



Ref. No. ENV/ Nagpur/December-2021-22

Date: 31<sup>st</sup> December 2021

To,

Additional Principal Chief Conservator of Forests (C),  
Ministry of Environment, Forest and Climate Change,  
Regional Office (WCZ), Ground Floor, East Wing,  
New Secretariat Building Civil Lines, Nagpur-440001

**Sub : Environmental Clearance for 25 MW Lean Gas Based Power Plant as well as EC for Carbon Black Plant (1,20,000 TPA) at Patalganga, Dist: Raigad, Maharashtra.**

**Ref : 1) Environmental Clearance Letter No. J-13011/35/2007-IA.II (T) dated September 28, 2007,**  
**2) Environmental Clearance Letter No. J-11011/35/2007 IA II (I) dated 22<sup>nd</sup> March 2013**

Respected Sir,

In reference to the above referred letter of your highly revered office we would like to clarify submit the Current Status of our construction work and Point wise compliance status to various stipulations laid down by the Ministry in its clearance letter No. J- 13011/35/2007-IA.II(T) & J-11011/35/2007 IA II (I) along with the necessary enclosure and annexure.

This is for your kind consideration and records. Kindly acknowledge the same.

Thanking you,

Yours Sincerely,

**For, Birla Carbon India Private Limited  
(Unit – Patalganga)**

**Authorised Signatory**

**CC: 1) MoEF Delhi**  
**2) MPCB, Sion**  
**3) CPCB, Delhi**

**Encl:**

Part A: Current Status of Construction Work.

Part B: Point wise compliance status.

Part C: Enclosures.

Part D: Annexure.

**Birla Carbon India Private Limited**

[Formerly known as SKI Carbon Black (India) Private Limited]

Unit: Patalganga, Village: Lohop-Talvali,

Taluka: Khalapur, District: Raigad – 410207, Maharashtra, India

Telephone: +91 9702436333, 9702245353, Email: info@adityabirla.com

**Registered Office:** Aditya Birla Centre, S.K. Ahire Marg, Worli, Mumbai 400 030, India

T : +91 22 6652 5000 / 2499 5000 | F : +91 22 2499 5729 | W : www.birlacarbon.com | CIN : U23201MH2013PTC241741

**- : LIST OF ENCLOSED DOCUMENTS:-**

<b>SR. NO.</b>	<b>PARTICULARS</b>	<b>ENCLOSURE</b>
<b>PART A</b>	<b>CURRENT STATUS OF WORK</b>	
<b>PART B</b>	<b>POINT WISE COMPLIANCE STATUS</b>	
<b>PART C</b>	<b>ENCLOSURE</b>	
1	Data Sheet in Format	Enclosure-1 with Part-I, Part-II & Part-III
2	Environmental Clearance Copy for Electricity	Enclosure-2
3	Environmental Clearance Copy for Carbon Black	Enclosure-3
4	Consent to Operate from Maharashtra Pollution Control Board	Enclosure-4
<b>PART D</b>	<b>ANNEXURE</b>	
1	Air Pollution Control Details	Annexure -1
2	RWH Details	Annexure -2
3	Facilities provided for the workers / Contractors/ Drivers	Annexure -3
4	Green belt development plan	Annexure -4
5	Monitoring report	Annexure -5
6	Advertisement copy	Annexure-6
7	EMP and DMP	Annexure -7
8	Funds spent on Environmental Protection measures	Annexure -8
9	MWML certificate of registration	Annexure - 9

## **PART A**

### **Current Status of Construction Work**

### **CURRENT STATUS OF WORK**

**Status of construction** : Construction is completed for 84000 MT/A of  
Carbon Black production out of 1200000 MT/A

**Date of commencement** : Not Applicable  
( Actual and/or planned )

**Date of completion** : Planned 25.08.2025  
( Actual and/of planned )

## **PART B**

### **Point Wise Compliance Status**

: PART B:

**POINT-WISE COMPLIANCE STATUS**

**Point-Wise Compliance Status to Various Stipulations Laid Down by the Ministry of  
Environment and Forests in its Clearance  
Letter No. J-13011/35/2007-IA.II (T) dated 28.09.2007 as follows.**

Sr. No	Condition	Status
1	The environmental clearance for the main carbon black plant, as applicable shall be obtained separately.	Carbon Black Environment Clearance received with J-11011/35/2007-IA-II (I) dated 22.03.2013
2	Lean gases generated from existing process plant shall only be utilized. No other fuel shall be used for the power plant.	Lean gases generated from existing process plant is only utilized for co-generation. No other fuel is used.
3	Effective safeguard measures shall be taken to ensure that the SPM levels do not exceed the prescribed standards.	Air Pollution Control Equipment are provided. Details given in <b>Annexure – 1</b>
4	A stack of 103 Meter height with exit velocity of at least 13.85m/s shall be provided with continuous online monitoring system for disposal of waste gases.	Stack of 108 meter is constructed and in operation.
5	Closed circuit cooling system with cooling towers shall be provided. COC of at least 8 shall be adopted.	Complied.
6	Rain water harvesting shall be practiced. A detailed scheme for Rain Water Harvesting shall be prepared in consultation with Central Ground Water Authority / State Ground water Board and a copy of the same shall be submitted within three months to Ministry.	Collection from reservoirs and clarifier already implemented. For RWH please refer <b>Annexure – 2.</b>
7	First-aid and sanitation arrangements shall be made for the drivers and other contractors during construction phase.	Complied. Facilities provided for the workers / Contractors / Drivers <b>Annexure – 3.</b>
8	Leq of noise level should be limited to 75 dB (A) and regular maintenance of equipment be undertaken.	Maintenance of equipment's is carried out at regular intervals to maintain their performance. New initiatives are being taken to further reduce the noise levels.

9	Greenbelt shall be developed all around the plant boundary covering 1/3 of the project area.	We have already planted 10000 trees and approximately 20 acre is covered under green belt. Additionally we are going to plant 3000 more trees and cover rest of available open area under Green Belt development plan. Refer <b>Annexure- 4</b>
10	Regular monitoring of the ambient air quality shall be carried out in and around the power plant and records maintained. The location of the monitoring stations and frequency of monitoring shall be decided in consultation with SPCB. Periodic reports shall be submitted to the Regional Office of this Ministry.	Regular monitoring of the ambient air quality, Noise and Water Samples is being carried out. And the reports of the same submitted to MPCB on monthly basis Please refer <b>Annexure- 5.</b>
11	The project proponent shall advertise in at least two local newspapers widely circulated in the region around the project, one of which shall be in the vernacular language Of the locality concerned within seven days of issue of this letter, informing that the project has been accorded environmental clearance and copies of clearance letters are available with the State Pollution Control Board / Committee and may also be seen at Website of the Ministry of Environment and Forests at <a href="http://envfor.nic.in">http://envfor.nic.in</a> .	Public notice has been published in English in Indian Express and in Marathi in Sakal daily on 13/10/2007 intimating about the Environmental Clearance issued for the project by MoEF. For this please refer <b>Annexure- 6.</b>
12	A separate environment monitoring cell with suitable qualified staff should be set up for implementation of the stipulated environmental safeguards.	Environmental Management Plan and Disaster management plan is made. Details Given in <b>Annexure –7.</b>
13	Half yearly report on the status of implementation of the stipulated conditions and environmental safeguards should be submitted to this Ministry, its Regional Office at Nagpur, CPCB and SPCB.	Noted and complied.
14	Regional Office of the Ministry of Environment & Forests located at Bhopal will monitor the implementation of tie stipulated conditions. A complete set of documents including Environmental Impact Assessment Report and Environment Management Plan shall be forwarded to the Regional Office for their use during monitoring.	Noted.

15	Separate funds should be allocated for implementation of environmental protection measures along with item-wise break-up. This cost should be included as part of the project cost. The funds earmarked for the environment protection measures should not be diverted for other purposes and year-wise expenditure should be reported to the Ministry.	Earmarked funds have been spent on environmental protection measures towards capital cost for bag filters, RO plant, Triple effect evaporators, vent scrubbers, stacks. Refer <b>Annexure 8</b>
16	Full cooperation should be extended to the Scientists/Officers from the Ministry/Regional Office of the Ministry at Bhopal/the CPCB/the SPCB who would be monitoring the compliance of environmental status.	Full cooperation shall be extended to the all statutory bodies which will be monitoring the compliance of environmental status.
17	The Ministry reserves the right to revoke the clearance if conditions stipulated are not implemented to the satisfaction of the Ministry.	Noted
18	The environmental clearance accorded shall be valid for a period of 5 years to start of production operations by the power plant.	Noted.
19	In case of any deviation or alteration in the proposed project from those submitted to this Ministry for clearance, a fresh reference should be made to the Ministry to assess the adequacy of the condition(s) imposed and to incorporate additional environmental protection measures required, if any.	Noted.
20	The above stipulations shall be enforced among others under the Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, The Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989, the Public Liability Insurance Act, 1991 and rules there under.	Noted.

: PART B:

**POINT-WISE COMPLIANCE STATUS**

**Point-Wise Compliance Status to Various Stipulations Laid Down by the Ministry of Environment and Forests in its Clearance Letter No. J-11011/35/2007-IA.II (I) dated 22.03.2013 as follows.**

Sr. No	Condition	Status
	<b>Specific Conditions-</b>	
1	Permission and recommendations of the State Forest Department regarding impact of the proposed plant on the reserve forests located near to 4 nos. of reserve forests shall be obtained and recommendations shall be implemented satisfactorily. Copy of permission shall be submitted to the respective Regional Office.	Permission obtained. Copy submitted to regional office
2	As proposed, vent scrubber in the reactor area, main bag filter in the product separation area, process bag filter in the pelletizing area, purge gas filter in the product drying area, dryer combustor in the dryer area and packing exhaust filter in the packing area shall be provided to control air emissions	All proposed equipment's in respective area provided
3	The gaseous emissions (SO <sub>2</sub> , NO <sub>x</sub> , CO and HC) and particulate matter from existing and proposed boiler, dryer, purge gas filter, packing exhaust filter units shall conform to the norms prescribed by the Central Pollution Control Board (CPCB)/Maharashtra Pollution Control Board (MPCB) from time to time. At no time, the emission levels shall go beyond the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency. Stack emissions shall be monitored regularly	Noted. Regular monitoring is done by MoEF Approved laboratory <b>Annexure - 5</b>
4	Continuous stack monitoring of stacks for SO <sub>2</sub> , NO <sub>x</sub> and CO and recording facilities shall be installed along with interlocking facilities. As proposed, particulate matter shall be monitored in the stack manually. Data for particulate matter, SO <sub>2</sub> , NO and CO shall be displayed on web as well as outside the premises at prominent place for public viewing.	Noted. Online monitoring of SO <sub>2</sub> and NO <sub>x</sub> are installed. Online CO monitoring and Environment data display on website started from October 2013

5	As proposed, this being an existing plant Sulphur content in the feed stock i.e. Carbon Black Feed Stock (CBFS) shall not exceed 2.5% at any time	Same is ensured
6	Ambient air quality data shall be collected as per NAAQES standards notified by the Ministry vide G.S.R. No. 826(E) dated 16th September, 2009.	Complied. Reports attached for reference <b>Annexure -5</b>
7	Poly-Aromatic Hydrocarbon (PAH) shall be monitored in fugitive dust emission area particularly in Packaging Plant. Data shall be properly monitored, recorded, and submitted to the Ministry's Regional Office at Bhopal.	PAH monitored from the packing plant and reports attached vide <b>Annexure -5</b>
8	Industrial exhaust and proper ventilation shall be provided in packaging plant area	Provided
9	The levels of PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>x</sub> , CO and HC (Non-methane) shall be monitored in the ambient air. Data of stack monitoring and ambient air shall be displayed on web as well as outside the premises at prominent place for public viewing. The company shall upload the results of monitored data on its website and shall update the same periodically. It shall simultaneously be sent to the Regional office of MOEF, the respective Zonal office of CPCB and MPCB.	Noted. Online monitoring of SO <sub>2</sub> and NO <sub>x</sub> , CO installed, and Environment data display on website started from October'2013. Annexure: for data monitoring of levels of PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>x</sub> , CO and HC (Non-methane) in the ambient air is enclosed vide <b>Annexure -5</b>
10	In plant control measures for checking fugitive emissions from all the vulnerable sources shall be provided. Fugitive emissions shall be controlled by providing closed storage, closed handling & conveyance of chemicals/materials, multi cyclone separator and water sprinkling system. Dust suppression system including water sprinkling system shall be provided at loading and unloading areas to control dust emissions. Fugitive emissions in the work zone environment, product, raw materials storage area etc. shall be regularly monitored. The emissions shall conform to the limits stipulated by the MPCB.	All processes are in closed handling and DCS controlled. To control dust emissions, Dust collection system in Product Packing area is being further strengthened Regular monitoring of the ambient air quality, Soil, Noise and Water Samples is being carried out. And the report of the same submitted to SPCB on monthly basis Please refer <b>Annexure -5</b> Unloading area handles Liquid raw Material. The area is fully concreted. There is an oil skimmer to collect Liquid spillages, if any. The product area has got cleaning facilities. MPCB limits are complied.
11	The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution.	Acoustic enclosure provided for the DG. As per CPCB standard, its stack height is 43 mtr.

12	Total fresh water requirement from Patalganga River shall not exceed 4000 m <sup>3</sup> /day. No ground water shall be used. Steps should also be identified to conserve water and measures adopted for minimizing the same.	No water extracted from the ground and also we complied the rain water harvesting project to conserve the rain water please refer <b>Annexure – 02</b> Studies are underway to assess the feasibility of collecting Hill side water.
13	Effluent generated shall be treated in the ETP comprising RO and rejects shall be concentrated in MEE. Permeate from RO and condensate shall be recycled / reused in the cooling tower make up water. Oil water stream shall be treated in Oil water separator. Sewage shall be treated in sewage treatment plant (STP) and treated wastewater shall be used for cooling water make up. Treated effluent shall be recycled / reused within the factory premises. Treated effluent quality shall be monitored regularly and conform to the norms prescribed by the CPCB/MPCB from time to time.	Treated effluent quality is checked on regular basis reports attached vide <b>Annexure -5</b>
14	No treated process effluent shall be discharged outside the premises and Zero discharge shall be ensured.	No effluent discharged outside our premises. Zero discharge ensured.
15	Process effluent/any wastewater shall not be allowed to mix with the storm water. Storm water drain shall be passed through guard pond	Guard pond provided
16	All the solid/hazardous waste including ETP sludge and waste oil shall properly stored at the site as per CPCB guideline. Fine carbon particles generated as solid waste shall be sold to industries for manufacturing low grade rubber goods. MEE sludge shall be sent to TSDF. Oily waste from oil removal tank shall be mixed along with carbon black feed stock and burnt in the furnace.	Separate covered Hazardous waste storage facility is provided within the factory premises
17	Proper and valid authorization and membership shall be obtained from the concerned authorities for the management of solid/hazardous waste and a copy submitted to the Ministry's Regional Office at Bhopal	Authorization and membership obtained (MWML) <b>Annexure-9</b>
18	The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All Transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.	Noted.

19	Proper housekeeping shall be maintained and no spillage of Carbon Black shall be permitted. Preventive measures shall be taken to avoid and prevent any accidental release of Carbon Black to the environment.	Good Housekeeping Practices within our factory premises are followed. Preventive measures to avoid Carbon spillage are implemented
20	The company shall undertake following waste minimization measures :- a. Metering and control of quantities of active ingredients to minimize waste b. Reuse of by products from the process as raw materials or as raw material substitutes in other processes c. Use of automatic filling to minimize spillage d. Use of Close feed system into batch reactor e. Use of high pressure hoses for equipment cleaning to reduce waste water generation	a. Followed b. By products are used as raw materials for other process c. Automatic filling is used in for finished product Packing d. Close Feed system is used for feeding raw material and other materials into the process e. High pressure hoses are used for cleaning.
21	A proper occupational health monitoring system should be implemented for all personnel / workers in the plant / laboratory and other areas which may have an impact on their health.	Pre-employment medical examination as well as routine periodic medical examination is in practice
22	The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Firefighting system shall be as per the OISD 117 norms.	Noted. Firefighting system is in place as applicable to our industry. A pressurized network and also a set of Dry fire extinguishers are in place.
23	All the workers involved in packing of Carbon Black in Packaging Plant area shall use (PPE) and masks to avoid direct exposure to Carbon Black dust.	Good quality PPE'S provided in packing area
24	All the workers shall be regularly monitored for occupational health for relevant parameters pertaining to industry specific and records maintained.	Periodically medical checkup for workers is in practice and records are maintained.
25	Proper energy conservation measures shall be adopted and a report submitted to the Ministry and its Regional Office at Bhopal.	Energy conservation measures adopted in year 2012-2013 send to Regional office MoEF Bhopal on 19.04.2013
26	As proposed, green belt shall be developed in 21.5 acres out of 65 acres of total land Selection of plant species shall be as per the CPCB guidelines.	We are having the green belt development programme, find the attachment as per Annexure – 4 We shall further extend our green belt on available open area
27	All the recommendations/standards mentioned in the CPCB guidelines for the Carbon Black manufacturers shall be implemented.	Noted and Complied

28	Company shall prepare Corporate Environment Policy as per the Ministry's G.M. No. J-11013/41/2006-IAII(I) dated 26 <sup>th</sup> April, 2011 within one month from date of issue of letter and submitted to the Ministry's Regional Office.	Corporate Environment Policy prepared and send to Regional office MoEF Bhopal on 19.04.2013
29	Provision shall be made for the housing for the construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile sewage treatment plant, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structure to be removed after the completion of the project. All the construction wastes shall be managed so that there is no impact on the surrounding environment.	Noted & Complied during project stage
	<b>General Conditions-</b>	
30	The project authorities shall strictly adhere to the stipulations made by the Maharashtra Pollution Control Board.	Same is adhered
31	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment and Forests. In case of deviations or alterations in the project proposal from those submitted to this Ministry for clearance, a fresh reference shall be made to the Ministry to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any	Noted
32	The locations of ambient air quality monitoring stations shall be decided in consultation with the State Pollution Control Board (SPCB) and it shall be ensured that at least one stations is installed in the upwind and downwind direction as well as where maximum ground level concentrations are anticipated.	Four Ambient Air Quality monitoring stations are installed
33	The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under Environment (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).	DG Sets are provided with acoustic enclosure as well as steam vents of power plant is having provision of silencers to reduce the noise. Noise levels are continuously monitored. Monitoring reports attached vide <b>Annexure :5</b>

34	The Company shall harvest rainwater from the roof tops of the buildings and storm water drains to recharge the ground water and use the same water for the process activities of the project to conserve fresh water.	Complied. We have installed rain water harvesting system for warehouse, TG, Admin building roof. We are collecting it and sending in our raw water pond for reuse. Ground water recharging is not possible because of rocky surface.
35	Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre-employment and routine periodical medical examinations for all employees shall be undertaken on regular basis. Training to all employees on handling of chemicals shall be imparted.	EHS Trainings are regular practice in the plant
36	The company shall also comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, risk mitigation measures and public hearing relating to the project shall be implemented.	Noted
37	The company shall undertake all relevant measures for improving the socio-economic conditions of the surrounding area. CSR activities shall be undertaken by involving local villages and administration.	CSR activities are going on in near by villages,
38	The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment.	Eco-developmental and community welfare measures are taken under CSR Programme
39	A separate Environmental Management Cell equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.	Noted. In-house, we have partial capacity for monitoring environment data such as pH, PM <sub>10</sub> , TDS, Conductivity, Temperature, Chlorides, Silica, Free chlorine, Oil & grease, phosphate. Other environmental data are taken through an MoEF approved Lab.
40	The company shall earmark sufficient funds towards capital cost and recurring cost per annum to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so earmarked for environment management/ pollution control measures shall not be diverted for any other purpose.	Find the <b>Enclosure 1,-Part 3</b>

41	A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, Zila Parishad/Municipal Corporation, Urban local Body and the local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal.	EC Copies to all local bodies are submitted
42	The project proponent shall also submit six monthly reports on the status of compliance of the stipulated Environmental Clearance conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF, the respective Zonal Office of CPCB and MPCB. A copy of Environmental Clearance and six monthly compliance status report shall be posted on the website of the company.	Status reports being submitted regularly and Report display on website is made available.
43	The environmental statement for each financial year ending 31 <sup>st</sup> March in Form V as is mandated shall be submitted to the concerned State Pollution Control Board as prescribed under the Environment Protection Rules, 1986 as amended subsequently shall also be put on the website of the company along with the status of compliance of environment clearance conditions and shall also be sent to the respective Regional Offices of MOEF by email.	Complied and <b>Form V</b> displayed on Website
44	The project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB/Committee and may also be seen at Website of the Ministry at <a href="http://envfor.nic.in">http://envfor.nic.in</a> . This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the concerned Regional Office of the Ministry.	Complied, Public notice has been published in Marathi in Krushival and Sakal daily on 30/03/2013 intimating about the Environmental Clearance issued for the project by MoEF. For this please refer <b>Annexure- 6.</b>
45	The project authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of start of the project.	Construction phase of the Project is completed

**PART C**  
**Enclosures**

MONITORING THE IMPLEMENTATION OF ENVIRONMENTAL SAFEGUARDS  
MINISTRY OF ENVIRONMENT & FOREST  
WESTERN REGION, REGIONAL OFFICE, NAGPUR  
**DATA SHEET**

Date: 26<sup>th</sup> Dec 2022

1.	Project type: River - valley/ Mining / Industry / Thermal / Nuclear / Other (specify)		:	Carbon Black manufacturing Thermal – cogeneration
2.	Name of the project		:	Birla Carbon India Private Limited
3.	Clearance letter ( s ) / OM No. and Date		:	1) EC for power plant:- J-13011/35/2007-IA.II(T) dt. September 28,2007 2) EC for Carbon Black plant:- J-11011/35/2007-IA-II (I) dt. 22 <sup>nd</sup> March 2013.
4.	Location :			
	a.	District ( S )	:	Raigad
	b.	State ( s )	:	Maharashtra
	c.	Latitude/ Longitude	:	Latitude – 18 deg. 51 ' N Longitude – 73 deg 12 ' E
5.	Address for correspondence			
	a.	Address of Concerned Project Chief Engineer ( with pin code & Telephone / telex / fax numbers	:	<b>Mr. Sambit Rath</b> Sr. Manager - Project M/s. Birla Carbon India Pvt. Ltd. VILLAGE : LOHOP,TALVALI, PATALGANGA, TALUKA : KHALAPUR, DIST. RAIGAD – 410 207 MAHARASHTRA, INDIA. Phone 021922202050
	b.	Address of Executive Project: Engineer/Manager ( with pincode/ Fax numbers )	:	Same As Above
6.	Salient features			
	a.	of the project	:	PART –I –Project Details
	b.	of the environmental management plans	:	PART –II - EMP
7.	Break up of the project area:			
	a.	submergence area forest & non-forest	:	Not applicable
	b.	Others	:	PART –I – Project Details
8.	Break up of the project affected Population with enumeration of Those losing houses / dwelling units Only agricultural land only, both Dwelling units & agricultural Land & landless labourers/artisan		:	Not Applicable.

	a.	SC, ST/Adivasis	:	Not Applicable
	b.	Others (Please indicate whether these Figures are based on any scientific And systematic survey carried out Or only provisional figures, it a Survey is carried out give details And years of survey)	:	Not Applicable
9.	Financial details :			
	a.	Project cost as originally planned and subsequent revised estimates and the year of price reference :		
	i.	Total Cost of the Project	:	Rs. 490.00 Crores
	b.	Allocation made for environ-mental management plans with item wise and year wise Break-up.	:	Rs. 22.47 Crores PART -III - Allocation made for environ-mental management plan
	c.	Benefit cost ratio / Internal rate of Return and the year of assessment	:	--
	d.	Whether ( c ) includes the Cost of environmental management as shown in the above.	:	Yes
	e.	Actual expenditure incurred on the project so far.	:	Rs 341 Crores Only.
	f.	Actual expenditure incurred on the environmental management plans so far.	:	Rs. 22.47 Crores Only.
10.	Forest land requirement			
	a.	The status of approval for diversion of forest land for non-forestry use.	:	Not Applicable
	b.	The status of clearing felling	:	Not Applicable
	c.	The status of compensatory afforestation, it any.	:	Not Applicable
	d.	Comments on the viability & sustainability of compensatory afforestation program in the light of actual field experience so far.	:	Not Applicable
11.	The status of clear felling in Non-forest areas (such as submergence area of reservoir, approach roads), it any with quantitative information.			
			:	Not Applicable
12.	Status of construction :			
	a.	Date of commencement ( Actual and/or planned )	:	Construction completed
	b.	Date of completion ( Actual and/or planned )	:	Construction completed
13.	Reasons for the delay if the Project is yet to start			
			:	Not Applicable
14.	Dates of site visits :			

	a.	The dates on which the project was monitored by the Regional Office on previous Occasions, if any	:	No
	b.	Date of site visit for this monitoring report.	:	Not Applicable
15.		Details of correspondence with Project authorities for obtaining Action plans/information on Status of compliance to safeguards Other than the routine letters for Logistic support for site visits.	:	Not Applicable
		(The first monitoring report may contain the details of all the Letters issued so far, but the Later reports may cover only the Letters issued subsequently.)	:	Not Applicable

By Speed Post

No.J-13011/35/2007-IA.II(T)  
Government of India  
Ministry of Environment & Forests

Paryavaran Bhawan,  
CGO Complex, Lodi Road,  
New Delhi-11003.

Dated: 28<sup>th</sup> September, 2007

To

M/s Hi-Tech Carbon  
(A Unit of Aditya Birla Nuvo Ltd)  
Ahura Centre, 2<sup>nd</sup> Floor, Near MIDC Office  
Mahakali Caves Road, Andheri (E)  
Mumbai- 400 093, Maharashtra

**Sub: 25 MW Lean Gas based Power Project at Patalganga, District Raigad, Maharashtra by M/s Hi-Tech Carbon- Environmental Clearance regarding.**

Sir,

The undersigned is directed to refer to your communication no. nil dated 28<sup>th</sup> May, 2007 on the above mentioned subject.

2. The proposal is for setting up of a 25 MW Lean Gas based Cogeneration Power Project at Patalganga, District Raigad, Maharashtra. The land requirement for the power plant is estimated as 11 acres. The water requirement including the carbon black plant is estimated as 7200 m<sup>3</sup>/day, which will be obtained from Patalganga river. No National Park/Sanctuary is reported within 10 km of the project area. Public hearing was held on 22.05.2007.

3. The proposal has been considered in accordance with para 12 of the EIA Notification dated 14<sup>th</sup> September, 2006 read with para 2.2.1 (i) (a) of the Circular No. J-11013/41/2006-IA.II(I) dated 13.10.2006. Based on the recommendations of the Expert Appraisal Committee for Thermal Power and Coal Mine Projects, the Ministry of Environment & Forests hereby accords environmental clearance to the

said 25 MW cogeneration power project under the provisions of EIA Notification 2006, subject to implementation of the following terms and conditions:-

- (i) The environmental clearance for the main carbon black plant, as applicable, shall be obtained separately.
- (ii) Lean gases generated from the existing process plant shall only be utilized. No other fuel shall be used for the power plant.
- (iii) Effective safeguard measures shall be taken to ensure that the SPM levels do not exceed the prescribed standards.
- (iv) A stack of 103 m height with exit velocity of at least 13.85 m/s shall be provided with continuous online monitoring system for disposal of waste gases.
- (v) Closed circuit cooling system with cooling towers shall be provided. COC of at least 8 shall be adopted.
- (vi) Rain water harvesting shall be practiced. A detailed scheme for rain water harvesting shall be prepared in consultation with Central Ground Water Authority / State Ground Water Board and a copy of the same shall be submitted within three months to the Ministry.
- (vii) First aid and sanitation arrangements shall be made for the drivers and other contract workers during construction phase.
- (viii) Leq of noise level should be limited to 75 dBA and regular maintenance of equipment be undertaken. For people working in the high noise areas, personal protection devices should be provided.
- (ix) Greenbelt shall be developed all around the plant boundary covering 1/3 of the project area.
- (x) Regular monitoring of the ambient air quality shall be carried out in and around the power plant and records maintained. The location of the monitoring stations and frequency of monitoring shall be decided in consultation with SPCB. Periodic reports shall be submitted to the Regional Office of this Ministry.
- (xi) The project proponent shall advertise in at least two local newspapers widely circulated in the region around the project, one of which shall be in the vernacular language of the locality concerned within seven days of

Issue of this letter, informing that the project has been accorded environmental clearance and copies of clearance letters are available with the State Pollution Control Board / Committee and may also be seen at Website of the Ministry of Environment and Forests at <http://envfor.nic.in>.


- (xii) A separate environment monitoring cell with suitable qualified staff should be set up for implementation of the stipulated environmental safeguards.
  - (xiii) Half yearly report on the status of implementation of the stipulated conditions and environmental safeguards should be submitted to this Ministry, its Regional Office at Bhopal, CPCB and SPCB.
  - (xiv) Regional Office of the Ministry of Environment & Forests located at Bhopal will monitor the implementation of the stipulated conditions. A complete set of documents including Environmental Impact Assessment Report and Environment Management Plan shall be forwarded to the Regional Office for their use during monitoring.
  - (xv) Separate funds should be allocated for implementation of environmental protection measures along with item-wise break-up. This cost should be included as part of the project cost. The funds earmarked for the environment protection measures should not be diverted for other purposes and year-wise expenditure should be reported to the Ministry.
  - (xvi) Full cooperation should be extended to the Scientists/Officers from the Ministry/Regional Office of the Ministry at Bhopal/the CPCB/the SPCB who would be monitoring the compliance of environmental status.
4. The Ministry reserves the right to revoke the clearance if conditions stipulated are not implemented to the satisfaction of the Ministry.
  5. The environmental clearance accorded shall be valid for a period of 5 years to start of production operations by the power plant.
  6. In case of any deviation or alteration in the proposed project from those submitted to this Ministry for clearance, a fresh reference should be made to the Ministry to assess the adequacy of the condition(s) imposed and to incorporate additional environmental protection measures required, if any.
  7. The above stipulations shall be enforced among others under the Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, The

Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989, the Public Liability Insurance Act, 1991 and rules there under.

(Dr. S.K. Aggarwal)  
Director

**Copy to:**

1. The Secretary, Ministry of Power, Shram Shakti Bhawan, Rafi Marg, New Delhi-110001.
2. The Secretary, Department of Energy and Environment, Govt. of Maharashtra, Mantralaya, Mumbai-400032, Maharashtra.
3. The Chairman, Central Electricity Authority, Sewa Bhawan, R.K. Puram, New Delhi-110066.
4. The Chairman, Maharashtra Pollution Control Board, Kalptaru point 3<sup>rd</sup> & 4<sup>th</sup> Floor Sion Matunga Scheme Road No. 8, Opp. Cine Planet Cinema, near Sion Circle, Sion(East), Mumbai-400022 - **with request to display a copy of the clearance letter at the Regional Office, District Industries Centre and Collector's office for 30 days.**
5. The Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi-110032.
6. The Chief Conservator of Forests, Western Regional Office, Ministry of Environment & Forests, E-3/240, Arera Colony, Bhopal-462016.
7. Director (EI), MOEF
8. Guard file.
9. Monitoring file.

  
(Dr. S.K. Aggarwal)  
Director

F. No. J-11011/35/2007- IA II (I)  
Government of India  
Ministry of Environment and Forests  
(I.A. Division)

ParyavaranBhawan  
CGO Complex, Lodhi Road  
New Delhi – 110 003

E-mail : [aditya.narayan@nic.in](mailto:aditya.narayan@nic.in)  
Telefax : 011: 2436 0549  
Dated 22<sup>nd</sup> March, 2013

To,

M/s Hi-Tech Carbon  
(A Unit of Aditya Birla Nuvo Ltd.)  
Ahura Centre, 2<sup>nd</sup> Floor, Near MIDC Office  
Mahakali Caves Road, Andheri (E)  
Mumbai-400 093, Maharashtra

E-mail : [htcmum@adityabirla.com](mailto:htcmum@adityabirla.com)

**Subject: Carbon Black Plant (1,20,000 TPA) at Patalganga, District Raigad, Maharashtra by M/s Hi-Tech Carbon – Environmental Clearance reg.**

**Ref. : Your letter no. HTC/PTG/UH/MPCB/EC/001 dated 18<sup>th</sup> March, 2011**

Sir,

Kindly refer to your letter dated 18<sup>th</sup> March, 2011 alongwith project documents including Form I, Terms of References, Pre-feasibility Report, EIA/EMP Report and subsequent clarification/additional information submitted vide letter dated 21<sup>st</sup> July, 2011 regarding above mentioned project.

2.0 The Ministry of Environment and Forests has examined the application. It is noted that the proposal is for an integrated Carbon Black Manufacturing Unit alongwith CPP (25 MW) at Patalganga, District Raigad, Maharashtra. This is an operational unit. Environmental clearance for CPP (25 MW) was accorded by the Ministry vide letter no. J-13011/35/2007-IA-II(T) dated 28<sup>th</sup> September, 2007. Total plot area is 65 acres. Total project cost is Rs. 470 Crores. Patalganga and Balganga rivers are flowing in the study area. 4 nos. of reserve forests are located within 10 km.

3.0 Ventury scrubber (4 Nos.) are provided in the reactor area. Bagfilter (2 Nos.) are provided in the product separation area. Process bagfilter (3 Nos.) are installed in the pelletising area. Purge gas filter, Dryer combustor, packing exhaust filter and boiler combustor are installed in the product drying area, dryer area, packing area and boiler area respectively. Total fresh water requirement from Patalganga River will 4000 m<sup>3</sup>/day. Industrial effluent generation will be 756 m<sup>3</sup>/day and treated in the effluent treatment plant (ETP) comprising reverse osmosis (RO) and rejects will be concentrated in multiple effect evaporators (MEE). Permeate from RO and condensate will be recycled/reused in the cooling tower make up water. Oil water stream will be treated in oil water separator. Sewage will be treated in sewage treatment plant (STP). Treated effluent will be recycled/reused within the factory premises. No effluent will be discharged outside the premises and 'Zero' discharge concept will be adopted. ETP sludge and MEE sludge will be sent to the treatment storage disposal facility for hazardous waste (TSDF). Oil sludge will be mixed with carbon feed stock and burnt in the furnace.

4.0 Public hearing was exempted as per Section 7 (ii) of EIA Notification, 2006.

5.0 All the carbon black manufacturing units are covered under petrochemical based processing units and listed at S.N. 5(e) under Category 'A' due to location outside notified industrial area and appraised at the central level.

6.0 The proposal was considered by the Expert Appraisal Committee (Industry-2) in its 24<sup>th</sup> and 33<sup>rd</sup> meetings held during 22<sup>nd</sup>-23<sup>rd</sup> June, 2011 and 21<sup>st</sup>-22<sup>nd</sup> March, 2012 respectively. The Committee recommended the proposal for environmental clearance. **M/s Hi-Tech Carbon** passed a resolution in a meeting of the Board of Directors held on 13.07.2012 that violation of the Environmental (Protection) Act, 1986 will not be repeated. A copy of Board Resolution is Annexed. Maharashtra Pollution Control Board has filed a regular criminal complaint (No. 33/2013) against the Company for commencing construction activities without environmental clearance.

7.0 Based on the information submitted by the project proponent, the Ministry of Environment and Forests hereby accords environmental clearance to above project under the provisions of EIA Notification dated 14<sup>th</sup> September 2006, subject to the compliance of the following Specific and General Conditions:

**A. SPECIFIC CONDITIONS:**

- i) Permission and recommendations of the State Forest Department regarding impact of the proposed plant on the reserve forests located near to 4 nos. of reserve forests shall be obtained and recommendations shall be implemented satisfactorily. Copy of permission shall be submitted to the respective Regional Office.
- ii) As proposed, vent scrubber in the reactor area, main bag filter in the product separation area, process bag filter in the pelletising area, purge gas filter in the product drying area, dryer combustor in the dryer area and packing exhaust filter in the packing area shall be provided to control air emissions.
- iii) The gaseous emissions (SO<sub>2</sub>, NO<sub>x</sub>, CO and HC) and particulate matter from existing and proposed boiler, dryer, purge gas filter, packing exhaust filter units shall conform to the norms prescribed by the Central Pollution Control Board (CPCB)/Maharashtra Pollution Control Board (MPCB) from time to time. At no time, the emission levels shall go beyond the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency. Stack emissions shall be monitored regularly.
- iv) Continuous stack monitoring of stacks for SO<sub>2</sub>, NO<sub>x</sub> and CO and recording facilities shall be installed alongwith interlocking facilities. As proposed, particulate matter shall be monitored in the stack manually. Data for particulate matter, SO<sub>2</sub>, NO<sub>x</sub> and CO shall be displayed on web as well as outside the premises at prominent place for public viewing.
- v) As proposed, this being an existing plant Sulphur content in the feed stock i.e. Carbon Black Feed Stock (CBFS) shall not exceed 2.5% at any time.
- vi) Ambient air quality data shall be collected as per NAAQES standards notified by the Ministry vide G.S.R. No. 826(E) dated 16<sup>th</sup> September, 2009.
- vii) Poly-Aromatic Hydrocarbon (PAH) shall be monitored in fugitive dust emission area particularly in Packaging Plant. Data shall be properly monitored, recorded, and submitted to the Ministry's Regional Office at Bhopal.
- viii) Industrial exhaust and proper ventilation shall be provided in packaging plant area.
- ix) The levels of PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub>, CO and HC (Non-methane) shall be monitored in the ambient air. Data of stack monitoring and ambient air shall be displayed on web as well as outside the premises at prominent place for public viewing. The company shall upload the results of monitored data on its website and shall update the same periodically. It shall simultaneously be sent to the Regional office of MOEF, the respective Zonal office of CPCB and MPCB.

- x) In plant control measures for checking fugitive emissions from all the vulnerable sources shall be provided. Fugitive emissions shall be controlled by providing closed storage, closed handling & conveyance of chemicals/materials, multi cyclone separator and water sprinkling system. Dust suppression system including water sprinkling system shall be provided at loading and unloading areas to control dust emissions. Fugitive emissions in the work zone environment, product, raw materials storage area etc. shall be regularly monitored. The emissions shall conform to the limits stipulated by the MPCB.
- xi) The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution.
- xii) Total fresh water requirement from Patalganga River shall not exceed 4000 m<sup>3</sup>/day. No ground water shall be used. Steps should also be identified to conserve water and measures adopted for minimizing the same.
- xiii) Effluent generated shall be treated in the ETP comprising RO and rejects shall be concentrated in MEE. Permeate from RO and condensate shall be recycled/reused in the cooling tower make up water. Oil water stream shall be treated in Oil water separator. Sewage shall be treated in sewage treatment plant (STP) and treated wastewater shall be used for cooling water make up. Treated effluent shall be recycled/reused within the factory premises. Treated effluent quality shall be monitored regularly and conform to the norms prescribed by the CPCB/MPCB from time to time.
- xiv) No treated process effluent shall be discharged outside the premises and Zero discharge shall be ensured.
- xv) Process effluent/any wastewater shall not be allowed to mix with the storm water. Storm water drain shall be passed through guard pond.
- xvi) All the solid/hazardous waste including ETP sludge and waste oil shall properly stored at the site as per CPCB guideline. Fine carbon particles generated as solid waste shall be sold to industries for manufacturing low grade rubber goods. MEE sludge shall be sent to TSDF. Oily waste from oil removal tank shall be mixed along with carbon black feed stock and burnt in the furnace.
- xvii) Proper and valid authorization and membership shall be obtained from the concerned authorities for the management of solid/hazardous waste and a copy submitted to the Ministry's Regional Office at Bhopal.
- xviii) The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All Transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.
- xix) Proper house keeping shall be maintained and no spillage of Carbon Black shall be permitted. Preventive measures shall be taken to avoid and prevent any accidental release of Carbon Black to the environment.
- xx) The company shall undertake following waste minimization measures :-
  - a. Metering and control of quantities of active ingredients to minimize waste.
  - b. Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.
  - c. Use of automated filling to minimize spillage.

- d. Use of Close Feed system into batch reactors.
- e. Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- xxi) A proper occupational health monitoring system should be implemented for all personnel / workers in the plant / laboratory and other areas which may have an impact on their health.
- xxii) The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the OISD 117 norms.
- xxiii) All the workers involved in packing of Carbon Black in Packaging Plant area shall use (PPE) and masks to avoid direct exposure to Carbon Black dust.
- xxiv) All the workers shall be regularly monitored for occupational health for relevant parameters pertaining to industry specific and records maintained.
- xxv) Proper energy conservation measures shall be adopted and a report submitted to the Ministry and its Regional Office at Bhopal.
- xxvi) As proposed, green belt shall be developed in 21.5 acres out of 65 acres of total land. Selection of plant species shall be as per the CPCB guidelines.
- xxvii) All the recommendations/standards mentioned in the CPCB guidelines for the Carbon Black manufacturers shall be implemented.
- xxviii) Company shall prepare Corporate Environment Policy as per the Ministry's O.M. No. J-11013/41/2006-IA.II(I) dated 26<sup>th</sup> April, 2011 within one month from date of issue of letter and submitted to the Ministry's Regional Office.
- xxix) Provision shall be made for the housing for the construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile sewage treatment plant, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structure to be removed after the completion of the project. All the construction wastes shall be managed so that there is no impact on the surrounding environment.

#### **B. GENERAL CONDITIONS:**

- i. The project authorities shall strictly adhere to the stipulations made by the Maharashtra Pollution Control Board.
- ii. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment and Forests. In case of deviations or alterations in the project proposal from those submitted to this Ministry for clearance, a fresh reference shall be made to the Ministry to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.
- iii. The locations of ambient air quality monitoring stations shall be decided in consultation with the State Pollution Control Board (SPCB) and it shall be ensured that at least one station is installed in the upwind and downwind direction as well as where maximum ground level concentrations are anticipated.
- iv. The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers,

enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under Environment (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).

- v. The Company shall harvest rainwater from the roof tops of the buildings and storm water drains to recharge the ground water and use the same water for the process activities of the project to conserve fresh water.
- vi. Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre-employment and routine periodical medical examinations for all employees shall be undertaken on regular basis. Training to all employees on handling of chemicals shall be imparted.
- vii. The company shall also comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, risk mitigation measures and public hearing relating to the project shall be implemented.
- viii. The company shall undertake all relevant measures for improving the socio-economic conditions of the surrounding area. CSR activities shall be undertaken by involving local villages and administration.
- ix. The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment.
- x. A separate Environmental Management Cell equipped with full fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.
- xi. The company shall earmark sufficient funds towards capital cost and recurring cost per annum to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so earmarked for environment management/ pollution control measures shall not be diverted for any other purpose.
- xii. A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, ZilaParisad/Municipal Corporation, Urban local Body and the local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal.
- xiii. The project proponent shall also submit six monthly reports on the status of compliance of the stipulated Environmental Clearance conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF, the respective Zonal Office of CPCB and MPCB. A copy of Environmental Clearance and six monthly compliance status report shall be posted on the website of the company.
- xiv. The environmental statement for each financial year ending 31<sup>st</sup> March in Form-V as is mandated shall be submitted to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental clearance conditions and shall also be sent to the respective Regional Offices of MoEF by e-mail.
- xv. The project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB/Committee and may also be seen at Website of the Ministry at

<http://envfor.nic.in>. This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the concerned Regional Office of the Ministry.

- xvi. The project authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of start of the project.

8.0 The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.

9.0 The Ministry reserves the right to stipulate additional conditions, if found necessary. The company in a time bound manner will implement these conditions.

10.0 The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous Waste (Management, Handling and Trans-Boundary Movement) Rules, 2008 and the Public (Insurance) Liability Act, 1991 along with their amendments and rules.

  
(A.N. Singh)  
Dy. Director (S)

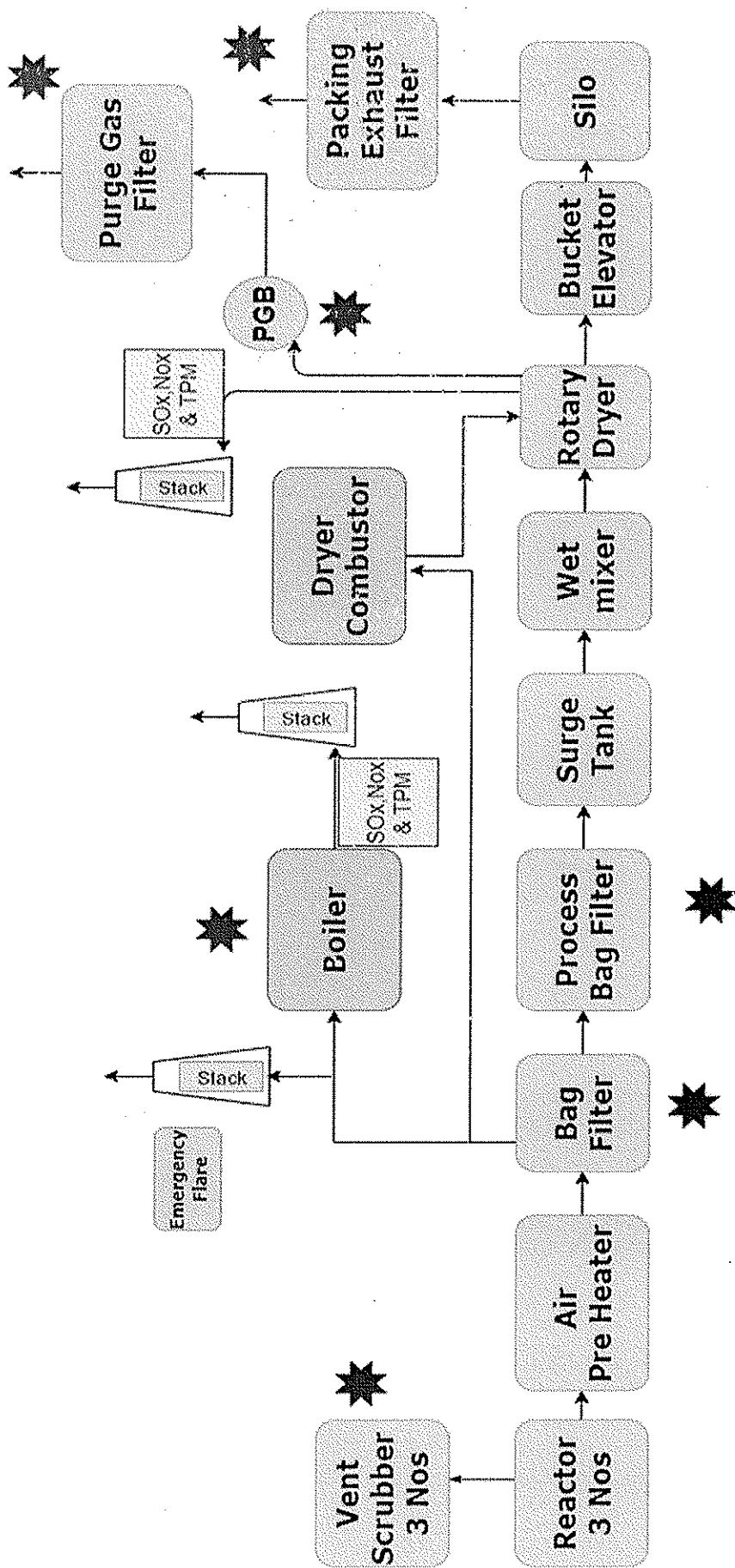
Copy to :-

1. The Principal Secretary, Environment Department, Government of Maharashtra, 15th Floor, New Administrative Building, Mantralaya, Mumbai - 400 032
2. The Chief Conservator of Forests (Central), Kendriya Paryavaran Bhavan, Link Road No.3, Bhopal-462016.
3. The Chairman, Central Pollution Control Board Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, New Delhi - 110 032.
4. The Chairman, Maharashtra Pollution Control Board, Kalpataru Point, 3<sup>rd</sup> and 4<sup>th</sup> floor, Opp. Cine Planet, Sion Circle, Mumbai-400 022.
5. The Joint Secretary, IA II(I), Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi.
6. Monitoring Cell, Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi.
7. Guard File/Monitoring File/Record File.

  
(A.N. Singh)  
Dy. Director (S)

**Part D**  
**Annexure**

# AIR POLLUTION CONTROL EQUIPMENT & MONITORING



Continuous monitoring analysers

Environment Protection Equipment

## **Scheme for Rain Water Harvesting in Warehouse, Birla Carbon India Private Limited.**

Date: 26.12.2021

### **Introduction:**

Rainwater harvesting (RWH) is the ancient practice of collecting rainwater and storing it for later use. RWH systems are comprised of a roof catchment, conveyance network, rainwater storage tank, pump, and fixtures where rainwater is utilized. Most systems also incorporate treatment technologies to improve the quality of rainwater before and/or after storage, and include provisions for periods of insufficient rainfall (a water make-up supply) and times of excessive rainfall (overflow provisions).

In our case we have considered case:

#### **1) Roof top of Warehouse**

Water from this source will be utilized in makeup of Reservoir pond.

### **Components of a rooftop rainwater harvesting system:**

Rainwater harvesting systems generally consist of four basic elements:

- (1) a collection (catchment) area
- (2) a conveyance system consisting of pipes and gutters
- (3) a storage facility
- (4) a delivery system consisting of a tap or pump.

**(1) A collection or catchment:** system is generally a simple structure such as roofs and/or gutters that direct rainwater into the storage facility. Roofs are ideal as catchment areas as they easily collect large volumes of rainwater.

The amount and quality of rainwater collected from a catchment area depends upon the rain intensity, roof surface area, type of roofing material and the surrounding environment.

**In our case warehouse roof is collection or catchment.**

**(2) A conveyance system:** is required to transfer the rainwater from the roof catchment area to the storage system by connecting roof drains (drain pipes) and piping from the roof top to one or more downspouts that transport the rainwater through a filter system to the storage tanks.

**In our case existing drain pipes & proposed modified pipe routes is conveyance system.**

**(3) Storage tank:** to store harvested rainwater for use when needed. Depending on the space available these tanks can be constructed above grade, partly underground, or below grade.

**In our case underground water sump is storage tank**

**(4) Delivery system:** which delivers rainwater and it usually includes pump, a pressure tank and a tap.

**In our case transfer water pumps are delivery system**

**First flush and filter screen:**

The first rain drains the dust, bird droppings, leaves, etc. which are found on the roof surface. To prevent these pollutants from entering the storage tank, the first rainwater containing the debris should be diverted or flushed before entering in cooling tower.

Screens to retain larger debris such as leaves can be installed in the down-pipe or at the sump inlet.

**Design:**

For design purpose we consider the peak rainfall in month of July in this region Patalganga.

**1) Water collection in July from warehouse building Roof:**

Total roof area:  $84\text{m} \times 47.4\text{m} = 3981.6\text{m}^2$

Run off Coefficient = 0.75 (Roof is made of concrete & sheet)

Average July Rainfall in HTC = 1500mm.

Water collection:  $3981.6\text{m}^2 \times 1.5\text{m} \times 0.75 = 4480\text{m}^3/\text{month of July}$

$4480\text{m}^3/31 \text{ days of July} = 144.5^3/\text{day} = 6\text{m}^3/\text{hr.}$

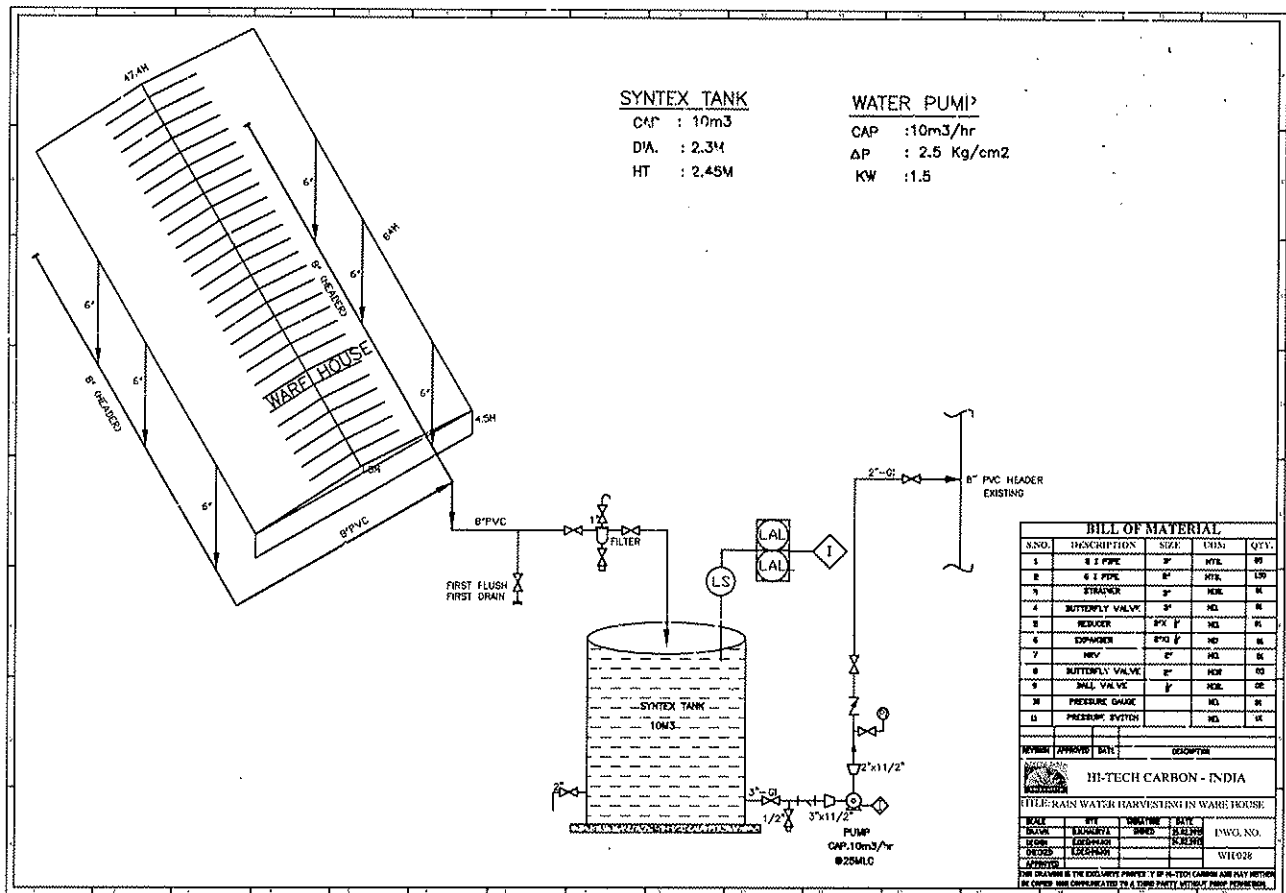
Considering two separate header of 8" PVC for collecting water from all sources of both side & line routed through a filter & isolation valve & one first rain drain connection towards water sump with slope 1:50.

Please refer details of line routing in P & ID.

**Benefits of rainwater harvesting:**

- Rainwater is a relatively clean and free source of water
- Rainwater harvesting provides a source of water at the point where it is needed
- It is owner-operated and managed
- It promotes self-sufficiency and conserves water resources
- Offers potential cost savings especially with rising water costs
- Provides safe water for human consumption after proper treatment
- Low running costs
- Construction, operation and maintenance are not labor-intensive.

Enclosure: P & ID & BOM.



### **ANNEXURE - 3**

#### **FACILITIES PROVIDED TO LABOUR**

**Project Name: Birla Carbon India Private Limited, (Unit- Patalganga)**

Site Address: Village – Lohop and Talavali, Tal. – Khalapur, Dist. - Raigad, Maharashtra

Total Labour hutments = NIL

Total Labour approximate = 317

Facilities provided:

1. No of Toilets provided = 32
2. Drinking water = 13
3. Water tank for domestic and flushing – Provided
4. Electricity is provided
5. Rest room – provided
6. Isolation of Labour hutments from construction activity area for safety purpose  
– Not Applicable
7. Cooking aids – Not Applicable

Tree Plantation and Area Covered				
Sr.No	Plant Area	Qty	Area Sqft	Area Sqmtr
1	Pallet Yard	210	42246	3929
2	H.R. Front hill site	168	26340	2450
3	Dandwadi Hill site	90	96920	9015
4	CBFS	570	7400	688
5	Control Room front side	8	1120	104
6	Boiler area	41	2880	267
7	CBFS	89	10720	997
8	D.G Area	32	1050	97
9	Bath house	34	1316	122
10	Gate no 1	145	24400	2269
11	Fuel oil area	34	1332	123
12	Settling pond area	84	1018	94
13	Pipe rack Garden area	40	800	74
14	T.G. Road site	20	1180	109
15	Warehouse	18	561	52
16	West side security tower no 1 & 2	300	80216.5	7462
17	Wall compound (East-west-North side)	1000	21500	2000
18	Area between bath house & settling pond	850	107500	10000
19	Switch yard side	125	28358.5	2638
20	Dandwadi (East – North side)	276	31175	2900
21	Pipe rack road side	20	800	74
22	Reactor road site	40	750	69
23	Labour shed area	90	3000	279
24	Switch yard back site slop area	200	15000	1395
25	Gate no.1	300	87000	8093
	<b>Total Area</b>	<b>4790</b>	<b>594583</b>	<b>55300</b>



TC-5600

ISO 9001 : 2015

ISO 45001 : 2018

Lab : Survey No. 93/A, Conformity Hissa No.2 G.V. Brothers Bldg., Bata Compound, Khopat, Near Flower Valley, Thane (West) - 400 601, Maharashtra, India.  
Tele : +91 22 2547 49 07 / +91 22 2547 62 17 Email : lab@ultratech.in Visit us at : www.ultratech.in

## TEST REPORT

**ISSUED TO: M/s. BIRLA CARBON INDIA PRIVATE LIMITED.**

Unit: "Patalaganga"

Village: Lohop, Talvali, Patalganga, Tal.: Khalapur,

Dist.: Raigad-410207, Maharashtra, India

**REPORT NO. : UT/ELS/REPORT/6610/11-2021****ISSUE DATE : 12/11/2021****YOUR REF. : 1300022569****REF. DATE : 27/04/2021****SAMPLE PARTICULARS :**

Sampling Plan Ref. No. : 02-11/2021

Sample Registration Date : 08/11/2021

Date of Sampling : 02/11/2021

Time of Sampling : 11:30 Hrs. to 12:30 Hrs

**STACK EMISSIONS QUALITY MONITORING**

Analysis Starting Date : 08/11/2021

Analysis Completion Date : 11/11/2021

Sample Lab Code : UT/ELS/020/11-2021

Sample Collected By : ULTRA TECH

**STACK DETAILS**

Stack ID : S-02

Stack Attached To : Boiler

Stack Shape : Round

Stack MOC : RCC

Stack Height : 108 meters from Ground Level

Stack Diameter : 6.3 meter @ Sampling Point

Fuel Used : Flue Gas

Fuel Consumption : 88,000 Nm<sup>3</sup>/hr**FLUE GAS CHARACTERISTICS**

Flue Gas Temperature : 392

°K

Flue Gas Velocity : 4.7

m/sec

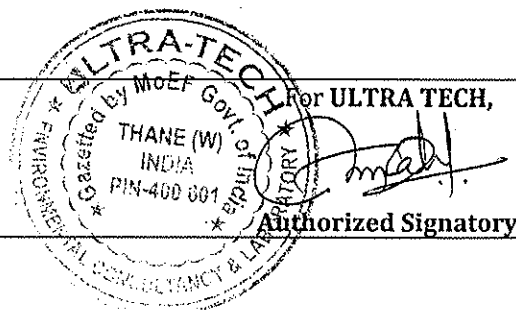
Volumetric Flow Rate : 382996 Nm<sup>3</sup>/hrTotal Volume of Flue Gas : 1.000 Nm<sup>3</sup> (@ STP)

Sr. No.	Test Parameter	Test Method	Test Result	Unit
1.	Total Particulate Matter (TPM)	UT/LQMS/SOP/SE01	35	mg/Nm <sup>3</sup>
2.	Sulphur Dioxide (SO <sub>2</sub> )	IS 11255 (Part 02) : 1985	21	mg/Nm <sup>3</sup>
			193.59	Kg/Day
3.	Oxides of Nitrogen (NO <sub>x</sub> )	IS 11255 (Part 07) : 2005	41	mg/Nm <sup>3</sup>

**Opinions / Interpretations: Nil**

Sampling Equipment Details	Instrument Used	Make & Model	Calibration Status
	Stack Sampling Kit	Make - POLLTECH; Model - PEM-SMS 4; Sr. No. 2613	Valid up to - 12/01/2022

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**- END OF REPORT -**

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## TEST REPORT

ISSUED TO: M/s. BIRLA CARBON INDIA PRIVATE LIMITED. REPORT NO. : UT/ELS/REPORT/6611/11-2021  
Unit: "Patalaganga" ISSUE DATE : 12/11/2021  
Village: Lohop, Talvali, Patalganga, Tal.: Khalapur, YOUR REF. : 1300022569  
Dist.: Raigad-410207, Maharashtra, India REF. DATE : 27/04/2021

### SAMPLE PARTICULARS :

Sampling Plan Ref. No. : 02-11/2021  
Sample Registration Date : 08/11/2021  
Date of Sampling : 02/11/2021  
Time of Sampling : 11:30 Hrs. to 12:30 Hrs

### STACK EMISSIONS QUALITY MONITORING

Analysis Starting Date : 08/11/2021  
Analysis Completion Date : 11/11/2021  
Sample Lab Code : UT/ELS/020/11-2021  
Sample Collected By : ULTRA TECH

### STACK DETAILS

Stack ID : S-02 Stack Height : 108 meters from Ground Level  
Stack Attached To : Boiler Stack Diameter : 6.3 meter @ Sampling Point  
Stack Shape : Round Fuel Used : Flue Gas  
Stack MOC : RCC Fuel Consumption : 88,000 Nm<sup>3</sup>/hr

### FLUE GAS CHARACTERISTICS

Flue Gas Temperature : 392 °K Volumetric Flow Rate : 382996 Nm<sup>3</sup>/hr  
Flue Gas Velocity : 4.7 m/sec Total Volume of Flue Gas : 1.000 Nm<sup>3</sup> (@ STP)

Sr. No.	Test Parameter	Test Method	Test Result	Unit
1.	Carbon Monoxide (CO)	NDIR CO Analyzer	78	ppm
2.	Hydrocarbon as Methane	IS 5182 Part 17	BDL[DL=0.5]	ppm
3.	Hydrocarbon as Non Methane	IS 5182 Part 17	BDL[DL=0.5]	ppm

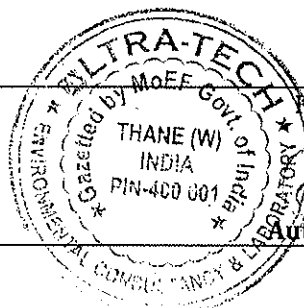
BDL = Below Detection Limit DL=Detection Limit

Opinions / Interpretations: Nil

Sampling Equipment Details	Instrument Used	Make & Model	Calibration Status
	Stack Sampling Kit	Make - POLLTECH; Model - PEM-SMS 4; Sr. No. 2613	Valid up to - 12/01/2022

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- END OF REPORT -



For ULTRA TECH,

Authorized Signatory



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**TEST REPORT****ISSUED TO: M/s. BIRLA CARBON INDIA PRIVATE LIMITED.****Unit: "Patalaganga"****Village: Lohop, Talvali, Patalganga, Tal.: Khalapur,****Dist.: Raigad-410207, Maharashtra, India****REPORT NO. : UT/ELS/REPORT/6612/11-2021****ISSUE DATE : 12/11/2021****YOUR REF. : 1300022569****REF. DATE : 27/04/2021****SAMPLE PARTICULARS :****Sampling Plan Ref. No. : 02-11/2021****Sample Registration Date : 08/11/2021****Date of Sampling : 02/11/2021****Time of Sampling : 10:00 Hrs. to 11:00 Hrs****STACK EMISSIONS QUALITY MONITORING****Analysis Starting Date : 08/11/2021****Analysis Completion Date : 11/11/2021****Sample Lab Code : UT/ELS/019/11-2021****Sample Collected By : ULTRA TECH****STACK DETAILS****Stack ID : S-03****Stack Attached To : D. G. Set (1875 KVA)****Stack Shape : Round****Stack MOC : M.S.****Stack Height : 43 meters from Ground Level****Stack Diameter : 0.25 meter @ Sampling Point****Fuel Used : H. S. D.****Fuel Consumption : 450 Liters/Hr****FLUE GAS CHARACTERISTICS****Flue Gas Temperature : 474****°K****Flue Gas Velocity : 7.2****m/sec****Volumetric Flow Rate : 811****Nm<sup>3</sup>/hr****Total Volume of Flue Gas : 1.000****Nm<sup>3</sup> (@ STP)**

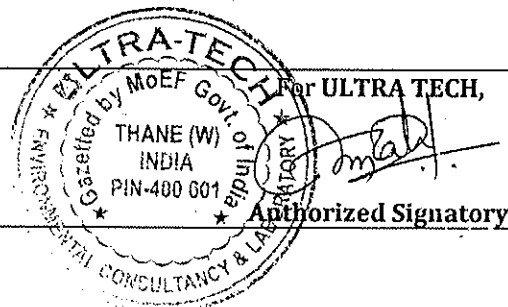
Sr. No.	Test Parameter	Test Method	Test Result	Unit
1.	Total Particulate Matter (TPM)	UT/LQMS/SOP/SE01	29	mg/Nm <sup>3</sup>
2.	Sulphur Dioxide (SO <sub>2</sub> )	IS 11255 (Part 02) : 1985	13	mg/Nm <sup>3</sup>
			0.26	Kg/Day
3.	Oxides of Nitrogen (NO <sub>x</sub> )	IS 11255 (Part 07) : 2005	27	mg/Nm <sup>3</sup>

**Opinions / Interpretations: Nil**

Sampling Equipment Details	Instrument Used	Make & Model	Calibration Status
	Stack Sampling Kit	Make - POLLTECH; Model - PEM-SMS 4; Sr. No. 2613	Valid up to - 12/01/2022

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## TEST REPORT

**ISSUED TO: M/s. BIRLA CARBON INDIA PRIVATE LIMITED.****Unit: "Patalaganga"****Village: Lohop, Talvali, Patalganga, Tal.: Khalapur,****Dist.: Raigad-410207, Maharashtra, India****REPORT NO. : UT/ELS/REPORT/6613/11-2021****ISSUE DATE : 12/11/2021****YOUR REF. : 1300022569****REF. DATE : 27/04/2021****SAMPLE PARTICULARS :****Sampling Plan Ref. No. : 02-11/2021****Sample Registration Date : 08/11/2021****Date of Sampling : 02/11/2021****Time of Sampling : 10:00 Hrs. to 11:00 Hrs****STACK EMISSIONS QUALITY MONITORING****Analysis Starting Date : 08/11/2021****Analysis Completion Date : 11/11/2021****Sample Lab Code : UT/ELS/019/11-2021****Sample Collected By : ULTRA TECH****STACK DETAILS****Stack ID : S-03****Stack Attached To : D. G. Set (1875 KVA)****Stack Shape : Round****Stack MOC : M.S.****Stack Height : 43 meters from Ground Level****Stack Diameter : 0.25 meter @ Sampling Point****Fuel Used : H. S. D.****Fuel Consumption : 450 Liters/Hr****FLUE GAS CHARACTERISTICS****Flue Gas Temperature : 474****°K****Flue Gas Velocity : 7.2****m/sec****Volumetric Flow Rate : 811****Nm<sup>3</sup>/hr****Total Volume of Flue Gas : 1.000****Nm<sup>3</sup> (@ STP)**

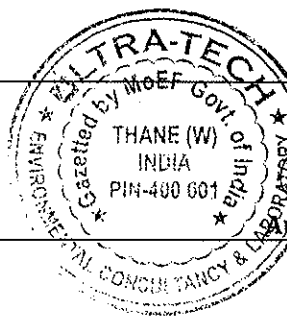
Sr. No.	Test Parameter	Test Method	Test Result	Unit
1.	Carbon Monoxide (CO)	NDIR CO ANALIZER	18	ppm
2.	Hydrocarbon as Methane	IS 5182 Part 17	BDL[DL=0.5]	ppm
3.	Hydrocarbon as Non Methane	IS 5182 Part 17	BDL[DL=0.5]	ppm

BDL = Below Detection Limit DL=Detection Limit

**Opinions / Interpretations: Nil**

Sampling Equipment Details	Instrument Used	Make & Model	Calibration Status
	Stack Sampling Kit	Make - POLI TECH; Model - PEM-SMS 4; Sr. No. 2613	Valid up to - 12/01/2022

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## TEST REPORT

**ISSUED TO: M/s. BIRLA CARBON INDIA PRIVATE LIMITED.****Unit: "Patalaganga"****Village: Lohop, Talvali, Patalganga, Tal.: Khalapur,****Dist.: Raigad-410207, Maharashtra, India****REPORT NO. : UT/ELS/REPORT/6614/11-2021****ISSUE DATE : 12/11/2021****YOUR REF. : 1300022569****REF. DATE : 27/04/2021****SAMPLE PARTICULARS :****Sampling Plan Ref. No. : 02-11/2021****Sample Registration Date : 08/11/2021****Date of Sampling : 02/11/2021****Time of Sampling : 14:30 Hrs. to 15:30 Hrs****STACK EMISSIONS QUALITY MONITORING****Analysis Starting Date : 08/11/2021****Analysis Completion Date : 11/11/2021****Sample Lab Code : UT/ELS/024/11-2021****Sample Collected By : ULTRA TECH****STACK DETAILS****Stack ID : S-01****Stack Attached To : Dryer****Stack Shape : Round****Stack MOC : M.S.****Stack Height : 77 meters from Ground Level****Stack Diameter : 1.43 meter @ Sampling Point****Fuel Used : Flue Gas****Fuel Consumption : 1,500 Nm<sup>3</sup>/Hr****FLUE GAS CHARACTERISTICS****Flue Gas Temperature : 496****°K****Flue Gas Velocity : 8.2****m/sec****Volumetric Flow Rate : 27453****Nm<sup>3</sup>/hr****Total Volume of Flue Gas : 1.000****Nm<sup>3</sup> (@ STP)**

Sr. No.	Test Parameter	Test Method	Test Result	Unit
1.	Total Particulate Matter (TPM)	UT/LQMS/SOP/SE01	24	mg/Nm <sup>3</sup>
2.	Sulphur Dioxide (SO <sub>2</sub> )	IS 11255 (Part 02) : 1985	19	mg/Nm <sup>3</sup>
			12.81	Kg/Day
3.	Oxides of Nitrogen (NO <sub>x</sub> )	IS 11255 (Part 07) : 2005	34	mg/Nm <sup>3</sup>

**Opinions / Interpretations: Nil**

Sampling Equipment Details	Instrument Used	Make & Model	Calibration Status
	Stack Sampling Kit	Make - POLLTECH; Model - PEM-SMS 4; Sr. No. 2613	Valid up to - 12/01/2022

**Note:**

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## TEST REPORT

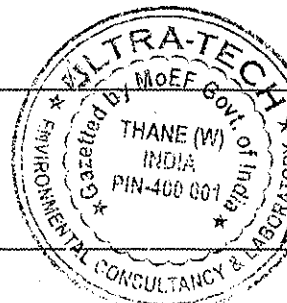
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Sr. No.	Test Parameter	Test Method	Test Result	Unit
1.	Carbon Monoxide (CO)	NDIR CO ANALYZER	58	ppm
2.	Hydrocarbon as Methane	IS 5182 Part 17	BDL[DL=0.5]	ppm
3.	Hydrocarbon as Non Methane	IS 5182 Part 17	BDL[DL=0.5]	ppm
BDL = Below Detection Limit		DL=Detection Limit		

**Opinions / Interpretations: Nil**

Sampling Equipment Details	Instrument Used	Make & Model	Calibration Status
	Stack Sampling Kit	Make - POLLTECH; Model - PEM-SMS 4; Sr. No. 2613	Valid up to - 12/01/2022

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## TEST REPORT

**ISSUED TO: M/s. BIRLA CARBON INDIA PRIVATE LIMITED.****Unit: "Patalaganga"****Village: Lohop, Talvali, Patalganga, Tal.: Khalapur,****Dist.: Raigad-410207, Maharashtra, India****REPORT NO. : UT/ELS/REPORT/6616/11-2021****ISSUE DATE : 12/11/2021****YOUR REF. : 1300022569****REF. DATE : 27/04/2021****SAMPLE PARTICULARS :****Sampling Plan Ref. No. : 02-11/2021****Sample Registration Date : 08/11/2021****Date of Sampling : 02/11/2021****Time of Sampling : 10:10 Hrs. to 11:30 Hrs****STACK EMISSIONS QUALITY MONITORING****Analysis Starting Date : 08/11/2021****Analysis Completion Date : 11/11/2021****Sample Lab Code : UT/ELS/021/11-2021****Sample Collected By : ULTRA TECH****STACK DETAILS****Stack ID : S-07****Stack Attached To : PGF No. 01****Stack Shape : Round****Stack MOC : S.S.****Stack Height : 30 meters from Ground Level****Stack Diameter : 2.1 meter @ Sampling Point****Fuel Used : NA****Fuel Consumption : NA****FLUE GAS CHARACTERISTICS****Flue Gas Temperature : 392****°K****Flue Gas Velocity : 6.4****m/sec****Volumetric Flow Rate : 58552****Nm<sup>3</sup>/hr****Total Volume of Flue Gas : 1.000****Nm<sup>3</sup> (@ STP)**

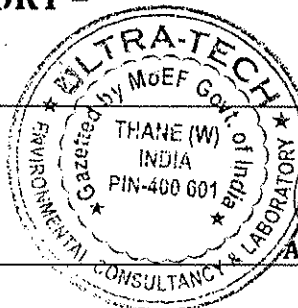
Sr. No.	Test Parameter	Test Method	Test Result	Unit
1.	Total Particulate Matter (TPM)	UT/LQMS/SOP/SE01	15	mg/Nm <sup>3</sup>
2.	Sulphur Dioxide (SO <sub>2</sub> )	IS 11255 (Part 02) : 1985	BDL[DL=5]	mg/Nm <sup>3</sup>
			BDL[DL=7.03] <sup>†</sup>	Kg/Day
3.	Oxides of Nitrogen (NO <sub>x</sub> )	IS 11255 (Part 07) : 2005	28	mg/Nm <sup>3</sup>

BDL = Below Detection Limit DL=Detection Limit

**Opinions / Interpretations: Nil**

Sampling Equipment Details	Instrument Used	Make & Model	Calibration Status
	Stack Sampling Kit	Make - POLLTECH; Model - PEM-SMS 4; Sr. No. 3813	Valid up to - 25/10/2021

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  5. <sup>†</sup>: Detection Limit obtained from calculation and tends to change with change in Volumetric Flow Rate of flue gases.
  6. This test report shall be referred along with Test Report No. UT/ELS/REPORT/6617/11-2021 Dated 12/11/2021 for final conclusion.

**- END OF REPORT -****For ULTRA TECH,****Authorized Signatory**

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## TEST REPORT

ISSUED TO: M/s. BIRLA CARBON INDIA PRIVATE LIMITED.

Unit: "Patalaganga"

Village: Lohop, Talvali, Patalganga, Tal.: Khalapur,

Dist.: Raigad-410207, Maharashtra, India

REPORT NO. : UT/ELS/REPORT/6617/11-2021

ISSUE DATE : 12/11/2021

YOUR REF. : 1300022569

REF. DATE : 27/04/2021

### SAMPLE PARTICULARS :

Sampling Plan Ref. No. : 02-11/2021

Sample Registration Date : 08/11/2021

Date of Sampling : 02/11/2021

Time of Sampling : 10:10 Hrs. to 11:30 Hrs

### STACK EMISSIONS QUALITY MONITORING

Analysis Starting Date : 08/11/2021

Analysis Completion Date : 11/11/2021

Sample Lab Code : UT/ELS/021/11-2021

Sample Collected By : ULTRA TECH

### STACK DETAILS

Stack ID : S-07

Stack Attached To : PGF No. 01

Stack Shape : Round

Stack MOC : S.S.

Stack Height : 30 meters from Ground Level

Stack Diameter : 2.1 meter @ Sampling Point

Fuel Used : NA

Fuel Consumption : NA

### FLUE GAS CHARACTERISTICS

Flue Gas Temperature : 392

°K

Flue Gas Velocity : 6.4

m/sec

Volumetric Flow Rate : 58552

Nm<sup>3</sup>/hr

Total Volume of Flue Gas : 1.000

Nm<sup>3</sup> (@ STP)

Sr. No.	Test Parameter	Test Method	Test Result	Unit
1.	Carbon Monoxide (CO)	NDIR CO ANALYZER	30	ppm
2.	Hydrocarbon as Methane	IS 5182 Part 17	BDL[DL=0.5]	ppm
3.	Hydrocarbon as Non Methane	IS 5182 Part 17	BDL[DL=0.5]	ppm

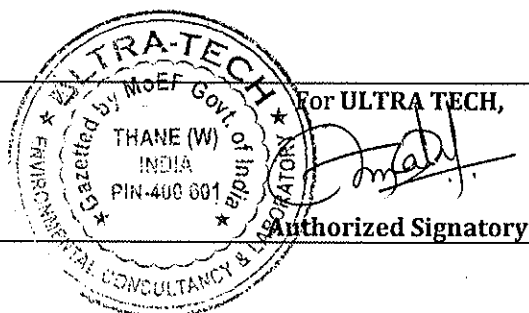
BDL = Below Detection Limit DL=Detection Limit

Opinions / Interpretations: Nil

Sampling Equipment Details	Instrument Used	Make & Model	Calibration Status
	Stack Sampling Kit	Make - POLLTECH; Model - PEM-SMS 4; Sr. No. 3813	Valid up to - 25/10/2021

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- END OF REPORT -





TC-5600

ISO 9001 : 2015

ISO 45001 : 2018

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## TEST REPORT

**ISSUED TO: M/s. BIRLA CARBON INDIA PRIVATE LIMITED.****Unit: "Patalaganga"****Village: Lohop, Talvali, Patalganga, Tal.: Khalapur,****Dist.: Raigad-410207, Maharashtra, India****REPORT NO. : UT/ELS/REPORT/6618/11-2021****ISSUE DATE : 12/11/2021****YOUR REF. : 1300022569****REF. DATE : 27/04/2021****SAMPLE PARTICULARS :****Sampling Plan Ref. No. : 02-11/2021****Sample Registration Date : 08/11/2021****Date of Sampling : 02/11/2021****Time of Sampling : 11:40 Hrs. to 12:40 Hrs****STACK EMISSIONS QUALITY MONITORING****Analysis Starting Date : 08/11/2021****Analysis Completion Date : 11/11/2021****Sample Lab Code : UT/ELS/022/11-2021****Sample Collected By : ULTRA TECH****STACK DETAILS****Stack ID : S-08****Stack Attached To : PGF No. 02****Stack Shape : Round****Stack MOC : S.S.****Stack Height : 30 meters from Ground Level****Stack Diameter : 2.1 meter @ Sampling Point****Fuel Used : NA****Fuel Consumption : NA****FLUE GAS CHARACTERISTICS****Flue Gas Temperature : 392****°K****Flue Gas Velocity : 6.4****m/sec****Volumetric Flow Rate : 58552****Nm<sup>3</sup>/hr****Total Volume of Flue Gas : 1.000****Nm<sup>3</sup> (@ STP)**

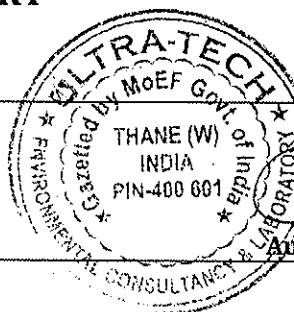
Sr. No.	Test Parameter	Test Method	Test Result	Unit
1.	Total Particulate Matter (TPM)	UT/LQMS/SOP/SE01	20	mg/Nm <sup>3</sup>
2.	Sulphur Dioxide (SO <sub>2</sub> )	IS 11255 (Part 02) : 1985	BDL[DL=5]	mg/Nm <sup>3</sup>
			BDL[DL=5.15] <sup>†</sup>	Kg/Day
3.	Oxides of Nitrogen (NO <sub>x</sub> )	IS 11255 (Part 07) : 2005	18	mg/Nm <sup>3</sup>

BDL = Below Detection Limit DL=Detection Limit

**Opinions / Interpretations: Nil**

Sampling Equipment Details	Instrument Used	Make & Model	Calibration Status
	Stack Sampling Kit	Make - POLLTECH; Model - PEM-SMS 4; Sr. No. 3813	Valid up to - 25/10/2021

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**- END OF REPORT -****For ULTRA TECH,****Authorized Signatory**

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## TEST REPORT

**ISSUED TO: M/s. BIRLA CARBON INDIA PRIVATE LIMITED.****Unit: "Patalaganga"****Village: Lohop, Talvali, Patalganga, Tal.: Khalapur,****Dist.: Raigad-410207, Maharashtra, India****REPORT NO. : UT/ELS/REPORT/6619/11-2021****ISSUE DATE : 12/11/2021****YOUR REF. : 1300022569****REF. DATE : 27/04/2021****SAMPLE PARTICULARS :****Sampling Plan Ref. No. : 02-11/2021****Sample Registration Date : 08/11/2021****Date of Sampling : 02/11/2021****Time of Sampling : 11:40 Hrs. to 12:40 Hrs****STACK EMISSIONS QUALITY MONITORING****Analysis Starting Date : 08/11/2021****Analysis Completion Date : 11/11/2021****Sample Lab Code : UT/ELS/022/11-2021****Sample Collected By : ULTRA TECH****STACK DETAILS****Stack ID : S-08****Stack Attached To : PGF No. 02****Stack Shape : Round****Stack MOC : S.S.****Stack Height : 30 meters from Ground Level****Stack Diameter : 2.1 meter @ Sampling Point****Fuel Used : NA****Fuel Consumption : NA****FLUE GAS CHARACTERISTICS****Flue Gas Temperature : 392****°K****Volumetric Flow Rate : 58552****Nm<sup>3</sup>/hr****Flue Gas Velocity : 6.4****m/sec****Total Volume of Flue Gas : 1.000****Nm<sup>3</sup> (@ STP)**

Sr. No.	Test Parameter	Test Method	Test Result	Unit
1.	Carbon Monoxide (CO)	NDIR CO ANALYZER	80	ppm
2.	Hydrocarbon as Methane	IS 5182 Part 17	BDL[DL=0.5]	ppm
3.	Hydrocarbon as Non Methane	IS 5182 Part 17	BDL[DL=0.5]	ppm

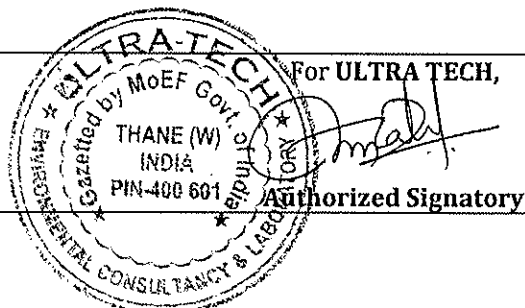
**BDL = Below Detection Limit**      **DL=Detection Limit**

**Opinions / Interpretations: Nil**

Sampling Equipment Details	Instrument Used	Make & Model	Calibration Status
	Stack Sampling Kit	Make - POLLTECH; Model - PEM-SMS 4; Sr. No. 3813	Valid up to - 25/10/2021

**Note:**

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**- END OF REPORT -**



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## TEST REPORT

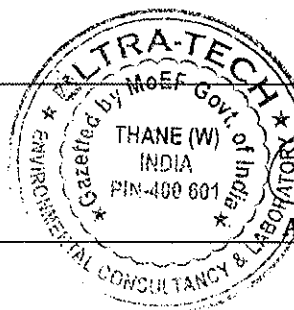
**ISSUED TO: M/s. BIRLA CARBON INDIA PRIVATE LIMITED.****Unit: "Patalaganga"****Village: Lohop, Talvali, Patalganga, Tal.: Khalapur,****Dist.: Raigad-410207, Maharashtra, India****REPORT NO. : UT/ELS/REPORT/6620/11-2021****ISSUE DATE : 12/11/2021****YOUR REF. : 1300022569****REF. DATE : 27/04/2021****SAMPLE PARTICULARS :****Sampling Plan Ref. No. : 02-11/2021****Sample Registration Date : 08/11/2021****Date of Sampling : 02/11/2021****Time of Sampling : 16:00 Hrs. to 17:00 Hrs****STACK EMISSIONS QUALITY MONITORING****Analysis Starting Date : 08/11/2021****Analysis Completion Date : 11/11/2021****Sample Lab Code : UT/ELS/027/11-2021****Sample Collected By : ULTRA TECH****STACK DETAILS****Stack ID : S-06****Stack Attached To : Packing Exhaust Blower****Stack Shape : Round****Stack MOC : MS****Stack Height : 30 meters from Ground Level****Stack Diameter : 0.2 meter @ Sampling Point****Fuel Used : NA****Fuel Consumption : NA****FLUE GAS CHARACTERISTICS****Flue Gas Temperature : 387****°K****Flue Gas Velocity : 4.9****m/sec****Volumetric Flow Rate : 407****Nm<sup>3</sup>/hr****Total Volume of Flue Gas : 1.000****Nm<sup>3</sup> (@ STP)**

Sr. No.	Test Parameter	Test Method	Test Result	Unit
1.	Total Particulate Matter (TPM)	UT/LQMS/SOP/SE01	26	mg/Nm <sup>3</sup>
2.	Sulphur Dioxide (SO <sub>2</sub> )	IS 11255 (Part 02) : 1985	14	mg/Nm <sup>3</sup>
			0.14	Kg/Day
3.	Oxides of Nitrogen (NO <sub>x</sub> )	IS 11255 (Part 07) : 2005	16	mg/Nm <sup>3</sup>

**Opinions / Interpretations: Nil**

Sampling Equipment Details	Instrument Used	Make & Model	Calibration Status
	Stack Sampling Kit	Make - POLLTECH; Model - PEM-SMS 4; Sr. No. 2613	Valid up to - 12/01/2022

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## TEST REPORT

**ISSUED TO: M/s. BIRLA CARBON INDIA PRIVATE LIMITED.****Unit: "Patalaganga"****Village: Lohop, Talvali, Patalganga, Tal.: Khalapur,****Dist.: Raigad-410207, Maharashtra, India****REPORT NO. : UT/ELS/REPORT/6621/11-2021****ISSUE DATE : 12/11/2021****YOUR REF. : 1300022569****REF. DATE : 27/04/2021****SAMPLE PARTICULARS :****Sampling Plan Ref. No. : 02-11/2021****Sample Registration Date : 08/11/2021****Date of Sampling : 02/11/2021****Time of Sampling : 16:00 Hrs. to 17:00 Hrs****STACK EMISSIONS QUALITY MONITORING****Analysis Starting Date : 08/11/2021****Analysis Completion Date : 11/11/2021****Sample Lab Code : UT/ELS/027/11-2021****Sample Collected By : ULTRA TECH****STACK DETAILS****Stack ID : S-06****Stack Attached To : Packing Exhaust Blower****Stack Shape : Round****Stack MOC : SS****Stack Height : 30 meters from Ground Level****Stack Diameter : 0.2 meter @ Sampling Point****Fuel Used : NA****Fuel Consumption : NA****FLUE GAS CHARACTERISTICS****Flue Gas Temperature : 387****°K****Flue Gas Velocity : 4.9****m/sec****Volumetric Flow Rate : 407****Nm<sup>3</sup>/hr****Total Volume of Flue Gas : 1.000****Nm<sup>3</sup> (@ STP)**

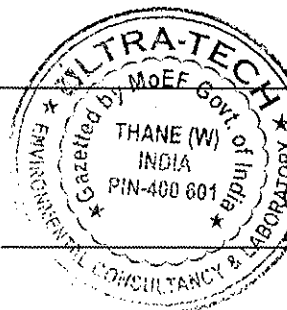
Sr. No.	Test Parameter	Test Method	Test Result	Unit
1.	Carbon Monoxide (CO)	NDIR CO ANALYZER	40	ppm
2.	Hydrocarbon as Methane	IS 5182 Part 17	BDL[DL=0.5]	ppm
3.	Hydrocarbon as Non Methane	IS 5182 Part 17	BDL[DL=0.5]	ppm

BDL = Below Detection Limit DL=Detection Limit

**Opinions / Interpretations: Nil**

Sampling Equipment Details	Instrument Used	Make & Model	Calibration Status
	Stack Sampling Kit	Make - POLLTECH; Model - PEM-SMS 4; Sr. No. 2613	Valid up to - 12/01/2022

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TC-5600

ISO 9001 : 2015

ISO 45001 : 2018

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## TEST REPORT

**ISSUED TO: M/s. BIRLA CARBON INDIA PRIVATE LIMITED.****Unit: "Patalaganga"****Village: Lohop, Talvali, Patalganga, Tal.: Khalapur,****Dist.: Raigad-410207, Maharashtra, India****REPORT NO. : UT/ELS/REPORT/6622/11-2021****ISSUE DATE : 12/11/2021****YOUR REF. : 1300022569****REF. DATE : 27/04/2021****SAMPLE PARTICULARS :****Sampling Plan Ref. No. : 02-11/2021****Sample Registration Date : 08/11/2021****Date of Sampling : 02/11/2021****Time of Sampling : 12:45 Hrs. to 13:45 Hrs****STACK EMISSIONS QUALITY MONITORING****Analysis Starting Date : 08/11/2021****Analysis Completion Date : 11/11/2021****Sample Lab Code : UT/ELS/023/11-2021****Sample Collected By : ULTRA TECH****STACK DETAILS****Stack ID : S-04****Stack Attached To : Gas Flair****Stack Shape : Round****Stack MOC : MS****Stack Height : 52 meters from Ground Level****Stack Diameter : 1.4 meter @ Sampling Point****Fuel Used : LPG****Fuel Consumption : 15kg/hr****FLUE GAS CHARACTERISTICS****Flue Gas Temperature : 414****°K****Flue Gas Velocity : 7.6****m/sec****Volumetric Flow Rate : 28807****Nm<sup>3</sup>/hr****Total Volume of Flue Gas : 1.000****Nm<sup>3</sup> (@ STP)**

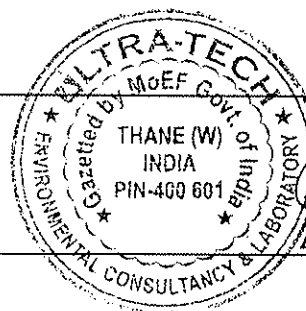
Sr. No.	Test Parameter	Test Method	Test Result	Unit
1.	Total Particulate Matter (TPM)	UT/LQMS/SOP/SE01	35	mg/Nm <sup>3</sup>
2.	Sulphur Dioxide (SO <sub>2</sub> )	IS 11255 (Part 02) : 1985	13	mg/Nm <sup>3</sup>
			9.05	Kg/Day
3.	Oxides of Nitrogen (NO <sub>x</sub> )	IS 11255 (Part 07) : 2005	26	mg/Nm <sup>3</sup>

**Opinions / Interpretations: Nil**

Sampling Equipment Details	Instrument Used	Make & Model	Calibration Status
	Stack Sampling Kit	Make - POLLTECH; Model - PEM-SMS 4; Sr. No. 2613	Valid up to - 12/01/2022

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## TEST REPORT

**ISSUED TO: M/s. BIRLA CARBON INDIA PRIVATE LIMITED.****Unit: "Patalaganga"****Village: Lohop, Talvali, Patalganga, Tal.: Khalapur,****Dist.: Raigad-410207, Maharashtra, India****REPORT NO. : UT/ELS/REPORT/6623/11-2021****ISSUE DATE : 12/11/2021****YOUR REF. : 1300022569****REF. DATE : 27/04/2021****SAMPLE PARTICULARS :****Sampling Plan Ref. No. : 02-11/2021****Sample Registration Date : 08/11/2021****Date of Sampling : 02/11/2021****Time of Sampling : 12:45 Hrs. to 13:45 Hrs****STACK EMISSIONS QUALITY MONITORING****Analysis Starting Date : 08/11/2021****Analysis Completion Date : 11/11/2021****Sample Lab Code : UT/ELS/023/11-2021****Sample Collected By : ULTRA TECH****STACK DETAILS****Stack ID : S-04****Stack Attached To : Gas Flair****Stack Shape : Round****Stack MOC : MS****Stack Height : 52 meters from Ground Level****Stack Diameter : 1.4 meter @ Sampling Point****Fuel Used : LPG****Fuel Consumption : 15 kg/hr****FLUE GAS CHARACTERISTICS****Flue Gas Temperature : 414****°K****Flue Gas Velocity : 7.6****m/sec****Volumetric Flow Rate : 28807****Nm<sup>3</sup>/hr****Total Volume of Flue Gas : 1.000****Nm<sup>3</sup> (@ STP)**

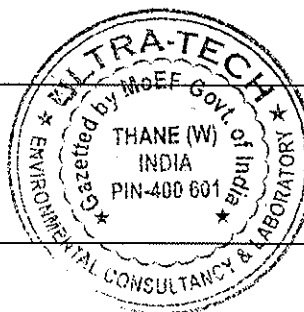
Sr. No.	Test Parameter	Test Method	Test Result	Unit
1.	Carbon Monoxide (CO)	NDIR CO ANALYZER	12	ppm
2.	Hydrocarbon as Methane	IS 5182 Part 17	BDL[DL=0.5]	ppm
3.	Hydrocarbon as Non Methane	IS 5182 Part 17	BDL[DL=0.5]	ppm

BDL = Below Detection Limit DL=Detection Limit

**Opinions / Interpretations: Nil**

Sampling Equipment Details	Instrument Used	Make & Model	Calibration Status
	Stack Sampling Kit	Make - POLLTECH; Model - PEM-SMS 4; Sr. No. 2613	Valid up to - 12/01/2022

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## TEST REPORT

**ISSUED TO:** M/s. BIRLA CARBON INDIA PRIVATE LIMITED. **REPORT NO. :** UT/ELS/REPORT/6624/11-2021  
**Unit:** "Patalaganga" **ISSUE DATE :** 12/11/2021  
**Village:** Lohop, Talvali, Patalganga, Tal.: Khalapur, **YOUR REF. :** 1300022569  
**Dist.:** Raigad-410207, Maharashtra, India **REF. DATE :** 27/04/2021

SAMPLE PARTICULARS :		STACK EMISSIONS QUALITY MONITORING	
Sampling Plan Ref. No.	: 02-11/2021	Analysis Starting Date	: 08/11/2021
Sample Registration Date	: 08/11/2021	Analysis Completion Date	: 11/11/2021
Date of Sampling	: 02/11/2021	Sample Lab Code	: UT/ELS/025/11-2021
Time of Sampling	: 13:30 Hrs. to 14:30 Hrs	Sample Collected By	: ULTRA TECH

STACK DETAILS			
Stack ID	: S-05	Stack Height	: 3.0 meters from Ground Level
Stack Attached To	: Fire Diesel pump	Stack Diameter	: 0.15 meter @ Sampling Point
Stack Shape	: Round	Fuel Used	: HSD
Stack MOC	: MS	Fuel Consumption	: 2.22 kg/hr

FLUE GAS CHARACTERISTICS			
Flue Gas Temperature	: 445	<sup>o</sup> K	Volumetric Flow Rate : 373 Nm <sup>3</sup> /hr
Flue Gas Velocity	: 9.0	m/sec	Total Volume of Flue Gas : 1.000 Nm <sup>3</sup> (@ STP)

Sr. No.	Test Parameter	Test Method	Test Result	Unit
1.	Total Particulate Matter (TPM)	UT/LQMS/SOP/SE01	28	mg/Nm <sup>3</sup>
2.	Sulphur Dioxide (SO <sub>2</sub> )	IS 11255 (Part 02) : 1985	11	mg/Nm <sup>3</sup>
			0.10	Kg/Day
3.	Oxides of Nitrogen (NO <sub>x</sub> )	IS 11255 (Part 07) : 2005	21	mg/Nm <sup>3</sup>

Opinions / Interpretations: Nil

Sampling Equipment Details	Instrument Used	Make & Model	Calibration Status
	Stack Sampling Kit	Make - POLLTECH; Model - PEM-SMS 4; Sr. No. 3813	Valid up to - 25/10/2021

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**- END OF REPORT -**

For ULTRA TECH,  
THANE (W)  
INDIA  
PIN-400 601  
Authorized Signatory

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## TEST REPORT

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Sr. No.	Test Parameter	Test Method	Test Result	Unit
1.	Carbon Monoxide (CO)	NDIR CO ANALYZER	60	ppm
2.	Hydrocarbon as Methane	IS 5182 Part 17	BDL[DL=0.5]	ppm
3.	Hydrocarbon as Non Methane	IS 5182 Part 17	BDL[DL=0.5]	ppm

**BDL = Below Detection Limit** **DL=Detection Limit**

**Opinions / Interpretations: Nil**

Sampling Equipment Details	Instrument Used	Make & Model	Calibration Status
	Stack Sampling Kit	Make - POLLTECH; Model - PEM-SMS 4; Sr. No. 3813	Valid up to - 25/10/2021

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## TEST REPORT

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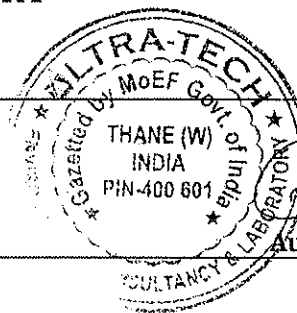
Sr. No.	Test Parameter	Test Method	Test Result	Unit
1.	Total Particulate Matter (TPM)	UT/LQMS/SOP/SE01	28	mg/Nm <sup>3</sup>
2.	Sulphur Dioxide (SO <sub>2</sub> )	IS 11255 (Part 02) : 1985	17	mg/Nm <sup>3</sup>
			0.17	Kg/Day
3.	Oxides of Nitrogen (NO <sub>x</sub> )	IS 11255 (Part 07) : 2005	22	mg/Nm <sup>3</sup>

**Opinions / Interpretations: Nil**

Sampling Equipment Details	Instrument Used	Make & Model	Calibration Status
	Stack Sampling Kit	Make - POLLTECH; Model - PEM-SMS 4; Sr. No. 3813	Valid up to - 25/10/2021

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## TEST REPORT

**ISSUED TO: M/s. BIRLA CARBON INDIA PRIVATE LIMITED.****Unit: "Patalaganga"****Village: Lohop, Talvali, Patalganga, Tal.: Khalapur,****Dist.: Raigad-410207, Maharashtra, India****REPORT NO. : UT/ELS/REPORT/6627/11-2021****ISSUE DATE : 12/11/2021****YOUR REF. : 1300022569****REF. DATE : 27/04/2021****SAMPLE PARTICULARS :****Sampling Plan Ref. No. : 02-11/2021****Sample Registration Date : 08/11/2021****Date of Sampling : 02/11/2021****Time of Sampling : 15:30 Hrs. to 16:30 Hrs****STACK EMISSIONS QUALITY MONITORING****Analysis Starting Date : 08/11/2021****Analysis Completion Date : 11/11/2021****Sample Lab Code : UT/ELS/026/11-2021****Sample Collected By : ULTRA TECH****STACK DETAILS****Stack ID : S-09****Stack Attached To : D.G SET 250KVA****Stack Shape : Round****Stack MOC : MS****Stack Height : 3.0 meters from Ground Level****Stack Diameter : 0.15 meter @ Sampling Point****Fuel Used : HSD****Fuel Consumption : 322.45 kg/hr****FLUE GAS CHARACTERISTICS****Flue Gas Temperature : 408 °K****Flue Gas Velocity : 9.3 m/sec****Volumetric Flow Rate : 429 Nm<sup>3</sup>/hr****Total Volume of Flue Gas : 1.000 Nm<sup>3</sup> (@ STP)**

Sr. No.	Test Parameter	Test Method	Test Result	Unit
1.	Carbon Monoxide (CO)	NDIR CO ANALYZER	44	ppm
2.	Hydrocarbon as Methane	IS 5182 Part 17	BDL[DL=0.5]	ppm
3.	Hydrocarbon as Non Methane	IS 5182 Part 17	BDL[DL=0.5]	ppm
BDL = Below Detection Limit		DL=Detection Limit		

**Opinions / Interpretations: Nil**

Sampling Equipment Details	Instrument Used	Make & Model	Calibration Status
	Stack Sampling Kit	Make - POLLTECH; Model - PEM-SMS 4; Sr. No. 3813	Valid up to - 25/10/2021

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  4. Any correction invalidates this test report.
  5. Parameter is tested are not covered under NABL scope.
  6. This test report shall be referred along with Test Report No. UT/ELS/REPORT/6626/11-2021 Dated 12/11/2021 for final conclusion.

**- END OF REPORT -****For ULTRA TECH,****Authorized Signatory**

Lab : Survey No. 93/A, Conformity Hissa No.2 G.V.Brothers Bldg., Bata Compound, Khopat, Near Flower Valley, Thane (West) - 400 601, Maharashtra, India.  
Tele : +91 22 2547 49 07 / +91 22 2547 62 17 Email : lab@ultratech.in Visit us at : www.ultratech.in

## TEST REPORT

ISSUED TO: M/s. BIRLA CARBON INDIA PRIVATE LIMITED.

Unit: "Patalaganga"

Village: Lohop, Talvali, Patalganga, Tal.: Khalapur,

Dist.: Raigad-410207, Maharashtra, India

REPORT NO. : UT/ELS/REPORT/6588/11-2021

ISSUE DATE : 12/11/2021

YOUR REF. : 1300022569

REF. DATE : 27/04/2021

### SAMPLE PARTICULARS :

Sampling Plan Ref. No.: 02-11/2021  
Sample Registration Date : 08/11/2021  
Date of Sampling : 01/11/2021 to 02/11/2021  
Time of Sampling : 13:35 Hrs. to 13:35Hrs.  
Analysis Starting Date : 08/11/2021  
Analysis Completion Date : 12/11/2021  
Sample Lab Code : UT/ELS/007/11-2021  
Ambient Air Temperature : 25.2°C to 34.8°C

### AMBIENT AIR QUALITY MONITORING

Location Code : 01  
Sample Location : Tank Farm area (10 Meter off to East Direction from Greenhouse)  
Co-ordinates: N 18°50'53.98"; E 73°12'45.35"  
Collected By : ULTRA TECH  
Height of Sampler : 1.0 Meter  
Sampling Duration : 24 Hours  
Relative Humidity : 47.3 % to 79.8 %

Sr. No.	Test Parameter	Test Method	Test Result	Unit
1.	Sulphur Dioxide (SO <sub>2</sub> )	IS 5182 (Part 02) : 2001	BDL[DL=5]	µg/m <sup>3</sup>
2.	Oxides of Nitrogen (NO <sub>x</sub> )	IS 5182 (Part 06) : 2006	21	µg/m <sup>3</sup>
3.	Particulate Matter (PM <sub>10</sub> )	EPA/625/R-96/010a Method IO-2.1	92	µg/m <sup>3</sup>
4.	Particulate Matter (PM <sub>2.5</sub> )	CPCB Guidelines, Vol-I, NAAQMS/36/2012-13	31	µg/m <sup>3</sup>
5.	Lead (Pb)	IS 5182 (Part 22) : 2004	BDL[DL=0.01]	µg/m <sup>3</sup>
6.	Carbon Monoxide (CO) <sup>†</sup>	IS 5182 (Part 10): 1999	1.3	mg/m <sup>3</sup>
7.	Ammonia (NH <sub>3</sub> ) <sup>£</sup>	ISC Method 401	47	µg/m <sup>3</sup>
8.	Arsenic (As)	CPCB Guidelines, Vol-I, NAAQMS/36/2012-13	BDL[DL=2]	ng/m <sup>3</sup>

†: Sampling Period 1 Hr.

£: Sampling Period 2 Hrs.

BDL: Below Detection Limit

DL: Detection Limit

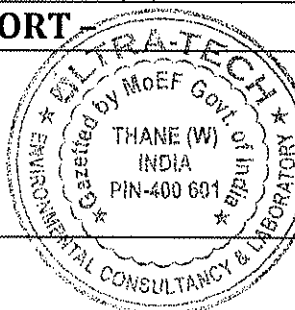
Opinions / Interpretations: National Ambient Air Quality Monitoring Standard, Part III- Section IV is provided as Annexure-I for your reference.

(Turnover to find Annexure)


Sampling Equipment Details	Instrument Used	Make & Model	Calibration Status
	Respirable Dust Sampler	Make - POLLTECH; Model- PEM-RDS 8NL BM; Sr. No. 914	Valid up to - 28/02/2022
	Fine Dust Sampler	Make - Netel; Model- NPM FDS2.5/10µ (A); Sr. No. 154	Valid up to - 09/02/2022

- Note:
1. This test report refers only to the sample tested.
  2. Monitoring area coming under Industrial areas and observed values are relevant to sample collected only.
  3. This test report may not be reproduced in part, without the permission of this laboratory.
  4. Any correction invalidates this test report.
  5. Weather was Sunny & Clear.
  6. This test report shall be referred along with Test Report No. UT/ELS/REPORT/6589/11-2021 Dated 12/11/2021 for final conclusion.

- END OF REPORT



For ULTRA TECH,



(Authorized Signatory)

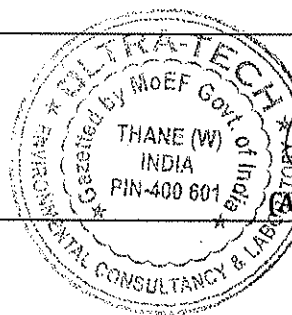
Lab : Survey No. 93/A, Conformity Hissa No.2 G.V.Brothers Bldg., Bata Compound, Khopat, Near Flower Valley, Thane (West) - 400 601, Maharashtra, India.  
Tele : +91 22 2547 49 07 / +91 22 2547 62 17 Email : lab@ultratech.in Visit us at : www.ultratech.in**TEST REPORT****ISSUED TO: M/s. BIRLA CARBON INDIA PRIVATE LIMITED.****Unit: "Patalaganga"****Village: Lohop, Talvali, Patalganga, Tal.: Khalapur,****Dist.: Raigad-410207, Maharashtra, India****REPORT NO. : UT/ELS/REPORT/6589/11-2021****ISSUE DATE : 12/11/2021****YOUR REF. : 1300022569****REF. DATE : 27/04/2021****SAMPLE PARTICULARS :****Sampling Plan Ref. No. : 02-11/2021**  
**Sample Registration Date : 08/11/2021**  
**Date of Sampling : 01/11/2021 to 02/11/2021**  
**Time of Sampling : 13:35 Hrs. to 13:35 Hrs.**  
**Analysis Starting Date : 08/11/2021**  
**Analysis Completion Date : 12/11/2021**  
**Sample Lab Code : UT/ELS/007/11-2021**  
**Ambient Air Temperature : 25.2°C to 34.8°C****AMBIENT AIR QUALITY MONITORING****Location Code : 01**  
**Sample Location : Tank Farm area (10 Meter off to East Direction from Greenhouse)**  
**Co-ordinates: N 18°50'53.98"; E 73°12'45.35"**  
**Collected By : ULTRA TECH**  
**Height of Sampler : 1.0 Meter**  
**Sampling Duration : 24 Hours**  
**Relative Humidity : 47.3 % to 79.8 %**

Sr. No.	Test Parameter	Test Method	Test Result	Unit
1.	Ozone (O <sub>3</sub> ) <sup>∞</sup>	IS 5182 (Part 09) : 1974	BDL [DL=10]	µg/m <sup>3</sup>
2.	Benzene (C <sub>6</sub> H <sub>6</sub> ) <sup>∞</sup>	IS 5182 (Part 11) : 2006	1.1	µg/m <sup>3</sup>
3.	Benzo(α)Pyrene (BaP) – Particulate Phase	IS 5182 (Part 12) : 2004	BDL [DL=0.5]	ng/m <sup>3</sup>
4.	Nickel (Ni)	CPCB Guidelines, Vol-I, NAAQMS/36/2012-13	BDL [DL=1]	ng/m <sup>3</sup>
∞: Sampling Period 8 Hrs.				
BDL: Below Detection Limit DL: Detection Limit				

**Opinions / Interpretations:** National Ambient Air Quality Monitoring Standard, Part III- Section IV is provided as Annexure-II for your reference.  
(Turnover to find Annexure)

Sampling Equipment Details	Instrument Used	Make & Model	Calibration Status
	Respirable Dust Sampler	Make - POLLTECH; Model- PEM-RDS 8NL BM; Sr. No. 914	Valid up to - 28/02/2022
	Fine Dust Sampler	Make - Netel; Model- NPM FDS2.5/10µ (A); Sr. No. 154	Valid up to - 09/02/2022

- Note:**
1. This test report refers only to the sample tested.
  2. Monitoring area coming under Industrial areas and observed values are relevant to sample collected only.
  3. This test report may not be reproduced in part, without the permission of this laboratory.
  4. Any correction invalidates this test report.
  5. Weather was Sunny & Clear.
  6. Parameter is tested are not covered under NABL scope.
  7. This test report shall be referred along with Test Report No. UT/ELS/REPORT/6589/11-2021 Dated 12/11/2021 for final conclusion.

**- END OF REPORT -**

For ULTRA TECH,

(Authorized Signatory)

Lab : Survey No. 93/A, Conformity Hissa No.2 G.V.Brothers Bldg., Bata Compound, Khopat, Near Flower Valley, Thane (West) - 400 601, Maharashtra, India.  
Tele : +91 22 2547 49 07 / +91 22 2547 62 17 Email : lab@ultratech.in Visit us at : www.ultratech.in

## TEST REPORT

ISSUED TO: M/s. BIRLA CARBON INDIA PRIVATE LIMITED.

Unit: "Patalaganga"

Village: Lohop, Talvali, Patalganga, Tal.: Khalapur,

Dist.: Raigad-410207, Maharashtra, India

REPORT NO. : UT/ELS/REPORT/6590/11-2021

ISSUE DATE : 12/11/2021

YOUR REF. : 1300022569

REF. DATE : 27/04/2021

### SAMPLE PARTICULARS :

Sampling Plan Ref. No.: 02-11/2021  
Sample Registration Date : 08/11/2021  
Date of Sampling : 01/11/2021 to 02/11/2021  
Time of Sampling : 14:15 Hrs. to 14:15Hrs.  
Analysis Starting Date : 08/11/2021  
Analysis Completion Date : 12/11/2021  
Sample Lab Code : UT/ELS/009/11-2021  
Ambient Air Temperature : 25.3°C to 34.9°C

### AMBIENT AIR QUALITY MONITORING

Location Code : 02  
Sample Location : Switch Yard Area (05 Meter off to South Direction on Steel Platform)  
Co-ordinates: N 18°51'11.18"; E 73°12'48.28"  
Collected By : ULTRA TECH  
Height of Sampler : 1.0 Meter  
Sampling Duration : 24 Hours  
Relative Humidity : 47.4 % to 79.9 %

Sr. No.	Test Parameter	Test Method	Test Result	Unit
1.	Sulphur Dioxide (SO <sub>2</sub> )	IS 5182 (Part 02) : 2001	BDL[DL=5]	µg/m <sup>3</sup>
2.	Oxides of Nitrogen (NO <sub>x</sub> )	IS 5182 (Part 06) : 2006	28	µg/m <sup>3</sup>
3.	Particulate Matter (PM <sub>10</sub> )	EPA/625/R-96/010a Method IO-2.1	88	µg/m <sup>3</sup>
4.	Particulate Matter (PM <sub>2.5</sub> )	CPCB Guidelines, Vol-I, NAAQMS/36/2012-13	33	µg/m <sup>3</sup>
5.	Lead (Pb)	IS 5182 (Part 22) : 2004	0.02	µg/m <sup>3</sup>
6.	Carbon Monoxide (CO) <sup>†</sup>	IS 5182 (Part 10): 1999	1.3	mg/m <sup>3</sup>
7.	Ammonia (NH <sub>3</sub> ) <sup>‡</sup>	ISC Method 401	42	µg/m <sup>3</sup>
8.	Arsenic (As)	CPCB Guidelines, Vol-I, NAAQMS/36/2012-13	BDL[DL=2]	ng/m <sup>3</sup>

†: Sampling Period 1 Hr.

‡: Sampling Period 2 Hrs.

BDL: Below Detection Limit

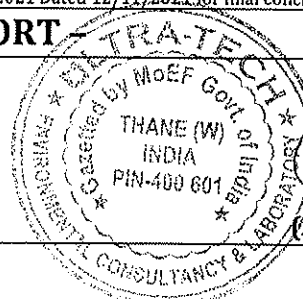
DL: Detection Limit

Opinions / Interpretations: National Ambient Air Quality Monitoring Standard, Part III- Section IV is provided as Annexure-I for your reference.  
(Turnover to find Annexure)

Sampling Equipment Details	Instrument Used	Make & Model	Calibration Status
	Respirable Dust Sampler	Make - POLLTECH; Model- PEM-RDS 9 NL; Sr. No. 220	Valid up to - 17/02/2022
	Fine Dust Sampler	Make - POLLTECH; Model- PEM-ADS 2.5/10µ; Sr. No. 18213	Valid up to - 04/01/2022

- Note:
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  3. This test report may not be reproduced in part, without the permission of this laboratory.
  4. Any correction invalidates this test report.
  5. Weather was Sunny & Clear.
  6. This test report shall be referred along with Test Report No. UT/ELS/REPORT/6591/11-2021 Dated 12/11/2021 for final conclusion.

- END OF REPORT



For ULTRA TECH,

(Authorized Signatory)

Lab : Survey No. 93/A, Conformity Hissa No.2 G.V.Brothers Bldg., Bata Compound, Khopat, Near Flower Valley, Thane (West) - 400 601, Maharashtra, India.  
Tele : +91 22 2547 49 07 / +91 22 2547 62 17 Email : lab@ultratech.in Visit us at : www.ultratech.in

## TEST REPORT

ISSUED TO: M/s. BIRLA CARBON INDIA PRIVATE LIMITED.

Unit: "Patalaganga"

Village: Lohop, Talvali, Patalganga, Tal.: Khalapur,

Dist.: Raigad-410207, Maharashtra, India

REPORT NO. : UT/ELS/REPORT/6591/11-2021

ISSUE DATE : 12/11/2021

YOUR REF. : 1300022569

REF. DATE : 27/04/2021

### SAMPLE PARTICULARS :

Sampling Plan Ref. No.: 02-11/2021  
Sample Registration Date : 08/11/2021  
Date of Sampling : 01/11/2021 to 02/11/2021  
Time of Sampling : 14:15 Hrs. to 14:15Hrs.  
Analysis Starting Date : 08/11/2021  
Analysis Completion Date : 12/11/2021  
Sample Lab Code : UT/ELS/009/11-2021  
Ambient Air Temperature : 25.3°C to 34.9°C

### AMBIENT AIR QUALITY MONITORING

Location Code : 02  
Sample Location : Switch Yard Area (05 Meter off to South Direction on Steel Platform)  
Co-ordinates: N 18°51'11.18"; E 73°12'48.28"  
Collected By : ULTRA TECH  
Height of Sampler : 1.0 Meter  
Sampling Duration : 24 Hours  
Relative Humidity : 47.4 % to 79.9 %

Sr. No.	Test Parameter	Test Method	Test Result	Unit
1.	Ozone (O <sub>3</sub> ) <sup>∞</sup>	IS 5182 (Part 09) : 1974	BDL [DL=10]	µg/m <sup>3</sup>
2.	Benzene (C <sub>6</sub> H <sub>6</sub> ) <sup>∞</sup>	IS 5182 (Part 11) : 2006	1.3	µg/m <sup>3</sup>
3.	Benzo(α)Pyrene (BaP) - Particulate Phase	IS 5182 (Part 12) : 2004	BDL [DL=0.5]	ng/m <sup>3</sup>
4.	Nickel (Ni)	CPCB Guidelines, Vol-I, NAAQMS/36/2012-13	BDL [DL=1]	ng/m <sup>3</sup>

∞: Sampling Period 8 Hrs.

BDL: Below Detection Limit

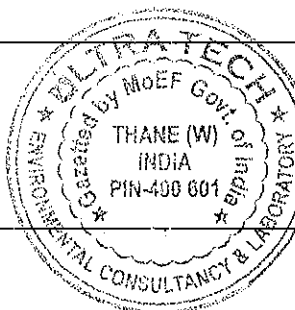
DL: Detection Limit

Opinions / Interpretations: National Ambient Air Quality Monitoring Standard, Part III- Section IV is provided as Annexure-II for your reference.  
(Turnover to find Annexure)

Sampling Equipment Details	Instrument Used	Make & Model	Calibration Status
	Respirable Dust Sampler	Make - POLLTECH; Model- PEM-RDS 9 NL; Sr. No. 220	Valid up to - 17/02/2022
	Fine Dust Sampler	Make - POLLTECH; Model- PEM-ADS 2.5/10µ; Sr. No. 18213	Valid up to - 04/01/2022

- Note:
1. This test report refers only to the sample tested.
  2. Monitoring area coming under Industrial areas and observed values are relevant to sample collected only.
  3. This test report may not be reproduced in part, without the permission of this laboratory.
  4. Any correction invalidates this test report.
  5. Weather was Sunny & Clear.
  6. Parameter is tested are not covered under NABL scope.
  7. This test report shall be referred along with Test Report No. UT/ELS/REPORT/6590/11-2021 Dated 12/11/2021 or final conclusion.

- END OF REPORT -



For ULTRA TECH,

(Authorized Signatory)



TC-5600

ISO 9001 : 2015  
OHSAS 18001 : 2007

Lab : Survey No. 93/A, Conformity Hissa No.2 G.V.Brothers Bldg., Bata Compound, Khopat, Near Flower Valley, Thane (West) - 400 601, Maharashtra, India.  
Tele : +91 22 2547 49 07 / +91 22 2547 62 17 Email : lab@ultratech.in Visit us at : www.ultratech.in

## TEST REPORT

ISSUED TO: M/s. BIRLA CARBON INDIA PRIVATE LIMITED.

Unit: "Patalaganga"

Village: Lohop, Talvali, Patalganga, Tal.: Khalapur,

Dist.: Raigad-410207, Maharashtra, India

REPORT NO. : UT/ELS/REPORT/6592/11-2021

ISSUE DATE : 12/11/2021

YOUR REF. : 1300022569

REF. DATE : 27/04/2021

### SAMPLE PARTICULARS :

Sampling Plan Ref. No.: 02-11/2021  
Sample Registration Date : 08/11/2021  
Date of Sampling : 01/11/2021 to 02/11/2021  
Time of Sampling : 13:50 Hrs. to 13:50Hrs.  
Analysis Starting Date : 08/11/2021  
Analysis Completion Date : 12/11/2021  
Sample Lab Code : UT/ELS/008/11-2021  
Ambient Air Temperature : 24.4°C to 33.5°C

### AMBIENT AIR QUALITY MONITORING

Location Code : 03  
Sample Location : Near Dandwadi. (10 Meter off to North-East Direction towards DM Room)  
Co-ordinates: N 18°51'02.90"; E 73°12'51.73"  
Collected By : ULTRA TECH  
Height of Sampler : 1.0 Meter  
Sampling Duration : 24 Hours  
Relative Humidity : 46.6 % to 78.5 %

Sr. No.	Test Parameter	Test Method	Test Result	Unit
1.	Sulphur Dioxide (SO <sub>2</sub> )	IS 5182 (Part 02) : 2001	BDL[DL=5]	µg/m <sup>3</sup>
2.	Oxides of Nitrogen (NO <sub>x</sub> )	IS 5182 (Part 06) : 2006	26	µg/m <sup>3</sup>
3.	Particulate Matter (PM <sub>10</sub> )	EPA/625/R-96/010a Method IO-2.1	98	µg/m <sup>3</sup>
4.	Particulate Matter (PM <sub>2.5</sub> )	CPCB Guidelines, Vol-I, NAAQMS/36/2012-13	35	µg/m <sup>3</sup>
5.	Lead (Pb)	IS 5182 (Part 22) : 2004	0.01	µg/m <sup>3</sup>
6.	Carbon Monoxide (CO) <sup>†</sup>	IS 5182 (Part 10): 1999	1.4	mg/m <sup>3</sup>
7.	Ammonia (NH <sub>3</sub> ) <sup>£</sup>	ISC Method 401	54	µg/m <sup>3</sup>
8.	Arsenic (As)	CPCB Guidelines, Vol-I, NAAQMS/36/2012-13	BDL[DL=2]	ng/m <sup>3</sup>

†: Sampling Period 1 Hr.

£: Sampling Period 2 Hrs.

BDL: Below Detection Limit

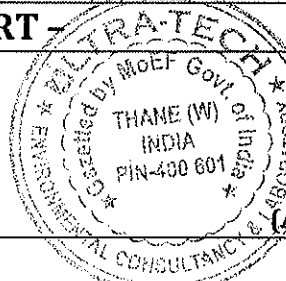
DL: Detection Limit

Opinions / Interpretations: National Ambient Air Quality Monitoring Standard, Part III- Section IV is provided as Annexure-I for your reference.  
(Turnover to find Annexure)

Sampling Equipment Details	Instrument Used	Make & Model	Calibration Status
	Respirable Dust Sampler	Make - POLLTECH; Model- PEM-RDS 9; Sr. No. 918	Valid up to - 20/12/2021
	Fine Dust Sampler	Make - POLLTECH; Model- PEM-ADS 2.5/10µ; Sr. No. 18713	Valid up to - 16/03/2022

Note: 1. This test report refers only to the sample tested.  
2. Monitoring area coming under Industrial areas and observed values are relevant to sample collected only.  
3. This test report may not be reproduced in part, without the permission of this laboratory.  
4. Any correction invalidates this test report.  
5. Weather was Sunny & Clear.  
6. This test report shall be referred along with Test Report No. UT/ELS/REPORT/6593/11-2021 Dated 12/11/2021 for final conclusion.

- END OF REPORT -



For ULTRA TECH,

(Authorized Signatory)

## TEST REPORT

ISSUED TO: M/s. BIRLA CARBON INDIA PRIVATE LIMITED.

Unit: "Patalaganga"

Village: Lohop, Talvali, Patalganga, Tal.: Khalapur,

Dist.: Raigad-410207, Maharashtra, India

REPORT NO. : UT/ELS/REPORT/6592/11-2021

ISSUE DATE : 12/11/2021

YOUR REF. : 1300022569

REF. DATE : 27/04/2021

### SAMPLE PARTICULARS :

Sampling Plan Ref. No. : 02-11/2021  
Sample Registration Date : 08/11/2021  
Date of Sampling : 01/11/2021 to 02/11/2021  
Time of Sampling : 13:50 Hrs. to 13:50Hrs.  
Analysis Starting Date : 08/11/2021  
Analysis Completion Date : 12/11/2021  
Sample Lab Code : UT/ELS/008/11-2021  
Ambient Air Temperature : 24.4°C to 33.5°C

### AMBIENT AIR QUALITY MONITORING

Location Code : 03  
Sample Location : Near Dandwadi. (10 Meter off to North-East Direction towards DM Room)  
Co-ordinates: N 18°51'02.90"; E 73°12'51.73"  
Collected By : ULTRA TECH  
Height of Sampler : 1.0 Meter  
Sampling Duration : 24 Hours  
Relative Humidity : 46.6 % to 78.5 %

Sr. No.	Test Parameter	Test Method	Test Result	Unit
1.	Sulphur Dioxide (SO <sub>2</sub> )	IS 5182 (Part 02) : 2001	BDL[DL=5]	µg/m <sup>3</sup>
2.	Oxides of Nitrogen (NO <sub>x</sub> )	IS 5182 (Part 06) : 2006	26	µg/m <sup>3</sup>
3.	Particulate Matter (PM <sub>10</sub> )	EPA/625/R-96/010a Method IO-2.1	98	µg/m <sup>3</sup>
4.	Particulate Matter (PM <sub>2.5</sub> )	CPCB Guidelines, Vol-I, NAAQMS/36/2012-13	35	µg/m <sup>3</sup>
5.	Lead (Pb)	IS 5182 (Part 22) : 2004	0.01	µg/m <sup>3</sup>
6.	Carbon Monoxide (CO) <sup>†</sup>	IS 5182 (Part 10) : 1999	1.4	mg/m <sup>3</sup>
7.	Ammonia (NH <sub>3</sub> ) <sup>£</sup>	ISC Method 401	54	µg/m <sup>3</sup>
8.	Arsenic (As)	CPCB Guidelines, Vol-I, NAAQMS/36/2012-13	BDL[DL=2]	ng/m <sup>3</sup>

†: Sampling Period 1 Hr.

£: Sampling Period 2 Hrs.

BDL: Below Detection Limit

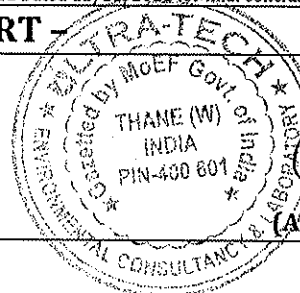
DL: Detection Limit

Opinions / Interpretations: National Ambient Air Quality Monitoring Standard, Part III- Section IV is provided as Annexure-I for your reference.  
(Turnover to find Annexure)

Sampling Equipment Details	Instrument Used	Make & Model	Calibration Status
	Respirable Dust Sampler	Make - POLLTECH; Model- PEM-RDS 9; Sr. No. 918	Valid up to - 20/12/2021
	Fine Dust Sampler	Make - POLLTECH; Model- PEM-ADS 2.5/10µ; Sr. No. 18713	Valid up to - 16/03/2022

Note: 1. This test report refers only to the sample tested.  
2. Monitoring area coming under Industrial areas and observed values are relevant to sample collected only.  
3. This test report may not be reproduced in part, without the permission of this laboratory.  
4. Any correction invalidates this test report.  
5. Weather was Sunny & Clear.  
6. This test report shall be referred along with Test Report No. UT/ELS/REPORT/6593/11-2021 Dated 12/11/2021 for final conclusion.

- END OF REPORT -



For ULTRA TECH,

(Authorized Signatory)

Lab : Survey No. 93/A, Conformity Hissa No.2 G.V.Brothers Bldg., Bata Compound, Khopat, Near Flower Valley, Thane (West) - 400 601, Maharashtra, India.  
Tele : +91 22 2547 49 07 / +91 22 2547 62 17 Email : lab@ultratech.in Visit us at : www.ultratech.in

## TEST REPORT

ISSUED TO: M/s. BIRLA CARBON INDIA PRIVATE LIMITED.

Unit: "Patalaganga"

Village: Lohop, Talvali, Patalganga, Tal.: Khalapur,

Dist.: Raigad-410207, Maharashtra, India

REPORT NO. : UT/ELS/REPORT/6593/11-2021

ISSUE DATE : 12/11/2021

YOUR REF. : 1300022569

REF. DATE : 27/04/2021

### SAMPLE PARTICULARS :

Sampling Plan Ref. No.: : 02-11/2021  
Sample Registration Date : 08/11/2021  
Date of Sampling : 01/11/2021 to 02/11/2021  
Time of Sampling : 13:50 Hrs. to 13:50Hrs.  
Analysis Starting Date : 08/11/2021  
Analysis Completion Date : 12/11/2021  
Sample Lab Code : UT/ELS/008/11-2021  
Ambient Air Temperature : 24.4°C to 33.5°C

### AMBIENT AIR QUALITY MONITORING

Location Code : 03  
Sample Location : Near Dandwadi. (10 Meter off to North-East Direction towards DM Room)  
Co-ordinates: N 18°51'02.90"; E 73°12'51.73"  
Collected By : ULTRA TECH  
Height of Sampler : 1.0 Meter  
Sampling Duration : 24 Hours  
Relative Humidity : 46.6 % to 78.5 %

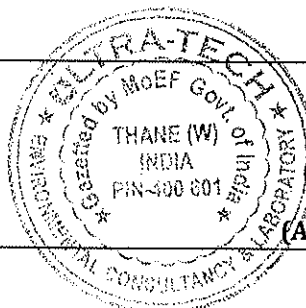
Sr. No.	Test Parameter	Test Method	Test Result	Unit
1.	Ozone (O <sub>3</sub> ) <sup>∞</sup>	IS 5182 (Part 09) : 1974	BDL [DL=10]	µg/m <sup>3</sup>
2.	Benzene (C <sub>6</sub> H <sub>6</sub> ) <sup>∞</sup>	IS 5182 (Part 11) : 2006	1.2	µg/m <sup>3</sup>
3.	Benzo(α)Pyrene (BaP) – Particulate Phase	IS 5182 (Part 12) : 2004	BDL [DL=0.5]	ng/m <sup>3</sup>
4.	Nickel (Ni)	CPCB Guidelines, Vol-I, NAAQMS/36/2012-13	BDL [DL=1]	ng/m <sup>3</sup>
∞: Sampling Period 8 Hrs.				
BDL: Below Detection Limit		DL: Detection Limit		

Opinions / Interpretations: National Ambient Air Quality Monitoring Standard, Part III- Section IV is provided as Annexure-II for your reference.  
(Turnover to find Annexure)

Sampling Equipment Details	Instrument Used	Make & Model	Calibration Status
	Respirable Dust Sampler	Make - POLLTECH; Model- PEM-RDS 9; Sr. No. 918	Valid up to - 20/12/2021
	Fine Dust Sampler	Make - POLLTECH; Model- PEM-ADS 2.5/10µ; Sr. No. 18713	Valid up to - 16/03/2022

- Note:
1. This test report refers only to the sample tested.
  2. Monitoring area coming under Industrial areas and observed values are relevant to sample collected only.
  3. This test report may not be reproduced in part, without the permission of this laboratory.
  4. Any correction invalidates this test report.
  5. Weather was Sunny & Clear.
  6. Parameter is tested are not covered under NABL scope.
  7. This test report shall be referred along with Test Report No. UT/ELS/REPORT/6592/11-2021 Dated 12/11/2021 for final conclusion.

- END OF REPORT -



For ULTRA TECH,

(Authorized Signatory)

Lab : Survey No. 93/A, Conformity Hissa No.2 G.V.Brothers Bldg., Bata Compound, Khopat, Near Flower Valley, Thane (West) - 400 601, Maharashtra, India.  
Tele : +91 22 2547 49 07 / +91 22 2547 62 17 Email : lab@ultratech.in Visit us at : www.ultratech.in

## TEST REPORT

ISSUED TO: M/s. BIRLA CARBON INDIA PRIVATE LIMITED.

Unit: "Patalaganga"

Village: Lohop, Talvali, Patalganga, Tal.: Khalapur,

Dist.: Raigad-410207, Maharashtra, India

REPORT NO. : UT/ELS/REPORT/6594/11-2021

ISSUE DATE : 12/11/2021

YOUR REF. : 1300022569

REF. DATE : 27/04/2021

### SAMPLE PARTICULARS :

Sampling Plan Ref. No.: 02-11/2021  
Sample Registration Date : 08/11/2021  
Date of Sampling : 01/11/2021 to 02/11/2021  
Time of Sampling : 13:15 Hrs. to 13:15Hrs.  
Analysis Starting Date : 08/11/2021  
Analysis Completion Date : 12/11/2021  
Sample Lab Code : UT/ELS/006/11-2021  
Ambient Air Temperature : 25.1°C to 34.7°C

### AMBIENT AIR QUALITY MONITORING

Location Code : 04  
Sample Location : Material gate (10 Meter off to North-East Direction from Security Cabin)  
Co-ordinates: N 18°51'11.58"; E 73°12'43.82"  
Collected By : ULTRA TECH  
Height of Sampler : 1.0 Meter  
Sampling Duration : 24 Hours  
Relative Humidity : 47.2 % to 79.7 %

Sr. No.	Test Parameter	Test Method	Test Result	Unit
1.	Sulphur Dioxide (SO <sub>2</sub> )	IS 5182 (Part 02) : 2001	BDL[DL=5]	µg/m <sup>3</sup>
2.	Oxides of Nitrogen (NO <sub>x</sub> )	IS 5182 (Part 06) : 2006	25	µg/m <sup>3</sup>
3.	Particulate Matter (PM <sub>10</sub> )	EPA/625/R-96/010a Method IO-2.1	83	µg/m <sup>3</sup>
4.	Particulate Matter (PM <sub>2.5</sub> )	CPCB Guidelines, Vol-I, NAAQMS/36/2012-13	28	µg/m <sup>3</sup>
5.	Lead (Pb)	IS 5182 (Part 22) : 2004	0.02	µg/m <sup>3</sup>
6.	Carbon Monoxide (CO) <sup>†</sup>	IS 5182 (Part 10): 1999	1.2	mg/m <sup>3</sup>
7.	Ammonia (NH <sub>3</sub> ) <sup>£</sup>	ISC Method 401	44	µg/m <sup>3</sup>
8.	Arsenic (As)	CPCB Guidelines, Vol-I, NAAQMS/36/2012-13	BDL[DL=2]	ng/m <sup>3</sup>

†: Sampling Period 1 Hr.

£: Sampling Period 2 Hrs.

BDL: Below Detection Limit

DL: Detection Limit

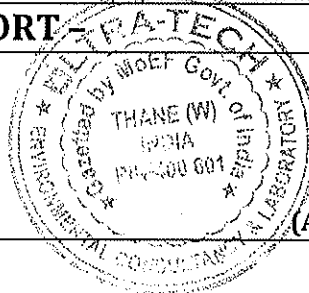
Opinions / Interpretations: National Ambient Air Quality Monitoring Standard, Part III- Section IV is provided as Annexure-I for your reference.  
(Turnover to find Annexure)

Sampling Equipment Details	Instrument Used	Make & Model	Calibration Status
	Respirable Dust Sampler	Make - POLLTECH; Model- PEM-RDS 8 NL BM; Sr. No. 614	Valid up to - 03/10/2022
	Fine Dust Sampler	Make - POLLTECH; Model- PEM-ADS 2.5/10µ; Sr. No. 18513	Valid up to - 02/03/2022

Note: 1. This test report refers only to the sample tested.  
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3. This test report may not be reproduced in part, without the permission of this laboratory.  
4. Any correction invalidates this test report.  
5. Weather was Sunny & Clear.  
6. This test report shall be referred along with Test Report No. UT/ELS/REPORT/6595/11-2021 Dated 12/11/2021 for final conclusion.

- END OF REPORT

For ULTRA TECH,



(Authorized Signatory)

Lab : Survey No. 93/A, Conformity Hissa No.2 G.V.Brothers Bldg., Bata Compound, Khopat, Near Flower Valley, Thane (West) - 400 601, Maharashtra, India.  
Tele : +91 22 2547 49 07 / +91 22 2547 62 17 Email : lab@ultratech.in Visit us at : www.ultratech.in

## TEST REPORT

**ISSUED TO: M/s. BIRLA CARBON INDIA PRIVATE LIMITED.****Unit: "Patalaganga"****Village: Lohop, Talvali, Patalganga, Tal.: Khalapur,****Dist.: Raigad-410207, Maharashtra, India****REPORT NO. : UT/ELS/REPORT/6595/11-2021****ISSUE DATE : 12/11/2021****YOUR REF. : 1300022569****REF. DATE : 27/04/2021****SAMPLE PARTICULARS :**

**Sampling Plan Ref. No.:** : 02-11/2021  
**Sample Registration Date** : 08/11/2021  
**Date of Sampling** : 01/11/2021 to 02/11/2021  
**Time of Sampling** : 13:15 Hrs. to 13:15Hrs.  
**Analysis Starting Date** : 08/11/2021  
**Analysis Completion Date** : 12/11/2021  
**Sample Lab Code** : UT/ELS/006/11-2021  
**Ambient Air Temperature** : 25.1°C to 34.7°C

**AMBIENT AIR QUALITY MONITORING**

**Location Code** : 04  
**Sample Location** : Material gate (10 Meter off to North-East Direction from Security Cabin)  
Co-ordinates: N 18°51'11.58"; E 73°12'43.82"  
**Collected By** : ULTRA TECH  
**Height of Sampler** : 1.0 Meter  
**Sampling Duration** : 24 Hours  
**Relative Humidity** : 47.2 % to 79.7 %

Sr. No.	Test Parameter	Test Method	Test Result	Unit
1.	Ozone (O <sub>3</sub> ) <sup>00</sup>	IS 5182 (Part 09) : 1974	BDL [DL=10]	µg/m <sup>3</sup>
2.	Benzene (C <sub>6</sub> H <sub>6</sub> ) <sup>00</sup>	IS 5182 (Part 11) : 2006	1.2	µg/m <sup>3</sup>
3.	Benzo(α)Pyrene (BaP) - Particulate Phase	IS 5182 (Part 12) : 2004	BDL [DL=0.5]	ng/m <sup>3</sup>
4.	Nickel (Ni)	CPCB Guidelines, Vol-I, NAAQMS/36/2012-13	BDL [DL=1]	ng/m <sup>3</sup>
∞: Sampling Period 8 Hrs.				
BDL: Below Detection Limit		DL: Detection Limit		

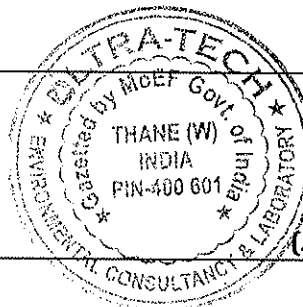
**Opinions / Interpretations:** National Ambient Air Quality Monitoring Standard, Part III- Section IV is provided as Annexure-II for your reference.  
(Turnover to find Annexure)

Sampling Equipment Details	Instrument Used	Make & Model	Calibration Status
	Respirable Dust Sampler	Make - POLLTECH; Model- PEM-RDS 8 NL BM; Sr. No. 614	Valid up to - 03/10/2022
	Fine Dust Sampler	Make - POLLTECH; Model- PEM-ADS 2.5/10µ; Sr. No. 18513	Valid up to - 02/03/2022

**Note:**

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2. Monitoring area coming under Industrial areas and observed values are relevant to sample collected only.
3. This test report may not be reproduced in part, without the permission of this laboratory.
4. Any correction invalidates this test report.
5. Weather was Sunny & Clear.
6. Parameter is tested are not covered under NABL scope.
7. This test report shall be referred along with Test Report No. UT/ELS/REPORT/6594/11-2021 Dated 12/11/2021 for final conclusion.

**- END OF REPORT -**



For ULTRA TECH,

*(Signature)*  
(Authorized Signatory)

## COMPOSITE REPORT

### Analysis Results Summary of Ambient Air Quality Monitoring for November 2021

#### [Monitoring Frequency-Monthly]

PARTICULARS					SAMPLING DETAILS			
					Tank Form area	Switch Yard Area	Near Dandwadi	Material Gate
Date Of Sampling					01/11/2021 to 02/11/2021	01/11/2021 to 02/11/2021	01/11/2021 to 02/11/2021	01/11/2021 to 02/11/2021
Sample Lab Code					UT/ELS/007/11-2021	UT/ELS/009/11-2021	UT/ELS/008/11-2021	UT/ELS/006/11-2021
Report No/s.					UT/ELS/REPORT/6588/11-2021 & UT/ELS/REPORT/6589/11-2021	UT/ELS/REPORT/6590/11-2021 & UT/ELS/REPORT/6591/11-2021	UT/ELS/REPORT/6592/11-2021 & UT/ELS/REPORT/6593/11-2021	UT/ELS/REPORT/6594/11-2021 & UT/ELS/REPORT/6595/11-2021
Sr. No	PARAMETER	TWA	NAAQS	UNIT				
01.	Sulphur Dioxide (SO <sub>2</sub> )	Annual*	50	µg/m <sup>3</sup>	BDL [DL=5]	BDL [DL=5]	BDL [DL=5]	BDL [DL=5]
		24 Hours**	80					
02.	Oxides of Nitrogen (NO <sub>x</sub> )	Annual*	20	µg/m <sup>3</sup>	21	28	26	25
		24 Hours**	80					
03.	Particulate Matter (PM <sub>10</sub> )	Annual*	60	µg/m <sup>3</sup>	92	88	98	83
		24 Hours**	100					
04.	Particulate Matter (PM <sub>2.5</sub> )	Annual*	40	µg/m <sup>3</sup>	31	33	35	28
		24 Hours**	60					
05.	Ozone (O <sub>3</sub> )	08 Hours*	100	µg/m <sup>3</sup>	BDL [DL=10]	BDL [DL=10]	BDL [DL=10]	BDL [DL=10]
		01 Hours**	180					
06.	Lead (Pb)	Annual*	0.50	µg/m <sup>3</sup>	BDL [DL=0.01]	0.02	0.01	0.02
		24 Hours**	1.0					
07.	Carbon Monoxide (CO)	08 Hours**	02	mg/m <sup>3</sup>	1.3	1.3	1.4	1.2
		01 Hours**	04					
08.	Ammonia (NH <sub>3</sub> )	Annual*	100	µg/m <sup>3</sup>	47	42	54	44
		24 Hours**	400					
09.	Benzene (C <sub>6</sub> H <sub>6</sub> )	Annual*	05	µg/m <sup>3</sup>	1.1	1.3	1.2	1.2
10.	Benzo(a)Pyrene (BaP) - Particulate Phase	Annual*	01	ng/m <sup>3</sup>	BDL [DL=0.5]	BDL [DL=0.5]	BDL [DL=0.5]	BDL [DL=0.5]
11.	Arsenic (As)	Annual*	06	ng/m <sup>3</sup>	BDL [DL=2]	BDL [DL=2]	BDL [DL=2]	BDL [DL=2]
12.	Nickel (Ni)	Annual*	20	ng/m <sup>3</sup>	BDL [DL=1]	BDL [DL=1]	BDL [DL=1]	BDL [DL=1]

BDL: Below Detection Limit

DL: Detection Limit

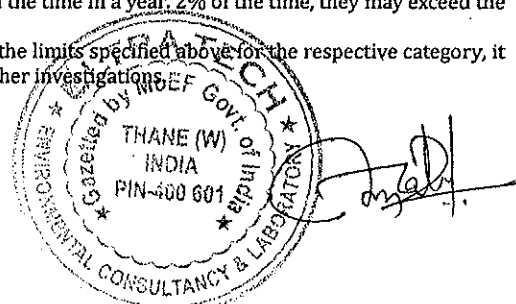
TWA: Time Weighted Average

NAAQS: NATIONAL AMBIENT AIR QUALITY STANDARDS, PART III-SECTION IV [The Gazette of India with Effect from Wednesday, November 18, 2009/KARTIKA 27, 1931]

\* Annual arithmetic mean of minimum 104 measurements in a year at a particular site taken twice a week 24 hourly at uniform intervals.

\*\* 24 hourly or 8 hourly or 1 hourly monitored values, as applicable, shall be complied with 98% of the time in a year. 2% of the time, they may exceed the limits but not on two consecutive days of monitoring.

NOTE: Whenever and wherever monitoring results on two consecutive days of monitoring exceed the limits specified above for the respective category, it shall be considered adequate reason to institute regular or continuous monitoring and further investigations.





TC-5600

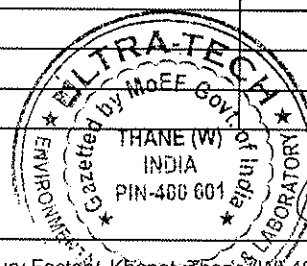
ISO 9001 : 2015

ISO 45001 : 2018

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**TEST REPORT****ISSUED TO: M/s. BIRLA CARBON INDIA PRIVATE LIMITED.****REPORT NO. : UT/ELS/REPORT/6635/11-2021****Unit: "Patalaganga"****ISSUE DATE : 12/11/2021****Village: Lohop, Talvali, Patalganga, Tal.: Khalapur,****YOUR REF. : 1300022569****Dist: Raigad-410207, Maharashtra, India****REF. DATE : 27/04/2021****SAMPLE PARTICULARS :****SOURCE NOISE LEVEL MONITORING****Sampling Plan Ref. No. : 02-11/2021****Sample Lab Code : UT/ELS/029/11-2021****Date of Monitoring : 02/11/2021****Survey Done By : ULTRA TECH****Average Temperature : 30.5 °C****Relative Humidity : 76.9 %****Wind Speed : 0.5 m/s****Weather Condition : Clear****Noise Source Details : D. G. Set of Capacity 1875 KVA Installed in Acoustic Room Mounted on Reinforced Concrete Cement Base.****Make: Transfer, Model No.: GC026/20, Sr. No.: 820080557****Dimensions of D. G. Set: 11.0 meter X 10.0 Meter X 8.0 Meter (L X B X H)****Fuel Used: HSD, Fuel Consumption: 450 liter/hours.**

Sr. No.	Location	Noise Level Reading in dB(A)
1	Measurement Point No. 01 (In front of Northern Face of D. G. Set)	
	i. At 0.5 meter distance from D. G. Set (When Acoustic Room Is Opened)	101.8
	ii. At 0.5 meter distance from D. G. Set (When Acoustic Room Is Closed)	73.6
2	Measurement Point No. 02 (In front of Northern Face of D. G. Set)	
	i. At 0.5 meter distance from D. G. Set (When Acoustic Room Is Opened)	103.6
	ii. At 0.5 meter distance from D. G. Set (When Acoustic Room Is Closed)	74.3
3	Measurement Point No. 03 (In front of Western Face of D. G. Set)	
	i. At 0.5 meter distance from D. G. Set (When Acoustic Room Is Opened)	102.4
	ii. At 0.5 meter distance from D. G. Set (When Acoustic Room Is Closed)	75.1
4	Measurement Point No. 04 (In front of Southern Face of D. G. Set)	
	i. At 0.5 meter distance from D. G. Set (When Acoustic Room Is Opened)	101.9
	ii. At 0.5 meter distance from D. G. Set (When Acoustic Room Is Closed)	74.2
5	Measurement Point No. 05 (In front of Southern Face of D. G. Set)	
	i. At 0.5 meter distance from D. G. Set (When Acoustic Room Is Opened)	100.8
	ii. At 0.5 meter distance from D. G. Set (When Acoustic Room Is Closed)	72.9
6	Measurement Point No. 06 (In front of Eastern Face of D. G. Set)	
	i. At 0.5 meter distance from D. G. Set (When Acoustic Room Is Opened)	101.9
	ii. At 0.5 meter distance from D. G. Set (When Acoustic Room Is Closed)	73.6
7	Measurement Point No. 07 (On top of D. G. Set)	
	i. At 0.5 meter distance from D. G. Set (When Acoustic Room Is Opened)	No Approach
	ii. At 0.5 meter distance from D. G. Set (When Acoustic Room Is Closed)	No Approach
8	Measurement Point No. 08 (On top of D. G. Set)	
	i. At 0.5 meter distance from D. G. Set (When Acoustic Room Is Opened)	No Approach
	ii. At 0.5 meter distance from D. G. Set (When Acoustic Room Is Closed)	No Approach
9	Measurement Point No. 09 (In front of North-Eastern Corner of D. G. Set)	
	i. At 0.5 meter distance from D. G. Set (When Acoustic Room Is Opened)	102.7
	ii. At 0.5 meter distance from D. G. Set (When Acoustic Room Is Closed)	74.1



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**TEST REPORT****ISSUED TO: M/s. BIRLA CARBON INDIA PRIVATE LIMITED.****REPORT NO. : UT/ELS/REPORT/6635/11-2021****Unit: "Patalaganga"****ISSUE DATE : 12/11/2021****Village: Lohop, Talvali, Patalganga, Tal.: Khalapur,****YOUR REF. : 1300022569****Dist.: Raigad-410207, Maharashtra, India****REF. DATE : 27/04/2021****SAMPLE PARTICULARS :****SOURCE NOISE LEVEL MONITORING****Sampling Plan Ref. No. : 02-11/2021****Sample Lab Code : UT/ELS/029/11-2021****Date of Monitoring : 02/11/2021****Survey Done By : ULTRA TECH****Average Temperature : 30.5 °C****Relative Humidity : 76.9 %****Wind Speed : 0.5 m/s****Weather Condition : Clear****Noise Source Details : D. G. Set of Capacity 1875 KVA Installed in Acoustic Room Mounted on Reinforced Concrete Cement Base.****Make: Transfer, Model No.: GC026/20, Sr. No.: 820080557****Dimensions of D. G. Set: 11.0 meter X 10.0 Meter X 8.0 Meter (L X B X H)****Fuel Used: HSD, Fuel Consumption: 450 liter/hours.**

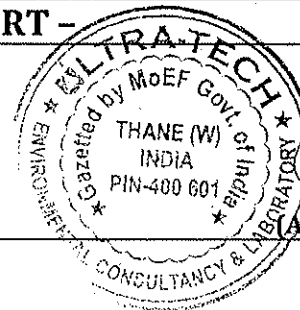
Sr. No.	Location	Noise Level Reading in dB(A)
10	<b>Measurement Point No. 10 (in front of North-Western Corner of D. G. Set)</b>	
	i. At 0.5 meter distance from D. G. Set (When Acoustic Room Is Opened)	101.6
	ii. At 0.5 meter distance from D. G. Set (When Acoustic Room Is Closed)	73.8
11	<b>Measurement Point No. 11 (in front of South-Western Corner of D. G. Set)</b>	
	i. At 0.5 meter distance from D. G. Set (When Acoustic Room Is Opened)	102.5
	ii. At 0.5 meter distance from D. G. Set (When Acoustic Room Is Closed)	74.9
12	<b>Measurement Point No. 12 (in front of South-Eastern Corner of D. G. Set)</b>	
	i. At 0.5 meter distance from D. G. Set (When Acoustic Room Is Opened)	101.4
	ii. At 0.5 meter distance from D. G. Set (When Acoustic Room Is Closed)	73.6
<b>Average Noise Level of D. G. Set under study at 0.5 meter distance - While Acoustic Room opened</b>		<b>102.1</b>
<b>Average Noise Level of D. G. Set under study at 0.5 meter distance - While Acoustic Room closed</b>		<b>74.0</b>

**Opinions / Interpretations:** The insertion loss of 28.1 dB(A) achieved at a distance 0.5 meter away from an Acoustic Room resulting in source noise level being reduced to 74.0 dB(A) from 102.1 dB(A) due to acoustic effect of a room which comply with standard requirement. [Refer Noise Limit for Generator Sets run with Diesel were notified by Environment (Protection) second Amendment Rules vide GSR 371(E), dated 17th May 2002 at serial no.94 and its amendments under the Environment (Protection) Act, 1986].

**Note:** 1. Monitoring area coming under Industrial Area.  
 2. Reference parallelepiped method is used to measure noise level, detailed description of location and measurement points is presented in schematic diagram as Annexure-II

Sampling Equipment Details	Instrument Used	Make & Model	Calibration Status
	Sound Level Meter	Make -3 M solution; Model -Se-402 Class 2, Sr. No. SE40210809	Valid up to - 30/12/2021

**Note:** 1. This test report refers only to the monitoring conducted.  
 2. This test report may not be reproduced in part, without the permission of this laboratory.  
 3. Any correction invalidates this test report.

**- END OF REPORT -**

For ULTRATECH,

(Authorized Signatory)



TC-5600

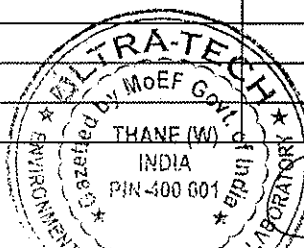
ISO 9001 : 2015

ISO 45001 : 2018

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Tele : +91 22 2547 49 07 / +91 22 2547 62 17 Email : lab@ultratech.in Visit us at : www.ultratech.in

**TEST REPORT****ISSUED TO: M/s. BIRLA CARBON INDIA PRIVATE LIMITED.****REPORT NO. : UT/ELS/REPORT/6636/11-2021****Unit: "Patalaganga"****ISSUE DATE : 12/11/2021****Village: Lohop, Talvali, Patalganga, Tal.: Khalapur,****YOUR REF. : 1300022569****Dist.: Raigad-410207, Maharashtra, India****REF. DATE : 27/04/2021****SAMPLE PARTICULARS :****Sampling Plan Ref. No. : 02-11/2021****Date of Monitoring : 02/11/2021****Ambient Temperature : 30.4 °C****Wind Speed : 0.5 m/s****Noise Source Details :****D. G. Set of Capacity 250 KVA (River Side) with Acoustic Enclosure Mounted on Reinforced Concrete Cement Base****Make: Kirloskar, Model No.: 250 DWS/2009/1694, Sr. No.: 8000002087-2092****Dimensions of D. G. Set: 4.5 meter X 1.7 Meter X 2.5 Meter (L X B X H)****Fuel Used: Diesel, Fuel Consumption: 25 liter/hours.****SOURCE NOISE LEVEL QUALITY MONITORING****Sample Lab Code : UT/ELS/028/11-2021****Survey Done By : ULTRA TECH****Relative Humidity : 76.8 %****Weather Condition : Clear**

Sr. No.	Location	Noise Level Reading in dB(A)
1	Measurement Point No. 01 (in front of Southern Face of D. G. Set)	
	iii. At 0.5 meter distance from D. G. Set (When Acoustic Room Is Opened)	94.7
	iv. At 0.5 meter distance from D. G. Set (When Acoustic Room Is Closed)	73.4
2	Measurement Point No. 02 (in front of Southern Face of D. G. Set)	
	iii. At 0.5 meter distance from D. G. Set (When Acoustic Room Is Opened)	95.8
	iv. At 0.5 meter distance from D. G. Set (When Acoustic Room Is Closed)	74.3
3	Measurement Point No. 03 (in front of Eastern Face of D. G. Set)	
	iii. At 0.5 meter distance from D. G. Set (When Acoustic Room Is Opened)	93.6
	iv. At 0.5 meter distance from D. G. Set (When Acoustic Room Is Closed)	72.9
4	Measurement Point No. 04 (in front of Northern Face of D. G. Set)	
	iii. At 0.5 meter distance from D. G. Set (When Acoustic Room Is Opened)	94.7
	iv. At 0.5 meter distance from D. G. Set (When Acoustic Room Is Closed)	71.5
5	Measurement Point No. 05 (in front of Northern Face of D. G. Set)	
	iii. At 0.5 meter distance from D. G. Set (When Acoustic Room Is Opened)	95.3
	iv. At 0.5 meter distance from D. G. Set (When Acoustic Room Is Closed)	74.8
6	Measurement Point No. 06 (in front of Western Face of D. G. Set)	
	iii. At 0.5 meter distance from D. G. Set (When Acoustic Room Is Opened)	93.7
	iv. At 0.5 meter distance from D. G. Set (When Acoustic Room Is Closed)	73.6
7	Measurement Point No. 07 (On top of D. G. Set)	
	iii. At 0.5 meter distance from D. G. Set (When Acoustic Room Is Opened)	94.4
	iv. At 0.5 meter distance from D. G. Set (When Acoustic Room Is Closed)	72.4
8	Measurement Point No. 08 (On top of D. G. Set)	
	iii. At 0.5 meter distance from D. G. Set (When Acoustic Room Is Opened)	91.4
	iv. At 0.5 meter distance from D. G. Set (When Acoustic Room Is Closed)	75.1
9	Measurement Point No. 09 (in front of South-Western Corner of D. G. Set)	
	iii. At 0.5 meter distance from D. G. Set (When Acoustic Room Is Opened)	92.8
	iv. At 0.5 meter distance from D. G. Set (When Acoustic Room Is Closed)	74.8



## TEST REPORT

ISSUED TO: M/s. BIRLA CARBON INDIA PRIVATE LIMITED.

Unit: "Patalaganga"

Village: Lohop, Talvali, Patalganga, Tal.: Khalapur,

Dist: Raigad-410207, Maharashtra, India

REPORT NO. : UT/ELS/REPORT/6636/11-2021

ISSUE DATE : 12/11/2021

YOUR REF. : 1300022569

REF. DATE : 27/04/2021

### SAMPLE PARTICULARS :

Sampling Plan Ref. No. : 02-11/2021

Date of Monitoring : 02/11/2021

Ambient Temperature : 30.4 °C

Wind Speed : 0.5 m/s

Noise Source Details :

D. G. Set of Capacity 250 KVA (River Side) with Acoustic Enclosure Mounted on Reinforced Concrete Cement Base

Make: Kirloskar, Model No.: 250 DWS/2009/1694, Sr. No.: 8000002087-2092

Dimensions of D. G. Set: 4.5 meter X 1.7 Meter X 2.5 Meter (L X B X H)

Fuel Used: Diesel, Fuel Consumption: 25 liter/hours.

### SOURCE NOISE LEVEL QUALITY MONITORING

Sample Lab Code : UT/ELS/028/11-2021

Survey Done By : ULTRA TECH

Relative Humidity : 76.8 %

Weather Condition : Clear

Sr. No.	Location	Noise Level Reading in dB(A)
10	Measurement Point No. 10 (in front of South-Eastern Corner of D. G. Set)	
	iii. At 0.5 meter distance from D. G. Set (When Acoustic Room Is Opened)	93.6
	iv. At 0.5 meter distance from D. G. Set (When Acoustic Room Is Closed)	73.6
11	Measurement Point No. 11 (in front of North-Eastern Corner of D. G. Set)	
	iii. At 0.5 meter distance from D. G. Set (When Acoustic Room Is Opened)	92.7
	iv. At 0.5 meter distance from D. G. Set (When Acoustic Room Is Closed)	74.7
12	Measurement Point No. 12 (in front of North-Western Corner of D. G. Set)	
	iii. At 0.5 meter distance from D. G. Set (When Acoustic Room Is Opened)	91.5
	iv. At 0.5 meter distance from D. G. Set (When Acoustic Room Is Closed)	73.6
Average Noise Level of D. G. Set under study at 0.5 meter distance - While Acoustic Room opened		93.8
Average Noise Level of D. G. Set under study at 0.5 meter distance - While Acoustic Room closed		73.8

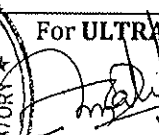
**Opinions / Interpretations:** The insertion loss of 20.0 dB(A) achieved at a distance 0.5 meter away from an Acoustic Enclosure resulting in source noise level being reduced to 73.8 dB(A) from 93.8 dB(A) due to acoustic effect of an enclosure which comply with standard requirement. [Refer Noise Limit for Generator Sets run with Diesel were notified by Environment (Protection) second Amendment Rules vide GSR 371(E), dated 17th May 2002 at serial no.94 and its amendments under the Environment (Protection) Act, 1986].

**Note:** 1. Monitoring area coming under Industrial Area.  
2. Reference parallelepiped method is used to measure noise level, detailed description of location and measurement points is presented in schematic diagram as Annexure-II

Sampling Equipment Details	Instrument Used	Make & Model	Calibration Status
	Sound Level Meter	Make - 3 M solution; Model - Se-402 Class 2, Sr. No. SE40210809	Valid up to - 30/12/2021

**Note:** 1. This test report refers only to the monitoring conducted.  
2. This test report may not be reproduced in part, without the permission of this laboratory.  
3. Any correction invalidates this test report.

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For ULTRA TECH,  
  
(Authorized Signatory)



TC-5600

ISO 9001 : 2015

ISO 45001 : 2018

Lab : Survey No. 93/A, Conformity Hissa No.2 G.V.Brothers Bldg., Bata Compound, Khopat, Near Flower Valley, Thane (West) - 400 601, Maharashtra, India.  
Tele : +91 22 2547 49 07 / +91 22 2547 62 17 Email : lab@ultratech.in Visit us at : www.ultratech.in

## TEST REPORT

ISSUED TO: M/s. BIRLA CARBON INDIA PRIVATE LIMITED.

Unit: "Patalaganga"

Village: Lohop, Talvali, Patalganga, Tal.: Khalapur,

Dist.: Raigad-410207, Maharashtra, India

REPORT NO. : UT/ELS/REPORT/6606/11-2021

ISSUE DATE : 12/11/2021

YOUR REF. : 1300022569

REF. DATE : 27/04/2021

### SAMPLE PARTICULARS

Sampling Plan Ref. No. : 02-11/2021

Date of Monitoring : 01/11/2021 to 02/11/2021

### AMBIENT NOISE LEVEL MONITORING

Sample Lab Code : UT/ELS/010/11-2021

Survey Done By : ULTRA TECH

Sr. No.	Location	Noise Level Reading in dB(A) Leq							
		Time (Hrs)	Day dB(A)			Time (Hrs)	Night dB(A)		
			Leq	L <sub>min</sub>	L <sub>max</sub>		Leq	L <sub>min</sub>	L <sub>max</sub>
01.	Near Material Gate Co-ordinates: N-18°51'10.73", E-73°12'43.94"	06:00 to 07:00	62.0	57.8	71.0	22:00 to 23:00	60.1	53.3	69.5
		07:00 to 08:00	66.4	59.1	77.9	23:00 to 00:00	68.6	55.3	82.0
		08:00 to 09:00	68.7	59.7	81.3	00:00 to 01:00	58.6	54.4	66.1
		09:00 to 10:00	63.3	58.0	74.3	01:00 to 02:00	66.3	54.1	77.0
		10:00 to 11:00	73.8	60.5	86.2	02:00 to 03:00	67.1	57.5	78.6
		11:00 to 12:00	68.8	57.7	80.8	03:00 to 04:00	68.6	55.3	81.7
		12:00 to 13:00	67.1	57.9	79.4	04:00 to 05:00	67.0	53.3	81.6
		13:00 to 14:00	65.1	59.6	74.8	05:00 to 06:00	59.7	54.5	69.4
		14:00 to 15:00	70.3	61.1	82.4	--	--	--	--
		15:00 to 16:00	66.9	59.4	78.3	--	--	--	--
		16:00 to 17:00	69.0	60.4	81.1	--	--	--	--
		17:00 to 18:00	66.4	59.1	77.8	--	--	--	--
		18:00 to 19:00	65.4	60.0	74.6	--	--	--	--
		19:00 to 20:00	67.9	61.5	78.9	--	--	--	--
		20:00 to 21:00	69.8	59.5	79.8	--	--	--	--
		21:00 to 22:00	68.1	59.6	79.3	--	--	--	--
		L <sub>10</sub>	69.3			Limits in dB(A) Leq as per THE NOISE POLLUTION (REGULATION AND CONTROL) RULES, 2000 (See rule 3(1) and 4(1)) Ambient Air Quality Standards in respect of Noise			
		L <sub>50</sub>	62.1						
		L <sub>90</sub>	59.4						
		Day Leq	68.3						
		Night Leq	66.0						

### Opinions / Interpretations:

The observed values for Leq dB(A) for Day Time & Night Time are within the standard limits as per Ambient Air Quality Standards in respect of Noise prescribed in The Noise Pollution (Regulation and Control) Rules, 2000 for Industrial Zone.

### Note:

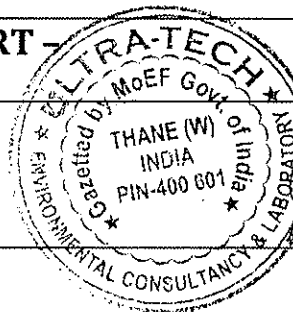
1. Monitoring area coming under Industrial Zone.
2. Day Time - 06:00 Hrs to 22:00 Hrs and Night Time - 22:00 Hrs to 06:00 Hrs.

Sampling Equipment Details	Instrument Used	Make & Model	Calibration Status
	Sound Level Meter	Make - LUTORN; Model - SL4033SDSr. No. Q665560	Valid up to - 13/10/2022

### Note:

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For ULTRA TECH,

Authorized Signatory



TC-5600

ISO 9001 : 2015  
ISO 45001 : 2018

Lab : Survey No. 93/A, Conformity Hissa No.2 G.V.Brothers Bldg., Bata Compound, Khopat, Near Flower Valley, Thane (West) - 400 601, Maharashtra, India.  
Tele : +91 22 2547 49 07 / +91 22 2547 62 17 Email : lab@ultratech.in Visit us at : www.ultratech.in

## TEST REPORT

ISSUED TO: M/s. BIRLA CARBON INDIA PRIVATE LIMITED.

Unit: "Patalaganga"

Village: Lohop, Talvali, Patalganga, Tal.: Khalapur,

Dist.: Raigad-410207, Maharashtra, India

REPORT NO. : UT/ELS/REPORT/6607/11-2021

ISSUE DATE : 12/11/2021

YOUR REF. : 1300022569

REF. DATE : 27/04/2021

### SAMPLE PARTICULARS :

Sampling Plan Ref. No. : 02-11/2021

Date of Monitoring : 01/11/2021 to 02/11/2021

### AMBIENT NOISE LEVEL MONITORING

Sample Lab Code : UT/ELS/013/11-2021

Survey Done By : ULTRA TECH

Sr. No.	Location	Noise Level Reading in dB(A) Leq							
		Time (Hrs)	Day dB(A)			Time (Hrs)	Night dB(A)		
			L <sub>eq</sub>	L <sub>min</sub>	L <sub>max</sub>		L <sub>eq</sub>	L <sub>min</sub>	L <sub>max</sub>
01.	Near Switch Yard Area Co-ordinates: N-18°51'11.22", E-73°12'48.88"	06:00 to 07:00	61.5	57.4	68.6	22:00 to 23:00	63.7	55.9	75.6
		07:00 to 08:00	63.1	56.1	73.2	23:00 to 00:00	58.5	56.0	66.2
		08:00 to 09:00	64.4	57.2	75.0	00:00 to 01:00	57.8	55.7	63.8
		09:00 to 10:00	64.5	55.6	76.0	01:00 to 02:00	56.6	55.2	60.0
		10:00 to 11:00	66.0	57.0	77.6	02:00 to 03:00	56.7	55.3	58.8
		11:00 to 12:00	64.6	55.4	75.9	03:00 to 04:00	56.3	55.1	59.2
		12:00 to 13:00	61.9	54.5	71.6	04:00 to 05:00	56.3	55.1	60.2
		13:00 to 14:00	59.5	51.9	66.5	05:00 to 06:00	58.1	55.6	65.7
		14:00 to 15:00	63.7	53.9	75.1	--	--	--	--
		15:00 to 16:00	64.6	51.7	76.8	--	--	--	--
		16:00 to 17:00	63.6	51.8	75.3	--	--	--	--
		17:00 to 18:00	65.8	52.0	77.5	--	--	--	--
		18:00 to 19:00	64.4	56.9	74.8	--	--	--	--
		19:00 to 20:00	64.5	55.6	75.6	--	--	--	--
		20:00 to 21:00	60.9	54.4	72.4	--	--	--	--
		21:00 to 22:00	57.8	53.5	65.8	--	--	--	--
		L <sub>10</sub>	64.8			Limits in dB(A) Leq as per THE NOISE POLLUTION (REGULATION AND CONTROL) RULES, 2000 (See rule 3(1) and 4(1)) Ambient Air Quality Standards in respect of Noise			
		L <sub>50</sub>	58.3						
		L <sub>90</sub>	56.0						
		Day Leq	63.7						
		Night Leq	58.8						

### Opinions / Interpretations:

The observed values for LeqdB(A) for Day Time & Night Time are within the standard limits as per Ambient Air Quality Standards in respect of Noise prescribed in The Noise Pollution (Regulation and Control) Rules, 2000 for Industrial Zone.

### Note:

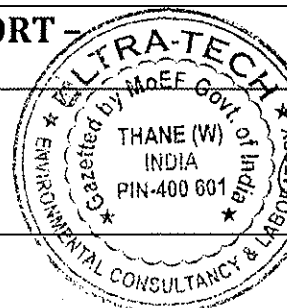
1. Monitoring area coming under Industrial Zone.
2. Day Time - 06:00 Hrs to 22:00 Hrs and Night Time - 22:00 Hrs to 06:00 Hrs.

Sampling Equipment Details	Instrument Used	Make & Model	Calibration Status
	Sound Level Meter	Make - Lutron; Model - SL4033SD Sr. No. Q660350	Valid up to - 13/10/2022

### Note:

1. This test report refers only to the monitoring conducted.
2. This test report may not be reproduced in part, without the permission of this laboratory.
3. Any correction invalidates this test report.

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For ULTRA TECH,

Authorized Signatory

## TEST REPORT

ISSUED TO: M/s. BIRLA CARBON INDIA PRIVATE LIMITED.

Unit: "Patalaganga"

Village: Lohop, Talvali, Patalganga, Tal.: Khalapur,

Dist.: Raigad-410207, Maharashtra, India

REPORT NO. : UT/ELS/REPORT/6608/11-2021

ISSUE DATE : 12/11/2021

YOUR REF. : 1300022569

REF. DATE : 27/04/2021

### SAMPLE PARTICULARS

Sampling Plan Ref. No. : 02-11/2021

Date of Monitoring : 01/11/2021 to 02/11/2021

### AMBIENT NOISE LEVEL MONITORING

Sample Lab Code : UT/ELS/012/11-2021

Survey Done By : ULTRA TECH

Sr. No.	Location	Noise Level Reading in dB(A) Leq							
		Time (Hrs)	Day dB(A)			Time (Hrs)	Night dB(A)		
			Leq	L <sub>min</sub>	L <sub>max</sub>		Leq	L <sub>min</sub>	L <sub>max</sub>
01.	Near Dandwadi Co-ordinates: N-18°51'02.13", E-73°12'50.75"	06:00 to 07:00	67.9	60.3	74.5	22:00 to 23:00	62.8	61.5	68.6
		07:00 to 08:00	67.3	58.2	75.6	23:00 to 00:00	61.8	61.1	65.3
		08:00 to 09:00	68.5	59.7	75.8	00:00 to 01:00	65.3	61.0	74.3
		09:00 to 10:00	67.3	58.4	75.4	01:00 to 02:00	61.7	57.4	69.0
		10:00 to 11:00	68.3	60.0	75.8	02:00 to 03:00	62.0	57.7	69.9
		11:00 to 12:00	68.4	59.8	77.0	03:00 to 04:00	61.9	57.5	68.3
		12:00 to 13:00	68.3	56.7	75.7	04:00 to 05:00	63.4	57.3	71.7
		13:00 to 14:00	68.6	58.5	76.5	05:00 to 06:00	68.8	61.3	74.4
		14:00 to 15:00	69.0	57.3	76.4	--	--	--	--
		15:00 to 16:00	72.7	55.5	87.1	--	--	--	--
		16:00 to 17:00	67.7	57.4	76.3	--	--	--	--
		17:00 to 18:00	72.2	56.9	83.7	--	--	--	--
		18:00 to 19:00	71.9	56.2	86.2	--	--	--	--
		19:00 to 20:00	64.5	55.6	73.6	--	--	--	--
		20:00 to 21:00	61.1	58.5	66.9	--	--	--	--
		21:00 to 22:00	66.5	61.4	74.7	--	--	--	--
		L <sub>10</sub>	70.1			Limits in dB(A) Leq as per THE NOISE POLLUTION (REGULATION AND CONTROL) RULES, 2000 (See rule 3(1) and 4(1)) Ambient Air Quality Standards in respect of Noise			
		L <sub>50</sub>	64.3						
		L <sub>90</sub>	60.4						
		Day Leq	68.9						
		Night Leq	64.2						

### Opinions / Interpretations:

The observed values for LeqdB(A) for Day Time & Night Time are within the standard limits as per Ambient Air Quality Standards in respect of Noise prescribed in The Noise Pollution (Regulation and Control) Rules, 2000 for Industrial Zone.

### Note:

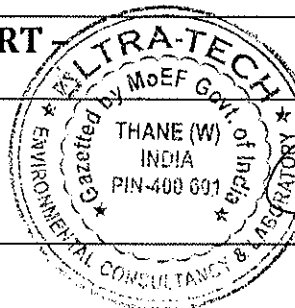
- Monitoring area coming under Industrial Zone.
- Day Time - 06:00 Hrs to 22:00 Hrs and Night Time - 22:00 Hrs to 06:00 Hrs.

Sampling Equipment Details	Instrument Used	Make & Model	Calibration Status
	Sound Level Meter	Make - Lutron; Model - SL4033SD; Sr. No. Q646217	Valid up to - 13/10/2022

### Note:

- This test report refers only to the monitoring conducted.
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- Any correction invalidates this test report.

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For ULTRA TECH,

Authorized Signatory

Lab : Survey No. 93/A, Conformity Hissa No.2 G.V.Brothers Bldg., Bata Compound, Khopat, Near Flower Valley, Thane (West) - 400 601, Maharashtra, India.  
Tele : +91 22 2547 49 07 / +91 22 2547 62 17 Email : lab@ultratech.in Visit us at : www.ultratech.in

## TEST REPORT

ISSUED TO: M/s. BIRLA CARBON INDIA PRIVATE LIMITED.

Unit: "Patalaganga"

Village: Lohop, Talvali, Patalganga, Tal.: Khalapur,

Dist.: Raigad-410207, Maharashtra, India

REPORT NO. : UT/ELS/REPORT/6609/11-2021

ISSUE DATE : 12/11/2021

YOUR REF. : 1300022569

REF. DATE : 27/04/2021

### SAMPLE PARTICULARS

Sampling Plan Ref. No. : 02-11/2021

Date of Monitoring : 01/11/2021 to 02/11/2021

### AMBIENT NOISE LEVEL MONITORING

Sample Lab Code : UT/ELS/011/11-2021

Survey Done By : ULTRA TECH

Sr. No.	Location	Noise Level Reading in dB(A) Leq							
		Time (Hrs)	Day dB(A)			Time (Hrs)	Night dB(A)		
			Leq	L <sub>min</sub>	L <sub>max</sub>		Leq	L <sub>min</sub>	L <sub>max</sub>
01.	Near Tank Form Area Co-ordinates: N-18°50'54.50", E-73°12'43.35"	06:00 to 07:00	70.6	67.6	79.8	22:00 to 23:00	67.1	63.8	73.9
		07:00 to 08:00	70.6	68.7	76.2	23:00 to 00:00	69.3	60.9	79.3
		08:00 to 09:00	71.3	69.7	75.3	00:00 to 01:00	69.4	65.0	76.5
		09:00 to 10:00	70.7	68.6	76.5	01:00 to 02:00	64.8	64.1	67.7
		10:00 to 11:00	69.5	67.6	73.5	02:00 to 03:00	69.2	68.6	70.3
		11:00 to 12:00	69.5	67.9	73.5	03:00 to 04:00	69.7	69.0	70.8
		12:00 to 13:00	70.4	66.0	77.8	04:00 to 05:00	69.6	68.9	70.8
		13:00 to 14:00	70.5	69.5	74.1	05:00 to 06:00	69.5	68.6	71.0
		14:00 to 15:00	68.8	65.8	76.0	--	--	--	--
		15:00 to 16:00	67.7	60.0	79.4	--	--	--	--
		16:00 to 17:00	66.5	59.2	78.3	--	--	--	--
		17:00 to 18:00	66.2	62.1	74.9	--	--	--	--
		18:00 to 19:00	69.8	65.3	80.4	--	--	--	--
		19:00 to 20:00	71.7	68.0	80.8	--	--	--	--
		20:00 to 21:00	72.2	68.3	79.9	--	--	--	--
		21:00 to 22:00	69.0	67.7	73.9	--	--	--	--
		L <sub>10</sub>	71.4			Limits in dB(A) Leq as per THE NOISE POLLUTION (REGULATION AND CONTROL) RULES, 2000 (See rule 3(1) and 4(1)) Ambient Air Quality Standards in respect of Noise			
		L <sub>50</sub>	68.2						
		L <sub>90</sub>	67.5						
		Day Leq	70.0						
		Night Leq	68.8						

### Opinions / Interpretations:

The observed values for LeqdB(A) for Day Time & Night Time are within the standard limits as per Ambient Air Quality Standards in respect of Noise prescribed in The Noise Pollution (Regulation and Control) Rules, 2000 for Industrial Zone.

### Note:

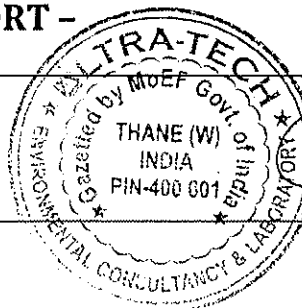
- Monitoring area coming under Industrial Zone.
- Day Time - 06:00 Hrs to 22:00 Hrs and Night Time - 22:00 Hrs to 06:00 Hrs.

Sampling Equipment Details	Instrument Used	Make & Model	Calibration Status
	Sound Level Meter	Make - LUTORN; Model - SL4033SDSr. No. Q665568	Valid up to - 13/10/2022

### Note:

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- END OF REPORT -



For ULTRA TECH,

Authorized Signatory



TC-5600

ISO 9001 : 2015

ISO 45001 : 2018

Lab : Survey No. 93/A, Conformity Hissa No.2 G.V.Brothers Bldg., Bata Compound, Khopat, Near Flower Valley, Thane (West) - 400 601, Maharashtra, India.  
Tele : +91 22 2547 49 07 / +91 22 2547 62 17 Email : lab@ultratech.in Visit us at : www.ultratech.in

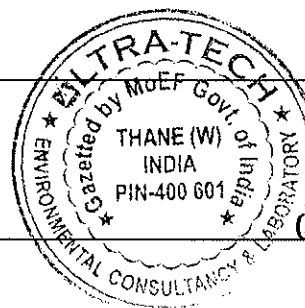
## TEST REPORT

**ISSUED TO: M/s. BIRLA CARBON INDIA PRIVATE LIMITED.****Unit: "Patalaganga"****Village: Lohop, Talvali, Patalganga, Tal.: Khalapur,****Dist.: Raigad-410207, Maharashtra, India****REPORT NO. : UT/ELS/REPORT/6628/11-2021****ISSUE DATE : 12/11/2021****YOUR REF. : 1300022569****REF. DATE : 27/04/2021****SAMPLE PARTICULARS :****Sampling Plan Ref. No. : 02-11/2021****Sample Registration Date : 02/11/2021****Date & Time of Sampling : 01/11/2021 at 14:45Hrs****Analysis Starting Date : 02/11/2021****Analysis Completion Date : 12/11/2021****Sample Collected By : ULTRA TECH****Sample Lab Code : UT/ELS/003/11-2021****WASTE WATER SAMPLE ANALYSIS****Sample Type : Untreated Sewage****Sample Location : At Collection Tank****Sample Quantity & Packing Details : 1L in Wide Mouth Glass Bottle for Oil and Grease and 2L In Plastic Container for other parameters.**

Sr. No.	Test Parameter	Test Method	Test Result	Unit
1.	pH	IS 3025 (Part 11) : 1983	7.2	-
2.	Total Dissolved Solids	IS 3025 (Part 16) : 1984	210	mg/L
3.	Total Suspended Solids	IS 3025 (Part 17) : 1984	33	mg/L
4.	Oil & Grease	IS 3025 (Part 34) : 1988	4	mg/L
5.	Biochemical Oxygen Demand (27°C, 3Days)	IS 3025 (Part 39) : 1991	60	mg/L
6.	Chemical Oxygen Demand	IS 3025 (Part 43) : 1992	246	mg/L

**Opinions / Interpretations: NIL**

**Note:** 1. This test report refers only to the sample tested.  
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**- END OF REPORT -****For ULTRA TECH****(Authorized Signatory)**



Lab : Survey No. 93/A, Conformity Hissa No.2 G.V.Brothers Bldg., Bata Compound, Khopat, Near Flower Valley, Thane (West) - 400 601, Maharashtra, India.

Tele : +91 22 2547 49 07 / +91 22 2547 62 17 Email : lab@ultratech.in Visit us at : www.ultratech.in

**TEST REPORT****ISSUED TO: M/s. BIRLA CARBON INDIA PRIVATE LIMITED.**

Unit: "Patalaganga"

Village: Lohop, Talvali, Patalganga, Tal.: Khalapur,

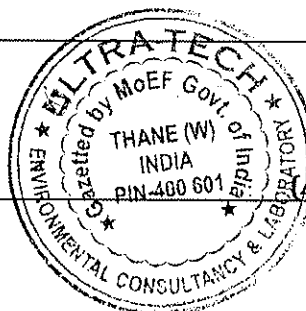
Dist: Raigad-410207, Maharashtra, India

**REPORT NO. : UT/ELS/REPORT/6629/11-2021****ISSUE DATE : 12/11/2021****YOUR REF. : 1300022569****REF. DATE : 27/04/2021****SAMPLE PARTICULARS :****Sampling Plan Ref. No. : 02-11/2021****Sample Registration Date : 02/11/2021****Date & Time of Sampling : 01/11/2021 at 14:50Hrs****Analysis Starting Date : 02/11/2021****Analysis Completion Date : 12/11/2021****Sample Collected By : ULTRA TECH****Sample Lab Code : UT/ELS/004/11-2021****WASTE WATER SAMPLE ANALYSIS****Sample Type : Treated Sewage****Sample Location : After Carbon Filter****Sample Quantity & Packing Details : 1L in Wide Mouth Glass Bottle for Oil and Grease and 2L In Plastic Container for other parameters.**

Sr. No.	Test Parameter	Test Method	Test Result	Unit
1.	pH	IS 3025 (Part 11) : 1983	7.0	-
2.	Total Dissolved Solids	IS 3025 (Part 16) : 1984	204	mg/L
3.	Total Suspended Solids	IS 3025 (Part 17) : 1984	BDL[DL=1]	mg/L
4.	Oil & Grease	IS 3025 (Part 34) : 1988	BDL[DL=2]	mg/L
5.	Biochemical Oxygen Demand (27°C, 3Days)	IS 3025 (Part 39) : 1991	2.9	mg/L
6.	Chemical Oxygen Demand	IS 3025 (Part 43) : 1992	12	mg/L
DL- Detection Limit			BDL-Below Detection Limit	

**Opinions / Interpretations: NIL**

- Note:**
1. This test report refers only to the sample tested.
  2. This test report may not be reproduced in part, without the permission of this laboratory.
  3. Any correction invalidates this test report.

**- END OF REPORT -**

For ULTRA TECH

(Authorized Signatory)



Lab : Survey No. 93/A, Conformity Hissa No.2 G.V.Brothers Bldg., Bata Compound, Khopat, Near Flower Valley, Thane (West) - 400 601, Maharashtra, India.  
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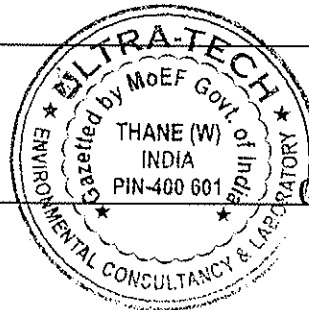
## TEST REPORT

**ISSUED TO: M/s. BIRLA CARBON INDIA PRIVATE LIMITED.****Unit: "Patalaganga"****Village: Lohop, Talvali, Patalganga, Tal.: Khalapur,****Dist.: Raigad-410207, Maharashtra, India****REPORT NO. : UT/ELS/REPORT/6630/11-2021****ISSUE DATE : 12/11/2021****YOUR REF. : 1300022569****REF. DATE : 27/04/2021****SAMPLE PARTICULARS :****Sampling Plan Ref. No. : 02-11/2021****Sample Registration Date : 02/11/2021****Date & Time of Sampling : 01/11/2021 at 15:15Hrs****Analysis Starting Date : 02/11/2021****Analysis Completion Date : 12/11/2021****Sample Collected By : ULTRA TECH****Sample Lab Code : UT/ELS/005/11-2021****WASTE WATER SAMPLE ANALYSIS****Sample Type : Treated Effluent****Sample Location : Settling pond outlet****Sample Quantity : 1L in Wide Mouth Glass Bottle for Oil and Grease and 2L in Plastic Container for other parameters.**

Sr. No.	Test Parameter	Test Method	Test Result	Unit
1.	pH	IS 3025 (Part 11) : 1983	7.3	-
2.	Total Dissolved Solids	IS 3025 (Part 16) : 1984	409	mg/L
3.	Total Suspended Solids	IS 3025 (Part 17) : 1984	13	mg/L
4.	Oil & Grease	IS 3025 (Part 34) : 1988	BDL[DL=2]	mg/L
5.	Biochemical Oxygen Demand (27°C, 3Days)	IS 3025 (Part 39) : 1991	35.2	mg/L
6.	Chemical Oxygen Demand	IS 3025 (Part 43) : 1992	150	mg/L

**DL- Detection Limit****BDL-Below Detection Limit****Opinions / Interpretations: NIL**

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3. Any correction invalidates this test report.

**- END OF REPORT -****For ULTRA TECH***BSHagat***(Authorized Signatory)**



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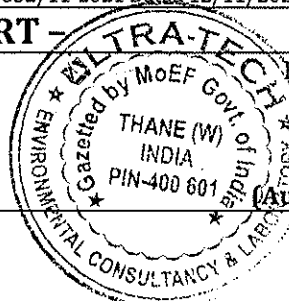
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**TEST REPORT****ISSUED TO: M/s. BIRLA CARBON INDIA PRIVATE LIMITED.****REPORT NO. : UT/ELS/REPORT/6631/11-2021****Unit: "Patalaganga"****ISSUE DATE : 12/11/2021****Village: Lohop, Talvali, Patalganga, Tal.: Khalapur,****YOUR REF. : 1300022569****Dist.: Raigad-410207, Maharashtra, India****REF. DATE : 27/04/2021****SAMPLE PARTICULARS :****WASTE WATER SAMPLE ANALYSIS****Sampling Plan Ref. No. : 02-11/2021****Sample Type : Untreated Effluent****Sample Registration Date : 02/11/2021****Sample Location : At Collection Tank****Date & Time of Sampling : 01/11/2021 at 14:30Hrs****Analysis Starting Date : 02/11/2021****Sample Quantity & : 1L in Wide Mouth Glass Bottle for Oil****Analysis Completion Date : 12/11/2021****Packing Details : and Grease, 500ml In Plastic Container****Sample Collected By : ULTRA TECH****for COD and 2L In Plastic Container for****Sample Lab Code : UT/ELS/001/11-2021****other parameters**

Sr. No.	Test Parameter ~	Test Method	Test Result	Unit
1.	pH	IS 3025 (Part 11) : 1983	7.5	-
2.	Temperature	IS 3025 (Part 09) : 1984	28.3	°C
3.	Total Dissolved Solids	IS 3025 (Part 16) : 1984	272	mg/L
4.	Total Suspended Solids	IS 3025 (Part 17) : 1984	76	mg/L
5.	Oil & Grease	IS 3025 (Part 39) : 1991	6	mg/L
6.	Biochemical Oxygen Demand (27°C, 3Days)	IS 3025 (Part 44) : 1993	113	mg/L
7.	Chemical Oxygen Demand	IS 3025 (Part 58) : 2006	404	mg/L
8.	Sulphate as SO <sub>4</sub> <sup>2-</sup>	APHA 23rdEd. 4500- SO42- E	25	mg/L
9.	Chlorides as Cl-	IS 3025 (Part 32) : 1988	108	mg/L
10.	Zinc as Zn	IS: 3025 (Part 49) : 1994	BDL[DL=0.03]	mg/L
11.	Copper as Cu	IS: 3025 (Part 42) : 1992	BDL[DL=0.03]	mg/L
12.	Iron as Fe	IS: 3025 (Part 53) : 2003	BDL[DL=0.09]	mg/L
13.	Phosphate as PO <sub>4</sub> <sup>3-</sup> -P	APHA 23rdEd. 4500 P D	BDL[DL=0.01]	mg/L
14.	Chromium as Cr	IS: 3025 (Part 52) : 2003	BDL[DL=0.18]	mg/L

**DL- Detection Limit****BDL-Below Detection Limit****Opinions / Interpretations: NIL**

- Note:**
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  4. This test report shall be referred along with Test Report No. UT/ELS/REPORT/6632/11-2021 Dated 12/11/2021 for final conclusion.

**- END OF REPORT -****For ULTRA TECH****(Authorized Signatory)**

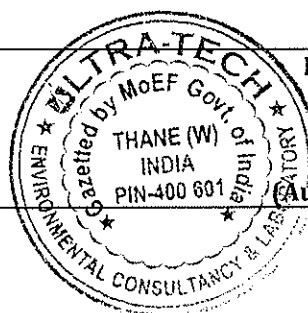
## TEST REPORT

**ISSUED TO: M/s. BIRLA CARBON INDIA PRIVATE LIMITED.****Unit: "Patalaganga"****Village: Lohop, Talvali, Patalganga, Tal.: Khalapur,****Dist.: Raigad-410207, Maharashtra, India****REPORT NO. : UT/ELS/REPORT/6632/11-2021****ISSUE DATE : 12/11/2021****YOUR REF. : 1300022569****REF. DATE : 27/04/2021****SAMPLE PARTICULARS :****Sampling Plan Ref. No. : 02-11/2021****Sample Registration Date : 02/11/2021****Date & Time of Sampling : 01/11/2021 at 14:30Hrs****Analysis Starting Date : 02/11/2021****Analysis Completion Date : 12/11/2021****Sample Collected By : ULTRA TECH****Sample Lab Code : UT/ELS/001/11-2021****WASTE WATER SAMPLE ANALYSIS****Sample Type : Untreated Effluent****Sample Location : At Collection Tank****Sample Quantity & : 2L In Plastic Container****Packing Details**

Sr. No.	Test Parameter	Test Method	Test Result	Unit
1.	Residual Chlorine	IS: 3025 (Part 26) : 1986	BDL[DL=0.1]	mg/L
DL- Detection Limit			BDL-Below Detection Limit	

**Opinions / Interpretations: NIL**

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**- END OF REPORT -**

For ULTRA TECH

**(Authorized Signatory)**



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## TEST REPORT

ISSUED TO: M/s. BIRLA CARBON INDIA PRIVATE LIMITED.

REPORT NO. : UT/ELS/REPORT/6633/11-2021

Unit: "Patalaganga"

ISSUE DATE : 12/11/2021

Village: Lohop, Talvali, Patalganga, Tal.: Khalapur,

YOUR REF. : 1300022569

Dist.: Raigad-410207, Maharashtra, India

REF. DATE : 27/04/2021

**SAMPLE PARTICULARS**

Sampling Plan Ref. No. : 02-11/2021  
Sample Registration Date : 02/11/2021  
Date & Time of Sampling : 01/11/2021 at 14:35Hrs  
Analysis Starting Date : 02/11/2021  
Analysis Completion Date : 12/11/2021  
Sample Collected By : ULTRA TECH  
Sample Lab Code : UT/ELS/002/11-2021

**WASTE WATER SAMPLE ANALYSIS**

Sample Type : Treated Effluent  
Sample Location : After Carbon Filter

Sample Quantity & Packing Details : 1L in Wide Mouth Glass Bottle for Oil and Grease, 500ml in Plastic Container for COD and 2L in Plastic Container for other parameters

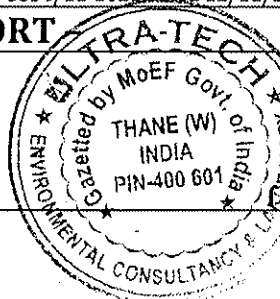
Sr. No.	Test Parameter ~	Test Method	Test Result	Unit
15.	pH	IS 3025 (Part 11) : 1983	7.3	-
16.	Temperature	IS 3025 (Part 09) : 1984	28.5	°C
17.	Total Dissolved Solids	IS 3025 (Part 16) : 1984	206	mg/L
18.	Total Suspended Solids	IS 3025 (Part 17) : 1984	8	mg/L
19.	Oil & Grease	IS 3025 (Part 39) : 1991	BDL[DL=2]	mg/L
20.	Biochemical Oxygen Demand (27°C, 3Days)	IS 3025 (Part 44) : 1993	7.4	mg/L
21.	Chemical Oxygen Demand	IS 3025 (Part 58) : 2006	28	mg/L
22.	Sulphate as SO <sub>4</sub> <sup>2-</sup>	APHA 23rdEd. 4500- SO42- E	28	mg/L
23.	Chlorides as Cl-	IS 3025 (Part 32) : 1988	23	mg/L
24.	Zinc as Zn	IS: 3025 (Part 49) : 1994	BDL[DL=0.03]	mg/L
25.	Copper as Cu	IS: 3025 (Part 42) : 1992	BDL[DL=0.03]	mg/L
26.	Iron as Fe	IS: 3025 (Part 53) : 2003	BDL[DL=0.09]	mg/L
27.	Phosphate as PO <sub>4</sub> <sup>3--</sup> P	APHA 23rdEd. 4500 P D	BDL[DL=0.01]	mg/L
28.	Chromium as Cr	IS: 3025 (Part 52) : 2003	BDL[DL=0.18]	mg/L

DL- Detection Limit

BDL-Below Detection Limit

Opinions / Interpretations: NIL

- Note:
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  4. This test report shall be referred along with Test Report No. UT/ELS/REPORT/6634/11-2021 Dated 12/11/2021 for final conclusion.

**- END OF REPORT**

For ULTRA TECH

(Authorized Signatory)

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## TEST REPORT

ISSUED TO: M/s. BIRLA CARBON INDIA PRIVATE LIMITED.

Unit: "Patalaganga"

Village: Lohop, Talvali, Patalganga, Tal.: Khalapur,

Dist.: Raigad-410207, Maharashtra, India

REPORT NO. : UT/ELS/REPORT/6634/11-2021

ISSUE DATE : 12/11/2021

YOUR REF. : 1300022569

REF. DATE : 27/04/2021

### SAMPLE PARTICULARS :

Sampling Plan Ref. No. : 02-11/2021

Sample Registration Date : 02/11/2021

Date & Time of Sampling : 01/11/2021 at 14:35Hrs

Analysis Starting Date : 02/11/2021

Analysis Completion Date : 12/11/2021

Sample Collected By : ULTRA TECH

Sample Lab Code : UT/ELS/002/11-2021

### WASTE WATER SAMPLE ANALYSIS

Sample Type : Treated Effluent

Sample Location : After Carbon Filter

Sample Quantity & : 2L In Plastic Container

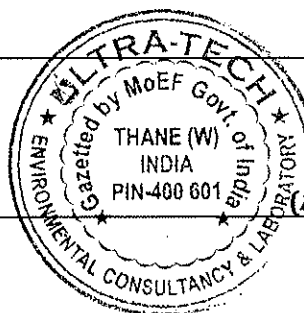
Packing Details

Sr. No.	Test Parameter	Test Method	Test Result	Unit
2.	Residual Chlorine	IS: 3025 (Part 26) : 1986	BDL[DL=0.1]	mg/L
DL- Detection Limit			BDL-Below Detection Limit	

Opinions / Interpretations: NIL

- Note:
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  5. This test report shall be referred along with Test Report No. UT/ELS/REPORT/6633/11-2021 Dated 12/11/2021 for final conclusion.

- END OF REPORT -



For ULTRA TECH

*Bhagat*

(Authorized Signatory)



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## TEST REPORT

**ISSUED TO: M/s. BIRLA CARBON INDIA PRIVATE LIMITED.** **REPORT NO. :** UT/ELS/REPORT/6596/11-2021  
**Unit: "Patalaganga"** **ISSUE DATE :** 12/11/2021  
**Village: Lohop, Talvali, Patalganga, Tal.: Khalapur,** **YOUR REF. :** 1300022569  
**Dist.: Raigad-410207, Maharashtra, India** **REF. DATE :** 27/04/2021

SAMPLE PARTICULARS :		WORKPLACE AIR QUALITY MONITORING	
Sampling Plan Ref. No.:	02-11/2021	Location Code	01
Sample Registration Date	08/11/2021	Sample Location	Ware House Canteen Area
Date of Sampling	02/11/2021		
Time of Sampling	10:15 Hrs. to 18:15Hrs.		
Analysis Starting Date	08/11/2021	Collected By	ULTRA TECH
Analysis Completion Date	12/11/2021	Height of Sampler	1.0 Meter
Sample Lab Code	UT/ELS/015/11-2021	Sampling Duration	08 Hours
Ambient Air Temperature	24:7°C to 35.2°C		

Sr. No.	Test Parameter	Test Method	Test Result	Unit
1.	Sulphur Dioxide (SO <sub>2</sub> )	IS 5182 (Part 02) : 2001	0.01	mg/m <sup>3</sup>
2.	Oxides of Nitrogen (NO <sub>x</sub> )	IS 5182 (Part 06) : 2006	0.03	mg/m <sup>3</sup>

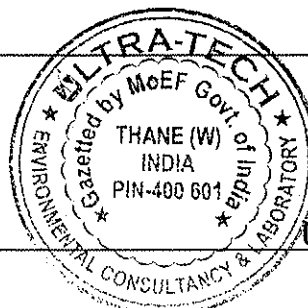
**Opinions / Interpretations:** Factories Act - 1948, Schedule II. For the tested parameters is enclosed as Enclosure-III for your reference.

Sampling Equipment Details	Instrument Used	Make & Model	Calibration Status
	Respirable Dust Sampler	Make - POLLTECH; Model - PEM RDS 9; Sr. No. 315	Valid up to - 03/10/2022
	Fine Dust Sampler	Make - POLLTECH; Model - PEM-ADS 2.5/10µ; Sr. No. 18113	Valid up to - 28/02/2022

**Note:**

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3. This test report may not be reproduced in part, without the permission of this laboratory.
4. Any correction invalidates this test report.
5. This test report shall be referred along with Test Report No. UT/ELS/REPORT/6597/11-2021 Dated 12/11/2021 for final conclusion.

**- END OF REPORT -**



For ULTRA TECH,

(Authorized Signatory)

Lab : Survey No. 93/A, Conformity Hissa No.2 G.V.Brothers Bldg., Bata Compound, Khopat, Near Flower Valley, Thane (West) - 400 601, Maharashtra, India.  
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## TEST REPORT

**ISSUED TO: M/s. BIRLA CARBON INDIA PRIVATE LIMITED.** **REPORT NO. :** UT/ELS/REPORT/6597/11-2021  
**Unit: "Patalaganga"** **ISSUE DATE :** 12/11/2021  
**Village: Lohop , Talvali , Patalganga, Tal.: Khalapur,** **YOUR REF. :** 1300022569  
**Dist.: Raigad-410207, Maharashtra, India** **REF. DATE :** 27/04/2021

SAMPLE PARTICULARS :		WORKPLACE AIR QUALITY MONITORING	
Sampling Plan Ref. No.:	02-11/2021	Location Code	01
Sample Registration Date	08/11/2021	Sample Location	Ware House Canteen Area
Date of Sampling	02/11/2021		
Time of Sampling	10:15 Hrs. to 18:15Hrs.		
Analysis Starting Date	08/11/2021	Collected By	ULTRA TECH
Analysis Completion Date	12/11/2021	Height of Sampler	1.0 Meter
Sample Lab Code	UT/ELS/015/11-2021	Sampling Duration	08 Hours
Ambient Air Temperature	24.7°C to 35.2°C		

Sr. No.	Test Parameter	Test Method	Test Result	Unit
1.	Hydrocarbon as Non-Methane(NMHC)	IS 5182 (Part 17) : 1979	BDL[DL=0.5]	ppm
2.	Polyaromatic Hydrocarbon (PAH)	IS 5182 (Part 12) : 2004	BDL[DL=0.5]	mg/m <sup>3</sup>
3.	Particular Matter (PM <sub>10</sub> )	EPA/625/r-96/010 Method IO-2.1	0.12	mg/m <sup>3</sup>
4.	Carbon Monoxide (CO)	IS 5182 (Part 10) : 1999	1.2	mg/m <sup>3</sup>
BDL: Below Detection Limit		DL: Detection Limit		

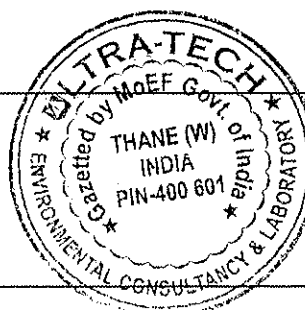
**Opinions / Interpretations:** Factories Act - 1948, Schedule II. For the tested parameters is enclosed as Enclosure-III for your reference.

Sampling Equipment Details	Instrument Used	Make & Model	Calibration Status
	Respirable Dust Sampler	Make - POLLTECH; Model -PEM RDS 9; Sr. No. 315	Valid up to - 03/10/2022
	Fine Dust Sampler	Make - POLLTECH; Model -PEM-ADS 2.5/10µ; Sr. No. 18113	Valid up to - 28/02/2022

**Note:**

1. This test report refers only to the sample tested.
2. Monitoring area coming under Industrial areas and observed values are relevant to sample collected only.
3. This test report may not be reproduced in part, without the permission of this laboratory.
4. Any correction invalidates this test report.
5. Parameter is Tested are not covered under NABL Scope
6. This test report shall be referred along with Test Report No. UT/ELS/REPORT/6596/11-2021 Dated 12/11/2021 for final conclusion.

**- END OF REPORT -**



For ULTRA TECH,

(Authorized Signatory)



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## TEST REPORT

ISSUED TO: M/s. BIRLA CARBON INDIA PRIVATE LIMITED. REPORT NO. : UT/ELS/REPORT/6598/11-2021  
Unit: "Patalaganga" ISSUE DATE : 12/11/2021  
Village: Lohop, Talvali, Patalganga, Tal.: Khalapur, YOUR REF. : 1300022569  
Dist.: Raigad-410207, Maharashtra, India REF. DATE : 27/04/2021

SAMPLE PARTICULARS :		WORKPLACE AIR QUALITY MONITORING	
Sampling Plan Ref. No.:	02-11/2021	Location Code	: 02
Sample Registration Date	: 08/11/2021	Sample Location	: Ware House Packing Area
Date of Sampling	: 02/11/2021		
Time of Sampling	: 10:00 Hrs. to 18:00 Hrs.		
Analysis Starting Date	: 08/11/2021	Collected By	: ULTRA TECH
Analysis Completion Date	: 12/11/2021	Height of Sampler	: 1.0 Meter
Sample Lab Code	: UT/ELS/014/11-2021	Sampling Duration	: 08 Hours
Ambient Air Temperature	: 25.5°C to 34.7°C		

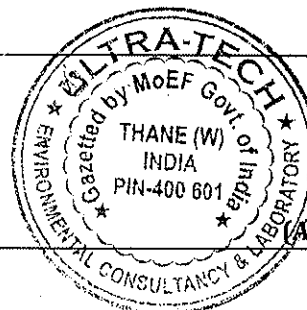
Sr. No.	Test Parameter	Test Method	Test Result	Unit
1.	Sulphur Dioxide (SO <sub>2</sub> )	IS 5182 (Part 02) : 2001	0.01	mg/m <sup>3</sup>
2.	Oxides of Nitrogen (NO <sub>x</sub> )	IS 5182 (Part 06) : 2006	0.02	mg/m <sup>3</sup>

Opinions / Interpretations: Factories Act - 1948, Schedule II. For the tested parameters is enclosed as Enclosure-III for your reference.

Sampling Equipment Details	Instrument Used	Make & Model	Calibration Status
	Respirable Dust Sampler	Make - POLLTECH; Model - PEM-RDS 8NL; Sr. No. 3513	Valid up to - 19/09/2022
	Fine Dust Sampler	Make - POLLTECH; Model - PEM-ADS 2.5/10µ; Sr. No. 18913	Valid up to - 20/09/2022

Note: 1. This test report refers only to the sample tested.  
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**- END OF REPORT -**



For ULTRA TECH,

(Authorized Signatory)

Lab : Survey No. 93/A, Conformity Hissa No.2 G.V.Brothers Bldg., Bata Compound, Khopat, Near Flower Valley, Thane (West) - 400 601, Maharashtra, India.

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**TEST REPORT**

**ISSUED TO: M/s. BIRLA CARBON INDIA PRIVATE LIMITED.** **REPORT NO. :** UT/ELS/REPORT/6599/11-2021  
**Unit: "Patalaganga"** **ISSUE DATE :** 12/11/2021  
**Village: Lohop, Talvali, Patalganga, Tal.: Khalapur,** **YOUR REF. :** 1300022569  
**Dist.: Raigad-410207, Maharashtra, India** **REF. DATE :** 27/04/2021

SAMPLE PARTICULARS :		WORKPLACE AIR QUALITY MONITORING	
<b>Sampling Plan Ref. No.:</b>	02-11/2021	<b>Location Code :</b>	02
<b>Sample Registration Date :</b>	08/11/2021	<b>Sample Location :</b>	Ware House Packing Area
<b>Date of Sampling :</b>	02/11/2021		
<b>Time of Sampling :</b>	10:00 Hrs. to 18:00 Hrs.		
<b>Analysis Starting Date :</b>	08/11/2021	<b>Collected By :</b>	ULTRA TECH
<b>Analysis Completion Date :</b>	12/11/2021	<b>Height of Sampler :</b>	1.0 Meter
<b>Sample Lab Code :</b>	UT/ELS/014/11-2021	<b>Sampling Duration :</b>	08 Hours
<b>Ambient Air Temperature :</b>	25.5°C to 34.7°C		

Sr. No.	Test Parameter ~	Test Method	Test Result	Unit
1.	Hydrocarbon as Non-Methane (NMHC)	IS 5182 (Part 17) : 1979	BDL[DL=0.5]	ppm
2.	Polyaromatic Hydrocarbon (PAH)	IS 5182 (Part 12) : 2004	BDL[DL=0.5]	mg/m <sup>3</sup>
3.	Particular Matter (PM <sub>10</sub> )	EPA/625/r-96/010 Method IO-2.1	0.15	mg/m <sup>3</sup>
4.	Carbon Monoxide (CO)	IS 5182 (Part 10) : 1999	1.2	mg/m <sup>3</sup>

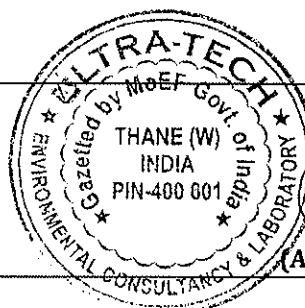
BDL: Below Detection Limit

DL: Detection Limit

**Opinions / Interpretations:** *Factories Act - 1948, Schedule II. For the tested parameters is enclosed as Enclosure-III for your reference.*

Sampling Equipment Details	Instrument Used	Make & Model	Calibration Status
	Respirable Dust Sampler	Make - POLLTECH; Model - PEM-RDS 8NL; Sr. No. 3513	Valid up to - 19/09/2022
	Fine Dust Sampler	Make - POLLTECH; Model - PEM-ADS 2.5/10µ; Sr. No. 18913	Valid up to - 20/09/2022

- Note:**
1. This test report refers only to the sample tested.
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  3. This test report may not be reproduced in part, without the permission of this laboratory.
  4. Any correction invalidates this test report.
  5. Parameter Is Tested are not covered under NABL Scope
  6. This test report shall be referred along with Test Report No. UT/ELS/REPORT/6598/11-2021 Dated 12/11/2021 for final conclusion.

**- END OF REPORT -**

For ULTRA TECH,

(Authorized Signatory)

**Environmental Consultancy & Laboratory**

Lab. Gazetted by MoEF&amp;CC-Govt. of India

Lab. Accredited by NABL - ISO/IEC 17025:2017 [TC-5600, Valid until 27.05.2022 in the field of Testing]

QCI-NABET Accredited EIA Consulting Organization

STP/ETP/WTP Project Management Consultants



TC-5600

ISO 9001 : 2015

ISO 45001 : 2018

Lab : Survey No. 93/A, Conformity Hissa No.2 G.V. Brothers Bldg., Bata Compound, Khopat, Near Flower Valley, Thane (West) - 400 601, Maharashtra, India.

Tele : +91 22 2547 49 07 / +91 22 2547 62 17 Email : lab@ultratech.in Visit us at : www.ultratech.in

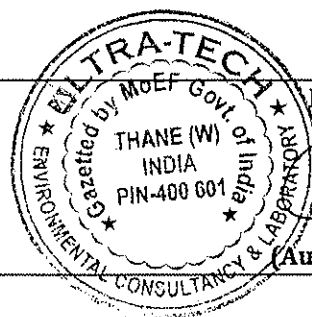
**TEST REPORT****ISSUED TO: M/s. BIRLA CARBON INDIA PRIVATE LIMITED.****REPORT NO. : UT/ELS/REPORT/6600/11-2021****Unit: "Patalaganga"****ISSUE DATE : 12/11/2021****Village: Lohop, Talvali, Patalganga, Tal.: Khalapur,****YOUR REF. : 1300022569****Dist.: Raigad-410207, Maharashtra, India****REF. DATE : 27/04/2021****SAMPLE PARTICULARS :****WORKPLACE AIR QUALITY MONITORING****Sampling Plan Ref. No. : 02-11/2021****Location Code : 03****Sample Registration Date : 08/11/2021****Sample Location : Reactor Area****Date of Sampling : 02/11/2021****Time of Sampling : 10:45 Hrs. to 18:45 Hrs.****Analysis Starting Date : 08/11/2021****Collected By : ULTRA TECH****Analysis Completion Date : 12/11/2021****Height of Sampler : 1.0 Meter****Sample Lab Code : UT/ELS/017/11-2021****Sampling Duration : 08 Hours****Ambient Air Temperature : 23.2°C to 35.9°C**

Sr. No.	Test Parameter	Test Method	Test Result	Unit
1.	Sulphur Dioxide (SO <sub>2</sub> )	IS 5182 (Part 02) : 2001	0.01	mg/m <sup>3</sup>
2.	Oxides of Nitrogen (NO <sub>x</sub> )	IS 5182 (Part 06) : 2006	0.02	mg/m <sup>3</sup>

**Opinions / Interpretations:** Factories Act - 1948, Schedule II. For the tested parameters is enclosed as Enclosure-III for your reference.

Sampling Equipment Details	Instrument Used	Make & Model	Calibration Status
	Respirable Dust Sampler	Make - POLLTECH; Model - PEM-RDS 8NL-BM; Sr. No. 714	Valid up to - 06/01/2022
	Fine Dust Sampler	Make - POLLTECH; Model - PEM-ADS 2.5/10µ; Sr. No. 22114	Valid up to - 23/02/2022

- Note:**
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**- END OF REPORT -**

For ULTRA TECH,

(Authorized Signatory)

Lab : Survey No. 93/A, Conformity Hissa No.2 G.V.Brothers Bldg., Bata Compound, Khopat, Near Flower Valley, Thane (West) - 400 601, Maharashtra, India.  
Tele : +91 22 2547 49 07 / +91 22 2547 62 17 Email : lab@ultratech.in Visit us at : www.ultratech.in

## TEST REPORT

**ISSUED TO: M/s. BIRLA CARBON INDIA PRIVATE LIMITED.****REPORT NO. : UT/ELS/REPORT/6601/11-2021****Unit: "Patalaganga"****ISSUE DATE : 12/11/2021****Village: Lohop, Talvali, Patalganga, Tal.: Khalapur,****YOUR REF. : 1300022569****Dist.: Raigad-410207, Maharashtra, India****REF. DATE : 27/04/2021****SAMPLE PARTICULARS :****WORKPLACE AIR QUALITY MONITORING****Sampling Plan Ref. No. : 02-11/2021****Location Code : 03****Sample Registration Date : 08/11/2021****Sample Location : Reactor Area****Date of Sampling : 02/11/2021****Time of Sampling : 10:45 Hrs. to 18:45 Hrs.****Analysis Starting Date : 08/11/2021****Collected By : ULTRA TECH****Analysis Completion Date : 12/11/2021****Height of Sampler : 1.0 Meter****Sample Lab Code : UT/ELS/017/11-2021****Sampling Duration : 08 Hours****Ambient Air Temperature : 23.2°C to 35.9°C**

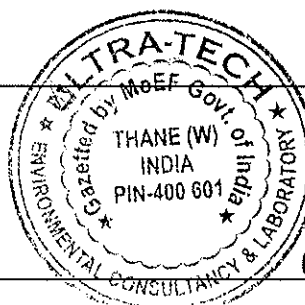
Sr. No.	Test Parameter	Test Method	Test Result	Unit
1.	Hydrocarbon as Non-Methane(NMHC)	IS 5182 (Part 17) : 1979	BDL[DL=0.5]	ppm
2.	Polyaromatic Hydrocarbon (PAH)	IS 5182 (Part 12) : 2004	BDL[DL=0.5]	mg/m <sup>3</sup>
3.	Particular Matter (PM <sub>10</sub> )	EPA/625/r-96/010 Method 10-2.1	0.11	mg/m <sup>3</sup>
4.	Carbon Monoxide (CO)	IS 5182 (Part 10) : 1999	1.4	mg/m <sup>3</sup>

**BDL: Below Detection Limit** **DL: Detection Limit**

**Opinions / Interpretations:** *Factories Act - 1948, Schedule II. For the tested parameters is enclosed as Enclosure-III for your reference.*

Sampling Equipment Details	Instrument Used	Make & Model	Calibration Status
	Respirable Dust Sampler	Make - POLLTECH; Model - PEM-RDS 8NL-BM; Sr. No. 714	Valid up to - 06/01/2022
	Fine Dust Sampler	Make - POLLTECH; Model - PEM-ADS 2.5/10µ; Sr. No. 22114	Valid up to - 23/02/2022

- Note:**
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  5. Parameter Is Tested are not covered under NABL Scope
  6. This test report shall be referred along with Test Report No. UT/ELS/REPORT/6600/11-2021 Dated 12/11/2021 for final conclusion.

**- END OF REPORT -**

For ULTRA TECH,

(Authorized Signatory)

**Environmental Consultancy & Laboratory**

Lab. Gazetted by MoEF&amp;CC-Govt. of India

Lab. Accredited by NABL - ISO/IEC 17025:2017 [TC-5600, Valid until 27.05.2022 in the field of Testing]

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ISO 9001 : 2015

ISO 45001 : 2018

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**TEST REPORT**

**ISSUED TO: M/s. BIRLA CARBON INDIA PRIVATE LIMITED.** **REPORT NO. :** UT/ELS/REPORT/6602/11-2021  
**Unit: "Patalaganga"** **ISSUE DATE :** 12/11/2021  
**Village: Lohop, Talvali, Patalganga, Tal.: Khalapur,** **YOUR REF. :** 1300022569  
**Dist.: Raigad-410207, Maharashtra, India** **REF. DATE :** 27/04/2021

SAMPLE PARTICULARS :		WORKPLACE AIR QUALITY MONITORING	
Sampling Plan Ref. No.:	02-11/2021	Location Code	04
Sample Registration Date	08/11/2021	Sample Location	DM Plant Room
Date of Sampling	02/11/2021		
Time of Sampling	10:35 Hrs. to 18:35 Hrs.		
Analysis Starting Date	08/11/2021	Collected By	ULTRA TECH
Analysis Completion Date	12/11/2021	Height of Sampler	1.0 Meter
Sample Lab Code	UT/ELS/016/11-2021	Sampling Duration	08 Hours
Ambient Air Temperature	23.2°C to 34.7°C		

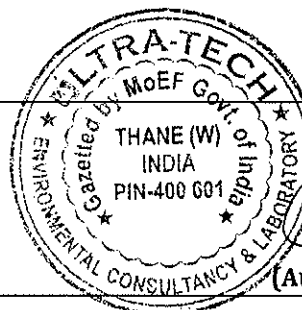
Sr. No.	Test Parameter	Test Method	Test Result	Unit
1.	Sulphur Dioxide (SO <sub>2</sub> )	IS 5182 (Part 02) : 2001	0.02	mg/m <sup>3</sup>
2.	Oxides of Nitrogen (NO <sub>x</sub> )	IS 5182 (Part 06) : 2006	0.03	mg/m <sup>3</sup>

**Opinions / Interpretations:** Factories Act - 1948, Schedule II. For the tested parameters is enclosed as Enclosure-III for your reference.

Sampling Equipment Details	Instrument Used	Make & Model	Calibration Status
	Respirable Dust Sampler	Make - POLLTECH; Model - PEM RDS 9; Sr. No. 515	Valid up to - 03/10/2022
	Fine Dust Sampler	Make - POLLTECH; Model - PEM-ADS 2.5/10µ; Sr. No. 1318	Valid up to - 04/01/2022

- Note:**
1. This test report refers only to the sample tested.
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  3. This test report may not be reproduced in part, without the permission of this laboratory.
  4. Any correction invalidates this test report.
  5. This test report shall be referred along with Test Report No. UT/ELS/REPORT/6603/11-2021 Dated 12/11/2021 for final conclusion.

**- END OF REPORT -**



For ULTRA TECH,

(Authorized Signatory)

Lab : Survey No. 93/A, Conformity Hissa No.2 G.V.Brothers Bldg., Bata Compound, Khopat, Near Flower Valley, Thane (West) - 400 601, Maharashtra, India.  
Tele : +91 22 2547 49 07 / +91 22 2547 62 17 Email : lab@ultratech.in Visit us at : www.ultratech.in

## TEST REPORT

**ISSUED TO: M/s. BIRLA CARBON INDIA PRIVATE LIMITED.** **REPORT NO. :** UT/ELS/REPORT/6603/11-2021  
**Unit: "Patalaganga"** **ISSUE DATE :** 12/11/2021  
**Village: Lohop , Talvali ,Patalganga, Tal.: Khalapur,** **YOUR REF. :** 1300022569  
**Dist.: Raigad-410207, Maharashtra, India** **REF. DATE :** 27/04/2021

SAMPLE PARTICULARS :		WORKPLACE AIR QUALITY MONITORING	
Sampling Plan Ref. No.:	02-11/2021	Location Code	04
Sample Registration Date	08/11/2021	Sample Location	DM Plant Room
Date of Sampling	02/11/2021		
Time of Sampling	10:35 Hrs. to 18:35 Hrs.		
Analysis Starting Date	08/11/2021	Collected By	ULTRA TECH
Analysis Completion Date	12/11/2021	Height of Sampler	1.0 Meter
Sample Lab Code	UT/ELS/016/11-2021	Sampling Duration	08 Hours
Ambient Air Temperature	23.2°C to 34.7°C		

Sr. No.	Test Parameter	Test Method	Test Result	Unit
1.	Hydrocarbon as Non-Methane(NMHC)	IS 5182 (Part 17) : 1979	BDL[DL=0.5]	ppm
2.	Polyaromatic Hydrocarbon (PAH)	IS 5182 (Part 12) : 2004	BDL[DL=0.5]	mg/m <sup>3</sup>
3.	Particular Matter (PM <sub>10</sub> )	EPA/625/r-96/010 Method IO-2.1	0.16	mg/m <sup>3</sup>
4.	Carbon Monoxide (CO)	IS 5182 (Part 10) : 1999	1.8	mg/m <sup>3</sup>
BDL: Below Detection Limit		DL: Detection Limit		

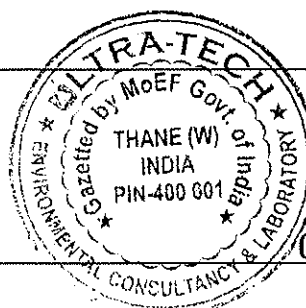
**Opinions / Interpretations:** Factories Act - 1948, Schedule II. For the tested parameters is enclosed as Enclosure-III for your reference.

Sampling Equipment Details	Instrument Used	Make & Model	Calibration Status
	Respirable Dust Sampler	Make - POLLTECH; Model -PEM RDS 9; Sr. No. 515	Valid up to - 03/10/2022
	Fine Dust Sampler	Make - POLLTECH; Model -PEM-ADS 2.5/10µ; Sr. No. 1318	Valid up to - 04/01/2022

**Note:**

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4. Any correction invalidates this test report.
5. Parameter is Tested are not covered under NABL Scope
6. This test report shall be referred along with Test Report No. UT/ELS/REPORT/6602/11-2021 Dated 12/11/2021 for final conclusion.

**- END OF REPORT -**



For ULTRA TECH,

(Authorized Signatory)



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## TEST REPORT

**ISSUED TO: M/s. BIRLA CARBON INDIA PRIVATE LIMITED.** **REPORT NO. :** UT/ELS/REPORT/6604/11-2021  
**Unit: "Patalaganga"** **ISSUE DATE :** 12/11/2021  
**Village: Lohop, Talvali, Patalganga, Tal.: Khalapur,** **YOUR REF. :** 1300022569  
**Dist.: Raigad-410207, Maharashtra, India** **REF. DATE :** 27/04/2021

SAMPLE PARTICULARS :		WORKPLACE AIR QUALITY MONITORING	
Sampling Plan Ref. No.:	02-11/2021	Location Code	05
Sample Registration Date	08/11/2021	Sample Location	Ware House Loading Area
Date of Sampling	02/11/2021		
Time of Sampling	11:00 Hrs. to 19:00 Hrs.		
Analysis Starting Date	08/11/2021	Collected By	ULTRA TECH
Analysis Completion Date	12/11/2021	Height of Sampler	1.0 Meter
Sample Lab Code	UT/ELS/018/11-2021	Sampling Duration	08 Hours
Ambient Air Temperature	24.9°C to 35.1°C		

Sr. No.	Test Parameter	Test Method	Test Result	Unit
1.	Sulphur Dioxide (SO <sub>2</sub> )	IS 5182 (Part 02) : 2001	0.01	mg/m <sup>3</sup>
2.	Oxides of Nitrogen (NO <sub>x</sub> )	IS 5182 (Part 06) : 2006	0.03	mg/m <sup>3</sup>

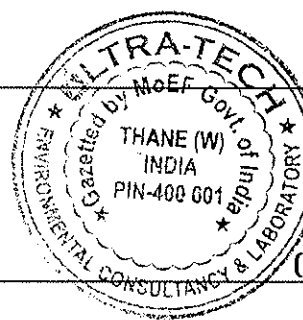
**Opinions / Interpretations:** Factories Act - 1948, Schedule II. For the tested parameters is enclosed as Enclosure-III for your reference.

Sampling Equipment Details	Instrument Used	Make & Model	Calibration Status
	Respirable Dust Sampler	Make - POLLTECH; Model - PEM-RDS 8NL; Sr. No. 3213	Valid up to - 05/01/2022
	Fine Dust Sampler	Make - POLLTECH; Model - PEM-ADS 2.5/10µ; Sr. No. 18213	Valid up to - 04/01/2022

**Note:**

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5. This test report shall be referred along with Test Report No. UT/ELS/REPORT/6605/11-2021 Dated 12/11/2021 for final conclusion.

**- END OF REPORT -**



For ULTRA TECH,

(Authorized Signatory)

Lab : Survey No. 93/A, Conformity Hissa No.2 G.V.Brothers Bldg., Bata Compound, Khopat, Near Flower Valley, Thane (West) - 400 601, Maharashtra, India.

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## TEST REPORT

ISSUED TO: M/s. BIRLA CARBON INDIA PRIVATE LIMITED. REPORT NO. : UT/ELS/REPORT/6605/11-2021  
Unit: "Patalaganga" ISSUE DATE : 12/11/2021  
Village: Lohop, Talvali, Patalganga, Tal.: Khalapur, YOUR REF. : 1300022569  
Dist.: Raigad-410207, Maharashtra, India REF. DATE : 27/04/2021

SAMPLE PARTICULARS		WORKPLACE AIR QUALITY MONITORING	
Sampling Plan Ref. No.:	02-11/2021	Location Code	05
Sample Registration Date	08/11/2021	Sample Location	Ware House Loading Area
Date of Sampling	02/11/2021		
Time of Sampling	11:00 Hrs. to 19:00 Hrs.		
Analysis Starting Date	08/11/2021	Collected By	ULTRA TECH
Analysis Completion Date	12/11/2021	Height of Sampler	1.0 Meter
Sample Lab Code	UT/ELS/018/11-2021	Sampling Duration	08 Hours
Ambient Air Temperature	24.9°C to 35.1°C		

Sr. No.	Test Parameter	Test Method	Test Result	Unit
1.	Hydrocarbon as Non-Methane(NMHC)	IS 5182 (Part 17) : 1979	BDL[DL=0.5]	ppm
2.	Polyaromatic Hydrocarbon (PAH)	IS 5182 (Part 12) : 2004	BDL[DL=0.5]	mg/m <sup>3</sup>
3.	Particular Matter (PM <sub>10</sub> )	EPA/625/r-96/010 a Method 10-2.1	0.14	mg/m <sup>3</sup>
4.	Carbon Monoxide (CO)	IS 5182 (Part 10) : 1999	1.3	mg/m <sup>3</sup>

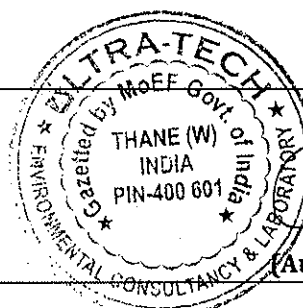
BDL: Below Detection Limit

DL: Detection Limit

Opinions / Interpretations: Factories Act - 1948, Schedule II. For the tested parameters is enclosed as Enclosure-III for your reference.

Sampling Equipment Details	Instrument Used	Make & Model	Calibration Status
	Respirable Dust Sampler	Make - POLLTECH; Model - PEM-RDS 8NL; Sr. No. 3213	Valid up to - 05/01/2022
	Fine Dust Sampler	Make - POLLTECH; Model - PEM-ADS 2.5/10µ; Sr. No. 18213	Valid up to - 04/01/2022

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**- END OF REPORT -**

For ULTRA TECH,

(Authorized Signatory)

**कृषीपाल**

शनिवार,

दि. ३० मार्च २०१३



**सकाळ**

शनिवार,

३० मार्च २०१३

## हायटेक कार्बन पाताळगंगा

या कारखान्यास

भारत सरकारच्या पर्यावरण खात्याने पत्र क्रमांक

F NO. J-11011/35/2007-1AII (1)

तारीख २२ मार्च २०१३ ला पर्यावरणाच्या परवाना

(Environmental Clearance) दिला आहे.

माहितीसाठी हायटेक कार्बन तर्फे.

## निवेदन

हायटेक कार्बन, पाताळगंगा या

कारखान्यास भारत सरकारच्या

पर्यावरण खात्याने पत्र क्रमांक

F No. J-11011/35/2007-

1A II (1) तारीख २२ मार्च

२०१३ ला पर्यावरणाचा

परवाना (Environmental

Clearance) दिला आहे.

माहितीसाठी हायटेक कार्बन तर्फे.

3

### PUBLIC NOTICE

This is to inform that 25 MW Lean Gas Based Power Plant & Carbon Black Project at Patalganga, Dist : Raigarh, Maharashtra by M/s. Hi-Tech Carbon ( A Unit of Aditya Birla Group Ltd) has been accorded Environmental Clearance and terms of the clearance letter are available with the Maharashtra Pollution Control Board and they also be seen on the website of the Ministry of Environment and Forests at <http://www.mef.gov.in>

For

M/s. Hi-Tech Carbon

(A Unit of Aditya Birla Group Ltd.)

दिनांक : शनिवार, १३ ऑक्टोबर २००७

सुकाळ

### **PUBLIC NOTICE**

This is to inform that 25 MW Lean Gas Based Power Plant & Carbon Black Project at Patanganga, Dist : Raigad, Maharashtra By M/s. Hi-Tech Carbon ( A Unit of Aditya Birla Nuvo Ltd) has been accorded Environmental Clearance and copies of the clearance letter are available with the Maharashtra Pollution Control Board and may also be seen on the website of the Ministry of Environment and Forests at <http://www.mefvfor.nic.in>

For

M/s. Hi-Tech Carbon

(A Unit of Aditya Birla Nuvo Ltd.)

## **PART II**

### **ENVIRONMENTAL MANAGEMENT PLAN AND DISASTER MANAGEMENT PLAN**

#### **A. ENVIRONMENTAL MANAGEMENT PLAN:**

Every plant after a commissioning phase requires a Health, Safety and Environmental Control mission to be set up with proper implementation. An organization chart covering responsibilities of various officials is formulated, reviewed periodically and updated. Being existing plant site, Environmental management planning has been already done. The details of the same are as follows;

#### **ORGANISATION CHART:**

- i) Location Head
- ii) Group Leader (Operations)
- iii) Group Leader (Engineering Services)
- iv) Group Leader (Environment)
- v) Group Leader (Quality Assurance)
- vi) Group Leader (Management Services)
- vii) Emergency Control Room

Environmental management plan includes following:

- 1) Operation of plants/ Facilities
  - Process water supply.
  - Waste water control system
  - Air pollution control system.
  - Solid waste management system.
- 2) Laboratory Facilities including routine monitoring.
- 3) Equipment and Instrumentation control
  - Periodic and systematic testing and control.
  - Repairing.
- 4) Data Handling
  - Data collection.
  - Reporting and storage of data
  - Maintaining track of discussions.
- 5) Disaster Planning
  - Disaster management team
  - Rescue and rehabilitation.
- 6) Manpower for Environmental management.

## **B. DISASTER MANAGEMENT PLANNING:**

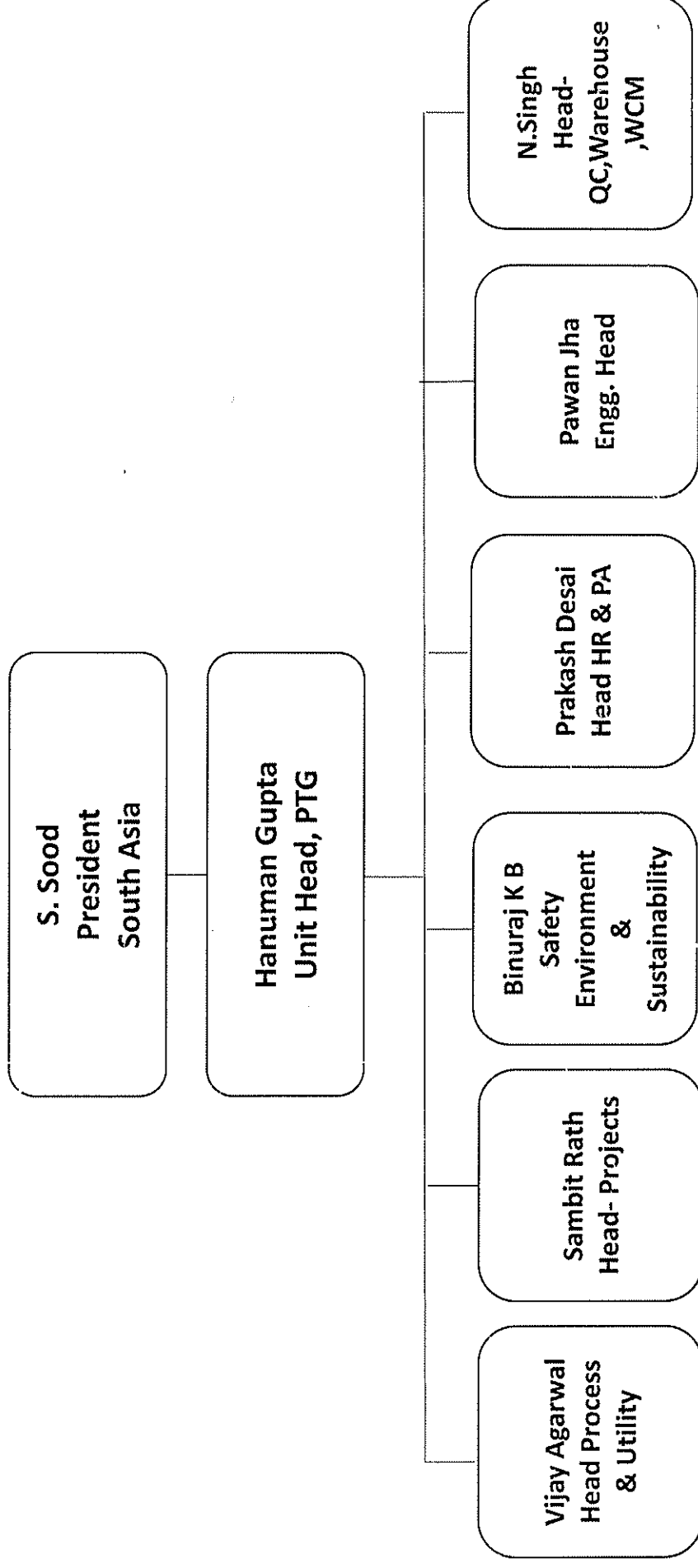
Disaster Management planning includes anticipatory action for disaster, stream lining of preparedness, assembly and coordination of disaster management team and quick mobilization of all the forces to face the situation.

Salient features of planning are;

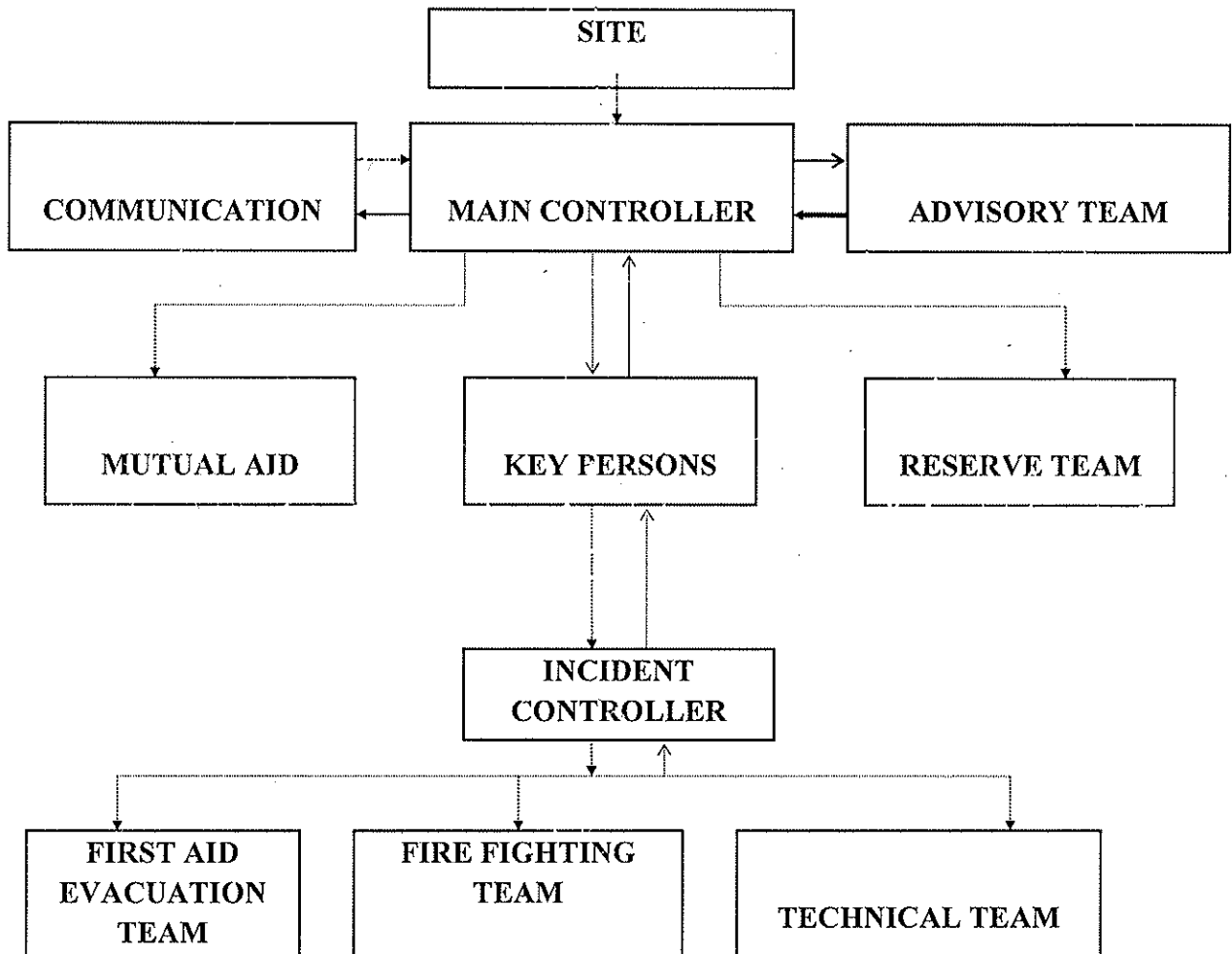
1. Preparation of an Organizational Chart identifying personnel to coordinate and take charge of various functions.
2. To train concerned personnel in safety measures required in event of disaster.
3. To identify communication link that can be established with local and state authorities to meet the challenges of disaster and to ensure reliability of communication system.
4. Identify nearby industries to muster help in case of emergency.
5. To ensure adequacy and efficiency of fire fighting system.
6. To ensure that necessary applications like boots, gas masks, protective wears, gloves, goggles, ear muffs, anti-vibration pads etc. are readily accessible.
7. To ensure reliability of gas leak detection system.
8. To prepare clear map of plant area indicating position of gates, various units, approach roads, emergency exits, etc.
9. To maintain adequate inventory of first-aid kits, antidotes, essential drugs.
10. To maintain a meteorological data of site especially giving wind direction in each season, in case, evacuation becomes necessary.
11. Immediate precaution like providing wet towels, gas masks or respirators shall be undertaken. Awareness has to be created to avoid panic on eventualities. The safety coordinator should do the needful to restore normalcy, whereas, medical coordinator shall attend to the casualties.
12. If required plant shall be shutdown and the entire area sealed off till trained personnel restore normalcy.
13. Environmental decontamination measures to be undertaken by physical, chemical or biological approaches as required.
14. Rescue and Rehabilitation :  
The rescue operation consists of removing operating personnel trapped in disaster /emergency area and shifting them to hospitals /nursing homes after first aid. A large number of ambulances may be required and should be summoned from various sources, like nearby industries, hospitals, voluntary organizations, etc. All the casualties should be identified and relatives should be informed, if possible.
15. The rescue operation will be initiated immediately after the disaster has occurred though relief may take some more time (few hours to couple of days). Depending upon severity of disaster, external help may be sought (to provide evacuation, medical help etc.) till normalcy is restored.
16. Rehabilitation will include taking adequate care of casualties, providing necessary help for the victim. It will also include rebuilding damaged plant, machinery and building, estimation of damage, compensation payment etc.

The following chart reveals the co-ordination of Emergency organization during emergency situations.

# ORGANIZATIONAL STRUCTURE



## EMERGENCY CONTROL ORGANISATION



The duties performed by the personnel of emergency organization team are as follows:

***First Observer:***

He is a person who observes the emergency at the first sight. He will try to handle the emergency with the immediately available facilities to him. If he feels that it is beyond his control, he will press hooter button nearby and inform immediately to his shift in-charge. If shift in-charge is not available in the vicinity, he can directly phone to security. He will give the information like type of emergency, location and his name. After that he will contact to his staff in-charge and will give all details. Then he will act as per the instructions of the shift in-charge (Refer Emergency Organization).

***Incident Controller.***

The shift engineer of the plant/ officer of the dept. in which the emergency arose is considered as incident controller.

1. He will receive the information from first observer and reach to the spot of the emergency.
2. He will assess the emergency and instruct to subordinates to bring the running plant operations in shutdown mode.
3. He will direct fire fighters, first aiders and technical team.
4. He will seek help from the key person.
5. He will give continuous feed back to the main controller and receive his instructions.
6. Once the emergency is brought under control, he will inform to the main controller.

***Main Controller:***

1. On hearing siren and instructions on public address system, he will reach near the site and take over the charge of the situation.
2. He will communicate with the incident controller and will assess the situation.
3. He will instruct the incident controller, communication team.
4. He will take advice from the advisory team if required.
5. He will give feedback to the site controller during or after the emergency brought under control.
6. Once the emergency is brought under control, he will instruct communication team to declare all clear by sounding all clear siren.
7. Organize investigation after bringing emergency under control.
8. Incorporate corrective measures to avoid further accident/ incident.

***Advisory Team:***

1. All advisory Team members should assemble at **Emergency Control Centre**.
2. They will provide essential information to the Main Controller on his demand.
3. If the Main Controller doesn't require any advice from the team, he can delegate any other jobs which may be more important at the time of emergency.

***Communication Team:***

1. On hearing siren they will take position in Security dept.
2. They will inform about their positions to the main controller.
3. They will receive instructions from the main controller and communicate internal personnel as well as outside agencies, authorities (fire brigade, ambulance, hospitals, and site controller) and government officials.
4. To restrict the vehicles from coming inside the factory except the vehicles of the emergency organization members. Also to remove the vehicles, if required from inside.
5. Keep the entrance road clear for emergency vehicles.
6. On the instructions from the main controller open the emergency exits.
7. To arrange for the ambulance car or vehicles.
8. As per the instructions of the main controller, they will inform about status of emergency to all people present in the premises.
9. They will sound all clear sirens once they get signal from the main controller.

***Emergency Handling Team (Fire Fighting Team):***

1. After hearing the information's about the emergency on Emergency Alarm System, they will reach at the spot of emergency. Before this, they will give charge of their jobs to the responsible person as per the instructions.
2. After reaching on the spot, they will act as per the instructions of the incident controller.
3. After handling the emergency they will be engaged in salvage operation if required, otherwise in normal case they will go back to the plant and will resume the work.

***First Aid Team:***

1. After receiving the information, the doctor and nurse will remain in occupational health centre only.
2. First aider will go to the site. They will remove the casualties from the place and will give them first aid treatment with help of a doctor/ nurse.

***Evacuation Team:***

1. Identify the wind direction.
2. Evacuate people from emergency location.
3. Guide them toward the assembly points.
4. Carry out head count operations.
5. Give feed to main controller.
6. In case of off-site implications, they will carry megaphone and evacuate neighbouring villages with help of police.

***Technical Team:***

1. Mechanical Engineer/ Utility operator to ensure that all water tanks are full and hydrant system is ready to use.
2. Electrical engineer/ Electricians: If required they will cut off electric supply of that area on the instructions of incident/ main controller and provide portable lights/ extension lights.
3. Instrumentation Engineer/ Technicians: To act as per the instructions given by incident / main controller.

**C. ORGANISATIONAL SET-UP FOR POLLUTION CONTROL:**

Pollution control systems will be looked after by a team of professional people headed by Manager. In general he will co-ordinate the operation and maintenance staff for control system.

***Operation and maintenance of effluent treatment plant / water treatment plant:***

ETP shall be operated & maintained by a team which consists of;

- |                      |   |
|----------------------|---|
| a. Plant In-Charge : | 1 |
| b. Shift In-Charge : | 1 |
| c. Supervisors :     | 1 |
| d. Operators :       | 1 |
| e. Helpers :         | 1 |

**D. GENERAL SAFETY PRECAUTIONS & INDUSTRIAL HYGIENE :**

1. Ventilation is provided by plenty of openings.
2. Adequate platforms are provided for manual operations. Free space for movements and carrying the material is provided.
3. Adequate number of fire extinguishers is provided.
4. All workers are provided with hand-gloves, goggles, footwear's, aprons, masks, hard hats etc. for protection.
5. There is no manual handling of liquids like Acids, Caustic Soda Lye etc. These liquids are always flow through pipe lines.
6. All steam pipe lines and steam heated vessels are provided with adequate insulation. All high pressure steam lines are IBR approved.
7. Safety relief valves are provided wherever necessary.
8. Routine medical attention is given to workers.
9. Company has provided a full fledged fire hydrant system for fire fighting. The system is constructed as per the TAC norms and necessary approval from TAC authority has been obtained.
10. Petrochemical products are being stored in petroleum tank farm licensed by Explosive

Department.

11. Portable fire extinguishers are provided throughout the plant as per the norms.
12. Process plant is controlled through Distributed Control System DCS operated instrument network to minimize the exposure of raw material to operating persons.
13. Plant layout and detailing is done by renowned professionals, viz. M/s. Davy Power Gas Consultants and process plants are provided with most modern Distributed Control System (DCS) with inbuilt safety features such as alarms, trips, pressure release system, etc.
14. Company will provide a full fledged fire hydrant system, designed as per statutory requirements.

The system is designed to adequately protect the buildings, equipment, storage facilities, utility plants & other installations by providing hydrants and water monitors around the areas.

The system mains are comprised of pressurized underground ring main of carbon steel pipes suitably waited & wrapped with hydrant points as required as per statutory norms. The installation is provided with sluice valves & suitable sizes at suitable points to facilitate isolation of ring mains, if required, during fire & maintenance.

Water Storage:

Water storage Tank of 10000 m<sup>3</sup> capacity is provided.

Pumps & Pump House:

A separate pump house is constructed. The pumping system consists of the following pumps.

DESCRIPTION	CAPACITY	NORMAL DISCHARGE PRESSURE
Electrical Driven Pump 2 no. (Working)	171.m <sup>3</sup> /hr.	88 Meters head
Diesel Driven Pump 1 no. (Standby)	171 m <sup>3</sup> /hr.	88 Meters head
Jockey Pump 2 no.	10.8 m <sup>3</sup> /hr.	88 Meters head

15. The pumps are provided with automatic starting devices as per statutory norms. In addition manual starting device is provided for all the pumps.

Hydrants:

Sr. No.	DESCRIPTION	QUANTITY
1.	S.S. Hydrant valve as per IS 5290	59 Nos.
2.	S.S. Fire Escape Hydrant valve as per IS 5290	8 Nos.
3.	ABC Type extinguisher - 5 Kg	44 Nos.
4.	CO2 extinguishers - 4.5 Kg	57 Nos.

PART II

DETAILS OF THE EXPENDITURE FOR THE ENVIRONMENTAL MANAGEMENET PLAN

Sr. No	Descriptions	Cost (Crores)
1	Air pollution Control Equipment (Heat recovery boilers)	23.25
2	ETP/STP	4.05
3	Green Belt	1.89
4	O & M and Monitoring	0.9581
	<b>Total</b>	<b>30.148</b>

उप वनसंरक्षक, अलिबाग वार्डिभाग अलिबाग यांचे कार्यालय.  
मु.पो. ता. अलिबाग जिल्हा- रायगड दूरध्वनी क्र. ०२१४१ २२२०१६

पत्र

विषय :- दाखला मिळणे बाबत.  
आदीत्य बिल्ला न्युव्हो लिमीटेड यांचा  
अर्ज.

जावक क्रमांक ब/२०/जमीन/३७८४/२०१२-२०१३  
अलिबाग, दिनांक : १५/१२/२०१२.

प्रति,

आदीत्य बिल्ला न्युव्हो लिमीटेड,  
युनिट, हाय-टेक कार्बन,  
पातळगंगा, लोहोप,  
ता. खालापूर जि. रायगड.

- संदर्भ :- १) आपलेकडील दि. ०९/०५/२०१२ रोजीचा विषयाधिन अर्ज.  
२) वन परिक्षेत्र खालापूर यांचेकडील पत्र क्र. अ/२०/जमीन/६२५, दि.  
१२/१२/२०१२.  
३) उप विभागीय वन अधिकारी, पनवेल यांचेकडील पत्र क्र.  
ब/२०/जमीन/५६९ दि. १३/१२/२०१२.

वनक्षेत्रपाल खालापूर व उप विभागीय वन अधिकारी, पनवेल यांनी वरील संदर्भित  
पत्रान्वये सादर केलेल्या अहवालानुसार आपणार कळविण्यांत येत आहे की, आपले दिनांक  
०९/०५/२०१२ रोजीचे विनंती अर्जात नमुद केत गप्रमाणे सद्या उभ्या असलेल्या युनिटमुळे  
( कंपनीचा प्लॉट ) लगतचे राखीव वनावर सद्यस्थितीत बाह्य स्वरूपी परिणाम झाल्याचे  
दिसून येत नाही.

उप वनसंरक्षक,  
अलिबाग.

प्रतिलिपी :- उप विभागीय वन अधिकारी, पनवेल व वनक्षेत्रपाल खालापूर यांना  
माहितीसाठी रवाना.

**RAV**  
GROUP

Towards sustainable growth

# Mumbai Waste Management Limited

## Certificate

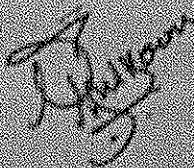
M/s. Biola Carbon India Pvt. Ltd.

is a registered member of  
CHW-TSDF at MIDC, Taleja  
for safe & secure disposal of  
Hazardous Waste.

Membership no.: MWML - HzW - PTG - 2907

This Certificate is valid up to

31st MAR - 2022



Omkar A. Kulkarni  
Manager - MBD



Sonmath Mulgar  
Director