

F. No. J-11011/182/2015-IA II (I)
Government of India
Ministry of Environment, Forest and Climate Change
(Impact Assessment Division)

Indira Paryavaran Bhawan
Jor Bagh Road, Delhi - 3
Dated: 10th October, 2017

To,

M/s Himadri Chemicals & Industries Ltd
JL No.103, Mouza & Village Mahiskry,
District Hooghly (West Bengal)

Sub: Expansion of 'Carbon Black, Coal tar pitch, Napthalene, SNF, Poly Carboxylate Ether, Heavy and Light Creosote Oil, Tail Gas Manufacturing Unit and Power Plant' at JL No.103, Mouza & Village Mahiskry, District Hooghly (West Bengal) by M/s Himadri Chemicals & Industries Ltd - Environmental Clearance - reg.

Ref: Online proposal No. IA/WB/IND2/65256/2015 dated 22nd June, 2017.

Sir,

This has reference to your online proposal No. IA/WB/IND2/65256/2015 dated 22nd June, 2017 along with project documents namely, EIA/EMP Report along with Public consultation details on the above subject matter.

2. The Ministry of Environment, Forest and Climate Change has examined the proposal for expansion of 'Carbon Black, Coal tar pitch, Napthalene, Sulfonated Naphthalene Formaldehyde (SNF), Poly Carboxylate Ether, Heavy and Light Creosote Oil, Tail Gas Manufacturing Unit and Power Plant' by M/s Himadri Chemicals & Industries Ltd at JL No.103, Mouza & Village Mahiskry, District Hooghly (West Bengal).

3. The details of products presently manufactured and after the proposed expansion are reported to be as under:-

S. No	Products	Existing Quantity (as per CTO valid till August 31, 2018)	Proposed Quantity (after expansion)
1	Carbon Black	1,20,003.96 MTPA	1,80,000 MTPA
2	Coal tar Pitch (Binder/Impregnating/Liquid/Solid/ Mesophase/HSCP/carbonized pitch)	1,87,050 MTPA	3,00,000 MTPA
3	Napthalene	21,999.96 MTPA	48, 000 MTPA
4	SNF/Dispersion Agent Phenol Based	50,000.04 MTPA	90,000 MTPA
5	Poly Carboxylate Ether (PCE)	-	30,000 MTPA
6	Heavy and light Creosote oil	1,12,950 MTPA	2,52,000 MTPA
7	Tail Gas	5,65,200 Nm ³ /Annum (for 69996 TPA of Carbon Black)	120,00,00,000 Nm ³ /Annum (for 1,80,000 TPA of Carbon Black)
8	Tail Gas	37,50,30,000 NM ³ /Annum (for 50004 TPM of Carbon Black)	
9	Power plant	20 MW	28 MW

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4. The expansion is proposed in the same area of 142393 sqm, and no additional area will be required for the proposed expansion. Greenbelt will be developed in an area of 32.23% i.e. 45902.3 sqm out of total area of the project. The estimated project cost is Rs. 400 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 21.9 Cr and the Recurring cost (operation and maintenance) will be about Rs. 0.6 Cr/annum. Total employment generation will be for 2000 persons as direct & 1500 persons indirect after expansion.

5. There are no National parks, Wildlife sanctuaries, Biosphere reserves, Tiger/Elephant reserves, Wildlife corridors etc., within 10 km distance. Ghiya River (700 m) and DVC Canal (7.27 km) are situated within 10 km distance from the project site.

6. Total water requirement will be increased from 1748 cum/day to 2681 cum/day after the expansion. Out of it, 1968 cum/day shall be met through ground water and 713 cum/day shall be the recycled water. Treated effluent of 31 m³/day is treated through CETP will be reused in Carbon black Quenching process. Plant will be based on zero liquid discharge system.

Total power requirement after expansion will be 12.5 MW/Hr including existing 8 MW/Hr and will be met from onsite tail gas based cogeneration power plant. There shall be tail gas based Co-Generation Plants with an output of 12 +8+ 8 MW. (Total 28 MW). After captive consumption, Balance power available shall be exported /sold to WBSEDCL. Existing unit has 6 no DG sets of capacity- 4 x725 KVA, 1x365 KVA & 1x1010 KVA. These DG sets will be used only during power failure. Stacks height 10.6 m are provided as per CPCB norms.

Existing unit has 2x40 TPH tail gas fired Boiler with PCME and a stack of height of 73 m is already installed (Within statutory limit of 115 mg/Nm³). For proposed expansion 1x 40 TPH tail gas fired boiler will be installed.

7. Details of process emissions generation and its management are as under:-

(a) Existing Air Pollution Control measures

Stack ID	Location	Shape of Stack	Capacity	Height of Stack from G.L. (m)	Stack I.D. at sampling point (m)	Height of sampling Port from G.L. (m)	Fuel consumed	Pollution Equipments
CARBON BLACK DIVISION								
2	C.P.P. Boiler	Circular	2X40 MT/hr	73	3	24	Tail Gas	PCME
S-1	CBD Drier Line - I	Circular	160 MT/Day	54	1.8	14.4	Tail Gas	OPACITY METER
3	CBD Drier Line - II	Circular	200 MT/Day	54	1.8	14.4	Tail Gas	OPACITY METER
COAL TAR DIVISION								

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S-1	NDU -2 Heaters	Circular	20,00,000 Kcal/hr (x 2 nos)	43	0.85	11.25	CBFS/Petroleum Based FO/LSF/HSD/Producer gas	SCRUBBER, VACUUM SYSTEM & OPACITY METER
S-2	Main Shed- 5 Heaters	Circular	10,00,000 Kcal/hour (x 5nos)	33	0.85	11.25	CBFS/Petroleum Based FO/LSF/HSD/Producer Gas	SCRUBBER, VACUUM SYSTEM & OPACITY METER
S-3	PM Shed	Circular	T.F.H - 10,00,000 kcal/hour (x2 nos)	31	0.85	11.25	CBFS/Petroleum Based FO/LSF/HSD/Producer Gas	SCRUBBER, & OPACITY METER
S-4	TP 10 (1 & 2) attached to common stack with 2 nos fired heaters NEAR VACUUM SHED	Circular	10,00,000 Kcal/hour	33	0.85	7.62	CBFS/Petroleum Based FO/LSF/HSD / Producer Gas	SCRUBBER, VACUUM SYSTEM & OPACITY METER
S-5	Naphthalene Plant	Circular	T.F.H - 10,00,000 Kcal/hour (x 4 Nos.)	33	0.85	6.8	CBFS/Petroleum Based FO/LSF/HSD	SCRUBBER, VACUUM SYSTEM & OPACITY METER
DG	DG(2 Nos)	Circular	725 Kva	10.6	-	0.203	HSD	-
DG	DG(2 Nos)	Circular	725 Kva	10.6	-	0.203	HSD	-

(b) Proposed Air Pollution Control measures

Stack ID	Location	Shape of Stack	Capacity	Height of Stack from G.L. (m)	Stack I.D. at sampling point (m)	Height of Sampling Port from G.L. (m)	Fuel consumed	Pollution Equipments
CARBON BLACK DIVISION								
S-2	CBD Drier Line-III	Circular	160 MT/Daily	54	1.8	14.4	Tail Gas	OPACITY METER
4	C.P.P. Boiler	Circular	40 MT/hr	73	3	24	Tail Gas	PCME
COAL TAR UNIT								

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S-6	Fire Heater – 2 nos	Circular	2 million kcal/hr	33	0.85	7.6	CBFS/Petroleum Based FO/LSF/HSD/Producer Gas	SCRUBBER,VACUUM SYSTEM & OPACITY METER
NAPHTHALENE UNIT								
S-7	TF Heater – 2 nos	Circular	2 million kcal/hr	43	0.85	11.25	CBFS/Petroleum Based FO/LSF/HSD/ Producer Gas	SCRUBBER,VACUUM SYSTEM & OPACITY METER

8. Details of solid/ hazardous waste generation and its management are as under:

Type of Waste	Existing Rate of Generation	Proposed Rate of Generation
ETP Sludge	1.5 MT PA	2.0 MT PA
Oil Jute, Soaked Sand	0.700 MT PA	0.700 MT PA
Empty Bag/Container	0.500 MT PA	0.700 MT PA
Used Oil	0.840 KL PA	1.0 KL PA

9. The project/activities are covered under category A/B of item 4 (b), 5 (e) and 5 (f) of the Schedule of EIA Notification, 2006.

10. The ToR for the project was issued on 7th September, 2015. Public Hearing was conducted by the State Pollution Control Board on 12th November, 2016.

11. The proposal was considered by the Expert Appraisal Committee (Industry-2) in its 26th meeting held during 27-28 July, 2017. The project proponent and the accredited consultant M/s Hubert Enviro Care Systems (P) Ltd, have presented EIA/ EMP report as per the ToR. The Committee has found the EIA/EMP Report to be satisfactory and in consonance with the presented ToR and recommended the proposal for grant of environmental clearance.

12. Based on the information submitted by the project proponent and recommendation of EAC (Industry-2), the Ministry of Environment, Forest and Climate Change hereby accords environmental clearance to project expansion of **'Carbon Black, Coal tar pitch, Napthalene, Sulfonated Napthalene Formaldehyde (SNF), Poly Carboxylate Ether, Heavy and Light Creosote Oil, Tail Gas Manufacturing Unit and Power Plant'** by M/s Himadri Chemicals & Industries Ltd at JL No.103, Mouza & Village Mahiskry, District Hooghly (West Bengal), under the provisions of the EIA Notification, 2006, and the amendments therein, subject to the compliance of the terms and conditions as under:

- (a) Consent to Establish/Operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.
- (b) As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises. The domestic effluent discharge, if any, shall conform to the standards prescribed under the Environment (Protection) Rules, 1986.

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- (c) Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to. Prior permission from the WBSPCB shall be obtained for disposal of solid/hazardous waste in the TSDF.
- (d) National Emission Standards for Organic Chemicals Manufacturing Industry issued by the Ministry vide G.S.R. 608(E) dated 21st July, 2010 and amended time to time shall be followed by the unit.
- (e) Multi-cyclone followed by bag filter shall be provided to the coal fired boiler to control particulate emissions within the permissible limit. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines, and at no point of time, the emission levels shall go beyond the prescribed standards.
- (f) Solvent management shall be carried out as follows :
- Reactor shall be connected to chilled brine condenser system.
 - Reactor and solvent handling pump shall have mechanical seals to prevent leakages.
 - The condensers shall be provided with sufficient HTA and residence time so as to achieve more than 95% recovery.
 - Solvents shall be stored in a separate space specified with all safety measures.
 - Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.
 - Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.
 - All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.
- (g) Total ground water requirement shall not exceed 1968 m³/day and prior permission for the same shall be obtained from the concerned regulatory authority/CGWA.
- (h) Industrial/trade effluent shall be segregated into High COD/TDS and Low COD/TDS effluent streams. High TDS/COD shall be passed through stripper followed by MEE and ATFD (agitated thin film drier). Low TDS effluent stream shall be treated in ETP and then passed through RO system. Condensate and recover water will be recycled/reused within factory premises.
- (i) Process effluent/any wastewater shall not be allowed to mix with storm water. Storm water drain shall be passed through guard pond.
- (j) Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm. Solvent transfer shall be by pumps.
- (k) Process organic residue and spent carbon shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF. The ash from boiler shall be sold to brick manufacturers/cement industry.
- (l) The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended

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time to time. All Transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.

- (m) Fly ash should be stored separately as per CPCB guidelines so that it should not adversely affect the air quality, becoming air borne by wind or water regime during rainy season by flowing along with the storm water. Direct exposure of workers to fly ash & dust should be avoided.
- (n) The company shall undertake waste minimization measures as below:-
 - i. Metering and control of quantities of active ingredients to minimize waste.
 - ii. Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.
 - iii. Use of automated filling to minimize spillage.
 - iv. Use of Close Feed system into batch reactors.
 - v. Venting equipment through vapour recovery system.
 - vi. Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- (o) 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 norms.
- (p) Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- (q) The green belt over 33% of the total project area shall be developed with at least 10 m wide along the project periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.
- (r) All the commitment made regarding issues raised during the Public Hearing/ consultation meeting held on 12th November, 2016 shall be satisfactorily implemented.
- (s) At least 5% of the total project cost shall be allocated for Enterprise Social Commitment based on Public Hearing issues and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.

12.1 The grant of Environmental Clearance is further subject to compliance of other generic conditions as under:-

- (i) The project authorities must strictly adhere to the stipulations made by the state Pollution Control Board (SPCB), State Government and/ or any other statutory authority.
- (ii) No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forest and Climate Change. 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.

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- (iii) The locations of ambient air quality monitoring stations shall be decided in consultation with the State Pollution Control Board (SPCB) and it shall be ensured that at least one station is installed in the upwind and downwind direction as well as where maximum ground level concentrations are anticipated.
- (iv) The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 shall be complied with.
- (v) 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).
- (vi) The Company shall harvest rainwater from the roof tops of the buildings and storm water drains to recharge the ground water and utilize the same for different industrial operations within the plant.
- (vii) 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.
- (viii) The company shall 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 shall be implemented.
- (ix) The company shall undertake all measures for improving socio-economic conditions of the surrounding area. CSR activities shall be undertaken by involving local villagers, administration and other stake holders. Also eco-developmental measures shall be undertaken for overall improvement of the environment.
- (x) A separate Environmental Management Cell equipped with full fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.
- (xi) The company shall earmark sufficient funds towards capital cost and recurring cost per annum to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so earmarked for environment management/ pollution control measures shall not be diverted for any other purpose.
- (xii) A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, Zila Parishad/ Municipal Corporation, Urban local Body and the local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal.
- (xiii) The project proponent shall also submit six monthly reports on the status of compliance of the stipulated Environmental Clearance conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF&CC, the respective Zonal office of CPCB and SPCB. 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&CC 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://moef.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.
13. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not reported to be satisfactory.
14. The Ministry reserves the right to stipulate additional conditions, if found necessary. The company in a time bound manner will implement these conditions.
15. The above conditions will be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Water Pollution) Act, 1981, the Environment (Protection) Act, 1986, the Hazardous Waste (Management, Handling and Trans-boundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and rules.


(S. K. Srivastava)
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Copy to:-

1. The Secretary, Department of Environment, Govt. of West Bengal, **Kolkata** (West Bengal)
2. The APCCF, Ministry of Environment & Forests, Regional Office, (EZ) A-3, Chandrashekharpur, **Bhubaneswar**-715023
3. The Member Secretary, Central Pollution Control Board Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, **Delhi** -32
4. The Member Secretary, West Bengal Pollution Control Board, Parivesh Bhawan, 10A Block-LA Sector-III, Salt Lake, **Kolkata** -700091 (West Bengal)
5. Monitoring Cell, Ministry of Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhavan, Jor bagh Road, **New Delhi**.
6. Guard File/Monitoring File/Record File.


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