# State Level Environment Impact Assessment Authority, Uttar Pradesh

## Directorate of Environment, U.P.

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To.

Shri D.S. Bindra, Director, M/s Wave Industries Pvt.Ltd, B-5, Sector-52, Noida, District- G.B. Nagar-244231

Ref. No. 401

./Parya/SEAC/5834-5510/2019

Date: 15 October, 2020

Sub: Environmental Clearance for Establishment of new Molasses / Cane Syrup based Distillery having Capacity: 100 KLD along with 7.0 MW co-gen power at Khasra No.- 108 in village Malasia, 8, 46, 47, 49, 59, 60, 61, 62, 63, 65, 70, 72 in Village-Musallepur, Tehsil - Dhanaura, District- J.P. Nagar, U.P, M/s Wave Industries Pvt. Ltd. Dear Sir,

Please refer to your application/letters 13-02-2020, 19-05-2020, 15-09-2020 & 22-09-2020 addressed to the Chairman/Secretary, State Level Environment Impact Assessment Authority (SEIAA) and Director, Directorate of Environment Govt. of UP on the subject as above. The State Level Expert Appraisal Committee considered the matter in its meetings held on dated 23-09-2020 and SEIAA in its meeting dated 12-10-2020.

A presentation was made by the project proponent along with their consultant M/s Environmental & Technical Research Centre. The proponent, through the documents submitted and the presentation made informed the committee that:-

- The environmental clearance is sought for Establishment of new Molasses / Cane Syrup based Distillery having Capacity: 100 KLD along with 7.0 MW co-gen power at Khasra No.- 108 in village Malasia, 8, 46, 47, 49, 59, 60, 61, 62, 63, 65, 70, 72 in Village-Musallepur, Tehsil - Dhanaura, District- J.P. Nagar, U.P, M/s Wave Industries Pvt. Ltd.
- The terms of reference in the matter were issued by SEIAA, U.P. vide letter no. 167/Parya/SEAC/5510/2018 dated 30/06/2020.
- Public hearing was organized on 20/08/2020. Final EIA report submitted by the project proponent on 15/09/2020.

4 Salient features of the project:

Sr. No.	Attributes	Proposed Distillery Unit	
1	Proposed capacity of Plant	100 KLD (Molasses/Cane Syrup Based)	
2	Co gen Power	7.0 MW	
3	Total project area	17.75 Hectare	
4	Total project cost	Rs. 17891.0 Lakhs	
5	No of working days	365 Days /Annum	
6	Raw material and its Quantity	Molasses /Cane Syrup-465 MT/Day. (214.4 Liters of Alcohol can be obtained 1 ton of molasses.)	
7	Power Requirement	2860 KWH Source – Co Generation Power Plant-7.0 MW	
8	Steam Requirement	28 TPH	
9	Man Power Requirement	Directly Employment : 55 nos. Indirect employment : 100 nos.	
10	Fuel Requirement	SLOP: 300 KLD along with Bagasse: 150 TPD	
11	Boiler Detail	Proposed : 01 no of 45 TPH (Slop fired boiler)	
12	Fresh Water Requirement	Total Fresh Water requirement : 620 KLD Industrial Use: 600 KLD (@ 6.0 KL/KL of Product) Domestic Use: 20 KLD	
13	Waste Water Generation	Spent Wash Generation-700 KLD	
14	Treatment Technology	Spent wash will be concentrate in Multi effect evaporation and then concentration from MEE will be used as fuel in incineration	

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		boiler of capacity 45 TPH along with bagasse/ other biomass.  Other Effluent: Secondary effluent like MEE condensate and blow down, lees will be treated in Secondary ETP and reutilized in process and other use.
15	Air Pollution Control Equipment	Bag Filter along with Stack of height 72 Meters.

5. Land use details:

Sr No	Land use	Area (sqm)	Area in %	
1	Roof Top	30505.0	17.2	
2	Green Belt	60000.0	33.8	
3	Road and Paved	21300.0	12.0	
4	Open area	65695.0	37.0	
	Grand Total	177500	100	

6. Raw material required with daily consumption and transport:

	Particular	Daily Requirements	Source of raw material & Mode of Transportation
1.	Molasses .	465 MT/ day	Adjacent sugar mills/ By road
2.	Others Chemicals Required		
	Sulphuric Acid	800.0 kg/Day	30.0 days storage will be provided and
	Sodium Hydrooxide (Caustic)	1600.0 Kg/Day	raw material will be transported
	Enzymes	6.0 kg/Day	through Tankers.
	NH <sub>2</sub> -CO-NH <sub>3</sub> (Nutrient: 46% N <sub>2</sub> )	340.0 Kg/Day	
	Antifoam Agent	120.0 Kg/Day	

7. Water requirement details:

Particular	Quantity	Remarks
Total Water Requirement	2669.0 KLD	Maximum frash water requirement of
Total treated and process water for recycling	2049.0 KLD	water in day will be 620 KLD.
Fresh Water Requirement	600.0 KLD	
Domestic water requirement	20.0 KLD	
Source of Fresh Water	Treated water from ETP of Sugar.	
Industrial Waste Water Generation (Spent wash)	700.0 KLD.	Spent wash will be concentrated in MEE and concentrated Slop will be used as fuel along with bagasse in 45 TPH boiler.
Domestic Wasta Water Generation	12.0 KLD	Domestic waste water will be disposed through septic tank and Soak pit
Other Effluent Generation	852 KLD	Secondary Effluent Treatment Plant will be constructed for the treatment of other effluent which include MEE condensate, Spent Lease, Floor washing, Reject, Blow downs etc.

8. Solid waste details:

Process Waste			
S. No.	Solid waste	Quantity during Molasses based operation	Method of disposal
1	Fermenter . Sludge	10 MT/Day	Fermenter Sludge recovered from fermenter process will also be used 100 % as manure due to its good nutritive value

Hazardous Waste Generation and Management			
S. No.	Solid waste	Quantity	Method of disposal
1.	Used Oil	1100 Liters / Annum	The used oil will be Sold to the vendors authorised by UPPCB for the treatment of the same.
2.	Chemical Containers	•	Will be sent to TSDF

9. The project proposal falls under category 5 (g) of EIA Notification, 2006 (as amended).

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Based on the recommendations of the State Level Expert Appraisal Committee Meeting (SEAC) held on 23-09-2020 the State Level Environment Impact Assessment Authority (SEIAA) in its Meeting held 12-10-2020 and decided to grant the Environmental Clearance for proposed project along with subject to the effective implementation of the following general & specific conditions:-

### I. Statutory compliance:

- 45 days monitoring report of the area for air quality, water quality, Noise level. Besides flora & fauna should be examined twice a week and be submitted within 60 days for a record.
- The project proponent shall obtain forest clearance under the provisions of Forest (Conservation)
   Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.
- 3. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- 4. The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six monthly compliance report. (in case of the presence of schedule-I species in the study area).
- The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State pollution Control Board/ Committee.
- The project proponent shall obtain authorization under the Hazardous and other Waste Management Rules, 2016 as amended from time to time.
- 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

### II. Air quality monitoring and preservation:

- The project proponent shall install 24x7 continuous emission monitoring system at process stacks to
  monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986
  and connected to SPCB and CPCB online servers and calibrate these system from time to time
  according to equipment supplier specification through labs recognized under Environment (Protection)
  Act, 1986 or NABL accredited laboratories.
- 2. The project proponent shall install system carryout to Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM10 and PM2.s in reference to PM emission, and SO2 and NOx in reference to SQ2 and NOx emissions) within and outside the plant area at least at four locations (one within and three outside the plant area at an angle of 120° each), covering upwind and downwind direct lons. (case to case basis small plants: Manual; Large plants: Continuous).
- The project proponent shall submit monthly summary report of continuous stack emission and air
  quality monitoring and results of manual stack monitoring and manual monitoring of air quality /fugit
  ive emissions to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along
  with six- monthly monitoring report.
- Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points
  including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and
  fugitive emission standards.
- 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.
- Sulphur content should not exceed 0.5% in the coal for use in coal fired boilers to control particulate
  emissions within permissible limits (as applicable). The gaseous emissions shall be dispersed through
  stack of adequate height as per CPCB/SPCB guidelines.
- The DG sets shall be equipped with suitable pollution control devices and the adequate stack height so that the emissions are in conformity with the extant regulations and the guidelines in this regard.
- Storage of raw materials, coal etc shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.

### III. Water quality monitoring and preservation:

- 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 (applicable in case of the projects achieving ZLD) and connected to SRCB and CPCB online servers.
- 2. Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the

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premises (applicable in case of the projects achieving the ZLD).

- Process effluent /any wastewater shall not be allowed to mix with storm water. The storm water from the premises shall be collected and discharged through a separate conveyance system.
- The effluent discharge shall conform to the standards prescribed under the Environment (Protection) Rules, 1986, or as specified by the State Pollution Control Board while granting Consent under the
- Total fresh water requirement shall not exceed the proposed quantity or as specified by the Committee. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this
- Industrial/trade effluent shall be segregated into High COD/TDS and Low COD/TDS effluent streams. High TDS/COD shall be passed through stripper followed by MEE and ATFD (agitated thin film drier). 6. Low TDS effluent stream shall be treated in ETP and then passed through RO system.
- 7. 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.

# IV. Noise monitoring and prevention:

- Acoustic enclosure shall be provided to DG set for controlling the noise pollution.
- 2. 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
- The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.

# V. Energy Conservation measures:

The energy sources for lighting purposes shall preferably be LED based.

- 1. 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.
- 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 company shall undertake waste minimization measures as below :-
  - Metering and control of quantities of active ingredients to minimize waste .
  - Reuse of by-products from the process as raw materials or as raw material substitutes in other processes. ii.
  - Use of automated filling to minimize spillage. iii.
  - Use of Close Feed system into batch reactors.
  - Venting equipment through vapour recovery system.
  - Use of high pressure hoses for equipment clearing to reduce wastewater generation vi.

### VII. Green Belt:

Green belt shall be developed in an area equal to 33% of the plant area with a native tree species in accordance with CPCB guidelines. The greenbelt shall inter alia cover the entire periphery of the plant.

- Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and VIII. Safety, Public hearing and Human health issues: Disaster Management Plan shall be implemented.
  - The PP shall provide Personal Protection Equipment (PPE) as per the norms of Factory Act.
  - Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre-2. 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.
  - Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
  - Occupational health surveillance of the workers shall be done on a regular basis and records
  - 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
  - IX. Corporate Environment Responsibility:

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- The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility.
- 2. The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements /deviation/violation of the environmental / forest /wildli fe norms / conditions. The company shall have defined system of reporting infringements / deviation/ violation of the environmental/ forest / wildlife norms I conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- A separate Environmental Cell both at the project and company head quarter level, with qualified
  personnel shall be set up under the control of senior Executive, who will directly to the head of the
  organization.
- 4. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
- Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

#### X. Miscellaneous:

- If the proposed project is situated in notified area of ground water extraction, where creation of new
  wells for ground water extraction is not allowed, requirement of fresh water shall be met from
  alternate water sources other than ground water or legally valid source and permission from the
  competent authority shall be obtained to use it.
- The project proponent shall ensure that the distillery shall be on ZLD basis with incineration of spent
  wash in slop boiler. As proposed treated waste water should be completely recycled /reused and ZLD
  should be achieved. Under no circumstances treated waste water and effluent shall be discharged to
  any drain/sewer line/ inland surface water/Nala etc.
- Directions/suggestions given during public hearing and commitment made by the project proponent should be strictly complied.
- 4. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
- The copies of the environmental clearance shall be submitted by the project proponents to the Heads
  of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government
  who in turn has to display the same for 30 days from the date of receipt.
- The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- The project proponent shall monitor the criteria pollutants level namely; PM10, SO2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.
- The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- 10. The project proponent 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, commencing the land development work and start of production operation by the project.
- The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- 12. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- 13. No further expansion or modifications in the plant shall be carried out without prior approval of the

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Ministry of Environment, Forests and Climate Change (MoEF&CC).

- Concealing factual data or submission of false /fabricated data may result in revocation of this
  environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- 16. The Ministry reserves the right to stipulate additional conditions if found necessary.
- 17. The Company in a time bound manner shall implement these conditions.
- 18. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- 19. The above conditions shall 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, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.
- Any appeal against this EC 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.

Concealing factual data and information or submission of false/fabricated data and failure to comply with any of the conditions stipulated in the Prior Environmental Clearance attract action under the provision of Environmental (Protection) Act, 1986.

This Environmental Clearance is subject to ownership of the site by the project proponents in confirmation with approved Master Plan for G.B. Nagar. In case of violation; it would not be effective and would automatically be stand cancelled.

The project proponent has to ensure that the proposed site in not a part of any no- development zone as required/prescribed/indentified under law. In case of the violation this permission shall automatically deemed to be cancelled. Also, in the event of any dispute on ownership or land use of the proposed site, this Clearance shall automatically deemed to be cancelled.

The project proponent has to mandatorily submit the compliance of specific conditions no- 1, 3, 4 & 5 given in E.C. letter within 3 months, falling which the Clearance shall automatically deemed to be cancelled.

Further project proponent has to submit the regular 6 monthly compliance report regarding general & specific conditions as specified in the E.C. letter and comply the provision of EIA notification 2006 (as Amended).

These stipulations would be enforced among others under the provisions of Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, the Public Liability (Insurance) Act, 1991 and EIA Notification, 2006 including the amendments and rules made thereafter.

(Ashish Tiwari) Member Secretary, SEIAA

No...../Parya/SEAC/5834-5510/2019

Dated: As above

## Copy with enclosure for Information and necessary action to:

- 1. The Principal Secretary, Department of Environment, Govt. of Uttar Pradesh, Lucknow.
- Advisor, IA Division, Ministry of Environment, Forests & Climate Change, Govt. of India, Indira Paryavaran Bhawan, Jor Bagh Road, Aliganj, New Delhi.
- Additional Director, Regional Office, Ministry of Environment & Forests, (Central Region), Kendriya Bhawan, 5th Floor, Sector-H, Aliganj, Lucknow.
- 4. District Magistrate J.P. Nagar.
- The Member Secretary, U.P. Pollution Control Board, TC-12V, Paryavaran Bhawan, Vibhuti Khand, Gomti Nagar, Lucknow.
- 6. Copy to Web Master/ guard file.

(Ashish Tiwari) Member Secretary, SEIAA