

By speed post

Government of India Ministry of Environment & Forests (IA Division)

Paryavaran Bhawan CGO Complex, Lodhi Road New Delhi – 110 003

E-mail: hsmalviya@gmail.com

Telephone: 011: 24367076 Dated: July 10, 2009

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

To

M/s Deccan Fine Chemicals (India) Limited. Kesavaram Village.

Venkatanagaram Post, Payakaraopeta Mandal,

Visakhapatnam,

Andhar Pradesh

gsrpl@sify.com , lakshmi_dnr@yahoo.com

Sub: Expansion and change in product mix for pesticides, fine Chemicals and Biotech based Organic Chemical manufacturing Unit at Kesavaram Village, Venkatanagaram Post, Payakaraopeta Mnadal, Visakhapatnam, Andhra Pradesh by M/s Deccan Fine Chemicals (India) Limited - Environmental Clearance reg.

Sir.

This has reference to your letter no. nil dated 17th September, 2008 along with Form-1 and prefeasibility report seeking environmental clearance for the above project under the Environment Impact Assessment Notification, 2006 and subsequent submission of clarification vide letter no. nil dated 16th May, 2009.

2.0 The Ministry of Environment and Forests has examined the proposal and noted that M/s. Deccan Fine Chemicals (India) Private Limited proposes to enhance annual production from 4750 MT/annum to 8665 MT/annum retaining permitted maximum daily production at 26.25 MT/day at Kesavaram Village, Venkatanagaram Post, Payakaraopeta Mnadal, Visakhapatnam, Andhra Pradesh. The company has obtained environmental clearance on 26th December, 2007 from Ministry of Environment and Forests to setup chemical unit for Pesticides, Fine Chemicals and biotech based organic chemicals with daily production capacity of 26.25 MT and annual capacity of 4750 MT. The total land of the project is 13.44 hectares. The total cost of the project for the expansion will be Rs. 115 Crores. The existing and proposed manufacturing capacities are presented are as given below:

| S. No. | Product | Permitted Capacity | | Proposed Capacity after Product mix | |
|-----------|--|--------------------|----------|---|---------------------|
| | | MT/day | MT/annum | MT/day | MT/annum |
| 1 | Diacetone Acrylamide (DAAM) | 2 | 350 | MESS And And the Ang | |
| 2 | 4 Hydroxy Butyl Acrylate Glycidyl Ether (4H BAGE) | 1 | 100 | err and ass and 400 | and and and had had |

Hand

| Tot | al Production Capacity | 26.25 | 4750 | 26.25 | 8665 |
|-----|------------------------|-------------------|---------------------|--------------------------|---|
| 17 | Clethodim | ` <u></u> | | 1.5 | 500 |
| 16 | Thiomethoxam | ಿ | Carl Carl Carl Carl | 3.15 | 1030 |
| 15 | Methoxy-AA | pie 8 P W | gyj sou naz sat Ma | 0.6 | 200 |
| 14 | Tricyclozole | क्षा स्थानिक वर्ग | cas ann mòr ann | 1 | 325 |
| 13 | Propiconazole | ಪ್ರಭಟಕಾಮ | pas and 40 say par | 12.5 | 4100 |
| | | Additional P | roducts | | |
| 12 | Pyroquilon | 1.5 | 300 | 1 | 325 |
| 11 | Prodiamine | 2 | 500 | 1.1 | 360 |
| 10 | Zoxamide | 1 | 200 | and pair first field | es es es es es es |
| 9 | Myclobutanil | 2.5 | 400 | 1.25 | 410 |
| 8 | Tebuthiuron | 4 | 1200 | 2220 | nel kia Gripal (ia |
| 7 | Tacsifun | 5 | 500 | 0.95 | 310 |
| 6 | Abamectin | 0.25 | 50 | gant half pilp (and 1950 | may that has been been been been been been been bee |
| 5 | Difenthuron (DIPPT) | 2 | 600 | 2 | 700 |
| 4 | Fenoxanil | 3 | 150 | 0.2 | 80 |
| 3 | Buprofezine | 2 | 400 | 1 | 325 |

3.0 The bag filter followed by chimney of 44 m height to the boiler and Quencher, two caustic scrubbers in series will be provided to incinerator for control of emissions. The DG sets will be provided adequate height stack and acoustic enclosures. Total water requirement will be 975 KLD which will be drawn from infiltration wells on Tandava River. High TDS and COD effluent generated from process will be treated in stripper followed by multiple effect evaporator and salts from multiple effect evaporator will be sent to TSDF, Visakhapatnam. High BOD & Low COD and domestic effluents are treated in Biological effluent treatment plant. Utility blow downs are mixed with chemically oxidized effluents. The total effluent after treatment will be stored in Guard ponds having five days storage capacity to conduct the test for Bioassay before Marine Disposal. The fly ash and bottom ash generated from boiler will be sold to the brick manufacturers and ash generated from incinerator will be sent to the TSDF Visakhapatnam.

4.0 The project activity "manufacturing of synthetic organic chemicals" is listed at S.N. 5(f) under Category 'A' and the proposal was considered in 95th meeting of the Expert Appraisal Committee (Industry) held during 15th – 17th June, 2009. Public hearing was exempted as per para 7(ii) of the EIA Notification, 2006.

Based on the information submitted by the Project Authorities, the Ministry of Environment and Forests hereby accords the environmental clearance to the above project under the provisions of EIA Notification dated 14th September, 2006 subject to compliance of the following specific and general conditions:

A. SPECIFIC CONDITIONS:

- (i) The Company shall comply with all the conditions stipulated in the environmental clearance accorded by the Ministry vide letter of even no. dated 26th December, 2007.
- (ii) The company shall install fullfleged effluent treatment plant to treat the wastewater generated from the plant as per the discharge norms prescribed under Environmental (Protection) Rules, 1986 or by the Andhra Pradesh Pollution Control Board whichever are stringent.
- (iii) The unit shall carry out the monitoring for all Pesticides which are being produced or proposed to be produced in the ground water. Results shall be submitted to the Ministry and Ministry's Regional Office at Bangalore. Afterwards, yearly monitoring for these pesticides shall be carried out.
- (iv) Bioassay test and toxicity index shall be carried out regularly for the waste water before and after treatment and record shall be submitted with the six monthly reports.
- (v) The project authority shall install adequate air pollution control equipment with the incinerator, thermopack, boiler and DG set to achieve the standard prescribed by the SPCB or prescribed in Environmental (Projection) Rules, 1986 whichever are stringent.
- (vi) The incinerator installed in the plant shall comply with the monitoring procedure and emission & effluent standards notified vide G.S.R. 600(E) dated 18th August 2008. The monitoring shall be carried out monthly and reports shall be submitted to the Ministry's Regional office at Bangalore, CPCB Zonal office and A.P. Pollution Control Board.
- (vii) The Company shall install continuous monitoring equipment for HBr, H₂S, HCl and Cl₂ from the stacks/vents and data shall be submitted with reports.
- (viii) The company shall provide the monitoring arrangement with all the vents for monitoring of (SO₂, NOx, HBr, HCl, Cl₂, H₂S, CO, HC and VOC) along with PM, SPM and RSPM and reports shall be submitted to the SPCB, CPCB and Ministry's Regional Office at Bangalore.
- (ix) The proponent shall upload the status of compliance of the stipulated EC conditions, including monitored data on their 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 SPC. The criteria pollutant namely; SPM, RSPM, SO₂, NOx (Ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored and displayed at the convenient location near the main gate of the Company in the public domain.
- (x) Chilled Brine Secondary Condensers shall be provided for control of evaporation/emission of low boiling solvents.
- (xi) 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 98%.

- (xii) Fugitive emissions in the work zone environment, product, raw materials storage area etc. shall be regularly monitored. The emissions shall conform to the limits imposed by A.P. PCB.
- (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 98% 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.
- (xiv) For control of fugitive emission and VOCs following steps shall be followed:
 - a. Closed handling system shall be provided for chemicals.
 - b. Reflux condenser shall be provided over reactors.
 - c. Solvent handling pump shall be provided with mechanical seals to prevent leakages.
 - d. System of leak detection and repair of pump/pipeline based on preventive maintenance.
 - e. Solvent shall be taken from underground storage tanks to reactors through closed pipeline. Storage tanks shall be vented through trap receiver and condenser operated on chilled water.
- (xv) All the storage tanks shall be under negative pressure to avoid any leakages. Breathers, N₂ blanketing and condensers will be provided for all the storage tanks. Closed handling systems for chemicals and solvents will be provided. Magnetic seals will be provided for pumps/agitators for reactors for reduction of fugitive emissions. Chilled Brine based condensers shall be used to prevent VOC emissions. Solvent traps shall be installed wherever necessary.
- (xvi) 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.
- (xvii) Entire quantity of the hazardous waste generated shall be disposed of as per the provisions of the Hazardous Waste (Management and Handling) Rules 1989 as amended up to date.
- (xviii)During transfer of materials, spillages shall be avoided and garland drains be constructed to avoid mixing of accidental spillages with domestic waste and storm drains.
- (xix) The company shall make adequate arrangement for control of odour nuisance from the plant premises. There shall be no odour from the unit.

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- (xx) Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- (xxi) The company shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling.
- (xxii) Training shall be imparted to all employees on safety and health aspects of chemicals handling. As informed to the Ministry, OHSAS 18001 shall be continued. 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.
- (xxiii) Usage of PPEs by all employees/ workers shall be ensured.
- (xxiv) The company shall strictly follow all the recommendations mentioned in the Charter on Corporate Responsibility for Environmental Protection (CREP) for pesticide & chemical units.
- (xxv) The project authorities shall develop greenbelt in 33% of project area as per the guidelines of CPCB to mitigate the effect of fugitive emission.
- (xxvi) Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, Safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.

GENERAL CONDITIONS

- i. The project authorities shall strictly adhere to the stipulations of the SPCB/state government or any statutory body.
- 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. Authorization from the SPCB shall be obtained for collection, treatment, storage, and disposal of hazardous wastes.
- iv. 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 State Pollution Control Board.
- v. For control of process emissions, stacks of appropriate height as per the Central Pollution Control Board guidelines shall be provided. The scrubbed water shall be sent to ETP for further treatment.
- vi. The company shall undertake following Waste Minimization measures:-

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- Metering 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.
- Maximizing recoveries
- Use of automated material transfer system to minimize spillage.
- Use of "Closed Feed" system into batch reactors.
- vii) 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 SPCB shall be obtained for collections/treatment/ storage/disposal of hazardous wastes.
- viii. 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 Environment (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).
- ix. A separate Environmental Management Cell equipped with full fledged laboratory facilities shall be set up to carry out the environmental management and monitoring functions.
- x. The adequate financial provisions shall be made in the budget of the project for implementation of the above suggested environmental safeguards. Fund so earmarked shall not be diverted for any other purposes.
- xi. The project authorities shall provide rainwater harvesting system and ground water recharge.
- xii. The implementation of the project vis-à-vis environmental action plans shall be monitored by Ministry's Regional Office /SPCB / CPCB. A six monthly compliance status report shall be submitted to monitoring agencies.
- xiii. The project proponent shall also submit six monthly reports on the status of compliance of the stipulated EC conditions including results of monitored data (both on hard copies as well as by e-mail) to the respective Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB.
- xiv. A copy of 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 whom suggestions/representations if any, were received while processing the proposal. The clearance letter shall also put up on the website of the Company by the proponent.
- xv. 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 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 Ministry's Regional Office.

- xvi. The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986 as amended subsequently, shall also be put on the website of the Company alongwith the status of compliance of EC conditions and shall also be sent to the respective regional Office of the MoEF by e-mail.
- xvii. 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.
- 6.0 The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- 7.0 The Ministry reserves the right to stipulate additional conditions, if found necessary. The company in a time bound manner will implement these conditions.
- 8.0 Any appeal against this environmental clearance shall lie with the National Environment Appellate Authority, Second Floor, Trikoot-I, Bhikaji Cama Place, New Delhi-110066, if preferred within a period of 30 days as prescribed under Section 11 of the National Environment Appellate Authority Act, 1997.
- 9.0. 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.

(H.S. Malviya)
Joint Director

Copy to: -

- 1. The Secretary, Department of Environment and Forests, Govt. of A.P., Secretariat Hyderabad, A.P.
- 2. The Chairman, Central Pollution Control Board, Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, New Delhi 110032.
- 3. The Chairman, Andra Pradesh Pollution Control Board, Paryavaran Bhavan, A-3 Industrial Estate, Sanathnagar, Hyderabad- 500018, A.P.
- 4. The Chief Conservator of Forests (Central), Ministry of Environment & Forests, Regional Office (SZ), Kendriya Sadan, IVth Floor, E&F wings 17th Main Road, Koramangala II Block, Bangalore-560034, Karnataka.
- 5. Monitoring Cell, Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi-110003.
- 6. Guard file.
- 7. Record file
- 8. Monitoring file.

(H.S. Malviya)
Joint Director