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F. No. J-11011/370/2009-IA-II(I)
Government of India
Ministry of Environment, Forest & Climate Change
Impact Assessment Division

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

Dated: 27th August, 2020

To,

M/s Paradeep Phosphate Limited.
PPL Township,
District **Jagatsinghpur**
(Orissa)

Sub: Expansion of Fertilizer manufacturing unit by M/s Paradeep Phosphate Limited at PPL Township, District Jagatsinghpur (Orissa) - Environmental Clearance - reg.

Sir,

This has reference to your online proposal No.IA/OR/IND2/77891/2018 dated 5th December, 2018 and further dated 14.05.2020 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 Fertilizer manufacturing unit by M/s Paradeep Phosphate Limited in an area of 2282.4 acres at PPL Township, District Jagatsinghpur (Orissa).

3. The details of product and capacity as under:-

S. No.	Products Details	Quantity in MMTPA			
		Existing Quantity	Expansion Quantity	Proposed Quantity	Total Quantity
1.	Sulphuric acid	1.452	-	-	1.452
2.	Phosphoric acid	0.462	-	-	0.462
3.	Di-Ammonium Phosphates	1.5	0.4 (capacity expansion of existing 4 DAP plants)	-	1.9
4.	Coal Hand. Plant	-	-	7	7
5.	Ammonia	-	-	2.178	2.178
6.	Urea	-	-	1.3	1.3
7.	Ammonium Nitrate	-	-	0.35	0.35 MMTPA
8.	Nitric Acid	-	-	0.33 (0.05 MMTPA Conc. Nit. Acid)	0.33 (0.05 MMTPA Conc. Nit. Acid)

9.	Granulated Single Super Phosphates (GSSP)	-	-	0.5	0.5
10.	Aluminium Fluoride	-	-	9500	9500

4. The existing land area is 2282.4 acres, no additional land is required for the proposed project. Industry has developed greenbelt in an area of 854 acres covering 37% of total project area. The estimated project cost is Rs 9459 crores. Total capital cost earmarked towards environmental pollution control measures is Rs 473 crores and the recurring cost (operation and maintenance) will be about Rs 100 crores per annum. Total employment opportunity will be for 1017 persons directly and 50 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. Mahanadi river is flowing at a distance of 5.02 km in North East.

6. Total water requirement is 2355.6 m³/hr of which freshwater requirement of 1276 cum/hr (existing-776 cum/hr and proposed-500 cum/hr) proposed to be met from Taladanda canal. Effluent of 736.6 m³/hr (industrial) and 230 m³/hr (domestic) will be treated through ETP and STP. The plant will be based on Zero Liquid discharge system. Power requirement after expansion will be 273 MW including existing 34 MW and will be met from inhouse Captive Power Plant. Existing unit has one DG sets of 5 MVA and two number of 1 MVA DG Sets. DG sets will be used as standby during power failure. Stack is provided as per CPCB norms. No boiler is proposed in the project.

7. Details of Process emissions generation and its management is mentioned below:-

S.No	Plant	Pollution Control equipment	Purpose
1	Di-Ammonium Phosphate	Cyclones, Pre-Scrubber, RG (Fumes) Scrubber, upgraded Mist Eliminators, Ventury scrubbers, upgraded fumes scrubber & fan, Upgraded Tail Gas Scrubber, Upgraded Dryer and Dust Scrubber, Upgraded Cooler Gas Scrubber, Upgraded Pre-Neutralizer. Online Ammonia Analyzers.	To control dust emission & gaseous emission.
2	Coal handling	Dry fog / ADS (Agglomerative dust suppression) & Bag filter systems	To control dust emission
3 /4	Ammonia / Urea	Dry gas seal for compressors	To prevent dust & Process gas emission
		Modified prill bucket.	Improving dust emission
		Urea hydrolyser stripper	To Recover ammonia and reusing in Urea plant
		MP condensate stripper	To recover ammonia and reusing the condensate in

			Cooling Tower as makeup
5	Ammonium Nitrate	Scrubbers (Vapor & Drying)	To control dust & gaseous emission
6	Nitric acid	Additional tail gas treatment system, Tail gas ammonia mixer and tail gas reactor	To control gaseous (NOx) emission
7	Granulated Single Super Phosphates (GSSP)	Venturi scrubbing followed by efficient wet scrubbing, Granulator scrubber , Bag filter, fluorine scrubber	To control fumes and gaseous emission
8	Aluminum Fluoride	Cyclones, Scrubbers.	To control fumes , Dust and gaseous emission

8. The project/activity is covered under category A of item 5(a) 'Chemical Fertilizers' of the Schedule to the Environment Impact Assessment Notification, 2006 and requires appraisal at central level in the Ministry.

9. PP has taken TOR earlier in 2013, PH conducted in 2017 and when PP applied for EC, the TOR validity was lapsed and as per Ministry's OM PH should not be older than 3 years. Therefore, PP has taken Standard TOR in 01.06.2018 and submitted the EIA/EMP Report along with earlier PH in 2019 which was less than three years old and accordingly EAC has considered the PH in its meeting held during 26-28 February, 2019. Public hearing for the project was conducted by the State Pollution Control Board on 19th May 2017. The Public hearing was chaired by the Additional District Magistrate. The main issues raised during the public hearing are related to pollution from the proposed plant and employment to local people.

10. The proposal for environmental clearance was considered by the EAC (Industry-2) in its meetings held on 26-28 February, 2019 and 14 to 16 July, 2020. The project proponent and their accredited consultant M/s EQMS India Pvt Ltd, made a detailed presentation through Video Conferencing (VC) and have presented the EIA/EMP report. The Committee found the EIA/EMP report to be satisfactory, complying with the ToR, and recommended the project for grant of environmental clearance.

11. 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.

12. 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. Additional information submitted by the project proponent to be satisfactory and addressing the concerns of the Committee. 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 (EC).

13. The proposal has been further examined in the Ministry and it is observed that EAC has recommended Rs. 50 crore towards the Corporate Environment Responsibility (CER) on expansion cost of Rs. 9459 crore which should be maximum of Rs. 27.64 crore for expansion project as per the Ministry's Office Memorandum No. 22-65/2017-IA.III on CER dated 01.05.2018. Accordingly, the competent authority in the Ministry has approved the CER cost of Rs. 27.64 crore. The CER funds shall be utilized as per the specific condition no. 15 (xi).

14. 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.

15. 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 Fertilizer manufacturing unit by M/s Paradeep Phosphate Limited at PPL Township, District Jagatsinghpur, Orissa**, 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 EIA/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). 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.
- (iv). Total fresh water requirement shall not exceed 1276 cum/hr, proposed to be met from Taladanda canal. Prior permission in this regard shall be obtained from the concerned regulatory authority.

- (v). 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.
- (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). 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.
- (viii). 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.
- (ix). The Project Proponent 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.
- (x). 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.
- (xi). As committed Rs. 27.64 crore shall be allocated for Corporate Environment Responsibility (CER), and shall be utilized for meeting the commitment of issues raised during public consultation/ hearing. The CER plan shall be completed before commissioning /expansion of the project.
- (xii). 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.
- (xiii). The project proponent shall implement site specific conservation plan and wildlife management plan for the presence of Schedule-1 species in the study area. The recommendations shall be implemented in consultation with the State Forest/Wildlife Department in a time bound manner.
- (xiv). The Project Proponent has agreed to install 1MW Solar Power Unit.

15.1.: 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.

16. 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.

17. 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.

18. 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.

19. 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.

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


(Dr. R. B. Lal)
Scientist 'E'/Additional Director
(Dr. R. B. Lal)
वैज्ञानिक 'ई'/Scientist 'E'
पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय
Min. of Environment, Forest and Climate Change
भारत सरकार, नई दिल्ली
Govt. of India, New Delhi

Copy to: -

1. The Principal Secretary, Department of Forest and Environment, Government of Odisha, Bhubaneswar (Odisha)
2. Dy. Director General of Forest, MoEF&CC Regional Office (EZ), A/3, Chandersekharapur, Bhubaneswar - 23 (Odisha)
3. The Member Secretary, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi - 32
4. The Member Secretary, Odisha State Pollution Control Board, Paribesh Bhawan, A/118, Nilakantha Nagar, Unit - VIII, Bhubaneswar -12 (Odisha)
5. Monitoring Cell, MoEF&CC, IP Bhawan, Jor bagh Road, **New Delhi**
6. District Collector, **Jagatsinghpur**, (Odisha)
7. Guard File/Record File/Monitoring File/Website of MoEF&CC


(Dr. R. B. Lal)
Scientist 'E'/Additional Director
Tele-fax: 24695362
Email-rb.lal@nic.in