB32D3647596** Licence No. **32/D**  
Year Of Registration= **2011** Date: **23-07-2019**  
vehicle registration no = **WB15B2529** TIME: **05:46:14**  
Speedometer Reading[kms] = **2541** Owner: **NABA KUMAR GHOSH /851304**  
Engine Number=**28746** Driver:- **SELF**  
chasis Number=**B5954** Test Fee : **Rs.100/-**  
Vehicle Colour = **OTHERS** Fuel : **Diesel**  
Vehicle Make : **HMT** Smk cell Temp : **00**  
Vehicle Model : **4022** Oil Temp : **93.0**  
Type Of Engine : **OTHERS** Valid Up To : **22-01-2020**  
Type OF Vehicle: **OTHERS** Grade : **A**

Test Result : Free Acceleration

	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	66
Avg	860	2900	1.9	55.83	

Validity 6 Months

Seal Of Testing Center

Certified that this Vehicle's K-Mean and hsu% value conforms to the standards prescribed under rule 115(2) of CMB rules 1989. Operator- MD RAMIZ RANA

<b>NCC LIMITED</b>	<b>Design and Construction of Overhead Reservoir Including Water Supply Distribution Network and Metering Work in Bhangar-II Block</b>	<b>Doc. No. NCC/ SEMP /01</b>
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## Appendix O.2: Contractor's OHS Policy Statement

**NCC LIMITED**

***Health, Safety & Environment Policy***  
For Construction/Erection and Commissioning, the General Strategic Objectives Listed Below are Followed:

- A proactive, role model HSE at Site.
- All Sites related activities and Office Work will result in no one getting injured or made unwell.
- Early identification of hazards and risk and the decision or adequate measures,
- Reduction of negative impact on the neighborhood are the the environment in particular on fauna and flora to a minimum.
- Provide training in HSE knowledge and encourage continuous improvement and development of this.
- Continuous monitoring of the HSE performance.
- Promote the benefits of a healthy life-style amongst our employees.
- Report and investigate accidents and incidents to take lessons and prevents similar events occurring again.
- Preserve ecological balance and heritage.

Prepared by:	Copy No.	Date of Issue:	Approved by:	Issued by:

<b>NCC LIMITED</b>	<b>Design and Construction of Overhead Reservoir Including Water Supply Distribution Network and Metering Work in Bhangar-II Block</b>	<b>Doc. No. NCC/ SEMP /01 Last Revision No. 00 Last Revision Date : 00 Page 36 of 79 Original Issue Date :</b>
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### Appendix O.3: Sample Grievance Registration Form

(Available in Bengali and English)

The \_\_\_\_\_ Project welcomes complaints, suggestions, queries, and comments regarding project implementation. We encourage persons with grievance to provide their name and contact information to enable us to get in touch with you for clarification and feedback.

Should you choose to include your personal details but want that information to remain confidential, please inform us by writing/typing \*(CONFIDENTIAL)\* above your name. Thank you.

Date	Place of registration	Project Town			
		Project:			
Contact information/personal details					
Name		Gender	* Male * Female	Age	
Home address					
Place					
Phone no.					
E-mail					
Complaint/suggestion/comment/question Please provide the details (who, what, where, and how) of your grievance below:					
If included as attachment/note/letter, please tick here:					
How do you want us to reach you for feedback or update on your comment/grievance?					

#### 1. FOR OFFICIAL USE ONLY

Registered by: (Name of official registering grievance)	
Mode of communication: Note/letter E-mail Verbal/telephonic	
Reviewed by: (Names/positions of officials reviewing grievance)	
Action taken:	
Whether action taken disclosed:	Yes No
Means of disclosure:	



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### অভিযোগ/ পরামর্শ/ মন্তব্য/ প্রশ্নাদি লিপিবদ্ধ করার নমুনা পত্র

এই ..... প্রকল্পটি সৃষ্টি ও সুন্দরভাবে রূপায়নের উদ্দেশ্যে সকলের অভিযোগ, পরামর্শ, প্রশ্ন এবং মন্তব্য প্রত্যাশা করে। আপনার কোনও অভিযোগ থাকলে আপনার নাম ও যোগাযোগের ঠিকানা দিয়ে আমাদের সহযোগিতা করবেন, আপনার অভিযোগ / প্রশ্নের যথার্থ সদুত্তর ও আপনাকে পরিস্থিতি সম্পর্কে আমরা অবগত করবো।

যদি আপনি আপনার ব্যক্তি পরিচয় গোপন রাখতে চান তাহলে আপনার নামের উপরে " গোপনীয় " কথাটি লিখবেন।

ধন্যবাদান্তে

তারিখ	পঞ্জীকরনের বা <b>Registration</b> এর স্থানঃ	ব্লক-	
		গ্রাম পঞ্চায়েত-	
		গ্রাম সংসদ-	
যোগাযোগের ঠিকানা / ব্যক্তিগত তথ্য			
নাম		লিঙ্গ	বয়স
বাড়ির ঠিকানাঃ গ্রাম-	পাড়া-	পুরুষ -	
ফোন নং-	ই-মেইল-	মহিলা-	
অভিযোগ/ পরামর্শ/ মন্তব্য/ প্রশ্নাদি- দয়া করে কে, কি, কোথায় এবং কিভাবে - অভিযোগের এই বিশদ বিবরণ নিচে লিখুন-			
যদি কোন অতিরিক্ত কাগজ জুড়তে হয় / বা নোট থাকে বা চিঠি থাকে তাহলে এই ঘরে (x) টীক দিন।			
আপনি কিভাবে আপনার অভিযোগ / মন্তব্য বিষয়ে অবগত হতে চান ?			

শুধুমাত্র অফিসের ব্যবহারের জন্যঃ

যে আধিকারিক অভিযোগ জমা নিলেন তার নামঃ
কিভাবে জানানো হল (x) টীক দিনঃ নোট বা চিঠির মাধ্যমে – ই-মেইল- মুখে মুখে বা টেলিফোনে-
যিনি অভিযোগ পাবার পর খতিয়ে দেখেছেনঃ
(নাম / পদ)
কি ব্যবস্থা গ্রহণ করা হয়েছেঃ
ব্যবস্থা যা গৃহীত হয়েছে তা জানানো হয়েছে কি না - হ্যা / না
কিভাবে জানানো হলঃ

মন্তব্য-

প্রস্তুতকারক -

আনুমদনকারী -

তারিখ-

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## SITE SPECIFIC ENVIRONMENTAL MANAGEMENT PLAN

**WBDWSIP BHANGAR-II BLOCK**

**LOCATION :ZONE-13,PIPE LAYING (BANIARA)**

0	<u>22.07.19</u> 22.07.19				
REV	DATE	PREPARED BY	CHECKED BY	APPROVED BY DSISC	APPROVED BY PIU

Assistant Engineer - II  
PIU, N-24Pgs.,WBDWSIP, PHE D.K.  
Govt. Of West Bengal

Environmental Specialist, DSISC  
North 24 Parganas  
WBDWSI Project

West Bengal Drinking Water Sector Improvement Project

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Package No.				Package No: N24P/02B  Zone 13 - Pipe Laying (Baniara) under PIU North 24 Parganas							
Package title				Design and Construction of Overhead Reservoir Including Water Supply Distribution Network and Metering Work in Bhargar-II Block . SEMP is as per requirement of the Draft IEE covering package no. N24P/02B							
Contractor				NCC Pvt. Ltd.							
Date of Contract Award				19/09/2018							
Date of particular works commencement				22/07/2019							
Contract period				Construction: 3 Years ; O&M: 2 Years							
SEMP Component				Laying of 47463m of pipeline as detailed below.							
Demolition Work				No demolition activity involved							
Project Area				Bhogali II Gram Panchayet ,Bhargar II block							
Project Description				Individual household water supply schemes for the project Gram Panchayats							
Household Connection				2676 (Estimated HH Connection)							
Non-Household Connection				All Commercial, Educational, Religious and Health institutions will get potable water from this project. Numbers are not identified yet.							
Indicative Budget for the EMP Implementation for the entire package				INR 21,42,500/-							
Project Components				As per project detailed design							
Gram Panchayat (GP): Bhogali II											
Water Distribution Pipe Length (m) Summary											Total Length
Zone ID	Pipe Diameters(mm) External Dia										
	63*	75*	90*	110*	140*	200*	250	300	350	400	
Zone - B13	25146	7282	4187	3978	3173	3279	418				47463
Map of Distribution Network											
Refer Appendix – P.1											



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<b>Details of contractors on-site-personnel and workers</b>	Zone-13 (Pipeline works), Baniara village, Bhogali II GP of Bhargar II block
Project Manager	Mr. Durga Prasad; 9836803672
Site Engineer	Mr. Amlan Singha Roy; 9734667934
Site Supervisor	Mr. Randhir Shukla; 8755017446
EHS Supervisor	Mr. Nitin Sartape; 8971107720
Archeological supervisor	NA
Skilled / semi-skilled workers	2 Skilled and 0 Semi-skilled
Unskilled workers	18
Women workers	Nil
Workers – local / migrant	Local-Nil / Migrant-20 (from other districts within West Bengal)
<b>Details of facilities</b>	
Construction camps, (no's and locations)	Rented accommodation for labours at Baniara Market  [Ref. Attachment P2]

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**Table 1: Anticipated Impacts and Mitigation Measures – Pre-construction Environmental Mitigation Plan**

Field/ Issues	Anticipated Impact	Recommended Mitigation Measures	Actions Taken/ Status	Responsibility of Implementation	Monitoring of mitigation	Cost and source of fund
Infrastructure and Services	Electric poles and wires, water lines within proposed project area of Pipe laying.	<ul style="list-style-type: none"> <li>Locations and operators of these utilities to be identified as per detailed design documents to prevent unnecessary disruption of services during construction phase.</li> <li>Prepare spoils (Waste) management plan.</li> </ul>	<ul style="list-style-type: none"> <li>Contingency Plan has been developed by informing to emergency services like WBSEDCL, Telecommunication, local administration and police etc.</li> <li>First we are digging the trial pit manually, if any obstruction arise the same is removed as per direction of end user</li> <li>The pipe laying work to continue without disturbing the existing water pipelines and electric poles and overhead HT line.</li> <li>Flagman deployed on-site with Red and Green flags to control traffic and activity side by side.</li> </ul> <p>Please refer <b>Attachment P7 and P8</b> of this SEMP for site specific spoil management plan and traffic management plans.</p>	Contractor, PIU	DSISC observation at site and document checking	Project cost
Climate	The nature and intensity of rainfall events in an area, has implications for surface water management.	Seasonal climatic variations should be taken into account during scheduling of construction in the area.	<ul style="list-style-type: none"> <li>Excavation works schedule during dry season have been approved by PMU.</li> <li>If excavation work is to be conducted during rainy season then preventive measures will be taken like dewatering from the trench</li> <li>During laying use of Gumboot is a must.</li> <li>To avoid slip, trip and fall, no one is allowed within the barrication area.</li> </ul>	Contractor, PIU	DSISC observation at site	Project cost
Sources of Materials	Extraction of materials can disrupt natural land contours and vegetation resulting in accelerated erosion, disturbance in natural drainage	<ul style="list-style-type: none"> <li>Obtain construction materials only from government approved quarries with prior approval of PIU.</li> <li>On a monthly basis documentation on material obtained from each source (quarry/borrow pit) should be</li> </ul>	No involvement of any new borrow area or quarry is anticipated. Excavated soil will be used for backfilling of trenches.	Contractor, PIU	DSISC document checking	Project cost

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Field/ Issues	Anticipated Impact	Recommended Mitigation Measures	Actions Taken/ Status	Responsibility of Implementation	Monitoring of mitigation	Cost and source of fund
	patterns, ponding and water logging, and water pollution.	submitted. <ul style="list-style-type: none"> <li>In case of involvement of new quarries/ borrow areas, prior steps will follow for all clearances and permissions as required under law.</li> </ul>				
Consents, permits, clearances, no objection certificates (NOCs), etc.	Failure to obtain necessary consents, permits, NOCs, etc can result to design revisions and/or stoppage of works.	<ul style="list-style-type: none"> <li>All necessary consents, permits, clearance, NOCs, etc prior to award of civil works should be obtained.</li> <li>All necessary approvals for construction to be obtained before start of construction.</li> <li>Acknowledge in writing and report on compliance consents, permits, clearance, NOCs etc. obtained.</li> </ul>	<ul style="list-style-type: none"> <li>We have already received pipelaying permission from local authorities, electric connection, water source etc.</li> <li>NOC taken from Gram Pradhans for carrying out the activity.</li> <li>DG sets of capacity less than 5 kVA only being used.</li> <li>Refer <b>Attachment P3</b> for relevant clearances.</li> </ul>	Contractor, PIU	DSISC observation at site and document checking	Project cost
Asbestos Cement Pipes	Health risk due to exposure to asbestos materials	<ul style="list-style-type: none"> <li>Obtain details on location of underground Asbestos Cement pipes</li> <li>Locate the new pipe carefully to avoid encountering AC pipes</li> <li>Leave the Asbestos Cement pipes undisturbed in the ground.</li> </ul>	<p>Pipelaying work will be continued without disturbing existing pipelines as recommended in the IEE</p> <p>No asbestos pipes encountered till now. In any circumstances the Asbestos Cement pipes will not be disturbed and left in situ.</p> <p>Subproject does not includes rehabilitation of existing infrastructure like replacement of AC pipes, tube wells, pumping stations and OHSRs</p>	Contractor, PIU	DSISC observation at site and document checking	Project cost

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**Table 2: Anticipated Impacts and Mitigation Measures – Construction Environmental Mitigation Plan**

<b>Field/ Issues</b>	<b>Anticipated Impact</b>	<b>Recommended Mitigation Measures</b>	<b>Actions Taken/ Status</b>	<b>Responsibility of Implementation</b>	<b>Monitoring of mitigation</b>	<b>Cost and source of fund</b>
Material handling	HDPE pipes gets heated during strong sun and at fusion weld joints.	Hand gloves, nose masks and related PPE's should be used by the workmen.	Continuous supervision regarding the use of safety gadgets is being ensured [Refer <b>Attachment P4</b> for availability of PPEs at Site].	Contractor	PIU through DSISC observation at site and document checking	Project cost
Air Quality	Emissions from construction vehicles, equipment, machinery and DG set used for excavation and pipe laying resulting in dust and increase in concentration of vehicle-related noxious compounds that causes pollution.	<ul style="list-style-type: none"> <li>Following air pollution/dust control measures for construction activities stipulated by the "Direction of West Bengal Department of Environment under the Air Act, 1981 Direction No. EN/3170/T-IV-7/001/2009 dated: 10 December 2009": <ul style="list-style-type: none"> <li>Only vehicles having valid Pollution Under Control Certificates should be engaged in the project.</li> <li>Vehicles transporting (cement, sands etc) should be covered and cleaned prior to release at site, sprinkling of water and stabilization of soil for dust hazards to be carried out on site.</li> <li>Damp down soil, sand/ earth stockpiled at site should be maintained as per site condition.</li> <li>Control unnecessary movement of vehicle, public trespassing into work areas for control of dust generation.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Only vehicles having valid PUC certificate have been engaged in the project.</li> <li>Sprinkling and dust screen arrangement have been made, and will be used when required.</li> <li>Workers has been instructed to always use dust musk while working in the trench.</li> <li>Site has been access controlled to prevent trespassing.</li> <li>Excavated earth piles will be maintained in such a way to minimise dust rising.</li> <li>Air quality monitoring has been conducted at following five places (<b>Near School Swastayangachhi. Zone-04, Near Paschim Majarhat primary school Sanpukuria. Zone-10, Dharmatala Pachuria Zone:-01 Nangla Palpur Zone:-09</b>) in the Bhangar II Package.</li> </ul>	Contractor	PIU through DSISC observation at site	Project cost
Drainage and hydrology	Due to the nature and locality of the projects there is unlikely to be any significant impacts	<ul style="list-style-type: none"> <li>The site surface should be engineered and shaped in such a way that rapid and efficient evacuation of runoff is achieved.</li> </ul>	<ul style="list-style-type: none"> <li>We have ensured run-off through the site to a local drain does not contaminate existing drain and pond around the project site.</li> </ul>	Contractor	PIU through DSISC observation at site and document checking	Project cost

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Field/ Issues	Anticipated Impact	Recommended Mitigation Measures	Actions Taken/ Status	Responsibility of Implementation	Monitoring mitigation	Cost and source of fund
	on water resources within the immediate area.		<ul style="list-style-type: none"> <li>Dewatering, if any and hydrotest water, will be also discharged to local drains after ensuring no contamination.</li> </ul>			
River/Surface water quality	Mobilization of settled silt materials, run-off from stockpiled materials, and chemical contamination from fuels and lubricants during construction works can contaminate nearby surface water quality.	<ul style="list-style-type: none"> <li>Avoid stockpiling of earth fill; especially in monsoon season, cover it with tarpaulins or plastic sheets.</li> <li>Prioritize and implement reuse of excess spoil and materials in the construction work; if necessary, dispose in designated disposal area.</li> <li>Storage locations should have impervious floors</li> <li>Fuels and lubricants should be stored away from drainage and spillage protection should be provided.</li> </ul>	<ul style="list-style-type: none"> <li>Excavated earth from dug trenches will be stacked along the pipeline and away from drainage locations/ nearby water bodies.</li> <li>Locations for fuels and lubricants store is away from drainage path and spill kits have been obtained.</li> <li>All excavated soils are expected to be utilized on-site only. No excess spoil anticipated.</li> <li>Surface water monitoring has been conducted already following two places <b>(Koach Pukur Zone-15, and (Majer hat) Zone-10, Sanpukuria)</b> in the Bhangar II project as per Environmental Monitoring Plan recommended in the IEE.</li> </ul>	Contractor	PIU through DSISC observation at site and document checking	Project cost
Biodiversity Fauna and Flora	Due to the nature and locality of the project there is unlikely to be any significant impacts on bio-diversity within the area.	<ul style="list-style-type: none"> <li>For flora protection, tree cutting is strictly prohibited; if necessary, then obtain permission through proper channel.</li> <li>For faunal activity, instruction should be given to everyone to inform site EHS Coordinator who should take appropriate action for their protection and safe rescue.</li> </ul>	<ul style="list-style-type: none"> <li>Few trees are present along the existing alignment; cutting of tree strictly banned without regulatory clearance, if necessary, trimming allowed.</li> <li>So far no faunal movement has been observed in this site.</li> </ul>	Contractor	PIU through DSISC observation at site and document checking	Project cost
Noise Levels	Increase in noise level due to earth-moving and	<ul style="list-style-type: none"> <li>Minimize noise from construction equipment by using vehicle silencers, fitting</li> </ul>	<ul style="list-style-type: none"> <li>Consultation made with local communities in advance of the work to identify and avoid working at</li> </ul>	Contractor	PIU through DSISC observation at site and document	Project cost

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Field/ Issues	Anticipated Impact	Recommended Mitigation Measures	Actions Taken/ Status	Responsibility of Implementation	Monitoring of mitigation	Cost and source of fund
	excavation equipment, and the transportation of equipment, materials by labours	jackhammers with noise-reducing mufflers minimising the sound impact to surrounding sensitive receptor; <ul style="list-style-type: none"> <li>• Horns not to be used unless it is necessary to warn other road users;</li> <li>• Maintain maximum sound levels not exceeding 75 decibels (dbA). When measured at a distance of 1m from the vehicle/s.</li> <li>• Baseline and construction phase Noise Monitoring (Day &amp; Night time) should be conducted.</li> </ul>	sensitive times, such as religious and cultural festivals. <ul style="list-style-type: none"> <li>• Noise quality Monitoring has been conducted at following five places (<b>Majerhat Sanpukuria Zone:-10, Near Swastayan gchhi School Zone :-04, Dharmatala Pachuria School Zone:-01, Nangla Palpur Zone:-09, Near Koach Pukur Primary School Zone:-15</b>) in the Bhangar Project for Environmental Monitoring Report.</li> <li>• DG set (less than 5 kVA) are used for connecting the HDPE lines. This is properly maintained and stopped immediately after completion of work.</li> </ul>		checking	
Landscape and Aesthetics character, and sense of place	Construction wastes as well as excess construction materials may show some impact.	<ul style="list-style-type: none"> <li>• Prepare a construction waste management plan for site.</li> <li>• Hazardous wastes e.g. waste oil, empty paint cans, etc. should be stored on site and then shifted to a central location from where these will be disposed in accordance with Hazardous Wastes Management Rule, 2016.</li> <li>• As far as possible utilize the debris and excess soil in construction purpose such as for site filling and labelling purpose.</li> <li>• Avoid stockpiling excavated earth at the site for long time, if required, dispose at the site selected, in consultation with local</li> </ul>	<ul style="list-style-type: none"> <li>• Spoil management plan has been developed [Refer <b>Attachment P7</b>]</li> <li>• Excavated earth is utilized for backfilling purpose.</li> <li>• Excavated earth will be backfilled on the same day.</li> </ul>	Contractor	PIU through DSISC observation at site and document checking	Project cost



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Field/ Issues	Anticipated Impact	Recommended Mitigation Measures	Actions Taken/ Status	Responsibility of Implementation	Monitoring of mitigation	Cost and source of fund
		GP preferably from barren, infertile land, which is located away from any sensitive area.				
Occupational Health and Safety	Occupational hazards which can arise during work	<p>Develop and implement a site specific occupational health and safety(OHS) plan which will include measures such as:</p> <p>(a) excluding public from the site;</p> <p>(b) ensuring all workers are provided with and use personal protective equipment like Helmet, Gumboot, Safety Belt, Gloves, Nose mask etc.</p> <p>(c) documentation of work related accidents.</p> <p>(d) Providing qualified first aider at all times.</p> <p>(e) Providing to all workers reflective jacket,</p> <p>(f) Marking and providing sign boards for most of hazardous areas such as high voltage equipment,</p> <p>(g) Workers allowed exposure to noise level up to 85 dB (A) only.</p>	<ul style="list-style-type: none"> <li>Based on NCC's OHS Plan, a site specific OHS plan has been developed.</li> <li>Site OHS plan is attached at <b>Attachment - P4</b>.</li> <li>All workers have been provided with and made to use Personal Protective Equipment like helmet, gumboot, reflective jacket, gloves, nose mask and ear plugs;</li> <li>H&amp;S Training for all site personnel has been arranged and it will be continued;</li> <li>H&amp;S orientation training provided to all new workers to ensure that they are apprised of the basic site rules of work at the site, personal protective protection, and preventing injuries to fellow workers;</li> <li>Documented procedures are followed for all site activities;</li> <li>Work-related accidents will be recorded;</li> <li>Bottled water provided at site.</li> <li>First Aid box provided at working sites;</li> <li>Clean eating areas provided to workers;</li> <li>Moving equipment maintained with audible back-up alarms</li> </ul>	Contractor	PIU through DSISC observation at site and document checking	Project cost
Socio	Generation of	• Employ local labour force as far	• Local labours are employed, on	Contractor	PIU through DSISC	Project cost

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<b>Field/ Issues</b>	<b>Anticipated Impact</b>	<b>Recommended Mitigation Measures</b>	<b>Actions Taken/ Status</b>	<b>Responsibility of Implementation</b>	<b>Monitoring of mitigation</b>	<b>Cost and source of fund</b>
Economic Employment	temporary employment and increase in local revenue	as possible • Comply with labour laws	priority, whenever available. • Refer <b>Attachment P3</b> for documents relating to statutory compliances		observation at site and document checking	
Environmental Management Plan (EMP) Implementation Training	Irreversible impact to the environment, workers, and community	Project Manager and all key workers will be required to undergo training on EMP implementation including spoils/waste management, Standard operating procedures (SOP) for construction works; occupational health and safety (OHS), core labour laws, applicable environmental laws etc.	Training session for all employees has been arranged.	Contractor	PIU through DSISC observation at site and document checking	Project cost
Construction Camps	Temporary air, noise, land and water pollution from machine operation and after establishment of habitation	<ul style="list-style-type: none"> <li>• Camp sites shall be away from residential areas (100 m), sensitive areas (schools, hospitals, etc. 250 m), water bodies (500 m) and forests (more than 1 km)</li> <li>• Use unused, vacant lands; no trees shall be cut</li> <li>• Provide a proper fencing/compound wall</li> <li>• Prepare a site layout plan &amp; display at the site; uniformly label (name boards) all the places in the facility</li> <li>• Entire site/facility area shall be provided with hard levelled surface as appropriate; no loose soil, slush, water logging etc.,</li> <li>• Living quarters and construction camps shall be provided with standard materials; no shacks or huts</li> </ul>	<ul style="list-style-type: none"> <li>• Before locating project offices, sheds, and construction plants we discussed with DSISC and within or nearest place has been selected,</li> <li>• Till date no trees have been cut and no any destruction of property, irrigation and drinking water supply systems observed,</li> <li>• Employees are trained for storage and handling of materials which can potentially cause soil contamination and water contamination;</li> <li>• Solid waste managed according to the following preferential hierarchy: reuse, and disposal to designated areas; Kitchen wastes collected in a dustbin then it is disposed outside from area to designated disposal location,</li> <li>• Daily generated effluent disposed by arrangements already present in</li> </ul>	Contractor	PIU through DSISC observation at site and document checking	Project cost

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Field/ Issues	Anticipated Impact	Recommended Mitigation Measures	Actions Taken/ Status	Responsibility of Implementation	Monitoring of mitigation	Cost and source of fund
		<ul style="list-style-type: none"> <li>Adequate lighting and ventilation</li> <li>Provide drinking water, water for other uses, and sanitation facilities; drinking water should be regularly tested</li> <li>Provide clear pathways for safe movement</li> <li>Provide cooking fuel (cooking gas); and a separate safe place to cook; fire wood not allowed</li> <li>Construct septic tanks and soak pit arrangement for wastewater disposal</li> <li>Solid waste shall be properly managed – provide separate bins, compost biodegradable waste; sell recyclable waste.</li> <li>According to rule and regulation camp will be vacated and restored to pre-project conditions before acceptance of work.</li> </ul>	<ul style="list-style-type: none"> <li>camp/ household.</li> <li>Rented house is used as labour accommodation. Location of Labour accommodation: Rented accommodation at <b>Baniyara Market</b></li> <li>The details of labour accommodation is presented in <b>Attachment P2.</b></li> </ul>			
Archaeological and Cultural characteristics	Risk of archaeological chance finds	<ul style="list-style-type: none"> <li>Strictly follow the protocol for chance finds in any excavation work;</li> <li>Construction staff members should be made aware of the likelihood of heritage resources being unearthed and of the scientific importance of such discoveries.</li> </ul>	<ul style="list-style-type: none"> <li>No archaeological chance finds are reported at project sites till date.</li> <li>If there is any such finding, action will be taken up as per requirement.</li> </ul>	Contractor	PIU through DSISC observation at site and document checking	Project cost

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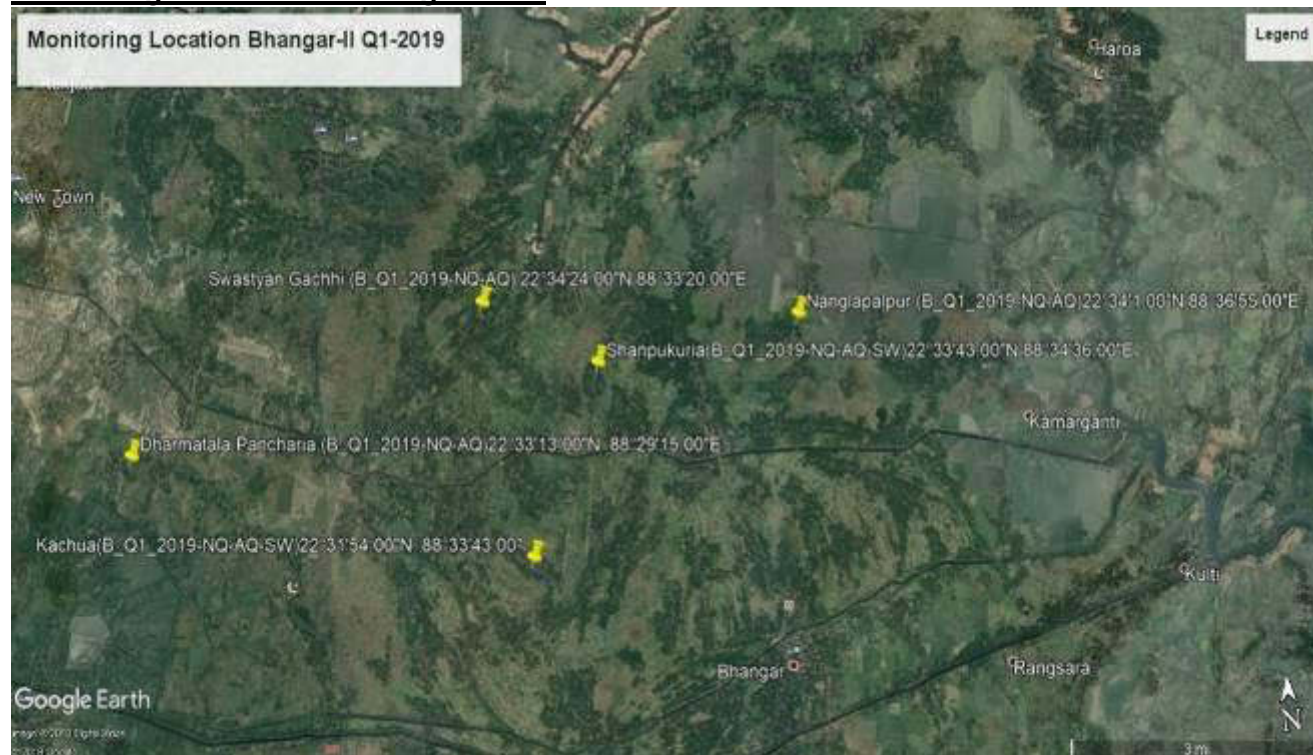
**Table 3: Construction Phase Environmental Monitoring Plan for entire package**

<b>Monitoring Field</b>	<b>Monitoring Location</b>	<b>Monitoring Parameters</b>	<b>Frequency</b>	<b>Locations*</b>	<b>Cost as per budget (in Rs.)</b>
Ambient air quality	5 locations (to be selected during implementation to represent the overall project area)	• PM <sub>10</sub> , PM <sub>2.5</sub> NO <sub>2</sub> , SO <sub>2</sub> , CO	Once before start of construction Quarterly (yearly 4- times) during construction (2-year period considered)	Near School Swastayangachhi. Zone-04, Near Paschim Majarhat primary school Sanpukuria. Zone-10, Dharmatala Pachuria Zone:-01 Nangla Palpur Zone:-09	225,000
Ambient noise	5 locations (same as air quality monitoring)	• Day time and night time noise levels (24 hours)	Once before start of construction Quarterly (yearly 4- times) during construction (2-year period considered)	Majerhat Sanpukuria Zone:-10, Near Swastayan Gachhi School Zone :-04, Dharmatala Pachuria School Zone:-01, Nangla Palpur Zone:-09, Near Coch Pukur Primary School Zone:-15	67,500
Surface water quality	2 locations (to be selected during implementation)	• pH, Oil and grease, Cl, F, NO <sub>3</sub> , TC, FC, Hardness, Turbidity BOD, COD, DO, Total Alkalinity	Once before start of construction Half yearly during construction (2-year construction period considered)	Koach Pukur Zone:-15, and Majerhat, Sanpukuria Zone-10	40,000
Chance Finds	Areas protected by ASI or West Bengal State Archaeology Department	• Chance finds protocol	Before finalization of detailed design, consult with ASI or West Bengal State Archaeology Department		-

Note: \* It should be noted that every quarter only 5 locations in the entire package is monitored for air and noise while two locations are monitored for surface water every half-yearly. Locations are changeable with progress of work. Present locations as mentioned in mitigation tables are base line monitoring conducted as per EMP provision. The exact locations of these monitoring are reported in SEMR over google earth image. For all the packages conduct of these monitoring are responsibility of concerned Contractor and cost for such already budgeted in the IEE

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### **Monitoring Locations on Google Earth**



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### **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

[Appendix P1: Map of Distribution Network](#)

[Appendix P.A: Gram Panchayat and other Authorities Permission](#)

[Appendix P.B: Labour License](#)

[Appendix P.C: Workman Compensation](#)

[Appendix P.D: PUC Certificates](#)

[Appendix P.2: Contractor's OHS Policy Statement](#)

[Appendix P.3: Sample Grievance Registration Form](#)

Enclosure 1 : Health\_Safety\_Management\_Plan of Pkg.N24PGS/02B\_Bhangar II block,




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### Attachment P1: Details of construction Work sites

<b>1. Zone 13: Pipeline construction Site</b>						
<b>Location- Baniara</b>						
<b>A</b>	<b>Material storage</b> <ul style="list-style-type: none"> <li>• Pipe</li> <li>• Fittings</li> </ul>					
<b>B</b>	<b>Plant &amp; Machinery</b> <ul style="list-style-type: none"> <li>▪ Jointing Machin-1 No</li> <li>▪ DG (less than 5 kVA) – 1 No</li> <li>▪ JCB – 1 No</li> </ul>					
<b>C</b>	<b>Site office – No</b>					
<b>D</b>	<b>Laboratory – No</b>					
<b>E</b>	<b>Security cabin – No</b>					
<b>F</b>	<b>Labor welfare facilities at Site</b> <ul style="list-style-type: none"> <li>• Drinking water</li> <li>• First Aid Box.</li> </ul>					
<b>G</b>	<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 ( 418m)</b>					
	<b>400 mm</b>	---	0.4- 0.8	1.250	2.0-6.0	CC/BT/Earthen
	<b>350 mm</b>	---	0.4- 0.8	1.140	2.0-6.0	CC/BT/Earthen
	<b>300 mm</b>	---	0.4- 0.8	1.30	2.0-6.0	CC/BT/Earthen
	<b>250 mm</b>	418	0.4- 0.8	1.25	2.0-6.0	CC/BT/Earthen
	<b>Distribution Network— HDPE Pipes (47045m)</b>					
	<b>200 mm</b>	3279	0.4- 0.8	1.20	2.0-6.0	CC/BT/Earthen
	<b>140 mm</b>	3173	0.4- 0.8	1.14	2.0-6.0	CC/BT/Earthen
	<b>110 mm</b>	3978	0.4- 0.8	1.11	2.0-6.0	CC/BT/Earthen
	<b>90 mm</b>	4187	0.4- 0.8	1.09	2.0-6.0	CC/BT/Earthen
	<b>75 mm</b>	7282	0.4- 0.8	1.08	2.0-6.0	CC/BT/Earthen
	<b>63 mm</b>	25146	0.4- 0.8	1.06	2.0-6.0	CC/BT/Earthen

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

<b>1.</b>	<b>Labour Accommodation, Pipeline site – Zone 13</b>
<b>Location- Baniyara Market, Bhogali II</b>	
<b>A</b>	<p>Accommodation – For 20 construction workers. No women / families in the camp</p> <p>Facilities provided at camp site</p> <ul style="list-style-type: none"> <li>• Type of living accommodation – Rented accommodation at Baniara Market</li> <li>• Accommodation provided for 20 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>B</b>	<b>Camp photographs</b>
Original site Photographs	Not applicable as it is a rented pre-existing accommodation
Photos of camp and facilities provided	
	Labour accommodation

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

Sl. No.	Project related	Status
<b>A</b>	<b>Construction/work related</b>	
1	Gram Panchayat 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

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#### Attachment P4: Contractor's OHS Plan & 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- 20 nos. • Gloves- 3 no. • Helmet - 26 nos. • Safety jacket- 25 nos. • Goggles- 2 nos.	Yes	
D	Preventive Measures		
	Orientation of all workers on OHS	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>	<b>Emergency responsibility</b>
	Site Engineer	Mr. Amlan Singh Roy Mob: 9734667934	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	Mr. Nitin Kumar Mob: 8971107720	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	Mr. Ansari Mob: 7417526845	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

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#### 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	14650.6	From trench cutting	Not required

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#### Attachment P7: Spoil Management Plan

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<b>Spoil Management Plan</b>		




  

**SPOIL MANAGEMENT PLAN (SMP)**

**WBDWSIP BHANGAR-II BLOCK**

**LOCATION – ZONE-13,PIPE LAYING (BANIARA)**

0	22.07.2019				
REV	DATE	PREPARED BY	CHECKED BY	APPROVED BY DSISC	APPROVED BY PIU

Environmental Specialist, DSISC  
North 24 Parganas  
WBOWSI Project

*may be approved*

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

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

West Bengal Drinking Water sector improvement Project



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#### 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 (13).

#### 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 confirming 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 their 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.

<b>NCC LIMITED</b>	<b>Design and Construction of Overhead Reservoir Including Water Supply Distribution Network and Metering Work in Bhangar-II Block</b>	<b>Doc. No. NCC/ SEMP /01 Last Revision No. 00 Last Revision Date : 00 Page 59 of 79 Original Issue Date :</b>
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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. 14650.6 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 reuse 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 Baniara (Zone 13) for Pipe laying**

Sl. No.	Dia	Length(m)	Width(m)	Depth(m)	Total(cum)
1	63	25145	0.3	1	7543.5
2	75	7281	0.3	1	2184.3
3	90	4186	0.3	1	1255.8
4	110	3978	0.3	1	1193.4
5	140	3174	0.3	1	952.2
6	200	2872	0.4	1	1148.8
7	200	409	0.4	1	163.6
8	300	418	0.5	1	209
9	Approx. generated total Spoil at ZONE-13				<b>14650.6</b>

<b>NCC LIMITED</b>	Design and Construction of Overhead Reservoir Including Water Supply Distribution Network and Metering Work in Bhangar-II Block	Doc. No. NCC/ SEMP /01 Last Revision No. 00 Last Revision Date : 00 Page 60 of 79 Original Issue Date :
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#### Attachment P8: Traffic Management Plan

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




  

**TRAFFIC MANAGEMENT PLAN (TMP)**

**WBDWSIP BHANGAR-II BLOCK**

**LOCATION – ZONE-13, PIPE LAYING (BANIARA)**

0	22.07.2019				
REV	DATE	PREPARED BY	CHECKED BY	APPROVED BY DSISC	APPROVED BY PIU

Environmental Specialist, DSISC  
North 24 Parganas  
WBDWSI Project

*may be approved*

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

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

West Bengal Drinking Water Sector Improvement Project

<b>NCC LIMITED</b>	<b>Design and Construction of Overhead Reservoir Including Water Supply Distribution Network and Metering Work in Bhangar-II Block</b>	<b>Doc. No. NCC/ SEMP /01 Last Revision No. 00 Last Revision Date : 00 Page 61 of 79 Original Issue Date :</b>
	Site Specific Environmental Management Plan	

## 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.

Pipe laying 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**

<b>NCC LIMITED</b>	<b>Design and Construction of Overhead Reservoir Including Water Supply Distribution Network and Metering Work in Bhangar-II Block</b>	<b>Doc. No. NCC/ SEMP /01</b>
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- 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.

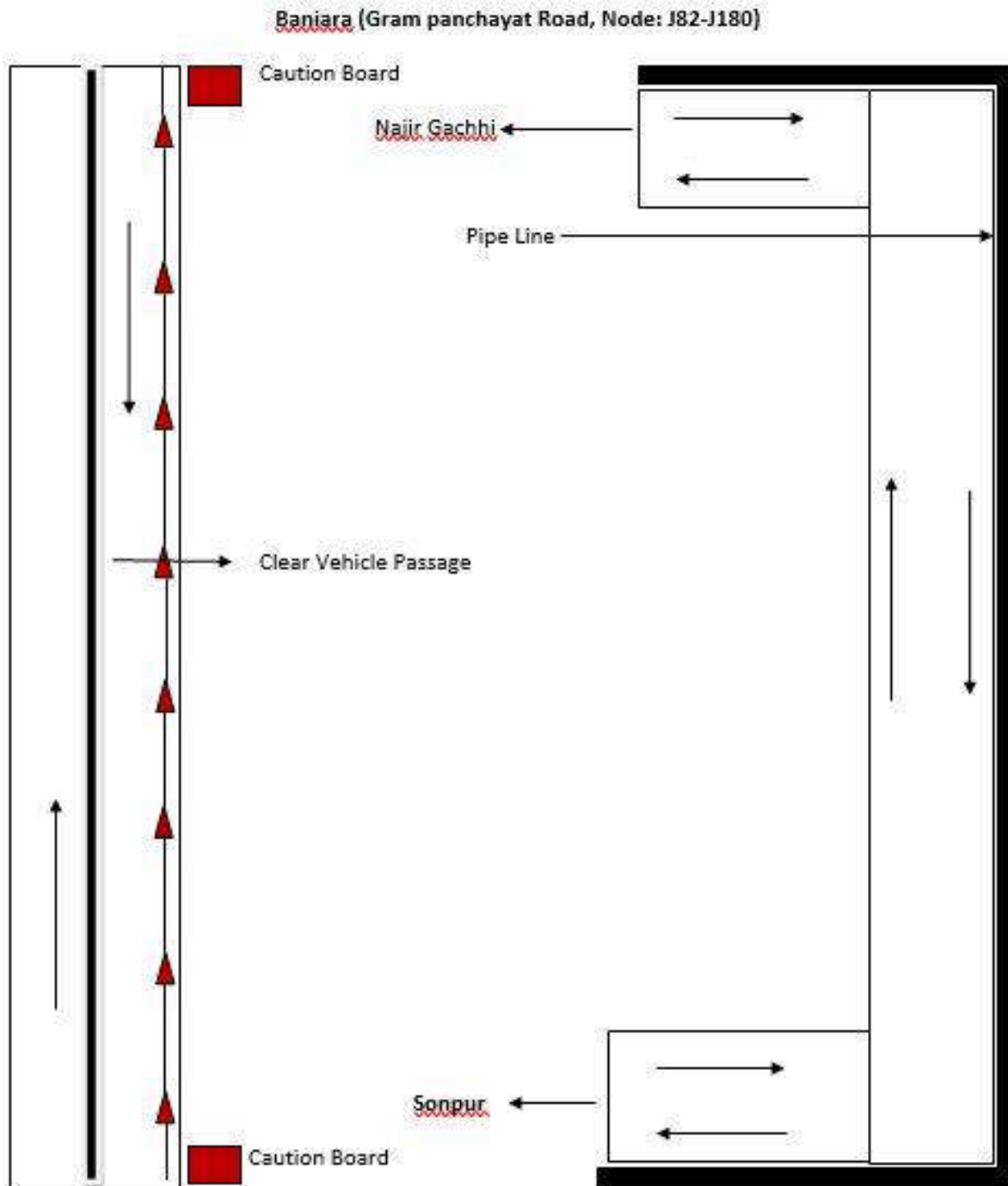
### **5.8 Working Area**

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

Particular attention has been taken in working area:

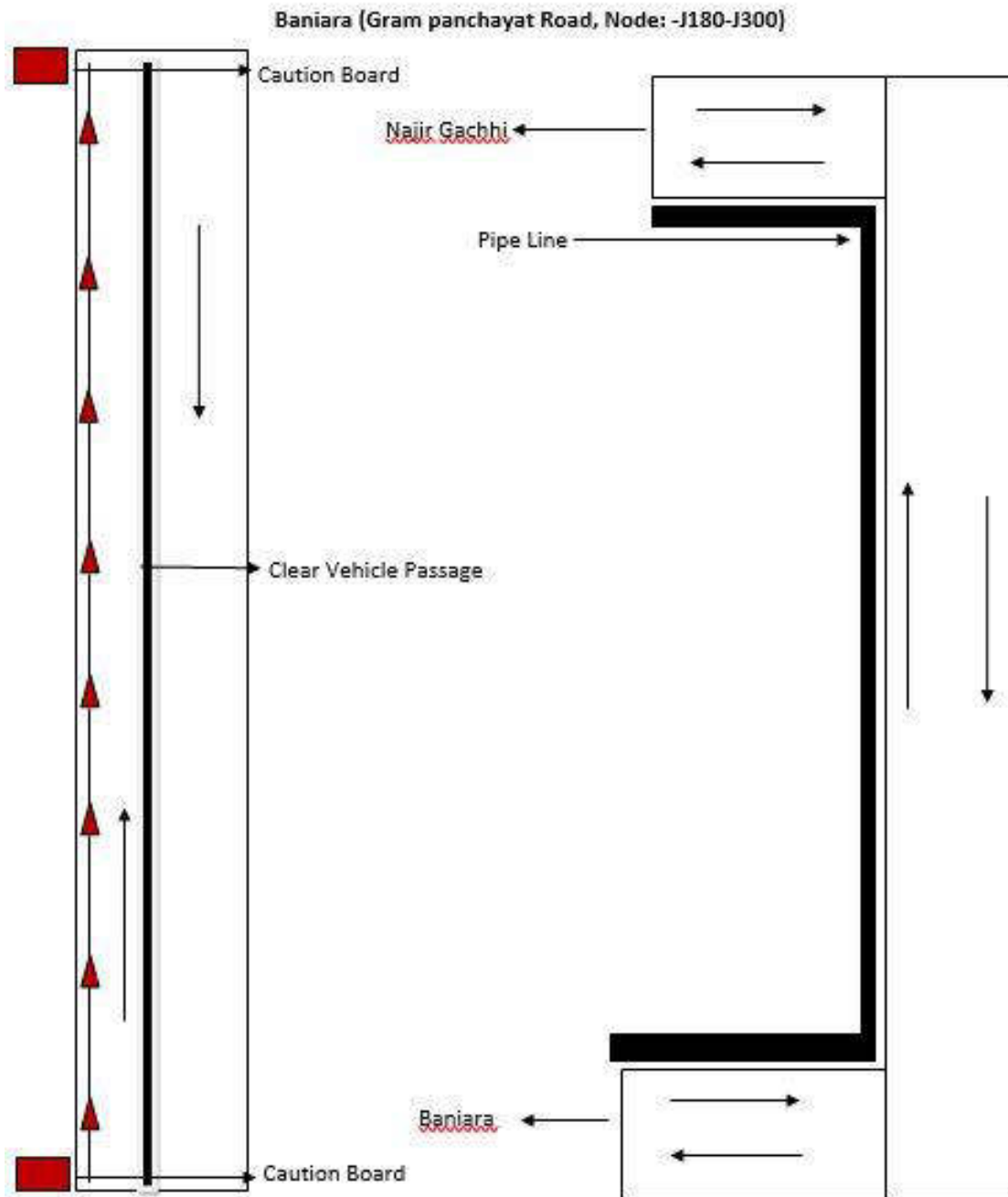
- Traffic signs
- Cones
- Barriers
- Information boards, and
- Site lighting
- Adequate lighting has been provided at working area at night.
- All persons wear high visibility jackets.

<b>NCC LIMITED</b>	<b>Design and Construction of Overhead Reservoir Including Water Supply Distribution Network and Metering Work in Bhangar-II Block</b>	<b>Doc. No. NCC/ SEMP /01 Last Revision No. 00 Last Revision Date : 00 Page 63 of 79 Original Issue Date :</b>
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<b>NCC LIMITED</b>	<b>Design and Construction of Overhead Reservoir Including Water Supply Distribution Network and Metering Work in Bhangar-II Block</b>	<b>Doc. No. NCC/ SEMP /01 Last Revision No. 00 Last Revision Date : 00 Page 64 of 79 Original Issue Date :</b>
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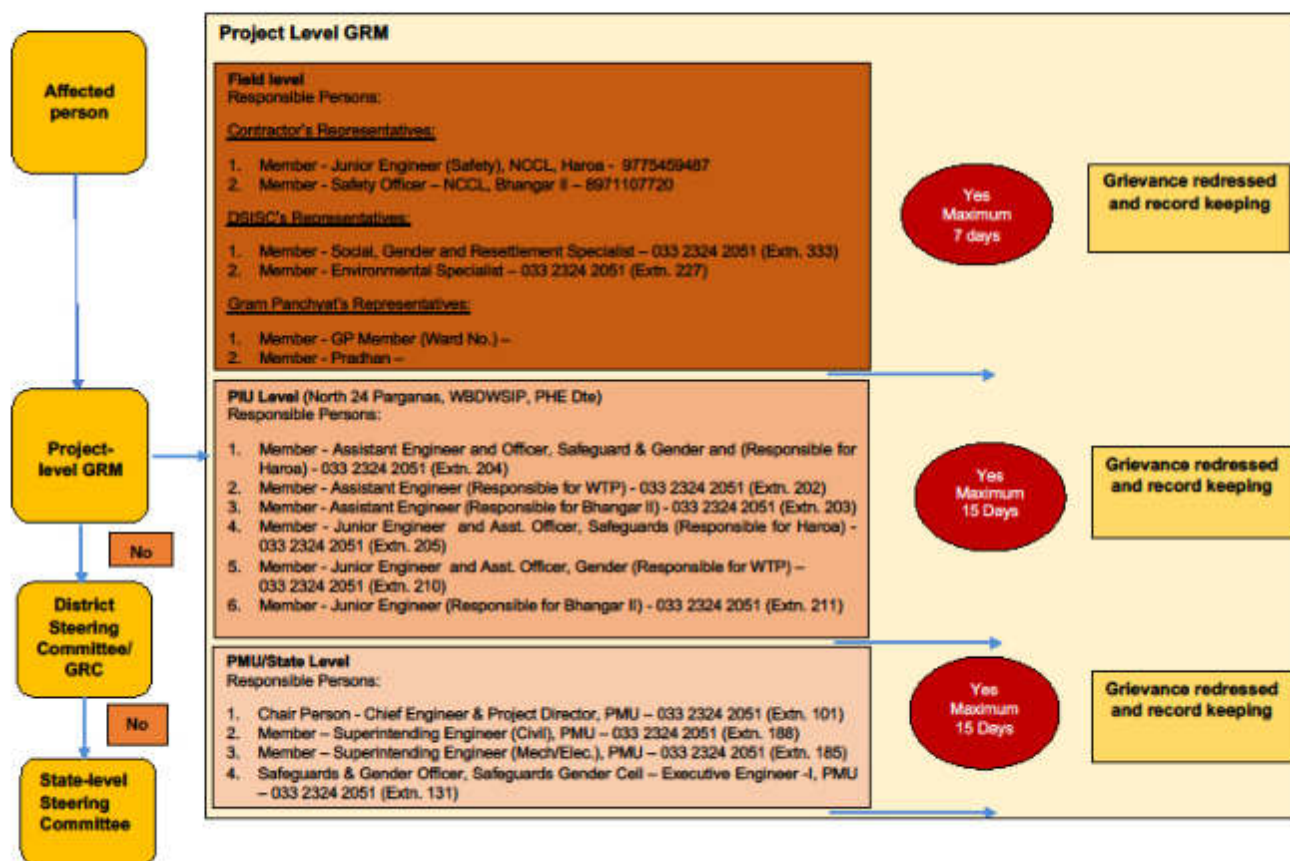


<b>NCC LIMITED</b>	<b>Design and Construction of Overhead Reservoir Including Water Supply Distribution Network and Metering Work in Bhargar-II Block</b>	<b>Doc. No. NCC/ SEMP /01</b>
	Site Specific Environmental Management Plan	<b>Last Revision No. 00</b> <b>Last Revision Date : 00</b> <b>Page 65 of 79</b> <b>Original Issue Date :</b>

### Attachment P 9 : 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



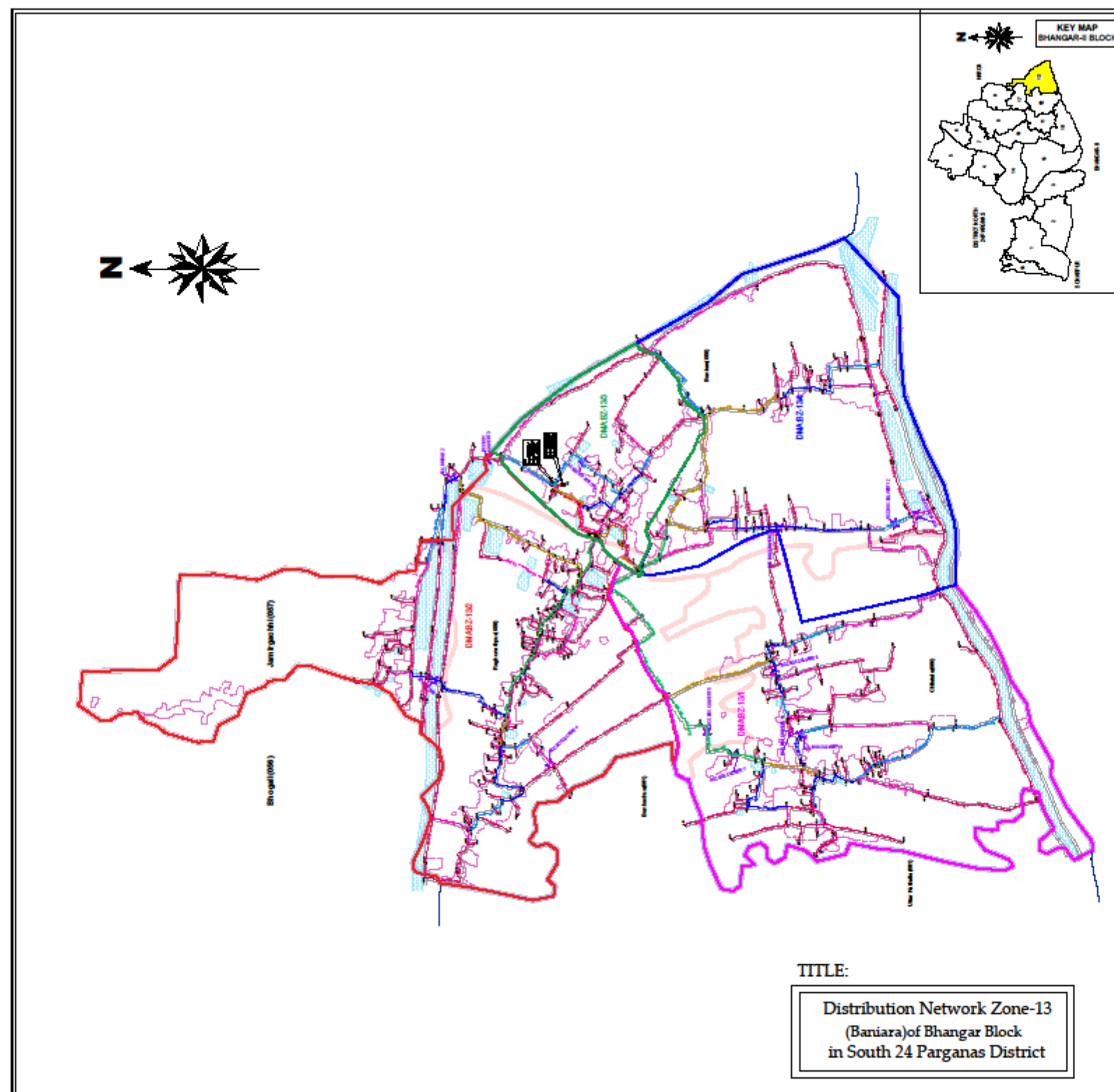
All grievances are recorded in site grievance register and resolved at the earliest. The sample grievance registration form is included in Appendix O3.

### Attachment P 10: 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.


NCC LIMITED	Design and Construction of Overhead Reservoir Including Water Supply Distribution Network and Metering Work in Bhangar-II Block	Doc. No. NCC/ SEMP /01 Last Revision No. 00 Last Revision Date : 00 Page 66 of 79 Original Issue Date :
	Site Specific Environmental Management Plan	

#### Appendix P.1: Map of Distribution Network



<b>NCC LIMITED</b>	<b>Design and Construction of Overhead Reservoir Including Water Supply Distribution Network and Metering Work in Bhangar-II Block</b>	<b>Doc. No. NCC/ SEMP /01</b>
	<b>Site Specific Environmental Management Plan</b>	<b>Last Revision No. 00</b> <b>Last Revision Date : 00</b> <b>Page 67 of 79</b> <b>Original Issue Date :</b>

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



**Government of West Bengal**  
**Office of the Executive Engineer**  
**PIU, North 24 Parganas, WBDWSIP, PHE Dte.**  
**Utility Building, Tank No.3, 2<sup>nd</sup> Floor, Block-AI,**  
**Action Area-IA, New Town, Kolkata-700156**  
**Phone No. : (033) 2324-2051, E-mail : ee.piun24p.adb@wbphed.gov.in**

---

Memo No. \_\_\_\_\_/EE(C)PIUN24P, Dated, New Town, the, \_\_\_\_\_

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

Sub. : Design and construction of overhead reservoir including water supply distribution network & metering works in Bhangar-II Block (Zone-13) Baniara.


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 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 19.07.2019 in **Bhogali-I & Bhogali-II 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,

  
Executive Engineer,  
PIU, N-24 Pgs., WBDWSIP, PHE Dte.  
Dated, New Town, the, \_\_\_\_\_

Memo No. \_\_\_\_\_/EE(C)PIUN24P.

Copy forwarded for information to :-

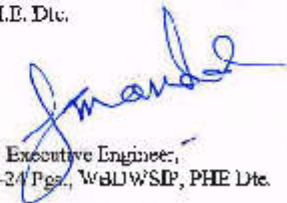
- 1) The Sahasrpati, South 24 Parganas Ziila Parishad.
- 2) The District Magistrate, South 24 Parganas.
- 3) The District Engineer, South 24 Parganas Ziila Parishad.

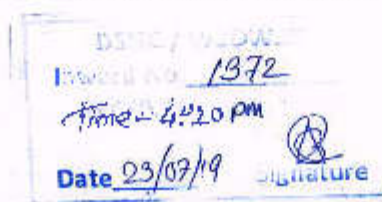
  
Executive Engineer,  
PIU, N-24 Pgs., WBDWSIP, PHE Dte.  
Dated, New Town, the, 17/07/2019

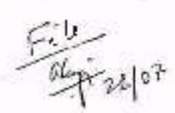
Memo No. 173 (3.3)/EE(C)PIUN24P.

Copy forwarded for information to :-

- 1) The Superintending Engineer, P.I.U., North 24 Parganas, WBDWSIP, PHE Dte.
- 2) The Assistant Engineer-II, PIU, N-24 Pgs., WBDWSIP, PHE Dte.
- 3) The Team Leader, DSISO-North 24 Parganas, WBDWSIP.

  
Executive Engineer,  
PIU, N-24 Pgs., WBDWSIP, PHE Dte.





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**Government of West Bengal  
Office of the Executive Engineer  
PIU, North 24 Parganas, WBDWSIP, PHE Dte.  
Utility Building, Tank No.3, 2<sup>nd</sup> Floor, Block-AI,  
Action Area-IA, New Town, Kolkata-700156  
Phone No. : (033) 2324-2051, E-mail : ee.piu24p.adb@wbphed.gov.in**

Memo No. \_\_\_\_\_/EE(C)PIUN24P,

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 (Zone-13) Banianra.

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 19.07.2019 in Bhogali-I & Bhogali-II 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,  
PIU, N-24 Pgs., WBDWSIP, PHE Dte.  
Dated, New Town, the, \_\_\_\_\_

Memo No. \_\_\_\_\_/EE(C)PIUN24P,

Copy forwarded for information to :-

- 1) The Sahbadnari, South 24 Parganas Zilla Parishad.
- 2) The District Magistrate, South 24 Parganas.

*Sd/-*  
Executive Engineer,  
PIU, N-24 Pgs., WBDWSIP, PHE Dte.  
Dated, New Town, the, 17/07/2019

Memo No. 177 (2-3)/EE(C)PIUN24P,

Copy forwarded for information to :-

- 1) The Superintending Engineer, P.U., North 24 Parganas, WBDWSIP, P.H.E. Dte.
- 2) The Assistant Engineer-II, PIU, N-24 Pgs., WBDWSIP, PHE Dte.
- 3) The Team Leader, DSISC-North 24 Parganas, WBDWSIP.

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*J. Manab*  
Executive Engineer,  
PIU, N-24 Pgs., WBDWSIP, PHE Dte.



**Government of West Bengal  
Office of the Executive Engineer  
PIU, North 24 Parganas, WBDWSIP, PHE Dte.  
Utility Building, Tank No.3, 2<sup>nd</sup> Floor, Block-AI,  
Action Area-IA, New Town, Kolkata-700156**

Phone No. : (033) 2324-2051, E-mail : ee.piu24p.adb@wbphed.gov.in

Memo No. \_\_\_\_\_/EE(C)PIUN24P,

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 (Zone-13) Baulura.

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 19.07.2019 in **Bhogali-I & Bhogali-II 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  
PIU, N-24 Pgs., WBDWSIP, PHE Dte.

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

Memo No. \_\_\_\_\_/EE(C)PIUN24P,

Copy forwarded for information to :-

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

*Sd/-*  
Assistant Engineer-II  
PIU, N-24 Pgs., WBDWSIP, PHE Dte.

Dated, New Town, the, 18/07/2019

Memo No. 184-185 (2-4) /EE(C)PIUN24P,

Copy forwarded for information to :-

- 1) The Superintending Engineer, P.U., North 24 Parganas, WBDWSIP, P.H.E. Dte.
- 2) The Executive Engineer, PIU, N-24 Pgs., WBDWSIP, PHE Dte.
- 3) Sri Shyamalendu Debadhikari, Junior Engineer, PIU, N-24 Pgs., WBDWSIP, PHE Dte.
- 4) The Team Leader, DSISC-North 24 Parganas, WBDWSIP.

*Sd/-*  
Assistant Engineer-II  
PIU, N-24 Pgs., WBDWSIP, PHE Dte.

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Date 23/07/19

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<b>NCC LIMITED</b>	<b>Design and Construction of Overhead Reservoir Including Water Supply Distribution Network and Metering Work in Bhangar-II Block</b>	<b>Doc. No. NCC/ SEMP /01</b>
	<b>Site Specific Environmental Management Plan</b>	<b>Last Revision No. 00</b> <b>Last Revision Date : 00</b> <b>Page 70 of 79</b> <b>Original Issue Date :</b>

  
**Government of West Bengal**  
**Office of the Executive Engineer**  
**PIU, North 24 Parganas, WBDWSIP, PHE Dte.**  
**Utility Building, Tank No.3, 2<sup>nd</sup> Floor, Block-AI,**  
**Action Area-1A, New Town, Kolkata-700156**  
**Phone No. : (033) 2324-2051, E-mail : ee.piu24p.adb@wbphed.gov.in**

---

Memo No. \_\_\_\_\_/EE(C)PIUN24P, 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 (Zone-13) Banisra.

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 19.07.2019 in Bhogali-I & Bhogali-II 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,

*S.L.*  
Assistant Engineer-II  
PIU, N-24 Pgs., WBDWSIP, PHE Dte.

Memo No. \_\_\_\_\_/EE(C)PIUN24P, Dated, New Town, the, \_\_\_\_\_

Copy forwarded for information to :-

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

*S.L.*  
Assistant Engineer-II  
PIU, N-24 Pgs., WBDWSIP, PHE Dte.

Memo No. 186 (3-1) /EE(C)PIUN24P, Dated, New Town, the, 18/07/2019

Copy forwarded for information to :-

- 1) The Superintending Engineer, P.I.U., North 24 Parganas, WBDWSIP, PHE Dte.
- 2) The Executive Engineer, P.I.U., N-24 Pgs., WBDWSIP, PHE Dte.
- 3) Sri Shyamalendu Debadhikari, Junior Engineer, PIU, N-24 Pgs., WBDWSIP, PHE Dte.
- 4) The Team Leader, DSISC-North 24 Parganas, WBDWSIP.

*S.L.*  
Assistant Engineer-II  
PIU, N-24 Pgs., WBDWSIP, PHE Dte.



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22/07/19  
Date



<b>NCC LIMITED</b>	<b>Design and Construction of Overhead Reservoir Including Water Supply Distribution Network and Metering Work in Bhangar-II Block</b>	<b>Doc. No. NCC/ SEMP /01 Last Revision No. 00 Last Revision Date : 00 Page 71 of 79 Original Issue Date :</b>
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## Appendix P.B: Labour License

**GOVERNMENT OF WEST BENGAL**  
**OFFICE OF THE DEPUTY LABOUR COMMISSIONER, BARUIPUR**  
 South 24 Parganas, Nandarani 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) ]

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

Lic Fees	1000
S.Deposit	30000

**LICENSE**

License is hereby granted to **NCC LIMITED** at **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 condition specified in Annexure.

The License shall remain till:-26th Dec, 2019

sd/-  
 Signature & Seal  
**Licensing Officer**

**RENEWAL**

[Rule 29]

Renewal vide AIN No.	RENEWAL-LIC-009474-008133-26939-2019
1.Date of Renewal	21st Nov, 2019
2.Fees paid for Renewal	₹ 1250 (One Thousand Two Hundred Fifty rupees only)
3.Date of Expiry	26th Dec, 2020

**SHREEJITA  
SAHA**  
 Digitally signed by  
 SHREEJITA SAHA  
 Date: 2019.11.21 00:57:44  
 +05'30'  
 Signature & Seal  
**Licensing Officer**

<b>NCC LIMITED</b>	<b>Design and Construction of Overhead Reservoir Including Water Supply Distribution Network and Metering Work in Bhargar-II Block</b>	<b>Doc. No. NCC/ SEMP /01 Last Revision No. 00 Last Revision Date : 00 Page 72 of 79 Original Issue Date :</b>
	Site Specific Environmental Management Plan	

*Kabano dican  
DWS Bhargar-II  
Expire 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, Shibanipith, 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/CLN/000092)


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

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

1 of 2

**Appendix P.C: Workman Compensation**

**FUTURE GENERALI**  
TOTAL INSURANCE SOLUTIONS

Workman's Compensation Policy- Policy Schedule			
Policy Issuing Office :	Off Code-15, Future Generali India Insurance Co Ltd, 1st Floor D.No.7-4-21A, APDL, Bazaar Opp Country Club, Begumpet, Hyderabad, Telangana, Pincode-500016, Tel. No : 040 66038600		
Policy No :	2019-16129169-FWC	Period of Insurance :	From 00:00 04/02/2019 To Midnight of 03/02/2020
Insured :	NCC Limited	Intermediary Name/Code :	INCCA INSURE RISK MANAGEMENT AND INSURANCE BROKING SERVICES#0001521
Address :	BHANGAR II BLOCK, South Twenty First Pergana, West Dargah, 743302	Telephone (Atch, Off, Home) :	400 7812990/00892590738/4027822990
		Fax No & Email Id :	02256791416 / PAIDANAJA.SURYAKAJANG@INDIAGENERAL.COM
GSTIN Number :	19AAACH3335C1ZM	PGI GSTIN Number :	36AAACF0191K1ZA
In consideration of the Policyholder's payment to the Future Generali India Insurance Company Limited (herein after called the Insurer) the premium as stated in the Schedule and in reliance upon the statements made by the Policyholder in the proposal including its attachments or otherwise, and the material misstatements 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%	Goods and Service Tax	24,174.78
		Total Premium	158,479.14
Risk Details			
Nature of Business :	Design and Construction of overhead reservoir including water supply distribution and metering works in Bhangar II Block		
Location :	Design and Construction of overhead reservoir including water supply distribution and metering works in Bhangar II Block		
Contractor/Sub-Contractor Name :	NCC LTD		
No of Employees	Description of work done by Employees	Declared Wages during the Period of Insurance (₹)	
30	Highly Skilled workers	6,542,000.00	
30	Skilled workers	6,048,000.00	
30	Semi Skilled Workers	5,490,000.00	
30	Unskilled Workers	4,988,000.00	
Total		23,168,000.00	
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	Subject otherwise, to the terms, conditions & scope, Exclusions of the Policy, the amount of liability incurred by the Insurer	Yes	
Common Law Final 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 intended to include			
1. 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			
2. Occupational disease of any kind			
Additional Clauses, Conditions, Warranties & Exclusions			
Terminations is excluded from coverage.			
No cover for Medical Expenses, Unless specifically allowed in the policy.			
No Cover for Medical Expenses.			
No Cover for occupational Diseases			
Jurisdictional Territory: India			
Including War Risk, Blast, Terrorism and Handling of Explosives			
Excluding loss arising out of installation and operation of fire wiring.			
Warranted that safety precautions followed by the workers in light of Contractors and sub-contractors employees are covered.			
Important:- 1. All other Terms, Conditions and Exclusions as per attached Policy Writings. 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/operation of whether a separate communication is sent or not.			
For Future Generali India Insurance Co. Ltd.			
Receipt No. :	23605378	 (Authorized Signatory)	
Date of Issue :	07/02/2019		
Place of Issuance :	Mumbai*		
*Addresses mentioned below.			
Note: This document is digitally signed by Sharada Ramakrishnan, Authorized Signatory of Future Generali India Insurance Company Limited on 07/02/2019			
The stamp duty of Rs 67.15 paid by Letter Of Authorization No. CSDN/18/2018/179/18, dated 16/08/2018, at Madras - 2017/C.R.9754-1, dated 08/03/2018.			
Product UIN : IBDANI3290012V01200708			
Future Generali India Insurance Company Limited, Corporate & Registered Office: 6th Floor, Tower - 1, Indiatrust Finance Centre, Begumpet Begumpet, Hyderabad, Telangana, India - 500013, Maharashtra, India - 400013, Maharashtra, India - 400013, India. Tel: 020-2362-2111, 020-2362-2112, 020-2362-2113, 020-2362-2114, 020-2362-2115, 020-2362-2116, 020-2362-2117, 020-2362-2118, 020-2362-2119, 020-2362-2120, 020-2362-2121, 020-2362-2122, 020-2362-2123, 020-2362-2124, 020-2362-2125, 020-2362-2126, 020-2362-2127, 020-2362-2128, 020-2362-2129, 020-2362-2130, 020-2362-2131, 020-2362-2132, 020-2362-2133, 020-2362-2134, 020-2362-2135, 020-2362-2136, 020-2362-2137, 020-2362-2138, 020-2362-2139, 020-2362-2140, 020-2362-2141, 020-2362-2142, 020-2362-2143, 020-2362-2144, 020-2362-2145, 020-2362-2146, 020-2362-2147, 020-2362-2148, 020-2362-2149, 020-2362-2150, 020-2362-2151, 020-2362-2152, 020-2362-2153, 020-2362-2154, 020-2362-2155, 020-2362-2156, 020-2362-2157, 020-2362-2158, 020-2362-2159, 020-2362-2160, 020-2362-2161, 020-2362-2162, 020-2362-2163, 020-2362-2164, 020-2362-2165, 020-2362-2166, 020-2362-2167, 020-2362-2168, 020-2362-2169, 020-2362-2170, 020-2362-2171, 020-2362-2172, 020-2362-2173, 020-2362-2174, 020-2362-2175, 020-2362-2176, 020-2362-2177, 020-2362-2178, 020-2362-2179, 020-2362-2180, 020-2362-2181, 020-2362-2182, 020-2362-2183, 020-2362-2184, 020-2362-2185, 020-2362-2186, 020-2362-2187, 020-2362-2188, 020-2362-2189, 020-2362-2190, 020-2362-2191, 020-2362-2192, 020-2362-2193, 020-2362-2194, 020-2362-2195, 020-2362-2196, 020-2362-2197, 020-2362-2198, 020-2362-2199, 020-2362-2200, 020-2362-2201, 020-2362-2202, 020-2362-2203, 020-2362-2204, 020-2362-2205, 020-2362-2206, 020-2362-2207, 020-2362-2208, 020-2362-2209, 020-2362-2210, 020-2362-2211, 020-2362-2212, 020-2362-2213, 020-2362-2214, 020-2362-2215, 020-2362-2216, 020-2362-2217, 020-2362-2218, 020-2362-2219, 020-2362-2220, 020-2362-2221, 020-2362-2222, 020-2362-2223, 020-2362-2224, 020-2362-2225, 020-2362-2226, 020-2362-2227, 020-2362-2228, 020-2362-2229, 020-2362-2230, 020-2362-2231, 020-2362-2232, 020-2362-2233, 020-2362-2234, 020-2362-2235, 020-2362-2236, 020-2362-2237, 020-2362-2238, 020-2362-2239, 020-2362-2240, 020-2362-2241, 020-2362-2242, 020-2362-2243, 020-2362-2244, 020-2362-2245, 020-2362-2246, 020-2362-2247, 020-2362-2248, 020-2362-2249, 020-2362-2250, 020-2362-2251, 020-2362-2252, 020-2362-2253, 020-2362-2254, 020-2362-2255, 020-2362-2256, 020-2362-2257, 020-2362-2258, 020-2362-2259, 020-2362-2260, 020-2362-2261, 020-2362-2262, 020-2362-2263, 020-2362-2264, 020-2362-2265, 020-2362-2266, 020-2362-2267, 020-2362-2268, 020-2362-2269, 020-2362-2270, 020-2362-2271, 020-2362-2272, 020-2362-2273, 020-2362-2274, 020-2362-2275, 020-2362-2276, 020-2362-2277, 020-2362-2278, 020-2362-2279, 020-2362-2280, 020-2362-2281, 020-2362-2282, 020-2362-2283, 020-2362-2284, 020-2362-2285, 020-2362-2286, 020-2362-2287, 020-2362-2288, 020-2362-2289, 020-2362-2290, 020-2362-2291, 020-2362-2292, 020-2362-2293, 020-2362-2294, 020-2362-2295, 020-2362-2296, 020-2362-2297, 020-2362-2298, 020-2362-2299, 020-2362-2300, 020-2362-2301, 020-2362-2302, 020-2362-2303, 020-2362-2304, 020-2362-2305, 020-2362-2306, 020-2362-2307, 020-2362-2308, 020-2362-2309, 020-2362-2310, 020-2362-2311, 020-2362-2312, 020-2362-2313, 020-2362-2314, 020-2362-2315, 020-2362-2316, 020-2362-2317, 020-2362-2318, 020-2362-2319, 020-2362-2320, 020-2362-2321, 020-2362-2322, 020-2362-2323, 020-2362-2324, 020-2362-2325, 020-2362-2326, 020-2362-2327, 020-2362-2328, 020-2362-2329, 020-2362-2330, 020-2362-2331, 020-2362-2332, 020-2362-2333, 020-2362-2334, 020-2362-2335, 020-2362-2336, 020-2362-2337, 020-2362-2338, 020-2362-2339, 020-2362-2340, 020-2362-2341, 020-2362-2342, 020-2362-2343, 020-2362-2344, 020-2362-2345, 020-2362-2346, 020-2362-2347, 020-2362-2348, 020-2362-2349, 020-2362-2350, 020-2362-2351, 020-2362-2352, 020-2362-2353, 020-2362-2354, 020-2362-2355, 020-2362-2356, 020-2362-2357, 020-2362-2358, 020-2362-2359, 020-2362-2360, 020-2362-2361, 020-2362-2362, 020-2362-2363, 020-2362-2364, 020-2362-2365, 020-2362-2366, 020-2362-2367, 020-2362-2368, 020-2362-2369, 020-2362-2370, 020-2362-2371, 020-2362-2372, 020-2362-2373, 020-2362-2374, 020-2362-2375, 020-2362-2376, 020-2362-2377, 020-2362-2378, 020-2362-2379, 020-2362-2380, 020-2362-2381, 020-2362-2382, 020-2362-2383, 020-2362-2384, 020-2362-2385, 020-2362-2386, 020-2362-2387, 020-2362-2388, 020-2362-2389, 020-2362-2390, 020-2362-2391, 020-2362-2392, 020-2362-2393, 020-2362-2394, 020-2362-2395, 020-2362-2396, 020-2362-2397, 020-2362-2398, 020-2362-2399, 020-2362-2400, 020-2362-2401, 020-2362-2402, 020-2362-2403, 020-2362-2404, 020-2362-2405, 020-2362-2406, 020-2362-2407, 020-2362-2408, 020-2362-2409, 020-2362-2410, 020-2362-2411, 020-2362-2412, 020-2362-2413, 020-2362-2414, 020-2362-2415, 020-2362-2416, 020-2362-2417, 020-2362-2418, 020-2362-2419, 020-2362-2420, 020-2362-2421, 020-2362-2422, 020-2362-2423, 020-2362-2424, 020-2362-2425, 020-2362-2426, 020-2362-2427, 020-2362-2428, 020-2362-2429, 020-2362-2430, 020-2362-2431, 020-2362-2432, 020-2362-2433, 020-2362-2434, 020-2362-2435, 020-2362-2436, 020-2362-2437, 020-2362-2438, 020-2362-2439, 020-2362-2440, 020-2362-2441, 020-2362-2442, 020-2362-2443, 020-2362-2444, 020-2362-2445, 020-2362-2446, 020-2362-2447, 020-2362-2448, 020-2362-2449, 020-2362-2450, 020-2362-2451, 020-2362-2452, 020-2362-2453, 020-2362-2454, 020-2362-2455, 020-2362-2456, 020-2362-2457, 020-2362-2458, 020-2362-2459, 020-2362-2460, 020-2362-2461, 020-2362-2462, 020-2362-2463, 020-2362-2464, 020-2362-2465, 020-2362-2466, 020-2362-2467, 020-2362-2468, 020-2362-2469, 020-2362-2470, 020-2362-2471, 020-2362-2472, 020-2362-2473, 020-2362-2474, 020-2362-2475, 020-2362-2476, 020-2362-2477, 020-2362-2478, 020-2362-2479, 020-2362-2480, 020-2362-2481, 020-2362-2482, 020-2362-2483, 020-2362-2484, 020-2362-2485, 020-2362-2486, 020-2362-2487, 020-2362-2488, 020-2362-2489, 020-2362-2490, 020-2362-2491, 020-2362-2492, 020-2362-2493, 020-2362-2494, 020-2362-2495, 020-2362-2496, 020-2362-2497, 020-2362-2498, 020-2362-2499, 020-2362-2500, 020-2362-2501, 020-2362-2502, 020-2362-2503, 020-2362-2504, 020-2362-2505, 020-2362-2506, 020-2362-2507, 020-2362-2508, 020-2362-2509, 020-2362-2510, 020-2362-2511, 020-2362-2512, 020-2362-2513, 020-2362-2514, 020-2362-2515, 020-2362-2516, 020-2362-2517, 020-2362-2518, 020-2362-2519, 020-2362-2520, 020-2362-2521, 020-2362-2522, 020-2362-2523, 020-2362-2524, 020-2362-2525, 020-2362-2526, 020-2362-2527, 020-2362-2528, 020-2362-2529, 020-2362-2530, 020-2362-2531, 020-2362-2532, 020-2362-2533, 020-2362-2534, 020-2362-2535, 020-2362-2536, 020-2362-2537, 020-2362-2538, 020-2362-2539, 020-2362-2540, 020-2362-2541, 020-2362-2542, 020-2362-2543, 020-2362-2544, 020-2362-2545, 020-2362-2546, 020-2362-2547, 020-2362-2548, 020-2362-2549, 020-2362-2550, 020-2362-2551, 020-2362-2552, 020-2362-2553, 020-2362-2554, 020-2362-2555, 020-2362-2556, 020-2362-2557, 020-2362-2558, 020-2362-2559, 020-2362-2560, 020-2362-2561, 020-2362-2562, 020-2362-2563, 020-2362-2564, 020-2362-2565, 020-2362-2566, 020-2362-2567, 020-2362-2568, 020-2362-2569, 020-2362-2570, 020-2362-2571, 020-2362-2572, 020-2362-2573, 020-2362-2574, 020-2362-2575, 020-2362-2576, 020-2362-2577, 020-2362-2578, 020-2362-2579, 020-2362-2580, 020-2362-2581, 020-2362-2582, 020-2362-2583, 020-2362-2584, 020-2362-2585, 020-2362-2586, 020-2362-2587, 020-2362-2588, 020-2362-2589, 020-2362-2590, 020-2362-2591, 020-2362-2592, 020-2362-2593, 020-2362-2594, 020-2362-2595, 020-2362-2596, 020-2362-2597, 020-2362-2598, 020-2362-2599, 020-2362-2600, 020-2362-2601, 020-2362-2602, 020-2362-2603, 020-2362-2604, 020-2362-2605, 020-2362-2606, 020-2362-2607, 020-2362-2608, 020-2362-2609, 020-2362-2610, 020-2362-2611, 020-2362-2612, 020-2362-2613, 020-2362-2614, 020-2362-2615, 020-2362-2616, 020-2362-2617, 020-2362-2618, 020-2362-2619, 020-2362-2620, 020-2362-2621, 020-2362-2622, 020-2362-2623, 020-2362-2624, 020-2362-2625, 020-2362-2626, 020-2362-2627, 020-2362-2628, 020-2362-2629, 020-2362-2630, 020-2362-2631, 020-2362-2632, 020-2362-2633, 020-2362-2634, 020-2362-2635, 020-2362-2636, 020-2362-2637, 020-2362-2638, 020-2362-2639, 020-2362-2640, 020-2362-2641, 020-2362-2642, 020-2362-2643, 020-2362-2644, 020-2362-2645, 020-2362-2646, 020-2362-2647, 020-2362-2648, 020-2362-2649, 020-2362-2650, 020-2362-2651, 020-2362-2652, 020-2362-2653, 020-2362-2654, 020-2362-2655, 020-2362-2656, 020-2362-2657, 020-2362-2658, 020-2362-2659, 020-2362-2660, 020-2362-2661, 020-2362-2662, 020-2362-2663, 020-2362-2664, 020-2362-2665, 020-2362-2666, 020-2362-2667, 020-2362-2668, 020-2362-2669, 020-2362-2670, 020-2362-2671, 020-2362-2672, 020-2362-2673, 020-2362-2674, 020-2362-2675, 020-2362-2676, 020-2362-2677, 020-2362-2678, 020-2362-2679, 020-2362-2680, 020-2362-2681, 020-2362-2682, 020-2362-2683, 020-2362-2684, 020-2362-2685, 020-2362-2686, 020-2362-2687, 020-2362-2688, 020-2362-2689, 020-2362-2690, 020-2362-2691, 020-2362-2692, 020-2362-2693, 020-2362-2694, 020-2362-2695, 020-2362-2696, 020-2362-2697, 020-2362-2698, 020-2362-2699, 020-2362-2700, 020-2362-2701, 020-2362-2702, 020-2362-2703, 020-2362-2704, 020-2362-2705, 020-2362-2706, 020-2362-2707, 020-2362-2708, 020-2362-2709, 020-2362-2710, 020-2362-2711, 020-2362-2712, 020-2362-2713, 020-2362-2714, 020-2362-2715, 020-2362-2716, 020-2362-2717, 020-2362-2718, 020-2362-2719, 020-2362-2720, 020-2362-2721, 020-2362-2722, 020-2362-2723, 020-2362-2724, 020-2362-2725, 020-2362-2726, 020-2362-2727, 020-2362-2728, 020-2362-2729, 020-2362-2730, 020-2362-2731, 020-2362-2732, 020-2362-2733, 020-2362-2734, 020-2362-2735, 020-2362-2736, 020-2362-2737, 020-2362-2738, 020-2362-2739, 020-2362-2740, 020-2362-2741, 020-2362-2742, 020-2362-2743, 020-2362-2744, 020-2362-2745, 020-2362-2746, 020-2362-2747, 020-2362-2748, 020-2362-2749, 020-2362-2750, 020-2362-2751, 020-2362-2752, 020-2362-2753, 020-2362-2754, 020-2362-2755, 020-2362			

<b>NCC LIMITED</b>	<b>Design and Construction of Overhead Reservoir Including Water Supply Distribution Network and Metering Work in Bhangar-II Block</b>	<b>Doc. No. NCC/ SEMP /01 Last Revision No. 00 Last Revision Date : 00 Page 74 of 79 Original Issue Date :</b>
	Site Specific Environmental Management Plan	

## Appendix P.D: PUC Certificates

14-Sep-2019 13-Mar-2020

Pollution Level:

CO (%)	1.745
HC (ppm)	00542
SO (HSU)	00542

PUC Certificate issued by: 

License No. and Seal:  36/NAD/2011

Signature: 

WB-01: **D 3044009**

### TEST REPORT

AUTHORISED BY: TRANSPORT DEPT. GOVT OF W.B.  
CHOWRASTA, NH-34, CHAKDAH, NADIA

Vehicle Registration No.: WB-52H-7637 Test Fee: 80.00  
Year of Registration: 01-02-2010 Fuel: PETROL  
Speedometer Reading(kms): \* Type Of Vehicle: 2W  
Engine Number: 33374 Type Of engine: 4S  
Chassis Number: 02501 Vehicle Make: HERO HONDA  
Vehicle Color: RED Vehicle Model: CDDAWN  
I.D. Number: WBPP003628  
Time: 04:03:26 Driver: SELF  
Date: 14-Sep-2019 Owner: NAGARJUNA CONSTRUCTION LTD

**Test Result: IDLING**

Regulation(%)	Actual Reading	
	Final	
CO	01.359	%Vol
HC	00542	PPM
CO2	10.32	%Vol
O2	02.57	%Vol
NOx	---	%Vol
Lambda	4.1900	
Oil	141	°C
RPM	60000	
AFR	18.712	
PEF	---	
CO(corr.)	1.745	%Vol

Certified that this vehicle's CO and HC Emission Level confirm to the standards prescribed under Rule 115(2) of CMV Rules, 1989

Validity: 6 months  
Valid UpTo: 13-Mar-2020 Grade A 

Seal Of Testing  Name of Authorised Signatory With Signature: 



**POLLUTION UNDER CONTROL CERTIFICATE**  
(Under the West Bengal Motor Vehicles Rules, 1988)

Vehicle Registr. No. **WB02BL7373** WB-01-**D 5679142**

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

Pollution Level

CO (%)	5.83
HC (ppm)	5.83

PUC Certificate No. **32/D**

Signature

**WB-01-D 5679142**

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

ID Number: **WB32D3647572** Licence No.: **32/D**  
Year Of Registration: **2011** Date: **16-08-2019**  
Vehicle registration no = **WB02BL7373** TIME: **02:47:14**  
Speedometer Reading(kms) = **21522** Owner: **N C C CO**  
Engine Number=**9218** Driver: **SELF**  
Chassis Number=**G2011** Test Fee : **Rs.100/-**  
Vehicle Colour = **YELLOW** Fuel : **Diesel**  
Vehicle Make : **JCB** Smk cell Temp : **00**  
Vehicle Model : **3DX** Oil Temp : **93.0**  
Type Of Engine : **OTHERS** Valid Up To : **15-02-2020**  
Type OF Vehicle: **OTHERS** Grade: **---**

Test Result : Free Acceleration Validity 6 Months

	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	66
3	852	2700	0.12	6.9	66
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 prescribed under rule 115(2) of CMB rules 1989, Operator:- MD RAMIZ RANA

**POLLUTION UNDER CONTROL CERTIFICATE**  
(Under the West Bengal Motor Vehicles Rules, 1986)

Vehicle Registr. No. **WB15B2529** **WB-01-D 5678745**

Date of issue: **23-07-2019** Valid upto: **22-01-2020**

Pollution Level

CO (%)	
HC (ppm)	
SD (HSU)	<b>55.83</b>

PUC Certificate issued by: **AKBAR AUTO EMISSION TESTING CENTRE**

Signature: **[Signature]**

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

I.D Number **WB32D3647596** Licence No: **32/D**  
Year Of Registration= **2011** Date: **23-07-2019**  
vehicle registration no = **WB15B2529** TIME: **05.46.14**  
Speedometer Reading[kms] = **2541** Owner: **NABA KUMAR GHOSH /851304**  
Engine Number=**28746** Driver: **SELF**  
chasis Number=**B5954** Test Fee : **Rs.100/-**  
Vehicle Colour = **OTHERS** Fuel : **Diesel**  
Vehicle Make : **HMT** Smk cell Temp : **00**  
Vehicle Model : **4022** Oil Temp : **93.0**  
Type Of Engine : **OTHERS** Valid Up To : **22-01-2020**  
Type OF Vehicle: **OTHERS** Grade : **[Blank]**

Test Result : Free Acceleration Validity: **6Months**

	Ideal Rpm	max Rpm	K Value	Hsu_val	Oil Temp
1	860	2900	5.37	90.06	81
2	860	2900	0.17	8.9	68
3	862	2700	0.12	6.9	66
Avg	860	2900	1.9	55.83	

Seal Of Testing Center

Certified that this Vehicle's K-Mean and hsu% value conforms to the standards prescribed under rule 115(2) of CMB rules-1989. Operator: **MD RAMIZ RAHA**

<b>NCC LIMITED</b>	<b>Design and Construction of Overhead Reservoir Including Water Supply Distribution Network and Metering Work in Bhangar-II Block</b>	<b>Doc. No. NCC/ SEMP /01 Last Revision No. 00 Last Revision Date : 00 Page 77 of 79 Original Issue Date :</b>
	Site Specific Environmental Management Plan	

## Appendix P.2: Contractor's OHS Policy Statement

<b>NCC Ltd.</b>	<b>OH&amp;S PLAN</b> Design and Construction of Reservoir Including Water Supply Distribution Network and Metering Works in Haroa Block	Doc. No. NCC/ OHSP /01 Revision No. 00 Revision Date : 00 Page 10 of 58 Effective Date :
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**NCC LIMITED**

### ***Health, Safety & Environment Policy***

For Construction/Erection and Commissioning, the General Strategic Objectives Listed Below are Followed:

- A proactive, role model HSE at Site.
- All Sites related activities and Office Work will result in no one getting injured or made unwell.
- Early identification of hazards and risk and the decision on adequate measures.
- Reduction of negative impact on the neighborhood and the environment in particular on fauna and flora to a minimum.
- Provide training in HSE knowledge and encourage continuous improvement and development of this.
- Continuous monitoring of the HSE performance.
- Promote the benefits of a healthy life-style amongst our employees.
- Report and investigate accidents and incidents to take lessons and prevent similar events occurring again.
- Preserve ecological balance and heritage.

Prepared by:	Copy No.	Date of Issue:	Approved by:	Issued by:
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<b>NCC LIMITED</b>	<b>Design and Construction of Overhead Reservoir Including Water Supply Distribution Network and Metering Work in Bhangar-II Block</b>	<b>Doc. No. NCC/ SEMP /01 Last Revision No. 00 Last Revision Date : 00 Page 78 of 79 Original Issue Date :</b>
	Site Specific Environmental Management Plan	

### Appendix P.3: Sample Grievance Registration Form

(Available in Bengali and English)

The \_\_\_\_\_ Project welcomes complaints, suggestions, queries, and comments regarding project implementation. We encourage persons with grievance to provide their name and contact information to enable us to get in touch with you for clarification and feedback.

Should you choose to include your personal details but want that information to remain confidential, please inform us by writing/typing \*(CONFIDENTIAL)\* above your name. Thank you.

Date	Place of registration	Project Town			
		Project:			
Contact information/personal details					
Name		Gender	* Male * Female	Age	
Home address					
Place					
Phone no.					
E-mail					
Complaint/suggestion/comment/question Please provide the details (who, what, where, and how) of your grievance below:					
If included as attachment/note/letter, please tick here:					
How do you want us to reach you for feedback or update on your comment/grievance?					

#### 2. FOR OFFICIAL USE ONLY

Registered by: (Name of official registering grievance)	
Mode of communication: Note/letter E-mail Verbal/telephonic	
Reviewed by: (Names/positions of officials reviewing grievance)	
Action taken:	
Whether action taken disclosed:	Yes No
Means of disclosure:	

<b>NCC LIMITED</b>	<b>Design and Construction of Overhead Reservoir Including Water Supply Distribution Network and Metering Work in Bhangar-II Block</b>	<b>Doc. No. NCC/ SEMP /01</b>
	Site Specific Environmental Management Plan	<b>Last Revision No. 00</b> <b>Last Revision Date : 00</b> <b>Page 79 of 79</b> <b>Original Issue Date :</b>

**অভিযোগ/ পরামর্শ/ মন্তব্য/ প্রশ্নাদি লিপিবদ্ধ করার নমুনা পত্র**

এই \_\_\_\_\_ প্রকল্পটি সৃষ্ট ও সুন্দরভাবে রূপায়নের উদ্দেশ্যে সকলের অভিযোগ, পরামর্শ, প্রশ্ন এবং মন্তব্য প্রত্যাশা করে। আপনার কোনও অভিযোগ থাকলে আপনার নাম ও যোগাযোগের ঠিকানা দিয়ে আমাদের সহযোগিতা করবেন। আপনার অভিযোগ / প্রশ্নের যথার্থ সদুত্তর ও আপনাকে পরিস্থিতি সম্পর্কে আমরা অবগত করবো।

যদি আপনি আপনার ব্যক্তি পরিচয় গোপন রাখতে চান তাহলে আপনার নামের উপরে " গোপনীয় " কথাটি লিখবেন।

ধন্যবাদান্তে

তারিখ	পঞ্জীকরণের বা <b>Registration</b> এর স্থানঃ ব্লক- গ্রাম পঞ্চায়েত- গ্রাম সংসদ-		
যোগাযোগের ঠিকানা / ব্যক্তিগত তথ্য			
নাম		লিঙ্গ	বয়স
বাড়ির ঠিকানাঃ গ্রাম- ফোন নং-	পাড়া- ই-মেইল-	পুরুষ - মহিলা-	
অভিযোগ/ পরামর্শ/ মন্তব্য/ প্রশ্নাদি- দয়া করে কে, কি, কোথায় এবং কিভাবে - অভিযোগের এই বিশদ বিবরণ নিচে লিখুন-			
যদি কোন অতিরিক্ত কাগজ জুড়তে হয় / বা নোট থাকে বা চিঠি থাকে তাহলে এই ঘরে (৭) টীক দিন।			
আপনি কিভাবে আপনার অভিযোগ / মন্তব্য বিষয়ে অবগত হতে চান ?			

শুধুমাত্র অফিসের ব্যবহারের জন্যঃ

যে আধিকারিক অভিযোগ জমা নিলেন তার নামঃ
কিভাবে জানানো হল (✓) টীক দিনঃ নোট বা চিঠির মাধ্যমে – ই-মেইল- মুখে মুখে বা টেলিফোনে-
যিনি অভিযোগ পাবার পর খতিয়ে দেখেছেনঃ (নাম / পদ)
কি ব্যবস্থা গ্রহণ করা হয়েছেঃ
ব্যবস্থা যা গৃহীত হয়েছে তা জানানো হয়েছে কি না - হ্যা / না
কিভাবে জানানো হলঃ

মন্তব্য-

প্রস্তুতকারক -

আনুমদনকারী -

তারিখ-