

भारत सरकार
पर्यावरण एवं वन मंत्रालय
GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT & FORESTS

BY SPEED POST

E-mail : sanse_n_2859@yahoo.co.in

Telefax : 011-24360488

No. J-11011/657/2007 - IA II (I)

Date: 26th December 2007

To,

M/s Deccan Fine Chemicals (India) Pvt. Limited
Plot No. 211, Street No. 14
Prashant Nagar, Road No. 72
Jubilee Hills, Hyderabad- 500 003
Andhra Pradesh

Subject: Pesticides, Fine Chemicals and Biotech based Organic Chemical Unit at Kesavaram village, Venkatanagaram Post, Payakaraopeta Mandal, Visakhapatnam, Andhra Pradesh by M/s Deccan Fine Chemicals (India) Private Limited- Environmental Clearance regarding.

Sir,

This is with reference to your application No. Nil dated 27th May 2007 seeking environmental clearance for the above-mentioned project.

2. The Ministry of Environment and Forests has examined the proposal. It is noted that the proposal is to set up a new unit to manufacture technical grade Agro-chemicals (Pesticides), Fine Chemicals and Biotech based Organic Chemicals at Sy. 52-54, 81-84, Kesavaram Village, Vankatanagaram Post, Payakaraopeta Mandal, Visakhapatnam District, Andhra Pradesh. The cost of the projects is Rs.115 Crores out of which Rs. 10 Crores will be earmarked for environmental protection measures. Rs. 2.27 Crores shall be the recurring expenditure for environment protection measures. Land area available for the project is 13.44 ha out of which 4.43 ha will be developed as green belt. Tandava River is at 1.2 Km and Bay of Bengal is at 2.0 Km from the site. No ecologically sensitive area exists in 10 Km periphery of the project site and no R&R is involved in the project. No endangered species of Flora and Fauna has been reported. The following products are proposed to be manufactured at the site-

S. No.	Products	Proposed Production	
		MTD	MTA
1	Diacetone Acrylamide	2.00	350
2	4 Hydro Butylacrylate Glycidyl Ether	1.00	100
3	Abamectin	2.00	50
4	Buprofezin	3.00	400
5	Fenoxanil	2.00	150



जहाँ है हरियाली।
वहाँ है खुशहाली।।

पर्यावरण भवन, सी.जी.ओ. कॉम्प्लेक्स, लोदी रोड, नई दिल्ली - 110 003
PARYAVARAN BHAWAN, C.G.O. COMPLEX, LODHI ROAD, NEW DELHI - 110 003

6	Diflufenethuron	0.25	600
7	Tecsfun	5.00	500
8	Tebuthiuron	4.00	1200
9	Meclofuranil	2.50	400
10	Zoxanide	1.00	200
11	Propdamine	2.00	500
12	Peroquillon	1.5	300
Total		26.25	4750
By- Products			
1	Aq. Hydrochloric Acid of 30% from primary water scrubbers	--	14.2
2	Sodium Bisulphate Solution of 20% from secondary caustic scrubbers	--	16.4

3. Solvent recovery shall be more than 95%. Power requirement of 2 MW will be sourced from AP Transco. 20 TPH coal fired fluidized bed boiler with bag filter will be provided. Two DG sets of 1000 KVA each will be provided as stand by. Chilled Brine Condenser will be provided for storage tanks. Reverse Osmosis plant of 20 KL/hr will be installed for boiler enhancing the boiler efficiency. The water requirement of 981 m³/d will be met from branch Canal of Tandava River. The waste water generation shall be 432.1 m³/day of industrial trade effluent and 25 m³/day of domestic effluent salts will be sent to TSDF at Visakhapatnam. Treated water shall be discharged to marine disposal. NIO has conducted the study for the marine outfall discharge point. 4.3 TPD of salts generated from MEE and 0.11 TPD of ETP sludge shall be sent to TSDF, Visakhapatnam. 13 TPD of fly ash and bottom ash generating from Boiler will be sold to brick manufacturers and 0.25 TPD of ash from incinerator shall be sent to TSDF Visakhapatnam. 5.05 TPD of organic residue shall be sent to the incinerator. Used batteries and waste lubricating oil shall be sent to authorized recyclers.

4. The project activities are listed at 5 (b) and 5 (f) and are of 'A' Category in the Schedule of EIA Notification, 2006. The project was considered as per EIA Notification, 1994 under Para 2.2.1 (i) (a) of the Interim Operation Guidelines dated 13th October 2006 issued by the Ministry. Public Hearing of the project was held on 06.07.2007.

5. Based on the Information provided, the Ministry of Environment and Forests hereby accords environmental clearance to above project under the provisions of EIA Notification, 2006 dated 14th September 2006 subject to the compliance of the following conditions:

A. SPECIFIC CONDITIONS:

- (i) New Standards for Pesticides unit, as proposed by the CPCB under the E (P)A, 1986 shall be followed by the Unit.

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- (ii) The gaseous emissions (SO_2 , NO_x , HCl , Cl_2 , Br_2 , HBr , NH_3 , CO , HC and VOC along with SPM and RSPM 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.
- (iii) Bromine recovery system, as provided in Nagarjuna Agrichem Ltd., shall be provided for this project also. Bromine shall be recovered from Hydrogen Bromide and Sodium Bromide solutions so formed shall be recycled in the process.
- (iv) The process emissions shall be scrubbed in two stage, water and alkali scrubber. Dilute HCl and NaHSO_3 generated shall be sold as by-product. Dilute NaCl shall be sent to ETP.
- (v) Coal fired boiler shall be fluidized bed boiler. Boiler and incinerator shall have stacks of 45 m and 30 m respectively to limit SPM emission within $50 \text{ mg} / \text{Nm}^3$. Pneumatic transfer of ash shall be provided. Incinerator shall have quencher and two caustic scrubbers in series.
- (vi) All liquid raw material shall be stored in storage Tanks and Drums. All Transportation of Hazardous Chemicals shall be as per the MVA, 1989.
- (vii) Regular monitoring for SO_2 , NO_x , HCl , Cl_2 , Br_2 , HBr , NH_3 , CO , HC and VOC along with SPM and RSPM in the ambient air at various probable locations in and around the plant shall be carried out. 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 station each is installed in the downwind direction and where maximum ground level concentrations are anticipated.
- (viii) Use of toxic solvents like Methylene Chloride (M.C.) etc. shall be minimized to the extent possible. Benzene shall not be used as solvent and no odorous compounds/gas like Mercaptans or Hydrogen Sulfide shall be used or formed in any of reactions at the site.
- (ix) Bioassay test and toxicity index test shall be carried out regularly for the effluent.
- (x) All the storage tanks shall be under negative pressure to avoid any leakages. Breathers, N_2 blanketing and Chilled Brine Condensers shall be provided for all

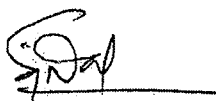
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the storage tanks to minimize solvent losses. All vents shall be connected to a common header to scrubber. Vents of all scrubbers shall be connected to incinerator to eliminate odour nuisance. Closed operation and handling systems with all safety features for chemicals and solvents shall be provided. Magnetic seals will be provided for pumps/agitators for reactors for reduction of fugitive emissions. Solvent traps shall be installed wherever necessary. Reactor generating solvent vapors shall be connected to condensers with receivers.

- (xi) All venting equipment shall have vapour recovery system. All the pumps and other equipment's where there is a likelihood of HC leakages shall be provided with Leak Detection and Repair (LDAR) system and LEL indicators and Hydrocarbon detectors. Provision for immediate isolation of such equipment, in case of a leakage will also be made. The company shall provide a well defined Leak Detection and Repair (LDAR) programme for quantification and control of fugitive emissions. The detectors sensitivity will be in ppm levels.
- (xii) Spent solvents shall be recovered as far as possible & solvent recovery shall be further increased from the present 95% to at least 98% percent. Solvent vapours emitted during purification process from purification tanks as fugitive emissions shall be reduced as far as possible.
- (xiii) Portable monitoring instruments for all relevant gases like Chlorine, Ammonia and HC/VOC shall be provided.
- (xiv) Fugitive emissions in the work zone environment, product, raw materials storage area shall be regularly monitored for all relevant parameters including HC/VOC. The emissions shall conform to the limits imposed by the State Pollution Control Boards/Central Pollution Control Board.
- (xv) No ground water shall be used for the project. Water requirement shall not exceed 981 m³/d and shall be met from branch Canal of Tandava River. The permission for water withdrawal from relevant authorities shall be obtained before starting the production and submitted to the Ministry.
- (xvi) The waste water generation shall not exceed to 432.1 m³/day of industrial trade effluent and 25 m³/day of domestic effluent which shall be treated in an effluent treatment plant comprising of equalization tank, buffer tank, UASB reactor (for fermentation based effluents), extended aeration tank, clarifier and sludge drying beds. The high COD and high TDS stream shall be sent for stripping and forced evaporation by MEE. Organic stream from the air stripper shall be sent to incinerator. Condensate shall be recycled for cooling tower make-up and salts shall be sent to TSDF at Visakhapatnam. High

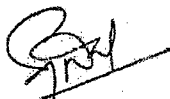
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- (xvii) COD and high BOD effluent shall be sent to anaerobic digester and activated sludge treatment. Scrubbed water and domestic effluent shall also be sent to activated sludge treatment system. Utility blow down shall be subject to chemical oxidation. All treated effluent shall be collected in a guard pond and disposed off through a pipeline at a marine outfall point suggested by NIO.
- (xviii) Salts generated from MEE, ETP Sludge and Ash from incinerator shall be sent to TSDF, Visakhapatnam. Fly ash and Bottom ash generated from Boiler shall be sold to brick manufacturers and shall be sent to TSDF Visakhapatnam. Organic residue shall be sent to the incinerator of TSDF, Visakhapatnam. Used batteries and waste lubricating oil shall be sent to authorized recyclers.
- (xix) Emissions from the incinerator shall be within the prescribed norms for the incinerators. Monitoring Protocol as prescribed in these standards shall be followed.
- (xx) Fly ash generated from the Coal Fired Boiler will be utilized for Brick and Cement manufacturing.
- (xxi) Rs. 10 Crores shall be earmarked for environmental protection measures 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, and Rs. 2.27 Crores shall be the annual recurring expenditure for environmental protection measures. The funds so provided shall not be diverted for any other purpose.
- (xxii) 4.43 ha is of land shall be developed as green belt in consultation with DFO and as per CPCB guidelines.

B. GENERAL CONDITIONS :

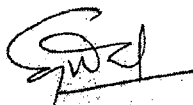
- i. The project authorities shall strictly adhere to the stipulations made by the State Pollution Control Board.
- ii. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment and Forests. In case of deviations or alterations in the 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.



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- 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 company shall undertake following Waste Minimization measures:-
 - a. Metering and control of quantities of active ingredients to minimize waste.
 - b. Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.
 - c. Use of automated filling to minimize spillage.
 - d. Use of "Close Feed" system into batch reactors.
 - e. Venting equipment through vapour recovery system.
 - f. Use of high pressure hoses for equipment cleaning to reduce wastewater generation.
- v. The project authorities shall strictly comply with the provisions made in Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 as amended in 2000 for handling of hazardous chemicals. Necessary approvals from Chief Controller of Explosives must be obtained before commissioning of the expansion project. Requisite On-site and Off-site Disaster Management Plans will be prepared and implemented. Regular mock drills shall be carried out for both On-site and Off-Site plans.
- vi. The company shall develop rain water harvesting structures to harvest the run off water for recharge of ground water.
- vii. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- 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. Training to all employees on handling of chemicals shall be imparted.
- ix. Usage of PPEs by all employees/ workers shall be ensured.
- x. The company shall strictly follow all the recommendations mentioned in the Charter on Corporate Responsibility for Environmental Protection (CREP).
- xi. The Company shall harvest surface as well as rainwater from the rooftops of the buildings proposed in the expansion project 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.

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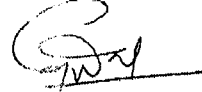
- xii. The project proponent shall also comply with all the environmental protection measures and safeguards and risk mitigation measures relating to the project recommended in the EIA/EMP report.
 - xiii. The company shall undertake all relevant measures, as indicated during the Public Hearing for improving the Socio-economic conditions of the surrounding area. CSR activities will be undertaken by involving local villages and administration.
 - xiv. The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment. The eco-development plan should be submitted to the SPCB within three months of receipt of this letter for approval.
 - xv. 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).
 - xvi. A separate Environmental Management Cell equipped with full fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.
 - xvii. The implementation of the project vis-à-vis environmental action plans shall be monitored by the concerned Regional Office of the Ministry/SPCB / CPCB. A six monthly compliance status report shall be submitted to monitoring agencies.
 - xviii. 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.
 - xix. 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.
6. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.



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

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



(Sanchita Jindal)
Additional Director

Copy to:

1. The Secretary, Department of Environment and Forests, Government of Andhra Pradesh, Secretariat, Hyderabad- 500 022, A.P.
2. The Chief Conservator of Forests, Regional Office (Southern Zone) , Ministry of Environment & Forests, Kendriya Sadan ,4th Floor , C& F Wing, 17 Main Road, II Block , Kormangla, Bangalore- 560 034, Karnataka .
3. The Chairman, Central Pollution Control Board Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, New Delhi - 110 032.
4. The Chairman, A.P. Pollution Control Board, Paryavaran Bhawan, A-3, Industrial Estate, Sanath Nagar, Hyderabad- 500 018, A.P.
5. Monitoring Cell, Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi.
6. Guard File.
7. Monitoring File.
8. Record File.

(Sanchita Jindal)
Additional Director