**GOVERNMENT OF INDIA**
**MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE**
**(IA DIVISION-INDUSTRY-2 SECTOR)**
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**Dated: 12.01.2021**

# MINUTES OF THE 27th MEETING OF THE EXPERT APPRAISAL COMMITTEE

## (INDUSTRY-2 SECTOR PROJECTS),

## HELD ON 30th – 31st December, 2020

**Venue: Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhawan, Jor Bagh 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 offered by the EAC members on the minutes of its 26th Meeting of the EAC (Industry-2) held on 10th December, 2020 conducted through Video Conferencing (VC) and 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: -

**30th December, 2020 (Wednesday)**

**Agenda No. 27.1**

**Onshore Development and Production of oil & gas from 53 wells in 7 ML blocks by M/s Oil and Natural Gas Corporation Limited located in Jorhat and Golaghat districts, Assam - Consideration of Environment Clearance regarding.**

**[IA/AS/IND2/99149/2019, IA-J-11011/86/2019-IA-II(I)]**

The project proponent and their consultant M/s. AECOM Indian Private Limited 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 Onshore Development and Production of oil & gas from 53 wells in 7 ML blocks by M/s Oil and Natural Gas Corporation Limited located in Jorhat and Golaghat districts, 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).

The ToR for the project was granted by Ministry vide letter No. IA-J-11011/86/2019-IA-II(I) dated 14th April, 2019. Public Hearing for the proposed project was conducted by the Assam Pollution Control Board on 30th September 2020, at Borbali ME School field, Sarupathar, Golaghat and on 20th October 2020 at Borholla, Jorhat respectively. Public Hearing was chaired by the Additional Deputy Commissioner Golaghat and Jorhat respectively. Major issues raised during public hearings included queries on CSR activities like installation of Solar lights, repair of roads and provision of drinking water, which are already a part of CSR activities of ONGC. ONGC has provided estimated budget and an expected timeline for completion of the activities in response to issues raised in the Public hearing. It was informed that no litigation is pending against the proposal.

**The details of products and capacity are as under:**

| S.No | Product Details | Existing Quantity | Proposed Quantity | Total quantity (Estimated) |
|---|---|---|---|---|
| 1 | Development & production well | None | 1.76 MMt | 1.76 MMt |

Total land area of the seven PML blocks is 231.2 sq. km. The estimated project cost is Rs. 1325 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 15 lakh and the Recurring cost (operation and maintenance) will be about Rs. 12 lakh per annum. Total Employment will be 30 persons as direct & 30 persons indirect. Total budget of Rs. 1.7 Crore is kept to address the issues raised during the public hearing.

PP has reported that there are no national parks, Biosphere Reserves, Tiger/Elephant Reserves, etc. within 10 km distance from the project site. However, some areas under of East Lakhibari, Golaghat Extn IIA and Golaghat Extn IIA (addl) falls within ESZ of Nambor Wildlife Sanctuary. Also, some parts of East Lakhibari PML, kalyanpur PML, Golaghat Extn IIA (addl) are located within Nambar South Reserved Forest and Rengma Reserved Forest. Dhansiri River flows on the western side of the East Lakhibari PML and Kalyanpur PML block boundaries. The river flows on both the eastern and western sides of the Golaghat Extn IIA PML and Golaghat Extn IIA (addl) PML; and the river flows in a highly meandering course within the block along the eastern boundary.

Ambient air quality monitoring was carried out at 8 locations during October 2019 to January 2020 and the baseline data indicates the ranges of concentrations as: PM10 (72.60– 78.00µg/m3), PM2.5 (37.58 – 40.20 µg/m3), SO2 (10.32 – 20.48 µg/m3) and NO2 (17.10- 34.90µg/m3). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.56 µg/m3, 0.75µg/m3 and 16.0 µg/m3 with respect to PM10, SOx and NOx. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total water requirement is 25 $m^3$/day of which fresh water requirement of 15$m^3$/day will be met through Tankers. The plant will be based on Zero Liquid discharge system. Effluent of 20 $m^3$/day quantity will be treated through installation of Effluent Treatment Plant.

The power requirement during the site preparation and construction phase would be met by 3 Nos. of DG Sets. The power requirement for drilling will be met by using the four Diesel Generator Sets of 750 kVA, 3 working and 1 standby. Stack of 7.7 m will be provided as per CPCB norms to the proposed DG sets. Multi cyclone separator/ bag filter with a stack will be installed for controlling the particulate emissions within the statutory limit of 115 mg/$Nm^3$ for the proposed boilers.

**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, if gas reserves are encountered during drilling

operations. 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 through approved waste handling contractors. Recyclable wastes will be periodically sold to authorized local waste recyclers. Hazardous waste (waste and used oil) will be managed in accordance with Hazardous Waste (Management, Handling & Transboundary Movement) Rules, 2016.

***Deliberations in the EAC:***

The EAC desired village wise development plan in 130 villages along with budget, issues related to EIA Report i.e. foecal coliform in surface water and revised air dispersion modeling. PP has submitted the information regarding the same.

The EAC during deliberations noted w.r.t Golaghat District, some areas under of East Lakhibari, Golaghat Extn IIA and Golaghat Extn IIA (addl) falls within ESZ of Nambor Wildlife Sanctuary. Also, some parts of East Lakhibari PML, kalyanpur PML, Golaghat Extn IIA (addl) are located within Nambar South Reserved Forest and Rengma Reserved Forest. However, PP has submitted undertaking stating that none of the 53 wells locations under the said proposal fall inside any forest area and 10 kms ESZ of any protected area. PP was not having any concrete evidence to produce or explain whether it attracts clearance related with ESZ.

The EAC deliberated the above and desired to get it examined by the Ministry/ESZ division whether clearance regarding this is required or not.

***The proposal was accordingly deferred for the needful.***

**Agenda No. 27.2**

**Proposed Project of Poly Vinyl Chloride (PVC) Paste Resin Plant of 70,000 TPA Plant by M/s Chemplast Sanmar Limited located at Cuddalore, Tamilnadu - Consideration of Environment Clearance regarding.**

**[IA/TN/IND2/156565/2020, IA-J-11011/132/2020-IA-II(I)]**

The Project Proponent and their accredited consultant M/s. Kadam Environmental Consultants., made a detailed presentation on the salient features of the project through video conferencing and informed that:

The proposal is for environmental clearance to the project Poly Vinyl Chloride (PVC) Paste Resin Plant of 70,000 TPA at RS No. 70 Part, 71 Part, 74 Part, 75 Part, SIPCOT Industrial Complex Phase-II, Semmankuppam village, Cuddalore Taluka & Cuddalore district, Tamil Nadu by M/s. Chemplast Sanmar Limited.

**The details of products and capacity as under:**

| S. No. | Product/Activity (Capacity/Area) | Quantity | Unit | Mode of Transport / Transmission of Product |
|---|---|---|---|---|
| 1 | Poly Vinyl Chloride Resin | 70,000 | TPA | Road |

The Standard ToR has been issued by Ministry vide letter No. J-11011/132/2020- IA-II(I); dated 24th July 2020. Public Hearing for the project is exempted as the industry is located in Notified Industrial Area SIPCOT Industrial Complex Phase-II. It was also reported by the PP that there is no litigation pending against the proposal.

The project/activities are covered under category B of item 5(e) 'Petrochemical based processing (processes other than cracking & reformation and not covered under the complexes)' of the Schedule to the Environment Impact Assessment Notification, 2006. Due to applicability of general conditions (location of the project site in SPA), the project requires appraisal at central level by the sectoral Expert Appraisal Committee (EAC) in the Ministry.

The land area available for the project is 48543 $m^2$. Industry will develop greenbelt in an area of 33% i.e. 16428 $m^2$, out of total area of the project. The estimated project cost is Rs. 450 crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 1050.00 lakhs and the Recurring cost (operation and maintenance) will be about Rs. 190 lakhs per annum. Total Employment will be 450 persons as direct & 820 persons indirect during operation phase. Industry proposes to allocate Rs. 1.5 crores towards Corporate Social Responsibility.

There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site. Uppanar river is flowing at a distance of 0.06 km in East direction

Ambient air quality monitoring was carried out at 8 locations during March, 2018 to May, 2018 and the baseline data indicates the ranges of concentrations as: PM10 (43 µg/m3 to 60 µg/m3), PM2.5 (12 µg/m3 to 23 µg/m3), SO2 (8.69 µg/m3 to 9.21 µg/m3) and NO2 (18.38 µg/m3 20.06 µg/m3). AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 4.79 µg/m3, 0.01 µg/m3 and 1.29 µg/m3 with respect to PM10, SOx and NOx. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS)..

Total water requirement is 1526 $m^3$/day of which fresh water requirement of 1208 $m^3$/day will be supplied from Chemplast Cuddalore Vinyls Ltd. (CCVL). Effluent of 338 KLD (318 KLD industrial + 20 KLD domestic) quantity will be treated through ETP & STP. The plant will be based on Zero Liquid discharge system.

Power requirement after expansion will be 7 MW and it will be met from Tamil Nadu Electricity Board (TANGEDCO). 3 DG sets will be used as standby during power failure. Stack (height 30 m) will be provided as per CPCB norms to the proposed DG sets.

No boiler will be installed as steam will be provided by group company Chemplast Cuddalore Vinyls Ltd situated adjacent to the proposed project site.

**Details of Process emissions generation and its management:**

**Flue Gas Stacks**

| S. No. | Stack Attached to | Capacity | No. of working hrs | Type of Fuel used | Fuel consumption in Hr | Stack Height (m) Provided | Stack Height (m) Calculated as per CPCB Norms[1] | No. of Stacks | Pollutants and control measures |
|---|---|---|---|---|---|---|---|---|---|
| 1 | DG set - 3 nos | 2000 KVA each | Emergency operation (Power failure) | HSD | 100 lit/hr each | 30 (each) | 3.34 | 3 | PM, SOx, NOx Adequate stack height |

* Operation only during power failure

**Process Vents Details**

| S. No. | Stack Attached to | No. of Stacks | No. of working hrs | Stack Height (m) | Pollutants Emitted | Air Pollution Control Measures Attached |
|---|---|---|---|---|---|---|
| 1 | Vent gas absorption system for VCM recovery | 1 | Continuous | 20 | VCM | Stack |
| 2 | PVC dryer section-1 | 1 | Continuous | 28 | VCM and particulate matter | Multiple Bag filters with Adequate stack height |
| 3 | PVC dryer section-2 | 1 | Continuous | 28 | VCM and particulate matter | Multiple Bag filters with Adequate stack height |

[1] Stack Height is calculated as per $H = 14(Q)^{0.3}$.

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

| S. No | Type of waste | Hazardous waste category | Quantity (Tons per Annum) | Source | Treatment/Disposal |
|---|---|---|---|---|---|
| 1 | Used/Spent oil | 5.1 | 10 | Process plant | To authorised recyclers |
| 2 | ETP sludge | 35.3 | 400 | ETP | Disposal at Tamilnadu waste Management Limited (TNWML) facility at Gummudipondi, authorised agency |
| 3 | Evaporator | 35.3 | 500 | MEE to ZLD | |
| 4 | PVC lumps | 22.2 | 20 | Process | |

***Deliberations in the EAC:***

The EAC during deliberations noted that the committee received a letter from National Fisher Folk Forum requesting not to consider granting Environmental Clearance to this project until environment carrying capacity and comprehensive cumulative impact of the SIPCOT area is assessed. However, the committee did not find any concrete reasons/evidence in this communication.

The project Proponent informed that utilities for the project shall be generated at the adjoining sister industry. Committee suggested that EIA should be presented with emission from both industries.

Lastly, it was pointed out that fresh water is being used for gardening, hence EAC suggested the PP to use the recycled water instead of fresh water.

*The Committee, after detailed deliberations, has desired additional information/inputs in respect of the following:*

*(i). Details of the NGT issues if any w.r.t the existing project and for the proposed project.*
*(ii). 3D modelling and consequence analysis study and safety plan for the existing and proposed projects.*
*(iii). Revised water balance reducing consumption of fresh water.*
*(iv). Uppanar river is in vicinity of 50m from the project site. It is a water body connected to the sea. So applicability of CRZ rules 2011 may be clarified.*

*Hence, the committee asked PP to present the combined details of the existing and the proposed projects for better assessment of the environmental concerns.*

***The proposal was accordingly deferred for the needful.***

**Agenda No. 27.3**

**Establishment of 105 KLPD Molasses/Cane Juice based distillery unit by M/s Shri Dutt India Pvt. Ltd. (SDIPL) located at Gat No. 65/2, 69 & 74, Sakharwadi, Tal.: Phaltan, Dist.: Satara- 415522, Maharashtra - Consideration of Environment Clearance regarding.**

**[IA/MH/IND3/186431/2020, IA-J-11011/115/2020-IA-II(I)]**

The project proponent and their consultant M/s. Equinox Environments (I) 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 establishment of 105 KLPD Molasses/Cane Juice based distillery unit by Shri Dutt India Pvt. Ltd. (SDIPL) located at Gat No. 65/2, 69 & 74, Sakharwadi, Tal.: Phaltan, Dist.: Satara- 415522, Maharashtra.

All the Molasses & Cane Juice Distilleries are listed at S.N. 5 (g) of Schedule of Environmental Impact Assessment (EIA) Notification, 2006 under category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).

The Standard ToR for the project was granted by Ministry vide letter No. F. No J-11011/115/2020-IA-II (I) dated 29th June 2020. Public Hearing for the proposed project was conducted by the Maharashtra Pollution Control Board on 08.10.2020 at M/s. Shri Dutt India Pvt. Ltd. (SDIPL), Gat No. 65/2, 69 & 74, Sakharwadi, Tal. Phaltan, Dist. Satara and chaired by the Additional District Magistrate Satara. The issues were raised mainly w.r.t ash & effluent generation & its management, employment generation, Benefits to farmers and villagers, etc. It was informed that no litigation is pending against the proposal.

**The details of products and capacity are as under:**

| Industrial Unit | Description | Quantity |
|---|---|---|
| Distillery (Proposed105 KLPD) | **Product** | |
| | Rectified Spirit/ Ethanol/ ENA | 3,150 KL/M |
| | **By-product** | |
| | Carbon Di-oxide ($CO_2$) Gas | 2,610 MT/M |
| | Fusel Oil (0.2%) | 6 KL/M |
| | Spentwash Dry Powder | 3810 MT/M |

Total plot land area is 3,28,885 $M^2$. Existing Sugar Factory Built- up is 29,578 $M^2$, additional builtup for proposed distillery is 13,850 $M^{2\cdot}$ Industry has already developed Green Belt in an area of 52,625 $M^2$ (16% out of total plot area). Moreover, additional Green Belt area of 55,907 $M^2$ (17% out of total plot area) will be developed. After establishment of distillery, the total Green Belt area would be 1,08,532 $M^2$ which accounts for 33 % of total plot area. The estimated proposed project cost is Rs. 80 Crores. The distillery will be operated for 330 days. Total capital cost earmarked towards environmental pollution control measures under distillery is Rs. 14.20 Crores and the Recurring cost (operation and maintenance) will be about Rs. 0.72 Crores per annum. Total Employment under proposed project would be 125 persons as direct as well as indirect after establishment of projects. Industry proposes to allocate Rs. 1.84 Crores @ of 2% towards Corporate Environmental Responsibility.

PP has reported that there are no national parks, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 Km Study Area. River Nira is flowing at a distance of 3 Km in W to E.

Ambient air quality monitoring was carried out at 8locations during October 2019 – December 2019 and submitted baseline data indicates that ranges of concentrations of $PM_{10}$ (44.20 – 65.60 µg/$m^3$), $PM_{2.5}$ (13.10 – 23.40 µg/$m^3$),$SO_2$ (13.10 – 27.60 µg/$m^3$) and $NO_x$ (16.50 – 31.80 µg/$m^3$) respectively. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the establishment project would be 0.169 µg/$m^3$ $PM_{10}$(towards South-West side), 0.042 µg/$m^3$$PM_{2.5}$(towards South-West side), 1.06 $SO_2$ µg/$m^3$ (towards South-West side) and 0.624 µg/$m^3$$NO_x$(towards South-West side). The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total water requirement for Distillery project will be 1660 CMD. Out of which, 415 CMD will fresh water from Nira right bank canal while 1035 CMD will be CPU treated effluent and 210 CMD will be harvested rainwater. The effluent generated from 105 KLPD distillery would be in the form of raw spent wash to the tune of 840 $M^3$/Day. Here, raw spent wash shall be concentration in Multiple (Five) Effect Evaporator (MEE). Concentrated spent wash to the tune of 183 $M^3$/Day (1.7 KL/KL of alcohol against norm of 8 KL/KL of alcohol)shall be dried in ATFD to form powder. Raw spent wash generated from to cane juice distillery to the tune of 420 $M^3$/Day. Here, raw spent wash shall be concentration in Multiple (Five) Effect Evaporator (MEE). Concentrated spent wash to the tune of 84 $M^3$/Day (0.8 KL/KL of alcohol against norm of 8 KL/KL of alcohol) shall be dried in ATFD to form powder.

Power requirement for proposed distillery will be 1.5 MW will be procured from boiler turbine. Two DG sets of 500 kVA & 380 kVA capacity are installed in existing sugar factory as standby during power failure. Stack of height 5 M ARL is provided as per CPCB norms to the DG sets. No new boiler will be installed under proposed distillery unit, since steam required

will be taken from existing 28 & 55 TPH boilers. Wet Scrubber is provided with a stack of height of 22 M & 45 M resp. for controlling the particulate emissions within the statutory limit of 115 mg/$Nm^3$.

**Details of Process emissions generation and its management:**

The CO2 generation shall take place in fermenters of the distillery. CO2 to the tune of 87 MT/Day shall be released from 105 KLPD distillery plant. CO2 shall be bottled and supplied to manufacturers of beverages.

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

**Details of Solid waste generated & its management**

| No. | Unit | Waste Type | Quantity (MT/M) | Disposal |
|---|---|---|---|---|
| 1. | Distillery | Yeast Sludge | 720 | Used as manure |
| | | CPU sludge | 25 | |

**Details of Hazardous waste generated & its management**

| No | Industrial Unit | Category | Quantity | Disposal |
|---|---|---|---|---|
| 1 | Sugar Factory & Distillery Unit | Cat.5.1 : Spent Oil | 0.8 MT/Yr. | Forwarded to authorized re-processor |
| | | Cat. 33.3 : Contaminated Cotton Waste | 0.3 MT/Yr. | |
| | | Cat. 33.1 : Empty Containers | 30 Nos. / Yr. | Forwarded to authorized re-seller |

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 directed that the project proponent will treat and use the treated water within the industry. 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 and to compliance of terms and conditions as under, and general terms of conditions at Annexure: -

(i). 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.

(ii). 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.

(iii). As proposed, total water requirement is 1660 CMD. Out of which fresh water requirement of 415 CMD will be met from Nira right bank canal while 1035 CMD will be CPU treated effluent and 210 CMD will be harvested rainwater. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard, and renewed from time to time. No ground water recharge shall be permitted within the premises.

(iv). The spent wash/other concentrates shall be incinerated.

(v). $CO_2$ generated from the process shall be bottled/made solid ice and utilized/sold to authorized vendors.

(vi). Occupational health centre for surveillance of the worker's health shall be set up. The health data shall be used in deploying the duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection.

(vii). Training shall be imparted to all employees on safety and health aspects of chemicals handling. Safety and visual reality training shall be provided to employees.

(viii). 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.

(ix). Process organic residue and spent carbon, if any, shall be sent to Cement other suitable industries for its incinerations. ETP sludge, process inorganic & evaporation salt shall be disposed of to the TSDF.

(x). 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.

(xi). The green belt of at least 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department. Records of tree canopy shall be monitored through remote sensing map.

(xii). 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.

(xiii). There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products, and no parking to be allowed outside on public places.

(xiv). Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.

(xv). 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.

(xvi). A separate Environmental Management Cell (having qualified person with Environmental Science/Environmental Engineering/specialization in the project area) equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.

**Agenda No. 27.4**

**Expansion of Carbon Black Manufacturing Plant capacity from 16500 to 20100 MTPM along with Waste Gas Based Co-Generation Power Plant capacity from 32 to 40 MW by M/s Phillips Carbon Black Ltd. located at Survey No. 47, SH-46, Village Mokha, Taluka Mundra, District Kachchh, State Gujarat - Consideration of Environment Clearance regarding.**

**[IA/GJ/IND2/58103/2016, J-11011/195/2016- IA II(I)]**

The project proponent and their consultant M/s. Kadam Environmental Consultants 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 of Carbon Black Manufacturing Plant capacity from 16500 to 20100 MTPM along with Waste Gas Based Co-Generation Power Plant capacity from 32 to 40 MW by M/s Phillips Carbon Black Ltd. located at Survey No. 47, SH-46, Village Mokha, Taluka Mundra, District Kachchh, State Gujarat.

All products are listed at S.N. 5 (e) 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 the project was granted by Ministry vide letter No. J-11011/195/2016- IA II(I); dated 26.08.2019. The project proposal was considered by the Expert Appraisal Committee (Industry-2) in its 22nd meeting held during 20.08.2020 and amendment Terms of References (ToRs) for the project has been issued by Ministry vide letter no. J-11011/195/2016- IA II(I); on dated 03.12.2020 in which Public Hearing is exempted in para 7(ii) of EIA Notification, 2006. It was informed that no litigation is pending against the proposal.

Ministry had issued EC earlier vide letter no. J-11011/195/2016- IA II(I); dated 15.01.2018 to the existing project of Expansion of Carbon Black Plant & Co-generation Power Plant in favor of M/s. Phillips Carbon Black Limited.

**The details of products and capacity are as under:**

| S. No. | Product Details | Existing Quantity | Proposed Quantity | Total Quantity |
|---|---|---|---|---|
| 1. | Carbon Black, MTPM | 16500 | 3600 | 20100 |
| 2. | Co-generation Power (waste gas base), MW | 32 | 8 | 40 |

Existing land area is 294614 $m^2$. Additional 0 $m^2$ land will be used for proposed expansion. Industry has already developed greenbelt in an area of 33% i.e., 1,16,027 $m^2$ out of total area of the project. The estimated project cost is Rs. 210 Crore apart from existing investment of Rs. 612 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs 18.63 lakhs and the Recurring cost (operation and maintenance) will be about Rs 40.9576 lakhs per annum. Total Employment will be 300 persons as direct & 80 persons indirect after expansion. Industry proposes to allocate INR 1 Crores i.e. 1 % of INR 100

Crores & INR 0.825 Crores i.e. 0.75% of INR 110 Crores. So Total 1.825 Crore of Total Project Cost towards Corporate Social Responsibility.

PP has reported that there are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site. Mitti River is flowing at a distance of 0.8 km in East direction.

Ambient air quality monitoring was carried out at 8 locations during October, 2019 to January, 2020 and the baseline data indicates the ranges of concentrations as: PM10 (68 µg/$m^3$ to 83 µg/$m^3$), PM2.5 (19 µg/$m^3$ to 31 µg/$m^3$), SO2 (9.0µg/$m^3$ to 9.2µg/$m^3$) and NO2 (17.3µg/$m^3$ to 18.1 µg/$m^3$). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 85.29 µg/$m^3$, 23 µg/$m^3$ and 19.75 µg/$m^3$ with respect to PM10, SOx and NOx. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total water requirement is 2,574 $m^3$/day of which fresh water requirement of 2,137 $m^3$/day will be met from Existing source of water supply i.e. Gujarat Water Infrastructure Limited (GWIL) and Bore well. Effluent of 449 KLD (399 KLD industrial + 50 KLD domestic) quantity will be treated through WTP & STP. The plant will be based on Zero Liquid discharge system.

Power requirement after expansion will be 10.8 MW including existing 8.3 MW and will be met from Co-Gen Power Plant and Paschim Gujarat Vij Company Limited (PGVCL). Existing unit has 1 DG set of 1250 kVA capacity, additionally No DG sets are used as standby during power failure. Stack (height 30 m) will be provided as per CPCB norms to the proposed DG sets. Existing unit has 1 CPP 16 MW Boiler & 2 CPP 8 MW Boilers & 2 Process Plant Flare stacks. Additionally, 1 CPP 8 MW Boiler will be installed. Bag filter with a stack of height of adequate m will be installed for controlling the particulate emissions within the statutory limit of 150 mg/$Nm^3$ for the proposed boilers.

**Details of Process emissions generation and its management:**

| S. No. | Stack Attached to | Nos. of Stacks | Stack Height in m | Pollutants Emitted | Air Pollution Control Measures Attached |
|---|---|---|---|---|---|
| Existing | | | | | |
| 1 | Vapour Bag Collector – 1 | 1 | 50 | PM: 150 mg/$NM^3$ NOx: 50 ppm | Bag Filter |
| 2 | Vapour Bag Collector – 2 | 1 | 50 | | Bag Filter |
| 3 | Dryer – 1 | 1 | 50 | | Not Required |

| | | | | | |
|---|---|---|---|---|---|
| | | | | | (Bag Filter is installed in the upstream of combustor to separate Carbon Black from Tail Gas.) |
| 4 | Dryer – 2 | 1 | 50 | | Not Required (Bag Filter is installed in the upstream of combustor to separate Carbon Black from Tail Gas.) |
| 5 | Vapour Bag Collector – 3 | 1 | 50 | | Bag Filter |
| 6 | Dryer – 3 | 1 | 50 | | Not Required (Bag Filter is installed in the upstream of combustor to separate Carbon Black from Tail Gas.) |
| **Proposed** | | | | | |
| 1 | Vapour Bag Collector – 4 | 1 | 50 | PM: 150 $mg/NM^3$ NOx: 50 ppm | Bag Filter |
| 2 | Vapour Bag Collector – 5 | 1 | 50 | | Bag Filter |
| 3 | Vapour Bag Collector – 6 | 1 | 50 | | Bag Filter |
| 4 | Dryer – 4 | 1 | 50 | | Not Required (Bag Filter is installed in the upstream of combustor to separate Carbon Black from Tail Gas.) |
| 5 | Dryer – 5 | 1 | 50 | | Not Required (Bag Filter is installed in the upstream of combustor to separate Carbon Black from Tail Gas.) |
| 6 | Dryer – 6 | 1 | 50 | | Not Required (Bag Filter is installed in the upstream of combustor to separate Carbon Black from Tail Gas.) |

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

| S. No. | Type of Waste | Hazardous Waste Category as per HWMR 2016 | Quantity (MT/ Year) | | | Source | Method of Collection | Treatment / Disposal |
|---|---|---|---|---|---|---|---|---|
| | | | Existing | Proposed | Total | | | |
| 1 | Used Oil | 5.1 | 2.2 | 0.5 | 2.7 | Equipment Lubrications | Manually in cans from equipment | Collection, Storage, Transportation, reuse in process/ sent to GPCB registered recycler |
| 2 | Spent Acid | 36.2 | 0.024 | 0 | 0.024 | From Batteries | Manual | Collection, Storage, Transportation, Disposal by Authorized way |
| 3 | Chemical Sludge from Wastewater Treatment | 35.3 | 1735 | 425 | 2160 | ETP | Packed in Plastic Bags | Collection, Storage, Transportation, Disposal at TSDF site of SEPPL. |
| 4 | Oily Sludge Emulsion | 4.1 | 15 | 3.5 | 18.5 | Strainers Cleaning | Manually in cans | Collection, Storage, Transportation, Disposal at |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Common Incineration site of SEPPL – Bhachau |
| 5 | Used Batteries | Schedule IV-17 | 0.1 | 0.1 | 0.2 | UPS / Fork Lifts | Manual | Collection, Storage, Transportation, and Disposal as per lead batteries rules. |
| 6 | Discarded Drum / Barrels/ Containers / Bags/ Liners / Bag filter | 33.1 | 20 | 5 | 25 | Lubricating Oil Drums / Chemicals / Packing Bags /Wagon Liners | Manual | Collection, Storage, Transportation, sent to GPCB Approved recycler or Disposal by incineration at SEPPL – Bhachau |
| 7 | Spent Ion Exchange Resin Containing Toxic Metal | 35.2 | 1 | 0.2 | 1.2 | DM Plant | Manual | Collection, Storage, Transportation, Disposal at TSDF site of SEPPL. |
| 8 | Oily Cotton Waste /Leather Hand | 33.2 | 3 | 2 | 5 | Equipment cleaning / PPEs etc. | Manual | Collection, Storage, Transportation, and Disposal |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Gloves / Cotton Hand Gloves | | | | | | | by incineration at SEPPL – Bhachau |

Certified compliance report was submitted by RO, MoEF&CC, Bhopal (West Zone) to verify conditions as stipulated in previous environment clearances on 15.01.201. Certified Monitoring & Compliance report was received from Regional Office of MoEF&CC, Bhopal vide File No. 5-215/2008(ENV)/409 dated 07/07/2020.

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. PP has proposed that incremental GLC for sulphur dioxide is to the tune of 13.8 micrograms per cubic metre which seems to be on higher side. Committee suggested that PP shall provide suitable air pollution control devices to reduce the incremental GLC for sulphur dioxide.

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 and to compliance of terms and conditions as under, and general terms of conditions at Annexure: -

(i). The company/PP shall ensure that there will be no impact on mangroves plantation present in study area.

(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). Total water requirement is 2,574 $m^3$/day of which fresh water requirement of 2,137 $m^3$/day will be met from Existing source of water supply i.e. Gujarat Water Infrastructure Limited (GWIL) and Bore well. Necessary 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.

(iv). Comprehensive water audit to be conducted on annual basis and report to the concerned Regional Office of MEF&CC. Outcome from the report to be implemented for conservation scheme.

(v). Process effluent/any wastewater shall not be allowed to mix with storm water. Storm water drain shall be passed through guard pond.

(vi). Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm, and solvent transfer to be done through pumps.

(vii). Process organic residue and spent carbon, if any, 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.

(viii). Regular VOC monitoring shall be done at vulnerable points.

(ix). The oily sludge shall be subjected to melting pit for oil recovery and the residue shall be bio-remediated. The sludge shall be stored in HDPE lined pit with proper leachate collection system.

(x). Oil catchers/oil traps shall be provided at all possible locations in rain/ storm water drainage system inside the factory premises.

(xi). 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 cleaning etc. to reduce wastewater generation.

(xii). The green belt of 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.

(xiii). 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.

(xiv). The project proponent shall ensure 70% of the employment to the local people, as per the applicable law. The project proponent shall set up a skill development centre/provide skill development training to village people.

(xv). A separate Environmental Management Cell (having qualified person with Environmental Science/Environmental Engineering/specialization in the project area) equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.

(xvi). The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Firefighting system shall be as per the norms.

(xvii). 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. In case of the treated effluent to be utilized for irrigation/gardening, real time monitoring system shall be installed at the ETP outlet.

(xviii). PP to set up occupational health Centre for surveillance of the worker's health within and outside the plant on a regular basis. The health data shall be used in deploying the duties of the workers. All

workers & employees shall be provided with required safety kits/mask for personal protection.

(xix). The National Emission Standards for Petrochemical (Basic & Intermediates) issued by the Ministry vide G.S.R. 820 (E) dated 9th November, 2012 as amended time to time shall be followed.

(xx). Recommendations of mitigation measures from possible accident shall be implemented based on advanced risk Assessment studies conducted for worst case scenarios using latest techniques.

**Agenda No. 27.5**

**Expansion Grain based Distillery plant from 125 KLPD to 200 KLPD & Co-generation from 3 MW to 9 MW by M/s Pioneer Industries Ltd located at A-2(P), A-3 AND A-4, Industrial Growth Center, Village Ranipur, Defence Road, Tehsil and District Pathankot, Punjab - Reconsideration of Environmental Clearance regarding.**

**[IA/PB/IND2/142310/2016, J-11011/127/2016-IA II (I)]**

The project proponent and their consultant M/s. Enviro Infra Solutions Pvt. Ltd. were present for deliberation.

The proposal is for environmental clearance to the project for expansion Grain based Distillery plant from 125 KLPD to 200 KLPD & Co-generation from 3 MW to 9 MW by M/s Pioneer Industries Ltd located at A-2(P), A-3 AND A-4, Industrial Growth Center, Village Ranipur, Defence Road, Tehsil and District Pathankot, Punjab.

The EIA report was prepared by a non-accredited consultant. As per EIA Notification 2006, Consultant should have accreditation by QCI/NABET for preparation of EIA/EMP report.

In view of this, Expert Appraisal Committee (EAC) has decided not to discuss the proposal and ***Returned*** it in present form.

**Agenda No. 27.6**

**Expansion and debottlenecking of existing petrochemical manufacturing facility at Vadodara (Gujarat) Manufacturing Division (VMD) of M/s Reliance Industries Limited (RIL) - Reconsideration of Environment Clearance regarding.**

**[IA/GJ/IND2/100410/1998, J-11011/13/99-IA-II(I)]**

The proposal was earlier considered by the EAC in its meeting held on 30th December, 2019. The additional information desired by the Committee and response from the project proponent are as under:

<table>
<tr><th>S. No.</th><th>Query Raised in earlier EAC meeting</th><th>Query Reply Given by PP</th><th>Observation of EAC</th></tr>
<tr><td>1.</td><td>The project proponent shall submit proposal for transfer of EC at Ministry's online portal as per the procedure laid down in the EIA Notification with-in 15 days after the grant of EC falling which the EC shall stand auto revoked.</td><td>Transfer applications for mentioned ECs - 1991 & 1999 from IPCL to Reliance Industries Limited, Vadodara Manufacturing Division had been duly applied online on "Parivesh portal" vide proposal no. IA/GJ/IND2/136471/2020 and IA/GJ/IND2/136439/2020 dtd. 13th Jan 2020 respectively, thus meeting the requirement.<br><br>As per the process, EC 1999 transfer from M/s IPCL to RIL was granted vide letter dated 12th May, 2020.</td><td rowspan="3">The EAC deliberated the matter and found the reply to be satisfactory.</td></tr>
<tr><td>2.</td><td>PP shall resubmit the copy of all the consent granted.</td><td>PP has submitted copy of all the consents granted to the Ministry.</td></tr>
<tr><td>3.</td><td>PP shall adhere the all applicable provisions of CPA as per the Ministry's OM dated 31st October, 2019 on including i.e. increase in green belt to 40% of the total land area beyond the permissible requirement of 33% and 2 (two) times of CER.</td><td>All conditions prescribed in the Ministry's OM dated 31st October, 2019, will be followed and complied with totally.<br><br>Greenbelt Plan has been revised to meet with 40% Requirement.<br><br>
<table>
<tr><th>Description</th><th>Existing</th><th>Proposed</th><th>Total</th></tr>
<tr><td>Total Area of Green Belt (Ha)</td><td>105</td><td>35*</td><td>140</td></tr>
<tr><td>Percentage of Total Project Area (%)</td><td>30</td><td>10</td><td>40</td></tr>
</table>
*The proposed additional greenbelt development will be carried out within RIL Township.<br><br>The CER plan of INR 68.36 Cr. spreading over 5 years involving various activities</td></tr>
</table>

| | | | |
|---|---|---|---|
| | In 27th EAC meeting, EAC suggested to increase greenbelt to 40% of total (site) land area from existing 30%. | towards upliftment of nearby villages through livelihood support, women empowerment, education, environment protection, health and sanitation.<br>Total land area of the site is 350 ha of which existing greenbelt is 105 ha (30%). Additional 10% of total site land area i.e. 35 ha, has been identified in our Reliance Township, which will be developed as greenbelt to meet the requirement of 40%; No construction activity will be carried out in the identified land area and the open land will be dedicated as greenbelt only. | |
| 4. | PP shall not be permitted to use pet coke. | The proposal for use of petcoke in the boilers as fuel is dropped as per the condition and only coal and bio fuels will be used as fuels. | The EAC deliberated the matter and found the reply to be satisfactory. |
| 5. | PP to provide ZLD within 3 years after grant of EC. | ➢ The VMD complex is a unit operational since 1973 and though old, is being operated with the maximum efficiency.<br>➢ The water consumption and effluent generation and discharge is well within the approved limits and will continue to be so even after the proposed expansion.<br>➢ The quality of treated effluent is always maintained well below the limits stipulated by the State PCB<br>➢ The requirement of ZLD and attaining ZLD with effluent to the tune of ~ 20,000 m3 /d, though technically possible, will lead to other environmental impacts and have thus, represented to the Committee formed by the Ministry to review this condition.<br>➢ We will always recycle treated effluent to the extent | |

| | | | |
|---|---|---|---|
| | In 27th EAC meeting, EAC suggested to implement effluent reduction/recycle by 50% in 5 years after project implementation. | possible for CT and Fire water makeup.<br><br>After the proposed expansion, total effluent generation will be about 20, 000 $m^3$/day. We commit to limit our treated effluent discharge to <8000 $m^3$/day by recycling and other conservation techniques within 5 years. | |

The project proponent and their consultant M/s. Kadam Environmental Consultants 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 debottlenecking of existing petrochemical manufacturing facility at Vadodara (Gujarat) Manufacturing Division (VMD) of M/s Reliance Industries Limited (RIL).

All products 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 ToR for the project was granted by Ministry vide letter No. IA-J-11011/212/2017-IA-II(I); dated 7th August 2017. Public hearing is exempted as per Para 7(i), III. Stage (3), (i)(b) of the EIA Notification, 2006, and in accordance with the Ministry's OM dated 27th April 2018, as the project site is located in the notified industrial area by GIDC. It was informed that no litigation is pending against the proposal.

Ministry had issued EC earlier vide letter no. J-11011/13/99-IA. II(I) dated 27th September 1999 to the existing project.

**The details of products and capacity are as under:**

| **Plant** | **Name of Products** | **Production Capacities TPA** | | |
|---|---|---|---|---|
| | | **Existing Capacity TPA** | **Proposed Addition TPA** | **Total TPA** |
| GOP | Ethylene | 2,04,000 | 96,000 | 3,00,000 |
| | Propylene | 96,000 | 84,000 | 1,80,000 |
| GAP | Ortho xylene | 45,408 | 0 | 45,408 |
| | Para xylene | 48,600 | 0 | 48,600 |
| | Dimethyl Terephthalate | 39,996 | 0 | 39,996 |

| | | | | |
|---|---|---|---|---|
| C2 Derivatives including Vinyl | Ethylene Glycol (EG) | 20,040 | 5,640 | 25,680 |
| | Ethylene Oxide (EO) | 10,032 | 12,048 | 22,080 |
| | Low Density Poly Ethylene (LDPE) | 1,60,020 | 0 | 1,60,020 |
| | Ethylene Dichloride (EDC) | 1,00,020 | 0 | 1,00,020 |
| | Vinyl Chloride Monomer (VCM) | 57,000 | 36,240 | 93,240 |
| | Poly Vinyl Chloride (PVC) | 55,020 | 39,780 | 94,800 |
| | Chlorinated Poly Vinyl Chloride (C-PVC) (New product) | 0 | 72,000 | 72,000 |
| C3 Derivatives | Poly Propylene (PPCP (PP-II)) | 25,020 | 39,060 | 64,080 |
| | Poly Propylene (PP-IV) | 75,000 | 85,440 | 1,60,440 |
| | Polypropylene (PP-I) | 36,000 | 0 | 36,000 |
| | Acrylonitrile | 30,000 | 0 | 30,000 |
| | Methyl Acrylates | 2,040 | 0 | 2,040 |
| | Ethyl Acrylates | 3,000 | 0 | 3,000 |
| | Butyl Acrylates | 4,008 | 0 | 4,008 |
| C4 Derivatives | Butadiene (GOP Plant) | 54,000 | 24,000 | 78,000 |
| | Poly-Butadiene Rubber (PBR-I) | 20,040 | 27,120 | 47,160 |
| | Poly-Butadiene Rubber (PBR-II) | 49,992 | 13,608 | 63,600 |
| C6+ Derivatives | Benzene | 55,020 | 31,860 | 86,880 |
| | Toluene (New Product) | 0 | 27,000 | 27,000 |
| | Normal Paraffin (New Product) | 0 | 60,000 | 60,000 |
| | Linear Alkyl Benzene | 43,500 | 39,540 | 83,040 |
| Mono-component Acrylic fibre | Acrylic Fiber (AF) | 12,000 | 0 | 12,000 |
| | Dry Spun Acrylic Fiber (DSAF) | 12,000 | 0 | 12,000 |
| Carbon fibre | Carbon Fibre (CF) | 12 | 0 | 12 |
| PR | Petroleum Resin | 5,004 | 0 | 5,004 |
| Utilities | Steam | 620 TPH | 96 TPH | 716 TPH |
| | Steam * | 0 | 500 TPH | 500 TPH |
| | Power | 81 MW | 14 MW | 95 MW |

| | | | | |
|---|---|---|---|---|
| GOP | Carbon Black Feed Stock (CBFS) | 19,020 | 16,980 | 36,000 |
| | Mix C4 | 1,27,020 | 0 | 1,27,020 |
| | Pyrolysis Gasoline (PGH) | 2,20,020 | 0 | 2,20,020 |
| C2 Derivatives including Vinyls | Di Ethylene Glycol (DEG) (New Product) | 0 | 1,620 | 1,620 |
| | Tri Ethylene Glycol (TEG) (New Product) | 0 | 180 | 180 |
| | Poly Ethylene Glycol (PEG) (New Product) | 0 | 1,800 | 1,800 |
| | HCL (New Product) | 0 | 17,004 | 17,004 |
| C4 Derivatives | C4 Raffinate | 73,020 | 0 | 73,020 |
| C6+ Derivatives | Heavy Normal Paraffin (HNP) (New Product) | 0 | 8,400 | 8,400 |
| | Light Normal Paraffin (LNP) (New Product) | 0 | 2,400 | 2,400 |
| | Heavy alkylates (New Product) | 0 | 4,800 | 4,800 |
| | Naphtha Return Stream (NRS) | 1,65,000 | 0 | 1,65,000 |
| | Heavy Aromatics (New Product) | 0 | 54,000 | 54,000 |

Existing land area is 35,00,000 $m^2$ (350 Ha), no additional land will be required for proposed expansion. Industry has already developed greenbelt in an area of 10,50,000 $m^2$ (105 Ha) out of total plot area and the same will be maintained & increased upto 40% as per requirement. The estimated project cost is ~Rs 2,270 Crores. Total capital cost earmarked towards environmental pollution control measures is ~ Rs. 47 Crores and the Recurring cost will be about ~ Rs. 7.6 Crores per annum. The existing employment at VMD is ~ 3550 (direct & indirect) persons & the same will be utilized for the proposed project as well. Industry proposes to allocate ~ Rs 68.3 Crores @ 2 times of the slab given in OM dtd. 01.05.2018 towards Corporate Environment Responsibility in 5 years.

PP has reported that there are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site. Mahi River is flowing at a distance of 3 km in west direction.

Ambient air quality monitoring was carried out at 12 locations during December, 2016 to February, 2017 and the baseline data indicates the ranges of concentrations as: PM10 (36-99 µg/$m^3$), PM2.5 (10-68 µg/$m^3$), $SO_2$ (4.9-18.4 µg/$m^3$) and $NO_2$ (10.2-22.4 µg/$m^3$). The baseline data for surface & ground water quality, Soil quality, Noise quality, Traffic, ecological environment and socioeconomic is collected during the study period and the same is included in the EIA report. AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 1.61 µg/m3, 3.24 µg/m3 and 12.6 µg/m3 with respect to PM10, $SO_2$ and NOx. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Power requirement after expansion will be 95 MW which will be met from existing Captive Power Plant. 5 DG sets are already provided as stand by to be used during any emergencies. No additional DG sets will be installed. Existing unit has 620 TPH Natural Gas/FO fired boiler, debottlenecking to 716 TPH. Additionally, 500 TPH Coal & biofuel fired boiler will be installed. Multi cyclone separator/ bag filter with an adequate stack height will be installed for controlling the particulate emissions within the statutory limit of 115 mg/$Nm^3$ for the proposed boilers.

**Details of Process emissions generation and its management:**

Emissions such as PM, $SO_2$, NOx from the proposed project will be designed to be within the standard stipulated by GPCB. Continuous Emissions Monitoring Systems for the stacks and effluent already installed and will be continued.

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

All hazardous waste will be handled and disposed as per Hazardous and other waste (Management and Transboundary Movement) Rules, 2016.

The compliance status of conditions for existing Environmental Clearances was certified 14.09.2018 by RO, MoEF&CC, Bhopal.

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 Committee has found the additional information submitted by the project proponent to be satisfactory and addressing the issues raised by the Committee. 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 and to compliance of terms and conditions as under, and general terms of conditions at **Annexure**:-

(i). 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.

(ii). The Project Proponent proposed post expansion effluent load is expected to be below 20,000 M3/day.

(iii). The Project Proponent will recycle 50% of the effluent and discharge treated effluent up to maximum 10,000M3/day within next five years.

(iv). Comprehensive water audit to be conducted on annual basis and report to the concerned Regional Office of MEF&CC. Outcome from the report to be implemented for conservation scheme.

(v). Process effluent/any wastewater shall not be allowed to mix with storm water. Storm water drain shall be passed through guard pond.

(vi). Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm, and solvent transfer to be done through pumps.

(vii). Process organic residue and spent carbon, if any, 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.

(viii). Regular VOC monitoring shall be done at vulnerable points.

(ix). The oily sludge shall be subjected to melting pit for oil recovery and the residue shall be bio-remediated. The sludge shall be stored in HDPE lined pit with proper leachate collection system.

(x). Oil catchers/oil traps shall be provided at all possible locations in rain/ storm water drainage system inside the factory premises.

(xi). 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 cleaning etc. to reduce wastewater generation.

(xii). The green belt of 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.

(xiii). 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.

(xiv). The project proponent shall ensure 70% of the employment to the local people, as per the applicable law. The project proponent shall set up a skill development center/provide skill development training to village people.

(xv). A separate Environmental Management Cell (having qualified person with Environmental Science/Environmental

Engineering/specialization in the project area) equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.

(xvi). The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Firefighting system shall be as per the norms.

(xvii). 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. In case of the treated effluent to be utilized for irrigation/gardening, real time monitoring system shall be installed at the ETP outlet.

(xviii). PP to set up occupational health Centre for surveillance of the worker's health within and outside the plant on a regular basis. The health data shall be used in deploying the duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection.

(xix). The National Emission Standards for Petrochemical (Basic & Intermediates) issued by the Ministry vide G.S.R. 820 (E) dated 9th November, 2012 as amended time to time shall be followed.

(xx). Recommendations of mitigation measures from possible accident shall be implemented based on Risk Assessment studies conducted for worst case scenarios using latest techniques.

(xxi). The project proponent shall develop R& D facilities to develop their own technologies for propylene and polypropylene processing.

**31st December, 2020 (Thursday)**

**Agenda No. 27.7**

**Expansion Of Existing Distillery From 120 KLPD To 150 KLPD (Molasses Based Distillery) Along with 8.0 MW Power Cogeneration at Village: Nanglamal, Tehsil: Sadar, District: Meerut, State: Uttar Pradesh of M/s Naglamal Sugar Complex (A Unit Of Mawana Sugar Ltd) - Consideration of Environment Clearance regarding.**

**[IA/UP/IND3/186631/2020, J-11011/317/2020-IA II(I)]**

The Project Proponent and their accredited Consultant M/s. Environmental and Technical Research Centre, Lucknow made a detailed presentation on the salient features of the project through video conferencing and informed that:

The proposal is for environmental clearance to the proposed expansion of existing distillery from 120 KLPD to 150 KLD Molasses based Distillery (Ethanol) along with 8 MW co-generation power plant at Village: Naglamal, Block: Rajpura , Tehsil: Sadar & District: Meerut, (U.P.) by Naglamal Sugar Complex (Distillery Division) under provisions of para 7 (ii) of the EIA Notification, 2006.

The project/activity is covered under category 'A' of item 5 (g) 'Distilleries' of the Schedule to the Environment Impact Assessment Notification, 2006 and requires appraisal at central level by the sectoral EAC in the Ministry.

**The details of products and capacity as under:**

| S. No | Product Details | Existing Quantity | Proposed Quantity | Total Quantity |
|---|---|---|---|---|
| 1 | RS /Ethanol | 120 KLD | 30 KLD | 150 KLPD |
| 2 | Co-Gen Power | - | 8.0 MW | 8.0 MW |

Ministry had issued EC earlier vide letter no. J – 11011/226/2006-IA II(I); dated August 31, 2006 to the existing project Distillery Unit – 120 KLD Molasses based Distillery in favour of M/s. Naglamal Sugar Complex (A Unit of Mawana Sugar Limited). There is no litigation pending against the project.

PP reported that the existing land area is 222672.0 $m^2$, no additional land will be used for proposed expansion. Industry has already developed greenbelt in an area of 33 % i.e., 73400 $m^2$ out of total area of the project. The estimated project cost is Rs 4700 Lakhs for proposed expansion including existing investment of Rs 128.45 Crore. Total capital cost earmarked towards environmental pollution control measures is Rs. 1200 Lakhs and the Recurring cost (operation and maintenance) will be about Rs. 550.0 Lakh per annum after expansion. Total Employment for existing distillery unit 120 persons as direct & 200 persons indirect after expansion. Industry proposes to allocate Rs 35.2 Lakhs towards Corporate Environmental Responsibility against the proposed expansion.

There is no national park, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves and Wildlife Corridors etc. within 10 km distance from the project site. Kali Nadi is flowing at a distance of 5.26 Km in the South West direction.

PP reported that existing total water requirement is 2640 KLD. Total water requirement after expansion will be 3300 KLD of which fresh water requirement will be 600 KLD. Fresh water is being /will be met from ground water. There is no change in fresh water requirement of the project. Effluent of Spent wash 1116 KLD (@ 7.44 KL/KL of product) quantity is being / will be treated through Multi effect evaporators. Concentrated spent wash is being / will be used as fuel in incineration boiler of capacity – 47 TPH for 25 days per month. For rest 6 days, concentrated spent wash is being / will be concentrated upto 30 Brix in

MEE and utilized in bio composting.

Power requirement after expansion will be 3575 KW which will be met from Co-generation power plant of 8.0 MW & State power distribution corporation Limited. Existing unit has 2 DG sets of 1000 KVA & 500 KVA capacity respectively. Stack height 6.5 Meter above roof top has been provided as per CPCB norms.

Existing unit has 47 TPH Slop fired boiler. ESP (Electrostatic Precipitator) with a stack of height of 75m has been installed for controlling the particulate emissions within the statutory limit of 150 mg/$Nm^3$ for the existing boilers.

**Details of Process emissions generation and its management:**

Maximum CO2 generation after expansion will be 97 TPD during the fermentation process will be recovered by CO2 Scrubbers and sold to beverage & packaging industry.

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

| **Particulars** | **Existing Distillery** | **After proposed Expansion** | **Remarks** |
|---|---|---|---|
| Fly ash | 55.26 tonnes/day | 64.44 tonnes/day | Fly ash generated will be converted to granule and utilized as manure. |
| Fermenter Sludge | 15 MT/Day | 15 MT/Day(No Change) | Utilized as manure |
| Used Oil & Grease | Approx.1100 Liters /Annum | Approx.1100 Liters /Annum (No Change) | Hazardous waste will be disposed as per the Hazardous Waste Management Rules 2016. |

The Ministry had issued EC earlier on 30th August, 2006 to the existing plant. In this context certified EC compliance Report has been submitted by Regional Office, MoEFCC, Lucknow vide letter no. IV/ENV/UP/IND-84/206/2006 dated 05.12.2019 and date of site visit was 22.11.2019.

It was informed that the company has now proposed expansion of Molasses based distillery from 120 KLD to 150 KLD by modernization in fermentation technology (Only 25% enhancement) along with co-gen power of 8.0 MW within the existing plant. This is possible through efficiency improvement, modernization of existing fermentation and distillation processes, within existing utilities and resources. The company will utilize minimal resources and manufacture an essential product i.e. Ethanol which is a major contribution to Ethanol Blending Program by GOI

and to supplement the programs for reaching GOI targets of 20% blending till 2022.

For this proposed expansion, the company has not started any modernisation or construction activities till date. For proposed expansion, there will be process improvement in fermentation to achieve higher alcohol concentration and higher efficiency and utilization of better quality of Molasses. Proposed expansion will be done by adding advanced enzyme and yeast. Based on experience in foreign countries and improved varieties of enzymes & strains of yeast, the company will be able to increase the concentration of alcohol from 8% to 10 %. Company will use enzymes which will be supplied by one of the Global leader in enzyme business. Few modifications / modernization in plant and machinery of existing plant will take place. With the help of CPU modernization, industry will be able to reduce the fresh water requirement per KL of alcohol from 5.0 KL/KL to 4.0 KL/KL.

The Committee noted that the instant proposal has been submitted under provisions of para 7 (ii) of the EIA Notification, 2006. The Committee deliberated the compliance status of earlier EC submitted by PP and found in order. There is no major impact envisaged on the environment due to the modernization of the plant.

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 PFR 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 PFR 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 Form 1/PFR report is in compliance of the notification/guidelines/OMs issued by the Ministry for such projects, reflecting the present environmental concerns and the projected scenario for all the environmental components. The compliance of the existing EC conditions found to be satisfactory. 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 as per para 7(ii) of the EIA Notification, 2006 exempting ToR, fresh public hearing and EIA report.

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). Installation of brick manufacturing plant inside plant premises shall be explored for ash management.

(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). 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.

(iv). As proposed, total fresh water requirement shall be 600 cum/day, proposed to be met from ground water source. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard, and renewed from time to time.

(v). The spent wash/other concentrates shall be incinerated.

(vi). $CO_2$ generated from the process shall be bottled/made solid ice and utilized/sold to authorized vendors.

(vii). Occupational health centre for surveillance of the worker's health shall be set up. The health data shall be used in deploying the duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection.

(viii). Training shall be imparted to all employees on safety and health aspects of chemicals handling. Safety and visual reality training shall be provided to employees.

(ix). 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.

(x). Process organic residue and spent carbon, if any, shall be sent to Cement other suitable industries for its incinerations. ETP sludge, process inorganic & evaporation salt shall be disposed of to the TSDF.

(xi). 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.

(xii). The green belt of at least 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department. Records of tree canopy shall be monitored through remote sensing map.

(xiii). 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.

(xiv). There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products, and no parking to be allowed outside on public places.

(xv). Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.

(xvi). 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.

(xvii). A separate Environmental Management Cell (having qualified person with Environmental Science/Environmental Engineering/specialization in the project area) equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.

**Agenda No. 27.8**

**Proposed 200 KLPD Molasses Based Distillery along with 10 MW Co-generation Power Plant by M/s DSCL Sugar Rupapur, Distillery Division (A Unit of DCM Shriram Ltd.) located at Village Munder, Tehsil Sawayajpur, District Hardoi, U.P. - Consideration of Environmental Clearance regarding.**

**[IA/UP/IND2/74061/2018, IA-J-11011/127/2018-IA-II(I)]**

The project proponent and their accredited consultant J.M. EnviroNet Pvt. Ltd. made a detailed presentation on the salient features of the project through Video Conferencing (VC).

During deliberations, the EAC noted the following:

The proposal is for environmental clearance to the project proposed 200 KLPD Molasses Based Distillery along with 10 MW Co-generation Power Plant at Village Munder, Tehsil Sawayajpur, District Hardoi (Uttar Pradesh) by DSCL Sugar - Rupapur, Distillery Division (A Unit of DCM Shriram Ltd.).

**The details of products and capacity as under:**

| S.No. | Units | Capacity | Products |
|---|---|---|---|
| 1. | Molasses based distillery | 200 KLPD | Ethanol / Extra Neutral Alcohol (ENA)/ Rectified Spirit (RS) / Impure alcohol |
| 2. | Co-Generation Power Plant (Slop Fired) | 10 MW | Power & steam |

All Molasses based Distilleries >100 KLPD are listed at S.N. '5(g)' Distilleries 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 the Ministry of Environment, Forest & Climate Change vide letter no. IA-J-11011/127/2018-IA II (I) dated 10th May, 2018. Public Hearing for the proposed project has been conducted by Uttar Pradesh Pollution Control Board on 05th July, 2019. The public hearing was presided over by the Additional District Magistrate. The main issues raised during public hearing are related to Odour problems, water pollution & benefits to local people. There is no litigation pending against the project.

Total land area of 10.89 ha (26.9 acres) is required for the proposed project which is already under the possession of company. Industry will develop greenbelt in an area of 33% i.e.3.6 Hectares out of total area of the project. The estimated project cost is Rs. 225 Crores for proposed project. Total capital cost earmarked towards environmental pollution control measures is Rs. 50 Crores and the Recurring cost (operation and maintenance) will be about Rs. 4.0 Crores per annum. No. of working days will be 365 days/annum. Total Employment during operation phase will be 150 persons (50 permanent and 100 temporary). Industry proposes to allocate Rs. 3.875 Crores i.e. maximum percentage of total project cost as per Office Memorandum dated 1st May, 2018 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. There are 5 water bodies in buffer zone i.e. Siwaijpur Distributary flowing at a distance of 1.5 km in SW direction, Barwan Distributary flowing at a distance of 3.5 km in East direction, Sendha Nadi flowing at a distance of 4.5 km in WSW direction, Deoha or Garra River flowing at a distance of 6.5 km in NE direction & Ram Ganga River flowing at a distance of 6.5 km in WSW direction.

Ambient air quality monitoring was carried out at 8 locations during Summer Season (March to May, 2018) and the baseline data indicates the ranges of concentrations as: PM10 (60.3 to 89.5μg/m3), PM2.5 (27.2 to 47.2μg/m3), SO2 (5.8 to 17.6μg/m3) and NO2 (14.6 to 34.6μg/m3). AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.47μg/m3, 1.33μg/m3, 2.46μg/m3, 2.89μg/m3 with respect to PM2.5, PM10, SO2 and NO2. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total water requirement for the proposed project will be 1102 KLPD (674 KLPD for distillery+ 200 KLPD for pump seals & scrubbers+ 208 KLPD boiler makeup water &20 KLPD for domestic & others) which will be met from Groundwater. Effluent of 2359 KLPD quantity will be treated through Condensate Treatment Plant (Based on Anaerobic, aerobic treatment, filters, UV, UF & RO) of capacity 2800 KLPD.

Total power requirement will be 5.4 MW which will be met from proposed 10 MW co-generation power plant. D.G. Set of 2x1500 KVA capacity will be used as standby during power failure. Stack (8 m height) will be provided as per CPCB norms to the proposed DG sets. The company has proposed 80 TPH boiler which is slope (Conc. spent wash) fired boiler with auxiliary fuel like Bagasse/rice husk/Indian coal. Bag filter with a stack height of 84 meters will be installed for controlling the particulate emissions within the statutory limit for the proposed boiler.

**Details of Process emissions generation and its management:**

| Source | Emissions | Management |
|---|---|---|
| Slop fired Boiler (Co-generation power plant) | Particulate matter& gaseous emission | • Bag filter will be installed.<br>• Adequate stack height (84 m) will be provided.<br>• Necessary temperature profile will be maintained. |
| Fermentation | Carbon dioxide | Carbon dioxide generated will be collected and sold to authorized vendors. |

**Details of Solid waste/ Hazardous waste generation and its management is as follow:**

- Concentrated spent wash (706 TPD) will be burnt as fuel in slop fired boiler (Co-generation power plant).
- Ash (125 TPD) will be given to brick manufactures and used as manure/potash granules given to fertilizer manufacturers.
- Sludge from ETP (0.26 TPD) will be used as manure (given to the farmers for soil amendment).
- Used oil & grease (1.0 TPA) generated from plant machinery/gear boxes as hazardous waste will be sold to the CPCB authorized recyclers.

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 and incremental GLC due to the proposed project are within NAAQ standards. The Committee has also deliberated on the public hearing issues, action plan and CER plan and found to be addressing the issues in the study area and the issues raised during the public hearing. 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 (EC).

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 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.

(ii) 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.

(iii) As proposed, total fresh water requirement shall be 1102 cum/day, proposed to be met from ground water source. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard, and renewed from time to time.

(iv) The spent wash/other concentrates shall be incinerated.

(v) $CO_2$ generated from the process shall be bottled/made solid ice and utilized/sold to authorized vendors.

(vi) Occupational health centre for surveillance of the worker's health shall be set up. The health data shall be used in deploying the duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection.

(vii) Training shall be imparted to all employees on safety and health aspects of chemicals handling. Safety and visual reality training shall be provided to employees.

(viii) 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.

(ix) Process organic residue and spent carbon, if any, shall be sent to Cement other suitable industries for its incinerations. ETP sludge, process inorganic & evaporation salt shall be disposed of to the TSDF.

(x) 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.

(xi) The green belt of at least 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department. Records of tree canopy shall be monitored through remote sensing map.

(xii) 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.

(xiii) There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products, and no parking to be allowed outside on public places.

(xiv) Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.

(xv) 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.

(xvi) A separate Environmental Management Cell (having qualified person with Environmental Science/Environmental Engineering/specialization in the project area) equipped with full-

fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.

**Agenda No. 27.9**

**Expansion of Molasses based Distillery from 120 KLPD to 250 KLPD by Modernization and Enabling usage of Cane juice/ Cane Syrup/ Sugar by M/s Dalmia Chini Mills, Distillery Unit - Jawaharpur (A unit of Dalmia Bharat Sugar and Industries Limited) located at Village Jawaharpur, Tehsil Misrikh, District Sitapur, Uttar Pradesh - Consideration of Environment Clearance regarding.**

**[IA/UP/IND2/187527/2020, J-11011/316/2020-IA II(I)]**

The Project Proponent and their accredited Consultant M/s JM EnviroNet Pvt. Ltd. made a detailed presentation on the salient features of the project through video conferencing and informed that:

The proposal is for environmental clearance to the project under para 7(ii) of EIA Notification, 2006 and subsequent amendments to the project Expansion of Molasses based Distillery from 120 KLPD to 250 KLPD by Modernization and Enabling usage of Cane juice/ Cane Syrup/ Sugar at Village Jawaharpur, Tehsil Misrikh, District Sitapur, Uttar Pradesh by Dalmia Chini Mills, Distillery Unit - Jawaharpur (A unit of Dalmia Bharat Sugar and Industries Limited).

All Molasses based distilleries >100 KLPD are listed at S.N. 5(g) under category "A" of Schedule of Environment Impact Assessment (EIA) Notification dated 14th Sep, 2006 and as amended on 13th June, 2019 and are appraised at Central Level by Expert Appraisal Committee (EAC).

**The details of products and capacity as under:**

| S.No. | Unit | Product | Existing | Proposed Additional | Total after expansion by modernization |
|---|---|---|---|---|---|
| 1. | Distillery | Ethanol/RS/Impure alcohol/ENA | 120 KLPD | 130 KLPD | 250 KLPD |
| 2. | Co-generation power plant | Power | 6.5 MW | - | 6.5 MW |
| *Number of working days – 365 days/ annum* | | | | | |

Ministry had issued EC earlier vide letter no. J-11011/341/2006-IA-II (I) dated 04th December, 2006 and as amended on 23rd December, 2008 to

the existing operational project in favor of Dalmia Chini Mills, Distillery Unit - Jawaharpur (A unit of Dalmia Bharat Sugar and Industries Limited).

PP reported that the existing land area is 20.23 Ha (202300 $m^2$). The proposed expansion will be done within the existing plant premises so no additional land is required. Industry is being/will develop greenbelt in an area of 33% i.e.6.7 ha (67000 $m^2$) out of total area of the project. The estimated project cost is Rs.20.0 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 8.0 Crores (MEE, Upgradation in CPU and recycling units) and the Recurring cost (operation and maintenance) will be about Rs. 10 Lakhs per annum. No. of working days will be 365 days/annum. Total Employment will be 111 persons (Permanent 86 & temporary 25) during operation phase after expansion. Being a Brownfield project, according to the latest OM dated 1st May, 2018 on CER, the budget allocated shall be Rs. 20 Lakhs @1% of total project cost i.e. Rs. 20 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 plant site. River/ waterbody i.e. Saunri Nadi (~7.5 km in South direction), Sarayan River (~8.5 km in ENE direction), Kaimahra Distributary (~1.0 km in SE), Arthana Distributary (~2.0 km in West), Ramkot Distributary (~4.5 km in NNE), Sitapur Branch (~5.5 km in WSW), Machhrehta Distributary (~6.5 km in ESE), Behat Distributary (~7.0 km in SE), Islamnagar Distributary (~7.0 km in WNW), Pirai Nala (~9.0 km in NE) are flowing within 10 km radius.

PP reported that total fresh water requirement after expansion will be 1300 KLPD (785 KLPD for distillery+ 250 KLPD for Co-generation power plant + 215 KLPD for Utilities + 50 KLPD for domestic & others) which will be met from ground water. Effluent of 1345 KLPD quantity after expansion will be treated through state of art ETP (Anaerobic, aerobic, Filters, & RO system).

Power requirement after expansion will be 3.0 MW including existing 2.5 MW and will be met from existing 6.5 MW Co-generation Power Plant & D.G. Sets (for emergency). Existing unit has 1 DG set of capacity 1000 KVA which is used as standby during power failure. Stack (Height –8 m) has been provided as per CPCB norms to the existing DG set. No additional DG set is proposed. Existing unit has 50 TPH Concentrated spent wash & bagasse fired boiler. No additional boiler will be installed. Bag filter with a stack height of 84 m is already installed for controlling the particulate emissions within the statutory limit for the existing boiler.

**Details of Process emissions generation and its management:**

- Bag filter with stack of adequate height (84 m) is already installed with the boiler to control the particulate and gaseous emissions as per CPCB guidelines. No new boiler is proposed as the existing will cater to the needs after expansion also.
- CO2 (190 TPD) generated during the fermentation process sold to vendors.

- Online Continuous Emission Monitoring System has been installed with the existing stack and data transmitted to CPCB/SPCB servers.

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

- Concentrated spent wash is being/will be burnt in boiler along with bagasse.
- Ash (20 TPD) is being/will be used as manure due to rich potash content or sold to fertilizer manufacturers.
- ETP Sludge is being/will be dried and given to farmers to be used as soil manure.
- Used oil generated from the plant machinery/ gear boxes as hazardous waste is being/will be sold out to the CPCB authorized recycler.

Certified EC compliance Report has been obtained by Regional Office, MoEFCC, Lucknow vide RO office file no. IV/ENV/UP/IND – 94/264/2008 dated 03rd December, 2020 and site visit was conducted on 29th October, 2020.

The company is manufacturing ethanol and contributing in Ethanol Blending Programme of Government of India. Now, company is proposing expansion of distillery from 120 KLPD to 250 KLPD by modernization and enabling usage of Cane juice/ Cane Syrup/ Sugar. 130 KLPD expansion in distillery will take place within existing premises by utilizing all types of molasses & cane juice. No new boiler is proposed as existing (50 TPH Incineration Boiler) will cater to requirement of additional power and steam. With implementation of this modernization, net reduction in fresh water, steam and power consumption per KL of alcohol is ensured. No increase in pollution load as existing incineration boiler will suffice requirement for treatment of spent wash. There will be significant reduction in transportation / vehicular pollution.

For this proposed expansion, the company has not started any modernisation or construction activities till date. No violation has been done by the company at any point of time. For proposed expansion, utilization of Cane juice/ Cane Syrup/ Sugar and upgradation in existing equipment & machinery is proposed and shall be maintained. As committed, the company will be manufacturing ethanol in the proposed 130 KLPD so that the company would be able to contribute more in to the Ethanol Blending Programme of the Government of India.

The Committee noted that the instant proposal has been submitted under provisions of para 7 (ii) of the EIA Notification, 2006. The Committee deliberated the compliance status of earlier EC submitted by PP and found in order. It was also noted that there is no litigation pending against the project. There is no major impact envisaged on the environment due to the modernization of the plant.

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 PFR 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 PFR 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 Form 1/PFR report is in compliance of the notification/guidelines/OMs issued by the Ministry for such projects, reflecting the present environmental concerns and the projected scenario for all the environmental components. The compliance of the existing EC conditions found to be satisfactory. The EAC also desired undertaking pertaining that the company will produce ethanol with the proposed additional quantity of 130 KLPD in addition to existing 120 KLPD. PP has submitted the undertaking in compliance of above. 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 as per para 7(ii) of the EIA Notification, 2006 exempting ToR, fresh public hearing and EIA report.

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 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.

(ii). 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.

(iii). As proposed, total fresh water requirement shall be 1300 cum/day, proposed to be met from ground water source. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard, and renewed from time to time.

(iv). The spent wash/other concentrates shall be incinerated.

(v). $CO_2$ generated from the process shall be bottled/made solid ice and utilized/sold to authorized vendors.

(vi). Occupational health centre for surveillance of the worker's health shall be set up. The health data shall be used in deploying the duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection.

(vii). Training shall be imparted to all employees on safety and health aspects of chemicals handling. Safety and visual reality training shall be provided to employees.

(viii). 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.

(ix). Process organic residue and spent carbon, if any, shall be sent to Cement other suitable industries for its incinerations. ETP sludge, process inorganic & evaporation salt shall be disposed of to the TSDF.

(x). 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.

(xi). The green belt of at least 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department. Records of tree canopy shall be monitored through remote sensing map.

(xii). 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.

(xiii). There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products, and no parking to be allowed outside on public places.

(xiv). Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.

(xv). 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.

(xvi). A separate Environmental Management Cell (having qualified person with Environmental Science/Environmental Engineering/specialization in the project area) equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.

**Agenda No. 27.10**

**Expansion of Distillery Unit by M/s Shri Sai Priya Sugars limited located at Survey Nos. 144-151 of village Maigur and Sy Nos. 238-239 of village Hipparagi Jamakandi Taluk, Bagalkot District, Karnataka - Consideration of Environmental Clearance reg.**

**[IA/KA/IND2/187847/2020, J-11011/316/2020-IA II(I)]**

The Project Proponent and their accredited consultant M/s Samrakshan made a detailed presentation on the salient features of the project through video conferencing and informed that:

The proposal is for Environmental Clearance to the project for expansion of distillery from 120 KPLD RS/ENA/Ethanol to 300 KLPD Ethanol or 120 KLPD RS/ENA + 150 KLPD Ethanol and Captive Power Plant Expansion from 5MW to 8MW with multi feed stock (C Heavy Molasses/B-Heavy Molasses/Cane Juice syrup) by M/s Shri Sai Priya Sugars Ltd at Sy. Nos. 144, 145, 146, 147, 148, 149, 150, 151 in Maigurand village & Sy. Nos.

238 & 239 of Hipparagi village, Jamakhandi Taluk, Bagalkot District, Karnataka.

**The details of existing and proposed products and capacity as under:**

| Sl No | Products manufactured | Existing production | Proposed expansion | Scenario after expansion |
|---|---|---|---|---|
| 1 | Sugar | 10000 TCD of sugar cane crushing | Nil | 10000 TCD of sugar cane crushing |
| 2 | Co-generation | 65 MW | Nil | 65 MW |
| 3 | Distillery (Any one scenario at a time) | | | |
| 3.1 | Ethanol using C Heavy Molasses | 120 KLPD | 180 KLPD | 300 KLPD |
| 3.2 | Ethanol using B Heavy Molasses/Syrup or juice | 0 | 300 KLPD | 300 KLPD |
| 3.3 | RS/ENA | 120 KLPD | 0 | 120 KLPD |
| 4 | Captive Co-Generation of distillery | 5 MW | 3 MW | 8 MW |

The project/activities are covered under category A of item 5 (g) 'Distilleries' of the Schedule to the Environment Impact Assessment Notification, 2006 and requires appraisal at central level by the sectoral Expert Appraisal Committee (EAC). The proposal has been submitted under the Ministry's EIA Notification, 2006 amendments vide Notification no. S.O. 345(E) dated 17th January 2019 & extension of notification S.O. 750(E)) dated 17th February 2020. Accordingly, the proposal shall be appraised as category 'B2' project.

The ministry had issued EC earlier vide letter No. F.No.J-11011/277/2010-IA II(I) dated 14.02.2015 to the existing project Sugar Complex(Sugar Plant 5000 TCD, Cogeneration plant 30 MW & Molasses based distillery 120 KLPD). PP has also informed that SEIAA had issued EC Vide letter No. SEIAA 6 IND 2015 dated 19.10.2015 for expansion of sugar plant from 5000 TCD to 10000 TCD with 65 MW Cogeneration and installation of Incineration boiler to generate 5 MW power in favour of M/s Shri Sai Priya Sugars Ltd.

The certified compliance report submitted by the Ministry's Regional office at Bangalore vide letter dated 16.11.2020. The Committee noted that

since the instant proposal has submitted under provisions of para 7 (ii) of the EIA Notification, 2006, therefore the Committee deliberated the compliance status of earlier EC submitted by PP and found in order. It was informed that there is no litigation pending against the project.

PP reported that the existing land area is 675419.527 $m^2$ out of which distillery land is 75028.2324 $m^2$ and no additional land will be used for proposed expansion. The proposed activities will be within the existing land area. Industry has already developed greenbelt in an area of 33 % i.e. 2,22,500 $m^2$ out of total area of the project.

The estimated project cost is Rs.308.35 Crores including existing investment Rs.143.25 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs.27.46 Crores. And the recurring cost (operation and maintenance) will be Rs. 1.7 Crores per annum. Total employment will be 90 persons as direct & 20 persons indirect after expansion. Industry proposes to allocate Rs 4.12 Crores @2.5% towards Corporate Social Responsibility.

There are no national parks, wild life sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wild life Corridors etc. within 10 km distance from the project site. River Krishna is flowing at a distance of 3.6 km in North direction.

Baseline ambient air quality monitoring is not carried out since the project is to be appraised as B2 category as per the Notification of MOEF & CC no. 345 (E) dated 17th January 2019. However, ambient air quality monitoring is carried out by the industry as per the conditions of the Consent issued by KSPCB. The monitoring data during February 2020 indicate $PM_{10}$ 73.06µg/$m^3$, $PM_{2.5}$ (27.18 µg/$m^3$), $SO_2$ (7.41 µg/$m^3$) and $NO_X$(16.27µg/$m^3$). AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.771 µg/$m^3$, 0.308 µg/$m^3$ and 0.638 µg/$m^3$ with respect to PM10, $SO_2$ and NOx respectively. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

Total water requirement is 4240 $m^3$/day of which fresh water requirement of 1558 $m^3$/day will be met from River Krishna. The industry has obtained water permission from Irrigation Department, Govt of Karnataka vide Letter No KBJNL/DSA/DB/2017-18 for 4.5 MLD/annum from Krishna river. Effluent of 1885 $m^3$/day spent wash & 2340 $m^3$/day other effluents (condensate, spent lees, cooling tower blow down, lab washings & RO reject) is generated. Spent wash is concentrated in MEE and used as fuel for Incineration Boiler. Condensate is treated in 3 Stage RO process and is used as cooling tower make-up, remaining effluent will be treated in CPU viz., Biological ETP. It will be used for process and 16 m3/day sewage is sent to septic tank and soak pit.

Power requirement after expansion will be 4576 kW or 5720 kVA including existing 2763 kW or 3450 kVA and will be met from Captive power. Existing unit has 2 DG sets of 1250kVA & 625 kVA capacity, additionally no DG Sets are used as standby during power failure. Stack of height 30 m & 8 m AGL is provided as per CPCB norms to the proposed DG sets.

Existing unit has 52 TPH concentrated spent wash & Bagasse/coal (70:30) fired boiler. Additionally, no boiler will be installed. Electrostatic Precipitator and a stack of height of 85 m will be installed for controlling the particulate emissions within the statutory limit of 115 mg/$Nm^3$ for the proposed boilers.

**Details of Process emissions generation and its management:**

CO2 from fermentation will be scrubbed, recovered and bottled.

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

| SI. No. | Details of the Solid waste | Quantity in TPM (existing) | Quantity in TPM (proposed) | Quantity in TPM (after expansion) | Mode of Disposal |
|---|---|---|---|---|---|
| 1 | Sludge (Yeast) | 630 | 62 | 692 | Sold to farmers as manure |
| 2 | Fly Ash | 1485 | 865 | 2350 | Sold to brick manufacturers and to farmers as manure. |
| 3 | Bottom Ash | 165 | 96 | 261 | |

**Hazardous waste Management**

| Waste category | Hazardous waste | Quantity | | | Method of handling |
|---|---|---|---|---|---|
| | | Existing | For proposed expansion | After Expansion | |
| 5.1 | Used Oil | 0.125 KL/A | Nil | 0.125 KL/A | Used oil is reused for lubrication purpose for factory machineries during the season |
| 5.2 | Oil soaked cotton waste | 0.025 MT/A | Nil | 0.025 MT/A | Oil soaked cotton waste is burnt in boilers. |
| 5.2 | Oil filters | 05 Nos | Nil | 05 Nos | |

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 the 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 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 compliance report to be satisfactory, reflecting the present environmental concerns and the projected scenario for all the environmental components. The Committee has found the baseline data and incremental GLC due to the expansion project within NAAQ standards. The Committee has also deliberated on the CER plan and found to be addressing the issues in the study area. The committee directed PP to ensure that waste water generated from Sugar and distillery complex shall be treated and re-used within the plant and no treated or untreated waste water shall be left out from the premises of Sugar and distillery complex. Also ethanol will be used for blending bio-ethanol with petrol under EBP programme for additional proposed capacity. PP has submitted the undertaking in compliance of the above.

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 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 EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.

(ii). 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.

(iii). Total fresh water requirement shall not exceed 1558 $m^3$/day and it will be met from River Krishna. The industry has obtained water permission from Irrigation Department, Govt of Karnataka vide Letter No. KBJNL/DSA/DB/2017-18 for 4.5 MLD/annum from Krishna river.

(iv). As committed by the Project Proponent, the spent wash/other concentrates shall be incinerated.

(v). $CO_2$ generated from the process shall be bottled/made solid ice and utilized/sold to authorized vendors.

(vi). Occupational health centre for surveillance of the worker's health shall be set up. The health data shall be used in deploying the duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection.

(vii). Implementation of outcome of Process safety and risk assessment studies which carried out by using advanced models, and the mitigating measures shall be undertaken/implemented accordingly.

(viii). Training shall be imparted to all employees on safety and health aspects of chemicals handling. Safety and visual reality training shall be provided to employees.

(ix). 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.

(x). Process organic residue and spent carbon, if any, shall be sent to Cement/other suitable industries for its management/incinerations.

(xi). 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.

(xii). The green belt of at least 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department. Records of tree canopy shall be monitored through remote sensing map.

(xiii). 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.

(xiv). Storm water from the roof top shall be channelized through pipes to the storage tank constructed for harvesting of rain water in the premises and harvested water shall be used for various industrial processes in the unit. No recharge shall be permitted within the premises. Process effluent/ any wastewater shall not be allowed to mix with storm water.

(xv). There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products, and no parking to be allowed outside on public places.

(xvi). Project Proponent shall reduce the quantity of effluents generation in the unit and PP shall install the effective wastewater treatment system. Adequate system shall be in place for controlling the odour and mitigation measures to protect the contamination of ground/surface water.

(xvii). Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.

(xviii). 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.

(xix). A separate Environmental Management Cell (having qualified person with Environmental Science/Environmental Engineering/specialization in the project area) equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.

**Agenda No. 27.11**

**Onshore Oil & Gas Exploration, Development and Production for 19 wells (6 wells for exploration and 13 for development) by M/s GSPC Ltd. located at CB-ONN-2000/1 Block in District Ahmedabad, Gujarat - Amendment in Environment Clearance reg.**

**[IA/GJ/IND3/186444/2020, J-11011/96/1014-IA II(I)]**

The proposal is for amendment in the **Environmental Clearance** granted by the Ministry vide letter F.No. J-11011/96/2014-IA II(I) dated 19.12.2017 for the project Onshore Oil & Gas Exploration, Development

and Production for 19 wells (6 wells for exploration and 13 for development) at CB-ONN-2000/1 Block in Ahmedabad district by GSPC Ltd. located at Ahmedabad district, Gujarat in favour of M/s Gujarat State Petroleum Corporation Limited.

The project proponent has requested for amendment in the EC with the details and observations of the committee are as under;

| S.No. | Para of EC issued by MoEF&CC | Details as per the EC | To be revised/read as | Justification/ reasons |
|---|---|---|---|---|
| 1. | Para 3 Final well location – PK1-Dev1 | 22°36'52.7570"N 72°28'29.5672"E | 22°38'21.0705"N 72°28'23.3136"E | The tentative well locations in the EC application were estimated on the basis of reservoir studies and testing during the initial phase. Based on the recent reservoir data and geophysical studies, two of the well locations needs to be shifted to new locations for better production. |
| 2. | Para 3 Final well location – SE#Dev-2 | 23°0'53.77"N 72°26'20.00"E | 23°1'25"N 72°26'17.6"E | The tentative well locations in the EC application were estimated on the basis of reservoir studies and testing during the initial phase. Based on the recent reservoir data and geophysical studies, two of the well locations needs to be shifted to new locations for better production. |

The Expert Appraisal Committee, after detailed deliberations **recommended the** amendments in EC, as proposed by the project proponent, with all other terms and conditions remain unchanged, as below:

(i) Para 3 well location – PK1-Dev1 shall be read as, "22°38'21.0705"N 72°28'23.3136"E."

(ii) Para 3 well location – SE#Dev-2 shall be read as, "23°1'25"N 72°26'17.6"E "

**Agenda No. 27.12**

**Molasses based Distillery (30 KLPD) by M/s DDN SFA Ltd located at Village Havargaon, Tehsil Kallam, District Osmanabad in Maharashtra - Amendment in Environment Clearance reg.**

**[IA/MH/IND3/187226/2020, J-11011/31/2010-IA II(I)]**

The Proposal is for amendment in the Environmental Clearance (EC) granted by the Ministry vide letter J-11011/31/2010-IA II (I) dated 15.10.2020 for the project Molasses based distillery (30KLPD) at village Havargaon, Tehsil kallam, Dist. Osmanabad in Maharashtra in favour of DDN SFA Ltd. Unit 2. (Earlier EC with name of Shambhu Mahadeo Sugar & Allied Industries Ltd).

The project proponent has requested for amendment in the EC with the details and observations of the committee are as under;

| S.No. | Para of EC issued by MoEF&CC | Details as per the EC | To be revised/read as | Justification/ reasons |
|---|---|---|---|---|
| 1. | Page No 1 Para 3 | Spentwash (240 $m^3$/day) will be treated through bio-methanation process and concentrated in multi effect evaporator (MEE) **followed by incineration in incinerator boiler.** Spent lees, MEE condensate and utilities effluent will | Spentwash (240 $m^3$/day) will be treated through bio-methanation process and concentrated in multi effect evaporator (MEE) and shall be **dried to form powder in Dryer (ATFD)**. Spent lees, MEE condensate and utilities effluent will be | The Sugar Factory & Distillery which was earlier owned by "Shambhu Mahadeo Sugar & Allied Industries Ltd." is now taken over by the new management of DDN SFA Ltd., through Bank Auction in Year 2018. The new management has decided to operate the Distillery and wish to participate in National Bio-fuel Policy. Further, it is |

| | | | | |
|---|---|---|---|---|
| | | be treated in effluent treatment plant. (ETP). Treated effluent will be used for cooling tower/boiler blow down make up | treated in effluent treatment plant. (ETP). Treated effluent will be used for cooling tower/boiler blow down make up. | planned to dry spentwash and generate powder for use as manure while making the Project a ZLD Unit. Accordingly, they have planned to adopt and implement drying technology for spentwash treatment instead of Incineration in boiler. |
| 2. | Page No 3 Point (x) | Spent wash shall be treated through bio-methanation process and concentrated in Multi-Effect Evaporator (MEE) **followed by incineration in incinerator boiler.** | Spent wash shall be treated through bio-methanation process and concentrated in Multi-Effect Evaporator (MEE) and shall be **dried to form powder in Dryer (ATFD).** | Same as above |
| 3. | Page No. 3 Under EC Conditions | - | Distillery shall be operated for 330 Days. | No mention of Distillery Operational Days in EC. |

The Expert Appraisal Committee, after detailed deliberations **recommended the** amendments in EC, as proposed by the project proponent, with all other terms and conditions remain unchanged, as below:

(i). Page No 1 Para 3 shall be read as, "Spentwash (240 $m^3$/day) will be treated through bio-methanation process and concentrated in multi effect evaporator (MEE) and shall be **dried to form powder in Dryer (ATFD)**. Spent lees, MEE condensate and utilities effluent will be treated in effluent treatment plant. (ETP). Treated effluent will be used for cooling tower/boiler blow down make up."

(ii). Page No 3 Point (x) shall be read as, "Spent wash shall be treated through bio-methanation process and concentrated in Multi-Effect Evaporator (MEE) and shall be **dried to form powder in Dryer (ATFD)**"

(iii). Page No. 3 under EC Conditions an extra condition would be added and shall be read as, "Distillery shall be operated for 330 Days."

The meeting ended with thanks to the Chair.

***

**ANNEXURE**

## GENERAL CONDITIONS

(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. | Shri R. K. Singh | Member |
| 3. | Ms. Saloni Goel | Member |
| 4. | Shri Ashok Agarwal | Member |
| 5. | Dr. Y.V. Rami Reddy | Member |
| 6. | Shri S.C. Mann | Member |
| 7. | Dr. I. Indrasena Reddy | Member |
| 8. | Dr. T. K. Joshi | Member |
| 9. | Dr. J. S. Sharma | Member |
| 10. | Dr. Uma Kapoor, CGWA | Member |
| 11. | Shri Dinabandhu Gouda, CPCB | Member |
| 12. | Sh. Ashok Kr. Pateshwary, Director, MoEFCC | Member Secretary |
| **MoEFCC** | | |
| 13. | Dr. Mahendra Phulwaria | Scientist 'C' |
| 14. | Sh. Kanaka Teja | Research Assistant |
| 15. | Ms. Meetika Gupta | Research Associate |

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