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F.No. IA-J-11011/195/2018- IA II(I)
Government of India
Ministry of Environment, Forest and Climate Change
(IA-II Section)

Indira Paryavaran Bhawan
Jorbagh Road, New Delhi - 3

Dated: 18th November, 2019

To

M/s Orange Distillery and Beverage Pvt Ltd
E-50, Panki Mandir Road
Panki, Kanpur Nagar (UP) – 208 020

Sub: Setting up molasses/grain based distillery of capacity 120 KLD at Khasra Nos. 490, 491, 496, 497, 531, 533, Village Fatehpur Roshnai, Tehsil Akbarpur, District Kanpur Dehat (UP) by M/s Orange Distillery and Beverage Pvt Ltd - Environmental Clearance - reg.

Sir,

This has reference to your proposal No. IA/UP/IND2/75365/2018 dated 27th June 2019, submitting the EIA/EMP report on the above subject matter.

2. The Ministry of Environment, Forest and Climate Change has examined the proposal for environmental clearance to the project for setting up molasses/grain based distillery (ENA/AA) of capacity 120 KLD by M/s Orange Distillery and Beverage Pvt Ltd in an area of 47298 sqm located at Khasra Nos. 490, 491, 496, 497, 531, 533, Village Fatehpur Roshnai, Tehsil Akbarpur, District Kanpur Dehat (Uttar Pradesh). The project also involves installation of 4 MW Co Generation Power Plant.
3. The land area available for the project is 47298 sqm. Industry will develop greenbelt in an area of 15608 sqm covering 33% of total project area. The estimated project cost is Rs.170.58 crores. Total capital cost earmarked towards environmental pollution control measures is Rs.34.70 crores and the recurring cost (operation and maintenance) will be about Rs.3.10 crores per annum. The project will provide employment for 135 persons directly & 150 persons indirectly.
4. There are no National parks, Wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km from the project site. Rind river flows at a distance of 2.14 km in east direction.
5. Total water requirement during molasses based operation is estimated to be 2739 cum/day, which includes fresh water requirement of 720 cum/day (6KL/KL of alcohol), proposed to be met from ground water. During grain based operation, total water requirement is estimated to be 2434 cum/day, which includes fresh water requirement of 600 cum/day (5KL/KL of alcohol).

During molasses based operation spent wash of 864 KLD will be treated through Concentration in MEE then concentrate from MEE will be incinerated in Slop fired boiler. During grain based operation, spent wash of 720 KLD will be first centrifuged for solid separation, supernatant will be concentrate in MEE and concentrate from MEE, will be mixed with the Wet cake. Other effluents like MEE condensate, cooling tower and boiler

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blow down, floor washing etc will be treated in laundry. Treated water will be reused for various processes in the plant. There will be no discharge of treated/untreated waste water from the unit, and thus ensuring Zero Liquid Discharge.

Power requirement for establishment of distillery will be 2265 KW. Two number of DG sets of capacity: 1000.0 KVA (01) & 500.0 KVA (01) are used as standby during power failure. Stack (height 6.0 above roof top) will be provided as per CPCB norms to the proposed DG sets.

Slop fired boiler of 35 TPH will be installed along with bag filter and a stack of height of 65 m for controlling the particulate emissions within the statutory limit of 50 mg/Nm³ for the proposed boilers.

Carbon Di Oxide (CO₂) generated from the process would be recovered and sold in the market. Ash generated would be mixed with fermenter sludge and utilized as manure. Fly ash generated will be provided to brick manufacturer. Grain residue will be used in manufacturing cattle feed.

6. The project/activities was 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.

7. Standard Terms of Reference (ToR) for the project was issued on 13th July, 2018. Public hearing for the project has been conducted by the State Pollution Control Board on 25th March, 2019.

8. The proposal was considered by the Expert Appraisal Committee (Industry-2) in its meeting held on 28-29 August 2019 in the Ministry, wherein the project proponent and their accredited consultant M/s Ascenso Enviro Pvt Ltd, presented the EIA/EMP report as per the ToR. The Committee found the EIA/EMP report complying with the ToR and recommended the project for grant of environmental clearance.

9. Based on the proposal submitted by the project proponent and recommendations of the EAC (Industry-2), Ministry of Environment, Forest and Climate change hereby accords environmental clearance to the project for **Setting up molasses/grain based distillery (ENA/AA) of capacity 120 KLD by M/s Orange Distillery and Beverage Pvt Ltd at Khasra Nos. 490, 491, 496, 497, 531, 533, Village Fatehpur Roshnai, Tehsil Akbarpur, District Kanpur Dehat (UP)**, under the provisions of the EIA Notification, 2006, subject to the compliance of terms and conditions as under:-

- (i) Grain unfit for human consumption shall only be used for grain based distillery operations.
- (ii) 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, shall be obtained from the State Pollution Control Board as required.
- (iii) As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises.
- (iv) Concentrated spent wash shall be incinerated and not to be released in open space.



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- (v) Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.
- (vi) To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.
- (vii) Odour shall be prevented at the source and effective odour management scheme shall be implemented.
- (viii) Total fresh water requirement during molasses based operation shall not exceed 720cum/day, and grain based operation shall not exceed 600 cum/day, proposed to be met from ground water. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard.
- (ix) Rainwater harvesting system shall be setup in the unit and the water shall be used for process requirements, to reduce fresh water requirements.
- (x) 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.
- (xi) 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.
- (xii) 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.
- (xiii) 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.
- (xiv) 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.
- (xv) All the commitments made regarding issues raised during the public hearing/consultation meeting shall be satisfactorily implemented.
- (xvi) At least 3% 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. Priority shall be given for construction/repair of the village roads.

- (xvii) 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.
- (xviii) 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.
- (xix) Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- (xx) 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.
- (xxi) Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.
- (xxii) 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 ZLD, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.
- (xxiii) CO₂ generated from the process shall be bottled/made solid ice and sold to authorized vendors.
- (xxiv) Grain shall be tested for micro-toxins in Government laboratory and awareness provided to workers related to grain dust. Regular medical checkup campaign shall be carried out for the same. Mask and gloves shall be provided to the workers.

9.1 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 the Environment (Protection) Act, 1986 and the Rules made thereunder.
- (vi) The Company shall harvest rainwater from the roof tops of the buildings and storm water drains to recharge the ground water and 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. CER 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 Parisad/ 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.

10. 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.

11. 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.

12. The above conditions will be enforced, *inter alia* under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, Air (Prevention & Control of Water Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and rules.


(Dr. R. B. Lal)
Scientist E

Copy to: -

1. The Deputy DGF (C), MoEF&CC Regional Office (CZ), Kendriya Bhawan, 5th Floor, Sector "H", Aliganj, Lucknow (UP) - 20
2. The Secretary, Department of Environment, Government of Uttar Pradesh, 601, Bapu Bhawan, Secretariat, Vidhan Sabha Marg, Lucknow (UP) - 1
3. The Member Secretary, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi - 32
4. The Member Secretary, Uttar Pradesh Pollution Control Board, Building No. TC-12V, Vibhuti Khand, Gomti Nagar, Lucknow - 10
5. The Member Secretary, Central Ground Water Authority, 18/11, Jamnagar House, Mansingh Road, New Delhi - 11
6. The District Collector, District Kanpur Dehat (UP)
7. Guard File/Monitoring File/Website/Record File


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