J-11011/160/2011-IA.II (I) (Pt.)
Government of India
Ministry of Environment, Forest & Climate Change
(I.A. Division)

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Dated: 31st January, 2017

To,

The General Manager
M/s SC Enviro Agro India Pvt. Ltd.
T-137, 138, 113, 251, M.I.D.C. Tarapur,
Boisar, District Thane,
Maharashtra

Subject: Expansion of Pesticide (from 2508 MTPA to 4128 TPA) at Tarapur M.I.D.C, Area, Village Boisar, Tehsil Palghar, District - Thane, Maharashtra by M/s SC Enviro Agro India Pvt. Ltd –Environmental Clearance - reg.

Ref.: Your online proposal no. IA/MH/IND2/33360/2011dated 29th April, 2016.

Sir,

This has reference to your online proposal no IA/MH/IND2/33360/2011dated 29th April, 2016 along with project documents including Form I, Terms of References, Pre-feasibility Report, EIA/EMP Report along with Public Hearing Report regarding above mentioned project.

2.0 The Ministry of Environment, Forests and Climate Change has examined the application. It is noted that proposal is for Expansion of Pesticide (from 2508 MTPA to 4128 TPA) at Tarapur M.I.D.C, Area, Village Boisar, Tehsil Palghar, District Thane, Maharashtra by M/s SC Enviro Agro India Pvt. Ltd. Total plot area is 1.8196 ha and No additional land is required. Environmental clearance is accorded by the Ministry vide letter no J-11011/71/2001 IA-II dated 14th June, 2002 for the existing unit. No national park/wildlife sanctuary/reserve forest is located within 10 Km. Details of existing and proposed products are as given below:

S. N.	Product	Existing Quantity (MTPA)	Proposed Quantity (MTPA)	Total Quantity (MTPA)
1	Prallethein Technical (ETOC)	540		540
2	Fenpropathrin Technical (DTL			540
3	Cypermethrin Technical (CPM)	240		240

4	Fenvalerate Technical (FNV)	240		240
5	Metaphenoxy Benzaldehyde (MPB)	360		360
6	D. Allethrin (Pynamin forte, PPY)	300		300
7	DPhenothrin Technical (98 SUM)	300		600
8	Cyphenothrin Technical (GKL)	288	312	468
9	Bioallethrin Technical (BAL)	--	468	180
10	Esbiothrin Technical (EBT)	--	180	480
11	S – Bioallethrin Technical (SBA)	--	480	180
Total		**2508**		**4128**

S.N.	**By-product**	**Quantity (MTPM)**		**Quantity (MTPA)**
1	Hydrochloric Acid Solution 25-30%	600	852	1452
2	Aluminum Chloride Solution	480	--	480
3	Phenolic Solution	60	--	60
4	Potassium Bromide Solution	480	--	480
5	Sodium Sulphite Solution 18-22%	1200	5094	6295

3.0 Scrubber will be provided to control HCl and SO2 process emissions. Scrubber system for sodium cyanide related process will be provided. HCN detector & Alarm will be provided. Solvent recovery system will be provided. SO2 detector will be provided. Fresh water requirement from MIDC Tarapur water supply will be increased from 145 m^3/day to 295 m^3/day after expansion. Effluent generation will be increased from 48 m3/day to 97 m^3/day after expansion. Effluent will be segregated into cyanide stream and High TDS/COD effluent streams. Cyanide effluent stream (21 m3/day) will be treated with sodium hypochlorite in alkaline medium. High TDS/COD effluent stream will be concentrated in MEE. MEE condensate will be treated in the ETP. Treated effluent will be sent to CETP. ETP sludge and off specification products will be sent to CHWTSDF. Process / spent catalyst/waste solvent will be sold to re-processor or sent to CHWTSDF. Used oil/spent oil/oily waste will be sold to authorized re-processor. Power requirement from SEB will be increased from 1.037 MW to 1.99 MW. DG Sets (3 No x 400 KVA+1 NO x 180 KVA) are installed. LDO will be used as fuel.

4.0 Site visit was conducted on 07.05.2013 and the Committee desired that the EIA report should be prepared by the QCI accredited Consultant. PP has submitted

EIA report validated by Environmental Consultant namely, M/s Eco-Chem Sales & Service.

5.0 The Committee also discussed the certified compliance report dated 14.05.2015 issued by MoEFCC's regional Office (Western Region) and found to be satisfactory.

6.0 Public hearing was exempted as per section 7 (i), (iii) Stage (3), Para (i) (b) of EIA Notification, 2006 as project is located in the notified industrial area.

7.0 All units producing technical grade pesticides are listed at S.N. 5(b) under category 'A' and appraised at Central level.

8.0 The proposal was considered by the Expert Appraisal Committee (Industry-2) in its 36th meetings held during 11th-12th June, 2012 and 27th-28th June, 2016 respectively. Project Proponent and the EIA Consultant namely M/s Eco-Chem Sales & Service, have presented EIA / EMP report as per the TOR. EAC has found the EIA / EMP Report and additional information to be satisfactory and in full consonance with the presented TORs. The Committee recommended the proposal for environmental clearance.

9.0 Based on the information submitted by the project proponent, 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) National Emission Standards for Pesticide Manufacturing and Formulation Industry issued by the Ministry vide G.S.R. 46(E) dated 3rd February, 2006 and amended time to time shall be followed by the unit.

ii) Adequate stack height shall be provided to oil fired boiler and thermic fluid heater to control particulate emissions.

iii) Two stage water scrubber followed by alkali scrubber shall be provided to process vent to control process emissions viz. SO_2 and HCl. The scrubbed water should be sent to ETP for further treatment. Efficiency of scrubber shall be monitored regularly and maintained properly. Scrubbers vent shall be provided with on-line detection and alarm system to indicate higher than permissible value of controlled parameters. At no time, the emission levels shall go beyond the prescribed standards. The system should be interlocked with the pollution control equipments so that in case of any increase in pollutants beyond permissible limits, plant should be automatically stopped.

iv) In plant control measures for checking fugitive emissions from all the vulnerable sources shall be provided. Fugitive emissions shall be controlled by providing closed storage, closed handling & conveyance of chemicals/materials, multi cyclone separator and water sprinkling system. Dust suppression system including water sprinkling system shall be provided at loading and unloading areas to control dust emissions. Fugitive emissions in the work zone environment, product, raw materials storage area etc. shall

be regularly monitored and records maintained. The emissions shall conform to the limits stipulated by the MPCB.

v) For further control of fugitive emissions, following steps shall be followed :

(a) Closed handling system shall be provided for chemicals.

(b) Reflux condenser shall be provided over reactor.

(c) System of leak detection and repair of pump/pipeline based on preventive maintenance.

(d) The acids shall be taken from storage tanks to reactors through closed pipeline. Storage tanks shall be vented through trap receiver and condenser operated on chilled water.

(e) Cathodic protection shall be provided to the underground solvent storage tanks.

vi) A proper Leak Detection and Repair (LDAR) Program for pesticide industry shall be prepared and implemented as per CPCB guidelines. Focus shall be given for prevention of fugitive emissions for which preventive maintenance of pumps, valves, pipelines are required. Proper maintenance of mechanical seals of pumps and valves shall be given. A preventive maintenance schedule for each unit shall be prepared and adhered to.

vii) Company shall take all the measures in order to protect the machineries and equipments for pesticide producing unit from ageing.

viii) Continuous monitoring system for chlorine, HCl as well as VOCs shall be installed at all important places/areas. Effective measures shall be taken immediately, when monitoring results indicate above the permissible limits. Alarm for chlorine leakage if any in the liquid chlorine storage area is provided alongwith automatic start of the scrubbing system.

ix) The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution.

x) Solvent management shall be carried out as follows :

i. Chilled brine circulation system shall be provided to condensate solvent vapors and reduce solvent losses. It shall be ensured that solvent recovery should not be less than 95%.

ii. Reactor and solvent handling pump shall have mechanical seals to prevent leakages.

iii. The condensers shall be provided with sufficient HTA and residence time so as to achieve more than 95% recovery

iv. Solvents shall be stored in a separate space specified with all safety measures.

v. Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.

vi. Entire plant shall be flame proof. The solvent storage tanks should be provided with breather valve to prevent losses.

xi) Total water requirement from MIDC water supply shall not exceed 295 m^3/day and prior permission should be obtained from the Competent Authority.

xii) Industrial effluent generation shall not exceed 97 m^3/day. As proposed, effluent shall be segregated into cyanide stream and High TDS/COD effluent streams. Cyanide effluent stream (21 m3/day) will be treated with sodium hypochlorite in alkaline medium. High TDS/COD effluent stream will be concentrated in MEE. MEE condensate will be treated in the ETP. Treated effluent will be sent to CETP. Treated effluent from ETP should be discharged into CETP after conforming to the standards prescribed for the effluent discharge and obtaining permission from the MPCB. Domestic sewage should be treated in STP. Water quality of treated effluent should meet the norms prescribed by CPCB/SPCB.

xiii) Treated effluent shall be passed through guard pond. Online pH meter, flow meter and TOC analyzer should be installed.

xiv) Bioassay and toxicity test shall be carried out for the treated effluent before discharging into CETP and to be performed before discharge to CETP.

xv) Process effluent/any wastewater shall not be allowed to mix with storm water. Storm water drain shall be passed through guard pond.

xvi) Hazardous chemicals shall be stored in tanks in tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm. Solvent transfer shall be by pumps.

xvii) 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 and amended as on date for management of Hazardous wastes and prior permission from MPCB shall be obtained for disposal of solid / hazardous waste in the TSDF. Measures shall be taken for fire fighting facilities in case of emergency. Membership of TSDF for hazardous waste disposal shall be obtained.

xviii) As proposed, ETP sludge, inorganic waste shall be sent to TSDF site. High calorific value waste such as spent organic shall be sent to cement factory/incinerated.

The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 11989 *as* amended in October, 1994 and January, 2000. All Transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.

xix) The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms.

xx) Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.

xxi) Green belt should be developed at least in 1600 m^2 area in and around the plant premises to mitigate the effects of fugitive emissions all around the plant as per the CPCB guidelines in consultation with DFO. Selection of plant species should be as per the CPCB guidelines.

xxii) All the recommendations made in the risk assessment report should be satisfactorily implemented.

B. GENERAL CONDITIONS:

i. The project authorities must strictly adhere to the stipulations made by the Maharashtra Pollution Control Board (MPCB), State Government and any other statutory authority.

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 locations of ambient air quality monitoring stations shall be decided in consultation with the MPCB and it shall be ensured that at least one station is installed in the upwind and downwind direction as well as where maximum ground level concentrations are anticipated.

iv. 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).

v. The Company shall harvest rainwater from the roof-tops of the buildings and storm water drains to recharge the ground water and use the same water for the process activities of the project to conserve fresh water.

vi. During transfer of materials, spillages shall be avoided and garland drains be constructed to avoid mixing of accidental spillages with domestic wastewater and storm water drains.

vii. Usage of Personnel Protection Equipments by all employees/ workers shall be ensured.

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. The company 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 the EIA/EMP in respect of environmental management, risk mitigation measures and public hearing relating to the project shall be implemented.

x. The company shall undertake CSR activities and all relevant measures for improving the socio-economic conditions of the surrounding area.

xi. The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment.

xii. A separate Environmental Management Cell equipped with full fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.

xiii. The company shall earmark sufficient funds for recurring cost per annum 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 earmarked for environment management/ pollution control measures shall not be diverted for any other purpose.

xiv. A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, ZilaParisad/Municipal Corporation, Urban local Body and the local NGO, if any, from who suggestions/ representations, if any, were received while processing the proposal.

xv. The project proponent shall also submit six monthly reports on the status of compliance of the stipulated Environmental Clearance conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF, the respective Zonal Office of CPCB and the Maharashtra Pollution Control Board. A copy of Environmental Clearance and six monthly compliance status report shall be posted on the website of the company.

xvi. The environmental statement for each financial year ending 31st March in Form-V as is mandated shall be submitted to the UP Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental clearance conditions and shall also be sent to the Bhopal Regional Offices of MoEF by e-mail.

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.

10.0 The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.

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

12.0 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 Waste (Management, Handling and Trans-boundary Movement) Rules, 2008 and the Public Liability Insurance Act, 1991 along with their amendments and rules.

31.1.2017

(Yogendra Pal Singh)
Scientist 'D'

Copy to:-

1. The Principal Secretary, Environment Department, Government of Maharashtra, 15th Floor, New Administrative Building, Mantralaya, Mumbai - 400 032

2. The Additional Principal Chief Conservator of Forests, Regional Office (WCZ), Ministry of Environment, Forest and Climate Change, Nagpur.

3. The Chairman, Central Pollution Control Board PariveshBhavan, CBD-cum-Office Complex, East Arjun Nagar, New Delhi - 110 032.

4. The Chairman, Maharashtra Pollution Control Board, Kalpataru Point, 3rd and 4th floor, Opp. Cine Planet, Sion Circle, Mumbai-400 022.

5. Monitoring Cell, Ministry of Environment and Forests, Indira Paryavaran Bhavan, Jor Bagh Road, New Delhi.

6. Guard File/Monitoring File/Record File.

31.1.2017

(Yogendra Pal Singh)
Scientist 'D'