



BIHAR STATE POLLUTION CONTROL BOARD

PARIVESH BHAWAN, PLOT NO. NS-B/2, PALIPUTRA INDUSTRIAL AREA,

PATLIPUTRA, Patna – 800 010

Ref. No.:-

Patna, dated:-

'CONSENT-TO-ESTABLISH' (NOC)

UNDER SECTIONS 25/26 OF THE WATER (PREVENATION AND CONTROL OF POLLUTION) ACT, 1974 AND 21 OF THE AIR (PREVENTION AND CONTROL OF POLLUTION) ACT, 1981

REFERENCE:

- (i) Name and address of the Proponent: Sri Kaushal Kishore Sharma, Director, M/s Brajendra Kumar Builders Pvt. Ltd. (Ethanol Project), At & P.O.-Achuara, Via-Barh, Patna, Dist-Patna; and
- (ii) Online application No.- ER526N019703/5152380 dated 11.09.2021 of the proponent for establishment of grain based distillery to produce ethanol as main product with 2.7 MW co-generation power unit at Khata No.-930, Khesra No.-3679, Thana No.-33, Mauza-More, Anchal & P.S.-Mokama, total land area-11.56 acre, Dist-Patna; for capacity: Ethanol-100 KLD.

AFTER CONSIDERING:

- (i) The facts stated in their application;
- (ii) Bihar State Pollution Control Board's Notification No. 26 dated 08.11.2003;
- (iii) Provisions of the Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981 and Board's notification no.-19, dated 07.09.2021;
- (iv) As made available by the applicant- application for Environmental Clearance (EC) dated nil submitted to concern authority of MoEF&CC, Govt. of India; and
- (v) Affidavit dated 09.09.2021 submitted online by the applicant and inspection dated 12.09.2021 by the Board.

**NOC IN FAVOUR OF THE PROPONENT AT THE SAID SITE IS HEREBY ACCORDED
SUBJECT TO THE FOLLOWING CONDITIONS:**

- (I) The proponent shall obtain 'Consent-to-Operate' under sections 25 & 26 of The Water Act, 1974 and Section 21 of The Air Act, 1981 prior to commissioning of the ethanol project from Bihar State Pollution Control Board;
- (II) That, the effluent (Domestic or Trade) and emission, if any, shall conform to the standard prescribed under the Rules;
- (III) That, they shall comply with the provisions (whichever applicable) of the Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and Rules and Notifications issued there under;

- (IV) That, the ethanol unit shall be established at distance as mentioned in the affidavit submitted and must ensure minimum distance of the site be away from Habitation, Hospital, Govt. School, Highway Road, Railway line, Court and river etc as mentioned in the NOC sitting guideline of the Board;
- (V) That, the plant shall never exceed the maximum capacity defined i.e. 100 KLD;
- (VI) That, all other mandatory approvals and permissions from competent authority shall be obtained. This Consent-to-Establish (CTE) should not be construed as exemption from obtaining necessary NOC/permission from any other Government agencies and it is confined to matters arising out of the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981;
- (VII) That, the applicant has to produce the valid Environmental Clearance within 180 days of issuing the CTE, otherwise the CTE issued may be considered rejected automatically;
- (VIII) That, prior permission/NOC shall be obtained from CGWA/SGWA for abstraction of the ground water and total fresh water requirement from ground water source shall not exceed as per NOC issued by CGWA/SGWA;
- (IX) That, spent wash generation from grain based operation shall not exceed 6 KL/KL of alcohol. The spent wash shall be treated through decanter and concentrated in multi-effect evaporator (MEE) to form Distiller's Wet Grains with Soluble (DWGS). DWGS shall be dried to form Distiller's Dry Grains with Soluble DDGS. The condensate from MEE will be recycled back to the process. Yeast sludge shall be utilized for bio-composting. DWGS/DDGS will be sold as cattle feed;
- (X) That, the spent wash shall be stored in impervious pucca lagoon with proper lining with HDPE and shall be kept in proper condition to prevent ground water pollution. The storage of spent wash shall not exceed 5 days capacity;
- (XI) That, no effluent from distillery/unit shall be discharged outside the plant premises and **Zero Liquid Discharge shall be adopted**. Water consumption shall be reduced by adopting 3 R's (reduce, reuse and recycle) concept in the process;
- (XII) That, process effluent/any wastewater (treated sewage, scrubber water and/or floor washings etc) shall not be allowed to mix with storm water. Storm water drain shall be passed through guard pond;
- (XIII) That, adequate facilities shall be provided for treatment of domestic wastewater and treated wastewater shall be re-used in irrigation/gardening purposes as well as back into the system for flushing/horticulture purpose/green belt development etc. and shall maintain a record on daily basis. Sludge shall be dried and used as manure in gardening;
- (XIV) That, 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 SPCB and this Ministry. The ground water quality monitoring for pH, BOD, COD, Chloride, Sulphate and total dissolved solids shall be monitored. Sampling and trend analysis monitoring must be made on monthly basis and report submitted to the BSPCB;

- (XV) That, the unit 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;
- (XVI) That no storage of wet cake shall be done at site. 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;
- (XVII) That, rice husk shall be stored in covered shed in such a way that it does not get air borne or fly around due to wind;
- (XVIII) That, they shall provide adequate air pollution control devices (APCD-ESP) to meet the boiler stack emission to be within prescribed limit;
- (XIX) That, the emission of particulate matter (PM) from boiler stack shall be maximum 50 mg/Nm³;
- (XX) That, the height of stack shall be of a minimum of 30 metres or, as per the formula $H=14 (Q)^{0.3}$, whichever is more, where "H" is the height of stack in metres and "Q" is the maximum quantity of SO₂ expected to be emitted in kg/hr through the stack at 100 percent rated capacity of the plant and calculated as per the norms of gaseous emission;
- (XXI) That, they shall maintain 'Zero Liquid Discharge' of industrial effluent and install following online monitoring system:

Online flow meters & PTZ cameras are required to be instated as given below:

- a) **Flow meters:** Online flow meters with data recording facility which should be transmitted online to CPCB and SPCB, shall be installed at the raw spent wash/whole stillage generation line and the concentrated spent wash/whole stillage/thick syrup line connecting to the final storage lagoon/tank before dryer.
- b) For distillery plants having advanced integrated multiple effect evaporators where concentrated spent wash/whole stillage is being directly generated, flow meters with similar specification shall be installed with data connectivity to CPCB and SPCB at the concentrated spent wash/whole stillage/thick syrup line connecting to the final storage lagoon dryer and at the alcohol production line for assessment of concentrated spent wash generation ratio; and
- c) **PTZ cameras:** the cameras should be IP camera with PAN, TILT Zoom, 5x or above focal length, with night vision capability and should be installed at relevant locations\ of DWGS/DDGS production area and final spent wash storage lagoon/storage tank, as applicable. The camera feed should be integrated with all camera controls (pan, zoom, tilt) and shown on central platform, where data on other parameters (effluent monitoring/flow meters/emission monitoring) is displayed/submitted. The camera feed shall be provided without pre-requirement of any plug-in software for data display or data submission and shall be available in the Google chrome browser.

Online Emission Monitoring System:

Distillery having dedicated boilers shall provide online continuous stack emission monitoring system at the designated out let point (as specified by SPCB) for the boiler stack with required real time data logging and data transmission facility to SPCB and CPCB for the Particulate Matter (PM) parameter. The location of device shall be according to the Emission regulation Part-III document of CPCB.

- (XXII) That, dust material/ash collected in APCD shall be disposed in proper manner and it shall not be disposed off on road side outside the campus. They shall submit ash disposal and management plan to the Board;
- (XXIII) That, they shall submit ambient air quality (AAQ) monitoring report quarterly and the locations of ambient air quality monitoring stations shall be decided in consultation with the BSPCB 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;
- (XXIV) That, boiler blow down shall be treated and shall be re-used in various purposes;
- (XXV) That, water meter conforming to ISO standards shall be installed at the inlet point of water uptake as well as at all necessary points to monitor the daily water consumption. Use of water efficient devices/fixtures and appliance should be promoted. A logbook shall be maintained;
- (XXVI) That, they shall submit exclusive colored layout drainage map of surface run-off water, industrial waste water (if any) and domestic wastewater with indication of their source and discharge points;
- (XXVII) That, they should ensure good housekeeping including road dust collection, regular mechanical sweeping, water sprinkling etc and maintain a log book in this regard;
- (XXVIII) That, diesel generating sets (DG Sets), if any; as source of backup power should be provided with an integral acoustic enclosure and the maximum permissible sound pressure level for new D.G. set shall be 75 dB(A) at 1 meter from the enclosure surface. The height of exhaust of DG sets should be as: Exhaust Stack Height formula:- $(H_t \text{ of Building in meter} + 0.2\sqrt{\text{KVA}})$ m; it should be installed on pucca base with anti vibration pads;
- (XXIX) That, they shall ensure all possible measures to be implemented to control noise pollution and the ambient noise levels should conform to the standards prescribed under the Noise Pollution (Regulation and Control) Rules, 2000, as amended to date viz. 75 dB(A) during day time and 70 dB (A) during night time;
- (XXX) That, massive tree plantation shall be done to improve ecology of the surroundings specially to minimize fugitive dust in the ambient air;
- (XXXI) That, the Environmental Statement as prescribed in the E (P) Rules, 1986 [see rule 14] for the each financial year ending the 31st March, shall be submitted by the month of September every year;

- (XXXII) That, they shall comply with the provisions (whichever applicable) of the Solid Waste Management Rules, 2016. Separate wet and dry bins must be provided and segregation of dry waste (in blue bin), wet waste (in green bin) and domestic hazardous waste (in black bin) must be ensure; wet waste must be composted inside the premises and dry & domestic hazardous waste shall be handed over to the local body. Non-biodegradable waste and dry waste like rejected corrugated cardboard; waste paper etc may be handed over to the recyclers registered with Bihar State Pollution Control Board;
- (XXXIII) That, they shall make provisions for display of data outside main factory gate about quantity and quality of water discharge and air emission along with solid waste generated within the factory premises;
- (XXXIV) That, above CTE condition may be revised after submission of EC obtain from the competent authority of MoEFCC;
- (XXXV) That, notwithstanding any thing stated above, the applicant unit shall abide by all the provisions of the environmental laws including policies and guidelines made there under; and
- (XXXVI) That, this CTE (NOC) is granted on basis of undertaking/document up-loaded by the applicant and it is subject to the condition that in the event of any information/documents submitted by the proponent are found false or misleading at any stage, the NOC granted, shall be revoked at proponent's risk and cost and legal action shall be initiated.

NOTE:

1. Bihar State Pollution Control Board reserves the option to revise or add other conditions, if necessary, for protection of Environment in general and for Pollution Control in particular;
2. The present NOC should not be construed as an assurance for the grant of 'Consent-to-Operate' the proposed project but shall be subject to compliance of all the conditions indicated above; and
3. The NOC, granted, shall be valid for a period of two years from the date of issue.

Sd/-
(S. Chandrasekar)
Member Secretary

Memo No.:- 1317

Patna, dated:- 13-9-2021

Copy forwarded to: Sri Kaushal Kishore Sharma, Director, M/s Brajendra Kumar Builders Pvt. Ltd. (Ethanol Project), At & P.O.-Achuara, Via-Barh, Patna, Dist-Patna for favour of information and necessary action.


(S. Chandrasekar)
Member Secretary