

F. No.J-11011/305/2016- IAI (I)
Government of India
Ministry of Environment, Forest and Climate Change
(IA-II Division)

Indira Paryavaran Bhawan
Jor Bagh Road, N Delhi - 3
Dated: 15th November, 2018

To,
✓ **M/s Kunjir Bioenergy India LLP,**
Village Mirwadi, Post Dahitane,
Taluka Daund,
District Pune (Maharashtra)

Sub: Setting up 60 KLPD Sugarcane Juice and Molasses Based Distillery by M/s Kunjir Bioenergy India LLP at Village Mirwadi, Post Dahitane, Taluka Daund, District Pune (Maharashtra) - Environmental Clearance - reg.

Ref: Online proposal No. IA/MH/IND2/75943/2016 dated 7th August, 2018.

Sir,

This has reference to your online proposal No. IA/MH/IND2/75943/2016 dated 7th August, 2018 for environmental clearance to the above project, along with the documents including Form-1, Terms of Reference (ToR), EIA/EMP report containing public hearing proceedings/details.

2. The Ministry of Environment, Forest and Climate Change has considered the proposal for environmental clearance to the project for setting up 60 KLPD Sugarcane Juice and Molasses Based Distillery (Rectified Spirit/Absolute Alcohol/Extra Neutral Alcohol) by M/s Kunjir Bioenergy India LLP in an area of 45 acres at Sy. No.47/1, 47/2, 48, 49, 50, 51, 52 & 53, Village Mirwadi, Post Dahitane, Taluka Daund, District Pune (Maharashtra).

3. Total land area is 45 acres. It is proposed to develop greenbelt in an area of 17.78 acres, covering 39.41% of the total project area. The total project cost is Rs.69.3576 Crore. Total capital cost earmarked towards environmental pollution control measures is Rs.1115.00 Lakhs and the recurring cost (operation and maintenance) will be about Rs.53.8 per annum.

4. There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc within 10 km of the project site. Mula Mutha River is flowing at 1.80 km in the South and Bhima River at 7.25 km in North.

5. Total water requirement is estimated to be 1125 cum/day, including fresh water requirement of 485 cum/day proposed to be met from Mula-Mutha River.

Raw spent wash shall be concentrated in Multi Effect Evaporator, and the concentrated spent wash of 185 TPD shall be sent for incineration in slop fired boiler. Spent lees will be recycled in the process. Process condensate will be treated in Condensate Polishing unit. Cooling tower and boiler blow down water will be used for green belt to reduce the fresh water requirement. There will be no discharge of treated/untreated waste water from the unit, and thus ensuring Zero Liquid Discharge.

Sd/-

Power requirement will be 1980 kWh proposed to be met from in-house generation. Coal and concentrated spent wash fired boiler of 22.5 TPH will be installed. ESP with a stack height of 58 m will be installed with the boiler to control particulate emissions within the statutory limit of 150 mg/Nm³.

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

S. No.	Solid Waste	Quantity	Disposal
1	Yeast sludge	9.6 TPD	Used as a manure
2	Ash	Coal ash: 22.4 TPD Spent wash ash: 24.3 TPD	Spent wash ash is potash rich ash and can be use directly use as manure. Ash will be store in the ash silos, Coal ash will be separately collected in the ash silos and sent to brick manufacturer
3	Domestic waste	15-20 kg/d	Local waste collection system
4	Oil from DG sets	Negligible	To authorized dealer or mixed with coal and burnt in the boiler
5	Discarded drums and containers	Negligible	Will be sold to authorized Recyclers

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

8. The ToR for the project was granted on 31st January, 2017. Public hearing was conducted by the Maharashtra Pollution Control Board on 1st November, 2017.

9. The proposal was considered by the Expert Appraisal Committee (Industry-2) in its meeting held during 24-26 September, 2018. The project proponent and their accredited consultant M/s SMS Envocare Ltd presented the EIA/EMP report as per the ToR. The Committee found the EIA/EMP report to be satisfactory and complying with the ToR. The Committee has recommended the proposal for grant of environmental clearance.

10. Based on the proposal submitted by the project proponent and recommendations of the EAC (Industry-2), the Ministry of Environment, Forest and Climate change hereby accords environmental clearance to the project for **Setting up 60 KLPD Sugarcane Juice and Molasses Based Distillery (RS/AA/ENA) by M/s Kunjir Bioenergy India LLP** at Sy. No.47/1, 47/2, 48, 49, 50, 51, 52 & 53, Village Mirwadi, Post Dahitane, Taluka Daund, District Pune (Maharashtra), under the provisions of the EIA Notification, 2006, subject to the compliance of terms and conditions as below:-

(a) Consent to Establish/Operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.

(b) As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises.

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- (c) Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.
- (d) Coal shall not be used as fuel in the boiler, instead bio-fuel/briquette/bagasse shall preferred.
- (e) To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.
- (f) Total fresh water requirement shall not exceed 485 cum/day proposed to be met from Mula- Mutha River. Prior permission shall be obtained from the concerned regulatory authority.
- (g) The spent wash shall be taken to multi effect evaporators (MEE) and the concentrated spent wash shall be incinerated in the boiler along with bagasse.
- (h) Number of working/operating days for the distillery shall be 330 days as proposed. However, the same may be increased to round the year subject to zero liquid discharge ensured by the SPCB, while considering the Consent to Operate.
- (i) Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm and the solvent transfer through pumps.
- (j) 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.
- (k) The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.
- (l) The company shall undertake waste minimization measures as below:-
- (i) Metering and control of quantities of active ingredients to minimize waste.
 - (ii) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.
 - (iii) Use of automated filling to minimize spillage.
 - (iv) Use of Close Feed system into batch reactors.
 - (v) Venting equipment through vapour recovery system.
 - (vi) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- (m) 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.
- (n) All the commitments made regarding issues raised during the public hearing/ consultation meeting shall be satisfactorily implemented.
- (o) At least 2% of the total project cost shall be allocated for Corporate Environment Responsibility (CER) and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.

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(p) For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.

(q) 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.

(r) Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.

(s) 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.

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

(u) 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.

(v) CO₂ generated from the process shall be bottled/made solid ice and sold to authorized vendors.

(w) 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.

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

(i) The project authorities must strictly adhere to the stipulations made by the state Pollution Control Board (SPCB), State Government and/ or any other statutory authority.

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

(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 each is installed in the upwind and downwind direction as well as where maximum ground level concentrations are anticipated.

(iv) The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 shall be complied with.



- (v) The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under Environment (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).
- (vi) The Company shall harvest rainwater from the roof tops of the buildings to recharge ground water, and to utilize the same for different industrial operations within the plant.
- (vii) Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre-employment and routine periodical medical examinations for all employees shall be undertaken on regular basis. Training to all employees on handling of chemicals shall be imparted.
- (viii) The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, risk mitigation measures and public hearing shall be implemented.
- (ix) The company shall undertake all measures for improving socio-economic conditions of the surrounding area. CSR activities shall be undertaken by involving local villagers, administration and other stake holders. Also eco-developmental measures shall be undertaken for overall improvement of the environment.
- (x) A separate Environmental Management Cell equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.
- (xi) The company shall earmark sufficient funds towards capital cost and recurring cost per annum to implement the conditions stipulated by the Ministry of Environment, 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.
- (xii) A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, Zila Parishad/ Municipal Corporation, Urban local Body and the local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal.
- (xiii) The project proponent shall also submit six monthly reports on the status of compliance of the stipulated Environmental Clearance conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF&CC, the respective Zonal office of CPCB and SPCB. A copy of Environmental Clearance and six monthly compliance status report shall be posted on the website of the company.
- (xiv) The environmental statement for each financial year ending 31st March in Form-V as is mandated shall be submitted to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental clearance conditions and shall also be sent to the respective Regional offices of MoEF&CC by e-mail.
- (xv) The project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB/Committee and may also be seen at Website of the Ministry at <http://moef.nic.in>. This shall be advertised within seven days from the date of issue of the clearance letter, at least in

two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the concerned Regional office of the Ministry.

11. 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.

12. The above conditions will be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Water Pollution) Act, 1981, the Environment (Protection) Act, 1986, the Hazardous Waste (Management, Handling and Trans-boundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991, read with subsequent amendments therein.


(S. K. Srivastava)
Scientist E

Copy to: -

1. The Principal Secretary, Environment Department, Government of Maharashtra, 15th Floor, New Administrative Building, Mantralaya, **Mumbai** - 32
2. The Additional Principal Chief Conservator of Forests, Ministry of Environment, Forest and Climate Change, Regional Office (WCZ), Ground Floor, East Wing, New Secretariat Building, Civil Lines, **Nagpur** - 1
3. The Member Secretary, Central Pollution Control Board Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, **Delhi** - 32
4. The Member Secretary, Maharashtra Pollution Control Board, Kalpataru Point, 3rd & 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** - 3
6. Guard File/Monitoring File/Record File


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