



SKI/EHS/124
29.12.2018

To

**Additional Principal Chief Conservator of Forests (C),
Ministry of Environment, Forest and Climate Change,
Regional Office (SEZ),
1st and 2nd Floor, Handloom Export Promotion Council,
34, Cathedral Garden Road, Nungambakkam,
Chennai – 34.**

Dear Sir,

Please find the information required as per General Condition No.08 of your Environmental Clearance File No. J-11011/350/2010-IA II (I) dated 29.09.2011. Six Monthly status of compliance of the stipulated Environmental Clearance conditions for the period of April 18 to September 18.

Thanking you,

Yours faithfully,

For **SKI Carbon Black (India) Private Ltd.**
(Unit: Hi-Tech Carbon, Gummidipoondi)

*Enclosure: Annexure IV, Annexure IVa, Annexure IIa, Annexure IIb, Annexure II,
Annexure VI*


RAJAN.J

Senior Manager (P&A) & CSR

CC: 1. Central Pollution Control Board
1st & 2nd Floors, Nisarga Bhavan
A-Block, Thimmaiah Main Road
7th D Cross, Shivanagar,
Bengaluru –560 079.

CC: 1. The District Environmental Engineer,
Tamil Nadu Pollution Control Board,
Gummidipoondi, EPIP Building,
Sipcot Industrial park,
Tiruvallur district,
Tiruvallur-601 201.

Birla Carbon India Private Limited
(Formerly known as SKI Carbon Black (India) Private Limited)
Unit : Gummidipoondi

K-16, Phase II, Sipcot Industrial Complex, P.O. Gummidipoondi, Dist. Tiruvallur - 601 201, Tamil Nadu, India

T : +91 44 2798 9233 - 36 | F : +91 44 2798 9116 / 29 | Website : www.birlacarbon.com | CIN : U23201MH2013PTC241741


Marketing Office 910 - 911, Kailash Building, Kasturba Gandhi Marg, New Delhi - 110 001 | T : +91 11 2335 1069 / 71 | F : +91 11 2335 0594

Regd. Office Aditya Birla Centre, S. K. Ahire Marg, Worli, Mumbai - 400 030, India | T : +91 22 6652 5000


Status of - Environment Clearance Conditions as on 30 September 2018

SI NO	Product	Existing	Approved	Phase - I
1	Carbon black	12500MTPA	1875MTPA	14500 MT/M
2	Power	12000000 Units PM (16.6 MWPH) (Additional of 4900000 units (6.89 MWPH) for plant consumption is not included in the CTC)	47MW	19900000 Units PM (27.6 MWPH) including plant consumption
		(Total installed capacity 33.7 MWPH)		(Total installed capacity 33.7 MWPH)
	Water	2010 KLD	2500 KLD	2100 KLD
	Specific condition			
	Condition			Remarks
1	Permission and recommendations of the State Forest Department regarding impact of the proposed plant on the serve forest located near to village Kedemallur (8.6 km, NW) and village Manali (6.7 km, SW) shall be implemented satisfactorily.			Since the project comes under SIPCOT leased land which was approved by Tamil Nadu Industrial corridor, Forest clearance is not required
2	Environmental clearance is subject to their obtaining prior clearance from the Standing committee of the National Board for Wildlife regarding Pulicat Wildlife (Bird) Sanctuary. Grant of environmental clearance does not necessarily implies that wildlife clearance will be considered by the respective authorities on their merits and decision taken. The investment made in the project, if any, based on environmental clearance so granted, in anticipation of the clearance from wildlife angle shall be entirely at the cost and risk of the project proponent and Ministry of Environment & Forest shall not be responsible in this regard in any manner and all the recommendations shall be implemented in a time bound manner.			Application submitted for clearance with wild life department. Wild life warden forwarded the application with NOC to Chief Warden. NOC awaited. (Annexure IV a)

3	<p>As proposed, vent scrubber in the reactor area, main bag filter in the product separation area, process bag filter in the pelletizing area, purge gas filter in the product area, purge gas filter in the product drying area, dryer combustor in the packing area and packing exhaust filter in the packing area shall be provided to control air emissions. Electrostatic Precipitator (ESP); should be provided to the boilers to control SO2 emissions.</p>	<p>Vent scrubber in the reactor area, main bag filter in the product separation area, process bag filter in the pelletizing area, purge gas filter in the product drying area, dryer combustor in the packing area and packing exhaust filter in the packing area have been provided. Electrostatic Precipitator (ESP) condition has been changed vide Letter No J-11011/350/2010 - IA II (I) dt 07th sep 2012 from MoEF office . (Copy of letter attached Annexure IIa)</p>
4	<p>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)/TNPCB 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.</p>	<p>All Stacks are provided with online stack monitoring equipments and the real time data is transmitted to care air centre of TNPCB Chennai. Manual monitoring is also carried out through external agency as stated the levels are within the limit. In the event of failure of any pollution control measures systems adopted by the unit, the respective unit will not be restarted until the control measures are rectified to achieve the desired efficiency</p>
5	<p>continuous on-line stack monitoring of particulate matter, SO2 and Nox with recording facilities as well as interlocking facilities shall be ensured and proper calibration shall be done time to time. Carbon content in the particulate matter shall also be measured.</p>	<p>Stack emission (particulate matter including carbon content, SO2 and Nox) are monitored through online continuous monitoring equipment with recording facilities. Interlocking facilities are also provided with proper calibration</p>
6	<p>Sulphur' content in the feed stock shall not exceed 3% as per the CPCB norms. Further efforts shall be made to procure feed stock with low sulphur content as possible.</p>	<p>The procured feed stock is having less than 3% sulphur content and the sulphur content of the feed stock ranges between 1.5% to 2.5 % at present</p>



7	Flue gas desulphurization system (FGD) shall be installed to control SO ₂ emissions.	Initially MOEF in their EC accorded for expansion project had stipulated condition to provide Flue Gas Desulphurization Plant. However, based on our representation, it was modified vide MOEF Letter dated 7th Sept. 2012 (Annexure IIa) to formulate a study group through CPCB regarding the relevancy of FGD to all Carbon Black Plants in India and till then the condition has been kept in abeyance. As advised by TNPCB, astudy was conducted by engaging IIT, Chennai on desulphurisation . But no breakthrough/ feasible and viable solution was achieved by the pilot plant study.
8	Ambient air quality data shall be collected as per NAAQES standards notified by the Ministry vide G.S.R. No. 826 € dated 16th September, 2009.	Two number of AAQMS had been installed and the real time data is connected to Care Aire center of TNPCB. AAQ is also monitored through third party once in 15 days at 6 locations including one location towards the pappanakuppam village and the levels are within the limits.
9	The levels of PM ₁₀ , SO ₂ , 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 CPCB and TNPCB.	AAQ is monitored through online as well as manual monitoring (through third party). The online real time data is connected to care air centre of TNPCB and the data are displayed (manual) outside the premises for public viewing. The monitored data are also uploaded on our website as well as updated regularly.



10	In plant control measures for checking fugitive emissions from all the vulnerable sources shall be provided. Fugitive emissions shall be controlled by providing closed storage, closed handling & conveyance of chemicals/materials, multi cyclone separator and water sprinkling system. Dust suppression system including water sprinkling system shall be provided at loading and unloading area 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 TNPCB.	The entire operational system are in closed condition. Carbon black is stored in a closed separate facilities along with air curtain facilities. Water sprinkling facilities, road sweeping machine are also provided to control the fugitive dust and regular road washing is also carried out. In the work zone environment fugitive dust monitoring is also carried out at six locations through external lab and as informed the levels are within the limit
11	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 Bangalore.	PAH monitoring is carried out at packing plant on monthly and the included in the monthly report submitted to the Regional office, Chennai.
12	For further control of fugitive emissions, following steps shall be followed:	
a	Closed handling system shall be provided for chemicals.	Closed handling system for chemicals have been provided.
b	Reflux condenser shall be provided over reactor.	vent scrubbers have been provided over reactor.
c	System of leak detection and repair of pump/pipeline based on preventive maintenance.	Leak detection system and early warning system including preventive maintenance
d	The acids shall be taken from storage tanks to reactors through closed pipeline. Storage tanks shall be vented through trap receiver and condenser operated on chilled water.	There is no transfer of acids from tanks to reactors.
e	Cathodic protection shall be provided to the underground solvent storage tanks.	There are no underground solvent storage tanks used at the plant.
13	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.	The DG sets are provided with adequate stack and acoustic enclosures. Noise level monitoring is carried out at 11 locations in and around the factory and the levels are within the limit.




14	Total fresh water requirement from SIPCOT for supply shall not exceed 2500 m3/day after expansion. Air cooled condenser shall be provided to reduce fresh water consumption even for expansion. Steps shall be identified to conserve water and measures adopted for minimizing the same.	The fresh water is supplied by SIPCOT and the water consumption as on today is about 2050 m3/day which is within the permitted quantity. Air cooled condensers are provided to reduce the fresh water consumption. Measures such as rain water harvesting, 16 percolation pits, scrubber pond to separate fresh water from road washed water for reuse are adopted to conserve the water.
15	As proposed, industrial effluent shall be segregated into oil bearing effluent stream, high TDS effluent stream and low TDS effluent stream. Oil bearing effluent stream shall be treated in effluent treatment plant (ETP) for removal/separation of oil. high TDS effluent stream shall be treated in ETP and rejects of reverse osmosis shall be concentrated in the multiple effect evaporator (MEE) and permeate shall be reused/recycled for cooling tower make up water. Low TDS effluent stream from floor washing shall be filtered. Sewage shall be treated in sewage treatment plant (STP). Treated effluent shall be recycle/reused with the factory premises. No effluent shall be discharge outside the factory premises and 'Zero' discharge concept shall be adopted. Treated effluent quality shall be monitored regularly and conform to the norms prescribed by the CPCB/TNPCB from time to time.	There is no segregation of high TDs and low TDS effluent. The effluent is treated in the ETP including the oil bearing effluent and followed by RO plant. The RO permeate is reused in the process and the rejects are stored separately and sent to TSDF, gummidipoondi. Sewage is treated in the STP and the treated sewage is used for green belt development. Zero discharge is followed. treated effluent is monitored through online monitoring equipments which is connected with care air centre of TNPCB. In addition to this, manual monitoring is also carried out on a daily basis and through external agency on a monthly basis. The results are submitted to TNPCB on monthly basis and to MoEF on six monthly basis.
16	Process effluent/any wastewater shall not be allowed to mix with the storm water. Storm water drain shall be passed through guard pond.	The process effluent is not mixed with storm water and storm water drain is provided with guard pond.
17	All 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 CBFS and burnt in the furnace.	All solid /hazardous waste including ETP sludge and waste oil are properly stored at the site as per CPCB guideline. Fine carbon particles generated as solid waste is also sold to industries for manufacturing low grade rubber goods. Oily waste from oil removal tank is mixed along with CBFS and burnt in reactor.

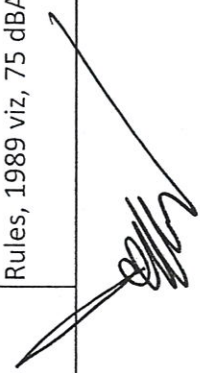


18	Proper and valid authorization and membership shall be obtained from the concerned authorities for the disposal of solid/hazardous waste and a copy submitted to the Ministry's Regional Office at Bangalore.	We have valid authorization and membership from the concerned authorities for disposal of solid/hazardous waste and copy of the same shall be submitted to the Ministry's Regional Office at Bangalore.
19	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 (MVA), 1989.	The rules and guidelines under the MSIHC rules 1989 as amended time to time are being followed. Further all transportation of hazardous chemical are carried out as per Motor vehicles act 1989.
20	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.	The company is maintaining world class manufacturing standard (WCM) and certified with ISO140001, OSHAS 18001 & SA8000. Company also signed on Wash pledge with WBCSD (World Business Council for Sustainable development) to maintain all necessary wash requirement on international standard and we committed and working on this. We are also following good housekeeping and having proper schedule of maintaining the house keeping 24*7 for 365 days.
21	The Company shall undertake following waste minimization measures:-	
a	Metering and control of quantities of active ingredients to minimize waste.	Weighing and merering are followed
b	reuse of by-products from the process as raw materials or as raw material substitutes in other processes.	Reuse of by products from the process as rar materials
c	Use of automated filling to minimize spillage.	Use of automatic filling partially
d	Use of close feed system into batch reactors.	Use of close feed systems into reactors

e	Venting equipment through vapour recovery system.	Vent scrubbers are provided with re-cycle system.
f	Use of high pressure hoses for equipment clearing to reduce wastewater generation.	Use of high pressure hoses for equipment clearing to reduce wastewater generation.
22	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.	Unit has all arrangement for protection of possible fire hazards during manufacturing process in material handling. Unit has valid fire license renewed time to time.
23	All the workers involved in packing of Carbon Black in Packaging Plant area shall use (PPE) and masks to avoid direct exposure to Carbon Black dust.	Proper PPE are ensured with all workers as well as doing half yearly medical check up to all workers to monitor their health status.
24	All the workers shall be regularly monitored for occupational health for relevant parameters pertaining to industry specific and records maintained.	Company is having in-house full fledged OHC with all necessary facility. One full time doctor and round the clock nursing facility is available. We are doing our internal half yearly medical checking as well as annual medical checking to all employees through external medical agencies and Industrial Safety and Health department doctor.
25	Proper energy conservation measures shall be adopted and a report submitted to the Ministry and its Regional Office at Bangalore.	The energy conservation measures are followed and a report on this was submitted to MoEF, RO
26	Green belt shall be developed in 30 acres out of total land 62 acres. Selection of plant species shall be as per the CPCB guidelines.	This condition has been corrected from 30 acres to 18.55 acres vide MoEF letter No J-11011/350/2010-IA II (I) dt 07th Sep 2012(Annexure IIa). We are maintaining more than 20 acres of green belt in our plant.
27	All the recommendation/standards mentioned in the CPCB guidelines for the Carbon Black manufacturers shall be implemented.	There is no separate guidelines for carbon black manufacturing available. However whatever recommendations from SPCB are implemented.

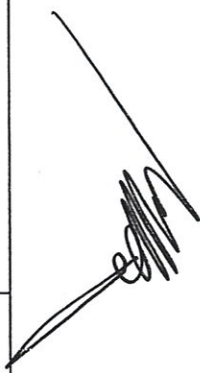



28	Provision shall be made for the housing for construction labour within the site with all necessary in fracture and facilities such as fuel for cooking, mobile toilets, mobile sewage treatment plant, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structure 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.	All provisions were made for the construction labourers during the construction time. Now no construction is going on and the labour colony also removed.
GENERAL CONDITIONS		
1	The project authorities shall strictly adhere to the stipulations made by the Tamil Nadu Pollution Control Board.	All the stipulations made by the TNPCB are being implemented. The consent is valid upto 31st march 2019
2	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment and Forest. In case of deviations or alterations in the project proposal from those submitted to this Ministry for clearance, a fresh reference shall be made to the Ministry to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.	No expansion was carried out without MoEF approval. Now we are going for extension of EC validity.
3	The locations of ambient air quality monitoring stations shall be decided in consultation with the State Pollution control Board (SPCB) and it shall be ensured that at least one stations is installed in the upwind and downwind direction as well as where maximum ground level concentration are anticipated.	The locations of AAQMS were decided in consultation with the SPCB including the upwind and downwind direction as well as were maximum ground level concentration is anticipated.
4	The Overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. On all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under Environment (Protection) Act, 1986 Rules, 1989 viz, 75 dBA (day time) and 70 dBA (night time).	Acoustic hoods, silencers and enclosures are provided to all sources of noise generation. Noise levels are monitored regularly at 11 locations on monthly basis and the levels are within limit.



5	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.	We have developed in-house water filtration system for re-use of water from settling pond. Rain water harvesting is implemented. A total numbers of 16 percolation pits and 2 rain water harvesting ponds are made for harvesting rain including roof top collection.
6	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.	Training imparted to all employees on safety and health aspects of chemical handling. Pre-employment and routine periodical medical examinations for all employees are undertaken on regular basis.
7	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.	The environmental protection measures and safeguards proposed in the documents submitted to the ministry are implemented. Similarly the EIA/EMP recommendations are also implemented. Public hearing is exempted because it is an industrial area.
8	The company shall undertake all relevant measures for improving the social economic conditions of the surrounding area. CSR activities shall be undertaken by involving local villages and administration.	Many CSR activities are carried out for the local villages including involving the local villages and administration.
9	The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment.	CSR activities are carried out in the nearby villages . Further under eco-development programme we are planting and maintaining trees in the nearby villages outside plant premises every year. Rainwater harvesting facility was created in the nearby village (pappanakuppam) two years back. Temple ponds
10	A separate Environmental Management Cell equipped with full fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions	EMC is existing with lab facilities

11	The company shall earmark sufficient funds towards capital cost and recurring cost per annum to implement the conditions stipulated by the Ministry of Environment and forests as well as the State Government along with 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.	We have allocated an adequate amount (Capital cost - Rs 38.14 Cr. And Recurring Cost - Rs. 2.2 Cr) for environmental management purpose. Allocated amount will not be diverted for any other purpose.
12	A copy of the clearance letter shall be sent by the project proponent to concern Panchayat, Zila Parisad/Municipal Corporation, Urban local body and the local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal.	The copy of clearance letter was forwarded to local panchayat as well as BDO
13	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 TNPCB. A copy of Environmental Clearance and six monthly compliance status report shall be posted on the website of the company.	Six monthly compliance reports to the regional office. A copy of the environmental clearance and six monthly compliance status reports are uploaded on the website of the company
14	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.	Form - V is submitted to TNPCB



15	<p>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 be 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.</p>	<p>The advertisement is given in two local newspapers (Dinamalar in Tamil and The new indian Express in English) and copies of the same were forwarded to the regional office</p>
16	<p>The Project authorities shall inform the Regional office as well as Ministry the date of financial closure and final approval of the project by the concerned authorities and the date of start of the project.</p> 	<p>Official information will be given during the start of the project.</p>

Annexure II

Stack monitoring report:

Month	BOILER I						BOILER II						BOILER III						DRIER I						DRIER II						DRIER III														
	SO ₂ (mg/Nm ³)	NO _x (mg/Nm ³)	SPM (mg/Nm ³)	CO (%)	HC (ppm)	SO ₂ (mg/Nm ³)	NO _x (mg/Nm ³)	SPM (mg/Nm ³)	CO (%)	HC (ppm)	SO ₂ (mg/Nm ³)	NO _x (mg/Nm ³)	SPM (mg/Nm ³)	CO (%)	HC (ppm)	SO ₂ (mg/Nm ³)	NO _x (mg/Nm ³)	SPM (mg/Nm ³)	CO (%)	HC (ppm)	SO ₂ (mg/Nm ³)	NO _x (mg/Nm ³)	SPM (mg/Nm ³)	CO (%)	HC (ppm)	SO ₂ (mg/Nm ³)	NO _x (mg/Nm ³)	SPM (mg/Nm ³)	CO (%)	HC (ppm)	SO ₂ (mg/Nm ³)	NO _x (mg/Nm ³)	SPM (mg/Nm ³)	CO (%)	HC (ppm)	SO ₂ (mg/Nm ³)	NO _x (mg/Nm ³)	SPM (mg/Nm ³)	CO (%)	HC (ppm)					
Apr-18	748.2	229.6	26.41	<0.2	<1	716.8	238.6	20.48	<0.2	<1	742.6	225.6	33.75	<0.2	<1	758.52	238.6	30.8	<0.2	<1	795.4	219.6	35.49	<0.2	<1	813.4	247.6	27.62	<0.2	<1	813.4	247.6	27.62	<0.2	<1	813.4	247.6	27.62	<0.2	<1	813.4	247.6	27.62	<0.2	<1
May-18	915.51	277.85	30.53	<0.2	<1	894.93	317.66	32.48	<0.2	<1	1037.2	382.64	34.09	<0.2	<1	834.28	278.06	32.54	<0.2	<1	816.93	299.61	34.67	<0.2	<1	797.95	323.08	35.29	<0.2	<1	797.95	323.08	35.29	<0.2	<1	797.95	323.08	35.29	<0.2	<1	797.95	323.08	35.29	<0.2	<1
Jun-18	921.3	478.12	40.69	<0.2	<1	906.71	436.46	37.2	<0.2	<1	914.04	416.47	39.06	<0.2	<1	752.39	425.49	37.9	<0.2	<1	840.05	380.14	35.36	<0.2	<1	807.88	369.46	37.07	<0.2	<1	807.88	369.46	37.07	<0.2	<1	807.88	369.46	37.07	<0.2	<1	807.88	369.46	37.07	<0.2	<1
Jul-18	1392	279	48.5	<0.2	<1	1329	285	44.8	<0.2	<1	1313	292	51.3	<0.2	<1	1421	218	38.1	<0.2	<1	1349	286	42.1	<0.2	<1	1178	255	36.5	<0.2	<1	1178	255	36.5	<0.2	<1	1178	255	36.5	<0.2	<1	1178	255	36.5	<0.2	<1
Aug-18	1360	245	52	<0.2	<1	1391	338	50.3	<0.2	<1	1340	358	43.7	<0.2	<1	1264	195	34.5	<0.2	<1	1377	236	44.8	<0.2	<1	1246	220	38.7	<0.2	<1	1246	220	38.7	<0.2	<1	1246	220	38.7	<0.2	<1	1246	220	38.7	<0.2	<1
Sep-18	1296	262	43.2	<0.2	<1	1350	295	46.1	<0.2	<1	1263	320	47	<0.2	<1	1276	225	40	<0.2	<1	1342	215	41	<0.2	<1	1205	240	35	<0.2	<1	1205	240	35	<0.2	<1	1205	240	35	<0.2	<1	1205	240	35	<0.2	<1

Ambient Air Quality Results

April-18

S.No.	Parameters	NAAQS*	Units	Sampling Location Results						
				1	2	3	4	5	6	7
1	Sulphur dioxide (SO ₂)	80	µg/m ³	11.62	13.78	18.17	12.84	16.48	9.76	-
2	Oxides of Nitrogen (NO _x)	80	µg/m ³	23.86	18.42	17.78	17.68	27.62	18.62	-
3	Particulate Matter (PM 10)	100	µg/m ³	68.42	91.82	88.82	91.67	90.46	52.48	-
4	Particulate matter (PM 2.5)	60	µg/m ³	35.79	56.42	50.11	50.79	49.95	34.65	-
5	Ozone (O ₃)	180	µg/m ³	14.28	16.1	14.72	14.06	14.25	14.25	-
6	Lead (Pb)	1	µg/m ³	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	-
7	Carbon monoxide (CO)	4	µg/m ³	<1.15	<1.15	<1.15	<1.15	<1.15	<1.15	-
8	Ammonia (NH ₃)	400	µg/m ³	18.62	27.24	35.42	38.54	27.25	20.72	-
9	Benzene (C ₆ H ₆)	5	µg/m ³	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-
10	Benzo (a) Pyrene	1	µg/m ³	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-
11	Arsenic (As)	6	µg/m ³	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	-
12	Nickel (Ni)	20	µg/m ³	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	-
13	Total hydro carbon (HC)	Not specified	-	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	-
14	Poly aromatic hydro carbon	Not specified	-	-	-	-	-	-	-	<0.2

Ambient Air Quality Results

May-18

S.No.	Parameters	NAAQS*	Units	Sampling Location Results						
				1	2	3	4	5	6	7
1	Sulphur dioxide (SO ₂)	80	µg/m ³	Near Main gate	Near Personal Department	Near DG Room	Near Weigh Bridge	Near CBFS Unloading area	Village Building-Pappankuppam	Packing house area
2	Oxides of Nitrogen (NO _x)	80	µg/m ³	13.14	11.34	15.31	10.29	14.12	12.55	-
3	Particulate Matter (PM 10)	100	µg/m ³	25.22	21.66	21.04	19.88	29.66	22.92	-
4	Particulate matter (PM 2.5)	60	µg/m ³	61.59	83.29	81.26	80.69	81.5	59.31	-
5	Ozone (O ₃)	180	µg/m ³	31.24	49.15	45	49.54	52.34	37.28	-
6	Lead (Pb)	1	µg/m ³	15.1	17.33	16.10	16.00	17.10	16.04	-
7	Carbon monoxide (CO)	4	µg/m ³	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	-
8	Ammonia (NH ₃)	400	µg/m ³	<1.15	<1.15	<1.15	<1.15	<1.15	<1.15	-
9	Benzene (C ₆ H ₆)	5	µg/m ³	19.54	29.03	32.69	31.93	30.08	21.94	-
10	Benzo (a) Pyrene	1	µg/m ³	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-
11	Arsenic (As)	6	µg/m ³	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-
12	Nickel (Ni)	20	µg/m ³	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	-
13	Total hydro carbon (HC)	Not specified	-	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	-
14	Poly aromatic hydro carbon	Not specified	-	-	-	-	-	-	-	<0.2

Ambient Air Quality Results

June-18

S.No.	Parameters	NAAQS*	Units	Sampling Location Results						
				1	2	3	4	5	6	7
1	Sulphur dioxide (SO ₂)	80	µg/m ³	Near Main gate	Near Personal Department	Near DG Room	Near Weigh Bridge	Near CBFS Unloading area	Village Building-Pappankuppam	Packing house area
2	Oxides of Nitrogen (NO _x)	80	µg/m ³	10.92	13.02	14.05	15.08	13.38	16.64	-
3	Particulate Matter (PM 10)	100	µg/m ³	21.54	22.38	23.22	25.76	24.96	26.18	-
4	Particulate matter (PM 2.5)	60	µg/m ³	86.41	92.75	92.09	90.91	91.23	70.62	-
5	Ozone (O ₃)	180	µg/m ³	45.02	50.01	52.53	51.29	51.31	33.77	-
6	Lead (Pb)	1	µg/m ³	15.38	16.34	14.74	16.34	16.02	15.06	-
7	Carbon monoxide (CO)	4	µg/m ³	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	-
8	Ammonia (NH ₃)	400	µg/m ³	<1.15	<1.15	<1.15	<1.15	<1.15	<1.15	-
9	Benzene (C ₆ H ₆)	5	µg/m ³	35.86	34.85	30.81	31.82	36.87	25.76	-
10	Benzo (a) Pyrene	1	µg/m ³	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-
11	Arsenic (As)	6	µg/m ³	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-
12	Nickel (Ni)	20	µg/m ³	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	-
13	Total hydro carbon (HC)	Not specified	-	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	-
14	Poly aromatic hydro carbon	Not specified	-	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<0.2



Ambient Air Quality Results

July-18

S.No.	Parameters	NAAQS*	Units	Sampling Location Results						
				1	2	3	4	5	6	7
1	Sulphur dioxide (SO ₂)	80	µg/m ³	Near Main gate	Near Personal Department	Near DG Room	Near Weigh Bridge	Near CBFS Unloading area	Village Building-Pappankuppam	Packing house area
2	Oxides of Nitrogen (NO _x)	80	µg/m ³	14.7	4.90	10.60	16.90	11.90	4.4	-
3	Particulate Matter (PM 10)	100	µg/m ³	29.6	13.6	26.1	33.5	25.20	16.70	-
4	Particulate matter (PM 2.5)	60	µg/m ³	78.7	69.3	78.3	81.2	74.30	62.5	-
5	Ozone (O ₃)	180	µg/m ³	35.1	32.7	38.6	40.6	37.60	27.9	-
6	Lead (Pb)	1	µg/m ³	25.2	15.3	22.4	26.1	21.70	12.3	-
7	Carbon monoxide (CO)	4	µg/m ³	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-
8	Ammonia (NH ₃)	400	µg/m ³	<1.15	<1.15	<1.15	<1.15	<1.15	<1.15	-
9	Benzene (C ₆ H ₆)	5	µg/m ³	23.80	17.4	18.50	20.40	28.30	15.1	-
10	Benzo (a) Pyrene	1	µg/m ³	<1	<1	<1	<1	<1	<1	-
11	Arsenic (As)	6	µg/m ³	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-
12	Nickel (Ni)	20	µg/m ³	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	-
13	Total hydro carbon (HC)	Not specified	ppm	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	-
14	Poly aromatic hydro carbon	Not specified	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.2



Ambient Air Quality Results

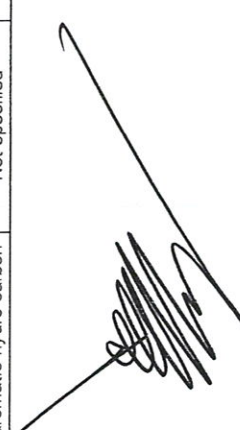
August-18

S.No.	Parameters	NAAQS*	Units	Sampling Location Results						
				1	2	3	4	5	6	7
1	Sulphur dioxide (SO ₂)	80	µg/m ³	Near Main gate	Near Personal Department	Near DG Room	Near Weigh Bridge	Near CBFS Unloading area	Village Building-Pappankuppam	Packing house area
2	Oxides of Nitrogen (NO _x)	80	µg/m ³	9.70	10.20	14.60	22.40	8.70	6.8	-
3	Particulate Matter (PM 10)	100	µg/m ³	20.4	22.8	31.2	34.5	25.20	12.20	-
4	Particulate matter (PM 2.5)	60	µg/m ³	55.6	64.5	74.1	96.3	65.1	57.1	-
5	Ozone (O ₃)	180	µg/m ³	24.1	31.1	35	52.1	33.4	25.6	-
6	Lead (Pb)	1	µg/m ³	36.1	30.5	34.8	41.6	28.1	11.6	-
7	Carbon monoxide (CO)	4	µg/m ³	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-
8	Ammonia (NH ₃)	400	µg/m ³	<1.15	<1.15	<1.15	<1.15	<1.15	<1.15	-
9	Benzene (C ₆ H ₆)	5	µg/m ³	27.40	23	30.10	27.50	25.1	8.7	-
10	Benzo (a) Pyrene	1	µg/m ³	<1	<1	<1	<1	<1	<1	-
11	Arsenic (As)	6	µg/m ³	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-
12	Nickel (Ni)	20	µg/m ³	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	-
13	Total hydro carbon (HC)	Not specified	ppm	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	-
14	Poly aromatic hydro carbon	Not specified	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.2

Ambient Air Quality Results

September-18

S.No.	Parameters	NAAQS*	Units	Sampling Location Results						
				1	2	3	4	5	6	7
1	Sulphur dioxide (SO ₂)	80	µg/m ³	Near Main gate	Near Personal Department	Near DG Room	Near Weigh Bridge	Near CBFS Unloading area	Village Building-Pappankuppam	Packing house area
2	Oxides of Nitrogen (NO _x)	80	µg/m ³	10.80	11.70	16.50	17.17	11.40	4.6	-
3	Particulate Matter (PM 10)	100	µg/m ³	24.5	26.6	32.1	36.6	21.10	10.40	-
4	Particulate matter (PM 2.5)	60	µg/m ³	62.1	67.2	78.7	90.1	70.1	50.1	-
5	Ozone (O ₃)	180	µg/m ³	29.5	32.8	36.6	48.5	34	24	-
6	Lead (Pb)	1	µg/m ³	27.1	32.5	28.5	47.5	26	12	-
7	Carbon monoxide (CO)	4	µg/m ³	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-
8	Ammonia (NH ₃)	400	µg/m ³	<1.15	<1.15	<1.15	<1.15	<1.15	<1.15	-
9	Benzene (C ₆ H ₆)	5	µg/m ³	22.50	17.5	26.30	36.80	20.4	6.4	-
10	Benzo (a) Pyrene	1	µg/m ³	<1	<1	<1	<1	<1	<1	-
11	Arsenic (As)	6	µg/m ³	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-
12	Nickel (Ni)	20	µg/m ³	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	-
13	Total hydro carbon (HC)	Not specified	ppm	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-
14	Poly aromatic hydro carbon	Not specified	-	-	-	-	-	-	-	<0.2



TAMIL NADU FOREST DEPARTMENT

From
K.Geethanjali,I.F.S,
Wildlife Warden,
Guindy Children's Park,
Chennai - 22

To
Principal Chief Conservator of Forests &
Chief Wildlife Warden,
Panagal Building,
Saidapet,Chennai – 600 015
Through Proper Channel

Ref.No.3740/2011/D1 dated.20.12.2016

Sir,

Sub: Forest and Wildlife Clearance – Expansion Carbon Block Plant (12,500 MTPM to 18,750MTPM) along with power plant (33.7 MW to 47 MW at SIPCOT Village,Pappankuppam, Gummidipoondi Taluk and Thiruvallur District, Tamil Nadu – Obtaining Wildlife Clearance – Online submission of proposal by the user agency – uploading of in Part- III details submissions - Regarding

Ref : 1. Online application uploaded by the user agency – M/s. SKI Carbon Block Private limited, Gummidipoondi, Proposal Ref. No.FP/TN/TIND/755/2016 Dated.09.08.2016

It is submitted to inform that the Part – III details, site inspection report and recommendation by Wildlife Warden, Chennai for Obtaining Wildlife Clearance for Expansion Carbon Block Plant (12,500 MTPM to 18,750MTPM) along with power plant (33.7 MW to 47 MW at at SIPCOT Village, Pappankuppam, Gummidipoondi Taluk and Thiruvallur District, Tamil Nadu by the M/s. SKI Carbon Block Private limited, Gummidipoondi, Chennai has been uploaded online. This is for favour of kind information and necessary action.

Encl: As stated above

Copy submitted to Additional Principal Chief Conservator
Of forest & Director, Aringar Anna Zoological Park,
Vandalur, Chennai – 48

Copy to SKI Carbon Block Private limited, Phase II SIPCOT Village,
Pappankuppam,Gummidipoondi District,Thiruvallur,Tamil Nadu

Yours faithfully,
Sd/K.Geethanjali
Wildlife Warden,
Chennai

//true copy/by order//

Superintendent

20/12/16

20/12/16

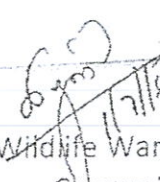
Site Inspection Report of Wildlife Warden, Chennai

The site proposed for "Expansion of Carbon Black Plant (12,500 MTPM to 18,750 MTPM) along with Power Plant (33.7MW to 47 MW at K-16,Phase – II,SIPCOT Village Pappankulam,Gummidipoondi Taluk,Thiruvallur District, Tamil Nadu" was inspected by me on 01.07.2016. The project site is located outside the limits of Pulicat Birds Sanctuary but falls within the Eco sensitive zone of the Sanctuary. But, the project will not have any adverse impact on the biodiversity of Pulicat Birds Sanctuary. No violation of Forest (conservation) Act, 1980 has taken place in the project site.


Wildlife Warden
Chennai

Report of Wildlife Warden, Chennai

The Pulicat Lake is essentially a back water lake and the lake along with the adjoining 13 villages namely, Pulicat, Kanavanthurai, Pakkam, Avurivakkam, Siralapakkam, Annamaliacherry, Sirumurkuppam, Kirapakkam, Mangodu, Pungulam, Obasamudramkuppam, Sannambukulam and Medipalayam constitute the Pulicat Birds Sanctuary. The area proposed for "Expansion of Carbon Black Plant (12,500 MTPM to 18,750 MTPM) along with Power Plant (33.7MW to 47 MW at K-16,Phase - II,SIPCOT Village Pappankulam,Gummidipoondi Taluk,Thiruvallur District, Tamil Nadu" is located outside the limits of Pulicat Birds Sanctuary but is located within the Eco Sensitive Zone of the Sanctuary. The project will not cause adverse impact on the bio-diversity of the Pulicat Lake. Hence "Recommended"


Wildlife Warden
Chennai



Annexure II B

Ref: SKI/UH/006/2015

Date: 28.04.2015

The Director
Ministry of Environment, Forests & Climate Change
Government of India,
Indira Paryavaran Bhawan,
Jor Bagh Road,
New Delhi-100 003.

Sub: Expansion of Carbon Black Plant (12500 MTPM to 18750 MTPM)
along with Plant (33.7 MW to 47 MW) at Gummidipoondi,
Dist. Thiruvallur, Tamil Nadu.

Ref: MoEF File No. J-11011/350/2010-IA.II(I)

Dear Sir,

We were granted Environmental Clearance for our Carbon Black Plant from 12500 MTPM to 18750 MTPM at Gummidipoondi (Tamil Nadu).

In the context of a Condition No.(vii) of the Environmental Clearance under reference relating to installation of FGD, the issue has been referred to the CP Division for their comments before taking a decision for deletion of this condition.

We have been given to understand by the CP Division that Carbon Black is not covered under any standards for sulphur emission except stack height. We have also held extensive technical discussions with some of the environmental experts who have opined as under:-

1. There is no proven technology available for installation of FGD in the co-generation power plants of Carbon Black. The power generated is based on the lean gas and not any other fuels like coal etc.
2. FGD has not been installed in any of the Carbon Black Plants. The only project proponent, i.e. Continental Carbon, which was granted Environmental Clearance based on FGD, is a non-starter.
3. The control of sulphur-di-oxide emissions in a Carbon Black plant can be achieved by ensuring that the Carbon Black Feedstock does not contain sulphur above 3% (as stipulated in CPCB norms).
4. Pilot plant studies conducted in consultation with IIT, Chennai revealed that installation of FGD through wet process involves consumption of a large quantity of water. In addition, the disposal of waste water arising out of the installation is an area of concern.

SV

Aditya Birla Carbon India Private Limited
(Unit - Hi-Tech Carbon, Gummidipoondi)
K-16, Phase II, Sipcot, P.O. Gummidipoondi
Dist. Thiruvallur - 601 201, Tamil Nadu, India

Telephone +91 44 27989233 - 36
Fax +91 44 27989179, 29

Website www.birlacarbon.com
E-mail info@adityabirla.com

Marketing Office 910 - 911, Kailash Building, Kasturba Gandhi Marg, New Delhi - 110 001 Telephone +91 11 23351069, 71 Fax +91 11 23350594
Regd. Office Aditya Birla Centre, S. K. Ahire Marg, Worli, Mumbai - 400 030, India Telephone +91 22 66525000

Our submissions:

4. Gummidipoondi in Tamil Nadu is an area, where there is a shortage of water. By installation of FGD, our requirement of water for scrubbing 1,70,000 nm³ per hour of flue gas will be 9384 m³/day as against the total water requirement even after the proposed expansion will be only 2500 m³/day.
5. The installation of FGD without a proven technology could end up in high water consumption and waste water generation. Our plant is presently operating on 'Zero Discharge' and we shall maintain the same.
6. The environment implications of disposal of solid waste and effluent through FGD will be more than the benefits from the FGD.

Our undertaking to reduce the impact of SO₂ emissions:

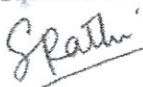
3. The stack height will be maintained as per CPCB guidelines. We propose to maintain a stack height of 75-m.
4. The So₂ emissions will be controlled by ensuring use of Carbon Black Feedstock with sulphur content 2.75%.

Request:

In order to ensure that the expansion project is implemented without further delay, we request that the condition of installation of FGD may please be deleted from the 'Environmental Clearance' with the stipulations of stack height and sulphur content in the Carbon Black Feedstock as undertaken by us.

Thanking you,

Yours faithfully,
For SKI CARBON BLACK (INDIA) PVT. LTD.
(Unit: Hi-Tech Carbon, Gummidipoondi)



S.S. RATHI
MANAGING DIRECTOR

CC:

The Director
CP Division
Ministry of Environment & Forests
New Delhi

Annexure - IIa

65

Raja
Original letter
for your record
Sathi
13/9/2012

F. No. J-11011/350/2010- IA II (I)
Government of India
Ministry of Environment and Forests
(I.A. Division)

Paryavaran Bhawan
CGO Complex, Lodhi Road
New Delhi - 110 003

E-mail : aditya.narayan@nic.in
Telefax : 011: 2436 549
Dated 7th September, 2012

To, ✓
The Chief Operating Officer
M/s Hi-Tech Carbon, India (A Unit of Aditya Birla NUVO Limited)
K-16, Phase-II, SIPCOT Industrial Complex, Gummidipoondi,
District Thiruvallur-601 201, Tamil Nadu.

E-mail: hitechr@adityabirla.com; s.rathi@adityabirla.com; rohit.raina@adityabirla.com;
Fax No.: 044- 2789116.

Corrigendum

Subject: Expansion of Carbon Black Plant (12,500 MTPM to 18,750 MTPM) alongwith
Power Plant (33.7 MW to 47 MW) at K-16, Phase-II, SIPCOT Village
Pappankuppam, Gummidipoondi, District Thiruvallur, Tamil Nadu by M/s
High-Tech Carbon India (A Unit of Aditya Birla NUVO Limited) -reg.

Ref. : (i) Ministry's even no. letter dated 21st September, 2011 and 18th June, 2012.
(ii) Your letter no. nil dated 28th June, 2012.

Sir,
Reference is invited to Ministry's letter of even no. dated 21st September, 2011 and
18th June, 2012 as well as your letter dated 28th June, 2012. Your proposal was examined in
the Ministry in light of decision taken in the 32nd EAC meeting held during 16-17th February,
2012. Accordingly, following corrections may be made in the Ministry's even no. letter dated
21st September, 2011 and 18th June, 2012:

Para 7.0; A Specific Conditions; v:

For:
"Continuous on-line monitoring of particulate matter, SO₂ and NO_x should be ensured and
proper calibration should be done time to time. Vent scrubbers should be provided to
reactors. Electrostatic precipitator (ESP) should be provided to the boilers. Carbon content in
the particulate matter should also be measured."

Read:
"Continuous on-line monitoring of particulate matter, SO₂ and NO_x should be ensured and
proper calibration should be done time to time. Efficient bag filter should be provided before
the boiler".

Para 7.0; A Specific Conditions; vii:

Regarding installation of FGD condition, matter is referred to the Ministry's CP Division to
constitute a study group comprising CPCB to study the suitability for the installation of FGD.

HI TECH CARBON
GUMMIDIPOONDI
MAIL RECEIVED

13 SEP 2012

Sign:.....

The condition may be kept in abeyance till the recommendation of study group is submitted and decision is taken by the Ministry.

Para 7.0; A Specific Conditions; xxvii:

For :

"Green belt should be developed in 30 acres out of total 62 acres."

Read :

"Green belt should be developed in 18.55 acres out of total 56.44 acres."

2.0 All other conditions will remain unchanged.


3.0 This has been issued with prior approval from the Competent Authority.

3.0 You are requested to keep this letter with the amendment accorded vide letters no. J-11011/350/2010- IA II (I) dated 21st September, 2011 and 18th June, 2012.


(A N Singh)
Dy. Director

Copy to:

1. The Principal Secretary, Department of Environment, Ground Floor, Panagal Buildings 1, Jeenis Road , Saidapet, Chennai - 600 015.
2. The Chief Conservator of Forests, Regional Office (Southern Zone, Bangalore) Kendriya Sadan, 4th Floor, E&F Wing, II Block Koramangala, Bangalore-560034.
3. The Chairman, Central Pollution Control Board Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, New Delhi - 110 032.
4. The Chairman, Tamil Nadu Pollution Control Board, Corporate Office, 76, Anna Salai, Guindy, Chennai - 600 032.
5. Joint Secretary, IA II(I), Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi.
6. Monitoring Cell, Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi.
7. Guard File/Monitoring File/Record File.


(A N Singh)
Dy. Director