

**GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE
(IA DIVISION-INDUSTRY-2 SECTOR)**

Dated: 11.05.2021

**MINUTES OF THE 34th MEETING OF THE EXPERT APPRAISAL
COMMITTEE**

(INDUSTRY-2 SECTOR PROJECTS)

HELD ON 28-29th April, 2021

**Venue: Ministry of Environment, Forest and Climate Change, Indira ParyavaranBhawan, JorBagh Road, New Delhi-110003
through Video Conferencing (VC)**

(i) Opening Remarks by the Chairman: The Chairman made hearty welcome to the Committee members and appreciated the efforts of the Committee. After opening remarks, the Chairman opened the EAC meeting for further deliberations.

(ii) Confirmation of minutes: The EAC, having taken note that final minutes were issued after incorporating comments received from the EAC members on the minutes of its 33rd Meeting of the EAC (Industry-2) held during 7-8th April, 2021 conducted through Video Conferencing (VC), confirmed the same.

After welcoming the Committee Members, discussion on each of the agenda items was taken up ad-seriatim.

Details of the proposals considered during the meeting **conducted through Video Conferencing (VC)**, deliberations made and the recommendations of the Committee are explained in the respective agenda items as under: -

28th April, 2021 (Wednesday)

Agenda No. 34.1

Development Drilling of 24 Drill Sites, Commissioning of two GGS, Capacity expansion of existing M-GPP and laying of underground transportation Pipeline at onshore Block AAP-ON-94/1 by M/s Hindustan Oil Exploration Company Pvt. Ltd. (HOEC) located at

Tinsukia District, Assam - Consideration of Environment Clearance reg.

[IA/AS/IND2/31891/2014, F. No.: J 11011/102/2018-IA-II(I)]

The Project Proponent and the accredited Consultant M/s ERM India Pvt. Ltd., made a detailed presentation on the salient features of the project.

The proposal is for environmental clearance to the project Development Drilling of 24 Drill Sites, Commissioning of two GGS, Capacity expansion of existing M-GPP and laying of underground transportation Pipeline by M/s Hindustan Oil Exploration Company Pvt. Ltd. (HOEC) located at onshore Block AAP-ON-94/1 Tinsukia District, Assam.

All Offshore and onshore oil and gas exploration, development & production proposals are listed at S.N. 1(b) of Schedule of Environment Impact Assessment (EIA) Notification under category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).

Standard ToR has been issued by Ministry of Environment, Forests & Climate Change vide letter No. J-11011/102/2018-IA-II(I) dated 23rd April, 2018. Public Hearing for the proposed project has been conducted by the Pollution Control Board, Assam at Uttar Margherita Rangamancha, near BDO Office, District Tinsukia on 21st October 2020 and chaired by Additional Deputy Commissioner, Tinsukia. The main issues raised during the public hearing are related to environmental pollution, developmental activities related to agriculture, employment, Tea plants management, assurance regarding no Bhagjan Blowout like incident will take place and safety measures, measures for preservation of ecology of Dihing Patkai Forest Reserves, protection of wildlife, infrastructure development, health and safety etc. No Litigation is pending against the proposal.

Ministry had issued EC earlier vide letter no. J-11011/245/2014-IA II (I); dated 31st January 2017; to the existing project six (06) Development wells, Group Gathering Station (GGS), Gas Processing Plant (GPP) and 11.5 km Gas Pipeline from GGS to GPP in onshore Block AAP-ON-94/1 Tinsukia District, Assam in favour of M/s Hindustan Oil Exploration Company Pvt. Ltd. (HOEC).

The details of products and capacity are as under:

S. No	Product Details	Existing Quantity	Proposed Quantity	Total Quantity
1.	Wells and production installation	06 wells; one GGS and GPP	24 wells and 2 GGS and expansion of capacity of GPP (from 20 mmscfd to 40 mmscfd)	30 wells, 3 GGS and one GPP – capacity of 40 mmscfd

PP informed that 5,00,000 m² (Total 50 ha- @ 2 ha x 24 drill site and @1 ha x 2 GGS) land will be used for proposed project. HOEC will develop

greenbelt at the GGS sites and GPP sites having total area of 2330.85 m². The estimated project cost is Rs. 620.5 crore. Recurring cost for greenbelt plan, wildlife conservation plan and environmental control measures will be a total of INR 0.98 crores per annum. HOEC has earmarked INR 7.665 crores as part of PH Action Plan in line with the comments and suggestions made by the local public during Public Hearings. Additionally, HOEC will comply with the conditions mentioned by EAC in this regard. Total Employment will be 20 persons as direct & 90 persons indirect after expansion for each drill site construction and drilling. As per MoEF&CC Notification no. F. No. 22-65/2017-IA.III dated 30th September, 2020 instead of allocation of funds under CER the EAC will prescribe specific conditions in physical terms to address the concerns raised during the Public Consultation while recommending the proposal. HOEC has earmarked INR 7.665 Crores as part of PH Action Plan in line with the comments and suggestions made by the local public during Public Hearing. Additionally, HOEC will comply with the conditions mentioned by EAC in this regard.

All the proposed well, GGS are located within 10 km of Dehing Patkai Wildlife Sanctuary. The nearest well from the Golai-Powai Elephant Corridor is 6.9 km. Buri Dehing River is flowing through the middle of the block from east to west direction.

HOEC has received wildlife clearance from Standing Committee of National Wildlife Board vide F.No.6-69/2017 WL (42nd Meeting) on 30.05.2017 and F.No. 6-119/2017 WL 43rd meeting on 21.07.2017 for six existing wells, GGS, GPP and pipeline as well as 10 proposed wells and one proposed GGS. HOEC had applied for NBWL clearance for remaining 14 wells, one proposed GGS and pipelines.

Ambient air quality monitoring was carried out at 8 locations during 2.10.2017 to 31.12.2017 and the baseline data indicates the ranges of concentrations as: PM10 (29–165 µg/m³), PM2.5 (14 - 78 µg/m³), SO₂ (4.1 – 9.5 µg/m³) and NO₂ (10.2 – 34.2 µg/m³). AAQ modeling study for point source emissions indicates that the monitoring location wise maximum incremental GLCs after the proposed project would be 6.24 µg/m³, 0.24 µg/m³, 0.21 µg/m³ and 6.12 µg/m³ with respect to NO_x, SO₂, PM10 and CO. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total water requirement for each drill site is 24.5 m³/day of which 20 m³/day for drilling and 4.5 m³/day for domestic water. After expansion, total water requirement for GPP will be 15 m³/day. The required water will be met from groundwater. Effluent of 07 m³/day will be generated from drilling activity and will be treated through ETP and will be recycled/reused implementing no discharge. 3.6 m³/day domestic waste water will be generated from drill sites and will be treated through Septic tank and soak pit. From the operation of GPP 10-15 m³/day effluent will be generated and from plant utility 4 m³/day will be generated. The total waste water will be treated through ETP at GPP site. The treated water will be

reused/recycled and no effluent will be discharged.

Power requirement will be met through three Diesel Generator Sets of 670 kVA each. Another 670 kVA DG set will be kept as standby. A 134 KW generator will be made available for lighting at residential camp and other emergency requirements. Stack height of 5 m will be provided as per CPCB norms to the proposed DG sets.

Details of process emissions generation and its management:

The operation of DG sets, movement of vehicles and machineries during construction and drilling, flaring of natural gas will result in the generation of air pollutants. Stacks will be used with DG sets and flare system as per CPCB norms.

Details of Solid waste/Hazardous waste generation and its management:

Drill cuttings and spent drilling mud will be disposed to HDPE lined pit within the drill site. The kitchen waste will be disposed in nearest municipal/village dumping site on a daily basis through approved waste handling contractors. Recyclable wastes will be periodically sold to local waste recyclers. Hazardous waste (waste and used oil) will be managed in accordance with Hazardous Waste (Management, Handling & Transboundary Movement) Rules, 2016.

Certified compliance report has been obtained by RO, MoEFCC, Shillong Regional Office vide letter No. RONE/E/IA/AS/OR/34/2132 dated 27.09.2018

During deliberations, EAC desired additional information/commitments related to:

- Safety measures to be implemented to control the accidents like Bhagjan blowout.
- Assurance to abide by the conditions/recommendations issued for such blow outs.
- Submission of agreements with the agencies responsible to control such blow out accidents.
- Submit active policy number for Public Liability Insurance.
- Revised water balance and effluent by reducing fresh water requirement to 20 KLPD for each well instead of 50 KLPD.
- PH action plan shall be revised in light of discussions and conditions deliberated by EAC.

PP submitted the desired documents/commitments in compliance of all above points.

EAC also noted that the consultant is ignorant of the latest notifications issued pertaining to CER and desired that **Show Cause Notice/Warning letter** shall be issued to the EIA consultant - M/s ERM India Pvt. Ltd.,

Gurgaon as the consultant has portrayed incorrect usage of CSR and CER in EIA/EMP Report submitted and no convincing explanation was presented by the consultant for doing so. Further, there are several discrepancies found in EIA report prepared by the consultant.

There is miss-match in produced water data at page no. 18 of the EIA, it is mentioned at 12.5 m³/day and at pageno.44 is 1-2 m³ /day and all other places i.e. on page no. VIII & also at page no.59 is 25 m³/day.

Max. GLC values for Oxides of Nitrogen as per Table no. 4.4 of the EIA at the distance of 700 meters not excepted as height of the stack is only 5 meters which seems to be wrong. Baseline data was more than 3 years old however EAC accepted due to pandemic/corona period.

The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent in desired form along with EIA/EMP report prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent. The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

The Committee noted that the EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. The Committee has found the baseline data is within NAAQ standards. The Committee has deliberated the action plan proposed by the project proponent to arrest the incremental GLC due to the project. The Committee has also deliberated on the CER plan and found to be addressing the issues in the study area. The EAC has deliberated the proposal and has made due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC have found the proposal in order and have **recommended** for grant of environmental clearance.

The environmental clearance granted to the project/activity is strictly under the provisions of the EIA Notification 2006 and its amendments. It does not tantamount/construe to approvals/consent/ permissions etc. required to be obtained or standards/conditions to be followed under any other Acts/ Rules/ Subordinate legislations, etc., as may be applicable to the project. The project proponent shall obtain necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable

from time to time, from the State Pollution Control Board, prior to construction & operation of the project.

The EAC, after detailed deliberations, **recommended** the project for grant of environmental clearance, subject to compliance of terms and conditions as under, and general terms of conditions at Annexure: -

- (i). The environmental clearance is subject to obtaining prior clearance from the wildlife angle, including clearance from the Standing Committee of the National Board for Wildlife, as applicable, as per the Ministry's OM dated 8th August, 2019. Grant of environmental clearance does not necessarily imply that Wildlife Clearance shall be granted to the project and that their proposal for Wildlife Clearance will be considered by the respective authorities on its merit and decision taken. PP shall also strictly follow the conditions mentioned in existing NBWL clearance.
- (i). The project proponent shall prepare a site specific conservation plan and wildlife management plan in case of the presence of Schedule-1 species in the study area, as applicable to the project, and submit to Chief Wildlife Warden for approval. The recommendations shall be implemented in consultation with the State Forest/Wildlife Department in a time bound manner.
- (ii). Latest certified compliance report shall be submitted to Ministry within six (06) months, failing which EC will become invalid.
- (iii). Greenbelt development shall be developed/undertaken @1500-2500 trees per hectares around processing facility and Rs. 25 Lakhs shall be allotted for the same.
- (iv). No drilling or any kind of activity shall be commenced until land use conversion of that specific area has been obtained.
- (v). The company shall strictly abide by the conditions/recommendations issued by the MOPNG, OISD, DGH and DGMS w.r.t. management of blow out cases and adhere to them in all circumstances.
- (vi). 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, and risk mitigation measures relating to the project shall be implemented.
- (vii). No pipelines or its part shall be laid in the Forest land/Protected Area without prior permission/approval from the Competent Authority.

- (viii). The project proponent will treat and reuse the treated water within the drilling site location including at processing location and no waste or treated water shall be discharged outside the premises under any condition. Mobile ETP coupled with RO and mobile STP shall be installed to treat the waste water and sewage waste respectively.
- (ix). During production, storage and handling, the fugitive emission of methane, if any, shall be monitored using Infra-red camera/ appropriate technology.
- (x). The project proponent also to ensure trapping/storing of the CO₂ generated, if any, during the process and handling.
- (xi). Approach road shall be made pucca to minimize generation of suspended dust.
- (xii). The project proponent shall make all arrangements for control of noise from the drilling activity. Acoustic enclosure shall be provided for the DG sets along with the adequate stack height as per CPCB guidelines.
- (xiii). Total fresh water requirement shall not exceed 20 m³/day for each well, at drilling location and 15 m³/day for GPP and shall be met from groundwater. Prior permission shall be obtained from the concerned regulatory authority. Mobile ETP coupled with RO shall be installed to reuse the treated water in drilling system. Size of the waste pit shall be equal to the hole volume+ volume of drill cutting and volume of discarded mud if any. Two feet free board may be left to accommodate rain water. There shall be separate storm water channel and rain water shall not be allowed to mix with waste water. Alternatively, if possible, pit less drilling be practiced instead of above.
- (xiv). The company shall construct the garland drain to prevent runoff of any oil containing waste into the nearby water bodies. Separate drainage system shall be created for oil contaminated and non-oil contaminated.
- (xv). Drill cuttings separated from drilling fluid shall be adequately washed and disposed in HDPE lined pit. Waste mud shall be tested for hazardous contaminants and disposed according to HWMH Rules, 2016. No effluent/drilling mud shall be discharged/disposed off into nearby surface water bodies. The company shall comply with the guidelines for disposal of solid waste, drill cutting and drilling fluids for onshore drilling operation notified vide GSR.546(E) dated 30th August, 2005.
- (xvi). Oil spillage prevention and mitigation scheme shall be prepared. In case of oil spillage/ contamination, action plan shall be prepared to

clean the site by adopting proven technology. The recyclable waste (oily sludge) and spent oil shall be disposed of to the authorized recyclers.

- (xvii). The project proponent shall take necessary measures to prevent fire hazards, containing oil spill and soil remediation as needed. At fixed installations or plants use of ground flare shall be explored. At the place of ground flaring, the overhead flaring stack with knockout drums shall be installed to minimize gaseous emissions during operation.
- (xviii). The project proponent shall develop a contingency plan for H₂S release including all necessary aspects from evacuation to resumption of normal operations. The workers shall be provided with personal H₂S detectors in locations of high risk of exposure along with self-containing breathing apparatus.
- (xix). Blow Out Preventer system shall be installed to prevent well blowouts during drilling operations.
- (xx). On completion of the project, necessary measures shall be taken for safe plugging of wells with secured enclosures to restore the drilling site to the original condition. The same shall be confirmed by the concerned regulatory authority from environment safety angle. In case of hydrocarbon not found economically viable, a full abandonment plan shall be implemented for the drilling site in accordance with the applicable DGH / Indian Petroleum Regulations.
- (xxi). As per the Ministry's OM dated 30.09.2020 superseding the OM dated 01.05.2018 regarding the Corporate Environmental Responsibility, and as per the action plan proposed by the project proponent to address the socio-economic and environmental issues in the study area, the project proponent, as committed, shall provide education funds in technical training centers/ support in nearby village's schools, support in health care facilities, drinking water supply and funds for miscellaneous activities like solar street lights, battery, solar panel etc., in the nearby villages. The action plan shall to be completed within time as proposed.
- (xxii). No lead acid batteries shall be utilized in the project/site.
- (xxiii). Occupational health surveillance of the workers shall be carried out as per the prevailing Acts and Rules. All workers & employees shall be provided with required safety kits/mask for personal protection.
- (xxiv). Oil content in the drill cuttings shall be monitored if oil-based mud is used and report shall be sent to the Ministry's Regional Office.
- (xxv). The project proponent shall prepare operating manual in respect of all activities, which would cover all safety & environment related

issues and measures to be taken for protection. One set of environmental manual shall be made available at the drilling site/project site. Awareness shall be created at each level of the management. All the schedules and results of environmental monitoring shall be available at the project site office. Remote monitoring of site should be done.

Agenda No. 34.2

Expansion of Acrylic Fibre Manufacturing Unit (130 TPD to 200 TPD), by M/S Pasupati Acrylon Limited located at Kashipur Road, Thakurdwara, District: Moradabad, State: Uttar Pradesh - Consideration of Environment Clearance reg.

[IA/UP/IND2/201672/2019, IA-J-11011/217/2019-IA-II(I)]

The Project Proponent and the accredited Consultant M/s. Perfect Enviro Solutions Pvt Ltd made a detailed presentation on the salient features of the project and informed that:

The proposal is for environmental clearance to the project "Expansion of Acrylic Fibre Manufacturing Plant 42900 TPA (130 TPD) to 66000 TPA (200TPD)" by M/s Pasupati Acrylon Limited located at Kashipur Road, Thakurdwara, Moradabad district, Uttar Pradesh.

All manmade fibre manufacturing units are listed at S.N. 5(d) of Schedule of Environment Impact Assessment (EIA) Notification dated 14.9.2006 under category 'B'. But due to the applicability of general condition of inter-state boundary within 5 km of the project site the proposal falls in Category 'A' and is appraised at Central Level by Expert Appraisal Committee (EAC).

Standard ToR has been issued by Ministry vide letter No. IA-J-11011/217/2019-IA-II(I) dated 5th August, 2019. Public Hearing for the expansion project has been conducted by Regional Office, Uttar Pradesh Pollution Control Board, Moradabad on 18th November, 2020 under the Chairmanship of Additional District Magistrate, Moradabad. The main issues raised during public hearing were related to groundwater depletion and boiler ash disposal. No Litigation is pending against the proposal.

The existing unit is in operation since 1990 on the basis of consents received from UPPCB. There is no change in production of acrylic fibre (130 TPD) since 2004. Therefore, EC was not applicable previously to the existing unit, as it was established before the applicability of EIA notification 14th September 2006.

The details of products and capacity are as under:

S. No.	Particulars	unit	Existing Quantity	Proposed Quantity	Total Quantity
1	Acrylic Fibre	TPD	130	70	200
		TPA	42900	23100	66000

Existing land area is 324557.72 m². No additional land will be required as proposed expansion will be done within the existing plant premises. Industry has already developed greenbelt in an area of 70.53% i.e., 228904.74 m² out of the total area of the project and it will be maintained in future. The estimated project cost is Rs 305.60 crores including existing investment of Rs 295.60 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 12.2 Crores and the recurring cost (operation and maintenance) will be about Rs. 1.28 crores per annum. Total Employment after expansion will be 492 persons. Industry proposes to allocate Rs. 20 Lakhs towards Corporate Environment Responsibility for social activities like skill development & Green belt development.

There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the plant site. Waterbody Tumaria nadi is flowing at a distance of 0.04 km in North-East direction.

Ambient air quality monitoring was carried out at 8 locations during March-May 2019. The baseline data indicates the ranges of concentrations (mean) as: PM₁₀ (77.1-103.9 µg/m³), PM_{2.5} (37.2-51.4 µg/m³), SO₂ (8.6-11.8 µg/m³) and NO₂ (27.7-37.9 µg/m³), CO (0.57-0.77 mg/m³) & TVOC (0.072-0.099 mg/m³). AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 1.76 µg/m³, 0.938 µg/m³, 0.613 µg/m³ and 0.725 µg/m³ with respect to PM₁₀, PM_{2.5}, SO₂ and NO₂ respectively. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total water requirement after expansion will be 2229 m³/day, out of which fresh water requirement of 1249 m³/day will be met from Ground water supply. After expansion, industrial effluent of 990 KLD quantity will be treated through Effluent Treatment Plant of capacity 1827 KLD. Treated water of 980 KLD will be generated from the ETP and will be reused within the plant for utility cooling tower (UCT) & Big Cooling Tower (BCT) & Small Cooling tower (SCT). The plant shall be based on Zero Liquid discharge system.

Total Power requirement after expansion will be 7500 KW (6000 kW existing & 1500 kW additional after expansion) and will be met from

Thermal Power Grid (Captive Power Generation from 50 TPH boiler & 8 MW Turbine). Existing unit has 4×1000 kVA, 1×1250 kVA DG Sets (as standby) which is used during power failure. Stack (height-6 m) has been provided as per CPCB norms to the DG sets. Existing unit has 50 TPH Coal/ Rice Husk fired boilers which will continue to operate with the existing. ESP (Electrostatic Precipitator) with a stack of height of 60 m and the particulate emissions within the statutory limit of 100 mg/Nm³ for the boiler.

Details of process emissions generation and its management:

To prevent emissions, APCS like ESP (Electrostatic Precipitator) have been installed at the boiler with appropriate stack in accordance with CPCB norms. To avoid emissions from spinning & stretching sections, Gas scrubbing system has been installed to control air emission and the same will be followed for further expansion. The DMF vapours are generated in the production area (Fibre line) for which proper stack height and gas scrubbing system has been provided the same will continue after expansion.

Details of Solid waste/Hazardous waste generation and its management:

Solid Waste

Category	Type of Waste	Treatment method	Existing (in TPA)	Proposed (in TPA)	Total Waste after expansion (in TPA)
Biodegradable	Organic Waste	Compost chamber for use as manure	10.95	Nil	10.95
Non-Biodegradable	Recyclable Waste	Local vendor	8.03	Nil	8.03
Recyclable Waste	Recyclable	Local vendor	1.10	Nil	1.10
Total			20.08	Nil	20.08

Hazardous Waste

Type of Waste	Disposal Method	Existing (in TPA)	Proposed (in TPA)	Total Waste after expansion (in TPA)
Used Oil (Hazardous Waste)	Hazardous Wastes is only used oil (schedule 5.1) that is lifted by an authorized recycler approved by UPPCB	0.9	Nil	0.9
ETP Sludge	It is lifted by TSD vendor (Ramky Division, Kanpur) of Pollution Control Board for safe disposal	10	Nil	10

Non Hazardous Waste

Waste Type	Existing Quantity	Proposed Quantity	Total Quantity	Disposal
Fly Ash from Boiler	(13.2 TPD) 4380 TPA	(4.42 TPD) 1460 TPA	(17.69 TPD) 5840 TPA	It is given to cement industry for making cement through contractor
Fibre waste	As per generation	As per generation	As per generation	It is recycled & reused in the process

Certified CTO compliance report has been obtained by RO, UP Pollution Control Board dated 07.11.2020.

EAC has been informed that the project falls under item 5(d), category 'A' of the EIA notification whereas accreditation of the consultant is only for item 5(d), category 'B' projects. The state boundary of Uttarakhand is falling within 5 KM. Further, it is also noted that the consultant is not accredited to prepare EIA report for this project. However, EAC agreed to appraise the project on merit basis. During deliberations, EAC directed the PP to completely switch to gas provision for fuel as and when available in that area, till then PP should make efforts to decrease the coal consumption in phased manner by 10% per year and completely replacing it by bio-briquettes gradually. Further it suggested that rain water should not be recharged within the premises of the industry instead it should be stored

and reused. PP agreed and submitted an undertaking in the compliance of the EAC directions.

The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent in desired form along with EIA/EMP report prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent. The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

The Committee noted that the EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. The Committee has found the baseline data is within NAAQ standards. The Committee has deliberated the action plan proposed by the project proponent to arrest the incremental GLC due to the project. The Committee has also deliberated on the CER plan and found to be addressing the issues in the study area. The EAC has deliberated the proposal and has made due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC have found the proposal in order and have **recommended** for grant of environmental clearance.

The environmental clearance granted to the project/activity is strictly under the provisions of the EIA Notification 2006 and its amendments. It does not tantamount/construe to approvals/consent/ permissions etc. required to be obtained or standards/conditions to be followed under any other Acts/ Rules/ Subordinate legislations, etc., as may be applicable to the project. The project proponent shall obtain necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, from the State Pollution Control Board, prior to construction & operation of the project.

The EAC, after detailed deliberations, **recommended** the project for grant of environmental clearance subject to general terms of conditions at Annexure.

- (i). The company shall immediately switch to usage of gas as fuel completely as and when available in the area, till then PP should work upon reducing coal usage by 10% every year so that it is replaced by bio-briquettes gradually.

- (ii). 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, and risk mitigation measures relating to the project shall be implemented.
- (iii). 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.
- (iv). Total fresh water requirement shall not exceed 1249 KLD proposed to be met from Ground water. Prior permission in this regard shall be obtained from the concerned regulatory authority. The project proponent will treat and reuse the treated water within the factory and no waste or treated water shall be discharged outside the premises.
- (v). 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.
- (vi). To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCS/SPCS guidelines.
- (vii). Solvent management, if any, shall be carried out as follows:
 - (a) Reactor shall be connected to chilled brine condenser system.
 - (b) Reactor and solvent handling pump shall have mechanical seals to prevent leakages.
 - (c) The condensers shall be provided with sufficient HTA and residence time so as to achieve more than 98% recovery.
 - (d) Solvents shall be stored in a separate space specified with all safety measures.
 - (e) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.
 - (f) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.
- (viii). Rain water shall be collected and stored in tanks and utilized in plant activities to reduce ground water usage instead of recharging. The storm water from the premises shall be collected and discharged through a separate conveyance system.
- (ix). Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm, and solvent transfer through pumps. 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.

- (x). Process organic residue and spent carbon, if any, shall be sent to cement industries.
- (xi). ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.
- (xii). The company shall undertake waste minimization measures as below: -
 - (a) Metering and control of quantities of active ingredients to minimize waste.
 - (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.
 - (c) Use of automated filling to minimize spillage.
 - (d) Use of Close Feed system into batch reactors.
 - (e) Venting equipment through vapour recovery system.
 - (f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- (xiii). The green belt of at least 5-10 m width shall be developed in more than 33% of the total project area, mainly along the plant 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.
- (xiv). As per the Ministry's OM dated 30.09.2020 superseding the OM dated 01.05.2018 regarding the Corporate Environmental Responsibility, and as per the action plan proposed by the project proponent to address the socio-economic and environmental issues in the study area, the project proponent, as committed, shall provide education funds in technical training centers/ support in nearby village's schools, support in health care facilities, drinking water supply and funds for miscellaneous activities like solar street lights, battery, solar panel etc., in the nearby villages. The action plan shall to be completed within time as proposed.
- (xv). For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.
- (xvi). 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.
- (xvii). Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.

- (xviii). Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.
- (xix). Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.
- (xx). The energy sources for lighting purposes shall preferably be LED based.
- (xxi). Transportation of raw materials/products should be carefully performed using GPS enabled vehicles.

Agenda No. 34.3

Expansion and De-bottlenecking of existing Petro-Chemical Plant by M/s Reliance Industries Limited located at Plot No. 1, Notified Industrial Area, GIDC Dahej, Bharuch, Gujarat - Consideration of Environment Clearance reg.

[IA/GJ/IND2/209217/2020, J-11011/39/2016-IA II (I)]

The project proponent and their consultant M/s. ERM India Pvt. Ltd., made a detailed presentation through Video Conferencing (VC) on the salient features of the project.

The proposal is for environmental clearance to the project for Expansion and De-bottlenecking of existing Petro-Chemical Plant by M/s Reliance Industries Limited located at Plot No. 1, Notified Industrial Area, GIDC Dahej, Bharuch, Gujarat.

All Petrochemical Complexes (industries based on processing of petroleum fractions & natural gas and/or reforming to aromatics) are listed at S.N. 5(c) of Schedule of Environment Impact Assessment (EIA) Notification under category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).

The standard ToR for category 5(c) has been issued by Ministry vide letter No. J-11011/39/2016-IA II(I); dated 24th February, 2020. Public hearing is not applicable to the project as the proposed expansion and debottlenecking is located in GIDC notified industrial area. It was also informed that no litigation pending against the proposal.

Ministry had issued EC earlier vide letter no. J-11011/39/2016-IA-II(I); dated 3rd April, 2017 to the existing project for Expansion & Debottlenecking of Petrochemical Plant of Dahej Manufacturing Division (DMD) at Tehsil Vagra, District: Bharuch, Gujarat in favor of M/s. Reliance Industries Ltd.

The details of products and capacity are as under:

Plant	Products/ By-Products	Existing Quantity (MTPA)	Proposed Quantity (MTPA)	Total Quantity (MTPA)
Ethane Propane Recovery Unit (EPRU)	Ethane/ Propane	6,50,000	0	6,50,000
Gas Cracker Unit (GCU)	Ethylene	7,00,000	0	7,00,000
	Propylene	1,60,000	0	1,60,000
	Mixed C4+	47,450	0	47,450
	RARFS (Pyrolysis Gasoline)	54,750	0	54,750
	Fuel Oil	40,000	0	40,000
	Tar Residue	5,472	0	5,472
Vinyl Chloride Monomer (VCM)	Ethylene Dichloride (EDC)	5,88,000	0	5,88,000
	Vinyl Chloride Monomer (VCM)	15,60,000	0	15,60,000
	Light Ends	15,600	0	15,600
	HCl	1,56,000	36,000	1,92,000
Polyvinyl Chloride	Polyvinyl Chloride (PVC)	15,60,000	0	15,60,000
Chlorinated Polyvinyl Chloride	Chlorinated Polyvinyl Chloride (PVC)	70,000	0	70,000
Chlor-Alkali	Chlorine	1,87,000	0	1,87,000
	Caustic Soda	2,21,000	0	2,21,000
	Sodium Hypochlorite	11,000	0	11,000
	Dilute H ₂ SO ₄	4,600	0	4,600
	HCl	15,000	0	15,000
	Hydrogen, New	0	4,000	4,000
Ethylene Oxide (EO) / Ethylene Glycol (EG)	EO	50,000	100,000	150,000
	EG	3,08,350	0	3,08,350
	Di Ethylene Glycol	30,550	0	30,550
	Tri Ethylene Glycol	1,270	0	1,270
	PEG	19,850	0	19,850
	TEG Bottom	2,880	0	2,880
	CO ₂ , New	0	90,000	90,000

Plant	Products/ By-Products	Existing Quantity (MTPA)	Proposed Quantity (MTPA)	Total Quantity (MTPA)
High Density Poly Ethylene (HDPE)	HDPE-I/II	2,40,000	0	2,40,000
	UHMW-PE	2,500	0	2,500
Ethylene Vinyl Acetate (EVA)	Ethylene Vinyl Acetate (EVA)	15,000	0	15,000
Purified Terephthalic Acid (PTA)	PTA	30,00,000	0	30,00,000
	Crude Benzoic Acid Mix	60,000	0	60,000
Polyethylene Terephthalate (PET)	PET	10,00,000	0	10,00,000
Polyester Complex	Polyester Complex Polyester Staple Fibre (PSF) Polyester Fibre Yarn (PSY)	8,00,000	0	8,00,000
Ethylene Oxide Derivatives	Pure Ethylene Oxide	2,00,000	0	2,00,000
	Ethanol Amines	60,000	0	60,000
	Glycol Ethers	60,000	0	60,000
	Glycol Ether Acetates	30,000	0	30,000
	Ethoxylates - Ethylene Oxides Condensates	2,00,000	0	2,00,000
Acrylic Acid and Esters	Crude Acrylic Acid	1,60,000	0	1,60,000
	Glacial Acrylic Acid/ High Purity Acrylic Acid	40,000	0	40,000
	Butyl Acrylate	1,20,000	0	1,20,000
	Ethyl Acrylate	20,000	0	20,000
	Methyl Acrylate	20,000	0	20,000
	Acrylate (2EHA)	40,000	0	40,000
Phenols	Phenol	2,50,000	0	2,50,000
	Acetone	1,55,000	0	1,55,000
Ethane Storage Tank	Ethane Storage Tank	90,000 Tons	0	90,000 Tons

Plant	Products/ By-Products	Existing Quantity (MTPA)	Proposed Quantity (MTPA)	Total Quantity (MTPA)
Ethylene Dichloride (EDC), New	Ethylene Dichloride (EDC), New	0	5,00,000	5,00,000
	Light Ends, New	0	500	500
	HCl, New	0	23,800	23,800
Co-polyester/ PET-G, New	Co-polyester / PET-G, New	0	2,00,000	2,00,000
	CHDM, New	0	50,000	50,000
	Methanol, New	0	15,000	15,000
Gas Based		195 MW	0	195 MW
Coal Based		270 MW	0	270 MW

Existing land area is 61,80,000 m², No additional land will be used for proposed expansion. Industry has already developed greenbelt in an area of 33 % i.e., 20,30,000 m² out of total area of the project. The estimated project cost is Rs. 5,150 crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 105 crores and the Recurring cost (operation and maintenance) will be about Rs. 10 crores per annum. Total Employment will be ~50 persons after expansion. The company proposes to allocate INR 6.5 crores towards Corporate Environment Responsibility.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site. River/ water body: Narmada Estuary is flowing at a distance of ~0.75 km in south direction.

Ambient air quality monitoring was carried out at 10 locations during 28th December, 2019 to 19th March, 2020 and the baseline data indicates the ranges of concentrations as: PM₁₀ (41.5 – 81.3 µg/m³), PM_{2.5} (16.5 – 43.8 µg/m³), SO₂ (8.4 – 16.2 µg/m³) and NO₂ (11.2 – 20.6 µg/m³). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 2.27 µg/m³, 7.93 µg/m³ and 12.85 µg/m³ with respect to PM₁₀, SO_x and NO_x. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

The existing water requirement for DMD petrochemical complex is ~1,86,315 m³/day (~40.9 MGD). It includes freshwater requirement 1,60,980 m³/day and recycle water is 25,335 m³/day. After proposed expansion and debottlenecking of DMD petrochemical complex, the water requirement will increase to 2,10,315 m³/day (~46.2 MGD) that will be met from ~1,82,480 m³/day freshwater and recycled water ~27,835 m³/day. Source will be GIDC water supply and supply from Vadodara Irrigation Division. The wastewater generated from the proposed expansion (~2,500 m³/day) will be reused /recycled. Total Effluent of

67,587 m³/day quantity will be treated through existing ETP. Therefore, no increase in wastewater discharge quantity and will remain the same as the present quantity (~39,752 m³/day).

Power requirement after expansion will be 250 MW including existing 220 MW and will be met from Captive power Plant (CPP). Existing unit has 16 DG sets of varying capacity, additionally 5 DG sets are proposed. All DG Sets are for emergency purpose only. Stack will be provided as per CPCB norms to the proposed DG sets. Existing unit has 8 boilers, 4 on solid fuel (coal and biomass) and 4 on mixed fuel (gas and/or liquid).

Details of Process emissions generation and its management:

S . N .	Stack attached to	Stack Identity	Stack Height (m)	Air Pollution Control Measure (APCM)	Expected Pollutants	GPCB Permissible Limit (mg/Nm ³)
Flue gas stacks						
1.	EDC Plant	Incinerator	65	HCl Scrubber, Chlorine absorbers, Low NOx burners	PM SO ₂ NOx CO Cl ₂ HC HCl VCM	5 40 250 50 10 15 30 6.6
Process stacks						
2.	CHDM Plant	CHDM	30	Low NOx burners	PM SO ₂ NOx CO	5 50 250 100
3.	Regenerative Thermal Oxidiser (RTO) in EO/EG unit	RTO	30	Low NOx burners	PM SO ₂ NOx CO	5 50 250 100
4.	Co-Polyesters/PET-G Unit	CoP/PE T-G	30	Low NOx burners	PM SO ₂ NOx CO	5 50 250 100

Details of Solid waste/ Hazardous waste generation and its management:

S.N	Description	Category	Existing Permission (MTPA)	Quantity after expansion (MTPA)	Present Management Practices
1	Oil from wastewater treatment	1.7 / 1	1,060	1,300	Collection storage, treatment and disposal to registered re-refiners
2	Spent Catalyst from various units and Molecular Sieve / alumina dessicant	1.6 / 1	486	500	Collection, Storage, Treatment and Disposal at own / common TSDF/ sell to approved recyclers or reprocessing / at Co-processing facility
3	Chemical Sludge from Waste water treatment	35.3/ 1	3,500	4,500	Collection, Storage, Treatment and Disposal at own/Common TSDF / Co-processing facility
4	ETP sludge containing polymeric constituents	35.3/ 1	300	400	Collection, Storage, Treatment and Disposal at own/Common TSDF - Incineration facility / for Co-processing facility
5	Used or Spent oil	5.1/1	325	400	Collection, Storage, Treatment and Disposal by selling to registered approved recyclers / reprocessors / Co-processing facility / co-processing in captive power plants

S.N	Description	Category	Existing Permission (MTPA)	Quantity after expansion (MTPA)	Present Management Practices
6	Waste residue containing oil*	5.2/1	So ever generated (600)	So ever generated (1,000)	Collection, storage, treatment and disposal at common incineration facility at RIL VMD / RIL HMD / Co-processing facility in captive coal based power plant
7	Process Residues (Residue from VCM production)	22.2/1	63,250	63,250	Collection, storage, treatment and disposal at own / common incinerator/co-processing facility
	Process Residues (from Co-polyesters / PET-G plant)	22.2/1	0	34,600	Also incinerate 140 MT/Month from RIL-VMD and send 180 MT/Month to RIL-HMD
8	Empty barrels / containers / liners contaminated with hazardous chemicals / wastes (Discarded Containers)	33.1/1	450	550	Sell as scrap after decontamination / given to approved decontamination facility
9	Bags / liners contaminated	33.1/1	61	70	Collection storage, and disposal by selling to authorised vendors for recycling

S.N	Description	Category	Existing Permission (MTPA)	Quantity after expansion (MTPA)	Present Management Practices
	with hazardous chemicals / wastes (Bags / Liners)				/ incineration facility / co-processing facility / co-processing in captive coal based power plant
10	Sludge and filters contaminated with oil	3.3/1	So ever generated (500)	So ever generated (600)	Collection, storage, treatment and disposal at TSDF / sell to authorised vendors for recycle / reprocessing / incineration facility / co-processing facility / co-processing in captive coal-based power plant
11	Spent Carbon	36.2/1	So ever generated (500)	So ever generated (600)	Collection, storage, treatment and disposal at common incineration facility / sell to authorised vendors for recycle / reprocessing / incineration facility / co-processing facility / co-processing in captive coal-based power plant
12	Spent ion exchange resin	35.2/1	So ever generated (500)	So ever generated (600)	Collection, storage, treatment and disposal at own / common TSDF / sell to authorised vendors for recycle / reprocessing / co-processing facility / co-processing in captive coal-based power plant
13	Spent Solvent (Degrad	20.2/1	216	300	Collection, storage, treatment and disposal at TSDF for

S.N	Description	Category	Existing Permission (MTPA)	Quantity after expansion (MTPA)	Present Management Practices
	ed Dowthorm)				incineration / sell to authorised vendors for recycle / reprocessing / co-processing facility / co-processing in captive coal-based power plant
14	Cargo / Tank Residue Washing Water and Sludge containing chemical	3.1/1	100	100	Collection, storage, transportation, treatment and disposal at common TSDF for incineration / sell to authorised vendors for recycle / reprocessing / co-processing facility / co-processing in captive coal based power plant
15	Cargo / Tank Residue and Sludge containing chemical	3.2/1	100	100	Collection, storage, transportation, treatment and disposal at common TSDF for incineration / sell to authorised vendors for recycle / reprocessing / co-processing facility / co-processing in captive coal based power plant
16	Bilge Water Containing oil from Ships	3.4/1	100	100	Collection, storage, transportation, treatment and disposal by treatment at ETP/ at common TSDF for incineration / sell to authorised vendors for recycle / reprocessing / co-processing facility / co-processing in captive coal based power plant

Certified EC Compliance report has been issued by RO, MoEFCC, Bhopal vide file no. 5-20/2020(Env)/239 and 18-A-21/2015(SEAC)/238 dated 24th March, 2021.

After detailed deliberations, the committee noted that the EIA/EMP report is not in compliance of the ToR issued in 2020 for the project. The Project Proponent should have clarified during the submission of the EC proposal with proper justification regarding this. Pre-feasibility Report submitted during grant of ToRs showed varied data when compared to EIA/EMP Report submitted at the time of EC application. The project is analyzed/ studied thoroughly at PFR stage only to ensure all details of PFR and EIA match considerably. Some major discrepancies have been found in both the documents pertaining to water requirement, effluent discharge, land requirement, new product proposed at EC stage etc. These are the major parameters which need to be decided at ToR stage only and no correction/modification shall be done at EC stage. After analyzing, it is found that data ambiguity is in PFR, Final EIA/EMP Report and even in Form-2 at some points. Plagiarism certificate has not been included in EIA Report. The Toposheet of study area/coastal area was also not attached. After considering the above facts, EAC desired following additional information/corrections for further consideration of the proposal:

- Certified compliance report has certain conditions which come under "being complied" or in the process of complying reported by RO, MoEFCC. Submit the time frame and action plan for complying such conditions.
- Affidavit/undertaking needs to be submitted for development of 33% greenbelt as the kml file indicates more concrete area rather than proper greenbelt.
- Submit a detailed land area break up showing total built up area, machinery & utilities area, greenbelt area and proper plant layout showing the existing and proposed coverage also especially for greenbelt development.
- Action plan for maximum recycle/reuse of waste water instead of discharging in the sea.
- It is also noticed that the consultant M/s ERM India Pvt. Ltd has not properly handled the proposal. There is a need to do proper corrections and modify the EIA report and present the proposal before this EAC in subsequent meeting.

The proposal was accordingly DEFERRED for the needful.

Agenda No. 34.4

Expansion of Coal Tar Distillation Plant from 300000 to 500000 TPA and setting up of Carbon Black plant of capacity 300000 TPA by M/s. Epsilon Carbon Private Limited (ECPL) located at

**Musinayakahalli, Taluka Sandur, District Ballari, Karnataka-
Amendment of Environment Clearance.**

[IA/KA/IND2/204518/2021, J-11011/500/2017-IA-II(I)]

The proposal is for amendment in the Environmental Clearance granted by the Ministry vide letter dated F. No. J-11011/500/2017-IA-II (I) dated 10.01.2020 for the project Expansion of Coal Tar Distillation Plant from 300000 to 500000 TPA and setting up of Carbon Black plant of capacity 300000 TPA located at Musinayakahalli, Taluka Sandur, District Ballari, Karnataka in favour of M/s. Epsilon Carbon Private Limited (ECPL).

The project proponent has requested for amendment in the EC with details as under:

S. No.	Para of EC issued by MoEF&CC	Details as per the EC	To be revised/ read as	Justification / reason
1	2	The Ministry of Environment, Forest and Climate Change has considered the proposal for environmental clearance to the project for expansion of Coal Tar Distillation Plant from 300000 to 500000 TPA and setting up of Carbon Black Plant of capacity 300000 TPA by M/s. Epsilon Carbon Private Limited (ECPL) in a total area of	The Ministry of Environment, Forest and Climate Change has considered the proposal for amendment in environmental clearance to the project for expansion of Coal Tar Distillation Plant from 300000 to 500000 TPA and setting up of Carbon Black Plant of capacity 300000 TPA along with Captive Power Plant of 54	PP now intend to split the existing EC between Epsilon Carbon Private Limited and Epsilon Graphite Private Limited.

		673870 sqm at Musinayakahalli, Taluka Sandur, District Ballari (Karnataka)	MWh by M/s. Epsilon Carbon Private Limited (ECPL) in a total area of 525058 sqm at Musinayakahalli, Taluka Sandur, District Ballari (Karnataka)	
2	3	Product List – As per Table 1	Product List – As per Table 1	PP now intend to split the existing EC between Epsilon Carbon Private Limited and Epsilon Graphite Private Limited.
3	4	Total land area is 673870 sqm (Existing – 140200 sqm and additional – 533670 sqm). Industry has already developed / will develop greenbelt in an area of 33% i.e. 225228 sqm out of total area of the project. The estimated project cost is Rs. 900 crores . Total capital cost earmarked	Total land area is 5,25,058 sqm . Industry has already developed / will develop greenbelt in an area of 33% i.e. 173144 sqm out of total area of the project. The estimated project cost is Rs. 700 crores . Total capital cost	PP now intend to split the existing EC between Epsilon Carbon Private Limited and Epsilon Graphite Private Limited. For change in employment details: We have

		<p>towards environmental pollution control measures is Rs. 20 crores and the recurring cost (O&M) will be about Rs. 200 Lacs per annum. Total Employment will be 575 (direct & indirect) persons as direct after expansion.</p>	<p>earmarked towards environmental pollution control measures is Rs. 37 crores and the recurring cost (O&M) will be about Rs. 1.5 crores per annum. Total Employment will be 710 (direct & indirect) persons as direct after expansion.</p> <p><i>(Note: We have proposed total 975 employment in EIA Report but received 575 employment in EC. Hence requesting to correct this as 710 employment)</i></p>	<p>proposed total 975 employments in EIA Report but received 575 employments in EC. Now after amendment of EC 710 employment will be done by Epsilon Carbon Private Limited and 265 employments will be done by Epsilon Graphite Private Limited</p>
4	6	<p>Total fresh water requirement estimated is 8520 cum/day, which is proposed to be met from JSW Steel water network.</p> <p>Effluent of 825 cum/day will be treated through existing ETP having capacity</p>	<p>Total fresh water requirement estimated is 7686 cum/day, which is proposed to be met from JSW Steel water network.</p> <p>Effluent of 825 cum/day will be treated through existing ETP having capacity 180* cum/day</p>	<p>PP now intend to split the existing EC between Epsilon Carbon Private Limited and Epsilon Graphite Private Limited.</p> <p>For Capacity of Existing</p>

		<p>120 cum/day and proposed ETP of 820 cum/day.</p> <p>Domestic effluent shall be treated through existing STP of 25 cum/day and proposed STP of 50 cum/day. The plant will be based on Zero Liquid discharge system.</p> <p>Power requirement after expansion will be 23500 KW including existing 3500 KW and will be met from JSW Network / in-house co-generation power plant based on lean tail gas.</p> <p>Additionally, 1 DG sets are used as standby during power failure. Stack will be provided as per CPCB norms to the proposed DG sets.</p>	<p>and proposed ETP of 820 cum/day.</p> <p>Domestic effluent shall be treated through existing STP of 25 cum/day and proposed STP of 50 cum/day. The plant will be based on Zero Liquid discharge system.</p> <p>Power requirement after amendment will be 10000 KW including existing 3500 KW and will be met from JSW Network / in-house co-generation power plant based on lean tail gas.</p> <p>Additionally, 1 DG sets are used as standby during power failure. Stack will be provided as per CPCB norms to the proposed DG sets.</p> <p><i>*Note: We have existing ETP of 180KLD. We have submitted the same in EIA</i></p>	<p>ETP: We have existing ETP of 180 KLD. We have submitted the same in EIA report but in EC we received 120 KLD existing ETP. Requesting to correct it.</p>
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			<i>report but in EC we received 120 KLD existing ETP.</i>	
5	10	Based on the proposal submitted by the project proponent and recommendations of the EAC (Industry 2), Ministry of Environment, Forest and Climate Change hereby accords environmental clearance to the project for expansion of Coal Tar Distillation Plant from 30000 to 50000 TPA and setting up of Carbon Black Plant of capacity 300000 TPA by M/s. Epsilon Carbon Private Limited (ECPL) , located at Musinayakahalli, Taluka Sandur, District Ballari Karnataka, under the provision of the EIA Notification, 2006, subject to the compliance of	Based on the proposal submitted by the project proponent and recommendations of the EAC (Industry 2), Ministry of Environment, Forest and Climate Change hereby accords amendment in environmental clearance to project for expansion of Coal Tar Distillation Plant from 30000 to 50000 TPA and setting up of Carbon Black Plant of capacity 300000 TPA along with Captive Power Plant of 54 MWh by M/s. Epsilon Carbon Private Limited (ECPL) , located at Musinayakahalli, Taluka Sandur, District Ballari (Karnataka), under the	PP now intend to split the existing EC between Epsilon Carbon Private Limited and Epsilon Graphite Private Limited.

		terms and conditions as below:-	provision of the EIA Notification, 2006, subject to the compliance of terms and conditions as below:-	
7	10.h	Total fresh water requirement shall not exceed 8520 cum/day , proposed to be met from JSW steel water network. Prior permission in this regard shall be obtained from the concerned regulatory authority before diverting the water from the quantum allotted the M/s JSW steel.	Total fresh water requirement shall not exceed 7686 cum/day , proposed to be met from JSW steel water network. Prior permission in this regard shall be obtained from the concerned regulatory authority before diverting the water from the quantum allotted the M/s JSW steel.	PP now intend to split the existing EC between Epsilon Carbon Private Limited and Epsilon Graphite Private Limited.
9	10.q	As committed Rs 10 crore shall be allocated for Corporate Environment Responsibility (CER). The CER funds shall be utilized for meeting the issues suggested during public hearing. The CER plan shall be completed before commissioning of	As committed Rs 7 crore shall be allocated for Corporate Environment Responsibility (CER). The CER funds shall be utilized for meeting the issues suggested during public hearing. The CER plan shall be completed before commissioning of	PP now intend to split the existing EC between Epsilon Carbon Private Limited and Epsilon Graphite Private Limited.

		the Expansion project.	the Expansion project.	
Note: All remaining conditions of EC granted on 10.01.2020 would remain same except the above stated EC conditions.				

Table 1: Production Capacity

S. No.	Products	Production Capacity in MTPA		
		Existing EC (Pre-Bifurcation under Epsilon Carbon Private Limited, ECPL (Parent Company))	Parent Company (Epsilon Carbon Private Limited, ECPL)	New Company (Epsilon Graphite Private Limited, EGPL)
Coal tar Distillation Section				
	Distillation capacity	500,000 TPA	500,000 TPA	-
1	Coal Tar Pitch	255000	255000	-
2	Zero QI/Impregnated Pitch	16000	16000	-
3	Carbon Black Oil (CBO)	253600	253600	-
4	Anthracene Oil/ Heavy Creosote Oil	99000	64000	35000
5	Wash Oil	41500	41500	-
6	Naphthalene	35000	35000	-
7	NSF	33000	33000	-
8	Phenol Oil	14900	14900	-
9	Light Oil	10000	10000	-
10	De-hydrated coal tar	483000	483000	-
11	Phenolics (Phenol, Cresols (ortho, meta, para orc mixture thereof), Xylenols)	14900	14900	-
12	Special Graphite/Advanced Carbon (Mesophase)	50000	-	50000
By- Product of Coal Tar Distillation Section				
1	Neutral Sodium Phenolate (14%)	25500	25500	-
2	Ammonical water	150	150	-
3	Calcium Carbonate	17340	17340	-
Carbon Black Unit Section				
1	Carbon Black	300000	300000	-
2	Lean Gas/ Tail Gas	270000 Nm ³ /hr.	270000 Nm ³ /hr.	-

Captive Power Plant			
1	CPP*	54 MWH	54 MWH -

After detailed deliberations EAC **recommended** the amendments in EC, as proposed by the project proponent, with all other terms and conditions remain unchanged mentioned as below:

(i) **Para 2** shall be read as, "The Ministry of Environment, Forest and Climate Change has considered the proposal for amendment in environmental clearance to the project for expansion of Coal Tar Distillation Plant from 300000 to 500000 TPA and setting up of Carbon Black Plant of capacity 300000 TPA along with Captive Power Plant of 54 MWh by M/s. Epsilon Carbon Private Limited (ECPL) in a total area of 525058 sqm at Musinayakahalli, Taluka Sandur, District Ballari (Karnataka)."

(ii) **Para 3** shall be read as given in Table 1 above.

(iii) **Para 4** shall be read as, "Total land area is 5,25,058 sqm. Industry has already developed / will develop greenbelt in an area of 33% i.e. 173144 sqm out of total area of the project. The estimated project cost is Rs. 700 crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 37 crores and the recurring cost (O&M) will be about Rs. 1.5 crores per annum. Total Employment will be 710 (direct & indirect) persons as direct after expansion."

(iv) **Para 6** shall be read as, " Total fresh water requirement estimated is 7686 cum/day, which is proposed to be met from JSW Steel water network. Effluent of 825 cum/day will be treated through existing ETP having capacity 180 cum/day and proposed ETP of 820 cum/day. Domestic effluent shall be treated through existing STP of 25 cum/day and proposed STP of 50 cum/day. The plant will be based on Zero Liquid discharge system. Power requirement after amendment will be 10000 KW including existing 3500 KW and will be met from JSW Network / in-house co-generation power plant based on lean tail gas. Additionally, 1 DG sets are used as standby during power failure. Stack will be provided as per CPCB norms to the proposed DG sets."

(v) **Para 10** shall be read as, " Based on the proposal submitted by the project proponent and recommendations of the EAC (Industry 2), Ministry of Environment, Forest and Climate Change hereby accords amendment in environmental clearance to project for expansion of Coal Tar Distillation Plant from 300000 to 500000 TPA and setting up of Carbon Black Plant of capacity 300000 TPA along with Captive Power Plant of 54 MWh by M/s. Epsilon Carbon Private Limited (ECPL) at Musinayakahalli, Taluka Sandur, District Ballari (Karnataka), under the provision of the EIA Notification, 2006, subject to the compliance of terms and conditions as below: -"

(vi) **Para 10, specific condition "h"** shall be read as, "Total fresh water requirement shall not exceed 7686 cum/day, proposed to be met from JSW steel water network. Prior permission in this regard shall be obtained from the concerned regulatory authority before diverting the water from the quantum allotted the M/s JSW Steel."

(vii) **Para 10, specific condition "q"** shall be read as, "As committed Rs. 7 crore shall be allocated for Corporate Environment Responsibility (CER). The CER funds shall be utilized for meeting the issues suggested during public hearing. The CER plan shall be completed before commissioning of the Expansion project."

28th April, 2021 (Thursday)

34.5. Any other items with the permission of the Chair.

Agenda No. 34.5.1

Discussion on Standardization/Optimization of conditions w.r.t. Standard Terms of Reference (ToR).

Following items and project/activities as per the EIA Notification, 2006 related to Industry-2 sector has been discussed.

1(b)	Off-shore and onshore oil and gas exploration, development and production
6(a)	Oil & gas transportation pipeline (crude and refinery/petrochemical products), passing through national parks/sanctuaries/coral reefs/ecologically sensitive areas including LNG Terminal

Member Secretary presented the Standard ToRs of 1(b) Offshore and 1(b) onshore along with 6(a) Oil & gas transportation pipeline via Power point presentation. EAC members deliberated/informed their inputs which have been included in the presentation. Certain ToR points were not required; some additional ToR points have been included & certain conditions have been modified also. Corrections/modifications/suggestions are being discussed and will be submitted to IA- Policy Division once discussion on all the sectors are completed in subsequent meetings.

The meeting ended with thanks to the Chair.

ANNEXURE

GENERAL CONDITIONS FOR ENVIRONMENTAL CLEARANCE

- (i) No further expansion or modifications in the plant, other than mentioned in the EIA Notification, 2006 and its amendments, shall be carried out without prior approval of the Ministry of Environment, Forest and Climate Change/SEIAA, as applicable. 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/SEIAA, as applicable, to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.
- (ii) The energy source for lighting purpose shall be preferably LED based, or advanced having preference in energy conservation and environment betterment.
- (iii) 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 the Environment (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).
- (iv) The company shall undertake all relevant measures for improving the socio-economic conditions of the surrounding area. CER activities shall be undertaken by involving local villages and administration and shall be implemented. The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment.
- (v) The company shall earmark sufficient funds towards capital cost and recurring cost per annum to implement the conditions stipulated by the Ministry of Environment, Forest and Climate Change 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.
- (vi) A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, Zilla Parishad/Municipal Corporation, Urban local Body and the local NGO, if any, from whom suggestions/representations, if any, were received while processing the proposal.

- (vii) 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.
- (viii) 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.
- (ix) 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 and at <https://parivesh.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.
- (x) 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.
- (xi) This Environmental clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, if any, as may be applicable to this project.

List of the Expert Appraisal Committee (Industry-2) members participated during Video Conferencing (VC) meeting

S. No.	Name and Address	Designation
1.	Dr. J. P. Gupta	Chairman
2.	Sh. R.K. Singh	Member
3.	Shri Ashok Agarwal	Member
4.	Dr. Y.V. Rami Reddy	Member
5.	Shri S.C. Mann	Member
6.	Dr. T. K. Joshi	Member
7.	Dr. J. S. Sharma	Member
8.	Dr. Uma Kapoor	Member
9.	Shri Dinabandhu Gouda, CPCB	Member
10.	Shri Sanjay Bist	Member
11.	Sh. Ashok Kr. Pateshwary, Director, MoEFCC	Member Secretary
MoEFCC		
12.	Dr. Mahendra Phulwaria	Scientist 'C'
13.	Sh. Kanaka Teja	Research Assistant
14.	Ms. Meetika Gupta	Research Associate
