

File No. IA- J-11011/106/2016-IA-II (I)

Government of India
Ministry of Environment, Forest & Climate Change
Impact Assessment Division

Indira Paryavaran Bhawan, Jal Wing, 3rd Floor, Aliganj, Jor Bagh Road, New Delhi-110 003

Dated:26th August,2021

To,

Shri. Prakash Jathar, COO, M/s Baramati Agro Limited (Unit-1), Shetphalgade village, Indapur taluka, Pune district, Maharashtra-413102.

Sub:

Expansion of sugarcane crushing capacity from 12000 TCD to 18000 TCD and molasses based distillery from 160 KLPD to Multi-feed (B heavy, Cane Juice, Grains) based 300 KLPD distillery unit at Shetphalgade, Tehsil- Indapur, District Pune, Maharashtra, by M/s Baramati Agro Limited (Unit-1)-Consideration of Environment Clearance reg.

Sir.

This has reference to your online proposal No. IA/MH/IND2/197038/2016, dated 26th March, 2021 for environmental clearance to the above mentioned project.

- 2. The Ministry of Environment, Forest and Climate Change has examined the proposal for environmental clearance to the proposed Project Expansion of of sugarcane crushing capacity from 12000 TCD to 18000 TCD and molasses based distillery from 160 KLPD to Multi-feed (B heavy, Cane Juice, Grains) based 300 KLPD distillery unit at Shetphalgade, Tehsil- Indapur, District Pune, Maharashtra by M/s Baramati Agro Limited (Unit-1).
- 3. The project/activities are covered under category A of item 5 (g) 'Distilleries' and 5 (j) Sugar Industry of the Schedule to the EIA, 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, S.O 980(E) dated 2nd March, 2021. Accordingly, the proposal is appraised as category 'B2' project at Central Level by Expert Appraisal Committee (EAC).
- **4.** Ministry had issued EC earlier vide letter No. J-11011/106/2016-IA-II (I) dated 20th March 2017 to the existing project from MoEF & CC, New Delhi for expansion of sugar unit (4500 TCD to 12000 TCD), Cogeneration Power Plant (20

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MW to 70 MW) and Distillery Unit (60 KLPD to 160 KLPD) at post Shetphalgade, Tehsil Indapur, District Pune, Maharashtra in favour of M/s. Baramati Agro Limited.

5. The details of products and capacity are as under: -

| Sr. no. | Description | Unit | Existing Capacity | | Dranasad | | |
|------------|--|------|----------------------|-----------------|----------------------|-------|---|
| | | | As per CTO | As per EC | Proposed Capacity | Total | Remark |
| 1. | Sugarcane crushing capacity | TCD | 9000* | 12000 | 6000 | 18000 | None |
| 2. | Co- generation Power | MW | 30* | 70 | 0 | 70 | None |
| 3. | Distillery Unit | | | | | | |
| a | Rectified Spirit or Extra Neutral Alcohol | KLPD | 160* | 160 | 0 | 160 | Only one product at a time (No Change proposed) |
| b | Ethanol | KLPD | 0 | 0 | 140 | 140 | For Ethanol Blending Programme |

- **6.** Existing land area is 477600 m² & no additional land will be used for proposed expansion. Industry will develop greenbelt in an area of 35.59 % i.e., 170000 m² out of net plot area of the project. The estimated project cost is Rs 544.3013 Crores including existing investment of Rs. 419.3013 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 1100.00 Lakhs and the Recurring cost (operation and maintenance) will be about Rs. 165.00 Lakhs per annum. Total Employment will be 450 persons as direct & 500 to 1000 persons as indirect after expansion. Industry proposes to allocate Rs. 0.9375 crores @ of 0.75 % towards Corporate Environment Responsibility.
- **7.** There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, and Wildlife Corridors etc. within 10 km distance from the project site. Water body Nimbodi Lake is at a distance of 3 Km in North East Direction.
- 8. Ambient air quality monitoring was carried out at nine locations during October 2020 to December 2020 and the baseline data indicates the ranges of concentrations as: PM10 43.65 to 74.68 µg/m3), PM 2.5 (22.05 to 54.36 µg/m3), SO2 (5.12 24.51 µg/m3), NO2 (9.21 28.24 µg/m3) and CO (0.08 to 1.38 mg/m3). AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.05 µg/m3, 0.04 µg/m3, 0.51 µg/m3, and 0.20 µg/m3 with respect to PM10, PM2.5, SOx and NOx respectively. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

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- Total fresh water requirement for the integrated unit shall not exceed 907 MT/D, 713 MT/D, 1044 MT/D and 441 MT/D based on raw material used 'C' molasses + B heavy molasses, 'B' heavy molasses, sugar cane juice and grains respectively. It will be met from Khadakwasla Canal and Ujani Dam. Effluent of quantity 7347 MT/Day (Sugar factory trade effluent- 660 MT/Day, Cogeneration power plant effluent- 237 MT/Day, Excess Condensates 3600 MT/Day, existing 60 KLPD Spent wash 570 MT/Day, 240 KLPD Distillery concentrated spent wash 270 MT/Day, Distillery Condensates and non -process effluent - 1798 MT/Day and domestic effluent of 212 MT/Day). Sugar (660 MT/Day) and Co-generation power plant (237 MT/Day) effluent shall be treated in existing sugar factory ETP based on primary, secondary and tertiary treatment and disposed on land for irrigation. Excess condensates from sugar unit (3600 MT/Day) shall be treated in Sugar Condensates Polishing Unit (CPU) and reused as process water or makeup water for boiler and cooling towers. Existing 60 KLPD Distillery spentwash (570 MT/Day) shall be treated based on biomethanation followed by concentration to 120 MT/Day followed by biocomposting. The condensates 450 MT/Day shall be treated in distillery CPU and recycled back to process and utilities. The effluent generated from 240 KLPD distillery shall be treated based on Concentration and Incineration. The plant will be based on Zero Liquid discharge system.
- 10. Power requirement after expansion will be 23.25 MW including existing 15.21 MW and will be met from own Co- generation power from existing 30 MW & proposed 40 MW TG attached to Bagasse/multi-feed fire boiler. Existing unit has 1 No. of DG sets of 500 kVA capacity, additionally 1*500 KVA DG set is used as standby during power failure. Stack (height 6m) will be provided as per CPCB norms to the proposed DG sets. Existing unit has 1* 40 TPH, 1*110 TPH bagasse fired boiler for sugar and cogeneration power plant and 1*10 TPH and 1*32 TPH Incinerator boiler for distillery unit. Additionally, 1*110 TPH and 1*50 TPH bagasse fired boilers will be installed. Electrostatic Precipitator (ESP) with a stack of height of 75 m will be installed for controlling the particulate emissions within the statutory limit for the proposed boilers.

11. Details of Process emissions generation and its management:

Air pollution control measures

| Sr. No | Boiler details | Fuel | Quantity | Source | Stack Height in Meters | APC Equipment |
|-----------|-------------------|---------|----------------|----------------------|---------------------------------|-----------------------|
| Exis | ting | | | | | |
| Suga | ar Unit | | | | | |
| 1 | 1*110 TPH | Bagasse | 1080 MT/Day | Own sugar unit | 65 | ESP |
| 2 | 1*40 TPH | Bagasse | 418 MT/Day | Own sugar unit | 49 | ESP |
| 3 | DG Set | HSD | 110 Ltr/hr | Open Market | 6 | Acoustic Enclosure |
| Dis | tillery unit | | TEALCH INCHES | | | |

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| 1 | 1*10 TPH | Biogas + Bagasse | Biogas: 32000 m3/Day Bagasse: 48 MT/Day | Anaerobic digester from distillery Own sugar unit | 40 | Wet Scrubber |
|------|------------------------------------|--------------------------------------|--|--|----------|------------------------|
| 2 | 1* 32 TPH Incinerator boiler | Concentrated Spent wash + Coal | CSW: 270 MT/Day Coal: 85 MT/Day | Distillery Spent wash Open market | 70 | ESP |
| 3 | DG Set (500 KVA) | HSD | 110 Ltr/Hr | Open Market | 6 | Acoustic Enclosures |
| Prop | osed | | | | | |
| Sug | ar Unit | | | | | |
| 1 | 1*110 TPH | Bagasse | 1080 MT/Day | Own sugar unit | 75 | ESP |
| 2 | 1*50 TPH | Bagasse | 520 MT/Day | Own sugar unit | 75 | ESP |
| Dis | tillery Unit | | | | | |
| No a | dditional boil | er shall be insta | alled for the | proposed ex | pansion. | |

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

Details of non-hazardous waste generated and its disposal

| Sr. No. | Decemention | Quantity | | | | Mode of | | |
|------------|-----------------------------|----------|-----|-------|------|---|--|--|
| | Description of waste | Existing | | | UOM | collection and disposal | | |
| | Sugar and cogeneration unit | | | | | | | |
| 1 | Fly/ Boiler ash | 18.73 | 20 | 38.73 | MT/D | Sell to brick manufacturers | | |
| 2 | ETP Sludge | 150 | 150 | 300 | MT/A | After drying, it will be sold for brick kiln | | |
| 3 | Press mud | 360 | 360 | 720 | MT/D | Mixed with concentrated spent wash as filler material and treated in composting | | |
| | Distillery uni | t | | | | | | |
| 1 | Incineration boiler ash | 26 | 28 | 54 | MT/D | Sold as potash rich manure to farmers after mixing with press mud | | |

| 2 | Fly/ Boiler ash | 0.6 | | 0.6 | MT/D | Sell to brick manufacturers |
|---|---------------------|------|-----|-----|------|--|
| 3 | Yeast Sludge | | | | | |
| а | C Molasses | 15 | 0 | 15 | | After drying, it will be sold for brick kiln |
| b | B Heavy Molasses | 13 | 11 | 24 | MT/D | |
| С | Cane Juice | 0 | 5 | 5 | | |
| d | Grains | 0 | 10 | 10 | | |
| | Other solid w | aste | | | | |
| 1 | Canteen waste | 1.5 | 1.0 | 2.5 | MT/D | Composting |

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

| Sr. No. | Category | Description of waste | Quantity | Mode of Collection and Disposal |
|------------|----------|----------------------|----------|---|
| 1. | 5.1 | Used Oil | | Shall be collected in Leak Proof Containers and utilized as lubricant for bullock carts |

- **13.** Certified EC compliance report obtained from Regional Officer, MoEF& CC, Nagpur vide File No. EC-5-87/2008/7404 Dated 02.11.2020. Site visit of RO was carried out on 05.10.2020. Partial compliance issued against Specific & general conditions. Industry complied the partial compliance & submitted action plan report to RO, MoEF&CC on 28.11.2020.
- **14.** As per OM dated 16th June, 2021, PP has submitted self-certification in the form of affidavit declaring that the proposed expansion of 140 KLPD will be for manufacturing of fuel ethanol only.
- 15. The proposal was considered by the EAC in its 38th meeting held during 28th -29th July, 2021 in the Ministry, wherein the project proponent and their consultant M/s SD Engineering Services Pvt. Ltd presented the EMP report as per the PFR. The Committee found the EMP report complying with the PFR and recommended the project for grant of environmental clearance.
- 16. 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.



- 17. 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.
- 18. 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.
- 19. Based on the proposal submitted by the project proponent and recommendations of the EAC (Industry-2), Ministry of Environment, Forest and Climate Change hereby accords environmental clearance for proposed expansion of Sugarcane crushing capacity from 12000 TCD to 18000 TCD and molasses based distillery from 160 KLPD to multifeed (B-heavy, cane juice, grains) based 300 KLPD distillery unit located at village Shetphalgade, Taluka- Indapur, District-Pune, Maharashtra by by M/s. Baramati Agro Limited, under the provisions of the EIA Notification, 2006, and the amendments therein, subject to compliance of the terms and conditions as under: -

A. Specific Conditions:

- (i) As per OM dated 16th June, 2021, project falls in category B2 and the proposed additional capacity of 140 KLPD shall be only be used for fuel ethanol manufacturing as per self-certification in form of an affidavit by the Project Proponent. Provided that subsequently if it is found that the ethanol, produced based on the EC granted as per this dispensation, is not being used completely for EBP Programme, or if ethanol is not being produced, or if the said distillery is not fulfilling the requirements based on which the project has been appraised as category B2 project, the EC shall stand cancelled.
- (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) Total fresh water requirement for the integrated unit shall not exceed 907 MT/D, 713 MT/D, 1044 MT/D and 441 MT/D based on raw material used 'C' molasses + B heavy molasses, 'B' heavy molasses, sugar cane juice and grains respectively. It shall be met from Khadakwasla Canal and Ujani Dam. 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.

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Ground water monitoring shall be done regularly and report is to be submitted to concerned authorities regularly. Rainwater storage ponds shall be constructed and utilized within plant activities as committed.

- (v) The spent wash/other concentrates shall be treated by concentration followed by incineration.
- (vi) CO2 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. Firefighting 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 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. Out of the total project area, 20% shall be allotted solely for parking purposes.

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- (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.

B. 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 socioeconomic 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.

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- (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.
- **20.** The Ministry reserves the right to stipulate additional conditions, if found necessary at subsequent stages and the project proponent shall implement all the said conditions in a time bound manner. The Ministry may revoke or suspend the environmental clearance, if implementation of any of the above conditions is not found satisfactory.
- **21.** Concealing factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- **22.** Any appeal against this environmental clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.
- **23.** The above conditions will be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, the Hazardous Waste (Management, Handling and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 read with subsequent amendments therein.

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24. This issues with the approval of the competent authority.

(Ashok Kumar Pateshwary)
Director

Copy to: -

- 1. The Secretary, Department of Environment, Government of Maharashtra, Mumbai 400 032
- 2. Deputy Director General of Forests (C), Ministry of Env., Forest and Climate Change, Integrated Regional Office, Ground Floor, East Wing, New Secretariat Building, Civil Lines, Nagpur- 440001
- 3. The Chairman, Central Pollution Control Board Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, Delhi -32
- 4. The Member Secretary, Maharashtra Pollution Control Board, Kalpataru Point, 3rd and 4th floor, Opp. Cine Planet, Sion Circle, Mumbai 22
- 5. Monitoring Cell, Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi
- 6. The District Collector, Pune District, Maharashtra
- 7. Guard File/Monitoring File/Parivesh portal/Record File

(Ashok Kumar Pateshwary)

Director

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8/26/08/2021