

No. J-11011/51/2005 – IA II (I)
Government of India
Ministry of Environment & Forests
I. A. Division

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Paryāvaran Bhavan
CGO Complex, Lodi Road
New Delhi – 110 003
Dated 13th October, 2005

To, ✓
The Director
M/s Kanoria Chemicals & Industries Limited
Renukoot Chemical Works Division
PO Renukoot – 231 217
District – Sonbhadra (UP)

Sub: Expansion of Caustic Soda Plant (membrane cell) from 145 to 255 MTPD by M/s Kanoria Chemicals and Industries Ltd. at Village Renukoot, District Sonbhadra, U.P.

Sir,

This has reference to your letter no. KC/ENV/04-05 dated 14.02.2005 along with project documents including EIA / EMP, disaster management report, questionnaire and CD containing all the documents and subsequent clarifications/additional information furnished vide your letter 11.04.2005 on the above mentioned project.

The Ministry of Environment and forests has examined your application. It is noted that expansion proposal is for increase in the capacity of Caustic Soda Plant from 145 MTPD to 255 MTPD. The Company will adopt State-Of-the-Art membrane cell based technology. The land area of the existing unit is 113.53 ha. Land area required for the expansion of the project is 0.339 ha. The proposed expansion is within the existing land area. The project does not involve forest land and displacement of people. Water requirement of 2598 m³/day will be met from the Rihand reservoir. Solid waste (10.4 TDP) in the form of brine sludge will be generated and disposed off in the landfill. It is also noted that NOC from the Uttar Pradesh Control Board has been obtained on the 21st February, 2005. The public hearing panel has considered the project in its meeting held on 3rd January, 2005. Total cost of the project is Rs.98.00 Crores.

2.0. The Ministry of Environment and Forests hereby accords environmental clearance to the above project under the provisions of EIA Notification dated 27th January, 1994 as amended subsequently subject to strict compliance to the following specific and general conditions:

A: SPECIFIC CONDITIONS

- i) The gaseous emissions (SO_2 , NO_x , Cl_2 & HCl) particulate matter from various process units shall conform to the standards prescribed by the concerned authorities from time to time. At no time, the emission levels shall go beyond the stipulated standards. In the event of failure of pollution control system(s) adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency.
- ii) Ambient air quality monitoring stations shall be set up in the downwind direction as well as where maximum ground level concentration are anticipated in consultation with the SPCB and data submitted to the Ministry.
- iii) The effluent generation after expansion shall not exceed $0.80 \text{ m}^3/\text{tonne}$ of the product. The treated effluent shall conform to the standards stipulated by the UPPCB while granting NOC to the expansion project and for discharge in inland surface water. The company shall make efforts to maximize the use of treated effluent for green belt development within the plant complex to minimize the discharge of treated effluent into Dongia nullah. Further, efforts shall be made by maximizing optimal re-use and recycle of treated effluent in process and utilities to reduce the fresh water consumption.
- iv) The vent gases from chlorine absorber of sodium hydrochloride plant and HCl acid plant shall be controlled at source by effective absorption system so that Chlorine concentration in the vent gases shall not exceed 5 ppm. The vent gases shall be discharged from the stacks of adequate height for effective dispersion.
- v) The solid waste including ETP sludge shall be disposed off in the landfill site approved by the State Control Pollution Board. Any further extension or creation of new secured landfill facility shall be as per the CPCB guidelines
- vi) The company shall seek permission from the State Irrigation Department to draw water from the Rihand reservoir.
- vii) The company shall develop rain water harvesting structures to harvest the run off water from the roof top and by laying a separate storm water drainage system for recharge of ground water.
- viii) Green belt shall be developed in an area of 22.75 ha to mitigate the effects of fugitive emissions all around the plant. The development of green belt shall be as per the Central Pollution Control Board guidelines.

- ix) The project authorities shall comply with the recommendations made in the Disaster Management Plan. The Company shall install chlorine gas detectors to detect leakage of chlorine at liquid chlorine storage tanks, sodium hypo plant at vent pipe, HCL synthesis unit at vent pipe and electrolyzes area. The company should install on-line Hydrogen in Chlorine analyzer.

GENERAL CONDITIONS

- i. The project authorities must strictly adhere to the stipulations made by the Uttar Pradesh Pollution Control Board.
- ii. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment and Forests. 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 project authorities shall strictly comply with the rules and regulations under Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 as amended in October 1994 and January 2000. Prior approvals from Chief Inspectorate of Factories, Chief of Controller Explosives, Fire Safety Inspectorate etc. must be obtained.
- iv. The project authorities must strictly comply with the rules and regulations with regard to handling and disposal of hazardous wastes in accordance with the Hazardous Wastes (Management and Handling) Rules, 2003. Authorization from the State Pollution Control Board must be obtained for collections/treatment/ storage/disposal of hazardous wastes.
- v. The overall noise levels in and around the plant area should be kept well within the standards (85 dBA) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels should conform to the standards prescribed under Environment (Protection) Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).
- vi. Occupational health surveillance programme should be undertaken as regular exercise for all the employees, specifically for those engaged in handling hazardous substances. The first aid facilities in the occupational health center should be strengthened and the medical records of each employee should be maintained separately

- vii. The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA and Disaster Management Plan. The company also under take social welfare/community development measures in the surrounding villages such as health care, education and drinking water supply facilities.
- viii. A separate Environmental Management Cell equipped with full fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.
- ix. The project authorities will provided requisite funds both recurring and non-recurring to implement the conditions stipulated by the Ministry of Environment & Forests as well as State Government along with the implementation schedule for all the conditions stipulated herein. The funds so provided shall not be diverted for any other purpose.
- x. The implementation of the project vis-à-vis environmental action plans will be monitored by the Ministry's Regional Office at Lucknow/SPCB/CPCB. A six monthly compliance status report shall be submitted to monitoring agencies.
- xi. *A.K. Panigrahi* 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 <http://envfor.nic.in>. This should 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 should be forwarded to the Regional Office.
- xii. 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 commencing the land development work, if any.
- 3.0 The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- 4.0 The Ministry reserves the right to stipulate additional conditions, if found necessary. The company in a time bound manner will implement these conditions.
- 5.0 The above conditions will be enforced, inter alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 Hazardous Wastes (Management and Handling)


Rules, 2003 and the Public Liability Insurance Act, 1991 along with their amendments and rules.



(Dr. P.B. RASTOGI)
Additional Director

Copy to : -

1. Chairman, Central Pollution Control Board Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar New Delhi – 110032.
2. Chairman, Uttar Pradesh State Pollution Control Board, 111 Floor, PICUP Bhavan, Vibhuti Khand, Lucknow – 226 020, UP.
3. Chief Conservator of Forests, Regional Office (Central Region), B-1/72, Sector K, Aliganj, lucknow – 226 020, UP.
4. Secretary, State Deptt. Of Environment, Government of Uttar Pradesh, Room No. 13, New Buildings, Vidhan Bhawan, Lucknow –226 001, UP.
5. Joint Secretary (CCI-I), Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi. - 110003.
6. Monitoring Cell, Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi- 110003.
7. Guard file.
8. Monitoring file.
9. Record file.



(Dr. P.B. RASTOGI)
Additional Director