

**No. J-11011/219/2003-IA-II
Government of India
Ministry of Environment & Forests**

**Paryavaran Bhawan,
CGO Complex, Lodi Road,
New Delhi-110 003
Telefax : 24364595
Email : sujata@menf.delhi.nic.in
Telefax : 2436 4595
June 24, 2004**

To
Shri M.K. Rao
Vice President (Works)
India Glycols Limited
A-1 Industrial Area, Bazpur Road
Kashipur-244713

Sub : Expansion of distillery unit by M/s India Glycols Ltd. at Kashipur, Udham Singh Nagar district, Uttaranchal

Sir,

This has reference to your letter No. AG/EC/MOEF/2003 dated 14.10.03 enclosing EIA/EMP report, and subsequent clarifications furnished vide your letters dated 18.11.03, 24.12.03, 14.1.04, 9.3.04, 13.4.04 and 22.4.04 on the above mentioned project.

2. The Ministry of Environment & Forests has examined the proposal. It is noted that the company proposes to expand the capacity of the existing distillery from 205 KLD to 425 KLD. Out of this, 120 KLD will be manufactured from molasses and 100 KLD from cane juice directly. The distillery is located in the IGL plant complex covering an area of 250 acres at Kashipur industrial area in Udham Singh Nagar district of Uttaranchal. Expansion will be undertaken using the same infrastructure facilities. The project does not involve forest land and displacement of people. Water requirement is met from groundwater. The distillery will operate for 330 days for molasses route and 240 days for cane juice process, since alcohol is produced for captive consumption on continuous basis for production of speciality chemicals. The unit uses batch type fermentation process in Plant I, which will increase from 120 KLD to 205 KLD, and continuous fermentation process in Plant II which will increase from 85 KLD to 220 KLD. For treatment of spentwash, biomethanation, ferti-irrigation, reverse osmosis and biocomposting will be practiced, to ensure zero discharge from the expanded distillery capacity right from the commencement of production. For the existing capacity of 205 KLD, zero discharge will be achieved by December 2005, by undertaking biocomposting and ferti-irrigation. Requirement of pressmud will be met from sugar mills in Uttaranchal. NOC from Uttaranchal Pollution Control Board was obtained on 16.8.03. Public hearing for the project was held on 28.7.03. Cost of the project is Rs. 20.50 crores.

3. 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 of the following specific and general conditions:

A. SPECIFIC CONDITIONS

- (i) The industry shall ensure that the treated effluent and stack emissions from the unit are within the norms stipulated under the EPA rules or CPCB whichever is more stringent. In case of process disturbances/failure of pollution control equipments adopted by the unit, the respective unit shall be shut down and shall not be restarted until the control measures are rectified to achieve the desired efficiency.
- (ii) The company shall adopt batch type and continuous fermentation technology. Out of the expanded capacity of 220 KLD, 120 KLD shall be manufactured from molasses and 100 KLD from cane juice.
- (iii) The quantity of spentwash generated from expanded capacity of 220 KLD shall not exceed 2140 m³/d (1440 m³/d from manufacture of 120 KLD of alcohol from molasses, and 700 m³/d from manufacture of 100 KLD of alcohol from cane juice). Out of the 2140 m³/d of effluent generated, 1440 m³/d of effluent after primary treatment (biomethanation), shall be processed through reverse osmosis, and 50% of the clear effluent recovered (i.e. 720 m³/d) shall be recycled to the process. The remaining 720 m³/d from reverse osmosis shall be stored in a dedicated storage lagoon for RO reject and used for biocomposting. Spentwash storage shall not be for more than 30 days. The entire effluent from cane juice process (i.e. 700 m³/d which is equivalent to 59 KLD of molasses based distillery) shall be treated by secondary aerobic treatment. The treated effluent shall be stored in a separate lagoon, and used for ferti-irrigation.
- (iv) The company shall achieve zero discharge for the existing distillery capacity of 205 KLD by December 2005, by undertaking ferti-irrigation and biocomposting, in accordance with the action plan submitted in the affidavit by the company on 22.4.04 to this Ministry.
- (v) The company shall earmark a separate area of 40 acres of land for existing capacity and 21 acres for augmented capacity, for biocomposting, on the basis of 1250 MT/pressmud/ acre/ cycle, as per the action plan submitted in the affidavit. The quality of manure produced shall meet the CPCB's norms.
- (vi) The company shall follow CPCB's protocol for ferti-irrigation, and shall accordingly arrange for land requirement of 2344 acres for existing capacity, and 1317 acres for expanded capacity, for ferti-irrigation, as per the action plan submitted in the affidavit. The effluent to be used for ferti-irrigation shall meet the CPCB's norms of BOD<100 mg/L and TDS <2100 mg/L.
- (vii) The company shall monitor the soil and ground water quality in the compost and project area on a regular basis and submit half-yearly reports to SPCB and the Ministry.
- (viii) The distillery shall not be operated for more than 330 days for molasses route, and 240 days for cane juice process, considering that alcohol is produced for captive consumption for production of speciality chemicals.
- (ix) In the event of non-availability / less availability of pressmud for biocomposting, the company shall ensure zero discharge by adopting either of these measures: (a) installing additional RO units; (b) by increasing alcohol production from cane juice process and reducing alcohol production from molasses route; and (c) by increasing ferti-irrigation only for cane juice process. If the company is unable to achieve zero discharge by adopting these measures, the company shall reduce alcohol production proportionately.
- (x) The company shall modify the existing anaerobic digesters and rectify the shortfalls in secondary treatment plant.
- (xi) As reflected in the EIA/EMP, green belt of adequate width and density shall be provided to mitigate the effects of fugitive emissions all around the plant as per the CPCB guidelines in consultation with the local DFO.
- (xii) Occupational health surveillance programme shall be undertaken as a regular exercise for all the employees and their medical records maintained.
- (xiii) The company shall not commence production for the expanded capacity till a Sub-Committee visits the unit to ensure that all systems, as stipulated to achieve zero discharge, are in place.

B.GENERAL CONDITIONS

- (i) The project authorities shall strictly adhere to the stipulations made by the Uttaranchal Pollution Control Board and the State Government.
 - (ii) No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment & Forests.
 - (iii) Ambient Air Quality Monitoring Stations shall be set up in the down wind direction as well as where maximum ground level concentration of SPM, SO₂, NO_x are anticipated in consultation with the State Pollution Control Board.
 - (iv) Adequate number of influent and effluent quality monitoring stations shall be set up in consultation with the State Pollution Control Board. Regular monitoring shall be carried out for relevant parameters.
 - (v) The overall noise levels in and around the plant area shall 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 shall conform to the standards prescribed under EPA Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).
 - (vi) The project proponent shall comply with all the environmental protection measures and safeguards recommended in the EIA report.
 - (vii) A separate environmental management cell equipped with full fledged laboratory facilities shall be set up to carry out the environmental management and monitoring functions. The project authorities shall provide adequate funds both recurring and non-recurring to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government alongwith the implementation schedule for all the conditions stipulated herein. The funds so provided shall not be diverted for any other purpose.
 - (viii) The implementation of the project vis-à-vis environmental action plans will be monitored by Ministry's Regional Office at Lucknow /State Pollution Control Board/Central Pollution Control Board. A six monthly compliance status report alongwith the monitored data shall be submitted to the monitoring agencies.
 - (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 State Pollution Control Board/Committee and may also be seen at website of the Ministry of Environment & Forests at <http://envfor.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 Regional Office.
 - (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 land development work.
4. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
5. The Ministry reserves the right to stipulate additional conditions if found necessary. The company will implement these conditions in a time bound manner.

6. The above conditions will be enforced interalia 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 and the Public Liability Insurance Act, 1991, alongwith their amendments and rules.

Sujata Arora
(Dr.Sujata Arora)
Joint Director

Copy to :

1. Secretary, Department of Environment & Forests, Government of Uttaranchal, Dehradun.
2. Chief Conservator of Forests, Ministry of Environment & Forests, Regional Office Regional Office (Central Region), 5th floor, Kendriya Bhawan, Sector H, Aliganj, Lucknow-226 024
3. Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-office Complex, East Arjun Nagar, New Delhi-110032
4. Chairman, Uttaranchal Pollution Control Board, E-115 Nehru Colony, Dehradun.
5. JS (CCI-I), MOEF
6. Director, Monitoring Cell, MoEF
7. Guard file
8. Monitoring file
9. Record file

(Dr.Sujata Arora)
Joint Director