## **F.No. J-11011/193/2016-IA II(I)** Government of India Ministry of Environment, Forest and Climate Change (IA-II Division)

Indira Paryavaran Bhawan Jorbagh Road, New Delhi - 3 Dated: 5<sup>th</sup> April, 2018

To,

M/s Rashtriya Chemicals & Fertilizers Ltd, Priyadharshini, Eastern Express Highway, Sion, <u>Mumbai</u> - 400 022 (Maharashtra)

Sub: Modernization of fertilizer plant by installation of Gas Turbine Generator and Heat Recovery Steam Generator under energy saving scheme by M/s Rashtriya Chemicals & Fertilizers Ltd at Trombay Fertilizer Complex, Mumbai (Maharashtra) - Environmental Clearance - reg.

## Ref.: Online proposal No. IA/MH/IND2/58082/2016 dated 5<sup>th</sup> February, 2018

Sir,

This has reference to your online proposal No. IA/MH/IND2/58082/2016 dated 5<sup>th</sup> February, 2018 for environmental clearance to the above project, along with the documents including Form-1, Terms of Reference (ToR), EIA/ EMP report containing the public hearing proceedings/details.

2. The Ministry of Environment, Forest and Climate Change has examined the proposal for environmental clearance to the project for modernization of fertilizer plant by installation of Gas Turbine Generator (GTG) of 2x 32 MW and Heat Recovery Steam Generator (HRSG) of 2x 65TPH under energy saving scheme by M/s Rashtriya Chemicals & Fertilizers Ltd at their Trombay Fertilizer Complex, Mumbai (Maharashtra). Present industrial operations within the complex include manufacturing of products namely Ammonia-1250 TPD, Urea-1300 TPD, Nitric Acid-1130 TPD, Suphala-1100 TPD, Ammonium Nitrophosphate-1200 TPD etc, for which consent for operation was earlier granted by Maharashtra PCB vide letter dated 30<sup>th</sup> March, 1989.

The project actually involves revamping of existing steam generation plant, and installation of GTG and HRSG, resulting overall energy saving of 86.05 GCal/hr to meet the target envisaged under the new urea policy of the Government of India. With the proposed energy savings measures, the power requirement of 40.7 MW, presently being supplied from the external source, shall be met from the inhouse GTG. The details are as under: -

S.No.	ltem	Existing case	Revamp case	Savings	
				Gas	Energy (GCal/hr)
		Natural Gas cor	nsumption Nm <sup>3</sup> /h		
1.	Steam generation in NSGP	16736	7524	9212	76.0
2.	GTG & HRSG	-	12900	-12900	-106.43
	···	Power	(KWh/h)		
3.	Power	Tata Power (40.7 MW)	2x32 MW GTG	40727 Kwh/h	116.48
Net saving in energy					86.05

Total project cost for the proposed modernization is estimated to be Rs.481.61 crores, and also the project proponent proposes to allocate 2.5% towards Corporate Social Responsibility.

**3.** Existing land area is 560 acres and no additional land shall be required for the proposed modernization. Greenbelt has already been developed in an area of 194 acres, thus covering 33% of total project area. There are No National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km of the project site.

There shall be saving of 1270 m<sup>3</sup>/day of fresh water consumption due to the proposed modernization. Effluent generated from the proposed project shall be treated in the existing Effluent Treatment Plant. There will be no discharge of treated/untreated waste water from the unit, and thus conforming to Zero Liquid Discharge.

After modernization, there shall be no more power requirement from the external source. Existing unit has 170 TPH x 3 Nos. of gas fired boilers already installed. For Proposed HRSG of 65 TPH x 2 Nos. of boilers shall be provided. Process emissions generation shall be released through 30 m GTG-HRSG stack and for NO<sub>x</sub> control, dry NO<sub>x</sub> burner shall be installed for emission management.

**4**. The project/activity is covered under category A of item 5(a) 'Chemical Fertilizer' of the Schedule to the Environmental Impact Assessment Notification, 2006 and requires appraisal at central level by the sectoral Expert Appraisal Committee in the Ministry.

5. The ToR for the project was granted on 28<sup>th</sup> February, 2017. Public hearing was conducted by SPCB on 19<sup>th</sup> July, 2017.

6. The proposal was considered by the Expert Appraisal Committee (Industry-2) in its 34<sup>th</sup> meeting held during 26-28 February, 2018. The project proponent and their accredited consultant M/s Projects & Development India Ltd, presented the EIA / EMP report as per the ToR. The Committee found the EIA / EMP Report to be satisfactory and complying with the ToR. The Committee has recommended the proposal for grant of environmental clearance.

7. Based on the proposal submitted by the project proponent and recommendations of EAC (Industry-2), the Ministry of Environment, Forest and Climate change hereby accords environmental clearance to the project '*Modernization of Fertilizer Plant by installation of Gas Turbine Generator of 2x 32 MW and Heat Recovery Steam Generator of 2x 65TPH*' under energy saving scheme by M/s Rashtriya Chemicals & Fertilizers Ltd at their Trombay Fertilizer Complex, Mumbai (Maharashtra), under the provisions of the EIA Notification, 2006, subject to the compliance of terms and conditions as below:

- (i) Consent to Establish/Operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.
- (ii) The effluent discharge, if any, shall meet the standards prescribed for 'Nitrogenous Fertilizer Industry' under the Environment (Protection) Rules, 1986.
- (iii) To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms of 50 mg/Nm<sup>3</sup> for particulate matter and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.

- (iv) Process effluent/any wastewater shall not be allowed to mix with storm water.
- (v) 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.
- (vi) The project proponent 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.
- (vii) The project proponent shall undertake waste minimization measures such as: -
  - (a) Metering and control of quantities of active ingredients to minimize waste.
  - (b) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- (viii) The green belt shall be developed in more than 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc.
- (ix) All the commitment made regarding issues raised during the Public Hearing/consultation meeting held on 19<sup>th</sup> July, 2017 shall be satisfactorily implemented
- (x) At least 2.5% of the total project cost shall be allocated for Enterprise Social Commitment based on Public Hearing issues and item-wise details.
- (xi) 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.
- (xii) 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.
- (xiii) Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- (xiv) 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.
- (xv) In case the unit adopting ZLD and to ensure 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. If the treated effluent is to be utilized for irrigation/gardening, real time monitoring system shall be installed at the ETP outlet.

7.1 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 and storm water drains to recharge the ground water and 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. Training to all employees on handling of chemicals shall be imparted.
- (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 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.
- (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 <u>http://moef.nic.in</u>. 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.

8. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.

**9**. The Ministry reserves the right to stipulate additional conditions, if found necessary. The company in a time bound manner will implement these conditions.

**10**. 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.

(S. K. Srivastava) Scientist E

## Copy to: -

- 1. The Principal Chief Conservator of Forests, Government of Maharashtra, MECL Building, Dr. Ambedkar Bhawan, Seminary Hills, Civil Lines, **Nagpur** 440006 (Maharashtra)
- 2. The Additional Principal Chief Conservator of Forests (C), Ministry of Environment, Forest and Climate Change, Regional Office (WCZ), Nagpur (Maharashtra)
- 3. The Member Secretary, Central Pollution Control Board, Parivesh Bhavan, East Arjun Nagar, Delhi - 32
- 4. The Member Secretary, Maharashtra Pollution Control Board, Kalpataru Point, 3<sup>rd</sup> and 4<sup>th</sup> floor, Opp. Cine Planet, Sion Circle, **Mumbai** 400 022 (Maharashtra)
- 5. Monitoring Cell, Ministry of Environment, Forest and Climate Change, New Delhi
- 6. Guard File/Monitoring File/Record File

4/2018 (S. K. Srivastava) Scientist E

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