

F. No. J-11011/396/2014-IA II (I)
Government of India
Ministry of Environment, Forest and Climate Change
(I.A. Division)

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Dated 3rd September, 2015

To

The General Manager
M/s Madhucon Sugar & Powder Industries Ltd.
Rajeswarapuram,
Nelakondapalli Mandal,
Khammam District
Telangana

E-mail: info@madhuconsugars.com

Subject: Molasses/Grain based Distillery (65 KLD) alongwith CPP (24.2 MW) and production of 2.5 MW from spent wash incinerator boiler and expansion existing sugar unit at Village Rajeswarapuram, Mandal Nelakondapalli, District Khammam, Telangana State by M/s Madhucon Sugar and Power Industries – Environmental Clearance reg.

Ref.: Your online proposal no. IA/TG/IND2/27243/2014 dated 5th May, 2015.

Sir,

This has reference to your online proposal dated 5th May, 2015 alongwith project documents including Form I, Terms of References, Pre-feasibility Report and EIA/EMP Report on the above mentioned subject.

2.0 The Ministry of Environment, Forest and Climate Change has examined the application. It is noted that proposal is for setting up of Molasses/Grain based Distillery (65 KLD) alongwith CPP (24.2 MW) and production of 2.5 MW from spent wash incinerator boiler and expansion existing sugar unit at Rajeswarapuram Village, Nelakondapalli Mandal, District Khammam, Telangana State by M/s Madhucon Sugar and Power Industries. It is reported that no national park/sanctuary is located within 10 km distance. Palair Reservoir is located at a distance of 0.72 km. Total available land is 134 acres. Out of which distillery will be installed in the land area of 20 acres. Cost of project is Rs. 114.535 Crore. Out of which, Rs 30 Crore has been earmarked towards capital cost for implementation of EMP. Plant will be operated for 200 working days on molasses and 130 days on grain. Total working days of plant will be 330 days.

3.0 Bagfilter alongwith adequate stack height will be provided to spent wash/coal fired boiler. Fresh water requirement from ground water source/ Palair Canal will be 650 m³/day. Spent wash generation from molasses and grain based distillery will be 520 m³/day and 390 m³/day respectively. Spent wash from molasses based will be evaporated in MEE followed by incineration boiler to achieve zero discharge. Spent wash from grain based distillery will be passed through decanter and concentrated in multi-effect evaporator (MEE). Thick syrup and wet cake will be mixed together to form Distiller's Wet Grains with Soluble (DWGS) to achieve zero discharge. DWGS will be dried to form Distiller's Dry Grains with Soluble (DDGS). Spentlees, MEE condensate and utilities wastewater will be treated in the effluent treatment plant followed by tertiary treatment facility and treated effluent will be recycled/reused for cooling tower make up. No effluent will be discharged outside the factory premises and 'Zero' effluent discharge concept will

be implemented. DDGS will be used as cattle feed and Fly ash will be sent to brick manufacturing unit. Waste/used oil will be sold to authorized recyclers / re-processors.

4.0 Public Hearing / Public Consultation meeting was exempted as para 7 (ii) of EIA Notification, 2006.

5.0 All molasses based distilleries are listed at S.N. 5 (g) (i) under category 'A' and appraised at Central level.

6.0 The proposal was considered by the Expert Appraisal Committee (Industry-2) in its 30th and 42nd meetings held during 22nd – 23rd December, 2014 and 16th-17th June, 2015 respectively. The Committee recommended the proposal for environmental clearance. Project Proponent and the EIA Consultant namely SV Enviro Labs & Consultants, have presented EIA / EMP report as per the TOR. EAC has found the EIA / EMP Report and additional information to be satisfactory and in full consonance with the presented TORs. The Committee recommended the proposal for environmental clearance.

7.0 Based on the information submitted by the project proponent, the Ministry of Environment and Forests hereby accords environmental clearance to above project under the provisions of EIA Notification dated 14th September 2006, subject to the compliance of the following Specific and General Conditions:

A. SPECIFIC CONDITIONS:

- i) Distillery unit shall be based on Molasses/Grain based Distillery (65 KLD) and production of the plant shall not exceed the maximum capacity defined i.e. shall never exceed to 60 KLPD.
- ii) Bagfilter alongwith adequate stack height will be provided to spent wash/coal fired boiler. The stack emissions from various units shall conform to the standards prescribed under the Environment (Protection) Act. At no time, the emission levels shall go beyond the stipulated standards. In the event of failure of pollution control system(s) adopted by the unit, the unit shall be immediately put out of operation and shall not be restarted until the desired efficiency of the pollution control device has been achieved..
- iii) In plant, control measures for checking fugitive emissions from all the vulnerable sources shall be provided. Fugitive emissions shall be controlled by providing closed storage, closed handling & conveyance of chemicals/materials, multi cyclone separator and water sprinkling system. Dust suppression system including water sprinkling system shall be provided at loading and unloading areas to control dust emissions. Fugitive emissions in the work zone environment, product, raw materials storage area etc. shall be regularly monitored and records shall be maintained. The emissions shall conform to the limits prescribed by Karnataka State Pollution Control Board (KSPCB).
- iv) Pucca approach road to project site shall be constructed prior to commencing construction activity of the main distillery so as to avoid fugitive emissions.
- v) The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB guidelines. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution.
- vi) The company shall upload the status of compliance of the stipulated environmental clearance conditions, including results of monitored data on its website and shall update the same periodically. It shall simultaneously be sent to the respective Regional office of MOEF, the respective Zonal office of CPCB and the KSPCB. The levels of PM₁₀, PM_{2.5}, SO₂, NO_x, CO and HC (Methane) in ambient air shall be monitored and

displayed at a convenient location near the main gate of the company and at important public places.

- vii) Total fresh water requirement from ground water source/ Palair Canal shall not exceed 650 m³/day for distillery and cogeneration unit and prior permission for drawl of water shall be obtained from the CGWA/SGWA.
- viii) Spent wash generation from molasses and grain based distillery shall not exceed 8 KI/KI of alcohol produced and 6 KI/KI of alcohol produced respectively. Spent wash from molasses based distillery shall be concentrated in MEE. Concentrate from MEE shall be incinerated in cogeneration boiler to achieve zero discharge. Spent wash from grain based shall be treated through decanter and concentrated in multi-effect evaporator (MEE) to form DWGS. DWGS shall be dried in the dryer to form DDGS. Spentlees, effluent from utilities and cogeneration unit should be treated in effluent treatment plant (ETP) and water quality of treated effluent should meet the norms prescribed by CPCB/SPCB and recycle/ reuse.
- ix) Wastewater generation from the sugar unit shall not exceed 100 litres per tonne of cane crushed. Effluent from sugar unit shall be treated in the effluent treatment plant (ETP). Water quality of treated effluent shall be monitored regularly. In any case, no wastewater/treated effluent shall be discharged into river/natural stream. Domestic effluent shall be treated in treatment plant.
- x) As proposed, no effluent from sugar, distillery and co-generation power plant should be discharged outside the premises and Zero discharge shall be achieved. Water consumption shall be reduced by adopting 3 R's (reduce, reuse and recycle) concept in the process.
- xi) Continuous online (24x7) monitoring system to be installed within treatment plant and data to be uploaded on company's website and same to be provided to respective Regional Office of MEF&CC and SPCB.
- xii) Process effluent/any wastewater shall not be allowed to mix with storm water. Storm water drain shall be passed through guard pond.
- xiii) Spent wash shall be stored in impervious lagoon (RCC) with HDPE lining as per CPCB guidelines and should be kept in proper condition to prevent ground water pollution. Storage capacity of spent wash lagoon should be for 5 days.
- xiv) Adequate numbers of ground water quality monitoring stations by providing piezometers around the project area should be set up. Sampling and trend analysis monitoring must be made on monthly a basis and report submitted to SPCB and this Ministry. The ground water quality monitoring for pH, BOD, COD, Chloride, Sulphate and total dissolved solids should be monitored. Sampling and trend analysis monitoring must be made on monthly basis and report submitted to the Ministry's Regional Office at Bangalore and SPCB.
- xv) Bagasse/biomass storage shall be done in such a way that it does not get air borne or fly around due to wind.
- xvi) Fly ash shall be stored separately as per CPCB guidelines so that it shall not adversely affect the air quality, becoming air borne by wind or water regime during rainy season by flowing alongwith the storm water. Direct exposure of workers to fly ash & dust shall be avoided. Bagasse ash and coal ash shall be stored separately.

- xvii) Fire fighting system shall be as per the norms and cover all areas where alcohol is produced, handled and stored. Provision of foam system for fire fighting shall be made to control fire from the alcohol storage tank.
- xviii) Risk Assessment should be carried to assess the fire and explosion risk due to storage of alcohol and report submitted to the Ministry and its Regional Office at Lucknow within six months.
- xix) Occupational health surveillance programme shall be undertaken as regular exercise for all the employees. The first aid facilities in the occupational health centre shall be strengthened and the regular medical test records of each employee shall be maintained separately.
- xx) Dedicated parking facility for loading and unloading of materials shall be provided in the factory premises. Unit shall develop and implement good traffic management system for their incoming and outgoing vehicles to avoid congestion on the public road.
- xxi) Adequate housekeeping arrangements to be made in sugar as well in distillery unit in the working zone.
- xxii) As proposed, greenbelt shall be developed in 76 acres of total plot area (134.23 acres) to mitigate the effects of fugitive emissions all around the plant as per CPCB guidelines in consultation with the local DFO. Thick green belt with suitable plant species should be developed around the proposed distillery to mitigate the odour problem.
- xxiii) At least 2.5 % of the total cost of the project should be earmarked towards the corporate social responsibility and item-wise details along with time bound action plan should be prepared and submitted to the Ministry's Regional Office at Bangalore. Implementation of such program should be ensured accordingly in a time bound manner.
- xxiv) Provision shall be made for the housing for the construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structure to be removed after the completion of the project. All the construction wastes shall be managed so that there is no impact on the surrounding environment.

B. GENERAL CONDITIONS:

- i. The project authorities must strictly adhere to the stipulations made by the Karnataka State Pollution Control Board (KSPCB), State Government and any other statutory authority.
- ii. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment and Forests. 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 is installed in the upwind and downwind direction as well as where maximum ground level concentrations are anticipated.

- iv. The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 shall be followed.
- v. The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under Environment (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).
- vi. The Company shall harvest rainwater from the roof tops of the buildings and storm water drains to recharge the ground water and use the same water for the process activities of the project to conserve fresh water.
- vii. Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre-employment and routine periodical medical examinations for all employees shall be undertaken on regular basis. Training to all employees on handling of chemicals shall be imparted.
- viii. The company shall also comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, risk mitigation measures and public hearing relating to the project shall be implemented.
- ix. The company shall undertake all relevant measures for improving the socio-economic conditions of the surrounding area. CSR activities shall be undertaken by involving local villages and administration.
- x. The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment.
- xi. A separate Environmental Management Cell equipped with full fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.
- xii. The company shall earmark sufficient funds towards capital cost and recurring cost per annum to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so earmarked for environment management/ pollution control measures shall not be diverted for any other purpose.
- xiii. A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, ZilaParisad/Municipal Corporation, Urban local Body and the local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal.
- xiv. The project proponent shall also submit six monthly reports on the status of compliance of the stipulated Environmental Clearance conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF, the respective Zonal Office of CPCB and KSPCB. A copy of Environmental Clearance and six monthly compliance status report shall be posted on the website of the company.
- xv. The environmental statement for each financial year ending 31st March in Form-V as is mandated shall be submitted to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, 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 by e-mail.

- xvi. The project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB/Committee and may also be seen at Website of the Ministry at <http://moef.nic.in>. This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the concerned Regional Office of the Ministry.
- xvii. The project authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of start of the project.

8.0 The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.


9.0 The Ministry reserves the right to stipulate additional conditions, if found necessary. The company in a time bound manner will implement these conditions.

10.0 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 Waste (Management, Handling and Trans-boundary Movement) Rules, 2008 and the Public Liability Insurance Act, 1991 along with their amendments and rules.


(Lalit Bokolia)
Additional Director

Copy to:-

1. The Secretary, Department of Environment & Ecology, Govt. of Karnataka, Room No. 708, Gate 2, Multi Storied Building, Dr. Ambedkar Veedhi, Bangalore - 560 001 secyenv-fee@karnataka.gov.in
2. The Chief Conservator of Forests, Regional Office (Southern Zone, Bangalore) KendriyaSadan, 4th Floor, E&F Wing, II Block Koramangala, Bangalore-560034.
3. The Chairman, Central Pollution Control Board Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, New Delhi - 110 032.
4. The Chairman, Karnataka State Pollution Control Board, #49, Parisara Bhavana, Church Street, Bangalore-01 (Karnataka).
5. The District Collector, District Mandya, Karnataka.
6. Monitoring Cell, Ministry of Environment, Forest & Climate Change, Indira Paryavaran Bhavan, Jor Bagh Road, New Delhi.
7. Guard File/Monitoring File/Record File.


(Lalit Bokolia)
Additional Director