F. No. J-11011/106/2016-IA-II (I) Government of India Ministry of Environment, Forest and Climate Change

(Impact Assessment Division)

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Dated: 20th March, 2017

To.

The Managing Director M/s Baramati Agro Ltd. Post Shetphalgade, Tehsil Indapur, District Pune, Maharashtra

Sub: Expansion of Sugar unit (4500 TCD to 12000 TCD), Cogeneration Power Plant (20 MW to 70 MW) and Distillery Unit (60 KLPD to 160 KLPD) at Post Shetphalgade, Tehsil Indapur, District Pune, Maharashtra by M/s Baramati Agro Ltd. -Environmental Clearance - reg.

Ref: Online Proposal No. IA/MH/IND2/27937/2015 dated 04th October, 2016.

Sir.

This has reference to your online proposal no. IA/MH/IND2/27937/2015 dated 04th October, 2016, along with project documents including Form I, Terms of References, Pre-feasibility Report and EIA/EMP Report with public hearing report regarding the above mentioned project.

The Ministry of Environment, Forest and Climate Change has examined the application. It is noted that the proposal is for Expansion of Sugar unit (4500 TCD to 12000 TCD), Cogeneration Power Plant (20 MW to 70 MW) and Distillery Unit (60 KLPD to 160 KLPD) at Post Shetphalgade, Tehsil Indapur, District Pune, Maharashtra by M/s Baramati Agro Ltd. As informed and as per the documents submitted by the Project Proponent (PP), the units will be established in the same premises of the existing sugar industry. The total plot area for the proposed expansion project is 18 Acres. The total cost of the project is ₹ 460 Crores. 2.5% of the project cost, which is estimated to be ₹ 11.5 crore is earmarked for CSR activities. The raw material, molasses and Bagasse generated from the sugar plant will be utilized in the proposed distillery and power plant, respectively. No Reserve Forest/Protected area/Eco-Sensitive Area/Coral Formation falls within 10 km radius from the project site. The following products will be generated by the company:

S. No.	Product	Production			Working
		Existing	New	Total	days
1	Crystalline Sugar	4500	7500	12000 TCD	180
2	Co-gen power	20	50	70 M W	240
3	Distillery(Ethyl Alcohol)	60	100	160 KLPD	270

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- 3. All molasses based distilleries are listed at Sl. No. 5(g) (i) of Schedule of EIA Notification under Category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).
- 4. The project proposal was considered by the Expert Appraisal Committee (Industry-2) in its 7th meeting held during 27th 28th April, 2016 and recommended Terms of References (TORs) for the Project. The TOR has been issued by Ministry vide letter dated 21st June, 2016.
- 5. The project proposal was again considered by the Expert Appraisal Committee (Industry -2) in its 16th meeting held during 8th 9th December, 2016. The Project Proponent and the accredited consultant M/s Ultra Tech, Thane, gave a detailed presentation on the salient features of the project and proposed environmental protection measures to be undertaken, as per Terms of References (TORs) awarded in the 7th meeting of the EAC held during 27th 28th April, 2016.
- 6. The PP has obtained environmental clearance (EC) for the existing distillery unit (60 KLPD) and Cogeneration Power Plant (20 MW) vide MoEF letter no. J-11011/475/2007 IA II (I) dated 15th April, 2008. Regional Office of MoEF&CC at Bhopal vide letter no. 5-87/2008(ENV)/537 dated 11.06.2015 has submitted the certified copy of the statement of compliance to the environmental conditions prescribed in the existing EC. The EAC has deliberated on the certified compliance report and found it satisfactory.
- 7. Public Hearing for the proposed project has been conducted by the Maharashtra State Pollution Control Board 19.08.2016. The EAC has deliberated upon the issues raised during the public hearing. The concerns were raised regarding water requirement for the unit, raw material from vicinity, employment, ash waste, spent wash disposal, etc. The EAC noted that the issues have satisfactorily been responded by the project proponent and incorporated in the final EIA-EMP report.
- 8. The fresh water requirement is 882 m³/day. It is informed that the PP has obtained permission of Irrigation Department. The source of water is Khadakwasala canal and Ujani Dam. Nearest water source for the plant is canal flowing at a distance of 2 km. Additionally, a pipeline from Ujani Dam is also erected.
- 9. Power requirement of 2500 KW will be met from Electricity Board and own generation. Bagass fired boilers of 2 X 110 TPH & 2 X10 TPH will be installed and connected with ESP & wet scrubber with stack height of 65 m for sugar co-gen and 40m for distillery for dispersion and for proposed boiler as per SPCB consent. The power evacuation line is connected to Bhigwan Sub-Station of 220 kV EHV substation through LILO arrangement at 0.5 km from plant site.
- 10. It is reported that the unit is Zero Liquid Discharge unit. No water is discharged from the site to surrounding area. The sober effluent is given physicochemical treatment and the water is combined with moderate effluent which is treated with equalization, neutralization, aeration, secondary clarifier and tertiary treatment.
- 11. Spent wash generated in proposed project will be used as compost (organic fertilizer). It is also proposed to convert this and use as fuel in the factory. Air pollution control equipment like ESP, wet scrubber, Stack of appropriate height will

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be installed. Solid wastes are proposed to be used as raw material or fuel or as manure. Hazardous waste is only in the form of limited waste oil and can be used after separation either for lubricating the carts or burnt in boiler along with bagasse. Ash will be used for brick-making as well as foe farming.

- 12. The EAC, in its 16th meeting held on 8th 9th December, 2016 has found that the final EIA/EMP report submitted by the PP is adequate. The EAC after detailed deliberations, on the basis of the information and presentation made by the PP, has recommended the project for environmental clearance with certain conditions.
- 13. Based on the proposal and information submitted by the Project Proponent, and considering the recommendation of the Expert Appraisal Committee (Industry-2), the Ministry of Environment, Forest and Climate Change hereby accords Environmental Clearance to the above project under the provisions of EIA Notification dated 14th September 2006, subject to the compliance of the following Specific and General Conditions:

A. Specific Conditions:

- (i) ESP & wet scrubber with stack height of 65 m for sugar co-gen and 40m for distillery for dispersion and for proposed boiler as per SPCB consent to be installed. At no time, the emission levels shall go beyond the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency.
- (ii) Distillery unit shall be based on molasses based only and no grain based distillery unit shall be operated.
- In plant, control measures for checking fugitive emissions from all the (iii) vulnerable sources shall be provided. Fugitive emissions shall be controlled by handling closed storage, closed & conveyance chemicals/materials, multi cyclone separator and water sprinkling system. Dust suppression system including water sprinkling system shall be provided at loading and unloading areas to control dust emissions. Fugitive emissions in the work zone environment, product, raw materials storage area etc. shall be regularly monitored and records shall be maintained. The emissions shall conform to the limits imposed by Maharashtra Pollution Control Board (MPCB).
- (iv) Company shall follow good management practices viz. collection of waste yeast sludge from fermentation section in a closed system and proper disposal, reduced volume of effluent by adopting strategic approaches, closed drains carrying spent wash to the treatment units; minimization of fugitive emissions from anaerobic treatment; proper collection & handling of excess sludge generated from the anaerobic & aerobic treatment units; minimum retention of treated & untreated spent wash in the lagoons; effective composting of the spent wash by controlled effluent spraying through mechanical system to avoid spillages & over application, blending of sludge in correct proportion with press mud; and properly finished compost and green belt development with suitable plantation in and around the treatment units to mitigate odour from the distillery unit.
- (v) Pucca approach road to project site shall be constructed prior to commencing construction activity of the main distillery so as to avoid fugitive emissions.



- (vi) The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB guidelines. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution.
- (vii) The company shall upload the status of compliance of the stipulated environmental clearance conditions, including results of monitored data on its website and shall update the same periodically. It shall simultaneously be sent to the Regional office of MOEF, the respective Zonal office of CPCB and the MPCB. The levels of PM₁₀, PM_{2.5}, SO₂, NOx, CO and HC (Methane) in ambient air shall be monitored and displayed at a convenient location near the main gate of the company and at important public places.
- (viii) Fresh Water need daily shall not exceed 882 m³/day. Permission of Irrigation Department be obtained.
- (ix) Spent wash to be generated will be used as compost (organic fertilizer) as proposed. Treated spent wash will be evaporated in MEE and concentrated spent wash will be bio-composted by mixing with press mud generated from sugar unit to achieve 'Zero' discharge. Evaporator Condensate, spentlees and utilities effluent shall be treated in polishing pond and recycled/reused in process. The storage of spent wash shall not exceed 5 days capacity.
- (x) Automatic/online monitoring system (24 x 7 monitoring devices) for flow measurement and relevant pollutants in the treatment system to be installed. The data to be made available to the respective SPCB and in the Company's website.
- (xi) The Company shall ensure the quantity and marketability of bio-compost produce by distilleries by standard labeling such as 'AGMARK' etc.
- (xii) As proposed, no effluent from distillery shall be discharged outside the premises and Zero discharge shall be adopted. Water consumption shall be reduced by adopting 3 R's (reduce, reuse and recycle) concept in the process.
- (xiii) Process effluent/any wastewater shall not be allowed to mix with storm water. Storm water drain shall be passed through guard pond.
- (xiv) Adequate numbers of ground water quality monitoring stations by providing piezometers around the project area shall be set up. Sampling and trend analysis monitoring must be made on monthly a basis and report submitted to SPCB and this Ministry. The ground water quality monitoring for pH, BOD, COD, Chloride, Sulphate and total dissolved solids shall be monitored. Sampling and trend analysis monitoring must be made on monthly basis and report submitted to the Ministry's Regional Office at Nagpur and MPCB.
- (xv) Baggase storage should be done in such a way that it does not get air borne or fly around due to wind. Fly ash shall be stored separately as per CPCB guidelines so that it shall not adversely affect the air quality, becoming air borne by wind or water regime during rainy season by flowing along with the storm water. Direct exposure of workers to fly ash & dust shall be avoided.
- (xvi) Fly ash shall be stored separately as per CPCB guidelines so that it shall not adversely affect the air quality, becoming air borne by wind or water regime during rainy season by flowing alongwith the storm water. Direct exposure of workers to fly ash & dust shall be avoided. Bagasse ash and coal ash shall be stored separately.
- (xvii) Fire fighting system shall be as per the norms and cover all areas where alcohol is produced, handled and stored. Provision of foam system for fire fighting shall be made to control fire from the alcohol storage tank.
- (xviii) Risk Assessment shall be carried to assess the fire and explosion risk due to storage of alcohol and report submitted to the Ministry and its Regional Office at Nagpur within six months.

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(xix) Occupational health surveillance programme shall be undertaken as regular exercise for all the employees. The first aid facilities in the occupational health centre shall be strengthened and the regular medical test records of each employee shall be maintained separately.

(xx) Dedicated parking facility for loading and unloading of materials shall be provided in the factory premises. Unit shall develop and implement good traffic management system for their incoming and outgoing vehicles to avoid

congestion on the public road.

(xxi) As proposed, green belt over 33 % of the total project area should be developed within plant premises with at least 10 meter wide green belt on all sides along the periphery of the project area, in downward direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the DFO.

(xxii) All the commitments made during the Public Hearing/Public Consultation meeting held on 19.08.2016 should be satisfactorily implemented and

adequate budget provision should be made accordingly.

(xxiii) At least 5 % of the total cost of the project shall be earmarked towards the Enterprise Social Commitment (ESC) based on local needs and action plan with financial and physical breakup/details shall be prepared and submitted to the Ministry's Regional Office at Nagpur. Implementation of such program shall be ensured accordingly in a time bound manner.

(xxiv) A regular environment manager having post graduate qualification in environmental sciences/environmental engineering to be appointed for looking

after the environmental management activities of the proposed plant.

(xxv) The Company shall submit within three months their policy towards Corporate Environment Responsibility which shall inter-alia address (i) Standard operating process/procedure to being into focus any infringement/deviation/violation of environmental or forest norms/conditions, (ii) Hierarchical system or Administrative order of the Company to deal with environmental issues and ensuring compliance to the environmental clearance conditions and (iii) System of reporting of non compliance/violation environmental norms to the Board of Directors of the company and/or stakeholders or shareholders.

(xxvi) Physical infrastructure and drinking water availability for the nearby villages may be improved under CSR plan.

(xxvii) Provision shall be made for the housing for the construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structure to be removed after the completion of the project. All the construction wastes shall be managed so that there is no impact on the surrounding environment.

(xxviii) Zero Liquid Discharge shall be ensured.

B. General Conditions:

i. The project authorities must strictly adhere to the stipulations made by the Maharashtra Pollution Control Board, State Government and any other

statutory authority.

ii. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forest and Climate Change. In case of deviations or alterations in the project proposal from those submitted to this Ministry for clearance, a fresh reference shall be made to the Ministry to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.

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- iii. The locations of ambient air quality monitoring stations shall be decided in consultation with the State Pollution Control Board (SPCB) and it shall be ensured that at least one stations is installed in the upwind and downwind direction as well as where maximum ground level concentrations are anticipated.
- iv. The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 shall be followed.
- v. The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under Environment (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).
- vi. The Company shall harvest rainwater from the roof tops of the buildings and storm water drains to recharge the ground water and use the same water for the process activities of the project to conserve fresh water.
- vii. Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre-employment and routine periodical medical examinations for all employees shall be undertaken on regular basis. Training to all employees on handling of chemicals shall be imparted.
- viii. The company shall also 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.
- ix. The company shall undertake all relevant measures for improving the socioeconomic conditions of the surrounding area. CSR activities shall be undertaken by involving local villages and administration.
- x. The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment.
- xi. A separate Environmental Management Cell equipped with full fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.
- xii. 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.
- xiii. 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.
- xiv. 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.
- xv. 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,

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- 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.
- xvi. The project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB/Committee and may also be seen at Website of the Ministry at http://moef.nic.in. This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the concerned Regional Office of the Ministry.
- xvii. 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.
- 14. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- 15. The Ministry reserves the right to stipulate additional conditions, if found necessary. The company in a time bound manner will implement these conditions.
- 16. The above conditions will be enforced, inter alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous Waste (Management, Handling and Trans-boundary Movement) Rules, 2008 and the Public Liability Insurance Act, 1991 along with their amendments and rules.

(Yogendra Pal Singh) Scientist 'D'

Copy to:-

- The Secretary, Environment Department, Government of Maharashtra, 15th Floor, New Administrative Building, Mantralaya, Mumbai - 400 032.
- 2. The Additional Principal Chief Conservator of Forests (C), Ministry of Environment, Forest and Climate Change, Regional Office(WCZ), Ground Floor, East Wing, New Secretariat Building, Civil Line, Nagpur 440001.
- 3. The Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex East Arjun Nagar, Delhi 110 032.
- 4. The Chairman, Maharashtra Pollution Control Board, Kalpataru Point, 3rd and 4th floor, Opp. Cine Planet, Sion Circle, Mumbai 400 022.
- 5. Monitoring Cell, Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhavan, Jor Bagh, New Delhi 110 003.
- 6. Guard File/Monitoring File/Website/Record File.

(Yogendra Pal Singh) Scientist 'D'

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