



# भारतीय अन्तर्देशीय जलमार्ग प्राधिकरण

(पोत परिवहन मंत्रालय, भारत सरकार)

INLAND WATERWAYS AUTHORITY OF INDIA

(Ministry of Shipping, Govt. of India)

क्षेत्रीय कार्यालय : पी-७८, गार्डनरीच रोड, कोलकाता-७०० ०४३ (प० बं०)  
REGIONAL OFFICE : P-78, Garden Reach Road, Kolkata - 700 043 (W.B.)

दूरभाष : 2439 0393 / 5577 / 6055, फैक्स : 2439 5570



SAGARMALA  
PORT-LEO PROSPERITY

Email : iwaical@yahoo.com  
dirkol.iwai@nic.in

IWAI/JMVP/8B/MMT-HAL/CRZ/2018-19/143/019

Date: 22<sup>nd</sup> April 2019

01/05/2019

To,

The Director  
Eastern Zone, MoEF&CC, Govt. of India  
A/3- Chandrashekharpur  
Bhubneswar - 751023  
E-mail-roe.z.bsr-mef@nic.in

Sub:- Submission of Half Yearly Compliance report of the Clearance Certificate of CRZ for construction of MMT IWT Terminal at Haldia – reg.

Ref:- MoEF&CC CRZ Clearance Letter No. 11-14/2017-IA-III, dated 6.11.2017

Sir,

Inland Waterways Authority of India (IWAI), Ministry of Shipping, Govt. of India is implementing the Jal Marg Vikas Project (JMVP) for capacity augmentation for navigation on National Waterway-1.

The project interventions including construction of Multi Modal IWT Terminal at Haldia (Dist. Purba Medinipur, W.B). The Ministry of Environment, Forest & Climate Change (MoEF&CC), Govt. of India accorded Coastal Region Zone (CRZ) clearance vide letter no. 11-14/2017-IA-III, dt. 6.11.2017 to IWAI for the project located at Haldia, Dist.- Purba Medinipur, W.B, under the provisions of the CRZ Notification, 2011.

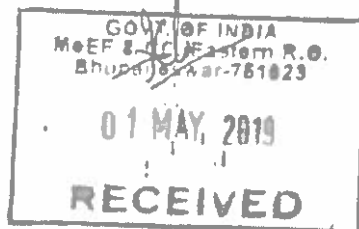
As per Part B, General Condition (Para-iii) of the aforesaid clearance letter, it is mandatory that Half Yearly reports indicating the compliance of the certain conditions listed by MoEF& CC are to be submitted to Regional Office at Bhubaneswar & West Bengal Coastal Zone Management Authority.

In this regard, please find enclosed herewith Half Yearly Compliance report of CRZ Clearance for the period July – December 2018 pertaining to construction of Multi Modal IWT Terminal at Haldia for your kind information and perusal.

Yours faithfully

(A. Selvakumar)  
Director & E-I-C  
MMT-Haldia, JMVP

Encl. As stated above  
Copy to:-



1. The Chief Engineer –II, P.M., JMVP, IWAI, Noida
2. Dr. Santosh Kumar Yadav, Specialist (Environment), JMVP, Noida
3. Shri K. Pedababu, Specialist (CE), JMVP, IWAI, Noida,
4. Ms. Sandhya Sharma, Specialist (Environment), JMVP, Noida

Head Office : A-13, Sector-I, NOIDA, U.P. Pin - 201301

Phone : 0120-2543972 / 4004 / 2521764, Fax : 0120-02543973 / 4009 / 4041 / 2521664

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# भारतीय अन्तर्देशीय जलमार्ग प्राधिकरण

(पोत परिवहन मंत्रालय, भारत सरकार)

## INLAND WATERWAYS AUTHORITY OF INDIA

(Ministry of Shipping, Govt. of India)

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दूरभाष : 2439 0393 / 5577 / 6055, फैक्स : 2439 5570



**SAGARMALA**  
PORT-LED PROSPERITY

Email : [hwai@nic.in](mailto:hwai@nic.in)  
[dirkol.iwai@nic.in](mailto:dirkol.iwai@nic.in)

IWAI/JMVP/8B/MMT-HAL/CRZ/2018-19/147

Date: 23<sup>rd</sup> April 2019

To,

The Member Secretary & CEO  
WBSCZMA, Dept. of Environment  
Govt. of W.B., Salt Lake, Kolkata  
Email - [environmentwb@gmail.com](mailto:environmentwb@gmail.com)

**RECEIVED**

Signature with Date 25/4/19  
Contents not verified  
Department of Environment  
Govt. of West Bengal

Sub:- Submission of Half Yearly Compliance report of the Clearance Certificate of CRZ for construction of MMT IWT Terminal at Haldia – reg.

Ref: 1. MoEF&CC CRZ Clearance letter no. 11-14/2017-IA-III, dt. 6.11.2017  
2. WBCZMA letter no. 135/EN/T-II-4/018/2015, dt. 24.01.2017

Sir,

Inland Waterways Authority of India (IWAI), Ministry of Shipping, Govt. of India is implementing the Jal Marg Vikas Project (JMVP) for capacity augmentation for navigation on National Waterway – 1.

The project interventions including construction of Multimodal IWT Terminal at Haldia (Dist.- Purba Medinipur, W.B.). The West Bengal Coastal Zone Management Authority (WBCZMA), Dept. of Environment (DoE), Govt. of W.B., has recommended the project for Coastal Region Zone (CRZ) clearance to the Ministry of Environment, Forest & Climate Change (MoEF&CC), Govt. of India, vide letter no. 135/EN/T-II-4/018/2015, dt. 24.1.17. The MoEF&CC accorded CRZ clearance vide letter no. 11-14/2017-IA-III, dt. 6.11.17 to the IWAI for the project located at Haldia, under the provisions of the CRZ Notification, 2011.

As per the condition mentioned under Part B, General Condition (Para – ix) of the aforesaid recommendation letter, it is mandatory that Half Yearly report indicating the compliance of the conditions listed is to be submitted to WBCZMA.

In this regard, please find enclosed herewith Half Yearly Compliance report for the period of July-December 2018 pertaining to construction of Multimodal IWT Terminal at Haldia for your kind Information and perusal.

Yours faithfully

(A. Selvakumar)

Director & E-I-C  
MMT-Haldia, JMVP

Encl. As stated above

Copy to:-

1. The Chief Engineer –II, P.M., JMVP, IWAI, Noida
2. Dr. Santosh Kumar Yadav, Specialist (Environment), JMVP, Noida
3. Shri K. Pedababu, Specialist (CE), JMVP, IWAI, Noida,
4. Ms. Sandhya Sharma, Specialist (Environment), JMVP, Noida

Head Office : A-13, Sector-I, NOIDA, U.P. Pin - 201301

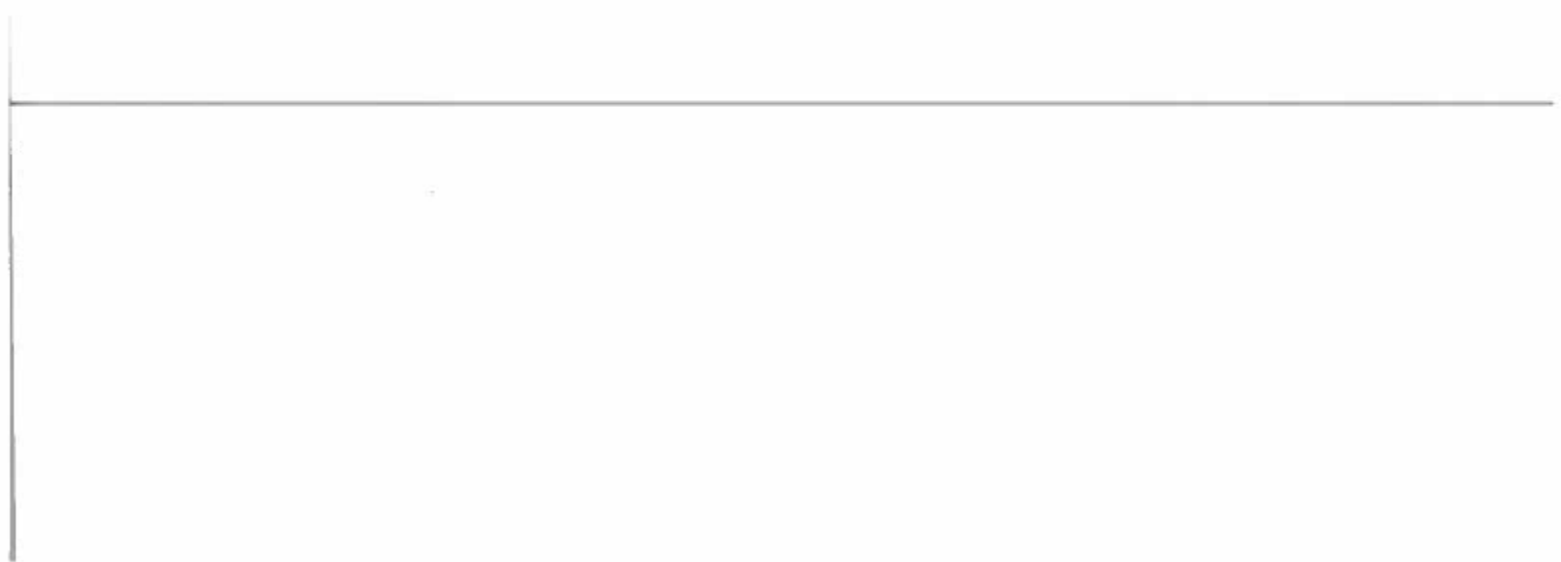
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**Half Yearly Compliance Report for CRZ Clearance for Inland  
Waterway Terminal at Haldia, District Purbi (East), Medinipur, West  
Bengal.**

**(July – December 2018)**

Compliance of conditions laid down by the MoEF&CC for granting CRZ clearance for the Haldia MMT vide letter No. 11-14/2017-IA.III dated 06.11.2017

Sl. No.	Conditions of CRZ	Compliance
<b>Part A: Specific Conditions</b>		
(i)	All conditions/ recommendations stipulated by the West Bengal Coastal Zone Management Authority (WBCZMA) vide its letter no. 135/EN/T-II/018/2015, dated 24.01.2017 shall strictly be complied with.	Complied. Status of compliance is given in <b>Annexure-1</b> and also submitted to the Ministry of Environment, Forest & Climate Change and West Bengal Coastal Zone Management Authority along with half yearly compliance report (Jan-June, 2018) dated 01.11.2018.
(ii)	Any other clearances, as may be applicable, under other rules/notifications/ Orders issued under the provisions of EIA Notification, 2006, shall be obtained, prior to commencement of the proposed activity.	No other clearance is applicable at this stage.
(iii)	'Consent to Establish' shall be obtained from State Pollution Control Board under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.	Already obtained and copies are submitted with half yearly CRZ compliance report for the period of (January-June 2018) dated 01.11.2018.
(iv)	A 2% of the cost of the project shall be apportioned for marine and coastal biodiversity protection and conservation measures, to be spent by the project proponent towards fulfilling its Corporate Environmental Responsibility (CER) during the currency of the project. Proper record and account of measures taken should be maintained and <del>should also be submitted to the CZMA every six months.</del>	This issue is being examined in IWAI in the light of MoEF & CC OM No. 22-65/2017-IA-III dated 01.05.2018.
(v)	The construction in CRZ areas shall be strictly in accordance with the provisions of CRZ Notification, 2011 and as amended from time to time.	Noted and is being complied with.

Sl. No.	Conditions of CRZ	Compliance
(vi)	The project shall be implemented in a manner such that it is consistent with the Government of India's mission on Clean Ganga and serves as role model for Inland Water Transport.	Noted and is being complied with.
(vii)	The project proponent shall take necessary directives from National Ganga River Basin Authority before execution of the project.	NGRBA has been informed about the project implementation and was requested to convey its views/ guidance, vide letter No. IWAI/WB/NW-1/10/3(13)/2015 dated 11.10.2017. NGRBA has not responded in this regard yet. NGRBA has been reminded in this matter on 20.09.2018 and 20.02.2019, copies are enclosed ( <b>Annexure-2</b> ).
(viii)	The project proponent shall commission a study on Gangetic Dolphin habitats and formulate road map for its conservation within a time bound manner not exceeding two years.	A study on Gangetic Dolphin namely "A consultancy study on the effect of navigational activities on Dolphins in the National Waterway-1" has been commissioned on 20 <sup>th</sup> December, 2017 and is in progress.
(ix)	The project proponent shall ensure that restoration plan for mudflat (in and around the vicinity of the project areas) is developed with specific focus on waders and other migratory species during the course of development of the project itself. Non-vegetated mudflats shall be maintained as it is and no mangrove afforestation should be undertaken on the same.	Noted. During the construction phase of the project the EPC contractor has been instructed to comply with this requirement.
(x)	A robust scientific study on data of fish fauna available in the Ganges shall be carried out from an institute of national repute and report submitted within one year to the Regional office of the Ministry and the Ganga Basin Authority.	A study on the 'Impact assessment of coal transportation through barges along the National Waterway No.1 (Sagar to Farakka) along river Ganga' by ICAR-CIFRI, Kolkata was commissioned by NTPC. This study included the data on fish fauna, abiotic and biotic components, impact on livelihood of fishermen etc. A copy of this study report is enclosed with half yearly CRZ compliance report for the period of (January-June 2018). A copy of the report has already been submitted by IWAI to NGRBA. vide letter No. IWAI/WB/NW-1/10/3/(13)/2015 dated 11.10.2017. A copy of the report

Sl. No.	Conditions of CRZ	Compliance
		has also been sent to MOEF&CC on 16.01.17 by NTPC.
(xi)	The project proponent shall ensure that implementation of the Oil Spill Contingency Plan is regularly monitored and observations documented and submitted to the concerned authority of the State Government.	Noted and being complied.  During construction phase, secondary containment has been provided on piling gantry platform below the oil drums to prevent oil spill and concrete base arrangement has been made for diesel storage to prevent soil contamination.
(xii)	Surface water contamination shall be monitored periodically in order to prevent contamination of run-off water getting mixed of contaminated run-off with river. The monitoring results shall be submitted periodically to the State Pollution Control Board and the regional office of the Ministry.	Surface water quality test is being carried out from March, 2018 onwards on a monthly basis. Copy of analysis reports are enclosed <b>(Annexure-3)</b> .
(xiii)	In order to ensure that the fishing community are not disturbed during their course of fishing activity, the project proponent shall ensure that barge movement shall be restricted to channel area only and the speed of barges are efficiently regulated.	Noted for compliance at the operational stage of the terminal when this condition is applicable.
(xiv)	The project proponent shall provide arrangement for Fish Drying beds with prior consultation with the fishing community. In addition, the project proponent shall ensure rehabilitation and resettlement of the fishermen communities in the event the project impacts existing livelihood pattern of these communities.	As per the ESIA study carried out for the project, no fishing community is affected, as the Haldia Dock Complex, the site of the project, is a restricted area and no fishing hamlet/ fishing activity within the shore of the river abutting the Complex is permitted.
(xv)	There shall be no disposal of solid or liquid wastes on the coastal area. Solid waste management shall be as per Solid Wastes Management Rules, 2016. A team comprising of members of the WBCZMA and others with expertise in the subject shall visit the project site	<del>Noted and being complied with.</del> Details submitted to the Ministry of Environment, Forest & Climate Change and West Bengal Coastal Zone Management Authority along with half yearly compliance dated 01.11.2018.

Sl. No.	Conditions of CRZ	Compliance
	periodically during the construction phase to supervise and suggest additional measures if desired.	
(xvi)	Status of implementation of the specific and general conditions prescribed in the recommendations made by the West Bengal Coastal Zone Management Authority shall be submitted to all concerned agencies including regional office of the Ministry of Environment, Forest and Climate Change.	Noted and is being complied with.
(xvii)	There shall be no dressing or alteration of the landscape sand dunes, natural features including changes for beautification, recreation and other such purpose.	Noted and is being complied with.
(xviii)	All waste (liquid and solid) arising from the proposed development will be disposed off as per the norms prescribed by Central/State Pollution Control Board. There shall not be any disposal of untreated effluent in to the sea/coastal water bodies.	Noted and being complied with.
(xix)	Soil and ground water samples shall be regularly collected from the project site and tested from an NABL accredited laboratory to ascertain that there are no threats to ground water quality by leaching of heavy metals and other toxic contaminants. In case, contamination is observed, immediate remedial action shall be undertaken and the concerned agency in the State Government shall be informed.	Noted and being complied with. Soil samples are being collected on a six-monthly basis since March-2018 and same are tested through a NABL accredited laboratory. A copy of the soil monitoring report is enclosed ( <b>Annexure - 4</b> ). No ground water is extracted at the construction site. Requirement of water for the construction is met by extracting the water from the river. Requirement of water for drinking purposes is met by transporting the same through tankers from the Haldia Development Authority.
(xx)	Disposal of muck during construction phase should not create any adverse effect on the neighbouring communities and be disposed taking the necessary precautions for general safety and health aspects of people, one in	Noted and being complied with. Details submitted to the Ministry of Environment, Forest & Climate Change and West Bengal Coastal Zone Management Authority along with half yearly compliance dated 01.11.2018.

Sl. No.	Conditions of CRZ	Compliance
	approved sites with the approval of competent authority.	
(xix)	Any hazardous waste generated during construction phase, should be disposed of as per applicable rules and norms with necessary approvals of the State Pollution Control Board, as may be applicable.	Noted and is being complied with.
<b>Part B: General Conditions</b>		
(i)	Adequate provision for infrastructure facilities including water supply, fuel and sanitation must be ensured for construction workers during the construction phase of the project to avoid any damage to the environment.	The EPC contractor of the project has provided the labour colony with all required infrastructure facilities such as water supply, fuel and sanitation and has also taken all the precautionary measures to avoid any damage to the environment. Potable water quality is tested on a monthly basis by a NABL accredited laboratory. The reports are enclosed (Annexure-5).
(ii)	Full support shall be extended to the officers of this Ministry/Regional Office by the project proponent during inspection of the project for monitoring purposes by furnishing full details and action plan including action taken reports in respect of mitigation measures and other environmental protection activities.	Noted.
(iii)	A six-monthly monitoring report shall be submitted by the project proponents to the Regional Office of this Ministry regarding the implementation of the stipulated conditions.	Being complied with. Reports are being regularly submitted to the Regional Office of MoEF & CC, regarding the compliance of stipulated conditions.
(iv)	The Ministry of Environment, Forest & Climate Change or any other competent authority may stipulate any additional conditions or modify the existing ones, if	Noted.

Sl. No.	Conditions of CRZ	Compliance
	necessary in the interest of environment and the same shall be complied with.	
(v)	The Ministry reserves the right to revoke this clearance if any of the conditions stipulated are not complied with to the satisfaction of the Ministry.	Noted
(vi)	In the event of a change in project profile or change in the implementation agency, a fresh reference shall be made to the Ministry.	Noted
(vii)	A copy of the clearance letter shall be marked to concerned Panchayat/ local NGO, if any, from whom any suggestion/ representation has been made received while processing the proposal.	Complied. Details submitted to the Ministry of Environment, Forest & Climate Change and West Bengal Coastal Zone Management Authority along with half yearly compliance dated 01.11.2018.
(viii)	A copy of the CRZ Clearance letter shall also be displayed on the website of the concerned State Pollution Control Board. The Clearance letter shall also be displayed at the Regional Office, District Industries centre and Collector's Office/Tehsildar's Office for 30 days.	Complied. Details submitted to the Ministry of Environment, Forest & Climate Change and West Bengal Coastal Zone Management Authority along with half yearly compliance dated 01.11.2018.

**List of Annexures**

<b>S.No.</b>	<b>Details</b>	<b>Annexure</b>
1.	Compliance of the conditions/recommendations stipulated by the West Bengal State Coastal Zone Management Authority (WBSCZMA)	Annexure 1
2.	Communication to National Ganga River Basin Authority	Annexure 2
3.	Test report of surface water quality of up-stream & downstream of river	Annexure 3
4.	Test report of soil quality	Annexure 4
5.	Test report of drinking water quality	Annexure 5

## **ANNEXURES**

### **Annexure-1**

**Compliance of the conditions/recommendations  
stipulated by the West Bengal State Coastal Zone  
Management Authority (WBSCZMA)**

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Compliance of the conditions/recommendations stipulated by the West Bengal State Coastal Zone Management Authority (WBSCZMA) vide its letter no. 135/EN/T-II/018/2015, dated 24.01.2017.

S.No.	Conditions	Compliance
<b>Part A: Specific Conditions of WBSCZMA</b>		
(i)	CRZ norms as laid down in CRZ Notification, 2011 should be strictly followed.	Noted and is being complied with.
(ii)	The built-up area as proposed should be strictly adhered to.	Noted and is being complied with.
(iii)	Noise and vibration during construction should be minimized through good working practices and management of working hours.	<p>The following measures have been taken to minimise the noise and vibration during construction stage:</p> <ul style="list-style-type: none"> <li>• Restriction of high noise generating activity between 10:00 PM to 6:00 AM.</li> <li>• Barricading (temporary noise barrier) the construction site to minimize the noise level outside the site boundary.</li> <li>• Noise Monitoring has been carried out in different project locations in periodic manner. Ambient noise level found under permissible limit.</li> </ul> <p>Noise monitoring reports are enclosed <b>(Appendix – I)</b>.</p>
(iv)	The structures created under this project should be able to withstand cyclonic storm that is likely to strike the coast once in 20 years interval. The project proponent should get the plan certified by a competent architect regarding its structural stability.	The structural design of the terminal regarding its stability to withstand cyclonic storms has been got vetted and certified from IIT Kharagpur.
(v)	Extraction of sand, levelling or digging of sandy stretches except for structural formation should not be done under any circumstance.	Noted and is being complied with.
(vi)	No dredging should be done during Hilsa breeding season.	Noted and is being complied with.
(vii)	Oil Spill Disaster Contingency Plan along the entire route of operations approved by Indian Coast Guard should be submitted prior to commencement of cargo handling and despatch.	<p>Noted.</p> <p>During construction phase there is no scope of cargo handling and despatch. Secondary containments are provided below the oil drums stored at piling gantry to prevent any oil spillage. Concrete base arrangements are</p>

		provided in oil storage areas to prevent soil contamination.  However, an Oil Spill Disaster Contingency Plan will be submitted prior to commencement of cargo handling and despatch.
(viii)	The vessels using the facility should have proper safeguard for protection of wildlife such as dolphin etc. from damage by propeller.	Noted.  There is no dolphin zone near the project location and no such big vessels having propeller are being used in construction activity, which may cause any damage to aquatic wildlife.  During operation phase, vessels berthing through Haldia terminal on their navigation to NW-1 will be fitted with specially designed propeller guards to prevent any damage to wildlife.
(ix)	Study of the siltation rate is to be submitted to the Authority from time to time.	Noted.

#### **PART- B: GENERAL CONDITION**

<b>S.No.</b>	<b>Conditions</b>	<b>Compliance</b>
<b>Part B: General Conditions of WBSCZMA</b>		
(i)	Liquid waste if any, from this area will not be allowed to drain directly into the river.	Liquid hazardous waste, generated on site is being collected and stored in a separate covered location and is being disposed with help of authorised agency. Authorization of recycler and manifest form are enclosed ( <b>Appendix-II</b> ).  Sewage generated from construction site and labour colony is being managed through septic tanks and soak pits.
(ii)	During loading and unloading of cargo strict vigilance should be <del>done to avoid spillage directly on river water.</del>	Noted and will be complied with.
(iii)	The Proponent should abide by the Municipal Solid Waste (Management & Handling) Rules, 2000. The Proponent must develop the solid waste management and disposal scheme ensuring storage and segregation of bio-degradable and	Noted and being complied with.  Details submitted to the Ministry of Environment, Forest & Climate Change and West Bengal Coastal Zone Management Authority along with half yearly compliance dated 01.11.2018.

	non-biodegradable wastes. The solid wastes to be composted and used as manure.	
(iv)	Adequate provision for the infrastructure facilities including water supply and sanitation may be ensured for the labourers during the construction period in order to avoid damage to the surrounding environment.	Complied.  Details submitted to the Ministry of Environment, Forest & Climate Change and West Bengal Coastal Zone Management Authority along with half yearly compliance dated 01.11.2018.
(v)	Construction materials and wastes including hazardous substances such as oil, if any, should not be allowed to pollute the surrounding land or aquatic environment as the case may be and should be disposed of as per prevalent rule.	Being complied with. Details submitted to the Ministry of Environment, Forest & Climate Change and West Bengal Coastal Zone Management Authority along with half yearly compliance dated 01.11.2018.
(vi)	The noise level and the suspended particulate matters should be kept within permissible levels at the time of establishments as well as operations.	Noise Monitoring and Ambient Air Monitoring has been carried out as per monitoring plan and found within permissible limit. Dedicated Tanker has been deployed for frequent Water sprinkling and loading and unloading of construction materials are done in covered areas.
(vii)	There should not be any removal of vegetative cover both at the establishment as well as operation stage, without the sanction of appropriate authority.	Noted and is being complied with. Permission from the Divisional Forest Office, Purba Medinipur, West Bengal for tree cutting has been obtained. Copy of letter dated 06.12.2017 in this regard has been enclosed with the half yearly CRZ compliance report for the period of (January-June 2018).
(viii)	The ships should not discharge ballast water or any untreated sewage directly into the river.	Noted. Zero discharge vessels have been designed for manufacture and deployment in NW-1. Untreated sewage will be collected at the waste reception facility being installed at the terminal for treatment in STP.
(ix)	This CRZ clearance accorded to the project shall remain valid for a period of 5 years from the date of its issue.	Noted.
(x)	The project proponent shall submit half yearly compliance report in respect of stipulated terms and conditions in hard and soft copies on 1 <sup>st</sup> June and 31 <sup>st</sup> December of each calendar year.	Being complied with.
(xi)	The WBSCZMA may monitor the implementation of the project at any stage. For all activities the	Noted.

	authorized member of West Bengal State Coastal Zone Management Authority will have the power to inspect the sites to enforce conditions imposed by the state authority. The Authority reserves the right to add additional safeguard measures subsequently if found necessary.	
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**Annexure-2**  
**Communication to National Ganga River Basin**  
**Authority**



## भारतीय अन्तर्देशीय जलमार्ग प्राधिकरण

( पोत परिवहन मंत्रालय, भारत सरकार )

मुख्यालय : ए-13, सेक्टर-1, नोडा-201 301, (उ.प्र.)

### INLAND WATERWAYS AUTHORITY OF INDIA

(Ministry of Shipping, Govt. of India)

Head Office : A-13, Sector-1, Noida-201 301 (U.P.)

Website : www.iwai.gov.in | www.iwai.nic.in

Tel. : +91-120-2544038, 2543972, 2527667, 2448101 Fax : +91-120-2544009, 2544041, 2543973, 2521764

IWAI/WB/NW-1/10/3/(13)/2015

Date: 11/10/2017

To  
The National Ganga River Basin Authority (NGRBA) Cell  
Central Pollution Control Board,  
Parivesh Bhavan, East Arjun Nagar,  
Delhi - 110 032

[Kind Attn: Shri Suneel Dave, Scientist -E, In-charge, NGRBA Cell]

Sub: Construction of Multi-Modal IWT Terminal at Haldia, West Bengal under the Jal Marg Vikas Project for capacity augmentation of navigation on NW-1.

Sir

The Inland Waterways Authority of India (IWAI), Ministry of Shipping, Government of India is implementing the Jal Marg Vikas Project (JMVP) of capacity augmentation of navigation on NW-1 with the technical and financial assistance of the World Bank. The Project interventions include construction of a multimodal terminal at Haldia (District Purbi (East), Medinipur, West Bengal) within the Haldia Dock Complex. The work award for construction of Phase-I of the terminal has already been awarded to comply with the timeline fixed by the PMO in the review meeting held in May, 2015. JMVP is included in PRAGATI for regular review and monitoring by the PMO and the Cabinet Secretariat and as such construction of the terminal is also in the purview of this review and monitoring.

2. The multimodal terminal site at Haldia falls within the CRZ area as per CRZ Notification, 2011. Accordingly, IWAI filed an application for CRZ clearance for this terminal. This matter was considered in the 170<sup>th</sup> meeting of the Expert Appraisal Committee (EAC) of MoEF&CC for CRZ Clearance and the EAC, while recommending grant of CRZ clearance, inter alia, stipulated that 'the project proponent shall take necessary directives from National Ganga River Basin Authority before execution of the project'. A copy each of the following documents are enclosed:

- (i) Minutes of the meeting of EAC of MoEF&CC;
- (ii) Letter No 135/EN/T-II-4/018/2015 dated 24/01/2017 from WBSCZMA recommending CRZ clearance for the terminal;
- (iii) EIA Report on the terminal; CRZ Mapping report including CRZ Maps of site on 1:4000 & 1:25000 scale prepared by Authorized Agencies; and Oil Spill Contingency Plan and approval of the Indian Coast Guard.
- (iv) Impact assessment of coal transportation through barges along the National Waterway No.1 (Sagar to Farakka) along River Ganga

3. IWAI will ensure implementation of the EMP and the conditions stipulated by the EAC.

4. It is requested that the views/guidance of NGRBA pertaining to the construction of the terminal may please be communicated at the earliest.

5. This issues with the approval of Chairperson, IWAI.

Yours faithfully,

(Ravi Kant)

Chief Engineer and Project Manager  
Jal Marg Vikas

Encl: As above.



# भारतीय अन्तर्देशीय जलमार्ग प्राधिकरण

(पोत परिवहन मंत्रालय, भारत सरकार)

मुख्यालय : ए-13, सेक्टर-1, नोएडा-201 301, (उ.प्र.)

## INLAND WATERWAYS AUTHORITY OF INDIA

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Head Office : A-13, Sector-1, Noida-201 301 (U.P.)

Website : www.iwai.gov.in | www.iwai.nic.in

Tel. : +91-120-2544036, 2543972, 2527667, 2448101 Fax : +91-120-2544009, 2544041, 2543973, 2521764

IWAI/WB/NW-1/10/3/(13)/2015

Date: 20/09/2018

To  
The National Ganga River Basin Authority (NGRBA) Cell  
Central Pollution Control Board,  
Parivesh Bhavan, East Arjun Nagar,  
Delhi - 110 032

[Kind Attn: Shri Suneel Dave, Scientist -E, In-charge, NGRBA Cell]

Sub: Construction of Multi-Modal Terminal at Haldia, West Bengal under the Jal Marg Vikas Project for capacity augmentation of navigation on NW-1.

Ref: MoEF&CC letter No. 11-14/2017-IA.III dated 06.11.2017 (CRZ Clearance for Inland Waterway Terminal at Haldia, District Purbi (East) Medinipur, West Bengal).

Sir

Please refer to this office letter no. IWAI/WB/NW-1/10/3/(13)/2015 dated 11.10.2017 on the above subject (copy enclosed).

2. It is requested that views/guidance of NGRBA on the project of construction of the multimodal terminal at Haldia may please be communicated to us at the earliest.

Yours faithfully,

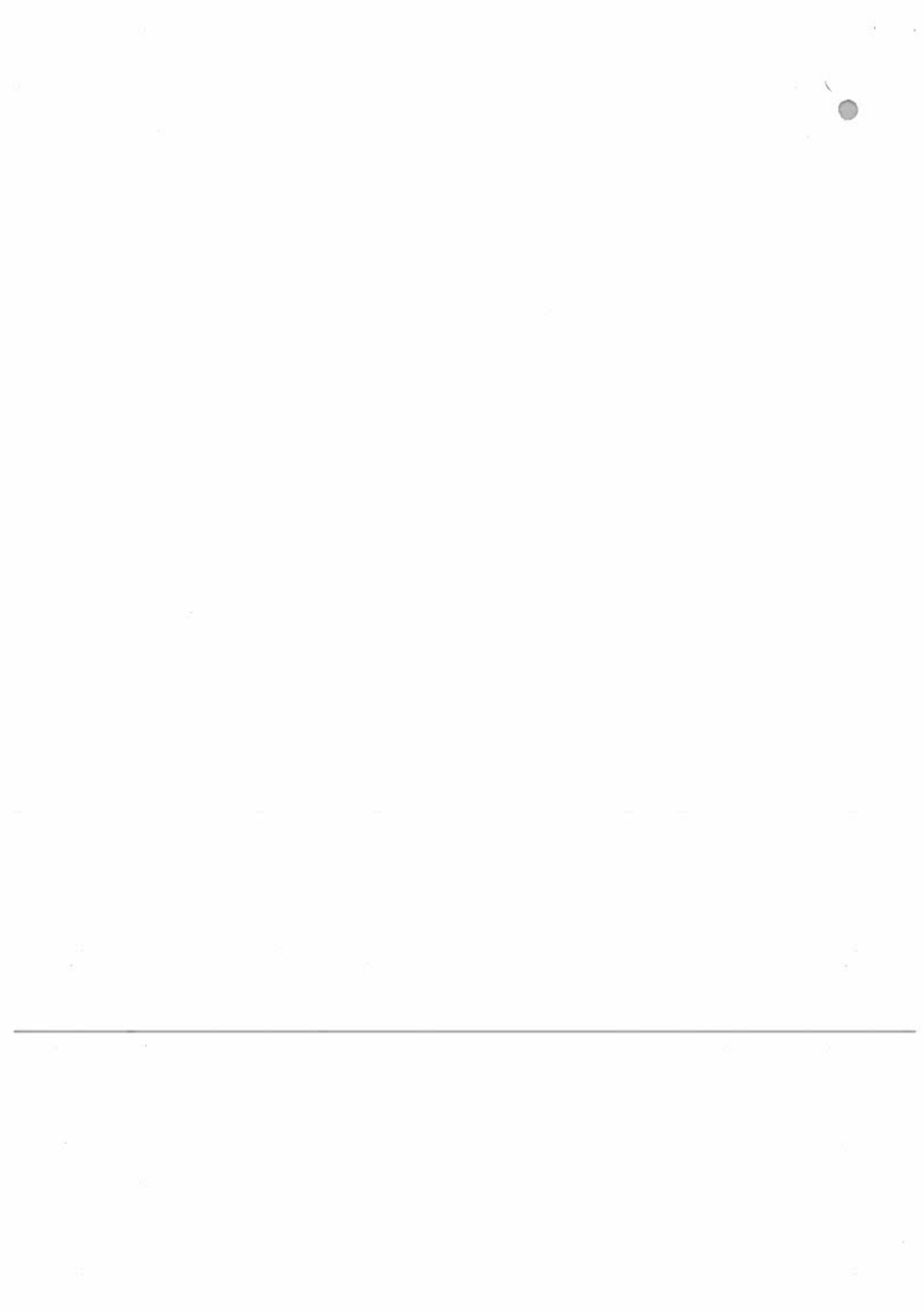
(Ravi Kant)

Chief Engineer and Project Manager  
Jal Marg Vikas

Encl: as above

o/c







# भारतीय अन्तर्देशीय जलमार्ग प्राधिकरण

(पोत परिवहन मंत्रालय, भारत सरकार)

मुख्यालय : ए-13, सेक्टर-1, नोडा-201 301, (उ.प्र.)

## INLAND WATERWAYS AUTHORITY OF INDIA

(Ministry of Shipping, Govt. of India)

Head Office : A-13, Sector-1, Noida-201 301 (U.P.)

Website : www.iwai.gov.in | www.iwai.nic.in

Tel. : +91-120-2544036, 2543972, 2527667, 2448101 Fax : +91-120-2544009, 2544041, 2543973, 2521784

IWAI/WB/NW-1/10/3/(13)/2015

Date: 20.02.2019

To  
The National Ganga River Basin Authority (NGRBA) Cell  
Central Pollution Control Board,  
Parivesh Bhavan, East Arjun Nagar,  
Delhi 110 032

[Kind Attn: Shri Suneel Dave, Scientist -E, In-charge, NGRBA Cell]

Sub: Construction of Multi-Modal Terminal at Haldia, West Bengal under the Jal Marg Vikas Project for capacity augmentation of navigation on NW-1.

Ref: MoEF&CC letter No. 11-14/2017-IA.III dated 06.11.2017 (CRZ Clearance for Inland Waterway Terminal at Haldia, District Purbi (East) Medinipur, West Bengal).

Sir,

Please refer to this office letter nos. IWAI/WB/NW-1/10/3/(13)/2015 dated 11.10.2017 and 20.09.2018 on the subject noted above (copies enclosed).

2. It is requested that views/guidance of NGRBA on the project of construction of the multimodal terminal at Haldia may please be communicated to us at the earliest.

Yours faithfully,

(Ravi Kant)

Chief Engineer and Project Manager  
Jal Marg Vikas

Encl: as above

o/c

20/02/19

**Annexure-3**  
**Test report of Surface water quality from Up-stream & Downstream**

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## POLLUTION AND PROJECT CONSULTANTS

ENVIRONMENTAL POLLUTION CONTROL - Air, Effluent, Pharmaceuticals  
& Chemical Project Engineers EIA & Disaster Management Study

### TEST REPORT Water Sample

Customer Name	: M/s. ITD Cementation India Ltd.	Report No.	: SW/18(7)/61
Address	: Adjacent to M/s. UPL Ltd. (Unit-09), Durgachawk, Haldia, Purba Medinipur, PIN-721602	Report Date	: 27/07/2018
Type of Sample	: Surface Water	Date of Sampling	: 20/07/2018
Sampling Location	: Approach 1 (Up Stream)	Sample Received Date	: 21/07/2018
		Sample Id No.	: SW/18(7)/61
		Test Start Date	: 21/07/2018
		Test End Date	: 27/07/2018

Sl. No.	Chemical Test Parameter	Unit	Results	Methods of Test (Reference)
1	Colour	--	Greyish	APHA 23 <sup>rd</sup> Edn. 2120 A : 2017
2	pH	--	6.67	APHA 23 <sup>rd</sup> Edn. 4500H+B : 2017
3	Bio-Chemical Oxygen Demand (BOD)	mg/l	6.5	IS:3025 (Part-4) : 1993 (RA 2014)
4	Dissolved Oxygen (DO)	mg/l	6.2	APHA 23 <sup>rd</sup> Edn. 4500 C : 2017
5	Arsenic (As)	mg/l	<0.01	IS 3025 (Part 37): 1988 (RA 2014)
6	Fluorides (F)	mg/l	0.70	APHA 23 <sup>rd</sup> Edn. 4500 F.D : 2017
7	Total Coliform Organisms	MPN/100 ml	280.0	APHA 23 <sup>rd</sup> Edn. 9221 B & C : 2017

The results relate only to the parameters tested.

....end of report..



*Tanmoy Chakrabarty*  
Tanmoy Chakrabarty  
Quality Manager  
Authorized Signatory

For Pollution and Project Consultants

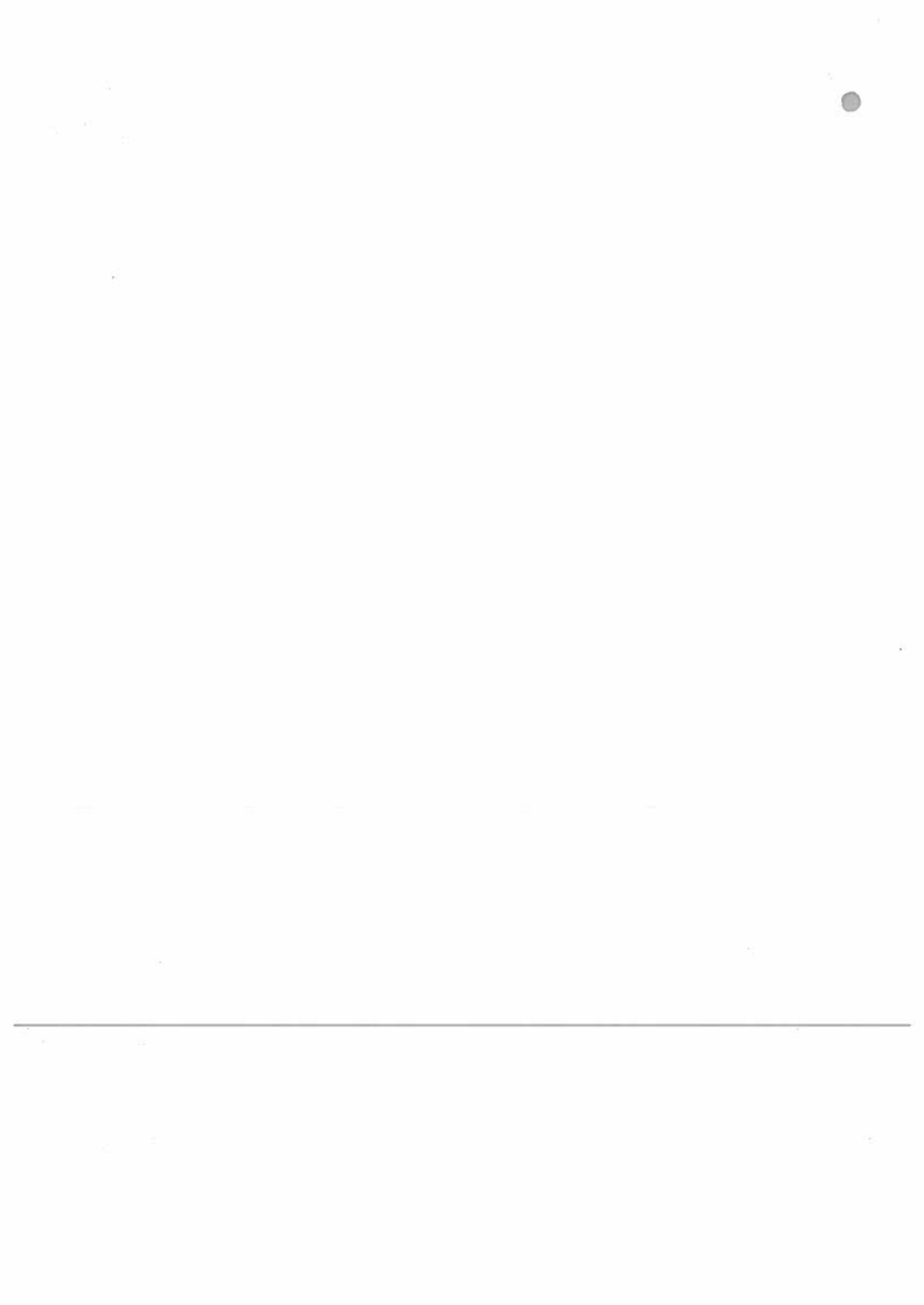
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Office & Laboratory : P-145, Bangur Avenue, Block - A, Kolkata - 700 055

Phone : (033) 2574-3418 / 2984 • Fax : (033) 2574-2984

E-mail : ppconsultants@awsppc.in / awsppc@airtelmail.in • Web : www.awsppcenvirogroup.com





# POLLUTION AND PROJECT CONSULTANTS

ENVIRONMENTAL POLLUTION CONTROL - Air, Effluent, Pharmaceuticals  
& Chemical Project Engineers, EIA & Disaster Management Study

## TEST REPORT Water Sample

Customer Name		M/s. ITD Cementation India Ltd		Report No.	SW/18(7)/62
Address		Adjacent to M/s. UPL Ltd (Unit 09), Durgachawk, Haldia, Purba Medinipur, PIN-721602		Report Date	27/07/2018
				Date of Sampling	20/07/2018
				Sample Received Date	21/07/2018
				Sample Id No.	SW/18(7)/62
Type of Sample		Surface Water		Test Start Date	21/07/2018
Sampling Location		Approach 4 (Down Stream)		Test End Date	27/07/2018
Sl. No.	Chemical Test Parameter	Unit	Results	Methods of Test (Reference)	
1	Colour		Pale brown	APHA 23 <sup>rd</sup> Edn. 2120 A : 2017	
2	pH		6.58	APHA 23 <sup>rd</sup> Edn. 4500H+8 : 2017	
3	Bio-Chemical Oxygen Demand (BOD)	mg/l	5.8	IS:3025 (Part-4) : 1993 (RA 2014)	
4	Dissolved Oxygen (DO)	mg/l	5.3	APHA 23 <sup>rd</sup> Edn. 4500 C : 2017	
5	Arsenic (As)	mg/l	<0.01	IS 3025 (Part 37): 1988 (RA 2014)	
6	Fluorides (F)	mg/l	0.90	APHA 23 <sup>rd</sup> Edn. 4500 F D : 2017	
7	Total Coliform Organisms	MPN/100 ml	350.0	APHA 23 <sup>rd</sup> Edn. 9221 B & C : 2017	

The results relate only to the parameters tested.

— end of report —



*Tanmoy Chakrabarty*  
Tanmoy Chakrabarty  
Quality Manager  
Authorized Signatory

For Pollution and Project Consultants

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## POLLUTION AND PROJECT CONSULTANTS

ENVIRONMENTAL POLLUTION CONTROL - Air, Effluent, Pharmaceuticals  
& Chemical Project Engineers. EIA & Disaster Management Study

### TEST REPORT Water Sample

Customer Name	: M/s. ITD Cementation India Ltd.,	Report No.	: SW/18(09)/80	
Address	: Adjacent to M/s. UPL Ltd. (Unit-09), Durgachawk, Haldia, Purba Medinipur, PIN-721602	Report Date	: 29/09/2018	
		Date of Sampling	: 21/09/2018	
		Sample Received Date	: 24/09/2018	
		Sample Id No.	: SW/18(09)/80	
Type of Sample	: Surface Water	Test Start Date	: 24/09/2018	
Sampling Location	: Approach 4 (Upstream)	Test End Date	: 29/09/2018	
Sl. No.	Chemical Test Parameter	Unit	Results	Methods of Test (Reference)
1	Colour	—	Pale brown	APHA 23 <sup>rd</sup> Edn. 2120 A : 2017
2	pH	—	7.46	APHA 23 <sup>rd</sup> Edn. 4500H+B : 2017
3	Bio-Chemical Oxygen Demand (BOD)	mg/l	<2.0	IS:3025 (Part-4) :1993 (RA 2014)
4	Dissolved Oxygen (DO)	mg/l	7.17	APHA 23 <sup>rd</sup> Edn. 4500 C : 2017
5	Arsenic (As)	mg/l	<0.01	IS 3025 (Part 37): 1988 (RA 2014)
6	Fluorides (F)	mg/l	0.40	APHA 23 <sup>rd</sup> Edn. 4500 F.D : 2017
7	Total Coliform Organisms	MPN/100 ml	350.0	APHA 23 <sup>rd</sup> Edn. 9221 B & C : 2017

The results relate only to the parameters tested.

The results relate only to the parameters tested.

....end of report...



  
Tanmoy Chakrabarty  
Quality Manager  
Authorized Signatory

For Pollution and Project Consultants

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### LABORATORY FOR ANALYSIS OF AIR, EFFLUENT, SOLIDWASTE, COAL, ORE. ETC.

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## POLLUTION AND PROJECT CONSULTANTS

ENVIRONMENTAL POLLUTION CONTROL - Air, Effluent, Pharmaceuticals  
& Chemical Project Engineers, EIA & Disaster Management Study

### TEST REPORT

#### Water Sample

Customer Name		: M/s. ITD Cementation India Ltd.	Report No.	: SW/18(09)/79
Address		: Adjacent to M/s. UPL Ltd. (Unit-09), Durgachawk, Haldia, Purba Medinipur, PIN-721602	Report Date	: 29/09/2018
			Date of Sampling	: 21/09/2018
			Sample Received Date	: 24/09/2018
			Sample Id No.	: SW/18(09)/79
Type of Sample	: Surface Water		Test Start Date	: 24/09/2018
Sampling Location	: Approach 1 (Downstream)		Test End Date	: 29/09/2018
Sl. No.	Chemical Test Parameter	Unit	Results	Methods of Test (Reference)
1	Colour	—	Greyish	APHA 23 <sup>rd</sup> Edn. 2120 A : 2017
2	pH	—	7.56	APHA 23 <sup>rd</sup> Edn. 4500H+B : 2017
3	Bio-Chemical Oxygen Demand (BOD)	mg/l	5.0	IS:3025 (Part-4) :1993 (RA 2014)
4	Dissolved Oxygen (DO)	mg/l	6.32	APHA 23 <sup>rd</sup> Edn. 4500 C : 2017
5	Arsenic (As)	mg/l	<0.01	IS 3025 (Part 37): 1988 (RA 2014)
6	Fluorides (F)	mg/l	0.90	APHA 23 <sup>rd</sup> Edn. 4500 F.D : 2017
7	Total Coliform Organisms	MPN/100 ml	430.0	APHA 23 <sup>rd</sup> Edn. 9221 B & C : 2017



*Tanmoy Chakrabarti*  
Tanmoy Chakrabarti  
Quality Manager  
Authorized Signatory

For Pollution and Project Consultants

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# POLLUTION AND PROJECT CONSULTANTS

ENVIRONMENTAL POLLUTION CONTROL - Air, Effluent, Pharmaceuticals  
& Chemical Project Engineers EIA & Disaster Management Study

Certificate Number: TC-7591

FORMAT NO.: PPC/FM/71 ISSUE NO.: 03 ISSUE Dt.: 01/01/2017 (Rev No.:02 Rev. Dt.: 28/05/2018)

Page: 1 of 1

## TEST REPORT

### Water Sample

Customer Name : M/s. ITD Cementation India Ltd.,		Report No. : 5W/18(10)/100		
Address : Adjacent to M/s. UPL Ltd. (Unit-09), Durgachawk, Haldia, Purba Medinipur, PIN-721602		Report Date : 09/11/2018 Date of Sampling : 26/10/2018 Sample Received Date : 29/10/2018 Sample Id No. : 5W/18(10)/100 Test Start Date : 29/10/2018 Test End Date : 09/11/2018		
Type of Sample : Surface Water				
Sampling Location : Approach 1 (Downstream)				
Sl. No.	Chemical Test Parameter	Unit	Results	Methods of Test (Reference)
1	pH	—	7.76	APHA (23 <sup>rd</sup> Edition) 4500H+B : 2017
2	Turbidity	NTU	486.0	APHA (23 <sup>rd</sup> Edition) 2130 B:2017
3	Total Dissolved Solid (TDS)	mg/l	997.0	APHA (23 <sup>rd</sup> Edition) 2540 C : 2017
4	Conductivity	µS/cm	1512.0	APHA (23 <sup>rd</sup> Edition) 2510 B : 2017
5*	Color	—	Greyish	APHA (23 <sup>rd</sup> Edition) 2120 C : 2017
6	Total Alkalinity (as CaCO <sub>3</sub> )	mg/l	127.0	APHA (23 <sup>rd</sup> Edition) 2320 B:2017
7	Total Hardness (as CaCO <sub>3</sub> )	mg/l	441.0	IS: 3025 (Part 21):2009 (RA 2014)
8*	Dissolved Oxygen (DO)	mg/l	5.91	APHA (23 <sup>rd</sup> Edition) 4500 C : 2017
9	Calcium (as Ca)	mg/l	105.00	IS: 3025 (Part 40):1991 (RA 2014)
10	Fluorides (as F)	mg/l	0.87	APHA (23 <sup>rd</sup> Edition) 4500 —F.D : 2017
11	Nitrate-N (as NO <sub>3</sub> -N)	mg/l	7.20	APHA (23 <sup>rd</sup> Edition) 4500-NO <sub>3</sub> -E : 2017
12*	Bio-Chemical Oxygen Demand (BOD)	mg/l	5.6	IS:3025 (Part-4 ):1993 (RA 2014)
13	Iron (as Fe)	mg/l	17.80	APHA (23 <sup>rd</sup> Edition) 3111 B:2017
14	Mercury (as Hg)	mg/l	<0.001	APHA (23 <sup>rd</sup> Edition) 3112 B:2017
15	Zinc (as Zn)	mg/l	0.55	APHA (23 <sup>rd</sup> Edition) 3111 B : 2017
16	Chloride (as Cl)	mg/l	232.50	APHA (23 <sup>rd</sup> Edition) 4500Cl.B : 2017
17*	Arsenic (as As)	mg/l	<0.01	IS 3025 (Part 37): 1988 (RA 2014)
18	Sulphate (SO <sub>4</sub> <sup>2-</sup> )	mg/l	134.0	IS 3025 (Part 24):1986 (RA 2014)
19	Sodium (as Na)	mg/l	93.8	APHA (23 <sup>rd</sup> Edition) 3500 Na B:2017
20	Potassium (as K)	mg/l	34.4	APHA (23 <sup>rd</sup> Edition) 3500 K:2017
21	Nitrite - N (NO <sub>2</sub> -N)	mg/l	0.22	APHA (23 <sup>rd</sup> Edition) 4500-NO <sub>2</sub> -E : 2017
22	Copper (as Cu)	mg/l	<0.05	APHA (23 <sup>rd</sup> Edition) 3111 B : 2017
23*	Total Coliform	MPN/100ml	540.0	APHA (23 <sup>rd</sup> Edition) 9221 B & C : 2017

The results relate only to the parameters tested.

...end of report...



*Tannoy Choudhury*  
Tannoy Choudhury  
Quality Manager

Authorized Signatory  
For Pollution and Project Consultants

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\* Marked parameters are not in our NABL Scope.

LABORATORY FOR ANALYSIS OF AIR, WATER, EFFLUENT, SOIL, SLUDGE, SOLIDWASTE, COAL, ORE. ETC.

Office & Laboratory : P-145, Bangur Avenue, Block - A, Kolkata - 700 055

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# POLLUTION AND PROJECT CONSULTANTS

ENVIRONMENTAL POLLUTION CONTROL - Air, Effluent, Pharmaceuticals  
& Chemical Project Engineers' EIA & Disaster Management Study

Certificate Number: PG/19/18

FORMAT NO.: PPC/FM/71 ISSUE NO.: 03 ISSUE Dt.: 01/01/2017 (Rev.No.02 Rev. Dt.: 28/05/2018)

Page.: 1 of 1

## TEST REPORT

### Water Sample

Customer Name : M/s. ITD Cementation India Ltd.,		Report No. : SW/18(10)/101		
Address : Adjacent to M/s. UPL Ltd. (Unit-09), Durgachawk, Haldia, Purba Medinipur, PIN-721602		Report Date : 09/11/2018 Date of Sampling : 26/10/2018 Sample Received Date : 29/10/2018 Sample Id No. : SW/18(10)/101 Test Start Date : 29/10/2018 Test End Date : 09/11/2018		
Type of Sample : Surface Water				
Sampling Location : Approach 4 (Upstream)				
Sl. No.	Chemical Test Parameter	Unit	Results	Methods of Test (Reference)
1	pH	--	7.35	APHA (23 <sup>rd</sup> Edition) 4500H+8 : 2017
2	Turbidity	NTU	417.0	APHA (23 <sup>rd</sup> Edition) 2130 B:2017
3	Total Dissolved Solid (TDS)	mg/l	425.0	APHA (23 <sup>rd</sup> Edition) 2540 C : 2017
4	Conductivity	µS/cm	646.0	APHA (23 <sup>rd</sup> Edition) 2510 B : 2017
5*	Color	--	Pale brown	APHA (23 <sup>rd</sup> Edition) 2120 C : 2017
6	Total Alkalinity (as CaCO <sub>3</sub> )	mg/l	103.4	APHA (23 <sup>rd</sup> Edition) 2320 B:2017
7	Total Hardness (as CaCO <sub>3</sub> )	mg/l	122.30	IS: 3025 (Part 21):2009 (RA 2014)
8*	Dissolved Oxygen (DO)	mg/l	6.82	APHA (23 <sup>rd</sup> Edition) 4500 C : 2017
9	Calcium (as Ca)	mg/l	25.23	IS: 3025 (Part 40):1991 (RA 2014)
10	Fluorides (as F)	mg/l	0.38	APHA (23 <sup>rd</sup> Edition) 4500 -F.D : 2017
11	Nitrate-N (as NO <sub>3</sub> -N)	mg/l	6.54	APHA (23 <sup>rd</sup> Edition) 4500-NO <sub>3</sub> -E : 2017
12*	Bio-Chemical Oxygen Demand (BOD)	mg/l	3.20	IS:3025 (Part-4 ):1993 (RA 2014)
13	Iron (as Fe)	mg/l	16.19	APHA (23 <sup>rd</sup> Edition) 3111 B:2017
14	Mercury (as Hg)	mg/l	<0.001	APHA (23 <sup>rd</sup> Edition) 3112 B:2017
15	Zinc (as Zn)	mg/l	0.30	APHA (23 <sup>rd</sup> Edition) 3111 B : 2017
16	Chloride (as Cl)	mg/l	109.80	APHA (23 <sup>rd</sup> Edition) 4500Cl.B : 2017
17*	Arsenic (as As)	mg/l	<0.01	IS 3025 (Part 37): 1988 (RA 2014)
18	Sulphate (SO <sub>4</sub> <sup>2-</sup> )	mg/l	28.57	IS 3025 (Part 24):1986 (RA 2014)
19	Sodium (as Na)	mg/l	78.29	APHA (23 <sup>rd</sup> Edition) 3500 Na B:2017
20	Potassium (as K)	mg/l	8.65	APHA (23 <sup>rd</sup> Edition) 3500 K:2017
21	Nitrite - N (NO <sub>2</sub> -N)	mg/l	0.17	APHA (23 <sup>rd</sup> Edition) 4500-NO <sub>2</sub> E :2017
22	Copper (as Cu)	mg/l	<0.05	APHA (23 <sup>rd</sup> Edition) 3111 B : 2017
23*	Total Coliform	MPN/100ml	350.0	APHA (23 <sup>rd</sup> Edition) 9221 B & C : 2017

The results relate only to the parameters tested.

...end of report...



*Tanmoy Chakrabarti*  
Tanmoy Chakrabarti/  
Quality Manager  
Authorized Signatory

For Pollution and Project Consultants

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\* Marked parameters are not in our NABL Scope

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Certificate Number : PC/1606

# POLLUTION AND PROJECT CONSULTANTS

ENVIRONMENTAL POLLUTION CONTROL : Air, Effluent, Pharmaceuticals  
& Chemical Project Engineers EIA & Disaster Management Study

FORMAT NO.: PPC/FM/71 ISSUE NO.: 03 ISSUE Dt.: 01/01/2017 (Rev No.:02 Rev. Dt.: 28/05/2018)

Page.: 1 of 1

## TEST REPORT

### Water Sample

Customer Name : M/s. ITD Cementation India Ltd.		Report No. : SW/18(11)/50		
Address : Adjacent to M/s. UPL Ltd. (Unit-09), Durgachawk, Haldia, Purba Medinipur, PIN-721602		Report Date : 03-12-2018		
		Date of Sampling : 26-11-2018		
		Sample Received Date : 27-11-2018		
		Sample Id No. : SW/18(11)/50		
Type of Sample : Surface Water		Test Start Date : 27-11-2018		
Sampling Location : Approach 1 (Downstream)		Test End Date : 03-12-2018		
Sl. No.	Chemical Test Parameter	Unit	Results	Methods of Test (Reference)
1	pH	—	7.64	APHA (23 <sup>rd</sup> Edition) 4500H-B : 2017
2	Turbidity	NTU	490.0	APHA (23 <sup>rd</sup> Edition) 2130 B:2017
3	Total Dissolved Solid (TDS)	mg/l	990.0	APHA (23 <sup>rd</sup> Edition) 2540 C : 2017
4	Conductivity	µS/cm	1530.0	APHA (23 <sup>rd</sup> Edition) 2510 B : 2017
5*	Color	—	Greyish	APHA (23 <sup>rd</sup> Edition) 2120 C : 2017
6	Total Alkalinity (as CaCO <sub>3</sub> )	mg/l	136.0	APHA (23 <sup>rd</sup> Edition) 2320 B:2017
7	Total Hardness (as CaCO <sub>3</sub> )	mg/l	449.00	IS: 3025 (Part 21):2009 (RA 2014)
8*	Dissolved Oxygen (DO)	mg/l	6.14	APHA (23 <sup>rd</sup> Edition) 4500 C : 2017
9	Calcium (as Ca)	mg/l	108.20	IS: 3025 (Part 40):1991 (RA 2014)
10	Fluorides (as F)	mg/l	0.83	APHA (23 <sup>rd</sup> Edition) 4500 -F.D : 2017
11	Nitrate-N (NO <sub>3</sub> -N)	mg/l	6.80	APHA (23 <sup>rd</sup> Edition) 4500-NO <sub>3</sub> -E : 2017
12*	Bio-Chemical Oxygen Demand (BOD)	mg/l	5.2	IS:3025 (Part-4 ):1993 (RA 2014)
13	Iron (as Fe)	mg/l	17.05	APHA (23 <sup>rd</sup> Edition) 3111 B:2017
14	Mercury (as Hg)	mg/l	<0.001	APHA (23 <sup>rd</sup> Edition) 3112 B:2017
15	Zinc (as Zn)	mg/l	0.60	APHA (23 <sup>rd</sup> Edition) 3111 B : 2017
16	Chloride (as Cl)	mg/l	228.60	APHA (23 <sup>rd</sup> Edition) 4500Cl.B : 2017
17*	Arsenic (as As)	mg/l	<0.01	IS 3025 (Part 37): 1988 (RA 2014)
18	Sulphate (SO <sub>4</sub> <sup>2-</sup> )	mg/l	130.6	IS 3025 (Part 24):1986 (RA 2014)
19	Sodium (as Na)	mg/l	91.7	APHA (23 <sup>rd</sup> Edition) 3500 Na B:2017
20	Potassium (as K)	mg/l	30.2	APHA (23 <sup>rd</sup> Edition) 3500 K:2017
21	Nitrite - N (NO <sub>2</sub> -N)	mg/l	0.20	APHA (23 <sup>rd</sup> Edition) 4500-NO <sub>2</sub> E : 2017
22	Copper (as Cu)	mg/l	<0.05	APHA (23 <sup>rd</sup> Edition) 3111 B : 2017
23*	Total Coliform	MPN/100ml	350.0	APHA (23 <sup>rd</sup> Edition) 9221 B & C : 2017

The results relate only to the parameters tested.

...end of report...



*Tanmoy Chakrabarty*  
Tanmoy Chakrabarty  
Quality Manager  
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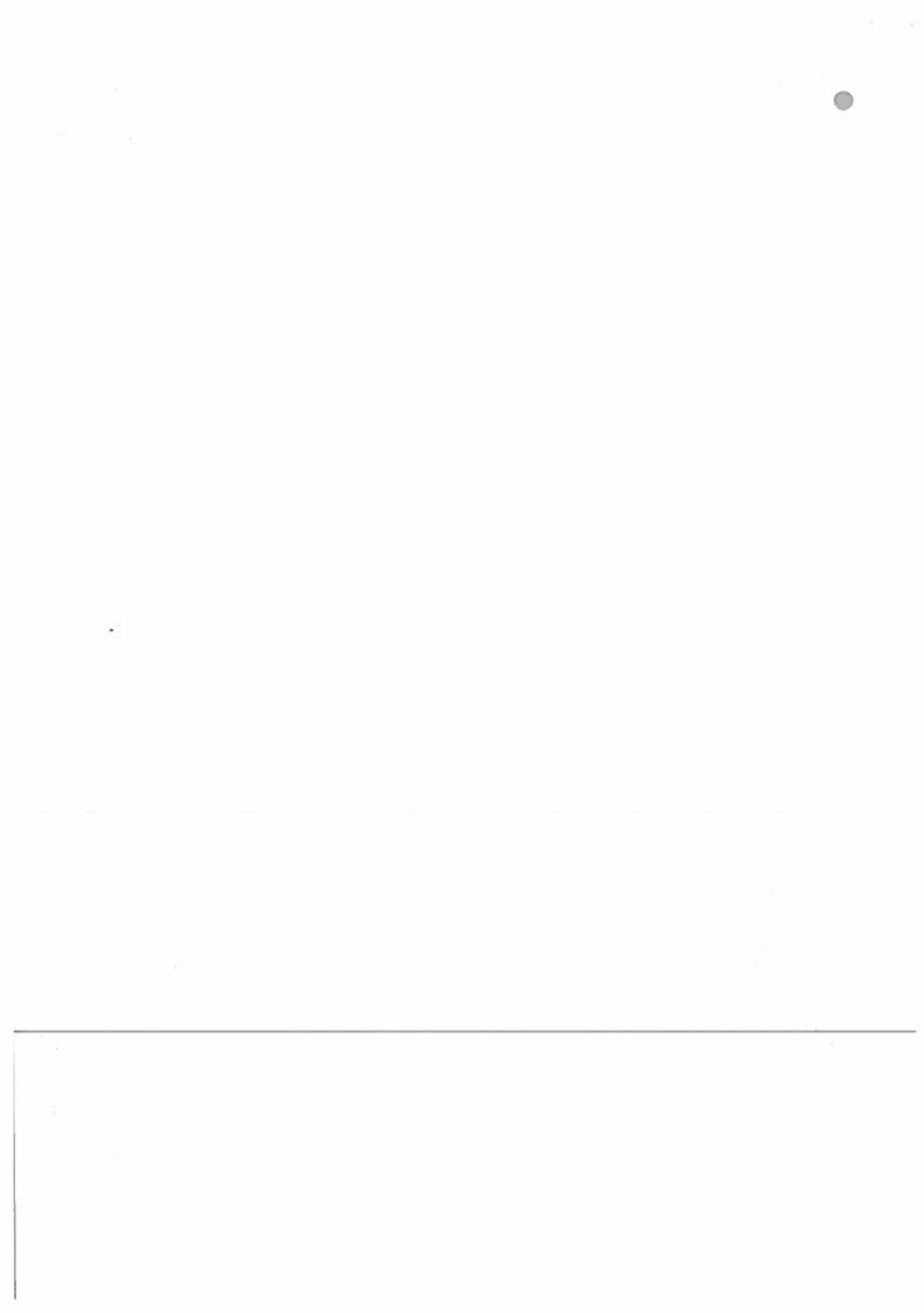
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# POLLUTION AND PROJECT CONSULTANTS

ENVIRONMENTAL POLLUTION CONTROL · Air, Effluent, Pharmaceuticals  
& Chemical Project Engineers EIA & Disaster Management Study

Certificate Number PC/199C

FORMAT NO.: PPC/FM/71 ISSUE NO.: 03 ISSUE Dt.: 01/01/2017 (Rev No.:02 Rev. Dt.: 28/05/2018)

Page.: 1 of 1

## TEST REPORT Water Sample

Water Sample				
Customer Name : M/s. ITD Cementation India Ltd.		Report No.	5W/18(11)/51	
Address : Adjacent to M/s. UPL Ltd (Unit-09),		Report Date	03-12-2018	
Durgachawk, Haldia,		Date of Sampling	26-11-2018	
Purba Medinipur, PIN-721602		Sample Received Date	27-11-2018	
		Sample Id No.	SW/18(11)/51	
Type of Sample : Surface Water		Test Start Date	27-11-2018	
Sampling Location : Approach 4 (Upstream)		Test End Date	03-12-2018	
Sl. No.	Chemical Test Parameter	Unit	Results	Methods of Test (Reference)
1	pH	--	7.23	APHA (23 <sup>rd</sup> Edition) 4500H+B : 2017
2	Turbidity	NTU	432.0	APHA (23 <sup>rd</sup> Edition) 2130 B:2017
3	Total Dissolved Solid (TDS)	mg/l	435.0	APHA (23 <sup>rd</sup> Edition) 2540 C : 2017
4	Conductivity	µS/cm	660.0	APHA (23 <sup>rd</sup> Edition) 2510 B : 2017
5*	Color	--	Pale brown	APHA (23 <sup>rd</sup> Edition)2120 C : 2017
6	Total Alkalinity (as CaCO <sub>3</sub> )	mg/l	107.0	APHA (23 <sup>rd</sup> Edition) 2320 B:2017
7	Total Hardness (as CaCO <sub>3</sub> )	mg/l	126.10	IS: 3025 (Part 21):2009 (RA 2014)
8*	Dissolved Oxygen (DO)	mg/l	7.02	APHA (23 <sup>rd</sup> Edition) 4500 C : 2017
9	Calcium (as Ca)	mg/l	27.21	IS: 3025 (Part 40):1991 (RA 2014)
10	Fluorides (as F)	mg/l	0.56	APHA (23 <sup>rd</sup> Edition) 4500 -F.D : 2017
11	Nitrate-N (NO <sub>3</sub> -N)	mg/l	5.50	APHA (23 <sup>rd</sup> Edition) 4500-NO <sub>3</sub> -E : 2017
12*	Bio-Chemical Oxygen Demand (BOD)	mg/l	3.0	IS:3025 (Part-4 ):1993 (RA 2014)
13	Iron (as Fe)	mg/l	14.13	APHA (23 <sup>rd</sup> Edition) 3111 B:2017
14	Mercury (as Hg)	mg/l	<0.001	APHA (23 <sup>rd</sup> Edition) 3112 B:2017
15	Zinc (as Zn)	mg/l	0.40	APHA (23 <sup>rd</sup> Edition) 3111 B : 2017
16	Chloride (as Cl)	mg/l	107.60	APHA (23 <sup>rd</sup> Edition) 4500Cl.B : 2017
17*	Arsenic (as As)	mg/l	<0.01	IS 3025 (Part 37): 1988 (RA 2014)
18	Sulphate (SO <sub>4</sub> <sup>2-</sup> )	mg/l	24.54	IS 3025 (Part 24):1986 (RA 2014)
19	Sodium (as Na)	mg/l	76.23	APHA (23 <sup>rd</sup> Edition) 3500 Na B:2017
20	Potassium (as K)	mg/l	7.35	APHA (23 <sup>rd</sup> Edition) 3500 K:2017
21	Nitrite - N (NO <sub>2</sub> -N)	mg/l	0.15	APHA (23 <sup>rd</sup> Edition) 4500-NO <sub>2</sub> -E :2017
22	Copper (as Cu)	mg/l	<0.05	APHA (23 <sup>rd</sup> Edition) 3111 B : 2017
23*	Total Coliform	MPN/100ml	280.0	APHA (23 <sup>rd</sup> Edition) 9221 B & C : 2017

The results relate only to the parameters tested.

...end of report...



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**Annexure-4**  
**Test report of Soil Quality**



## POLLUTION AND PROJECT CONSULTANTS

ENVIRONMENTAL POLLUTION CONTROL - Air Effluent, Pharmaceuticals  
& Chemical Project Engineers EIA & Disaster Management Study

### TEST REPORT SOIL

Customer Name		: M/s. ITD Cementation India Ltd.,		Report No.	: SS/18(09)/8
		: Adjacent to M/s. UPL Ltd. (Unit-09),		Report Date	: 29/09/2018
Address		Durgachawk, Haldia,		Sampling Date	: 21/09/2018
		Purba Medinipur, Pin-721602		Sample Received Date	: 24/09/2018
				Sample Id No.	: SS/18(09)/8
Type of Sample		: Soil		Test Start Date	: 24/09/2018
Sampling Location		: Near Approach 1 (Construction Site)		Test End Date	: 29/09/2018
SL No.	PARAMETER TEST	UNIT	STANDARD AGAINST WHICH TEST ARE PERFORMED		RESULT
1	pH at 25°C	—	IS 2720 (Part 26): 1987 (RA 2011)		9.10
2	Electrical Conductivity at 25°C	µs/cm	IS 14767: 2000 (RA 2016)		300.0
3	Infiltration	Inch/Hr.	AOAC 15 <sup>th</sup> Edition 1985		0.82
4	Porosity	—	AOAC 15 <sup>th</sup> Edition 1985		0.50
5	Texture:				
	a) Clay	%	In-House Method SOP No. SOP/03/18, Issue No. 02 Dated 01/01/2018		22.71
	b) Silt	%			75.33
	c) Sand	%			1.95

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— end of report —



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**Annexure-5**  
**Test report of Drinking water from labour colony**



# POLLUTION AND PROJECT CONSULTANTS

ENVIRONMENTAL POLLUTION CONTROL - Air Effluent Pharmaceuticals  
& Chemical Project Engineers EIA & Disaster Management Study

## TEST REPORT Water Sample

Water Sample					Report No.	DW/18(7)/63
Customer Name			M/s. ITD Cementation India Ltd.,		Report Date	27/07/2018
Address			Adjacent to M/s. UPL Ltd. (Unit-09), Durgachawk, Haldia, Purba Medinipur, PIN-721602		Sampling Date	20/07/2018
					Sample Received Date	21/07/2018
					Sample Id No.	DW/18(7)/63
Type of Sample			Drinking Water		Test Start Date	21/07/2018
Sampling Location			Labour Colony		Test End Date	27/07/2018
SL. NO.	PARAMETER TESTED	UNIT	Limit as per IS 10500:2012		STANDARD AGAINST WHICH TESTS ARE PERFORMED	RESULT
			Requirement (Acceptable Limit)	Permissible Limit in the Absence of Alternate Source		
1	Colour	—	—	—	APHA (23 <sup>rd</sup> Edition) 2120 C : 2017	Colourless
2	pH	—	6.5-8.5	No relaxation	APHA (23 <sup>rd</sup> Edition) 4500 H+B : 2017	7.73
3	Total Hardness (CaCO <sub>3</sub> )	mg/l	200.0	600.0	IS: 3025 (Part 21):2009 (RA 2014)	254.50
4	Calcium Hardness (CaCO <sub>3</sub> )	mg/l	—	—	IS: 3025 (Part 40):1991 (RA 2014)	161.50
5	Calcium (Ca)	mg/l	75.0	200.0	IS: 3025 (Part 40):1991 (RA 2014)	64.73
6	Magnesium (Mg)	mg/l	30.0	100.0	IS: 3025 (Part 46):1994 (RA 2014)	22.60
7	Magnesium Hardness (CaCO <sub>3</sub> )	mg/l	—	—	IS: 3025 (Part 46):1994 (RA 2014)	93.00
8	Total Alkalinity (CaCO <sub>3</sub> )	mg/l	200	600	APHA (23 <sup>rd</sup> Edition) 2320 B : 2017	302.0
9	Chloride (Cl)	mg/l	250.0	1000.0	APHA (23 <sup>rd</sup> Edition) 4500 Cl : 2017	186.00
10	Total Dissolved Solids (TDS)	mg/l	500.0	2000.0	APHA (23 <sup>rd</sup> Edition) 2540 C : 2017	615.0
11	Iron (Fe)	mg/l	0.3	No relaxation	APHA (23 <sup>rd</sup> Edition) 3111 B : 2017	0.21
12	Turbidity	NTU	1.0	5.0	APHA (23 <sup>rd</sup> Edition) 2130 B : 2017	1.42
13	Sulphate (SO <sub>4</sub> <sup>2-</sup> )	mg/l	200.0	400.0	IS : 3025 (Part 24):1986 (RA 2014)	27.0
14	Arsenic (As)	mg/l	0.01	0.05	IS: 3025 (Part 37):1998 (RA 2014)	<0.01
15	Zinc (Zn)	mg/l	5	15	APHA (23 <sup>rd</sup> Edition) 3111 B : 2017	0.30
16	Total Chromium (Cr)	mg/l	0.05	No relaxation	APHA (23 <sup>rd</sup> Edition) 3111 B : 2017	<0.01
17	Nitrate (NO <sub>3</sub> )	mg/l	45.0	No relaxation	APHA (23 <sup>rd</sup> Edition) 4500 NO <sub>3</sub> -E : 2017	0.32
18	Fluoride (F)	mg/l	1.0	1.5	APHA (23 <sup>rd</sup> Edition) 4500 F.D : 2017	0.80
19	Total Coliform	MPN/100ml	Shall not be detectable in any 100 ml sample		APHA (23 <sup>rd</sup> Edition) 9221 B & C : 2017	<1 (Absent)
20	Fecal Coliform	MPN/100ml			APHA (23 <sup>rd</sup> Edition) 9221 E : 2017	Absent
21	E- Coli	MPN/100ml	Shall not be detectable in any 100 ml sample		APHA (23 <sup>rd</sup> Edition) 9221 F : 2017	Absent

The results relate only to the parameters tested.

...end of report...



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## POLLUTION AND PROJECT CONSULTANTS

ENVIRONMENTAL POLLUTION CONTROL - Air, Effluent, Pharmaceuticals  
& Chemical Project Engineers, EIA & Disaster Management Study

### TEST REPORT Water Sample

Water Sample					Report No.	DW/18/09/81
Customer Name	: M/s. ITD Cementation India Ltd.				Report Date	: 29/09/2018
Address	: Adjacent to M/s. UPL Ltd. (Unit-09), Durgachawk, Maldia, Purba Medinipur, PIN-721603				Sampling Date	: 21/09/2018
					Sample Received Date	: 24/09/2018
Type of Sample	: Drinking Water				Sample Id No.	: DW/18/09/81
Sampling Location	: Labour Colony				Test Start Date	: 24/09/2018
					Test End Date	: 29/09/2018
SL. NO.	PARAMETER TESTED	UNIT	Limit as per IS 10500-2012		STANDARD AGAINST WHICH TESTS ARE PERFORMED	RESULT
			Requirement (Acceptable Limit)	Permissible Limit in the Absence of Alternate Source		
1	Colour	—	—	—	APHA (23 <sup>rd</sup> Edition) 2120 C : 2017	Colourless
2	pH	—	6.5-8.5	No relaxation	APHA (23 <sup>rd</sup> Edition) 4500 H+B: 2017	7.61
3	Total Hardness (CaCO <sub>3</sub> )	mg/l	200.0	600.0	IS: 3025 (Part 21):2009 (RA 2014)	254.00
4	Calcium Hardness (CaCO <sub>3</sub> )	mg/l	—	—	IS: 3025 (Part 40):1991 (RA 2014)	162.00
5	Calcium (Ca)	mg/l	75.0	200.0	IS: 3025 (Part 40):1991 (RA 2014)	64.93
6	Magnesium (Mg)	mg/l	30.0	100.0	IS: 3025 (Part 46):1994 (RA 2014)	22.4
7	Magnesium Hardness (CaCO <sub>3</sub> )	mg/l	—	—	IS: 3025 (Part 46):1994 (RA 2014)	92.0
8	Total Alkalinity (CaCO <sub>3</sub> )	mg/l	200	600	APHA (23 <sup>rd</sup> Edition) 2320 B:2017	302.0
9	Chloride (Cl)	mg/l	250.0	1000.0	APHA (23 <sup>rd</sup> Edition) 4500 Cl. B:2017	176.0
10	Total Dissolved Solids (TDS)	mg/l	500.0	2000.0	APHA (23 <sup>rd</sup> Edition) 2540 C:2017	615.0
11	Iron (Fe)	mg/l	0.3	No relaxation	APHA (23 <sup>rd</sup> Edition) 3111 B:2017	0.19
12	Turbidity	NTU	1.0	5.0	APHA (23 <sup>rd</sup> Edition) 2130 B:2017	1.30
13	Sulphate (SO <sub>4</sub> <sup>2-</sup> )	mg/l	200.0	400.0	IS : 3025 (Part 24):1986 (RA 2014)	30.0
14	Arsenic (As)	mg/l	0.01	0.05	IS: 3025 (Part 37):1998 (RA 2014)	<0.01
15	Zinc (Zn)	mg/l	5	15	APHA (23 <sup>rd</sup> Edition) 3111 B:2017	0.26
16	Total Chromium (Cr)	mg/l	0.05	No relaxation	APHA (23 <sup>rd</sup> Edition) 3111 B:2017	<0.01
17	Nitrate (NO <sub>3</sub> )	mg/l	45.0	No relaxation	APHA (23 <sup>rd</sup> Edition) 4500 NO <sub>3</sub> -E:2017	0.37
18	Fluoride (F)	mg/l	1.0	1.5	APHA (23 <sup>rd</sup> Edition) 4500 F.D. : 2017	0.68
19	Total Coliform	MPN/100ml	Shall not be detectable in any 100 ml sample		APHA (23 <sup>rd</sup> Edition) 9221 B & C : 2017	< 1.1 (Absent)
20	Fecal Coliform	MPN/100ml	—		APHA (23 <sup>rd</sup> Edition) 9221 E : 2017	Absent
21	E- Coli	MPN/100ml	Shall not be detectable in any 100 ml sample		APHA (23 <sup>rd</sup> Edition) 9221 F : 2017	Absent

The results relate only to the parameters tested.

—end of report—



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## TEST REPORT Water Sample

Water Sample					Report No.	DW/18(10)/99
Customer Name	M/s. ITD Cementation India Ltd.				Report Date	: 09/11/2018
Address	Adjacent to M/s UPL Ltd. (Unit-09), Durgachark, Haldia, Purba Medinipur, PIN- 721602				Sampling Date	: 27/10/2018
					Sample Received Date	: 29/10/2018
					Sample Id No.	: DW/18(10)/99
Type of Sample	Potable Water				Test Start Date	: 29/10/2018
Sampling Location	Labour Colony				Test End Date	: 09/11/2018
SL NO.	PARAMETER TESTED	UNIT	Limit as per IS 10500:2012		STANDARD AGAINST WHICH TESTS ARE PERFORMED	RESULT
			Requirement (Acceptable Limit)	Permissible Limit in the Absence of Alternate Source		
1	pH	—	6.5-8.5	No relaxation	APHA (23 <sup>rd</sup> Edition) 4500 H+B: 2017	7.65
2	Turbidity	NTU	1.0	5.0	APHA (23 <sup>rd</sup> Edition) 2130 B: 2017	1.20
3	Total Dissolved Solids (TDS)	mg/l	500.0	2000.0	APHA (23 <sup>rd</sup> Edition) 2540 C: 2017	609.0
4*	Colour	—	—	—	APHA (23 <sup>rd</sup> Edition) 2120 C: 2017	Colourless
5	Total Hardness (as CaCO <sub>3</sub> )	mg/l	200.0	600.0	IS: 3025 (Part 21): 2009 (RA 2014)	260.0
6	Calcium Hardness (as CaCO <sub>3</sub> )	mg/l	—	—	IS: 3025 (Part 40): 1991 (RA 2014)	160.0
7	Calcium (as Ca)	mg/l	75.0	200.0	IS: 3025 (Part 40): 1991 (RA 2014)	62.88
8*	Arsenic (as As)	mg/l	0.01	0.05	IS: 3025 (Part 37): 1998 (RA 2014)	<0.01
9	Magnesium (as Mg)	mg/l	30.0	100.0	IS: 3025 (Part 46): 1994 (RA 2014)	24.3
10	Magnesium Hardness (as CaCO <sub>3</sub> )	mg/l	—	—	IS: 3025 (Part 46): 1994 (RA 2014)	103.0
11	Total Alkalinity (as CaCO <sub>3</sub> )	mg/l	200	600	APHA (23 <sup>rd</sup> Edition) 2320 B: 2017	298.0
12*	Total Chromium (as Cr)	mg/l	0.05	No relaxation	APHA (23 <sup>rd</sup> Edition) 3111 B: 2017	<0.01
13	Mercury (as Hg)	mg/l	0.001	No relaxation	APHA (23 <sup>rd</sup> Edition) 3112 B: 2017	<0.001
14	Nickel (as Ni)	mg/l	0.02	No relaxation	APHA (23 <sup>rd</sup> Edition) 3111 B: 2017	<0.02
15	Copper (as Cu)	mg/l	0.05	1.5	APHA (23 <sup>rd</sup> Edition) 3111 B: 2017	<0.05
16	Zinc (as Zn)	mg/l	5	15	APHA (23 <sup>rd</sup> Edition) 3111 B: 2017	0.24
17*	Nitrate (as NO <sub>3</sub> )	mg/l	45.0	No relaxation	APHA (23 <sup>rd</sup> Edition) 4500 NO <sub>3</sub> : 2017	0.35
18	Sulphate (as SO <sub>4</sub> )	mg/l	200.0	400.0	IS : 3025 (Part 24): 1986 (RA 2014)	26.0
19	Chloride (as Cl)	mg/l	250.0	1000.0	APHA (23 <sup>rd</sup> Edition) 4500 Cl: B: 2017	182.0
20	Fluoride (as F)	mg/l	1.0	1.5	APHA (23 <sup>rd</sup> Edition) 4500 F.D: 2017	0.62
21	Iron (as Fe)	mg/l	0.3	No relaxation	APHA (23 <sup>rd</sup> Edition) 3111 B: 2017	0.20
22*	Total Coliform	MPN/100ml	Shall not be detectable in any 100 ml sample		APHA (23 <sup>rd</sup> Edition) 9221 B & C: 2017	< 1.1 (Absent)
23*	F. Coli	MPN/100ml	Shall not be detectable in any 100 ml sample		APHA (23 <sup>rd</sup> Edition) 9221 F: 2017	Absent

The results relate only to the parameters tested.

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## TEST REPORT Water Sample

Customer Name : M/s. ITD Cementation India Ltd., Address : Adjacent to M/s. UPL Ltd. (Unit-09), Durgachawki, Haldia, Purba Medinipur, PIN-721602					Report No. : DW/18(11)/53 Report Date : 03-12-2018 Sampling Date : 26-11-2018 Sample Received Date : 27-11-2018 Sample Id No. : DW/18(11)/53 Test Start Date : 27-11-2018 Test End Date : 03.12.2018	
Type of Sample : Potable Water Sampling Location : Labour Colony						
SL. NO.	PARAMETER TESTED	UNIT	Limit as per IS 10500:2012		STANDARD AGAINST WHICH TESTS ARE PERFORMED	RESULT
			Requirement (Acceptable Limit)	Permissible Limit in the Absence of Alternate Source		
1	pH	--	6.5-8.5	No relaxation	APHA (23 <sup>rd</sup> Edition) 4500 H+B: 2017	7.56
2	Turbidity	NTU	1.0	5.0	APHA (23 <sup>rd</sup> Edition) 2130 B:2017	1.40
3	Total Dissolved Solids (TDS)	mg/l	500.0	2000.0	APHA (23 <sup>rd</sup> Edition) 2540 C:2017	602.0
4*	Colour	--	--	--	APHA (23 <sup>rd</sup> Edition) 2120 C: 2017	Colourless
5	Total Hardness (as CaCO <sub>3</sub> )	mg/l	200.0	600.0	IS: 3025 (Part 23): 2009 (RA 2014)	258.00
6	Calcium Hardness (as CaCO <sub>3</sub> )	mg/l	--	--	IS: 3025 (Part 40):1991 (RA 2014)	164.00
7	Calcium (as Ca)	mg/l	75.0	200.0	IS: 3025 (Part 40):1991 (RA 2014)	65.84
8*	Arsenic (as As)	mg/l	0.01	0.05	IS: 3025 (Part 37):1998 (RA 2014)	<0.01
9	Magnesium (as Mg)	mg/l	30.0	100.0	IS: 3025 (Part 46):1994 (RA 2014)	22.8
10	Magnesium Hardness (as CaCO <sub>3</sub> )	mg/l	--	--	IS: 3025 (Part 46):1994 (RA 2014)	94.0
11	Total Alkalinity (as CaCO <sub>3</sub> )	mg/l	200	600	APHA (23 <sup>rd</sup> Edition) 2320 B:2017	291.0
12*	Total Chromium (as Cr)	mg/l	0.05	No relaxation	APHA (23 <sup>rd</sup> Edition) 3111 B:2017	<0.01
13	Mercury (as Hg)	mg/l	0.001	No relaxation	APHA (23 <sup>rd</sup> Edition) 3112 B:2017	<0.001
14	Nickel (as Ni)	mg/l	0.02	No relaxation	APHA (23 <sup>rd</sup> Edition) 3111 B:2017	<0.02
15	Copper (as Cu)	mg/l	0.05	1.5	APHA (23 <sup>rd</sup> Edition) 3111 B:2017	<0.05
16	Zinc (as Zn)	mg/l	5	15	APHA (23 <sup>rd</sup> Edition) 3111 B:2017	0.29
17*	Nitrate (as NO <sub>3</sub> )	mg/l	45.0	No relaxation	APHA (23 <sup>rd</sup> Edition) 4500 NO <sub>3</sub> -E:2017	0.39
18	Sulphate (as SO <sub>4</sub> )	mg/l	200.0	400.0	IS : 3025 (Part 24):1986 (RA 2014)	28.0
19	Chloride (as Cl)	mg/l	250.0	1000.0	APHA (23 <sup>rd</sup> Edition) 4500 Cl: B: 2017	177.0
20	Fluoride (as F)	mg/l	1.0	1.5	APHA (23 <sup>rd</sup> Edition) 4500 F.D : 2017	0.65
21	Iron (as Fe)	mg/l	0.3	No relaxation	APHA (23 <sup>rd</sup> Edition) 3111 B:2017	0.18
22*	Total Coliform	MPN/100ml	Shall not be detectable in any 100 ml sample		APHA (23 <sup>rd</sup> Edition) 9221 B & C : 2017	<1.1 (Absent)
23*	E. Coli	MPN/100ml	Shall not be detectable in any 100 ml sample		APHA (23 <sup>rd</sup> Edition) 9221 F : 2017	Absent

The results relate only to the parameters tested.

...end of report...



*Tanmoy Chakrabarty*  
Tanmoy Chakrabarty  
Quality Manager

Authorized Signatory  
For Pollution and Project Consultants

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\*marked parameters are not in our NABL Scope

LABORATORY FOR ANALYSIS OF AIR, WATER, EFFLUENT, SOIL, SLUDGE, SOLIDWASTE, COAL, ORE, ETC.

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**Appendix - I**  
**Test report of Noise quality**



# POLLUTION AND PROJECT CONSULTANTS

ENVIRONMENTAL POLLUTION CONTROL - Air, Effluent, Pharmaceuticals  
& Chemical Project Engineers EIA & Disaster Management Study

Certificate Number: PCC-75X

FORMAT NO.: PPC/PM/66 ISSUE DATE: 01/01/2017 (Rev. No. 02 Rev. Date: 22/05/2018)

Page: 1 of 1

## TEST REPORT FOR AMBIENT NOISE MONITORING

Report No.: G/18/10/21-23

Date: 09/11/2018

NOISE LEVEL MONITORING REPORT			
Customer Name	M/s. ITD Cementation India Ltd.,		
Address	Adjacent to M/s. UPL Ltd. (Unit-09), Durgachawk, Haldia, Purba Medinipur, PIN-721602		
Sampling Station	Near boundary wall of Main Office	Approach - 4	Near Labour Colony
Type of Area	Industrial	Industrial	Industrial
Monitoring Date	26/27.10.2018	26/27.10.2018	26/27.10.2018
Time (In Hrs.)	Hourly Leq dB(A)		
6.00-7.00	58.7	46.8	57.8
7.00-8.00	59.8	47.4	59.1
8.00-9.00	58.4	49.1	58.0
9.00-10.00	60.6	54.1	59.7
10.00-11.00	61.1	56.2	60.4
11.00-12.00	61.0	62.2	60.7
12.00-13.00	60.6	63.6	60.1
13.00-14.00	59.9	66.0	59.0
14.00-15.00	59.9	68.2	59.3
15.00-16.00	58.6	68.6	58.1
16.00-17.00	58.3	72.2	57.2
17.00-18.00	59.3	60.5	58.7
18.00-19.00	57.7	58.7	57.3
19.00-20.00	58.6	58.5	57.7
20.00-21.00	57.2	60.0	56.5
21.00-22.00	56.1	56.2	55.2
22.00-23.00	53.4	54.4	52.0
23.00-0.00	54.0	52.6	53.7
0.00-1.00	53.6	52.0	49.0
1.00-2.00	53.3	50.0	48.4
2.00-3.00	53.1	48.0	48.2
3.00-4.00	54.8	46.5	50.2
4.00-5.00	55.0	46.5	50.8
5.00-6.00	53.5	47.2	53.2
Leq dB(A) Day Time	59.3	64.3	58.7
Leq dB(A) Night Time	53.9	50.6	51.1
L <sub>max</sub> dB(A) Day Time	64.2	73.6	61.9
L <sub>max</sub> dB(A) Night Time	53.3	45.8	53.5
L <sub>min</sub> dB(A) Day Time	58.9	55.5	57.9
L <sub>min</sub> dB(A) Night Time	47.1	45.2	47.1
Day time Limit in Leq (06:00 A.M.-10:00 P.M.)	75 dB(A)	75 dB(A)	75 dB(A)
Night Time Limit in Leq (10:00 P.M.-06:00 A.M.)	70 dB(A)	70 dB(A)	70 dB(A)



*Tanmoy Chakrabarty*  
Tanmoy Chakrabarty  
Quality Manager  
Authorized Signatory

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# POLLUTION AND PROJECT CONSULTANTS

ENVIRONMENTAL POLLUTION CONTROL • Air, Effluent, Pharmaceuticals  
& Chemical Project Engineers, EIA & Disaster Management Study

Report No. : G/18(09)/36-38

Date : 29/09/2018

## NOISE LEVEL MONITORING REPORT

Customer Name	M/s. ITD Cementation India Ltd.		
Address	Adjacent to M/s. UPL Ltd. (Unit-09), Durgachawk, Haldia, Purba Medinipur, PIN-721602		
Sampling Station	Near boundary wall of Main Office	Approach - 1	Near Labour Colony
Type of Area	Industrial	Industrial	Industrial
Monitoring Date	21/22.09.2018	21/22.09.2018	21/22.09.2018
Time (In Hrs.)	Hourly Leq dB(A)		
6.00-7.00	61.8	51.8	61.6
7.00-8.00	63.0	52.4	63.0
8.00-9.00	61.8	54.1	61.8
9.00-10.00	63.5	59.1	63.5
10.00-11.00	64.3	61.2	64.3
11.00-12.00	64.3	67.2	64.5
12.00-13.00	63.8	68.6	63.8
13.00-14.00	62.9	71.0	62.9
14.00-15.00	63.1	73.2	63.1
15.00-16.00	62.0	73.6	62.0
16.00-17.00	61.2	77.2	61.1
17.00-18.00	62.6	65.5	62.6
18.00-19.00	60.9	63.7	60.9
19.00-20.00	61.7	62.7	61.7
20.00-21.00	60.4	65.0	60.4
21.00-22.00	59.1	61.2	59.1
22.00-23.00	55.9	59.4	55.9
23.00-0.00	53.5	57.6	58.2
0.00-1.00	52.9	57.0	52.9
1.00-2.00	52.3	55.0	52.6
2.00-3.00	52.4	53.0	52.4
3.00-4.00	54.1	51.5	54.1
4.00-5.00	54.7	51.5	54.7
5.00-6.00	57.5	52.2	57.5
Leq dB(A) Day Time	62.3	69.3	62.5
Leq dB(A) Night Time	54.5	55.6	55.3
$L_{max}$ dB(A) Day Time	64.9	78.6	64.9
$L_{max}$ dB(A) Day Time	58.3	58.8	58.3
$L_{max}$ dB(A) Night Time	59.2	60.5	62.9
$L_{max}$ dB(A) Night Time	52.0	50.2	52.0
The Applicant shall take adequate measures for control of noise levels from its own sources within premises to conform to :-			
Day time Limit in Leq (06:00 A.M.-10:00 P.M.)	75 dB(A)	75 dB(A)	75 dB(A)
Night Time Limit in Leq (10:00 P.M.-06:00 A.M.)	70 dB(A)	70 dB(A)	70 dB(A)



*Prasenjit*  
Prasenjit Chakrabarty  
Chief Manager  
Authorized Signatory  
For Pollution And Project Consultants

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# POLLUTION AND PROJECT CONSULTANTS

ENVIRONMENTAL POLLUTION CONTROL - Air, Effluent, Pharmaceuticals  
& Chemical Project Engineers, EIA & Disaster Management Study

Report No. : G/18(07)/22-24

Date : 27/07/2018

NOISE LEVEL MONITORING REPORT			
Customer Name	M/s. ITD Cementation India Ltd.,		
Address	Adjacent to M/s. UPL Ltd. (Unit-09), Durgachawk, Haldia, Purba Medinipur, PIN-721602		
Sampling Station	Near boundary wall of Main Office	Approach - 1	Near Labour Colony
Type of Area	Industrial	Industrial	Industrial
Monitoring Date	20/21.07.2018	20/21.07.2018	20/21.07.2018
Time (In Hrs.)	Hourly Leq dB(A)		
6.00-7.00	56.2	49.3	48.1
7.00-8.00	56.8	49.6	48.4
8.00-9.00	57.9	50.8	49.5
9.00-10.00	57.9	51.0	50.8
10.00-11.00	62.3	51.8	50.9
11.00-12.00	66.4	56.8	55.9
12.00-13.00	67.1	59.5	59.2
13.00-14.00	69.2	59.7	59.8
14.00-15.00	67.8	63.5	61.4
15.00-16.00	66.1	68.0	64.6
16.00-17.00	64.5	68.9	66.9
17.00-18.00	64.3	69.9	68.2
18.00-19.00	64.3	71.7	68.1
19.00-20.00	64.0	67.4	66.0
20.00-21.00	63.2	62.1	61.8
21.00-22.00	63.0	61.2	61.0
22.00-23.00	58.6	58.6	57.0
23.00-0.00	57.5	57.5	56.5
0.00-1.00	57.1	60.6	55.2
1.00-2.00	55.3	60.1	54.0
2.00-3.00	56.1	60.1	51.7
3.00-4.00	55.7	53.2	52.1
4.00-5.00	49.7	51.1	58.2
5.00-6.00	53.9	54.0	52.6
Leq dB(A) Day Time	64.6	65.2	63.0
Leq dB(A) Night Time	56.1	58.0	54.2
L <sub>max</sub> dB(A) Day Time	70.1	72.8	70.5
L <sub>max</sub> dB(A) Day Time	53.7	46.9	44.6
L <sub>max</sub> dB(A) Night Time	59.8	65.3	62.3
L <sub>max</sub> dB(A) Night Time	48.7	48.2	45.6
The Applicant shall take adequate measures for control of noise levels from its own sources within premises to conform to :-			
Day time Limit in Leq (06:00 A.M.-10:00 P.M.)	75 dB(A)	75 dB(A)	75 dB(A)
Night Time Limit in Leq (10:00 P.M.-06:00 A.M.)	70 dB(A)	70 dB(A)	70 dB(A)



Tanmoy Chakraborty  
Quality Manager  
Authorized Signatory

For Pollution And Project Consultants

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# POLLUTION AND PROJECT CONSULTANTS

ENVIRONMENTAL POLLUTION CONTROL - Air, Effluent, Pharmaceuticals  
& Chemical Project Engineers EIA & Disaster Management Study

Certificate Number PC-1590

FORMAT NO.: PPC/PM/66 ISSUE DATE: 01/01/2017 (Rev. No. 02 Rev. Dt.: 28/05/2018)

Page: 1 of 1

## TEST REPORT FOR AMBIENT NOISE MONITORING

Report No.: G/18(11)/47-49

Date 03-12-2018

NOISE LEVEL MONITORING REPORT			
Customer Name	M/s. ITD Cementation India Ltd.,		
Address	Adjacent to M/s. UPL Ltd. (Unit-09), Durgachawk, Haldia, Purba Medinipur, PIN-721602		
Sampling Station	Near boundary wall of Main Office	Approach - 4	Near Labour Colony
Type of Area	Industrial	Industrial	Industrial
Monitoring Date	26/27.11.2018	26/27.11.2018	26/27.11.2018
Time (In Hrs.)	Hourly Leq dB(A)		
6.00-7.00	62.9	52.4	56.6
7.00-8.00	64.0	52.6	57.6
8.00-9.00	62.8	54.1	58.7
9.00-10.00	64.5	58.8	59.7
10.00-11.00	65.3	60.8	60.8
11.00-12.00	65.3	66.8	61.7
12.00-13.00	64.8	68.1	63.2
13.00-14.00	63.9	69.3	62.9
14.00-15.00	64.1	72.9	63.1
15.00-16.00	63.0	73.2	62.0
16.00-17.00	62.2	76.8	61.1
17.00-18.00	63.6	65.2	62.6
18.00-19.00	61.9	63.5	60.9
19.00-20.00	62.7	62.8	61.7
20.00-21.00	61.4	65.0	60.4
21.00-22.00	59.5	61.5	59.1
22.00-23.00	55.9	58.4	55.9
23.00-0.00	54.6	57.1	53.5
0.00-1.00	53.4	55.1	52.9
1.00-2.00	53.1	53.3	52.5
2.00-3.00	53.2	52.2	52.4
3.00-4.00	53.9	52.0	54.1
4.00-5.00	54.5	52.4	54.7
5.00-6.00	55.5	51.1	55.2
Leq dB(A) Day Time	63.5	68.9	61.1
Leq dB(A) Night Time	54.4	54.7	54.1
L <sub>max</sub> dB(A) Day Time	65.9	77.6	63.8
L <sub>max</sub> dB(A) Day Time	59.1	50.8	56.3
L <sub>max</sub> dB(A) Night Time	56.7	59.1	58.5
L <sub>max</sub> dB(A) Night Time	52.6	50.4	51.4
Day time Limit in Leq (06:00 A.M.-10:00 P.M.)	75 dB(A)	75 dB(A)	75 dB(A)
Night Time Limit in Leq (10:00 P.M.-06:00 A.M.)	70 dB(A)	70 dB(A)	70 dB(A)



*Tanmoy Chakrabarty*  
Tanmoy Chakrabarty  
Quality Manager  
Authorized Signatory

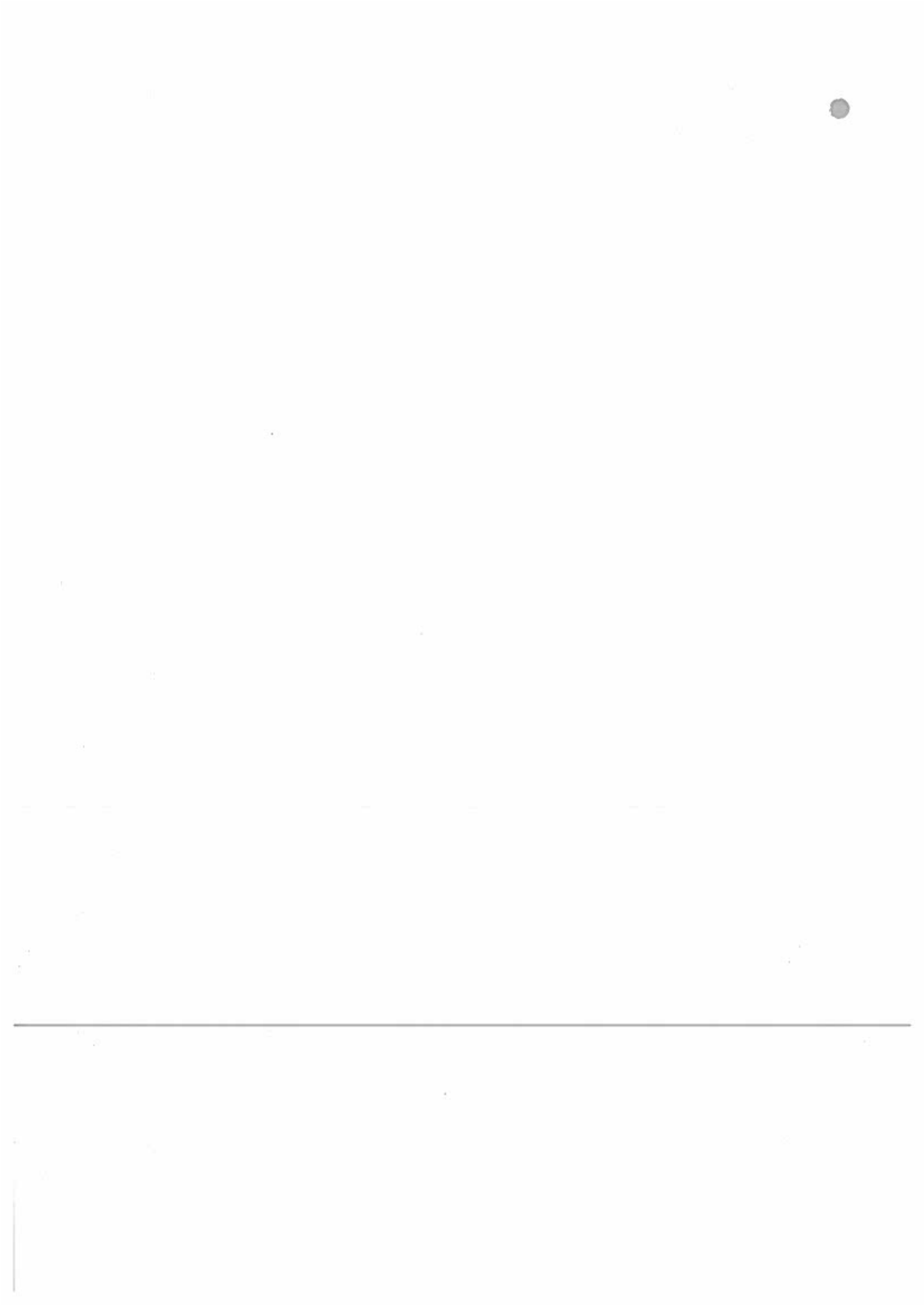
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# POLLUTION AND PROJECT CONSULTANTS

ENVIRONMENTAL POLLUTION CONTROL - Air, Effluent, Pharmaceuticals  
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Certificate Number TC/1580

FORMAT NO : PPC/PM/66 ISSUE ON : 03 ISSUE Dt : 01/01/2017 (Rev.No.:02 Rev. Dt.: 28/05/2018)

Page: 1 of 1

## TEST REPORT FOR AMBIENT NOISE MONITORING

Report No. : G/18(12)/62-64

Date 02-01-2019

NOISE LEVEL MONITORING REPORT			
Customer Name	M/s ITD Cementation India Ltd.,		
Address	Adjacent to M/s UPL Ltd. (Unit-09), Durgachawk, Haldia, Purba Medinipur, PIN-721602		
Sampling Station	Near boundary wall of Main Office	Approach - 1	Near Labour Colony
Type of Area	Industrial	Industrial	Industrial
Monitoring Date	24/25.12.2018	24/25.12.2018	24/25.12.2018
Time (In Hrs.)	Hourly Leq dB(A)		
6.00-7.00	64.4	61.2	60.6
7.00-8.00	65.4	67.6	64.2
8.00-9.00	65.3	63.1	66.8
9.00-10.00	64.8	70.2	63.1
10.00-11.00	65.8	74.3	67.3
11.00-12.00	66.3	73.6	66.4
12.00-13.00	67.1	73.1	68.5
13.00-14.00	65.8	72.8	68.1
14.00-15.00	65.8	74.6	69.2
15.00-16.00	65.7	76.4	68.8
16.00-17.00	64.7	67.7	70.9
17.00-18.00	65.5	68.8	70.9
18.00-19.00	64.6	69.2	72.9
19.00-20.00	64.0	67.8	68.1
20.00-21.00	62.9	67.3	65.3
21.00-22.00	59.6	66.5	65.5
22.00-23.00	57.3	58.1	63.1
23.00-0.00	55.3	58.6	60.6
0.00-1.00	53.8	56.9	60.7
1.00-2.00	54.2	54.4	57.0
2.00-3.00	53.8	53.4	60.5
3.00-4.00	54.7	53.3	57.4
4.00-5.00	55.3	58.1	53.2
5.00-6.00	56.5	68.8	54.3
Leq dB(A) Day Time	65.1	71.3	68.3
Leq dB(A) Night Time	55.3	61.3	59.4
L <sub>max</sub> dB(A) Day Time	68.1	77.2	74.8
L <sub>max</sub> dB(A) Night Time	58.7	59.6	58.7
L <sub>min</sub> dB(A) Day Time	59.7	70.8	65.2
L <sub>min</sub> dB(A) Night Time	53.1	51.4	51.3
Day time Limit In Leq (08:00 A.M.-10:00 P.M.)	75 dB(A)	75 dB(A)	75 dB(A)
Night Time Limit In Leq (10:00 P.M.-06:00 A.M.)	70 dB(A)	70 dB(A)	70 dB(A)



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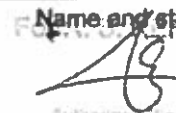
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**Appendix - II**  
**Copy of agreement for collection and disposal of**  
**Hazardous Waste**

---

**FROM 10**  
**(See rule 19(1))**  
**MANIFEST FOR HAZARDOUS AND OTHER WASTE**

1. Sender's name and mailing address (including Phone No and e-mail)	
2. Sender's authorisation No.	
3. Manifest Document No.	
4. Transporter's name and address: (including Phone No.)	<b>S.N. TRANSPORT</b> No. 9, Urdu School, Devasandra, K.R. Puram, Bengaluru - 560 076
5. Type of vehicle	(Truck/Tabler/special Vehicle)
6. Transporter's registration No.	
7. Vehicle registration No.	
8. Receiver's name and mailing address (including phone No. and e-mail)	<b>A.S. Refinery</b> Plot No. 97/B, Vasanthanarasapura, TUMKUR- 572 128 99832668330
9. Receiver's authorisation No.	PCB/HWM/SEO/2015-16/HD Reg. NO : 87448 / 1074
10. Waste description	
11. total quantity No. of containers	1000 LRS.....m3 or MT ..... Nos.
12. Physical form	(solid/semi-solid/sludge/Oily/Slurry/Liquid)
13. Special handling instructions and additional information	
14. Sender's certificate	I hereby declare that the contents of the consignment are fully and accurately described above by proper shipping name and are categorised, packed, marked, and labelled, and are in all respects in proper conditions for transport by road according to applicable national government regulations
<b>Name and stamp :</b>  Plot No. 97/B Vasanthanarasapura K.R. Puram, Tumkur Dist. 572 128 Pragathi V. Village, K.R. Puram, Tumkur Dist.	<b>Signature:</b>  <b>Month</b> <b>Day</b> <b>Year</b> 10 07 2018
15. Transporter acknowledgement of receipt of Waste	
<b>Name and stamp :</b>  S.N. TRANSPORT	<b>Signature:</b>  <b>Month</b> <b>Day</b> <b>Year</b> 10 07 2018
16. Receiver's certification for receipt of hazardous and other wastw	
<b>Name and stamp :</b>  A.S. REFINERY	<b>Signature:</b>  <b>Month</b> <b>Day</b> <b>Year</b> 10 07 2018

- 1) White To be Forwarded by the Sender to the State Pollution Control Board after Signing of the seven copies.  
2) Yellow To be Retained by the sender after taking signature on it from the transporter and rest of the five Signed copies to be carried by the transporter.  
3) Pink To be Retained by the Receiver Actual user or treatment Storage and disposal Facility after receiving the waste and the remaining four Copies are to be duly Signed by the receiver.  
4) Orange To be handed over to the transporter by the receiver after accepting waste.  
5) Green To be Sent by the receiver to the State Pollution Control Board.  
6) Blue To be Sent by the receiver to the sender.  
7) Grey To be Sent by the receiver to the State Pollution Control Board of the Sender in case the Sender is in another State.



ಫ್ಯಾಕ್ಸ್ / Fax : 080-25586321  
 ಇಮೇಲ್ / E-mail : ho@kspcb.gov.in  
 ವೆಬ್‌ಸೈಟ್ / Website : http://kspcb.gov.in



25581383, 25589112  
 25588151, 25588270  
 25588142, 25586520

## ಕರ್ನಾಟಕ ರಾಜ್ಯ ಮಾಲಿನ್ಯ ನಿಯಂತ್ರಣ ಮಂಡಳಿ Karnataka State Pollution Control Board

"ಪರಿಸರಭವನ", 1 ರಿಂದ 5ನೇ ಮಹಡಿಗಳು, ನಂ.49, ಚರ್ಚ್‌ಸ್ಟ್ರೀಟ್, ಬೆಂಗಳೂರು - 560 001, ಕರ್ನಾಟಕ, ಭಾರತ  
 "Parisara Bhavana", 1st to 5th Floor, # 49, Church Street, Bengaluru - 560 001, Karnataka, INDIA

FORM-2  
 [SEE RULE 5(4)]  
 RENEWAL OF AUTHORIZATION BY SPCB FOR OCCUPIERS OF FACILITIES FOR GENERATION,  
 STORAGE AND DISPOSAL OF HAZARDOUS WASTE

1. No. PCB/HWM/SEO/2015-16/HD Reg.No:87448/ 1074

Dated: 16-SEP 2015

2. The Occupier of M/s. A.S.Refinery, Plot No 97-B, vasanthnarasapura, KIADB Industrial Area, Nagenahalli, Kora, Tumkur District is hereby granted an authorization for generation, storage and disposal under Rule 5(4) of Hazardous Waste (Management, Handling and Transboundary Movement) Rules, 2008 as amended up to 2010 for handling Hazardous Waste in the manner indicated below while carrying on the activity of Lube base oil-542 KL/Month, Grease-250 MT/Month
3. The authorization granted to operate a facility for generation, storage and disposal of Hazardous Waste as indicated below.

Waste Category	Hazardous Waste reprocessed	Quantity	Method of Handling
Schedule IV Sl.No 20	1) Used oil 2) Waste oil	5004 KL/A 5004 KL/A	Shall be collected in Leak proof containers and shall be reprocessed using environmentally sound technology as approved by CPCB.
Waste Category	Hazardous Waste Generated	Quantity	Method of Handling
1.4	Organic Residue	500 MT/A	Stored in a secured manner and handed over to KSPCB Authorized Incinerator/co-incineration
4.5	Spent clay	150 MT/A	Stored in a secured manner and handed over to KSPCB Authorized Incinerator/co-incineration
33.3	Discarded containers	100 No's/A	Shall be stored in a secured manner and handed over to KSPCB authorized recycler after wash only
5.2	Oil Soaked Cotton Waste	1.5 MT/A	Shall be stored in a secured manner and handed over to KSPCB authorized incinerator/co-processing in cement kiln.

4. This authorization is issued with reference to the application dated 24/02/2015 and will be in force for a period from 1/06/2015 to 30/06/2019 ("This Authorization is valid only when the Consents are valid").

5. The authorization is subjected to the conditions stated below and such conditions as may be specified in the Rules for the time being in force under the Environment (Protection) Act, 1986.

ONLY OIL

MEMBER SECRETARY