



Speed Post/Online

F. No. IA-J-11011/261/2020-IA-II(I)
Government of India
Ministry of Environment, Forest & Climate Change
Impact Assessment Division

Indira Paryavaran Bhavan,
Vayu Wing, 3rd Floor, Aliganj,
Jor Bagh Road, New Delhi-110 003

Dated: 28th December, 2020

To,

M/s Khemani Distilleries Pvt. Ltd.,
Village Kachigam kachigam Road,
Daman, Daman and Diu

Email: hrdwivedi@khemanigroup.com

Sub: Expansion of Existing Grain Base Distillery from 59 KLPD to 71 KLPD along with 3.75 MW Co-generation power plant based on Agro waste fuel by M/s Khemani Distilleries Pvt. Ltd., located at Village: Ringanwada, Kachigam Road, Nani Daman, Daman, Daman and Diu - Environmental Clearance regarding.

Sir,

This has reference to your online proposal No. IA/DD/IND2/176552/2020 dated 01st October, 2020 for environmental clearance to the above mentioned project.

2. The Ministry of Environment, Forest and Climate Change has examined the proposal for environmental clearance to the project for Expansion of Existing Grain Base Distillery from 59 KLPD to 71 KLPD along with 3.75 MW Co-generation power plant based on Agro waste fuel by M/s Khemani Distilleries Pvt. Ltd., located at Village: Ringanwada, Kachigam Road, Nani Daman, Daman, Daman and Diu.

3. The project/activities are covered under category A of item 5 (g) 'Distilleries' of the Schedule to the Environment Impact Assessment Notification, 2006 and requires appraisal at central level by the sectoral Expert Appraisal Committee (EAC) in the Ministry as the non-existence of SEIAA. The proposal has been submitted under the Ministry's EIA Notification, 2006 amendments vide S.O.236 (E) dated 16 January, 2020 for proposed 20 % capacity addition of ethanol with "No increase in Pollution Load" para 7 (ii) of the EIA Notification, 2006 requesting exemption from ToR, Public Hearing and EIA report.

4. The details of existing and proposed products and capacity are as under:-

S. No.	Particulars	Unit	Existing	Proposed	Total	Use
Products						
1	ENA (Extra Neutral Alcohol)	KLD	59	12	71	Captive consumption for the

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						manufacturing of IMFL. Sold to Market
2	Co-Generation Power Plant	MW	3.75	-	3.75	Captive consumption
3	IMFL	lakhs cases/annum	66	-	66	Sold to Market
By-Products						
1	DWGS (Distillers Wet Grain Soluble)	TPD	81	14	95	Sold As a cattle feed
2	DDGS (Distillers Dried Grains & Soluble)	TPD	27	6	33	
3	CO ₂	TPD	29.5	6.5	36	Recovered by CO ₂ Plant and sold commercially. Plant will be commissioned in the month of December, 20

5. Earlier EC issued vide letter no. DCF/DMN/EIA/579 /2014/16; dated 27th August, 2018 to the existing project "Expansion of grain based distillery (33 to 59 KLPD and installation of 3.75 MW co-generation power plant at Ringanwada, Kachigam Road, Daman" in favour of M/s. Khemani Distilleries Pvt. Ltd. It is informed by PP there is no litigation Pending against the proposal.

6. The Certified compliance report submitted by the Ministry's Regional office at Bangalore vide letter dated 28.02.2019. The Committee noted that since the instant proposal has submitted under provisions of para 7 (ii) of the EIA Notification, 2006, therefore the Committee deliberated the compliance status of earlier EC submitted by PP and found in order.

7. Total land area for the proposed project is 97473 sqm. no additional land will be used for proposed expansion. The proposed activities will be within the existing land area. Industry has already developed/will develop greenbelt in an area of 33 % i.e.32200 m² out of total area of the project. The existing project cost was of Rs.100 crores. Total capital cost earmarked towards environmental pollution control measures was Rs.27 crores and the Recurring cost (operation and maintenance) is approx. Rs.4.10 Crores per annum. PP reported that there is no capital cost involved for proposed expansion. Total Employment of project is 425 persons.

8. There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site. River/ water body Natural drain from project site and Daman ganga river is flowing at a distance of 0.97 km in WSW direction. (A natural drain is also passing through factory premises which is seasonal, pockets of

reserve forest are located in the study area).

9. Ambient air quality monitoring was carried out at Eight locations during Feb 2020 and the baseline data indicates the ranges of concentrations as: PM10 (32.4-79.1 µg/m³), PM2.5 (14.3-40.7 µg/m³), SO₂ (4-23.6 µg/m³) and NO₂ (8.8-27.2 µg/m³). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 1 µg/m³, 0.85 µg/m³, 13.5 µg/m³ with respect to PM10, Sox and NOx. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS). Total water requirement is 3278 m³/day of which fresh water requirement of 1204 m³/day will be met from ground water and canal water. Effluent of 907 m³/day quantity will be treated through ETP. The plant will be based on Zero Liquid discharge system. Recycling plant /ETP capacity 950 KLPD.

10. Power requirement after expansion will be including existing 2700 kVA and will be met from 3.75 MW captive power generation and Electricity Department Daman & Diu State power distribution corporation limited (DDED). Existing unit has 500, 2 x 1000 kVA DG sets of 2500 kVA capacity, additionally not required power failure. Stack of height 30 m provided as per CPCB norms to the DG sets. Existing unit has 27.5 TPH 1 no boiler with stack height of 50 meters agro waste Rice Husk /Bagasse/Briquette fired boiler and 12 TPH as standby boiler with stack height of 32 meters based on FO as fuel. ESP with a stack of height of 50 m is installed for controlling the particulate emissions within the statutory limit of 150 mg/Nm³ for the proposed boilers. Existing boiler 27.5 TPH and 12 TPH as stand by, after proposed expansion boiler 27.5 TPH and 12 TPH as standby will be used.

11. Details of Process emissions generation and its management.

S. No.	Source	Pollution Control Measure	Height in Mtr	Exit Temp (°C)	Top Dia (m)	PM, mg/Nm ³	Fuel used
1	Boiler 27.5 TPH	ESP	50	110	1.15	150	Agro Based fuel
2	Boiler 12 TPH Standby	MS chimney	32	110	0.75	150	Furnace oil
3	DG sets 2 x 1000 KVA	Chimney.	30	395	0.25	150	Diesel
4	DG set 1 x 500 KVA	500 KVA Chimney.	30	310	0.123	150	Diesel

Boiler: The industry has already 27.5 TPH@67 kg/ cm² pressure capacity Traveling Grid (TG) for steam and 3.75 MW of cogeneration of power. The 12.0 TPH boiler is as standby. TG boiler is most suitable technology for the biomass as fuel. Reduced gaseous emission from biomass briquettes burning would be discharged into atmosphere through ESP and 50 meter stack height. The emissions will be limited & proper mitigation measures like installation of high efficiency Electrostatic precipitators (ESP) is taken for the existing and proposed plant. Online Continuous

Emission Monitoring System for stack is already installed and connected to CPCB server and PCC, DD & DNH.

12. Details of Solid waste/ Hazardous waste generation and its management is as follow:

Process Waste	Existing Quantity, Tons/day	Proposed Quantity of generation	Total after Expansion Quantity of generation	Disposal
	Tons/day			
Grain Grit	1.35	0.20	1.55	Sold as Cattle feed
Ash (bio-briquettes)	12	-	12	Brick Manufacturer & Bio-manure manufacturer
Domestic waste	0.03	-	0.03	Organic-as manure & incinerable to boiler
ETP sludge	0.3	-	-	As manure within the plant
STP sludge	0.03	-	-	As manure within the plant

Hazardous & e-waste Management

Type of Waste	Disposal Method	Total Waste Existing and after expansion
Used Oil (Hazardous Waste)	Hazardous waste is only used oil (schedule 5.1) that is sold to authorized recycler as per our PCC consent condition.	5 Kl/annum
E-waste	It is being collected and given to approve recycler of State Pollution Control Board as per Electronic Wastes (Management & Handling) Rules, 2016. The same shall be followed after expansion also.	12 Kg/month

13. The proposal for environmental clearance was considered by the EAC (Industry-3) in its First meeting held on **17-19 November, 2020**. The project proponent and their consultant M/s. Anacon Laboratories Pvt. Ltd., made a detailed presentation through Video Conferencing (VC) and have presented the report. The Committee found the report to be satisfactory, and recommended the project for grant of environmental clearance.

14. The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent in desired form along with the report prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent. The EAC noted that the Project

Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent. The Committee noted that the report is satisfactory for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. The Committee has found the baseline data and incremental GLC due to the proposed project within NAAQ standards. The Committee has also deliberated Environmental Audit Report submitted by PP and CO₂ management and found to be addressing the issues in the study area. Based on the deliberations in the EAC, PP has submitted additional information. The Committee has found the additional information submitted by the project proponent to be satisfactory and addressing the issues raised by the Committee.

15. The environmental clearance granted to the project/activity is strictly under the provisions of the EIA Notification 2006 and its amendments. It does not tantamount/construe to approvals/consent/ permissions etc. required to be obtained or standards/conditions to be followed under any other Acts/ Rules/ Subordinate legislations, etc., as may be applicable to the project. The project proponent shall obtain necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, from the State Pollution Control Board, prior to construction & operation of the project.

16. Based on the proposal submitted by the project proponent and recommendations of the EAC (Industry-3), Ministry of Environment, Forest and Climate Change hereby accords environmental clearance to the project for **Expansion of Existing Grain Base Distillery from 59 KLPD to 71 KLPD along with 3.75 MW Co-generation power plant based on Agro waste fuel by M/s Khemani Distilleries Pvt. Ltd., located at Village: Ringanwada, Kachigam Road, Nani Daman, Daman, Daman and Diu**, under the provisions of the EIA Notification, 2006, and the amendments therein, subject to compliance of the terms and conditions as under:-

A. Specific Condition

- (i). The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.
- (ii). As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises. Treated effluent shall be reused in the process/utilities. Treated Industrial effluent shall not be used for gardening/greenbelt development/horticulture.
- (iii). Total fresh water requirement shall not exceed 1204 m³/day proposed to be met from surface water/ground water source. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard.
- (iv). As committed by the Project Proponent, the spent wash/other concentrates shall be incinerated.
- (v). CO₂ generated from the process shall be bottled/made solid ice and utilized/sold to authorized vendors.

- (vi). Occupational health centre for surveillance of the worker's health shall be set up. The health data shall be used in deploying the duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection.
- (vii). Implementation of outcome of Process safety and risk assessment studies which carried out by using advanced models, and the mitigating measures shall be undertaken/implemented accordingly.
- (viii). Training shall be imparted to all employees on safety and health aspects of chemicals handling. Safety and visual reality training shall be provided to employees.
- (ix). 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.
- (x). Process organic residue and spent carbon, if any, shall be sent to Cement/other suitable industries for its management/incinerations.
- (xi). 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.
- (xii). The green belt of at least 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department. Records of tree canopy shall be monitored through remote sensing map.
- (xiii). The activities and the action plan proposed by the project proponent to address the socio-economic issues in the study area, shall be completed as per the schedule presented before the Committee and as described in the EMP report in letter and spirit. All the commitments made shall be satisfactorily implemented.
- (xiv). Storm water from the roof top shall be channelized through pipes to the storage tank constructed for harvesting of rain water in the premises and harvested water shall be used for various industrial processes in the unit. No recharge shall be permitted within the premises. Process effluent/ any wastewater shall not be allowed to mix with storm water.
- (xv). 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.
- (xvi). Project Proponent shall reduce the quantity of effluents generation in the unit and PP shall install the effective wastewater treatment system. Adequate system shall be in place for controlling the odour and mitigation measures to protect the contamination of ground/surface water.
- (xvii). Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.
- (xviii). Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.

- (xix). A separate Environmental Management Cell (having qualified person with Environmental Science/Environmental Engineering/specialization in the project area) equipped with full fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.

16.1. General Condition:

- (i) No further expansion or modifications in the plant, other than mentioned in the EIA Notification, 2006 and its amendments, shall be carried out without prior approval of the Ministry of Environment, Forest and Climate Change/SEIAA, as applicable. 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/SEIAA, as applicable, to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.
- (ii) The energy source for lighting purpose shall be preferably LED based, or advanced having preference in energy conservation and environment betterment.
- (iii) 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 the Environment (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).
- (iv) The company shall undertake all relevant measures for improving the socio-economic conditions of the surrounding area. CER activities shall be undertaken by involving local villages and administration and shall be implemented. The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment.
- (v) The company shall earmark sufficient funds towards capital cost and recurring cost per annum to implement the conditions stipulated by the Ministry of Environment, Forest and Climate Change 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.
- (vi) 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 whom suggestions/ representations, if any, were received while processing the proposal.
- (vii) 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&CC, the respective Zonal Office of CPCB and SPCB. A copy of Environmental Clearance and six monthly compliance status report shall be posted on the website of the company.
- (viii) 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&CC by e-mail.

- (ix) 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 and at <https://parivesh.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.
- (x) 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.
- (xi) This Environmental clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, if any, as may be applicable to this project.

17. The Ministry reserves the right to stipulate additional conditions, if found necessary at subsequent stages and the project proponent shall implement all the said conditions in a time bound manner. The Ministry may revoke or suspend the environmental clearance, if implementation of any of the above conditions is not found satisfactory.

18. 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.

19. Any appeal against this environmental clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

20. The above conditions will 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, the Hazardous Waste (Management, Handling and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 read with subsequent amendments therein.

21. This issues with the approval of the competent authority.

28/12/2020

(Dr. R. B. Lal)

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(डॉ. आर. बी. लाल)

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Min. of Environment, Forest and Climate Change
भारत सरकार, नई दिल्ली
Govt. of India, New Delhi

Copy to: -

1. Office of the Deputy Conservator of Forest, Daman, Fort Area, Post Office Moti Daman, Daman & Diu (U.T.)

EC for M/s Khemani Distilleries Pvt. Ltd.

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2. Deputy Director General of Forests (C), Ministry of Environment, Forest and Climate Change, Regional Office (WZ), E-5, Kendriya Paryavaran Bhawan, E-5 Arera Colony, Link Road-3, Ravishankar Nagar, Bhopal – 462016
3. The Member Secretary, Central Pollution Control Board, Parivesh Bhawan, East Arjun Nagar, Delhi - 32
4. The Member Secretary, Pollution Control Committee Daman & Diu and Dadra Nagar Haveli, 1st Floor, Udyog Bhavan, Bhenslore Daman, Diu and DNH
5. The District Collector, District Daman, Daman & Diu
6. Guard File/Monitoring File/Website/Record File/Parivesh Portal


(Dr. R. B. Lal)
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