

# State Environment Impact Assessment Authority, M.P.

(Ministry of Environment, Forest and Climate Change, Government of India)

### **Environmental Planning & Coordination Organization**

Paryavaran Parisar, E-5, Arera Colony Bhopal - 462016

> visit us http://www.mpseiaa.nic.in Email: mpseiaa@gmail.com Tel.: 0755 - 2466970, 2466859

Fax: 0755 - 2462136

No.: 1077 /SEIAAV 2]
Date 0/. 6. 21

To, Shri Rishabh Goyal, Director, M/S Mekalsuta Sugars Pvt Limited Village - Ghatwa, Tehsil- Thikri, Barwani, Madhya Pradesh-451660

Sub:- Case No. 8380/2021: Prior Environment Clearance for Proposed Molasses and syrup based Fuel Ethanol Plant at Khasra No. 212, 213, 214/1, 214/2, 216, 217, Village - Ghatwa, Tehsil- Thikri, Barwani, Madhya Pradesh- 451660 Total available Land area – 5,30,000 sq. m. (130 Acre), Proposed Capacity: 45 KLPD on C Molasses / 65 KLPD on B Molasses / 75 KLPD on Cane Juice or Syrup by Rishabh Goyal, Director, M/S Mekalsuta Sugars Pvt Limited Village - Ghatwa, Tehsil- Thikri, Barwani, Madhya Pradesh-451660 Email - mekalsutasugar@gmail.com, Mob- 9424578788 Envt. Consultant: Creative Enviro Services, Bhopal (MP)

Ref: Your online application (SIA/MP/IND2/198536/2021) dtd. 13.02.21 received in SEIAA office on 17.03.2021

With reference to above, the proposal has been appraised as per prescribed procedure & provisions under the EIA notification issued by the Ministry of Environment & Forests vide S.O. 1533 (E), dated 14<sup>th</sup> September 2006 and its amendment, on the basis of the mandatory documents enclosed with the application viz., Form- 2, pre-feasibility report, ppt and additional clarifications furnished in response to the observations by the State Expert Appraisal Committee (SEAC) and State Environment Impact Assessment Authority (SEIAA) constituted by the competent Authority.

- This is case of Prior Environment Clearance for Molasses and Syrup based Fuel Ethanol Plant of 45 KLD on C Molasses / 65 KLPD on B Molasses / 75 KLPD on Cane Juice or Syrup at Village - Ghatwa, Tehsil - Thikri, Dlst. Barwani, (MP).
- ii. The Latitude and Longitude of the project site is as follows:-

22°04'28"N,75°20'42"E to 22°04'39"N,75°20'48" E and 22°04'18"N,75°20'39" E to 22°04'17"N,75°20'28" E  $\,$ 

iii. M/s MSSPL is operating Sugar plant with capacity of 2500 TCD along with 3.0 MW Co-gen power plant at Village- Ghtawa, Tehsil- Thikari & Dist Barwani (MP). Keeping in view of the future requirements of Fuel Ethanol, PP is proposing to set

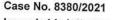
Case No. 8	3380/2021	14	
Issued vid	e letter no	3	dated
Case No.:	To be quoted in r	egistere	ed cases for correspondence



- up a 45 KLD fuel ethanol plant (Molasses based) in same premises. It will employ fermentation, multi pressure distillation system, etc.
- iv. The spent wash will be taken to Bio-methenization Plant from where bio-methanated spent wash (BMSW) will be taken for evaporation and condensate will be treated in PCTP. The concentrate will be taken to ATFD where it will be spent wash will be converted into powder having rich potash value and is ideal for agricultural Purposes.
- v. The existing and proposed detail of the unit are as follows:-

Sr.	Details	Sugar	Co-gen(Captive)	Distillery
1	Status	Existing	Existing	Proposed
2	Location		a. Tehsil- Thikari & Dist F	Panyant (MD)
3	Khasara No	Village- Ghatwa, Tehsil- Thikari & Dist Barwanr (MP) 212,213,214/1,214/2, 216,217		
4	Capacity	2500 TCD	3.0 MW	45 KLPD on C Molasses / 65 KLPD on B Molasses / 75 KLPD on Cane Juice or Syrup
5	Working days	120	160	330
6	Raw material	Sugarcane	Bagasse	Molasses
7	Required quantity of raw material	2500 TCD of sugar cane	585 TPD of Bagasse	C Molasses for 45 KLPD – 189 TPD B Molasses for 65 KLPD – 217 TPD Cane Juice/Syrup for 75 KLPD – 250 TPD
8	Source of Water Supply	Ground Water/ Existing Water Storage Reservoir	Ground Water/ Existing Water Storage Reservoir	River Narmada / Existing Water Storage Reservoir
9	Water Requirement	150 M3/day (only recycled water is used)	125 M3/day ( recycled water )	350-625KLD

- vi. As per EIA Notification dated 14<sup>th</sup> Septmber, 2006 and as amended, the project falls under Category "B", Project or Activity '5(g)' Distilleries (All Molasses based distilleries ≤ 100 KLPD). However as per in the MoEF & CC Notification S.O. 345(E) dated 17th January 2019, a special provision in the EIA Notification,2006 is made, wherein for all applications made for expansion projects of sugar Manufacturing or Distilleries, having Environmental Clearance for present industrial operation and intend to produce ethenol for blending with petrol under EBP program shall be appraised by SEIAA as per the procedure applicable to category B2 projects specified under EIA Notification 2006 7 its amendments.
- vii. There is no National park / Sanctuaries, Eco-sensitive areas (DFO letter dtd09.03.21), critically polluted areas and inter-State boundaries (Tehsildar letter



Issued vide letter no. ..... dated ......

Case No.: To be quoted in registered cases for correspondence



- dtd. 09.03.21) within 05 km of the proposed site, hence, general conditions are not attracted as per EIA Notification 2006.
- viii. The plant is proposed at piece of land i.e. 5,30,000 Sq. Mtr. (130 Acre)in existing premises. Regarding land documents PP has submitted copy of Rin Pustika and registry of land dtd. 02.11.2020.As per the land documents the land ownership is the name of M/S Mekalsuta Sugars Pvt Limited .The land use break-up of the unit is as follows:-

	cisting and proposed unit  Area in Sq Mt		
Particular	Existing Sugar Unit	Proposed Distillery unit	
Built up Area of main plant and machineries	27000	14500	
Road area	5600	36000	
Raw Material storage area	12350	4900	
Fuel Storage Area	10200	7800	
Parking area	13400	Common	
Green Belt	40000	1,80,000	
Total Occupied Land	1,08,500	2,43,400	
Open Land	1,78,100 Sq mtrs		
Total area	5,30,000 Sq. Mtr. (130 Acre)		

- ix. Total start up water requirement is estimated as 765-1045 M3 and after recycling & reuse of 415-480 M3 of water, net fresh water requirement is estimated as 350-625 KLD, which will be sourced through river Narmada. PP has submitted an agreement executed with Water Resource Division Barwani for supply of water.
- x. PP stated that this proposed ethanol unit would be ZLD based with provision of Biomethanization (500KLD), MEE (15m3/hrs.) and ATFD (10m3/hrs.). The spent wash will be taken to Biomethenization Plant from where bio-methanated spent wash (BMSW) will be taken for evaporation and condensate will be treated in PCTP. The concentrate will be taken to ATFD where it will be spent wash will be converted into power having rich potash value. The bio gas generated from biomethanization plant shall be used in the boiler as clean fuel. Condensate Polishing Unit (CPU) will treat spent lees, cooling tower blow down, boiler blow down and process condensate.
- xi. A drain along the boundary wall shall be made, which joins the settling tank to protect the flow of contaminant outside the premises if any. Water harvesting structure shall be constructed. The total harvesting is proposed as 1,90,550 cum/annum.
- xii. The project mainly comprises of installation of all the manufacturing and environment management equipment and necessary infrastructure development required for operating distillery unit.
- xiii. 45 KLPD capacity distillery plant, including incl. Molasses storage & handling, Fermentation, Multi-Pressure Distillation & Ethanol, Integrated & Independent Evaporation for spent wash concentration, Utility Equipment Cooling Towers, Condensate Polishing Unit, Blower, Alcohol Storage & auxiliaries, interface piping,

Case No. 8380/2021

Issued vide letter no. ...... dated ........

Case No.: To be quoted in registered cases for correspondence

Max

electrical & instrumentation, Air compressor, structural work, Erection & Commissioning etc.

xiv. Following will be solid /hazardous waste management practice to be adopted by unit:

Yeast sludge shall be mixed with spent wash and shall be used as manure.

 Hazardous waste i.e. Used oil from DG set, spent resin from DM/Cooling tower and waste carbon from ACF will be given to authorized recyclers/ TSDF, Pithampur.

		Solid Waste Deta	ils	
S.no	Type of waste	Quantity	Disposal	
		From existing sugar &- cogeneration plant	Proposed Distillery	Disposal
1	Yeast Sludge	NA .	0.2 KG/day	Ctil
2	Lime Sludge	0.7 Ton/day	NA NA	Fertilizer
3	WTP Sludge	0.001 MT/day		Fertilizer
4	ETP Sludge	0.6 Ton/day	NA	Fertilizer
5	Ash		-	Fertilizer
0	ASII	Bagasse ash: 10.T/Day	Coal	NA

			Details of Hazardous Waste	
Sr. No.	Description Quantity of Per Year Hazardous Waste		Treatment Disposal	
1	Used Oil	<1000 lit	Stored in HDPE drums and given to re- processor authorized by MPPCB/MoEF&CC	
2	Waste Resin from DM plant	300 Kg	Stored in MS Drums and shall be disposed off at TSDF, Pithampur	
3	Waste activated Carbon	80-100 Kg	Stored in MS Drums and shall be disposed off at TSDF Pithampur	

- xv. To mitigate the impact of pollutants from boiler stack, diesel generator sets, fugitive emission and emission from vehicular traffic during the operational phase of the site, following measures are proposed for implementation:
  - Provision of ESP at stack of boiler to control the emission below 50 mg per cubic meter.
  - Provision of Adequate stack height of 60 mt for boiler and 30 mt for the DG set for better dispersion.
  - Provision of Dust collectors system at various material transfer points.
  - Provision of Online continuous monitoring system for stack of boiler
  - Provision of parking at inside of unit near to main gate with basic facilities.
  - Provision of cover over bagasse conveyors belt along with dust suppression system
  - Regular maintenance and water spraying arrangement over approach road of the unit as well as internal roads
- xvi. PP has proposed the following measures to control the fugitive emission:
  - Provision of earmarking of storage area.
  - Provision of enclosure for points of loading & unloading and transfer operations.

Issued vide letter no. ...... dated ...........

Case No.: To be quoted in registered cases for correspondence

Case No. 8380/2021

Ad

- Provision of regular training to the personnel operating and maintaining fugitive emissions control systems.
- · Provision of pucca road within the plant premises.
- To control the vehicular pollution, control measures will be implemented such as periodical check of Vehicle for its fitness and PUC certificates.
- xvii. Odour generation is expected from molasses storage tank, bad mill sanitation, spent wash and alcohol storage tanks etc. Entire operation of unit is carried out in closed manner. It will control through use of efficient biocides, steaming of fermentation equipment, mill sanitation biocides etc.
- xviii. Total Connected load will be 1390 kW and operating load will be estimated as 720-780 KWH. Power requirement is as follows:-

Power requirement	Operating in KW	Connected inKW
Molasses Handling and Fermentation	220	280
Distillation (Wash to RS)	65	120
Dehydration Plant (MSDH)	30	60
Biomethanation	60	90
Pretreatment+ PCTP + BMSW Evaporation	190	350
Utility (Cooling Tower + IAC)	260	450
Alcohol Storage	25	40
Total Power Load (KW)	850	1390
Estimated Consumed Power (KW) for above scope of sections	720-780 KWH	11

- xix. PP has included disaster management plan, Fire hydrant and fire fighting system shall be provided and on site emergency plan shall be delineated. Storage of fuel Ethanol, molasses and spent wash shall be ensured as per industrial safety norms. Flammable chemical shall be stores away from source of ignition. Electrical wiring of flame proof type will be provided.
- xx. 4.0 ha of the land area has been developed with plantation. For the proposed project PP has proposed 18.0 ha area by planting 36000 numbers of trees along the boundary, road, admin block, near water reservoir, near bio-methanization plant and Parking area.
- xxi. Under CER activities PP has proposed Infrastructure facilities at schools in terms of provision of computers, teachers, facility of safe drinking water, separate toilets for girls and boys, provision of furniture, additional rooms etc. In consultation with district administration in Thikari, Barwani and Nearby Villages and [provision of Infrastructure facility at Aganwadi at Thikari Villages, with Rs. 10 Lakh Budgetary Provision.
- xxii. The total cost of the project is Rs.3287 lakh.

Based on the information submitted at Para i to xxii above and others, the State Level Environment Impact Assessment Authority (SEIAA) considered the case in its 671<sup>st</sup> meeting held on 01.04.2021 and decided to accept the recommendations of 493<sup>rd</sup> SEAC meeting held on dated 23.03.2021.

Hence, Prior Environmental Clearance is accorded under the provisions of EIA notification dtd. 14<sup>th</sup> September 2006 & its amendments to the proposed Molasses and

10

syrup based Fuel Ethanol Plant at Khasra No. 212, 213, 214/1, 214/2, 216, 217, Village - Ghatwa, Tehsil- Thikri, Barwani, Madhya Pradesh- 451660 Total available Land area - 5,30,000 sq. m. (130 Acre), Proposed Capacity: 45 KLPD on C Molasses / 65 KLPD on B Molasses / 75 KLPD on Cane Juice or Syrup by Rishabh Goyal, Director, M/S Mekalsuta Sugars Pvt Limited Village - Ghatwa, Tehsil- Thikri, Barwani, Madhya Pradesh-451660 subject to the compliance of the Standard Conditions and the following additional Specific Conditions as recommended by SEIAA & SEAC in its meetings.

### A. Specific Conditions as recommended by SEIAA

- 1. PP should obtain NOC from Water Resource Division Barwani for supply of water and there should no extraction of ground water.
- 2. PP should ensure to construct a Water harvesting structure with capacity of 1,90,550 cum/annum as proposed.
- PP should obtain certificate for production of ethanol, to be used as fuel for blending only from the competent authority as per MoEF & CC Notification 02.03.2021 and same submit to SEIAA within 06 months.

#### 4. Waste Water Disposal:

- Industry shall install Multi Effective Evaporator (MEE) and adequate ETP for treatment and disposal of effluent. Zero discharge shall be maintained.
- b. The process condensate, boiler blow down, cooling tower blow down, spent lees after cooling should be treated in **condensate polishing unit**.
- c. Spent wash should be stored in MS/SS tank. The storage of spent wash shall not exceed 5 days capacity.
- d. Process effluent/any waste water should not be allowed to mix with storm water. Storm water drain should be passed through guard pond.

#### 5. Solid & hazardous waste :-

- a. PP should obtain authorization from MPPCB regarding hazardous waste disposal. PP should ensure disposal of hazardous waste/ by products regularly through sale or in TSDF site and there should be no dumping of these materials in the premises/outside. PP should also ensure handling, disposal and management of hazardous waste as per the Hazardous waste (Management & Handling) Rules 2000.
- b. Other solid waste generated from the process shall be used as cattle-feed. Industry shall explore the possibility to make it available to the local farmers.

#### 6. Air Pollution Control measures :

- a. PP should provide fogging system for dust suppression.
- PP should ensure installation of DG sets with canopy and the stack height should be as per the MPPCB norms.
- c. PP should install continuous air quality monitoring station in coordination with MPPCB.
- Industry shall install bag-house in boiler to maintain the emission level of particulate matter as per MPPCB/CPCB prescribed norms.
- e. Boiler 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 storm water.
- f. Bagasse ash and coal ash should be stored separately and reuse/recycle properly.



# 7. Noise & Odor Environment & Management

- a. Walls and ceilings of the concerned buildings should be lined with sound absorbing materials.
- b. Noise attenuating devices like ear plugs and ear muffs should be provided to the workers exposed to high noise level.
- c. Vehicles should not be allowed to queue outside the plant on the highway. Vehicle and people flow during shift changes should be regulated by allowing exits in a phased manner.
- d. D.G. Set should be enclosed in a proper acoustic enclosure to reduce the noise emanating from it.
- e. Use of efficient biocides to control bacterial contamination.
- f. Control of temperature during fermentation to avoid in-activation / killing of yeast.
- g. Avoiding storage of fermented wash.
- h. Regular use of bleaching powder in the drains to avoid growth of putrefying microorganisms.
- i. Closed operation of the process to avoid odour nuisance.

### 8. Energy Conservation:

PP should ensure installation of photovoltaic cells (solar energy) for lighting in common areas, LED light fixtures, and other energy efficient plant machineries and equipments.

### 9. Disaster management:

- a. Prepare the onsite & offsite risk / disaster management plan, health and safety management plan and duly approved by the Competent Authority.
- b. 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 firefighting shall be made to control fire from made to control fire from the alcohol storage tank. DMP shall be implemented.

#### 10. Green Area :-

- a. PP should develop 18 ha wide green belt with four rows of trees all along the periphery and prefer to plant 36000 saplings of indigenous species such as Neem, Karanj, Peepal, Gulmohar etc.
- b. The plant species selection should be as per CPCB guidelines for plantation in industrial area.
- c. Every effort should be made to conserve the existing trees in the project area.
- d. Dense plantation shall be taken up in at least 33% of total plot area.
- 11. PP should ensure the implementation of CER activities to the extent of Rs. 10 lakh will be used for Infrastructure facilities at schools in terms of provision of computers facility of safe drinking water, separate toilets for girls and boys, provision of furniture, additional rooms etc. In consultation with district administration in Thikri and Nearby Villages and provision of Infrastructure facility at Aganwadi at Thikri Villages.
- 12. PP should make provision for MS tank for storage of finished product.
- 13. PP should ensure the traffic movement plan, parking facilities and road width.

Case No. 8380/2021 Issued vide letter no. ..... dated ...... Case No.: To be quoted in registered cases for correspondence



- 14. PP should make a Environmental Management Cell under the guidance of MPPCB to maintain the environmental condition of the project.
- 15. Dedicated parking facility for loading and unloading of materials shall be provided in the factory premises. Unit shall develop the implement good traffic management system for their incoming and outgoing vehicles to avoid congestion on the public road.
- 16. PP should ensure to submit half yearly compliance report and CER activity report with photographs of plantation in MP-SEIAA. If PP is failed to upload or submit two consecutive half yearly compliance reports of EC conditions to concerned authority (SEIAA and Regional Office, MoEF&CC,GoI,Bhopal) than prior environmental clearance issued to PP will automatically be treated as cancelled/ revoked as per OM No. 930/SEIAA/2019 dated 30.05.2019 issued by MPSEIAA.

# B. Specific Conditions as recommended by SEAC

I Statutory Compliance

- 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 Madhya Pradesh Pollution Control Board (MPPCB).
- ii. The project proponent shall obtain authorization under the Hazardous and other Waste Management Rules, 2016 as amended from time to time & permission of competent authority if ant tree falling is to be carried out.
- iii. 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

- i. 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 MPPCB 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.
- ii. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognized under Environment (Protection) Act, 1986.
- iii. To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS.
- iv. 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.
- v. DG exhaust will be discharged at height stipulated by CPCB.
- vi. CO2 generated from the process shall be bottled/made solid ice and sold to authorized vendors.



- vii. National Emission Standards for Organic Chemicals Manufacturing Industry issued by the Ministry vide G.S.R. 608(E) dated 21st July, 2010 and amended from time to time shall be followed.
- viii. The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 161h November, 2009 shall be complied with.

# III. Water quality monitoring and preservation

- Total fresh water requirement shall not exceed 350-625 KLD proposed to be met from river water source..
- ii. The spent wash will be taken to Bio-methenization Plant from where bio-methanated spent wash (BMSW) will be taken for evaporation and condensate will be treated in PCTP. The concentrate will be taken to ATFD where spent wash will be converted into powder which will be used a fertilizer
- iii. Number of working/operating days for the distillery shall be 330 days as proposed.
- iv. The project proponent shall provide online continuous monitoring of effluent ( if applicable), the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.
- v. As already committed by the project proponent Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises, for which PP shall provide MEE, Incineration boiler and CPU unit for making system zero discharge
- vi. Adhere to 'Zero Liquid Discharge and No industrial effluent from the unit shall be discharged outside the plant premises. PP should also install Internet Protocol PTZ camera with night vision facility along with minimum 05X zoom and data connectivity must be provided to the MPPCB's server for remote operations.
- vii. The effluent discharge shall conform to the standards prescribed under the Environment (Protection) Rules, 1986, or as specified by the Madhya Pradesh Control Board while granting Consent under the Air/Water Act, whichever is more stringent.
- viii. 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.
- ix. 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.
- Dedicated power supply shall be ensured for uninterrupted operations of treatment systems.

### IV Noise monitoring and prevention

- Acoustic enclosure shall be provided to DG sets for controlling the noise pollution.
- ii. 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.
- iii. 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.
- ii. Possibility of installation of solar power system may be explored.

### VI. Waste management

- 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.
- Hazardous wastes such as used oil, discarded drums, used carbon etc shall be directly sent to CTSDF, Dhar.
- iii. If any Flammable, ignitable, reactive and non-compatible wastes should be stored separately and never should be stored in the same storage shed.
- iv. Automatic smoke, heat detection system should be provided in the sheds. Adequate fire fighting systems should be provided for the storage area.
- v. In order to have appropriate measures to prevent percolation of spills, leaks etc. to the soil and ground water, the storage area should be provided with concrete floor of inert material or steel sheet depending on the characteristics of waste handled and the floor must be structurally sound and chemically compatible with wastes.
- vi. Measures should be taken to prevent entry of runoff into the storage area. The Storage area shall be designed in such a way that the floor level is at least 150 mm above the maximum flood level.
- vii. The storage area floor should be provided with secondary containment such as proper slopes as well as collection pit so as to collect wash water and the leakages/spills etc.
- viii. Recent MSDS of all the chemicals used in the plant be displayed at appropriate places.
- ix. Proper fire fighting arrangements in consultation with the fire department should be provided against fire incident.
- x. All the storage tanks of raw materials/products shall be fitted with appropriate controls to avoid any spillage / leakage. Bund/dyke walls of suitable height shall be provided to the storage tanks. Closed handling system of chemicals shall be provided.
- xi. Log-books shall be maintained for disposal of all types hazardous wastes and shall be submitted with the compliance report.
- xii. 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.

#### VII. Green Belt

i. As proposed 18 hact will be covered with the good green belt and 36000 trees will be planted. The green belt of 5-10 m width will be developed mainly along the periphery and road side. Selection of plant species shall be as per the CPCB guide lines in consultation with the State Forest Department.

Case No. 8380/2021
Issued vide letter no. ...... dated .........
Case No.: To be quoted in registered cases for correspondence



- ii. Peripheral plantation all around the project boundary shall be carried out using tall saplings of minimum 2 meters height of species which are fast growing with thick canopy cover preferably of perennial green nature. PP will also make necessary arrangements for the causality replacement and maintenance of the plants.
- PP shall also develop green belt over community places in consultation with gram Panchayat.

# VIII. Safety, Public hearing and Human health issues

- Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
- ii. 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.
- The PP shall provide Personal Protection Equipment (PPE) as per the norms of Factory Act.
- iv. 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.
- v. 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.
- vi. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- vii. 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. EMP

- i. 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/ wildlife norms/ conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / 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.
- ii. 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.
  - Fund should be exclusively earmarked for the implementation of EMP through a separate bank account.

Case No. 8380/2021

Issued vide letter no. ...... dated .........

Case No.: To be quoted in registered cases for correspondence

Ade

- iv. The proposed EMP cost is Rs. 1908.50 Lakhs as capital and 41.00 Lakhs /year as recurring cost.
- v. 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.
- vi. Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

### X. Miscellaneous

- PP shall be responsible for discrepancy (if any) in the submissions made by the PP to SEAC & SEIAA.
- The project authorities must strictly adhere to the stipulations made by the MP Pollution Control Board and the State Government.
- iii. 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.
- iv. 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
- v. 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.

### Standard Conditions:

 Regular monitoring of influent and effluent, surface, sub-surface and ground water should be ensured and treated waste water should meet the norms prescribed by the MPPCB or described under the Environment (Protection) Act, 1986 whichever are more stringent.

Case No. 8380/2021

Issued vide letter no. ..... dated ......

Case No.: To be quoted in registered cases for correspondence

Jun -

- Project Proponent has to strictly follow the direction/guidelines issued by MoEF, CPCB and other Govt. Agencies from time to time.
- The funds earmarked for environmental protection measures shall be kept in separate account and shall not be diverted for other purpose. Year wise expenditure shall be reported to the MoEF & CC, GoI, and its Regional Office, Bhopal.
- 4. A copy of the environmental clearance shall be submitted by the Project Proponent to the Heads of the Local Bodies (Panchayat and Municipal Bodies), District Collector and DFO as applicable and responsible for controlling the proposed projects who in turn has to display the same for 30 days from the date of receipt.
- 5. The Project Proponent shall advertise at least in two local newspapers widely circulated, one of which shall be in the vernacular language of the locality concerned, within 7 days of the issue of the clearance letter informing that the project has been accorded environmental clearance and a copy of the clearance letter is available with the State Pollution Control Board and also at web site of the MoEF & CC, GoI and State Level Environment Impact Assessment Authority (SEIAA) at www.enviornmentclearance.nic.in & www.mpseiaa.nic.in & and a copy of the same shall be forwarded to the Regional Office, MoEF & CC, GoI, Bhopal.
- Full Cooperation should be extended to the Officers and staff from the Ministry and its Regional Office at Bhopal / the CPCB / the SPCB during monitoring of the project.
- 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.
- The prior Environmental Clearance granted for the project is valid for a period of seven years as per EIA notification dtd. 14.09.2006 & its amendments.
- Any appeal against this prior environmental clearance shall lie with the Green Tribunal, if necessary, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act. 2010.
- 10. The Project Proponent has to upload soft copy of half yearly compliance report of the stipulated prior environmental clearance terms and conditions on 1st June and 1st December of each calendar year on MoEF & CC web portal http://www.environmentclearance.nic.in/ or <a href="http://www.efclearance.nic.in/">http://www.efclearance.nic.in/</a> and submit hard copy of compliance report of the stipulated prior environmental clearance terms and conditions to the Regulatory Authority also
- 11. The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent 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 EC conditions and shall also be sent to the Regional Office of MoEF & CC, Gol.



12. 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.

(Shriman Shukla) Member Secretary

Endt No.

/SEIAA/ 2021

Dated0/. 6.2

Copy to:-

- (1). Principal Secretary, Environment Deptt. 3<sup>rd</sup> Floor, Mantralaya Vallabh Bhawan, Bhopal.
- (2). Secretary, SEAC, Research and Development Wing Madhya Pradesh Pollution Control Board, Paryavaran Parisar, E-5, Arera Colony Bhopal-462016.
- (3). Member Secretary, MP Pollution Control Board, Paryavaran Parisar, E-5, Arera Colony, Bhopal.
- (4). The Collector, District Barwani -M.P.
- (5). Deputy Secretary, Department of Commerce, Industry & Employment, Mantralaya, Bhopal.
- (6). Director, I.A. Division, Monitoring Cell, MoEF, Gol, Ministry of Environment & Forest Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi 110 003
- (7). Director (S), Regional office of the MOEF, (Western Region), Kendriya Paryavaran Bhawan, Link Road No. 3, Ravi Shankar Nagar, Bhopal-462016.

(8). Guard file.

Z

(Alok Nayak) Officer-in-Charge

Case No. 8380/2021

Issued vide letter no. ..... dated ......

Case No.: To be quoted in registered cases for correspondence

2

14 of 14