

F. No. J-11011/970/2008- IA II (I)
Government of India
Ministry of Environment and Forests
(I.A. Division)

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Dated: 13th April , 2009

To,

M/s Micro Inks Limited
Corporate office, Bilakhia House
Muktanan, Chala, Vapi- 396191,
Gujarat

Sub: Expansion of printing inks unit at plot nos. 305/6/7, GIDC estate, Vapi-396195, Gujarat by M/s Micro Inks Limited - reg environmental clearance

Sir,

This has reference to your letter no. Nil dated 24th November, 2008 along with Form-1 and detailed pre-feasibility report on the above mentioned subject seeking environmental clearance under the Environmental Impact Assessment Notification, 2006.

2. The Ministry of Environment and Forests has examined your application. It is noted that M/s Micro Inks Limited has proposed for expansion of printing inks manufacturing unit by increasing the capacity of toners yellow and magenta and introduction of Isopropyl Laurate (IPL), a new product at plot nos. 305/6/7, GIDC estate, Vapi, Gujarat. The unit is located in GIDC Vapi, which is identified as critically polluted area by CPCB. It is also proposed to introduce isopropyl laurate (IPL), a new product with production capacity of 1000 MTPM. The total land area after expansion would be 39.90 ha. The land area requirement for the proposed expansion will be 6157 m². The expansion will be carried within the existing unit of 39.9 ha. No eco-sensitive areas are located within 10 km radius of the plant. The total cost of the project will be Rs. 35.80 crores.

3. Details of Products along with 12 production capacities are given below:

Sr. No.	Product	Present Capacity (MTPM)	Proposed Capacity (MTPM)	Total Capacity (MTPM)
01	Printing inks	16700	--	16700
	Or Flush colours	6000	--	6000
02	Ink toners Yellow	400	280	680
	Ink toner- Dry Or Ink Toners (paste)	1145	800	1945

03	Ink toner (Magenta) Ink toners (Dry)	400	140	540
	Or Ink Toners Paste	1145	400	1545
04	Ink toners(Cyan/Blue) Ink toner-Dry	650	--	650
	Or Ink Toner (Paste)	1578	--	1578
05	Synthetic resins	5000	--	5000
06	Ink Vehicles	5000	--	5000
07	R. Blue (Dry)	125	--	125
	Or R. Blue (paste)	340	--	340
08	Reterder/Reducer	450	--	450
09	Isopropyl Lauraye (IPL)	--	1000	1000
10	Power generating units	5 MWx2 nos	1.364 MWx5 nos	16.82 MW
	By products			
01	Dil. Sulphuric acid	1132.9	--	1132.9
02	Ammonium solution as byproduct	53	--	53

4.0 It is noted that the total water requirement of 3904.6 m³/day after expansion will be met from the GIDC water supply. The additional power requirement will be 1.20 MW. 5 nos of 1.364 MW of power generating units based on natural gas will be provided which will cater to the additional load as well as partial existing load. The existing two numbers of 5 MW units will be used only when required. Fuel requirement for the boiler and thermic fluid heater will be FO (existing :6038 Nm³/hr, additional: 635 Nm³/hr Total; 6673 Nm³/hr)/ natural gas (Existing :3609 Nm³/hr, Additional: 2643 Nm³/hr Total; 5509 Nm³/hr). Fuel requirement for the incinerator will be LDO (50 kg/hr.). The wastewater generation will be 2017.5 m³/day. The effluent will be treated in existing ETP, which will be modified to meet the additional load. Treated effluent will be sent to GIDC drainage system leading to CETP for further treatment and disposal. There will be no additional air pollution load from the process as there is no gaseous generation from proposed process. The process emissions in the existing unit is controlled by providing scrubbers to scrub the ammonia gas. Bag filters are provided for spin flash driers with stack height of 12.5 m. Cyclone & Bag filters are also provided for spray dryer.

5.0 The solid waste generation will be in the form of ETP waste (6842.7 kg/day) and incinerated ash (79.5 kg/day) will be sent to TSDF site of M/s VWEMCL, Vapi for final disposal. Used filter cloth and cotton waste (154.5 kg/day) will be incinerated. Used oil (72.6 kg/day) will be sold to approved vendors or will be incinerated. Containers of hazardous chemicals (371.2 kg/day) will be decontaminated and disposed of / incinerated.

6.0 All the synthetic organic chemicals manufacturing unit are listed at serial no. 5(f) of schedule of EIA Notification, 2006 and categorized under "A" or "B" category depending upon the location of the plant outside or inside the notified industrial area. In the instant case, the plant is located within the notified industrial area, GIDC Vapi and covered under category "B". But the Vapi is an identified critically polluted area; hence, as per general condition of EIA Notification, 2006, the proposal was appraised at centre. As the unit is located in the industrial estate, the public hearing/ consultation of the project is not required as per para 7 (i)-III (b) Stage (3) – public consultation of EIA Notification, 2006. The proposal was considered by the Expert Appraisal Committee (I) in its 92nd meeting held on 18-20th March, 2009. The EAC (I) recommended the proposal for grant of environmental clearance.

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7. Based on the information submitted by the project authorities, the Ministry of Environment and Forests hereby accords environmental clearance to above project under the provisions of EIA Notification, dated 14th September 2006 subject to the compliance of the following Specific and General Conditions:

A. SPECIFIC CONDITIONS:

- i. The industrial effluent generation shall not exceed 2017.5 m³/d. The existing ETP shall be upgraded to treat the effluent. The treated effluent shall conform to the standards prescribed under Environment (Protection) Act, 1986. The domestic effluent shall be treated through septic tank/soak pit.
- ii. GPCB shall not permit any new discharges from new industries or expansion of existing industries in the area that lead to CETP till the said CETP meet the required standards and have adequate hydraulic capacities.
- iii. The company shall adopt cleaner production technology to minimize the quantity of fresh water requirement and process effluent generation.
- iv. The particulate emissions from the steam boilers shall be dispersed through stack of height as per CPCB standards. The DG sets shall be provided with stack of adequate height as per CPCB standards.
- v. The process emissions in the form of NH₃ shall be scrubbed with scrubber. The gaseous emissions from the boilers shall be dispersed through the stack of height as per CPCB standards. Particulate emissions from the spin flash dryers and Spray Dryers shall be controlled by bag filters and cyclones respectively.
- vi. The company shall upload the status of compliance of the stipulated environmental clearance conditions, including results of monitored data on its website and shall update the same periodically. It shall simultaneously be sent

to the Regional office of MOEF, the respective Zonal office of CPCB and the State Pollution Control Board. The criteria pollutant levels namely; SPM, RSPM, SO₂, NO_x (ambient levels as well as stack emissions) or critical parameters like VOC, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.

- vii. The company shall adopt cleaner production technology to minimize the quantity of fresh water requirement and process effluent generation.
- viii. The Company shall obtain Authorization for collection, storage and disposal of hazardous waste under the Hazardous Waste (Management, Handling and Trans boundary movement) Rules, 2008 for management of hazardous wastes and prior permission from GPCB shall be obtained for disposal of solid / hazardous waste in the TSDF. The concerned company shall undertake measures for fire fighting facilities in case of emergency.

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- ix. The project authorities shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 as amended in October, 1994 and January, 2000. All Transportation of Hazardous Chemicals shall be as per the MVA, 1989.
- x. The company shall undertake following Waste Minimization measures :-
 - Metering and control of quantities of active ingredients to minimize waste.
 - Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.
 - Use of automated filling to minimize spillage.
 - Use of "Close Feed" system into batch reactors.
 - Venting equipment through vapour recovery system.
 - Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- xi. Fugitive emissions in the work zone environment, product, raw material storage area shall be regularly monitored. The emissions shall conform to the limits imposed by SPCB.
- xii. The project authorities shall provide the chilled brine solution in secondary condenser for condensation of the VOCs. The project authority shall ensure that the solvent recovery shall not be less than 95%. The VOC monitoring shall be carried in the solvent storage area and data submitted to the Ministry.

- xiii. Solvent management shall be 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. The condensers shall be provided with sufficient HTA and residence time so as to achieve more than 95% recovery
 - D. Solvents shall be stored in a separate space specified with all safety measures.
 - E. Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.
 - F. Entire plant where solvents are used shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.
- xiv. Hazardous chemicals shall be stored in tanks in tank farms, drums, carboys etc. An area of 33% shall be developed as green belt. Selection of plants species shall be as per the Guidelines of CPCB.
- xv. The Company shall harvest surface as well as rainwater from the roof tops of the buildings and storm water drains to recharge the ground water and use the same water for the various activities of the project to conserve fresh water.
- xvi. Occupational health surveillance of the workers shall be carried out on a regular basis and records shall be maintained *as per* the Factories Act.

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B. GENERAL CONDITIONS:

- i. The project authorities shall strictly adhere to the stipulations made by the State 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. At no time, the emissions shall exceed the prescribed limits. In the event of failure of any pollution control system adopted by the unit, the unit shall be immediately put out of operation and shall not be restarted until the desired efficiency has been achieved.
- iv. The gaseous emissions (NO_x, NH₃, SO₂ and SPM) and Particulate matter along with RSPM levels 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. Stack monitoring for SO₂, NO_x and SPM shall be carried.

- v. 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 is installed in the up wind and downwind direction as well as where maximum ground level concentrations *are* anticipated.
- vi. Dedicated scrubbers and stacks of appropriate height as per the Central Pollution Control Board guidelines shall be provided to control the emissions from various vents. The scrubbed water shall be sent to ETP for further treatment or sell to actual end users
- vii. 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).
- viii. 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.
- ix. Usage of PPEs by all employees/ workers shall be ensured.

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- x. The project proponent shall also comply with all the environmental protection measures and safeguards proposed in the project report submitted to the Ministry. All the recommendations made in respect of environmental management and risk mitigation measures relating to the project shall be implemented.
- xi. The company will undertake all relevant measures for improving the Socio-economic conditions of the surrounding area. CSR activities will be undertaken by involving local villages and administration
- xii. The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment.

- xiii. A separate Environmental Management Cell equipped with full fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.
 - xiv. The project authorities shall earmark adequate funds to implement the conditions stipulated by the Ministry of Environment and Forests as well as the 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.
 - xv. A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parishad/Municipal Corporation, Urban local Body and the local NGO, if any, from who suggestions/ representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the company by the proponent.
 - xvi. The implementation of the project vis-à-vis environmental action plans will be monitored by Ministry's Regional Office at Bhopal /State Pollution Control Board/Central Pollution Control Board.
 - xvii. 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 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.
 - xviii. 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.
8. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.

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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. Any appeal against this environmental clearance shall lie with the National Appellate Authority, if preferred, within a period of 30 days as prescribed under section 11 of the National Environment Appellate Authority Act, 1997.
11. The above conditions will be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, Air (Prevention & Control of Water Pollution) Act, 1981, the Environment (Protection) Act, 1986 Hazardous Wastes

(Management, Handling and Transboundary Movement) Rules, 2008 and the Public Liability Insurance Act, 1991 along with their amendments and rules.

(Dr.P.L. Ahujarai)
Director

Copy to:

1. The Secretary, Forests & Environment Department, Government of Gujarat, Sachivalaya, 8th Floor, Gandhi Nagar-382 010, Gujarat.
2. The Chief Conservator of Forests (Western Zone), Ministry of Environment & Forests, Regional Office, E-5, Arera Colony, Link Road -3, Bhopal -462 016, M.P.
3. The Chairman, Central Pollution Control Board Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, New Delhi - 110 032.
4. The Chairman, Gujarat State Pollution Control Board, Paryavaran Bhawan, Sector 10 A, Gandhi Nagar-382 043, Gujarat.
5. Monitoring Cell, Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi.
6. Guard File/Monitoring File/Record File.

(Dr.P.L. Ahujarai)
Director