## F. No.J-11011/140/2016- IAII (I) Government of India Ministry of Environment, Forest and Climate Change (IA-II Division)

Indira Paryavaran Bhawan Jor Bagh Road, N Delhi - 3 Dated: 5<sup>th</sup> July, 2019

To,

M/s Tata Chemicals Ltd Villages Mithapur & Surajkaradi, Taluka Dwarka, District <u>Devbhumi Dwarka</u> (Gujarat)

Sub: Expansion of Soda Ash Plant and Captive Power Plant by M/s Tata Chemicals Ltd at Villages Mithapur and Surajkaradi, Taluka Dwarka, District Devbhumi Dwarka (Gujarat) - Environmental Clearance - reg.

Ref: Online proposal No.IA/GJ/IND2/53444/2016 dated 28th June, 2018.

Sir.

This has reference to your online proposal No.IA/GJ/IND2/53444/2016 dated 28<sup>th</sup> June, 2018 for environmental clearance to the above project..

- 2. The Ministry of Environment, Forest and Climate Change has considered the proposal for environmental clearance to the project for expansion of Soda Ash Plant from 1091000 TPA to 1316000 TPA and Captive Power Plant from 85 MW to 125 MW by M/s Tata Chemicals Ltd in an area of 231 ha at villages Mithapur and Surajkaradi, Taluka Dwarka, District Devbhumi Dwarka (Gujarat).
- **3.** Existing plant area is 231 ha and no additional land shall be required for proposed expansion. Out of the total project area, green belt will be developed in 131 ha. The estimated project cost is Rs.1042.07 crores. Total capital cost earmarked for environmental pollution control measures is Rs.80.79 crores and the recurring cost (O&M) will be Rs.16.29 crores per annum.
- **4.** Marine National Park and Marine Wildlife Sanctuary are located at a distance of 2.9 km and 2.4 km respectively. Shamlasar River flows at 9.7 km in South East. Bhimgaja Rainwater Lake is at a distance of 9.7 km in South East direction. Arabian Sea is at a distance of 2.44 km. Gulf of Kutch is at a distance of 2.19 km.
- **5.** Total existing water requirement is 276000 cum/day. No additional fresh water will be required for the proposed expansion.

Total effluent generated from different industrial operations is estimated to be 240000 cum/day, which will be treated through the effluent treatment plant. Treated effluent would be discharged to Gulf of Kutch through existing channel. Domestic effluent will be taken to the sewage treatment plant for the required treatment.

Power requirement will be increased from 62.97 MW to 92.60 MW proposed to be met from own Captive Co-generation Power Plant. Existing unit has 9 DG sets of 8318 KVA capacity which will be used as standby during power failure. No additional DG sets shall be required for the proposed expansion.

One coal fired boiler of 300 TPH capacity is proposed to be installed along with Electrostatic Precipitator with a stack of 130 m height to control the particulate emissions within the statutory norms.

- 6. The project/activities are covered under category A of item 4(e) 'Soda ash industry' and category B of item 1(d) 'Thermal Power Plants' of the schedule to the Environment Impact Assessment Notification, 2006, and requires appraisal/approval at central level by the sectoral EAC in the Ministry.
- 7. The terms of reference (ToR) for the project was granted on 2<sup>nd</sup> August, 2016. Public hearing was conducted by the Gujarat Pollution Control Board on 17<sup>th</sup> February, 2018.
- **8.** The proposal was considered by the sectoral Expert Appraisal Committee (Industry-2) in its meetings held on 25-27 July, 2018, 24-26 September, 2018 & 26-27 November, 2018, wherein the project proponent and their accredited consultant presented the EIA/EMP report. The Committee found the EIA/EMP report complying with the ToR and recommended the project for grant of environmental clearance.
- 9. 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 Soda Ash Plant from 1091000 TPA to 1316000 TPA and Captive Power Plant from 85 MW to 125 MW by M/s Tata Chemicals Ltd at villages Mithapur and Surajkaradi, Taluka Dwarka, District Devbhumi Dwarka (Gujarat), under the provisions of the EIA Notification, 2006, subject to the compliance of terms and conditions as below:-
- (a) The environmental clearance shall be subject to obtaining prior clearance from the wildlife angle, including clearance from the Standing Committee of the National Board for Wildlife, as applicable.
- (b) 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, shall be obtained from the State Pollution Control Board.
- (c) Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.
- (d) National Emission Standards for Organic Chemicals Manufacturing Industry issued by the Ministry vide G.S.R. 608(E) dated 21<sup>st</sup> July, 2010 and amended from time to time shall be followed.
- (e) To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.
- (f) Total existing water requirement from Sea is 276000 cum/day. No additional fresh water/Sea water shall be required for proposed expansion.
- (g) 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.

- (h) Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm, and solvent transfer through pumps.
- (i) Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.
- (j) The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.
- (k) Fly ash should be stored separately as per CPCB guidelines so that it may not adversely affect the air quality. Direct exposure of workers to fly ash & dust should be avoided.
- (I) The company shall undertake waste minimization measures as below:-
  - (i) Metering and control of quantities of active ingredients to minimize waste.
  - (ii) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.
  - (iii) Use of automated filling to minimize spillage.
  - (iv) Use of Close Feed system into batch reactors.
  - (v) Venting equipment through vapour recovery system.
  - (vi) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- (m) 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. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.
- (n) All the commitments made to the public during public hearing/consultation shall be satisfactorily implemented.
- (o) At least 0.25% of the total project cost shall be allocated for Corporate Environment Responsibility (CER) and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.
- (p) For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.
- (q) 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.
- (r) Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- (s) 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.

- **9.1** The grant of Environmental Clearance is further subject to compliance of other generic conditions as under:-
- (i) The project authorities must strictly adhere to the stipulations made by the state Pollution Control Board (SPCB), State Government and/ or any other statutory authority.
- (ii) No further expansion or modifications in the plant 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 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 stations 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 16<sup>th</sup> November, 2009 shall be complied with.
- (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 to recharge ground water, and to utilize the same for different industrial operations within the plant.
- (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.
- (viii) 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, risk mitigation measures and public hearing shall be implemented.
- (ix) The company shall undertake all measures for improving socio-economic conditions of the surrounding area. CSR activities shall be undertaken by involving local villagers, administration and other stake holders. Also eco-developmental measures shall be undertaken for overall improvement of the environment.
- (x) A separate Environmental Management Cell equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.
- (xi) 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 Changeas 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.



- (xii) A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, Zila Parisad/Municipal Corporation, Urban local Body and the local NGO, if any, from whom suggestions/representations, if any, were received while processing the proposal.
- (xiii) 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.
- (xiv) The environmental statement for each financial year ending 31<sup>st</sup> 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.
- (xv) 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 at <a href="http://moef.nic.in">http://moef.nic.in</a>. 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.
- 10. 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.
- 11. 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 Water Pollution) Act, 1981, the Environment (Protection) Act, 1986, the Hazardous Waste (Management, Handling and Trans-boundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991, read with subsequent amendments therein.

(S. K. Srivastava) Scientist E

## Copy to: -

- 1. The Principal Secretary, Forests & Environment Department, Government of Gujarat, Sachivalaya, 8<sup>th</sup> Floor, **Gandhi Nagar** 382 010 (Gujarat)
- 2. The Additional Principal Chief Conservator of Forests (Western Zone), MoEF&CC, Regional Office, E-5, Arera Colony, Link Road -3, Ravishankar Nagar, **Bhopal** 462 016 (MP)
- **3.** The Member Secretary, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, **Delhi** -32
- 4. The Member Secretary, Gujarat Pollution Control Board, Paryavaran Bhawan, Sector 10 A, Gandhi Nagar-382 043 (Gujarat)
- 5. Monitoring Cell, MoEF&CC, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi
- 6. Guard File/Monitoring File/Record File

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