



F.No. IA-J-11011/360/2018- IA II(I)
Government of India
Ministry of Environment, Forest and Climate
Change
(IA-II Section)

By Speed Post/Online

Indira Paryavaran Bhawan
 Jorbagh Road, New Delhi - 3

Dated: 14th July, 2020

To

M/s Keltech Energies Ltd
 Village Garamsur, Post Dudhala
 Tehsil Katol, District Nagpur
 Maharashtra - 441 103.

Email: snsharma@keltechenergies.com

Sub: Expansion of Explosive Production Manufacturing Unit at Village Garamsur, Post Dudhala, Tehsil Katol, District Nagpur, Maharashtra by M/s Keltech Energies Ltd - Environmental Clearance - reg.

Sir,

This has reference to your proposal No.IA/MH/IND2/83338/2018 dated 11th March 2020, submitting the EIA/EMP report on the above subject matter.

2. The Ministry of Environment, Forest and Climate Change has examined the proposal for environmental clearance to the project for Expansion of explosive production manufacturing unit by M/s Keltech Energies Ltd in an area of 459962.7 sqm located at Village Garamsur, Post Dudhala, Tehsil Katol, District Nagpur, Maharashtra

3. The details of products and capacity are as under:

Proposed Products requiring EC			
S. No.	Product ⁽²⁾	Capacity	Storage ^{(1)*}
1.	PETN	1,600 MTPA	200 MT
2.	Lead Styphanate	5 MTPA	0.005 MT
3.	Lead Azide	12 MTPA	0.005 MT Max- 12 MTPA
4.	Mono Methyl amine nitrate (MMAN)	5000 MTPA	-
5.	TNT (purchase/storage)	-	60 MT Max- 100MTPA
6.	Ammonium nitrate(purchase/storage)	-	1200 MT Max-100,000 MTPA
7.	Mono Methyl amine(purchase/storage)	-	48 MT Max - 15000 MTPA
8.	LRG/CNG(purchase/storage)	-	48 MT Max- 15000 MTPA

⁽¹⁾Refer schedule II & III of MSIHC Rules 1989 amended 2000; *at any time

⁽²⁾As is or in form of compounded products-hetero-mixed stabilized formulations (physical mixing as per explosive standard)

S.No.	Proposed product not requiring EC	Maximum Quantity	DIPP license
1.	SME Bulk	20,000 MTPA	20,000 MTPA
2.	Slurry/ Emulsion	45000 MTPA	45000 MTPA
3.	Detonators	150 million Nos.	150 million Nos.
a	Shock tube	50 million meters	
b	Delay Elements	50 million Nos.	
4.	Detonating Fuse	50 Million Meters	50 Million Meters
5.	Cast Booster	200MTPA	200 MTPA
6.	Expanded Perlite	10 MT/day	NA

Note – MTPA (metric ton per annum) & MT/day (metric ton per day)

Storage of Products

Existing and proposed Storage			
Explosive Product	Existing*	Proposed*	Total*
Slurry & Emulsion	195 MT	220 MT	415 MT
PETN/DF/ Cast Booster	60 MT	140 MT	200 MT
HSD	20 KL	--	20 KL
Ammonium Nitrate	600 MT	600 MT	1200 MT
TNT	7 MT	53 MT	60 MT
SME	-	40 MT	40 MT
Mono Methyl amine	-	48 MT	Max. - 15000 MTPA
LPG /CNG	-	48 MT	Max. - 15000 MTPA
Styphnic acid	-	2 MT	Max. - 10 MTPA

*At any time quantity as per schedule II & III of MSIHC Rules 1989 amended 2000

Note – MTPA (metric ton per annum) & MT/day (metric ton per day)

4. The existing land area is 459962.7 sqm, no additional land will be required for proposed expansion. The proposed activities will be established within the existing land area. Industry has developed greenbelt in an area of 234705.66 sqm covering 51% of the total area and additionally, 64345 sqm will developed covering another 14% area and thus have greenbelt in an area of 299050.66 sqm out of total area of the project. The estimated project cost is Rs.63.17 crores including existing investment of Rs. 13.57 crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 0.96 crores and the recurring cost (O&M) will be about Rs. 0.295 crores per annum. The project will lead to employment for 254 persons directly & 200 persons indirectly after expansion.

5. There are no National parks, Wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km from the project site. Bor Nadi is flowing at a distance of 4.02 km in SE direction.

6. Total water requirement is estimated to be 80 cum/day, which includes fresh water requirement of 60 cum/day, proposed to be met from ground water. Effluent of 23 cum/day (Existing- 3 cum/day proposed 20 cum/day) will be treated through ETP. There will be no discharge of treated/untreated waste water from the unit, and thus ensuring Zero Liquid Discharge.

Power requirement after expansion will be 1000 KVA including existing 500 KVA and will be met from Maharashtra State Electricity distribution corporation limited (MSEDCL). Existing unit has 1x200 KVA, 1x500 KVA DG sets of 700 KVA capacity, additionally 1x500 KVA DG set are used as standby during power failure. Stack (height 8m) will be provided as per CPCB norms to the proposed DG set. Existing unit has 1 TPH Briquette fired boiler. Additionally, 3 TPH Briquette fired boiler will be installed.

Multi cyclone separator/ bag filter with a stack of height of 13 m will be installed for controlling the particulate emissions within the statutory limit of 115 mg/Nm³ for the proposed boilers.

7. The project/activity is covered under category A of item 5(f) 'Synthetic organic chemicals industry' of the schedule to the Environment Impact Assessment (EIA) Notification, 2006 and requires appraisal at central level by sectoral Expert Appraisal Committee (EAC) in the Ministry.

8. The Standard terms of references (ToR) for the project was issued by the Ministry vide letter dated 3rd December, 2018. Public Hearing for the project has been conducted by the Maharashtra State Pollution Control Board on 24th July 2019, which was presided over by Additional District Collector. The main issues raised during the public hearing are related to employment to local population and noise during testing of explosives in villages homes.

9. The proposal was considered by the Expert Appraisal Committee (Industry-2) in its meeting held on 11-13 May, 2020 in the Ministry, wherein the project proponent and their accredited consultant M/s Anacon Laboratories Pvt Ltd presented the EIA/EMP report as per the ToR. The Committee found the EIA/EMP report complying with the ToR and recommended the project for grant of environmental clearance.

10. 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 EIA/EMP 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 EIA/EMP 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 EIA/EMP report is in compliance of the ToR issued 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 on the public hearing issues, action plan and CER plan and found to be addressing the issues in the study area and the issues raised during the public hearing.

The Committee has observed that the project proponent has done 3D modelling, which suffice the risk assessment issues. The EAC has deliberated the proposal and has made due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC have found the proposal in order and have recommended for grant of Environmental Clearance.

11. The recommendations of the Expert Appraisal Committee has been examined in the Ministry. The environmental clearance granted to the project/activity is strictly under the provisions of the EIA Notification, 2006 and its amendments issued from time to time. 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.

12. Based on the proposal submitted by the project proponent and recommendations of the EAC (Industry-2), Ministry of Environment, Forest and Climate change hereby accords **environmental clearance to the project for Expansion of explosive**

production manufacturing unit by M/s Keltech Energies Ltd located at Village Garamsur, Post Dudhala, Tehsil Katol, District Nagpur, Maharashtra, under the provisions of the EIA Notification, 2006, subject to the compliance of terms and conditions as under:-

- (i) As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises. All the waste water to be collected and to be reused after treatment.
- (ii) Control room shall be set up with blast proof wall all around.
- (iii) Work in explosive process buildings should be confined to approved man limit and explosive quantity limits. Water based grit traps should be provided at entry of explosive plant buildings to prevent grit ingress. Adequate static discharge stations should be provided at entry / exit of the explosive production buildings, and magazines. Entry to explosives plant area should be restricted to authorized personnel and in minimal essential numbers.
- (iv) Suitable lightening arresting devices should be provided for explosive plant building. Work in explosive manufacturing process should be stopped during thunderstorm.
- (v) Noise and vibration monitoring stations shall be set up in the project site and villages and data generated during testing/explosion shall be submitted to State PCB and Regional Office of the Ministry.
- (vi) Volatile organic compounds (VOCs)/Fugitive emissions shall be controlled at 99.997% with effective chillers/modern technology.
- (vii) Trees shall not be cut for the proposed expansion. As proposed, the project proponent shall develop/maintain green belt area of 65 % out of total area of the project.
- (viii) Canal with sand shall be developed along the project area/explosive area for absorption of vibration due to explosion and testing.
- (ix) Solvent management shall be carried out as follows:
 - (a) Reactor shall be connected to chilled brine condenser system.
 - (b) Reactor and solvent handling pump shall have mechanical seals to prevent leakages.
 - (c) Solvents shall be stored in a separate space specified with all safety measures.
 - (d) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.
 - (e) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.
 - (f) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.
- (x) Total fresh water requirement shall not exceed 60 cum/day, proposed to be met from ground water. Prior permission in this regard shall be obtained from the concerned regulatory authority/CGWA.
- (xi) Process effluent/any wastewater shall not be allowed to mix with storm water. The storm water from the premises shall be collected and discharged through a separate conveyance system. All the vent pipes should be above the roof level.
- (xii) Storage of explosive materials should be in specified and approved storage places (store houses and magazines) only.

- (xiii) Standard Operating Procedures and General Safety Directions should be displayed in the explosive plant working area. First-Aid facility should be provided in each process area, and Ambulance services to be made available for emergency.
- (xiv) 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.
- (xv) As proposed the green belt of at least 5-10 m width shall be developed in nearly 65 % of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.
- (xvi) At least Rs.1.75 crore of the total project cost shall be allocated for Corporate Environment Responsibility (CER). As proposed, and the CER allocation shall be spent mainly for addressing the issues raised during public consultation/hearing and also for skill and economic development, health and medical, drinking water facility, drainage and sanitation, community development etc.
- (xvii) 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.
- (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 ZLD, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.
- (xix) Safety and risk assessment suggested during the advanced modelling shall be carried out.
- (xx) Risks and Hazards should be displayed at each Building in local language.
- (xxi) All Rules and Guidelines of Safety and Environmental Control must be followed in transportation of Explosive & Hazardous items within the facility and in vehicles being loaded at the factory. Adequate vehicle parking arrangements should be provided in factory premises to avoid transport vehicles agglomeration of Roads near the Factory Area.

12.1 The grant of environmental clearance is further subject to compliance of other general conditions as under:-

- (i) The project proponent shall prepare a site specific conservation plan and wildlife management plan in case of the presence of Schedule-1 species in the study area, as applicable to the project, and submit to Chief Wildlife Warden for approval. The recommendations shall be implemented in consultation with the State Forest/Wildlife Department in a time bound manner.
- (ii) 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. 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 energy source for lighting purpose shall be preferably LED based, or advance having preference in energy conservation and environment betterment.
- (iv) 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 station each is installed in the upwind and downwind direction as well as where maximum ground level concentrations are anticipated.
- (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 to utilize the same for process requirements.
- (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, and risk mitigation measures 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. CER activities shall be undertaken by involving local villages and administration and shall be implemented.
- (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 (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.
- (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, 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.
- (xiii) 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.
- (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&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.

- (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&CC 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 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.
- (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.
- (xviii) 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.

13. 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.

14. 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 the Environment (Protection) Act, 1986.

15. 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.

16. The above conditions shall 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, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.

17. This issues with approval of the competent authority.


(Dr. R. B. Lal)

Scientist 'E' / Additional Director

Copy to:-

(डा. आर. बी. लाल)
(Dr. R. B. LAL)
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1. The Deputy DGF (C), MoEF&CC Regional Office(WCZ), Ground Floor, East Wing, New Secretariat Building, Civil Line, Nagpur - 1
2. The Secretary, Environment Department, Government of Maharashtra, 15th Floor, New Administrative Building, Mantralaya, Mumbai - 32.
3. The Member Secretary, Central Pollution Control Board, Pariyesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi - 32.
4. The Member Secretary, Maharashtra Pollution Control Board, Kalpataru Point, 3rd and 4th Floor, Opp. Cine Planet, Sion Circle, Mumbai - 22
5. The District Collector, District Nagpur (Maharashtra)
6. Guard File/Monitoring File/Website/Record File

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