

F. No. J-11011/330/2009-IA-II (I)
 Government of India
 Ministry of Environment and Forests
 (I.A. Division)

Paryavaran Bhawan
 CGO Complex, Lodhi Road
 New Delhi – 110 003
 E-mail: ms.industry-mef@nic.in
 Tele/fax: 011 – 2436 3973
 Dated: April 22, 2010

To,

The Chief Executive Officer
 M/s HPCL Biofuels Limited
 6th Floor, Lok Nayak Jaiprakash Bhawan,
 Dak Bungalow Chowk,
 Patna – 8 00001

Sub: Proposed integrated sugar (3500 TCD), distillery (60 KLPD) and co-generation (20MW) unit at Village Lauriya, District West Champaran in Bihar by M/s HPCL Biofuels Ltd. – Reg. Environmental Clearance

Sir,

This has reference to your letter no. HBL/MoEF/BR dated 7.1.2010 along with copies of EIA/EMP and public hearing reports seeking environmental clearance under the provisions of EIA Notification, 2006.

2. The Ministry of Environment & Forests has examined the application. It is noted that M/s HPCL Biofuels Limited have proposed for a 60 KLPD Ethanol plant, 3500TCD sugar unit and 20MW co-generation power plant at Village: Lauriya, Dist.: West Champaran in Bihar. No Wildlife Sanctuary/National park/Biosphere reserve etc. is located within 10 km radius of the plant. River Sikrahna flows at a distance of 2.0 km from the proposed unit. The unit will be set up in a land area of 105 acres of which 34.7 acres has been earmarked for green belt development. The ethanol plant will be operated for 270 days in a year on mixed juice & own molasses during season & concentrated syrup/saved molasses during off-season. Distillery will operate on 50% mixed juice diverted from sugar plant and available molasses during season for 130 days and on concentrated syrup and saved molasses during off season for 140 days. The company will adopt continuous fermentation technology. Cost of the project is Rs. 30438 lakhs.

3. It is noted that the total water requirement of 3578 m³/day will be met from the ground water source and surface water. The Central ground Water Authority vide letter no. 21-4(34)/MER/CGWA/2009-996 dated 4.11.2009 has given permission for drawl of ground water not exceeding 3000m³/d. The Water Resources Department, Govt. of Bihar vide letter no. BMC-2(WALMI)-31&2005-1019 dated 22.7.2009 has given permission to draw 6000m³/d of water from river Gandak. The spent wash (500m³/d) treatment will be by bio-methanation followed by evaporation in the multiple effect evaporator followed by bio composting of concentrated spent wash

(78 m³/d) with press mud. About 281 m³/d of effluent will be generated from the sugar and co-generation unit which will be treated in effluent treatment plant. The treated effluent will be used for land irrigation. Domestic effluent (149 m³/d) will be treated in the sewage effluent treatment plant and treated effluent will be used for green belt development and land irrigation.

4. Power and steam requirement will be met from the co-generation power unit. The sources of air pollution will be 110TPH bagasse fired boiler and one number of each 250 KVA and 50KVA DG set. To control the particulate emissions from the boiler, ESP will be installed and emissions will be dispersed through stack of 75m height. Solid waste generation will be in the form of ash from the boiler which will be used in bio composting. Particulate emission from the boiler will be controlled by Electrostatic Precipitator. Solid waste would be generated in the form of press mud (61 TPD) which will be mixed with compost and boiler ash (25 TPD) will be mixed with compost or sold to brick manufacturers. .

5. All molasses based distilleries are listed at Sl. No. 5(g) of schedule of EIA notification, 2006 under category 'A' and appraised at central level.

6. The proposal was placed before the Expert Appraisal Committee in its meeting held on 18-19th March, 2010. The Committee recommended the project for environmental clearance. Public hearing of the project was held on 9.11.2009

7. Based on the information submitted by you, 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 strict compliance of the following Specific and General conditions:

A. SPECIFIC CONDITIONS:

- i. The industry shall ensure that the treated effluent and stack emissions from the unit are within the norms stipulated under the EPA rules or SPCB whichever is more stringent. In case of process disturbances/failure of pollution control equipment adopted by the unit, the respective unit shall be shut down and shall not be restarted until the control measures are rectified to achieve the desired efficiency.
- ii. The particulate emissions from the 110 TPH bagasse fired boiler shall be controlled by installation of electrostatic precipitator and emissions shall be dispersed through stack height as per the CPCB guidelines and conform to the prescribed standards. The emissions from the DG sets shall be dispersed through stack of height as per CPCB standards.

- iii. 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 Regional office of MOEF, the respective Zonal office of CPCB and the State Pollution Control Board. The levels of PM10, SO₂, NO_x (ambient levels), emissions from the stacks and pH, TDS, BOD, COD, Chloride, suspended solids and sulphates in the treated effluent shall be monitored and displayed at a convenient location near the main gate of the company and at important public places.
- iv. The spent wash generation shall not exceed 500 m³/d. The spent wash after bio-methanation in the anaerobic digester shall be concentrated in the multiple effect evaporator and concentrated spent wash shall be composted with press mud. The zero discharge shall be strictly complied with. The distillery shall operate for 270 days and shall not operate during the rainy season. The effluent from the sugar unit and cogeneration power plant and the waste water from washings of the distillery unit shall be treated in the effluent treatment plant and treated effluent after conforming to the prescribed standards shall be used for land irrigation and green belt development.
- v. The land requirement for compost yard, storage of finished products and lagoon shall be as per the CPCB guidelines. The bagasse from the sugar unit shall be stored in the covered storage.
- vi. The spent wash shall be stored in impervious pucca lagoons. The spent wash lagoons shall have proper lining with HDPE and shall be kept in proper condition to prevent ground water pollution. As per the CPCB recommendation, storage of spent wash shall not exceed 30 days capacity. The storage for the treated effluent from the sugar unit shall not exceed 15 days.
- vii. Adequate numbers of ground water quality monitoring stations by providing piezometers around the project area and bio-compost yard shall be set up. Sampling and trend analysis monitoring must be made on monthly a basis and report submitted to the RO, MOEF at Bhubaneswar / CPCB/SPCB and this Ministry.
- viii. Green belt in an area of 34.7 acres of the plant area shall be provided to mitigate the effects of fugitive emissions all around the plant and compost yard as per the CPCB guidelines in consultation with the local DFO.
- ix. Company shall adopt rainwater harvesting measures to recharge the ground water.
- x. Fire Fighting System shall be as per the TAC Norms and cover all areas where alcohol is produced, handled and stored.

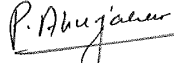
- xi. Provision of foam system for fire fighting to control fire from the alcohol storage tank.
- xii. Risk Assessment shall be carried to assess the fire and explosion risk due to storage of alcohol and report submitted to the Ministry within six months.
- xiii. The company shall comply with the recommendations made in the EIA/EMP report and during public hearing.
- xiv. 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 medical records of each employee shall be maintained separately.
- xv. Provision shall be made for the housing of construction labour with in the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets and STP, 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.

B. GENERAL CONDITIONS:

- i. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment and Forests.
- ii. Ambient Air Quality Monitoring Stations shall be set up in the down wind direction as well as where maximum ground level concentration of PM10, SO₂, NO_x, are anticipated in consultation with the State Pollution Control Board.
- iii. Adequate number of influent and effluent quality monitoring stations shall be set up in consultation with the State Pollution Control Board. Regular monitoring should be carried out for relevant parameters.
- iv. The industry shall ensure that the treated effluent and stack emissions from the unit are within the norms stipulated under the EPA rules or SPCB whichever is more stringent. In case of process disturbances/failure of pollution control equipment adopted by the unit, the respective unit shall be shut down and shall not be restarted until the control measures are rectified to achieve the desired efficiency.
- 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 should conform to the standards prescribed under EPA Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).

- vi. A separate environmental management cell equipped with full fledged laboratory facilities must be set up to carry out the environmental management and monitoring functions.
- vii. The project authorities shall provide requisite funds for both recurring and non-recurring expenditure to implement the conditions stipulated by the non-recurring expenditure 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 provided shall not be diverted for any other purpose.
- viii. A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parishad/Municipal Corporation, Urban local Body and the local NGO, if any, from who suggestions/ representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the company by the proponent.
- ix. The implementation of the project vis-à-vis environmental action plans will be monitored by Ministry's Regional Office at Bhubaneswar /State Pollution Control Board/Central Pollution Control Board.
- x. The project proponent shall also submit six monthly reports on the status of compliance of the stipulated E C 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 the State Pollution Control Board.
- xi. 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 Regional Office of MoEF by e-mail.
- xii. 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 State Pollution Control Board/ Committee and may also be seen at Website of the Ministry of Environment and Forests at <http://envfor.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 Regional office.
- xiii. 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 land development work.

8. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
9. The Ministry reserves the right to stipulate additional conditions if found necessary. The company will implement these conditions in a time bound manner.
10. Any appeal against this environmental clearance shall lie with the National Environment Appellate Authority, if preferred within a period of 30 days as prescribed under Section 11 of the National Environment Appellate Authority Act, 1997.
11. The above conditions will be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous Wastes (Management, Handling and Trans boundary Movement) Rules, 2008 and the Public Liability Insurance Act, 1991 along with their amendments and rules.


(Dr. P. L. Ahujarai)
Director

Copy to:

1. The Secretary, State Deptt. of Environment, Government of Bihar, Mantralaya, Patna.
2. The Chairman, Central Pollution Control Board, Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, Delhi-110032.
3. The Chairman, Bihar State Pollution Control Board, Beltron Bhavan, 2nd Floor, Lal Bahadur Shastri Nagar, Patna- 800023
4. The Chief Conservator of forests, Regional Office(EZ), A/3 Chandershekharpur, Bhubaneswar-751001.
5. The Director, Monitoring Cell, Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi- 110003.
6. Guard file.
7. Record file.
8. Monitoring file.

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(Dr. P. L. Ahujarai)
Director