

F. No. J-11011/85/2009- IA II (I)
Government of India
Ministry of Environment and Forests
(I.A. Division)

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Dated: 13th May, 2009

To,

✓ The General Manager-SHE Dept.
M/s Atul Limited
AT& Post: Atul -396020
Dist. Valsad, Gujarat

E-mail : sushil_kharkwal@atul.co.in

Subject: Expansion of pesticide and Synthetic Organic Chemicals manufacturing unit at Post: Atul Dist. Valsad, Gujarat by M/s Atul Limited- environmental clearance regd.

Sir,

This has reference to your letter no. nil dated 9.2.2009 along with form 1 and pre-feasibility report on the above mentioned subject seeking environmental clearance under the Environment Impact Assessment Notification, 2006.

2.0 The Ministry of Environment and Forests has examined your proposal. It is noted M/s Atul Limited have proposed for expansion of pesticide and Synthetic Organic Chemicals manufacturing unit in Dist. Valsad in Gujarat. Details of the products to be manufactured along with their capacity are annexed. Environmental clearance for the existing capacity was accorded on 20th February, 2004. No eco-sensitive areas are located within 10 km radius of the plant. River Par flows at a distance of 1km from the unit. The proposed expansion will be carried within the existing unit having land area of 10,87,340 m², of which green belt will be developed in 1,42,981 m² of the land area. Total cost of the project will be Rs. 777.8 Crores. An amount of Rs. 10.03 crores (Incl. existing cost of 8.33 crores) will be utilized for environmental protection measures.

3.0 The total water requirement after the proposed expansion will be 20,532 m³/d, which will be sourced from river Par. Industrial waste water generation will be 17,216 m³/d, out of which 23 m³/d high COD effluent will be incinerated in company's own incinerator, 97 m³/d high TDS effluent will be evaporated in proposed Multiple Effect Evaporation system & remaining 15,383 m³/d of normal effluent stream after mixing with other effluent like condensate (67 m³/day) from MEE, 1833 m³/day from boiler, cooling tower and others etc. and thus total effluent quantity of 17283 m³/day will be treated in company's own effluent treatment plant and treated effluent will be discharged into pipeline of 4 km length which has been constructed by M/s Atul Ltd. and finally discharged into estuary zone of river Par. Ammonia bearing effluent shall be subjected to ammonia recovery before mixing with the normal effluent stream. Phenol containing effluent will be isolated and phenol will be recovered for the reuse in the next batch. Power requirement will be met through company's own captive power plant of 34 MW capacity. No additional DG set is required apart from the existing DG set of 3100 KVA. Fuel requirement for DG set will be HSD (12 lt/hr.).

4.0 Process emissions in the form of SO₂, NH₃, Cl₂ and HCl will be controlled by scrubbers. Acetone, Methanol, IPA, Toluene, n-Hexane, Benzene & Dioxane are being used as solvents. Solvents will be recovered & reused. Separate go-downs for the storage of finish goods, raw materials & separate tank farm for solvents & other chemicals storage as per MSIHC Rules 1989 shall be provided.

5.0 After proposed expansion, additional 19.208 MT/month of activated carbon, 19.2 MT/month of spent carbon, 118.87 MT/month of filter cake with resin contamination, 2.1 MT/month of pyridine based insecticides & herbicides (Darco / Filter aid Sludge), 13.22 MT/month of Sulfonyl Urea (Residue) will be incinerated in company's own incinerator having sufficient capacity and designed as per CPCB guidelines. 1 MT/month of sludge from waste water treatment plant, 0.01 MT/month of sludge from wet scrubber, 0.12 MT/month of incinerated ash will be disposed off at company's own TSD site. 1000 nos./month of liners/bags, 50 nos./month of drums/HDPE carboys will be reused or sold to authorized recycler after decontamination. Each category of waste will be stored in segregated area in covered storage shed with chemical proof flooring and R.C.C. wall to prevent a leaching due to rain during monsoon. Leachate collection system will be provided which be connected to ETP inlet.

6.0 All the Pesticides & Pesticide intermediates and organic manufacturing units are listed at serial no. 5(b) and 5 (f) respectively of schedule of EIA Notification, 2006. The pesticide manufacturing units are category 'A' Projects. The Organic chemical manufacture units are categorized 'A' or 'B' depending upon their location outside or inside the notified industrial area. The proposed unit is located outside the industrial area. Hence the project has been appraised at the centre. The proposal was considered by the Expert Appraisal Committee (Industry) in the 92nd meeting held on 18-20th March, 2009. The Committee recommended the project for grant of environmental clearance as per para 7(ii) of EIA Notification, 2006 exempting the project from preparation of EIA and public hearing.

7.0 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. Industrial waste water generation shall not exceed 17,216 m³/d, out of which 23 m³/d high COD effluent shall be incinerated in company's own incinerator, 97 m³/d high TDS effluent shall be evaporated in proposed Multiple Effect Evaporation system & remaining 15,383 m³/d of normal effluent stream after mixing with other effluent like condensate (67 m³/day) from MEE, 1833 m³/day from boiler, cooling tower and others etc. and thus total effluent quantity of 17283 m³/day shall be treated in company's own effluent treatment plant and treated effluent shall be discharged into pipeline of 4 km length which has been constructed by M/s Atul Ltd. and finally discharged into estuary zone of river Par. Ammonia bearing effluent shall be subjected to ammonia recovery before mixing with the normal effluent stream. Phenol containing effluent will be isolated and phenol will be recovered for the reuse in the next batch. The treated effluent shall conform to the prescribed standards. The domestic effluent shall be disposed off through septic tank /soak pit.

- ii. Process emissions in the form of SO₂, NH₃, Cl₂ and HCl shall be scrubbed with scrubbers. The emissions shall be dispersed through stack of adequate height as per CPCB standards. The gaseous emissions from the DG sets shall be dispersed through stack of adequate height as per CPCB standards. Acoustic enclosures shall be provided to the DG set to control the noise pollution.
- iii. 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, Nox (ambient levels as well as stack emissions) or critical sectoral 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.
- iv. The company shall adopt cleaner production technology to minimize the quantity of fresh water requirement and process effluent generation.
- v. 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.
- vi. 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.
- vii. 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.
- viii. 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 I.
- ix. 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.

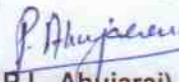
- x. Solvent management shall be as follows :
- A. Reactor shall be connected to chilled brine condenser system
 - B. Reactor and solvent handling pump shall have mechanical seals to prevent leakages.
 - C. The condensers shall be provided with sufficient HTA and residence time so as to achieve more 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 shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.
- xi. 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.
- xii. The Company shall harvest surface as well as rainwater from the rooftops 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.
- xiii. Occupational health surveillance of the workers shall be carried out on a regular basis and records shall be maintained as per the Factories Act.

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, HCl, 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, Nox 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 (I) and it shall be ensured that at least one station 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.
- 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 I/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.
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

Annexure to file no. F. No. J-11011/85/2009- IA II (I)

List of Details of products and their production capacities are given below:

Sr. No	Product name	capacity, MT/month		
		existing	proposed	Total after expansion
	DYES			
1	Azo dyes	550.0	0.0	550.0
2	Sulfur Black	250.0	0.0	250.0
3	Sulfur Dyes range	25.0	0.0	25.0
4	Naphthol Range	75.0	0.0	75.0
5	Fast Color Bases	40.0	0.0	40.0
6	Disperse Dyes (Atul – East) + Disperse Dyes (Atul – West)	118.5	0.0	118.5
7	Optical Brighteners	10.0	0.0	10.0
8	Reactive Dyes	127.3	0.0	127.3
9	Vat Dyes	105.0	0.0	105.0
	Total Production Capacity of Dyes	1300.8	0.0	1300.8
	Chlor – Alkali Industry			
10	Caustic Soda / Potash & Sodium Sulfide	1800.0	0.0	1800.0
11	Liquid Chlorine / HCl	1600.0	0.0	1600.0
	Total Production Capacity of Chlor – Alkali Industry	3400.0	0.0	3400.0
	Pesticides Tech.			
12	Carbamate group of Agrochemicals	33.3	0.0	33.3
13	Diuron	20.0	0.0	20.0
14	Isoproturon	8.3	0.0	8.3
15	Metoxuron	8.3	0.0	8.3
16	Trichlo Carbon	8.3	0.0	8.3
17	Cartap.HCl	50.0	0.0	50.0
18	Carbendazim	20.9	0.0	20.9
19	Herbicides (2,4 – D & related products)	1030.0	640.0	1670.0
20	Pyridine based insecticides & Herbicides chemical Imidacloprid	1.67	23.33	25.0
21	Triazole based Fungicide	1.67	0.0	1.67
22	Pyrethroides	6.0	4.0	10.0
23	Sulphonyl Urea	1.67	23.33	25.0
24	MCPA	0.0	500.0	500.0
25	Glyphosate	0.0	50.0	50.0
26	Isoprothiolane	0.0	8.3	8.3
27	Fipronil	0.0	5.0	5.0
28	Formulations	0.0	200.0	200.0
	Total Production Capacity of Pesticides	1190.1	1453.96	2644.07

P. Ahujara

