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F. No. J-11011/360/2016- IA II (I)
Government of India
Ministry of Environment, Forest and Climate Change
(Impact Assessment Division)

Indira Paryavaran
Bhawan
Jorbagh Road, New Delhi - 110003

Dated: 1st December, 2020

To

M/s Nalco Water India Limited
Lenin Sarani, Konnagar
District Hooghly, West Bengal - 712235

Email: ssen@ecolab.com

Sub: Capacity augmentation of specialty chemicals manufacturing unit from 11,000 TPA to 22,000 TPA at Konnagar, District Hooghly, West Bengal by M/s Nalco Water India Limited (NIWL) - Environmental Clearance - reg.

Sir,

This has reference to your proposal No. IA/WB/IND2/60903/2016 dated 17th June 2019, 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 Capacity augmentation of specialty chemicals manufacturing unit from 11,000 TPA to 22,000 TPA by M/s Nalco Water India Limited (NIWL) in an area of 2.02 ha located at Konnagar, District Hooghly, West Bengal.

3. The details of products and by-products are as under. Details of products in individual category is mentioned in the EIA report from pages C2-5 to C2-19.

S.No	Product Category	Existing (TPA)	Proposed (TPA)	Total (TPA)
1	Water treatment chemicals (WTC)	6600	4400	11000
2	Oil field Chemicals (OFC)	1650	2850	4500
3	Industrial additives (IA)	2750	3750	6500
	Total	11000	11000	22000

4. The existing land area is 2.02 ha (5.0 acres). No additional land is required for the proposed expansion. Industry has developed greenbelt in an area of 0.65 acres in the existing land & is developing further green belt of 1.5 acre on the external

lease land in nearby area to cover more than 33% green belt. The estimated cost of the project is about Rs. 10 crores and proposes to spend about Rs 3.25 crore towards environmental protection measures in a phase wise manner with a recurring cost of Rs. 10 lakhs per year. Total 33 nos. of skilled and unskilled manpower will be employed. Majority of labour will be employed from the nearby villages.

5. There are no National parks, Wildlife sanctuaries, Biosphere Reserves, Tiger/ Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site. Hooghly river is flows at 1.3 km, east from the project site.

6. Water requirement of our existing plant is 65 m³/day out of which 45 m³/day comes from bore well installed within the plant premises and the balance 20 m³/day comes as recycled water from Effluent treatment plant (ETP) after necessary treatment. For proposed project, additional water requirement is 45 m³/day and the total water requirement will be 110 m³/day out of which 56 m³/day will come from existing bore well, 40 m³/day will come as recycled water from Effluent treatment plant (ETP) after necessary treatment and remaining 14 m³/day will come from rainwater reuse. The treated water will be completely utilised within the plant. There will be no discharge of treated/untreated waste water from the unit, and thus ensuring Zero Liquid Discharge.

The power requirement for the proposed expansion will be about 20,00,000 KWh unit per year which will be sourced from Calcutta Electricity Supply Corporation. To support the safe operations during power failure, 1 no of D.G set (1010 KVA) is also provided. The process does not have any by-product for emission. Any vapour from raw materials are completely absorbed in caustic / water scrubbing system. These are very effectively scrubbed in water and alkali scrubbers. ETP sludge of 1 ton/month will be generated and disposed to WBPCB authorised dealers (WBWML). General polymeric waste – rinse water for latex polymers – stored in HDPE Tote and disposed to WBPCB authorised dealers (WBWML).

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. Terms of references (ToR) for the project was issued by the Ministry vide letter dated 28th February, 2017. Public Hearing has been conducted by West Bengal SPCB on 9th August, 2018 which was presided over by the Additional District Magistrate. The major issues raised during public hearing are related to land, environment management, traffic, employment & CSR activities.

9. It was reported that the plant was established in the year 1988, obtained industrial license from Department of Industrial Development, New Delhi vide letter no: CIL:215(8B)/Regn. No. 1261(86)/IL/MRTP/SCS, dated 12th September 1988. And also obtained No Objection Certificate (NOC) from West Bengal Pollution Control Board, Calcutta in Environment concerns vide letter no: 565-10/WPB-S(11),

dated 7th June, 1988. The plant is not having any prior EC as plant was established in 1988-89.

10. The proposal was considered by the Expert Appraisal Committee (Industry-2) in its meetings held on 29-31 July 2019, 11-13 May, 2020 and **20-22 October, 2020** in the Ministry, wherein the project proponent and their accredited consultant M/s Vimta Labs Limited 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.

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.

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.

12. 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.

13. 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 **Capacity augmentation of specialty chemicals manufacturing unit from 11,000 TPA to 22,000 TPA by M/s Nalco Water India Limited at Konnagar, District Hooghly, West Bengal**, under the provisions of the EIA Notification, 2006, subject to the compliance of terms and conditions as under:-

- (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). The storage of toxic/explosive raw material shall be bare minimum with respect to quantity and inventory. Quantity and days of storage shall be submitted to the Regional Office of Ministry and SPCB along with the compliance report.
- (v). 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.
- (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). 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). Volatile organic compounds (VOCs)/Fugitive emissions shall be controlled at 99.997% with effective chillers/modern technology.
- (xi). Total fresh water requirement shall not exceed 56 cum/day, proposed to be met from ground water. Prior permission in this regard shall be obtained from the concerned regulatory authority/CGWA.
- (xii). 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.
- (xiii). 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.
- (xiv). 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, in downward wind direction, and along road sides etc. As proposed, the greenbelt can be developed in the additional acquired area. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.
- (xv). Time-Bound Action Plan to address the issues raised during public hearing, as submitted by the PP to Ministry, shall be part of the EMP and to be complied by PP in letter and spirit. Preference shall be given to local villagers for employment in the unit. The action plan shall be completed within three years as proposed. All the commitments made during public hearing shall be satisfactorily implemented.
- (xvi). 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.

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

- (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 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 advance having preference in energy conservation and environment betterment.
- (iii) 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.
- (iv) The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 shall be followed.
- (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 undertake all relevant measures for improving the socio-economic conditions of the surrounding area. The activities shall be undertaken by involving local villages and administration.
- (ix) The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment.
- (x) 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.

- (xi) 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.
- (xii) 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.
- (xiii) 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.
- (xiv) 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.
- (xv) 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.
- (xvi) 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.

14. 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.

15. 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.

16. 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.

17. 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.

18. This issues with approval of the competent authority.

01/12/2020

(Dr. R. B. Lal)

Scientist 'E'/Additional Director

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Copy to: -

1. The Deputy DGF (C), MoEF&CC Regional Office (EZ), A/3, Chandersekharpur, Bhubaneswar - 23 (Odisha)
2. The Secretary, Department of Environment, Government of West Bengal, Poura Bhavan, 4th Floor, FD-415/A, Sector-III, Bidhannagar, Kolkata - 106 (WB)
3. The Member Secretary, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi - 32
4. The Member Secretary, West Bengal Pollution Control Board, Paribesh Bhavan, 10A, Block-L.A., Sector 3, Salt Lake City, Kolkata - 98 (WB)
5. The District Collector, District Hooghly (West Bengal)
6. Guard File/Monitoring File/Website/Record File/Parivesh Portal

(Dr. R. B. Lal)

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