

F. No. J-11011/348/2014-IA II (I)  
Government of India  
Ministry of Environment, Forest & Climate Change  
(I.A. Division)

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Dated: 8<sup>th</sup> April, 2016

To,  
M/s Rajinder Mittal,  
Managing Director,  
M/s BCL Industries and Infrastructure Ltd.  
Hazi Ratan Link Road, Bhatinda,  
Punjab -151005

E-mail: [bcl2@connectzone.in](mailto:bcl2@connectzone.in) ; Fax No. 0164-2240424

Subject: Expansion of Grain Based Distillery from 100 KLPD to 200 KLPD and Cogeneration Power Plant (from 5 MW to 10 MW) at Village Machchana and Sangat Kalan, Tehsil and District Bathinda, Punjab by M/s BCL Industries and Infrastructure Ltd. - Environmental Clearance reg.

Ref.: Your online proposal no. IA/PB/IND2/27543/2014 dated 8<sup>th</sup> May, 2015.

Sir,

This has reference to your online proposal no IA/PB/IND2/27543/2014 dated 8<sup>th</sup> May, 2015 alongwith project documents including Form I, Terms of References, Pre-feasibility Report, EIAIEMP Report alongwith Public Hearing Report regarding above mentioned project.

2.0 The Ministry of Environment, Forest & Climate Change has examined the application. It is noted that proposal is for expansion of Grain Based Distillery from 100 KLPD to 200 KLPD and Cogeneration Power Plant (from 5 MW to 10 MW) at Village Machchana and Sangat Kalan, Tehsil and District Bathinda, Punjab. Total plot area is 141600 m<sup>2</sup> of which greenbelt will be developed in 89000 m<sup>2</sup>. Cost of project is Rs. 45.10 crore. Out of which, Rs. 7.35 Crore and Rs. 2.75 Crore are earmarked towards capital cost and recurring cost per annum for implementation of environmental management plan. It is reported that no eco-sensitive area such as national park/wildlife sanctuary/biosphere reserves/ reserve forest is located within 10 km distance. Distillery unit will be operated for 330 days in a year. Phase wise daily production of products and by-products from the distillery plant is given below:-

S.N.	Product	Unit	Existing capacity	Proposed additional capacity	Total
1	ENA/RS	KL	100	100	200
2	Byproducts				
i	CO2	MT	80	80	160
ii	Fusel Oil	MT	1	1	2

iii	DDGS	MT	50	50	100
iv	Corn Oil (in case of maize used as raw material)	MT	5	5	10

Phase wise daily production of IMFL/country liquor from the bottling plant is given below:

S.N.	Item	Unit	Existing capacity	Proposed Additional Capacity	Total
1	IMFL/Country Liquor	Cases	8000	8000	16000

3.0 ESP alongwith stack of adequate height will be provided to additional biomass/coal fired boiler (35 TPH) to control particulate emissions. Fresh water requirement from canal water will be increased from 675 m<sup>3</sup>/day to 1350 m<sup>3</sup>/day after expansion. Spent wash generation will be 575 m<sup>3</sup>/day, spent lees generation will be 150 m<sup>3</sup>/day and MEE condensate will be 395 m<sup>3</sup>/day from the proposed expansion. 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). Out of total generation of 545 m<sup>3</sup>/day of condensate generation, 495 m<sup>3</sup>/day will be directly reused in the liquefaction process. Effluent from spentlees, utilities effluent and evaporator Condensate (50 m<sup>3</sup>/day) will be treated in effluent treatment plant and recycled/reused in process. No effluent will be discharged outside the plant premises and 'Zero' effluent discharge concept will be followed. DDGS will be sent to cattle feed. Fly ash will be used for brick manufacturing. Spent oil/waste oil will be sent to authorized recyclers/re-processors.

4.0 Public hearing/public consultation meeting was conducted on 20<sup>th</sup> March, 2015.

5.0 All cane juice/non-molasses based distillery (>60 KLD) are listed at S.N. 5(g) (ii) under category 'A' and appraised at Central level.

6.0 The proposal was considered by the Expert Appraisal Committee (Industry) in its 28<sup>th</sup>, 46<sup>th</sup> and 2<sup>nd</sup> meetings held during 1<sup>st</sup>-2<sup>nd</sup> December, 2014, 20<sup>th</sup>-21<sup>st</sup> August, 2015 and 16<sup>th</sup>-17<sup>th</sup> December, 2015 respectively. The Committee recommended the proposal for environmental clearance. Project Proponent and the EIA Consultant namely Ace Engineers and Consultants, stay order as per Court case No CWP No. 19598 of 2012, 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 14<sup>th</sup> September 2006, subject to the compliance of the following Specific and General Conditions:

**A. Specific Conditions:**

- i) Environment clearance accorded is for grain based distillery unit (200 KLPD) only and no molasses based distillery unit shall be operated without prior permission from the Ministry.
- ii) ESP alongwith stack of adequate height shall be provided to additional biomass/coal

fired boiler (35 TPH) to control particulate emission within 50mg/Nm<sup>3</sup>. At no time, the emission levels should go beyond the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency.

- 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 imposed by Punjab Pollution Control Board (PPCB).
- 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 Regional Office of MOEF, the respective Zonal office of CPCB and the PPCB. The levels of PM<sub>2.5</sub>, PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub>, 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 surface water supply shall not exceed 1350 m<sup>3</sup>/day for distillery and cogeneration unit after expansion. Water consumption shall be reduced by adopting 3 R's (reduce, reuse and recycle) concept in the process.
- viii) Spent wash generation shall not exceed 6 KI/KI of alcohol. Spent wash shall be treated through decanter and concentrated in multi-effect evaporator (MEE) to form DWGS. DWGS will be sent to dryer to form DOGS. The condensate, spentlees and utilities effluent shall be treated in the ETP comprising tertiary treatment. Treated effluent will be used for make up water of cooling towers and water quality of treated effluent shall meet the norms prescribed by CPCB/SPCB and recycle/reuse.
- ix) No effluent from distillery and co-generation power plant shall be discharged outside the factory premises and 'Zero' effluent discharge concept shall be adopted.
- x) Process effluent/any wastewater shall not be allowed to mix with storm water. Storm water drain shall be passed through guard pond.
- xi) Automatic /online monitoring system (24x7 monitoring devices) for flow measurement and relevant pollutants in the treatment system to be installed. The data to be made available to the respective SPCS and in the Company's website.
- xii) Spent wash shall be stored in the steel tank with maximum capacity for 5 days for emergency situation.
- xiii) Adequate numbers of ground water quality monitoring stations by providing piezometers

around the project area shall be set up. Sampling and trend analysis monitoring must be made on monthly a basis and report submitted to SPCS and this Ministry. The ground water quality monitoring for pH, SOD, COD, Chloride, Sulphate and Total Dissolve Solids shall be monitored and report submitted to the Ministry's Regional Office at Chandigarh and PPCB.

- xiv) ~~No storage of wet cake shall be done at site to avoid odour problem. An additional dryer shall be installed so that at any time wet cake is not sold then wet cake shall be converted into dry cake by operating additional dryer.~~
- xv) 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.
- xvii) Fire fighting system shall be as per 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 shall 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 Chandigarh within six months.
- xix) Dedicated Cell with qualified personnel for Environment management should be established to take care of all pollution related activities including monitoring.
- xx) 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.
- xxi) Dedicated parking facility for loading and unloading of material 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.
- xxii) As proposed, green belt over 33 % of the total project area shall be developed within plant premises with at least 10 meter wide green belt on all sides along the periphery of the project area, in downward direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the DFO.
- xxiii) All the commitment made regarding issues raised during the Public Hearing/consultation meeting held on 20<sup>th</sup> March, 2015 shall be satisfactorily implemented and a separate budget for implementing the same shall be allocated and information submitted to the Ministry's Regional Office at Chandigarh.
- xxiv) At least 5 % of the total cost of the project shall be earmarked towards the Enterprise Social Commitment based on locals need as well as public hearing issues and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office at Chandigarh. Implementation of such program shall be ensured accordingly in a time bound manner.

- xxv) 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, creche 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 shall strictly adhere to the stipulations made by the Punjab Pollution Control Board.
- 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 Punjab Pollution Control Board (PPCB) and it shall be ensured that at least one station is installed in the upwind and downwind direction as well as where maximum ground level concentrations are anticipated.
- iv. 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).
- v. 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.
- vi. The Company shall obtain Authorization for collection, storage and disposal of hazardous waste under the Hazardous Waste (Management, Handling and Trans-boundary Movement) Rules, 2008 and its amendment time to time and prior permission from PPCB shall be obtained for disposal of solid / hazardous waste including boiler ash.
- vii. During transfer of materials, spillages shall be avoided and gulland drains be constructed to avoid mixing of accidental spillages with domestic wastewater and storm water drains.
- viii. Usage of Personnel Protection Equipments by all employees/ workers shall be ensured.
- ix. 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.
- X. The company shall also comply with all the environmental protection measures and safeguards proposed in the project report submitted to the Ministry. All the

recommendations made in the EINEMP in respect of environmental management, risk mitigation measures and public hearing relating to the project shall be implemented.

- xi. The company shall undertake CSR activities and all relevant measures for improving the socio-economic conditions of the surrounding area.
- xii. The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment.
- xiii. A separate Environmental Management Cell equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.
- xiv. As proposed, the company shall earmark sufficient funds toward 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.
- xv. A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, Zilla Parishad/Municipal Corporation, Urban local Body and the local NGO, if any, from who suggestions/ representations, if any, were received while processing the proposal.
- xvi. 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 bye-mail) to the respective Regional Office of MoEF, the respective Zonal Office of CPCB and the Punjab Pollution Control Board. A copy of Environmental Clearance and six monthly compliance status report shall be posted on the website of the company.
- xvii. The environmental statement for each financial year ending 31 st March in Form-Vas is mandated shall be submitted to the Punjab 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 Chandigarh Regional Offices of MoEF bye-mail.
- xviii. 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://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 concerned Regional Office of the Ministry.
- xix. 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 Principal Secretary, Environment Department, Government of Punjab, Chandigarh.
2. The Chief Conservator of Forests, Regional Office (Northern Zone), Bay No.24-25, Sector 31-A, DakshimMarg, Chandigarh-160030.
3. The Chairman, Central Pollution Control Board PariveshBhavan, CBD-cum-Office Complex, East Arjun Nagar, New Delhi - 110 032.
4. The Chairman, Punjab Pollution Control Board, VaryavaranBhawan, Nabha Road, Patiala, 147001, Punjab.
5. Monitoring Cell, Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhavan, Jor Bagh Road, New Delhi.
6. Guard File/Monitoring File/Record File/ Notice Board.

  
**(Lalit Bokolia)**  
**Additional Director**