

Ref. No. ENV/ Nagpur/December-2019-02

Date:01st December 2019

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,

 Environmental Clearance Letter No. J-11011/35/2007 IA II (I) dated 22nd 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 Signator

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.

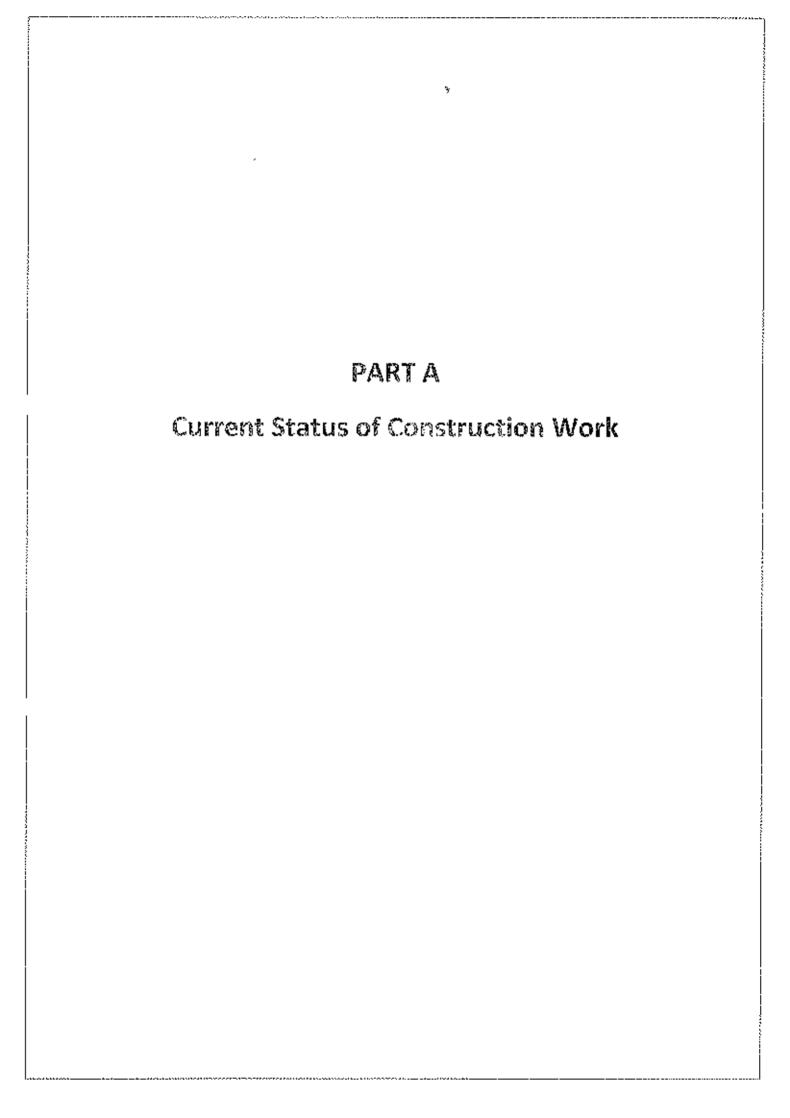
Birla Carbon India Private Limited

[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

-: LIST OF ENCLOSED DOCUMENTS:-

SR. NO.	PARTICULARS	ENCLOSURE
PART A	CURRENT STATUS OF WORK	
PART B	POINT WISE COMPLIANCE STATUS	
PART C	ENCLOSURE	
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
PART D	ANNEXURE	
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



CURRENT STATUS OF WORK

Status of construction

: Construction is completed

Date of commencement

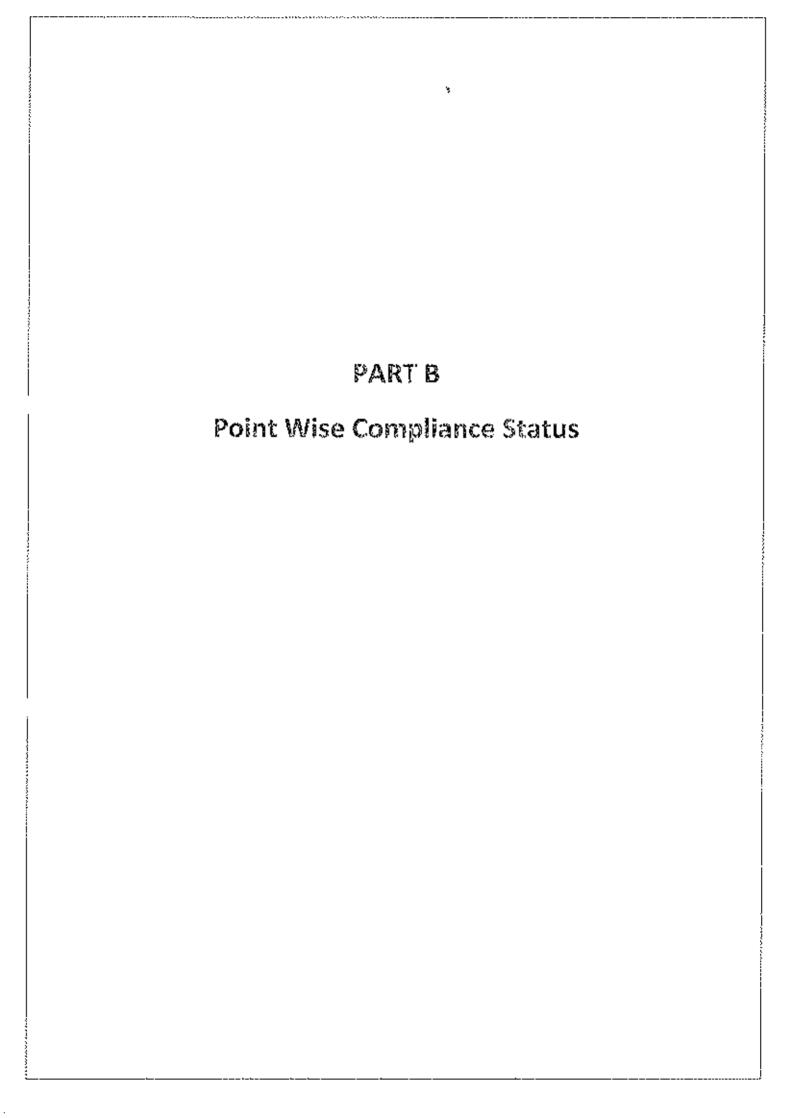
: Not Applicable

(Actual and/or planned)

Date of completion

: Not Applicable

(Actual and/of planned)



: 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.H (T) dated 28.09,2007 as follows.

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

	T	T
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 tine 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 bags filters, RO plant, Triple effect evaporators, vent scrubbers, stacks. Refer Annexure 8
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.

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; PART B:

POINT-WISE COMPLIANCE STATUS

Sr. No	Condition	Status
	Specific Conditions-	
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	Permission obtained. Copy submitted to regional office
2	satisfactority. Copy of permission shall be submitted to the respective Regional Office. As proposed, vent scrubber in the reactor area, main	All proposed equipment's in
	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	respective area provided
3	The gaseous emissions (SO ₂ , NOx, CO and HC) and particulate matter from existing and proposed beiler, 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 Annexure - 5
4	Continuous stack monitoring of stacks for SO2, NOx 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 ₂ , 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 ₂ and NO ₈ are installed. Online CO monitoring and Environment data display on website started from October 2013

5	As proposed, this being an existing plant Sulphur	Same is ensured
	content in the feed stock i.e. Carbon Black Feed	
	Stock (CBFS) shall not exceed 2.5% at any time	
6	Ambient air quality data shall be collected as per	Complied. Reports attached for
ļ	NAAQES standards notified by the Ministry vide	reference Annexure -5
-	G.S.R. No. 826(E) dated 16th September, 2009.	
7	Poly-Aromatic Hydrocarbon (PAH) shall be	PAH monitored from the packing
	monitored in fugitive dust emission area	plant and reports attached vide
	particularly in Packaging Plant. Data shall be	Annexure -5
	properly monitored, recorded, and submitted to the	
	Ministry's Regional Office at Bhopal.	
- 8	Industrial exhaust and proper ventilation shall be	Provided
	provided in packaging plant area	
9	The levels of PM10, SO2, NOx, CO and HC (Non-	Noted. Online monitoring of SO ₂
	methane) shall be monitored in the ambient air.	and NO _x CO installed, and
	Data of stack monitoring and ambient air shall be	Environment data display on website
ļ	displayed on web as well as outside the premises at	started from October'2013.
1	prominent place for public viewing. The company	Annexure: for data monitoring of
}	shall upload the results of monitored data on its	levels of PM ₁₀ , SO ₂ , NOx, CO and
İ	website and shall update the same periodically. It	HC (Non-methane) in the ambient air
	shall simultaneously be sent to the Regional office	is enclosed vide Annexure -5
	of MOEF, the respective Zonal office of CPCB and	
	MPCB.	
10	In plant control measures for checking fugitive	All processes are in closed handling
	emissions from all the vulnerable sources shall be	and DCS controlled. To control dust
	provided. Fugitive emissions shall be controlled by	emissions, Dust collection system in
	providing closed storage, closed handling &	Product Packing area is being further
	conveyance of chemicals/materials, multi cyclone	strengthened Regular monitoring of
]	separator and water sprinkling system. Dust	the ambient air quality, Soil, Noise
	suppression system including water sprinkling	and Water Samples is being carried
	system shall be provided at loading and unloading	out. And the report of the same
Ì	areas to control dust emissions. Fugitive emissions	submitted to SPCB on monthly basis
	in the work zone environment, product, raw	Please refer Annexure -5
	materials storage area etc. shall be regularly	Unloading area handles Liquid raw
	monitored. The emissions shall conform to the	Material. The area is fully concreted.
	limits stipulated by the MPCB.	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	Acoustic enclosure provided for the
	dispersed through adequate stack height as per	DG. As per CPCB standard, its stack
	CPCB standards. Acoustic enclosure shall be	height is 43 mtr.
	provided to the DG sets to mitigate the noise	į
Ĺ,	pollution.	

12	Total fresh water requirement from Patalganga River shall not exceed 4000 m ³ /day. No ground	No water extracted from the ground and also we complied the rain water
	water shall be used. Steps should also be identified	harvesting project to conserve the
	to conserve water and measures adopted for	rain water please refer
	minimizing the same.	Annexure - 02
	Transit of the same	Studies are underway to assess the
		feasibility of collecting Hill side
		water.
13	Effluent generated shall be treated in the ETP	Treated effluent quality is checked on
	comprising RO and rejects shall be concentrated in	regular basis reports attached vide
	MEE. Permeate from RO and condensate shall be	Annexure -5
1	recycled / reused in the cooling tower make up	
}	water. Oil water stream shall be treated in Oil water	
3	separator. Sewage shall be treated in sewage	
-	treatment plant (STP) and treated wastewater shall	
	be used for cooling water make up. Treated effluent	
i	shall be recycled / reused within the factory	
	premises. Treated effluent quality shall be	ļ
	monitored regularly and conform to the norms	
	prescribed by the CPCB/MPCB from time to time.	
14	No treated process effluent shall be discharged	No effluent discharged outside our
	outside the premises and Zero discharge shall be	premises. Zero discharge ensured.
	ensured.	
15	Process effluent/any wastewater shall not be	Guard pond provided
	allowed to mix with the storm water. Storm water	
	drain shall be passed through guard pond	
16	All the solid/hazardous waste including ETP sludge	Separate covered Hazardous waste
	and waste oil shall properly stored at the site as per	storage facility is provided within the
	CPCB guideline. Fine carbon particles generated as	factory premises
	solid waste shall be sold to industries for	
1	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.	
17	Proper and valid authorization and membership	Authorization and membership
	shall be obtained from the concerned authorities for	obtained (MWML) Annexure-9
	the management of solid/hazardous waste and a	
	copy submitted to the Ministry's Regional Office at	}
18	Bhopal The Company shall strictly comply with the rules	Noted.
"	and guidelines under Manufacture, Storage and	Trotot.
	Import of Hazardous Chemicals (MSIHC) Rules,	
	1989 as amended time to time. All Transportation	
	of Hazardous Chemicals shall be as per the Motor	İ
	Vehicle Act (MVA), 1989.	
	1 0.11.010 1.101 (11.11.11.11.11.11.11.11.11.11.11.11.11.	L

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19	Proper housekeeping shall be maintained and no	Good Housekeeping Practices within
	spillage of Carbon Black shall be permitted.	our factory premises are followed.
	Preventive measures shall be taken to avoid and	Preventive measures to avoid Carbon
	prevent any accidental release of Carbon Black to	spillage are implemented
	the environment.	
20	The company shall undertake following waste	a. Followed
1	minimization measures :-	b. By products are used a raw
	 a. Metering and control of quantities of active 	materials for other process
	ingredients to minimize waste	-
\$	b. Reuse of by products from the process as	c. Automatic filling is used in for
	raw materials or as raw material substitutes	finished product Packing
	in other processes	d. Close Feed system is used for
İ	e. Use of automatic filling to minimize	feeding raw material and other
	spillage	materials into the process
	d. Use of Close feed system into batch reactor	e. High pressure hoses are used for
	e. Use of high pressure hoses for equipment	cleaning.
	cleaning to reduce waste water generation	Cicaling.
21	A proper occupational health monitoring system	Pre-employment medical
	should be implemented for all personnel / workers	examination as well as routine
	in the plant / laboratory and other areas which may	i
		periodic medical examination is in
	have an impact on their health.	practice
22		Noted.
	The unit shall make the arrangement for protection	Firefighting system is in place as
	of possible fire hazards during manufacturing	applicable to our industry. A
	process in material handling. Firefighting system	pressurized network and also a set of
	shall be as per the OISD 117 norms.	Dry fire extinguishers are in place.
23	All the workers involved in packing of Carbon	Good quality PPE'S provided in
	Black in Packaging Plant area shall use (PPE) and	packing area
	masks to avoid direct exposure to Carbon Black	
.,	dust.	1
24	All the workers shall be regularly monitored for	Periodically medical checkup for
	occupational health for relevant parameters	workers is in practice and records are
	pertaining to industry specific and records	maintained.
	maintained.	
25		Energy conservation measures
	Proper energy conservation measures shall be	adopted in year 2012-2013 send to
	adopted and a report submitted to the Ministry and	Regional office MoEF Bhopal on
	its Regional Office at Bhopal,	19.04.2013
26	As proposed, green belt shall be developed in 21.5	We are having the green belt
	acres out of 65 acres of total land Selection of plant	development programme, find the
	species shall be as per the CPCB guidelines.	attachment as per Annexure - 4 We
	The state of the s	shall further extend our green belt on
		available open area
27	All the recommendations/standards mentioned in	Noted and Complied
٠,	the CPCB guidelines for the Carbon Black	1 total and compiled
	manufacturers shall be implemented.	
	manufacturers strait to implemented.	,.,

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28	Company shall prepare Corporate Environment	
	Policy as per the Ministry's G.M. No. J-	prepared and send to Regional office
	11013/41/2006-IAH(1) dated 26th April, 2011	MoEF Bhopal on 19.04,2013
	within one month from date of issue of letter and	
	submitted to the Ministry's Regional Office,	
29	Provision shall be made for the housing for the	Noted & Complied during project
	construction labour within the site with all	stage
	necessary infrastructure and facilities such as fuel	
	for cooking, mobile toilets, mobile sewage	
	treatment plant, safe drinking water, medical health	
	care, creche etc. The housing may be in the form of	
į	temporary structure to be removed after the	
	completion of the project. All the construction	
}	wastes shall be managed so that there is no impact	
İ	on the surrounding environment.	
	General Conditions-	
30	The project authorities shall strictly adhere to the	
	stipulations made by the Maharashtra Pollution	Same is adhered
	Control Board.	
31	No further expansion or modifications in the plant	
	shall be carried out without prior approval of the	
ļ	Ministry of Environment and Forests. In case of	
}	deviations or alterations in the project proposal	
5	from those submitted to this Ministry for clearance,	Noted
	a fresh reference shall be made to the Ministry to	
İ	assess the adequacy of conditions imposed and to	
	add additional environmental protection measures	
	required, if any	
32	The locations of ambient air quality monitoring	
	stations shall be decided in consultation with the	
	State Pollution Control Board (SPCB) and it shall	Four Ambient Air Quality monitoring
	be ensured that at least one stations is installed in	stations are installed
	the upwind and downwind direction as well as	
	where maximum ground level concentrations are anticipated.	
33	The overall noise levels in and around the plant	V73VV1V1C 131VV1211111111111111111111111111111111
.3.3	area shall be kept well within the standards by	DG Sets are provided with acoustic
-	providing noise control measures including acoustic	enclosure as well as steam vents of
	hoods, silencers, enclosures etc. on all sources of	power plant is having provision of
	noise generation. The ambient noise levels shall	silencers to reduce the noise. Noise
	conform to the standards prescribed under	levels are continuously monitored.
	Environment (Protection) Act, 1986 Rules, 1989	Monitoring reports attached vide
	viz. 75 dBA (day time) and 70 dBA (night time).	Annexure (5
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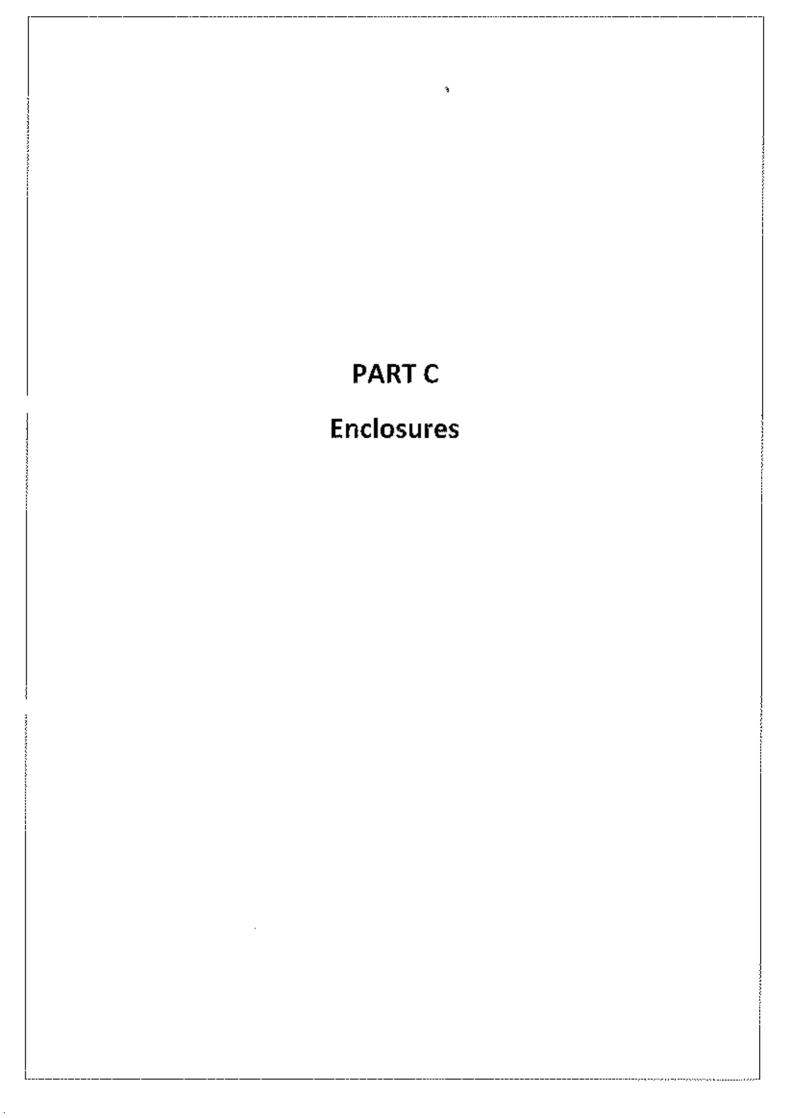
34	The Company shall harvest rainwater from the roof tops of the buildings and storm water drains to recharge the ground water and use the same water for the process activities of the project to conserve fresh water.	Complied. We have installed rain water harvesting system for warehouse, TG, Admin building 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 Ceil 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 ₁₀ . 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	Find the Enclosure 1,-Part 3

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 carmarked for environment management/ pollution control measures shall not

be diverted for any other purpose.

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41	A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, ZitaParishad/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 31st 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 Form V displayed on Website
-14	The project proponent shall inform the public that the project has been accorded environmental elearance 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.	Complied, Pablic 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 Annexure- 6.
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-1

PROJECT DETAILS

ABOUT THE PROJECT:

LOCATION	Village: Talvali and Lohop, Tal : Khalapur,
	Dist : Raigad
TECHNOLOGY	In house
PROJECT COST.	Rs. 490 Crores
COST OF POLLUTION CONTROL	Rs. 22.47 Crores
MEASURES	
SOURCE OF WATER	Available from Patalganga River

PRODUCT & ITS END USES:

Name of Product	End uses
Multi grade Carbon Black	Rubber processing and chemicals industry. Its largest use is in the manufacture of tyres, and it is also used to produce paints, dyes, inks and conveyor belts.
Electricity	Utilized in house and remaining sold to open access.

PRODUCT & ITS CAPACITY:

Products	Production capacity
Carbon Black	7,000 MT / Month
Electricity	23 MW/H

AREA REQUIREMENT:

Sr. No.	Purpose Carbon Power Black Plant Area (Sq. Area (Sq. Mt.) Mt.)		Common Arca (Sq. Mt)	TOTAL Area (Sg. Mt.)	
1.	Production area Including future expansion	46,690.00	21,000,00		67,690.00
2.	Material storage area Finished product	7,200.00			7,200.00
3.	Hazardous chemical storage	5950.00	1490.00		7,440.00

Sr. No.	Purpose Carbon Power Black Plant Area (Sq. Area (Sq. Mt.) Mt.)		Purpose Black Plan Area (Sq. Area		Purpose Black Plant Area (Sq. Area (Common Area (Sq. Mt)	TOTAL Area (Sq. Mt.)
4.	Approach road area – All inside roads	25,000.00	5,000.00		30,000,00			
5.	ETP, STP & Solid waste area	600.00	1,500.00		2,100.00			
6.	Utilities, water tank, etc	4,500.00	3,000.00		7,500.00			
7.	Open space area	13,520.00	13,350.00		26,870.00			
8.	Green belt area		4 -	1,33,200.00	1,33,200.00			
9.	Office buildings (admin, stores, workshop, etc)			8,000.00	8,000.00			
	TOTAL PLOT AREA	1,03,460.00	45,340.00	1,41,200.00	2,90,000.00			

WATER REQUIREMENT:

Daily water requirement of the proposed plants in m3/day will be as follows:

Sr. No.	Detail	M³/day
Ŧ.	Process	4610
2.	Gardening	350
3.	Domestic	80
	TOTAL	5040

POWER REQUIREMENT:

The proposed plants will require a power as follows;

	Requirement	KW
	Process (Production)	5000
2.	Utility	2000
3.	Administration Block	400
4.	Lighting	600
	TOTAL	8000

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

Date: 1st Dec 2019

[[,	Pro	ject type: R	tiver - valley/ Mining /	T;	Carbon Black manufacturing
	Inc	lustry / Thei	mal / Nuclear / Other (specify)		Thermal - cogeneration
2.	Name of the project		7:	Birla Carbon India Private Limited	
3.	Clearance letter (s)/OM No. and Date			EC for power plant:- J- 13011/35/2007-IA.II(T) dt. September 28,2007 EC for Carbon Black plant:- J- 11011/35/2007-IA-II (I) dt. 22 nd March 2013.	
4.	Lo	cation;			
	a.		District (S)	Τ:	Raigad
	Ъ.		State (s)	1:"	Maharashtra
	c.		Latitude/ Longitude	1:	Latitude 18 deg. 51 ' N
	Ì				Longitude - 73 deg 12 ' E
5.	Ad	dress for co	rrespondence		
	a,		Address of Concerned Project Chief Engineer (with pin code & Telephone / telex / fax numbers Address of Executive		Mr. Sambit Rath Sr. Manager - Project M/s. Birla Carbon India Pvt. Ltd, VILLAGE: LOHOP, TALVALI, PATALGANGA, TALUKA: KHALAPUR, DIST. RAIGAD 410 207 MAHARASHTRA, INDIA. Phone 021922202050 Same As Above
6.	- Sal	ient features	Project: Engineer/Manager (with pincode/ Fax numbers)		
171	8.	of the proj			PART -I -Project Details
 -	ĥ.		ronmental management plans	+	PART -II - EMP
7,	1		of the project area:	استسل	1 - 6001
	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 Josing houses / dwelling units Only agricultural land only, both Dwelling units & agricultural Land & landless labourers/artisan			Not Applicable.	

	a.	SC, ST/Adivasis	Ĭ:	Not Applicable
	b.	Others	1:	Not Applicable
	1	(Please indicate whether these Figures	-	''
		are based on any scientific And	}	
		systematic survey carried out Or only	1	
		provisional figures, it a Survey is carried		
į		out give details And years of survey)		1
9.	Fin	ancial details :	· i	3
}	i1,	Project cost as originally planned and sub	sea.	nent revised estimates and the year of
		price reference :	[
ļ	1,	Total Cost of the Project	Τï	Rs. 490.00 Crores
j	[Allocation made for environ-mental	- <u>:</u>	
	,.,	management plans with item wise and	.	PART - 411 - Allocation made for
		year wise Break-up.		environ-mental management plan
	 С,	Benefit cost ratio / Internal rate of	1	en voor-meann management pran
	j ```	Return and the year of assessment	j '	
	{ √.	Whether (e) includes the	1	Yes
	1.0	Cost of environmental management as		1 553
		shown in the above.	j j	
ļ	e.	Actual expenditure incurred on the	<u>ن</u> ې-را	Rs 316 Crores Only.
	٠.	project so far	' :	les ore croses emp.
<u>!</u>	<u>΄</u> ,	Actual expenditure incurred on the		Rs. 22.47 Crores Only.
	١.	environmental management plans so far.	'	res. Azarr Crores Cany.
10.	است محمداً	est land requirement		Not Applicable
. ! '''	it.	The status of approval for diversion of	1:	Not Applicable
i 	'	forest land for non-forestry use.	1	Two Applicance
	 b.	The status of clearing felling		Not Applicable
	 С.	The status of compensatory	 -:	
	٠. ا	afforestation, it any.	'	Not Applicable
	ď.	Comments on the viability &	 -	Nest Applicable
j	L.P.	sustainability of compensatory	-	Not Applicable
		,	,	
		afforestation program in the light of		
	33.0	actual field experience so far.		Not Applicable
' '		e status of clear felling in Non-forest areas	•	тун мррижилс
		ch as submergence area of reservoir. roach roads), it any with quantitative		
		roach roads). It may wan quantitative armation.		
12.		nnation. tus of construction :	ll	
16.	~~~		7	Construction appropriate
	a.	Date of commencement	:	Construction completed
		(Actual and/or planned)		Constanting
	b.	Date of completion	;	Construction completed
اا		(Actual and/or planned)	 	Non-Amelianki
13,		isons for the delay if the Project is yet to	:	Not Applicable
	star			
14 }	Dat	es 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.			;	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

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 Telefax: 011: 2436 0549

Daled 22nd March, 2013

To,

M/s Hi-Tech Carbon (A Unit of Aditya Birla Nuvo Ltd.) Ahura Centre, 2°5 Floor, Near MIDC Office Mahakali Caves Road, Andherl (E) Mumbai-400 093, Maharashtra

E-mail: htcmum@adityabida.com

Subject: Carbon Black Plant (1,20,000 TPA) at Patalganga, District Raigad, Maharashtra by M/s

HI-Tech Carbon - Environmental Clearance reg.

Rof. : Your letter no. HTC/PTG/UH/MPCB/EC/061 dated 18th March, 2011

Sir.

Kindly refer to your letter dated 18th 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 21stJuly, 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 Reigad, 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 28th 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 m³/day. Industrial effluent generation will be756 m³/day and treated in the effluent treatment plant (ETP) comprising reverse osmosis (RO) and rejects will be concentrated in multiple effect evaporators (MES). 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 studge 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 fisted 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 24th and 33th meetings held during 22th-23th June, 2011 and 21st-22th 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 14th September 2006, subject to the compliance of the following Specific and General Conditions:

A. SPECIFIC CONDITIONS:

- Permission and recommendations of the State Forest Department regarding impact at 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.
- The gaseous emissions (SO₂, NOx, 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 SO₂, NO_x 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_x, NO_x and CO shall be displayed on web as well as outside the premises at prominent place for public viewing.
- 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 16th September, 2009.
- 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_{ini} SO₂, NOx, 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 GPCB and MPCB.

- x) In plant control measures for checking fugitive remissions 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 m³/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 shalt 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 Oll 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.
 - Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.
 - Use of automated filling to minimize splitage.

- d. Use of Close Feed system into batch reactors.
- e. Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- 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.
- 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 CPC8 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.fl(t) dated 26th April, 2011 within one month from date of issue of letter and submitted to the Ministry's Regional Office.
- 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:

- 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 adequecy of conditions imposed and to 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 (SPC8) 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.
- iv The overall noise tevels 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 sofficient 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.
- xili. 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 31st 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 :-

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

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

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: 28th September, 2007

Τo

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

\$ub: 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^{th} 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 Ralgad, 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 m3/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 14th 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:-

- 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.
- (vili) 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 vernocular 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.pic.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.
- 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.
- 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.

4

(Dr. S.K. Aggarwal) Director

Copy to:

- The Secretary, Ministry of Power, Shram Shakti Bhawan, Rafi Marg, New 1. Delhi-110001.
- The Secretary, Department of Energy and Environment, Govt. of Maharashtra, 2. Mantralaya, Mumbal-400032, Maharashtra.
- The Chairman, Central Electricity Authority, Sewa Bhawan, R.K. Puram, New 3. Delhi-110066.
- The Chairman, Maharashtra Poliution Control Board, Kalptaru point 3rd & 4th 4. 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.
- The Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-5. Office Complex, East Arjun Nagar, Delhi-110032.
- The Chief Conservator of Forests, Western Regional Office, Ministry of 6. Environment & Forests, E-3/240, Arera Colony, Bhopal-462016.
- 7. Director (EI), MOEF
- 8. Guard file.
- 9. Monitoring file.

(Dr. S.K. Aggerwel)

MAHARASHTRA POLLUTION CONTROL BOARD

Phone : 4010437/4020781/

4037124/4035273

Fax : 24044532/4024068 /4023516

Email

cac-cell@mpcb.gov.in

Visit At : In

http://mpch.gov.in



Kalpataru Point, 3rd & 4th floor, Sion-Matunga Scheme Road No. 8, Opp. Cine Planet Cinema,

Near Sion Circle, Sion (€), Mumbai - 400 022

No. MPCB/UAN No. 0000002273 & 2318/CAC-Cell/Amend-1903000029 Date: 11/03/2019

AMENDMENT IN CONSENT

Subject: Amendment in Consent to Operate for change in name of M/s SKI Carbon Black (India) Pvt. Ltd., Village Lohop, Patalganga, Tal. Khalapur, Dist. Raigad - 410 207.

Ref.-

- Consent granted vide no. Format 1.0/BO/CAC-Cell/EIC No. RD-8003-15, RD-3078-15/60 CAC-11662 dtd. 03/09/2015 valid up to 30/03/2020.
- Industry application UAN No. 0000002273 & 2318 did, 19 & 23/01/2019.
 Minutes of Consent Appraisal Committee meeting held on 28/11/2014.

The Consent to Operate granted under Section 26 of the Water (Prevention & Centrol of Pollution) Act, 1974, under Section 21 of the Air (Prevention & Control of Pollution) Act, 1981 and an Authorization under Rule 6 of the Hazardon's & Other Wastes (Management & Transboundary Movement) Rules 2016 to M/s SKI Carbon Black (India) Pvt. Ltd., Village Lohop, Patalganga, Tal. Khalapur, Dist. Raigad - 410 207 is hereby amended as below:

- The name of the industry shall be read as M's Birla Carbon India Pvt. Ltd. in place of M's SKI Carbon Black (India) Pvt. Ltd.
- 2. Industry shall submit the feasibility reports of Pollution Control Equipments in the Board within 3 months.
- 3. Industry shall submit due diligence report to the effect of contamination assessment during transfer of the property within 3 months.

All other conditions of the Consent referred at Ref. No. 1 shall remain unchanged.

This amendment is valid only along with the Consent referred at Ref. No. 1 above.

For and on behalf of the Maharashtra Pollution Control Board

> (E. Ravondiran, IAS) Member Secretary

To, M/s Birla Carbon India Pvt. Ltd., Village Lohop, Patalganga, Tal. Khalapur, Dist. Raigad = 410 207.

Copy to:

- 1. Regional Officer (Raigad)/ Sub-Regional Officer (Raigad-I), M.P.C. Board.
- 2. Chief Accounts officer, M.P.C. Board, Mumbai.
- 3. CAC Cell, M.P.C. Board, Mumbai.

"M/a Birla Carbon India Pvt. Ltd.", SRO Raigad I/ UAN No. 0000002273 & 2018

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MAHARASHTRA POLLUTION CONTROL BOARD

MAHARASHTRA

Phone : 4010437/4020781

/4037124/4035273

Fax 24044532/4024068 /4023516

Email : enquiry@mpcb.gov.in Visit At : http://niprb.gov.in Kalpataru Point, 3rd & 4th floor, Slon- Matunga Scheme Road No. 8, Opp. Cine Planet Cinema, Near Sion Circle, Slon (E),

Mumbai - 400 022

Consent order No :- Formate1.0/ BO/CAC-Cell/EIC No RD-3003-15, RD-3078-15/6t/iCAC-11662
Date- 0310912015

To, M/s SKI Carbon Black (India) Pvt Ltd (Unit: Hitech Carbon, Patalganga), Village Lohop, Patalganga Taluka Khalapur Dist Raigad 410207

Subject: 1st operate for additional stand-by reactor, 1st operate for use of natural gas as substitute fuel & installation of decanter & storage tank (, renewal of existing consent and amalgamation of three consents under RED category.

Ref 1. Earlier Consent granted vide no. BO/RO-Raigad/PCI-1/EIC1477-10/O/CC-187 dtd 26.08.2010.

- Earlier Consent granted vide no. Formatcl.0/BO/CAC-Cell/EIC No PN-18134-13/16TH CAC-618 dtd 20.01;2014;
- Earlier Consent granted vide no. Formate1.0/BO/GAC-Cell/EIC No RD-2689-14/CAC-5874 dtd 21.06.2014.
- 4. Your application approved in CAC meeting held on 06.08.2015.

Your application: CO1504000132, CR1502000367

Dated:11.08.2015, 10.02.2015

For: 1st operate for additional stand-by reactor, 1st operate for use of natural gas as substitute fuel & installation of decanter & storage tank , renewal of existing consent and amalgamation of three consents

under Section 26 of the Water (Prevention & Control of Pollution) Act, 1974 & under Section 21 of the Air (Prevention & Control of Pollution) Act, 1981 and Authorization under Rule 5 of the Hazardons Wastes (M, H & T M) Rules 2008 is considered and the consent is hereby granted subject to the following terms and conditions and as detailed in the schedule I, II, III & IV annexed to this order:

- 1. The consent is granted for a period from 01.04.2016 to 30.03.2020.
- The actual capital investment of the industry is Rs.290 Crs. (As per C.A.Certificate submitted by industry)

3. The Consent is valid for the manufacture of -

	No.	Name		By-Product	Maximum Quantity
I	1000000	Carbon bl	ack		7000MT/M
		Electricity through w recovery (aste		28 MW

4. Conditions under Water (P&CP), 1974 Act for discharge of effluent:

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1		Tr	ide	offlu	ent		396,2		As pe			Zero	discha	rge
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M/s SKI Eartion Black (India) Pvt Ltd SRORalgad 1/1/R/L/97903000

Page 1 of 8

7	Domestic effluent	43.2	As per	On land for
٠. ا	17077103110 211102110	70.0	A	
		41-17-33-33-3	Schedule -1	gardening

5. Conditions under Air (P& CP) Act, 1981 for air emissions:

Sr.	Description of stack /	Number of Stack	Standards to be
no.	source		achieved
<u>1.</u>	Boiler	1	As per Schedule -H
2.	Dryer (2 nos)	2	As per Schedule -H
3.	DG set	2	As per Schedule -H

6. Conditions under Hazardous Waste (MH & TM) Rules, 2008 for treatment and disposal of hazardous waste:

Sr. No.		Category	Quantity	UOM	Treatment	Disposal
1.	Chemical sludge from Waste water treatment	34.3	17	MT/Month		CHWTSDF
2	Oily Sludge	1.3	0.72	MT/D		CHWTSDF
3	Used /Spent oil	5,1	100	KL/A		CHWTSDF
4	Used oil filters		25	nos/A		CHWTSDF
5	Discarded container/barrels contaminated with hazardous waste	33.3	150	nos/M		CHWTSDF
6	Resins	34.2	3000	ht/Once in three years		CHWTSDF
7	Carbon contaminated filter bags	33.3	-5000	Nos/ Once in three years		CHWTSDF

7. The Board reserves the right to review, amend, suspend, revoke etc. this consent and the same shall be binding on the industry.

8. This consent should not be construed as exemption from obtaining necessary NOC/permission from any other Government authorities.

For and on behalf of the Maharashtra Pollution Control Board

> (Dr. P. Anbalagan (AS) Member Secretary

Received Consent fee of +

Sr. No.	Amount(Rs.)	DD, No.	Date	Drawn On
1	75100	015217	09.08.2015	HDFC Bank
2	2903400	000551	16.01.2015	HDFC Bank

The balance fees Rs. 28500/- with the Board will be considered at the time of next renewal of consent.

Copy to:

1.Regional Officer -Raigad and Sub-Regional Officer-Raigad-1, MPCB: They are directed to ensure the compliance of the consent conditions. RO is directed to return the existing BG of Rs. 5 lakhs each obtained for compliance of RRZ Policy as per consent condition no 12 of consent dated 20.01.2014 & condition no 12 of consent dated 21.06.2014 as the RRZ policy, 2009 has been scrapped vide GR of GoM dated 03.02.2015.

2. Chief Accounts Officer, MPCB, Mumbai.

3.CC/CAC desk- for record & website updation purposes.

Schedule-L

Terms & conditions for compliance of Water Pollution Control:

- A) As per your application, you have provided the Effluent Treatment Plant (ETP) with the design capacity of 720 CMD.
 - B) The treated effluent shall be 100% recycled in the process to achieve zero discharge. In no case effluent shall find its way for gardening/outside factory premises.
- A.] As per your consent application, you have provided the scwage treatment system with the design capacity of 70 CMD.
 - B] The Applicant shall operate the sewage treatment system to treat the sewage so as to achieve the following standards/ prescribed under EP Act, 1986 and Rules made there under from time to time, whichever is stringent.

(1) Suspended Solids. Not to exceed

60 mg/l.

(2) BOD 3 days 27°C.

(3)

Not to exceed

30 mg/l.

COD Not to exceed

100 mg/l.

- C| The treated sewage shall be disposed on land for gardening
- 3) The Board reserves its rights to review plans, specifications or other data relating to plant setup for the treatment of waterworks for the purification thereof & the system for the disposal of sewage or trade effluent or in connection with the grant of any consent conditions. The Applicant shall obtain prior consent of the Board to take steps to establish the unit or establish any treatment and disposal system or/and extension or addition thereto.
- 4) The industry shall ensure geplacement of pollution control system or its parts after expiry of its expected life as defined by manufacturer so as to ensure the compliance of standards and safety of the operation thereof.
- 5) The Applicant shall comply with the provisions of the Water (Prevention & Control of Pollution) Cess Act, 1977 and as amended, by installing water meters, filing water cess returns in Form-I and other provisions as contained in the said act.

Sr. no	Purpose for water consumed	Water consumption guantity (CMD)
1.	Industrial Cooling, spraying in mine pits or boller feed	4655
2.	Domestic purpose	36
3. ,	Processing whereby water gets polluted & pollutants are easily biodegradable	0
d.	Processing whereby water gets poliuted & poliutants are not easily biodegradable and are toxic	Ç
Ď.	Gardening	350

6) The Applicant shall provide Specific Water Pollution control system as per the conditions of EP Act, 1986 and rule made there under from time to time/ Environmental Clearance / CREP guidelines.

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Page 4 of 8

Schedule-II

Terms & conditions for compliance of Air Pollution Control:

1. As per your application, you have provided the Air pollution control (APC) system and also creeted following stack (s) and to observe the following fuel pattern-

	Stack Attached To	APC System	Helght in Mtrs.	Typв of Fuel	Quantity & UoM	S %	SO ₂ Ng/Day
2	Boiler Dryer (2 Nos)	bag filter vent scrubber provided	108 Mtr 72 Mtr each	FO/LSHS OR NATURA L GAS	G3 T/day (FO/LSHS) OR 2400 MMBTU	4,5/1	5760/ 1260
3	DG set (2 x 1825 KVA)	Stnck	32 Mtra each	HSD	450 LTRS/HR	1	216

- 2. The Applicant shall provide Specific Air Pollution control equipments as per the conditions of EP Act, 1986 and rule made there under from time to time / Environmental Clearance / CREP guidelines.
- 3. The applicant shall operate and maintain above mentioned air pollution control system, so as to achieve the level of pollutants to the following standards:

Particulate	Not to exceed	150	mg/Nm³.
matter			

- 4. The Applicant shall obtain necessary prior permission for providing additional control equipment with necessary specifications and operation thereof or alteration or replacemental attention well before its life come to an end or erection of new pollution control equipment.
- 5. The Board reserves its rights to vary all or any of the condition in the consent, if due to any technological improvement or otherwise such variation (including the change of any control equipment, other in whole or in part is necessary).

Schedule-III Details of Bank Guarantees

Sr. No.	Consent (C to E/O/R)	Amt of BG Imposed	Submissi on Period	Purpose of BG	Complian ce Period	Validity Date
1.	C to R	Rs 5 lakhs	Within 15 days from the date of issue of consent	O & M of PCS	30.03.2020	30.07,2020

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Schedule-IV

General Conditions:

- The applicant shall provide facility for collection of environmental samples and samples of trade and sewage effluents, air emissions and hazardous waste to the Board staff at the terminal or designated points and shall pay to the Board for the services rendered in this behalf.
- 2) Industry should menitor effluent quality, stack emissions and ambient air quality monthly.
- 3) The applicant shall provide ports in the chimney/(s) and facilities such as ladder, platform etc. for monitoring the air emissions and the same shall be open for inspection to/and for use of the Board's Staff. The chimney(s) vents attached to various sources of emission shall be designated by numbers such as S-1, S-2, etc. and these shall be painted/ displayed to facilitate identification.
- 4) Whenever due to any accident or other unforeseen act or even, such emissions occur or is apprehended to occur in excess of standards laid down, such information shall be forthwith Reported to Board, concerned Police Station, office of Directorate of Health Services, Department of Explosives, Inspectorate of Factories and Local Body. In case of failure of pollution control equipments, the production process connected to it shall be stomed.
- 5) The applicant shall provide an alternate electric power source sufficient to operate all pollution control facilities installed to maintain compliance with the terms and conditions of the consent. In the absence, the applicant shall stop, reduce or otherwise, control production to abide by terms and conditions of this consent.
- 6) The firm shall submit to this office, the 30th day of September every year, the Environmental Statement Report for the financial year ending 31st March in the prescribed Form-V as per the previsions of rule 14 of the Environment (Protection) (Second Amendment) Rules, 1992.
- 7) The industry shall recycle/reprocess/reuse/recover Hazardous Waste as per the provision contain in the HW(MH&TM) Rules 2008, which can be recycled/processed/reused/recovered and only waste which has to be incinerated shall go to incineration and waste which can be used for land filling and cannot be recycled/reprocessed atc should go for that purpose, in order to reduce load on incineration and landfill site/environment.
- 8) The industry should comply with the Hazardous Waste (M,H & TM) Rules, 2008 and submit the Annual Returns as per Rule 5(6) & 22(2) of Hazardous Waste (M,H & TM) Rules, 2008 for the preceding year April to March in Form-IV by 30th June of every year.
- An inspection book shall be opened and made available to the Board's officers during their visit to the applicant.
- 10) The applicant shall make an application for renewal of the consent at least 60 days before the date of the expiry of the consent
- 11) Industry shall strictly comply with the Water (P&CP) Act, 1974, Air (P&CP) Act, 1981 and Environmental Protection Act, 1986 and industry specific standard under EP Rules 1986 which are available on MPCB websito(www.mpcb.gov.in).
- 12) The industry shall constitute an Environmental cell with qualified staff/personnel/agency to see the day to day compliance of consent condition towards Environment Protection.
- 13) Separate drainage system shall be provided for collection of trade and sewage effluents. Terminal manholes shall be provided at the end of the collection system with arrangement for measuring the flow. No effluent shall be admitted in the pipes/sewers downstream of the terminal manholes. No effluent shall find its way other than in designed and provided collection system.
- 14) Neither storm water nor discharge from other premises shall be allowed to mix with the effluents from the factory.

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Page 7 of 8

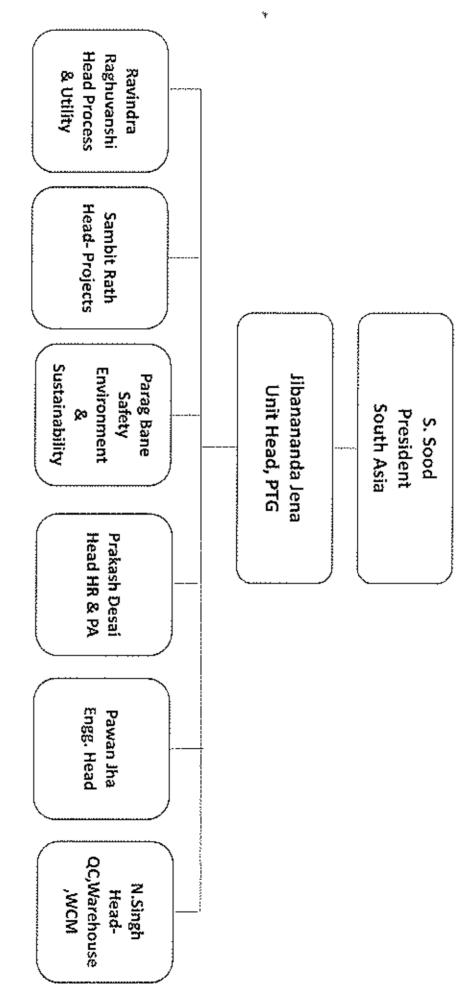
- 15) The applicant shall install a separate meter showing the consumption of energy for operation of domestic and industrial effluent treatment plants and air pollution control system. A register showing consumption of chemicals used for treatment shall be maintained.
- 16) Conditions for D.G. Set

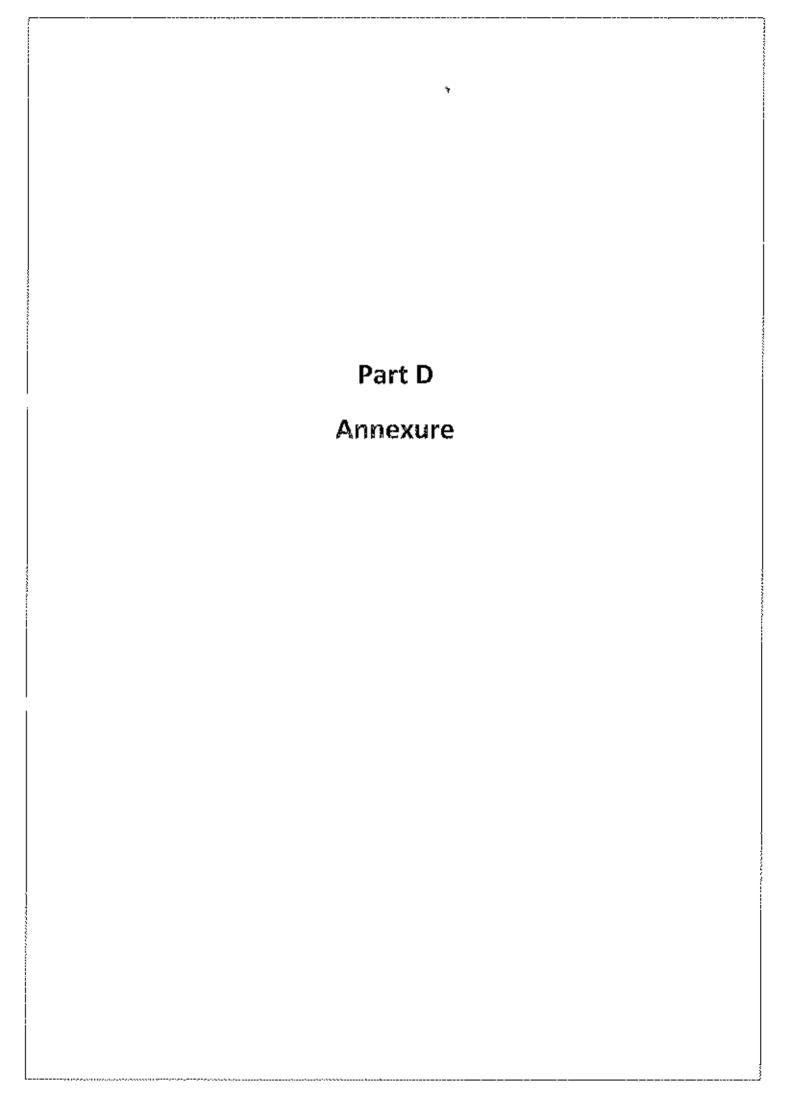
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- Noise from the D.G. Set should be controlled by providing an acoustic enclosure or by treating the room acoustically.
- b) Industry should provide acoustic enclosure for control of noise. The acoustic enclosure/ acoustic treatment of the room should be designed for minimum 25 dB (A) insertion loss or for meeting the ambient noise standards, whichever is on higher side. A suitable exhaust muffler with insertion loss of 25 dB (A) shall also be provided. The measurement of insertion loss will be done at different points at 0.5 meters from acoustic enclosure/room and then average.
- c) Industry should make efforts to bring down noise level due to DG set, outside industrial premises, within ambient noise requirements by proper sitting and control measures.
- d) Installation of DG Set must be strictly in compliance with recommendations of DG Set manufacturer.
- e) A proper routine and preventive maintenance procedure for DG set should be set and followed in consultation with the DG manufacturer which would help to prevent noise levels of DG set from deteriorating with use
- f) D.G. Set shall be operated only in case of power failure,
- g) The applicant should not cause any muisance in the surrounding area due to operation of D.G. Set.
- h) The applicant shall comply with the notification of MoEF dated 17.05.2002 regarding noise limit for generator sets rim with diesel
- 17) The industry should not cause any nuisance in surrounding area.
- 18) The industry shall take adequate measures for control of noise levels from its own sources within the premises so as to maintain ambient air quality standard in respect of noise to less than 75 dB (A) during day time and 70 dB (A) during night time. Day time is reckened in between 6 a.m. and 10 p.m. and night time is reckened between 10 p.m. and 6 a.m.
- 19) The applicant shall maintain good housekeeping.
- 20) The applicant shall bring minimum 33% of the available open land under green coverage/ plantation. The applicant shall submit a yearly statement by 30th September every year on available open plot area, number of trees surviving as on 31° March of the year and number of trees planted by September end.
- 21) The non-hazardous solid waste arising in the factory premises, sweepings, etc. be disposed of scientifically so as not to cause any nuisance / pollution. The applicant shall take necessary permissions from civic authorities for disposal of solid waste.
- 22) The applicant shall not change or alter the quantity, quality, the rate of discharge, temperature or the mode of the offluent/emissions or hazardous wastes or control equipments provided for without provious written permission of the Board. The industry will not carry out any activity, for which this consent has not been granted/without prior consent of the Board.
- 23) The industry shall ensure that fugitive emissions from the activity are controlled so as to maintain clean and safe environment in and around the factory premises.
- 24) The industry shall submit official e-mail address and any change will be duly informed to the MPCB.
- 26) The industry shall achieve the National Ambient Air Quality standards prescribed vide Government of India, Notification dtd. 16.11.2009 se amended.

-0000 TM







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

Date: 01.06.2018

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: 84m x 47.4m= 3981.6m2

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

Average July Rainfall in FFFC =1500mm.

Water collection: 3981.6m² x 1.5m x 0.75 = 4480m²/month of July

4480m³/31 days of July = 144.5³/day =6m³/hr.

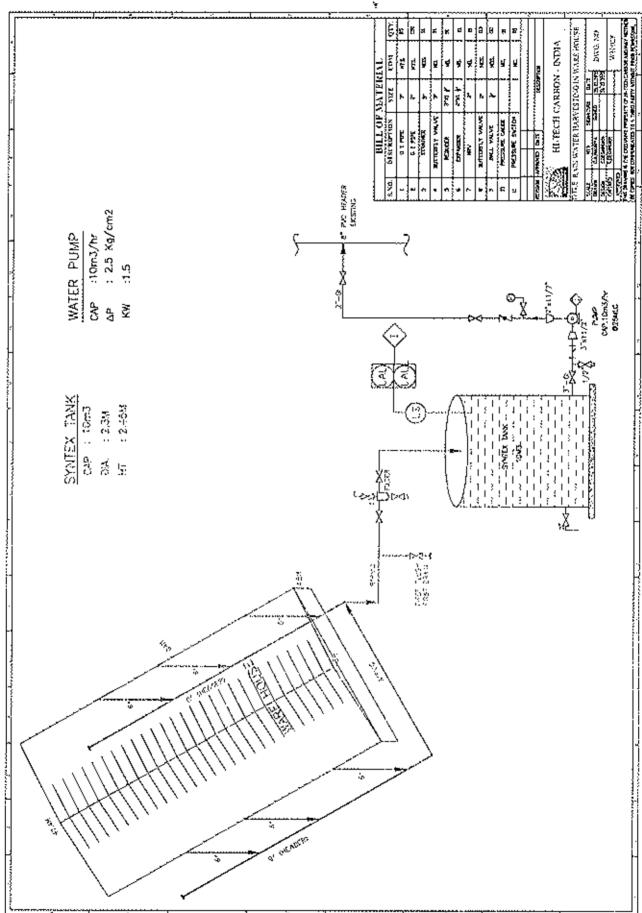
Considering two separate header of 8" PVC for collecting water from all sources of both side & line routed through a filter & isolation valve & one first rain drain connection towards water sump with slipee 1:50.

Please refer details of line routing in P & ID.

Benefits of rainwater harvesting:

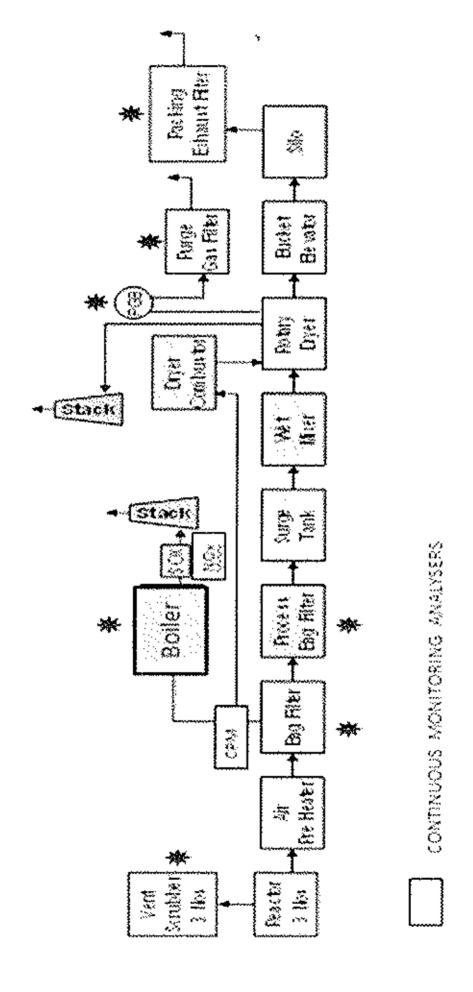
- Rainwater is a relatively clean and free source of water
- Rainwater harvesting provides a source of water at the point where it is needed.
- It is owner-operated and managed.
- It promotes self-sufficiency and conserves water resources
- Offers potential cost savings especially with rising water costs.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

Enclosure: P & ID & BOM.



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AIR POLLUTION CONTROL EQUIPMENTS & MONITORING



* ENGRANGEM PROTECTION EQUIPMENT



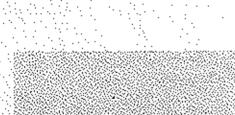
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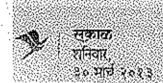
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सदरक कार्बन पाताळगंगा

कृषीवनः शास्त्रः



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सामिक सामित, पातालगात स्व नारणात्मार भारत संस्कारच्या पर्मवरण खल्यान पर क्रमांक 5 to 1-31011/35/2007 (A 11 (1) तामित २२ मार्च १८६३ (2) प्रसीवरणात्म प्रसार (Esperament) (Consume) दिला चार प्रतिपादन १४४ संस्कार स्वी

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

Sr.No	Tree Plantation and Area Plant Area	Qtγ	Area Sqft	Area Somtr
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
G	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
1.7	Wall compound (East-West-North side)	1.000	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	2.00	15000	1395
25	Gate no.1	300	87000	8093
	Total Area	4790	594583	55300

.



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Pune: 21 A, Shreeji Complex, Nehru Nagar, Pimpri, Pune: 411 018.

Vadodara: Plot No.1, Shah Ind. Park -1, Vadodara-Savli Road, Lamdapura. 391 775 Dist. Vadodara

Lab.: 1 & 4, Shreeji terrace apt. Plot No. 53, Purna Nagar, Chikhli, Pune: 411 019.
Ph.: 020-27423939 • Fax: 020-27421127 • Customer Care No. +91 9225247365

Web: www.shreejiaqua.com • Email: info@shreejiaqua.com

Laboratory Recognised by Ministry of Environment, Forest & Climate Change, Govt. of India

WORKZONE MONITORING REPORT

F/SL/RR-7.8/01/00

Client Name :	Lab Inward No. : SL/19-20/11/MAI-Mo/36A
M/s. Birla Carbon India Pvt.Ltd Unit- Patalganga, Village : Talvali & Lohop, Tal: Khalapur, Dist :Raigad, Maharashtra, Pune.	Date : 08/11/2019
	Analysis Date : 08/11/2019
	Lab Outward No.: SL/19-20/11/MAO-Mo/36A
	Report Date : 15/11/2019

MONITORING DETAILS

Reference to sampling Plan: Not Applicab	le.
Date of Sampling: 07/11/2019	Location : Boiler Area Near DM Room
Time of Sampling: 8 Hrs.	Collected By: SATPL
Monitoring Representative: Mr. Shubham	

Wind Velocity (km/hrs): 7 Ambient Temperature °C: 30
Wind Direction : East to West Humidity % : 59

RESULTS

Parameters	Unit	Reference Method	Results	Factory Acts Limits
Sulphur Dioxide (SO ₂)	μg/m³	IS 5182 (Part 2):2001	BDL	≤ 5.0
Oxides of Nitrogen (NO ₂)	μg/m³	IS 5182 (Part 6):2006	BDL	≤ 6.0
Particulate Matter(PM ₁₀)	μg/m³	IS 5182 (Part 23):2006	2.45	≤ 5.0
Particulate Matter (PM _{2.5})	μg/m³	CPCB Guidelines Vol1 2013	2.04	N.S.
Lead as (Pb)	μg/m³	IS 5182 (Part 22):2004	BDL	N.S.
Carbon Monoxide (CO)	mg/m³	IS 5182(Part 10):2003	1.5	≤55.0
Hydrocarbons as Non-Methane (HC)	ppm	NIOSH 1500	BDL-	N.S.
Polyaromatic Hydrocarbons(PAH)	ng/m³	IS 5182(Part 12):2004	BDL	N.S.
	Oxides of Nitrogen (NO ₂) Particulate Matter(PM ₁₀) Particulate Matter (PM _{2.5}) Lead as (Pb) Carbon Monoxide (CO) Hydrocarbons as Non-Methane (HC)	Oxides of Nitrogen (NO ₂) μg/m³ Particulate Matter(PM ₁₀) μg/m³ Particulate Matter (PM _{2.5}) μg/m³ Lead as (Pb) μg/m³ Carbon Monoxide (CO) mg/m³ Hydrocarbons as Non-Methane (HC) ppm	Oxides of Nitrogen (NO₂) μg/m³ IS 5182 (Part 6):2006 Particulate Matter(PM₁₀) μg/m³ IS 5182 (Part 23):2006 Particulate Matter (PM₂,5) μg/m³ CPCB Guidelines Vol1 2013 Lead as (Pb) μg/m³ IS 5182 (Part 22):2004 Carbon Monoxide (CO) mg/m³ IS 5182 (Part 10):2003 Hydrocarbons as Non-Methane (HC) ppm NIOSH 1500	Oxides of Nitrogen (NO₂) μg/m³ IS 5182 (Part 6):2006 BDL Particulate Matter(PM₁0) μg/m³ IS 5182 (Part 23):2006 2.45 Particulate Matter (PM₂.5) μg/m³ CPCB Guidelines Vol1 2013 2.04 Lead as (Pb) μg/m³ IS 5182 (Part 22):2004 BDL Carbon Monoxide (CO) mg/m³ IS 5182 (Part 10):2003 1.5 Hydrocarbons as Non-Methane (HC) ppm NIOSH 1500 BDL

Note: Permissible Levels/Limits In Work Environment as per Factories Act 1948, Second Schedule.

BDL= Below Detectable Limit, N.S. - Not Specified

DETAILS OF INSTRUMENT USED

Instrument Used :	Respirable Dust Sampler (RDS))& Fine Particulate Sampler
Date of calibration :	12/11/2018
Validity	11/11/2019

REMARK: As above mentioned monitoring report all the parameters are within as per Factories Act-1948 limits.

Authorized Signatory

Dr. Archana Waykole (Laboratory Head)
Page 1 of 1





We treat WATER under one roof

Pune: 21 A, Shreeji Complex, Nehru Nagar, Pimpri, Pune: 411 018.

Vadodara: Plot No.1, Shah Ind. Park -1, Vadodara-Savli Road, Lamdapura. 391 775 Dist. Vadodara

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Laboratory Recognised by Ministry of Environment, Forest & Climate Change, Govt. of India

WORKZONE MONITORING REPORT

F/SL/RR-7.8/01/00

Client Name :	Lab Inward No. : SL/19-20/11/MAI-Mo/36B
M/s. Birla Carbon India Pvt.Ltd. Unit- Patalganga, Village : Talvali & Lohop, Tal: Khalapur, Dist :Raigad, Maharashtra, Pune.	Date : 08/11/2019
	Analysis Date : 08/11/2019
	Lab Outward No.: SL/19-20/11/MAO-Mo/36B
	Report Date : 15/11/2019

MONITORING DETAILS

Reference to sampling Plan: Not Applicable	
Date of Sampling: 07/11/2019	Location : Unloading Near Tank Farm
Time of Sampling: 8 Hrs.	Collected By: SATPL
Monitoring Representative : Mr. Shubham	

Wind Velocity (km/hrs): 7 Ambient Temperature °C: 30
Wind Direction : East to West Humidity % : 59

RESULTS

Sr. No.	Parameters	Unit	Reference Method	Results	Factory Acts Limits
1	Sulphur Dioxide (SO ₂)	μg/m³	IS 5182 (Part 2):2001	BDL	≤ 5.0
2	Oxides of Nitrogen (NO ₂)	μg/m³	IS 5182 (Part 6):2006	BDĹ	≤ 6.0
3	Particulate Matter(PM ₁₀)	μg/m³	IS 5182 (Part 23):2006	1.23	≤ 5.0
4	Particulate Matter (PM _{2.5})	μg/m³	CPCB Guidelines Vol1 2013	4.08	N.S.
5	Lead as (Pb)	μg/m³	IS 5182 (Part 22):2004	BDL	N.S.
6	Carbon Monoxide (CO)	mg/m³	IS 5182(Part 10):2003	1.5	≤55.0
7	Hydrocarbons as Non-Methane (HC)	ppm	NIOSH 1500	BDL	N.S.
8	Polyaromatic Hydrocarbons(PAH)	ng/m³	IS 5182(Part 12):2004	BDL	N.S.

Note: Permissible Levels/Limits In Work Environment as per Factories Act 1948, Second Schedule.

BDL= Below Detectable Limit, N.S. - Not Specified

DETAILS OF INSTRUMENT USED

Instrument Used:	Respirable Dust Sampler (RDS))& Fine Particulate Sampler
Date of calibration :	12/11/2018
Validity	11/11/2019

REMARK: As above mentioned monitoring report all the parameters are within as per Factories Act-1948 limits.

Authorized Signatory

Dr. Archana Waykole (Laboratory Head)
Page 1 of 1



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Lab.: 1 & 4, Shreeji terrace apt. Plot No. 53, Purna Nagar, Chikhli, Pune: 411 019.
Ph.: 020-27423939 • Fax: 020-27421127 • Customer Care No. +91 9225247365

Web: www.shreejiaqua.com • Email: info@shreejiaqua.com

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WORKZONE MONITORING REPORT

F/SL/RR-7.8/01/00

Client Name : M/s. Birla Carbon India Pvt.Ltd. Unit- Patalganga,

Village : Talvali & Lohop, Tal: Khalapur, Dist :Raigad,

Maharashtra, Pune.

Lab Inward No. : SL/19-20/11/MAI-Mo/36C

Date : 08/11/2019

Analysis Date : 08/11/2019

Lab Outward No.: SL/19-20/11/MAO-Mo/36C

Report Date : 15/11/2019

MONITORING DETAILS

Reference to sampling Plan: Not Applicable

Date of Sampling: 07/11/2019

Location: Ware House Near Lunch Room

Time of Sampling: 8 Hrs.

Collected By: SATPL

Monitoring Representative: Mr. Shubham

METROLOGICA

METROLOGICAL DATA

Wind Velocity (km/hrs): 7 Ambient Temperature °C: 29
Wind Direction : East to West Humidity % : 59

RESULTS

Sr. No.	Parameters	Unit	Reference Method	Results	Factory Acts Limits
1	Sulphur Dioxide (SO ₂)	μg/m³	IS 5182 (Part 2):2001	BDL	≤ 5.0
2	Oxides of Nitrogen (NO ₂)	$\mu g/m^3$	IS 5182 (Part 6):2006	BDL	≤ 6.0
3	Particulate Matter(PM ₁₀)	μg/m³	IS 5182 (Part 23):2006	3.68	≤ 5.0
4	Particulate Matter (PM _{2,5})	μg/m³	CPCB Guidelines Vol1 2013	3.68	N.S.
5	Lead as (Pb)	μg/m³	IS 5182 (Part 22):2004	BDL	N.S.
6	Carbon Monoxide (CO)	mg/m³	IS 5182(Part 10):2003	1.0	≤55.0
7	Hydrocarbons as Non-Methane (HC)	ppm	NIOSH 1500	BDL	N.S.
8	Polyaromatic Hydrocarbons(PAH)	ng/m³	IS 5182(Part 12):2004	BDL	N.S.

Note: Permissible Levels/Limits In Work Environment as per Factories Act 1948, Second Schedule.

BDL= Below Detectable Limit, N.S. - Not Specified

DETAILS OF INSTRUMENT USED

Instrument Used: Respirable Dust Sampler (RDS))& Fine Particulate Sampler

Date of calibration: 12/11/2018

Validity 11/11/2019

REMARK: As above mentioned monitoring report all the parameters are within as per Factories Act-1948 limits.

Authorized Signatory

Dr. Archana Waykole (Laboratory Head)



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1 & 4, Shreeji terrace apt. Plot No. 53, Purna Nagar, Chikhli, Pune: 411 019. Lab.: 020-27423939 • Fax: 020-27421127 • Customer Care No. +91 9225247365 Ph.:

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WORKZONE MONITORING REPORT

F/SL/RR-7.8/01/00

Client Name :	Lab Inward No. : SL/19-20/11/MAI-Mo/36D
M/s. Birla Carbon India Pvt.Ltd. Unit- Patalganga, Village : Talvali & Lohop, Tal: Khalapur, Dist :Raigad, Maharashtra, Pune.	Date : 08/11/2019
	Analysis Date : 08/11/2019
	Lab Outward No.: SL/19-20/11/MAO-Mo/36D
	Report Date : 15/11/2019

MONITORING DETAILS

Reference to sampling Plan: Not Applicable		
Date of Sampling: 07/11/2019	Location : Reactor Area	
Time of Sampling: 8 Hrs.	Collected By: SATPL	

METROLOGICAL DATA

Wind Velocity (km/hrs): 7		Ambient Temperature °C: 30		
Wind Direction	: East to West	Humidity %	: 59	2.0

RESULTS

Sr. No.	Parameters	Unit	Reference Method	Results	Factory Acts Limits
1	Sulphur Dioxide (SO ₂)	μg/m³	IS 5182 (Part 2):2001	BDL	≤ 5.0
2	Oxides of Nitrogen (NO ₂)	μg/m³	IS 5182 (Part 6):2006	BDL	≤ 6.0
3	Particulate Matter(PM ₁₀)	μg/m³	IS 5182 (Part 23):2006	1.23	≤ 5.0
4	Particulate Matter (PM _{2.5})	μg/m³	CPCB Guidelines Vol1 2013	2.45	N.S.
5	Lead as (Pb)	μg/m³	IS 5182 (Part 22):2004	BDL	N.S.
6	Carbon Monoxide (CO)	mg/m³	IS 5182(Part 10):2003	2.0	<u><</u> 55.0
7	Hydrocarbons as Non-Methane (HC)	ppm	NIOSH 1500	BDL	N.S.
8	Polyaromatic Hydrocarbons(PAH)	ng/m³	IS 5182(Part 12):2004	BDL	N.S.

Note: Permissible Levels/Limits In Work Environment as per Factories Act 1948, Second Schedule.

BDL= Below Detectable Limit, N.S. - Not Specified

DETAILS OF INSTRUMENT USED

Instrument Used :	Respirable Dust Sampler (RDS))& Fine Particulate Sampler	
Date of calibration :	12/11/2018	
Validity	11/11/2019	

REMARK: As above mentioned monitoring report all the parameters are within as per Factories Act-1948 limits.

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Dr. Archana Waykole (Laboratory Head) Page 1 of 1





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WORKZONE MONITORING REPORT

F/SL/RR-7.8/01/00

Client Name: M/s. Birla Carbon India Pvt.Ltd Unit- Patalganga, Village: Talvali & Lohop, Tal: Khalapur, Dist: Raigad, Maharashtra, Pune.	Lab Inward No. : SL/19-20/11/MAI-Mo/36E
	Date : 08/11/2019
	Analysis Date : 08/11/2019
	Lab Outward No.: SL/19-20/11/MAO-Mo/36E
	Report Date : 15/11/2019

MONITORING DETAILS

Reference to sampling Plan: Not Applicab	le
Date of Sampling: 07/11/2019	Location : Packaging Area
Time of Sampling: 8 Hrs.	Collected By: SATPL
Monitoring Representative: Mr. Shubham	

METROLOGICAL DATA

Wind Velocity (km/hrs): 7		Ambient Temperature °C: 30	
Wind Direction	: East to West	Humidity % : 59	

RESULTS

Sr. No.	Parameters	Unit	Reference Method	Results	Factory Acts Limits
1	Sulphur Dioxide (SO ₂)	μg/m³	IS 5182 (Part 2):2001	BDL	≤ 5.0
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5	Lead as (Pb)	μg/m³	IS 5182 (Part 22):2004	BDL	N.S.
6	Carbon Monoxide (CO)	mg/m³	IS 5182(Part 10):2003	2.0	≤55.0
7	Hydrocarbons as Non-Methane (HC)	ppm	NIOSH 1500	BDL	N.S.
8	Polyaromatic Hydrocarbons(PAH)	ng/m³	IS 5182(Part 12):2004	BDL	N.S.

Note: Permissible Levels/Limits In Work Environment as per Factories Act 1948, Second Schedule.

BDL= Below Detectable Limit, N.S. - Not Specified

DETAILS OF INSTRUMENT USED

Instrument Used :	Respirable Dust Sampler (RDS))& Fine Particulate Sampler		
Date of calibration :	12/11/2018		
Validity	11/11/2019		

CHINCHWAD PUNE-411019

REMARK: As above mentioned monitoring report all the parameters are within as per Factories Act-1948 limits.

Authorized Signatory

Dr. Archana Waykole (Laboratory Head)
Page 1 of 1

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:

- 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/	Process water supply.
	Facilities	Waste water confrol system
		 Air pollution control system.

Solid waste management system.

Laboratory Facilities including routine monitoring.

3) Equipment and - Periodic and systematic testing and control.

Repairing.

Data Handling - Data collection.

Reporting and storage of data

Maintaining track of discussions.

5) Disaster Planning - Disaster management team

Rescue and rehabilitation.

Manpower for Environmental management.

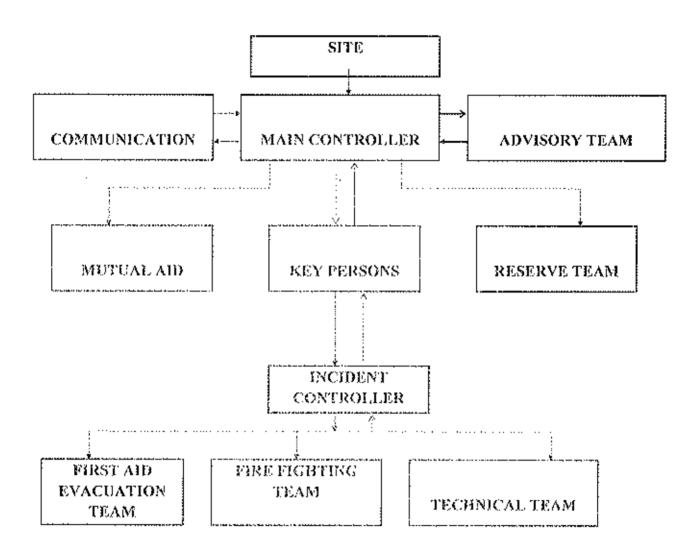
Disaster Management planning includes anticipatory action for disaster, stream fining of preparedness, assembly and coordination of disaster management team and quick mobilization of all the forces to face the situation.

Salient features of planning are;

- 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.
- 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, car 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.
- 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 panie on eventualities. The safety coordinator should do the needful to restore normaloy, whereas, medical coordinator shall attend to the easualties.
- 12. If required plant shalf be shutdown and the entire area scaled off till trained personnel restore normalcy.
- Environmental decontamination measures to be undertaken by physical, chemical or biological approaches as required.
- 14. Reseue 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 normaley 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.

EMERGENCY CONTROL ORGANISATION



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 incharge. 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 jucident controller.

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

Main Controller:

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

Advisory Team:

- 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:

- On hearing siren they will take position in Security dept.
- 2. They will inform about their positions to the main controller.
- 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.
- 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.
- To arrange for the ambulance car or vehicles,
- 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):

- 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.
- After reaching on the spot, they will act as per the instructions of the incident controller.
- 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:

- After receiving the information, the doctor and nurse will remain in occupational health centre only.
- 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.

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

Technical Team:

- Mechanical Engineer/ Utility operator to ensure that all water tanks are full and hydrant system is ready to use.
- 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.
- 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 HYGHENE :

- Ventilation is provided by plenty of openings.
- Adequate platforms are provided for manual operations, Free space for movements and carrying the material is provided.
- Adequate number of fire extinguishers is provided.
- All workers are provided with hand-gloves, goggles, footwear's, aprons, masks, hard hats etc. for protection.
- There is no manual handling of liquids like Acids, Caustic Soda Lye etc. These liquids are always flow through pipe lines.
- All steam pipe lines and steam heated vessels are provided with adequate insulation. All high pressure steam lines are IBR approved.
- Safety relief valves are provided wherever necessary.
- Routine medical attention is given to workers.
- 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.
- 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.
- 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 stuice valves & suitable sizes at suitable points to facilitate isolation of ring mains, if required, during fire & maintenance.

Water Storage:

Water storage Tank of 10000 m3 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	[71.m³/fg,	88 Meters, head
I no. (Working)		
Diesel Driven Pump	17 i m³/hr.	88 Meters head
Uno. (Standby)		
Jockey Pump 1 no.	10.8 m ⁵ /br.	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	45 Nos.
2.	S.S. Fire Escape Hydrant valve as per IS 5290	8 Nos.
3.	ABC Type extinguisher - 5 Kg	27 Nos.
4.	CO2 extinguishers - 4.5 Kg	23 Nos.

PART II

DETAILS OF THE EXPENDITURE FOR THE ENVIRONMENTAL MANAGMENET PLAN

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









bsi.

Mumbai Waste Management Limited Certificate

M/s Birla Carbon India Privathe Cincited.

is a registered member of

CHW-TSDF at MIDC, Taloja

for safe & secure disposal of

Hazardous Waste.

Membership no.: MWML - HzW . P.T.G.: 2997

This Certificate is valid up to

March, 31st, 2020

Somnath Malgar

Head - MWML

Director





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

นิส

विषय :- राखला मिळणे मावल. आरीस्य विर्ला म्युव्हों लिमीटेड याचा अर्ज.

णावक क्रमांक व/२०/जमीच/३७८५२०१२-२०१३ अलियाम, दिचांक : १९५९४ । २०१५

प्रति,

- आदील्य विलां न्युव्हो लिमीटेड, - युनिट, हाय-टेक कार्यन, - पावळचंगा, लोहोप, - ता- खालापुर दि: रायगड़,

संदर्भ : १) आपलेकडील दि. ०९/०५/२० २ रोजीचा विषयाधिन सर्जः

- २) ियन परिक्षेत्र खालापूर योधककील एक छ। ३।/२०/जगीन/६२५, दि. े १२/१२/२०५२.
- 3) जिम विभागीय यन अधिकारी, यनवेश यांचेकाडील घष्ट्र क ् ेब/२०/जर्मीन/५६९ वि. १३/९२/२०९२

पन्धेत्रपाल खालापूर व लय विभागीय वन अधिकारी, वनवंल दांनी वरील संदर्भिय पत्रान्त्रमें सादर केलेल्या अहबालानुसार आवणाल कव्विकार्यात होत उत्तरे की, आयले विनाल ०९/०५/२०१२ खेलीबे विनंती अर्जात नमुद्र केर मध्रमाणे साहा सम्बद्ध अर्थालेल्या वृतिहमूळे (कंपनीचा प्लेंट) लगावचे राखीय वनावर सर्वारिधतील बाह्य स्वरणी वरिणाम जात्याचे विसून येल नाही,

> ्राच्या वनस्यकृताः अधिकाम्

अविलिपी : रूप विभागीय धन अधिकारी, नगवेल व वनक्षेत्रपात ग्डालापुर यांना माहिलीसाठी रवाना.