



ಕರ್ನಾಟಕ ರಾಜ್ಯ ಮಾಲಿನ್ಯ ನಿಯಂತ್ರಣ ಮಂಡಳಿ
Karnataka State Pollution Control Board

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

NO. 372/KSPCB/SEO/MINES/CFE/2015-16/08-2171

DATED: - 3 MAR 20

TO:

The Director & CEO,
M/s Epsilon Carbon Private Limited
Upadrastha house, 2nd & 3rd floor,
48, Dr V B Gandhi Marg, Fort,
Mumbai - 400023

Sir,

Sub: Consent for Establishment (CFE) for Coal tar distillation plant of capacity 3,00,000 TPA at survey nos.28/A/1, 29/2, 29/3, 30/2, 30/3, 30/4, 31, 32/3, 34/2, 34/3, 41, 42, 43, 44/1, 44/2 & 45 of Musinayakanahalli village, near Sultanpur village, Sandur Taluk, Ballari district of M/s Epsilon Carbon Private Limited - reg.

- Ref:1. CFE application submitted by the industry at Regional Office, KSPCB, Bellary, on 08.02.2016 with Reg No. 106067
2. Inspection of the project site by Regional Officer, KSPCB, Bellary, on 09.02.2016.
3. Proceedings of the Consent Committee Meeting held on 15.02.2016.
4. Environmental Clearance issued by State Level Environment Impact Assessment Authority - Karnataka vide No. SEIAA 29 IND 2015 dated 18.02.2016

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With reference to the above, it is to be informed that, the Board hereby accords Consent for Establishment under the Water (Prevention & Control of Pollution) Act 1974, and the Air (Prevention & Control of Pollution) Act 1981, for Coal tar distillation plant of capacity 3,00,000 TPA at survey nos.28/A/1, 29/2, 29/3, 30/2, 30/3, 30/4, 31, 32/3, 34/2, 34/3, 41, 42, 43, 44/1, 44/2 & 45 of Musinayakanahalli village, near Sultanpur village, Sandur Taluk, Ballari district of M/s Epsilon Carbon Private Limited subject to the below mentioned Terms & Conditions for the manufacture of the following products:

Products / By products Manufactured

Products Manufactured	Capacity in Tonnes/Annum
Anthracene Oil/Heavy creosote oil	42, 000
Carbon Black Oil (CBO)	70, 000
Coal Tar Pitch (Binder Grade)	1,53,000

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P.e.

De-hydrated coal tar (Optional)	2,91,000
Light Oil	6,000
Naphthalene	18,000
NSF (30%)	33,333
Phenol Oil	6,000
Wash Oil	25,500
Zero QI/Impregnated Pitch	6,000

By Products Manufactured	Capacity in Tonnes/Annum
Neutral Sodium Phenolate	15,300
Ammonical Water	90

1. This CFE is valid for a period of 5 Years only. The applicant shall renew the CFE in case the Plant is not established within a period of 5 Years. The applicant shall apply & obtain prior Consent for Operation (CFO) for operating the Unit.
2. The applicant shall not undertake expansion/diversification without the prior consent of the Board.
3. The applicant shall obtain necessary license/clearance from other relevant statutory agencies before taking up construction.
4. There shall not be any complaint against the plant in respect of water/air/noise pollution from the surrounding public.
5. The applicant shall comply with **Environmental Clearance issued by State Level Environment Impact Assessment Authority - Karnataka vide No. SEIAA 29 IND 2015 dated 18.02.2016**

I. WATER CONSUMPTION:

1. Total water requirement from of 1440 KLD shall be sourced from M/s JSW Steel Limited. No ground water shall be used.
2. The total water consumption the industry shall not exceed for the plant of 1392 KLD for process, 24 KLD for domestic purpose and 24 KLD for Green belt.

II. WATER POLLUTION CONTROL:

1. The discharge from the premises of the applicant shall pass through terminal manhole/manholes where from the Board shall be free to collect samples at any time in accordance with the provision of the act or rules made there under.
2. Storm water shall not be allowed to mix with the trade and/or sewage effluent directly/indirectly on the upstream of the terminal manholes where the flow measuring devices installed.

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3. There shall not be any discharge of trade effluents from the industry. The trade effluent of 84 KLD shall be treated in effluent treatment plant with Zero discharge and treated water shall be recycled and the treated effluent shall conform to the standards prescribed in **Annexure-Ia**. During rainy season the discharge from the plant shall meet the norm of Schedule – VI of EPA notifications.
4. The industry shall treat the domestic wastewater of about 12 KLD from the plant in the Sewage Treatment Plant and the treated sewage shall be used for purposes like greenbelt development etc. The treated sewage shall conform to the standards prescribed in **Annexure-Ib**.

III. WATER CESS:

1. The industry shall comply with the provisions of Water (Prevention and Control of Pollution) Cess Act, 1977, by installing water meters, filing water cess returns in Form-I and other provisions as contained in the said Water (Prevention and Control of Pollution) Cess Act, 1977, and 2003.

IV. AIR POLLUTION CONTROL:

1. The discharge of emissions from the premises of the applicant shall pass through the air pollution control equipment and discharged through stacks/chimneys mentioned in **Annexure-II** where from the Board shall be free to collect the samples at any time in accordance with the provisions of the Act and Rules made there under.
2. The stacks shall have portholes and platforms as per the guidelines stipulated in **Annexure-III** to facilitate monitoring of emissions.
3. The industry shall conduct ambient air quality monitoring in and around the premises and shall ensure that the ambient air quality shall conform to the National Ambient Air Quality Standards specified in Environment (Protection) Seventh Amendment Rules, 2009, as stipulated in **Annexure-IV**. The reports shall be submitted to the Regional Office, KSPCB, Bellary, regularly.
4. The industry shall upgrade/modify/replace the control equipment's if they are found inadequate to meet the standards stipulated. Prior permission of the Board shall be obtained for the same.
5. If there is going to be any new air pollution sources in future, the project authorities shall apply and obtain consent for establishment for the same from the Board.
6. Suitable safety measures shall be provided to protect workers from the ill effect of air pollution.
7. The applicant shall display flow diagram of the pollution control system at the site.
8. The applicant shall provide individual Energy Meters to all air pollution control equipment's.
9. The applicant shall asphalt all the internal roads and approach road before commissioning the unit.


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V. NOISE POLLUTION CONTROL:

1. The overall noise levels in and around the plant area shall be kept well within the standards (85 dBA) by providing noise control measures including acoustic hoods, silencers enclosures etc. on all sources of noise generation. The ambient noise levels should conform the standards prescribed under EPA Rules, 1989 viz. 75 dBA (daytime) and 70 dBA (night time).
2. The applicant shall provide necessary acoustic enclosures or measures to control noise levels generated from the DG Sets as per Environment (Protection) Rules, 1986.

VI. SOLID WASTE (OTHER THAN HAZARDOUS WASTE) DISPOSAL:

1. The industry shall collect, treat and dispose off all solid waste generated from the process other than wastes covered under the Hazardous Wastes (Management, Handling & Transboundary Movement) Rules 2008, in such manner so as not to cause environmental pollution. The solid waste shall be collected & stored within the premises only.
2. The details of solids wastes generated from the industry and their mode of disposal shall be as per the **Annexure- V**
3. The applicant shall maintain log books showing the details of solid waste generated, disposed, place of disposal etc.

VII. HAZARDOUS WASTES (MANAGEMENT, HANDLING & TRANSBOUNDRY MOVEMENT) RULES 2008:

1. The industry shall apply and obtain authorization amendment to authorization under Hazardous Wastes (Management, Handling & Transboundary Movement) Rules 2008, and comply with the conditions of the authorization. The applicant shall apply for authorization along with the consent for operation (CFO) application under the Rules in Form-I to obtain authorization and comply with conditions.

VIII. GENERAL:

1. The industry shall take up extensive plantation activities in its premises from the beginning itself particular
2. The industry shall transport and store the raw materials/products in a manner so as not to cause any damage to environment, life and property. The applicant shall be solely responsible for any damages to environment.
3. The industry shall not commission the proposed plant for trial or regular production unless necessary water& air pollution control equipments are installed to the satisfaction of the Board. The industry shall ensure that the treatment plant and control equipments are completed and commissioned simultaneously along with construction of the factory and erection of machineries.
4. The industry shall not change or alter (a) raw materials or manufacturing process, (b) change the products or product mix (c) the quality, quantity or rate of discharge/emissions and (d) install/replace/alter the water or air pollution control equipments without the prior approval of the Board.


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5. The industry shall immediately report to the Board of any accident or unforeseen act or event resulting in release or discharge of effluents or emissions or solid wastes etc. in excess of the standards stipulated. And the industry shall immediately take appropriate corrective and preventive actions under intimation.
6. The industry is liable to reinstate or restore, damaged or destroyed elements of environment at his cost, failing which, the applicant/occupier as the case may be shall be liable to pay the entire cost of remediation or restoration in advance an amount equal to the cost estimated by Competent Agency or Committee.
7. The applicant shall comply with all the Rules and guidelines issued from time to time.
8. The applicant shall maintain log books to reflect the working condition of pollution control systems and also self monitoring results and keep it open for inspection.
9. The applicant shall set-up Environmental Cell comprising of qualified and competent personnel for complying with the conditions specified.
10. The Board reserves the right to review, impose additional condition or conditions, revoke, change or alter the terms and conditions.
11. This CFE does not give any right to the Party/Project Authority/Industry to forego any legal requirement, that is necessary for setting/operation of the plant.
12. The industry shall furnish pointwise compliance to the conditions given under this consent for establishment within 30 days.

Please note that this is only consent for establishment issued to you to proceed with the formalities for establishment of the industry and does not give any right to proceed with trial/regular production. For this purpose, separate consents of the Board for discharge of liquid effluent and the emissions to the air shall have to be obtained by remitting prescribed consent fee. The application for consent has to be made 45 days in advance of commissioning for trial production of the plant.

The receipt of this letter may please be acknowledged.

FOR AND ON BEHALF OF
KARNATAKA STATE POLLUTION CONTROL BOARD
Sd/-

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Encl.: Annexure-I to V.

Note:

1. It is advised to provide all necessary healthcare facilities to employees & local people and shall carry out routine health survey among employees & local people and tests like Spirometry, Pulseoxymetry, Lung function test, etc.
2. It is advised to regularly check the health of workers exposed to very high noise levels and suitable measures to avoid any ill effects shall be taken.
3. It is advised to take all safety measures to avoid any injury to its employees and local people as per the approved Onsite and Offsite Emergency Plan.

COPY TO:

1. The Regional Officer, KSPCB, Bellary, for information and necessary action.
2. Master copy (Dispatch).
3. Master copy (CFE).
4. Case File.


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ANNEXURE – IIa- STANDARDS FOR TREATED EFFLUENTS

Treated Effluent Standards	
Parameters	Limiting concentration in mg/l, except for pH
pH	6.0-8.50
Suspended Solids	100
BOD, 3 days at 27 ⁰ C	30
COD	250
Oil and Grease	10
Ammonical Nitrogen, as N	50
Cyanide (as CN)	0.2
Phenol	1.0

Ib- STANDARDS FOR TREATED SEWAGE

Parameter	Treated effluent standards
pH	6.5 to 9.0
BOD, 3 days, 27 ⁰ C (mg/l, Max)	<= 20 mg/lt
Suspended Solids	<=30 mg/lt
Oil and Grease	<=10mg/lt

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ANNEXURE - II

Sl. No.	Chimney Attached to	Minimum Height to be Provided Above ground level(AGL) in meters	Gas Qty. (Nm ³ /Hr)	Tolerance limits of Particulate Matter in mg/Nm ³	Air Pollution Control equipments proposed in addition to Chimney height as per Col (3)
1	Coal Tar Tube Furnace-1	35 m AGL Chimney	6243	50	Chimney
2	Coal Tar Tube Furnace-2	35 m AGL Chimney	6243	50	Chimney
3	Naphthalene tube furnace-1	35 m AGL Chimney	2433	50	Chimney
4	Naphthalene tube furnace-2	35 m AGL Chimney	2433	50	Chimney
5	Modified Pitch Furnace	30 m AGL Chimney	1623	50	Chimney
6	K-7601 Scrubber Vent	23 m AGL Chimney	3000	50	Scrubber
7	K-9302 Scrubber vent	23 m AGL Chimney	3000	50	Scrubber
8	K-7104 Scrubber Vent	23 m AGL Chimney	5000	50	Scrubber
9	Dedusting Naphthalene Pack	21 m AGL Chimney	7728	50	Scrubber
10	Boiler-Gas fired	48 m AGL Chimney	16140	50	Chimney
11	Boiler-Coal fired	48 m AGL Chimney	19329	50	Chimney
12	Fuel Heater-1 (Thermic)	35 m AGL Common Chimney	5676	50	Common Chimney
13	Fuel Heater-2 (Thermic)				

Note :

1. AGL – Above Ground Level.
2. Emission standards have been stipulated as per notification no.GSR277 (E)dt 31.03.2012.
3. The emission rates of all the sources shall be reported within 30 days.
4. The applicant shall provide online stack monitoring facility for major air pollution sources.


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ANNEXURE – III

LOCATION OF SAMPLING PORTHOLE, THE PLATFORMS, THE ELECTRICAL OUTLET.

1. Location of Portholes and approach Platform:

Portholes shall be provided for all chimneys, stacks and other sources of emission. These shall serve as the sampling points. The sampling point should be located at a distance equal to atleast eight times the stack or duct diameters downstream and two diameters upstream from source of flow disturbance such as a Bend, Expansion, Construction Valve, Fitting or Visible Flame for rectangular stacks, the equivalent diameter can be calculated from the following equation.

$$\text{Equivalent Diameter} = \frac{2 (\text{Length} \times \text{Width})}{(\text{Length} + \text{Width})}$$

- 2. The diameter of the Sampling Port should not be less than 3". Arrangements should be made so that the porthole is closed firmly during the period when it is not used for sampling.
- 3. An easily accessible platform to accommodate 3 to 4 persons to conveniently monitor the stack emission from the portholes shall be provided. Arrangements for an Electric Outlet Point off 230 V 15 A with suitable switch control and 3 Pin Point shall be provided at the Porthole location.

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ANNEXURE-IV

Pollutant	Time Weighted Average	Concentration in Ambient Air		Method of Measurement
		Industrial, Residential, Rural & other Areas	Ecologically sensitive area (Notified by Central Government)	
Sulphur Dioxide (SO ₂)	Annual* 24 Hours**	50 µg/m ³ 80 µg/m ³	20 µg/m ³ 80 µg/m ³	- Improved West and Gacke method. - Ultraviolet fluorescence.
Nitrogen Dioxide (NO ₂)	Annual* 24 Hours**	40 µg/m ³ 80 µg/m ³	30 µg/m ³ 80 µg/m ³	- Modified Jacob & Hochheiser (Na-Arsenite) Method. - Chemiluminescence.
Particulate Matter (Size less than 10 µm) or PM ₁₀	Annual* 24 Hours**	60 µg/m ³ 100 µg/m ³	60 µg/m ³ 100 µg/m ³	- Gravimetric. - TOEM. - Beta attenuation.
Particulate Matter (Size less than 2.5 µm) or PM _{2.5}	Annual* 24 Hours**	40 µg/m ³ 60 µg/m ³	40 µg/m ³ 60 µg/m ³	- Gravimetric. - TOEM. - Beta attenuation.
Ozone (O ₃)	8 Hours** 1 Hour**	100 µg/m ³ 180 µg/m ³	100 µg/m ³ 180 µg/m ³	- UV Photometric. - Chemiluminescence. - Chemical method.
Lead (Pb)	Annual* 24 Hours**	0.5 µg/m ³ 1 µg/m ³	0.5 µg/m ³ 1 µg/m ³	- AAS/ICP Method after sampling on EPM 2000 or equivalent filter paper. - ED – XRF using Teflon Filter. - Non dispersive infrared (NDIR) spectroscopy.
Carbon Monoxide (CO)	8 Hours** 1 Hour**	2 mg/m ³ 4 mg/m ³	2 mg/m ³ 4 mg/m ³	
Ammonia (NH ₃)	Annual* 24 Hours**	100 µg/m ³ 400 µg/m ³	100 µg/m ³ 400 µg/m ³	- Chemiluminescence. - Indophenol blue method.
Benzene (C ₆ H ₆)	Annual*	5 µg/m ³	5 µg/m ³	- Gas Chromatography based continuous analyzer. - Adsorption & Desorption followed by GC analysis.

Pollutant	Time Weighted Average	Concentration in Ambient Air		Method of Measurement
		Industrial, Residential, Rural & other Areas	Ecologically sensitive area (Notified by Central Government)	
Benzo (α) Pyrene (BaP) – Particulate phase only.	Annual*	1 ng/m ³	1 ng/m ³	Solvent extraction followed by HPLC/GC analysis.
Arsenic (As)	Annual*	6 ng/m ³	6 ng/m ³	AAS/ICP Method after sampling on EPM 2000 or equivalent filter paper.
Nickel (Ni)	Annual*	20 ng/m ³	20 ng/m ³	AAS/ICP Method after sampling on EPM 2000 or equivalent filter paper.

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

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

Note:

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


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ANNEXURE-V**Solid Waste Generation and Utilization**

Sr. No.	Details	Quantity	Method of disposal
1	Sludge from STP	60 (kg/Y)	This will be used as organic manure for greenbelt
2	Ash from coal based Boiler	4239 t/y	Disposed for brick making.


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