



J-11011/27/2015-IA II (I)
Government of India
Ministry of Environment, Forest and Climate Change
(I.A. Division)

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Dated: 12th July, 2016

To,

Shri K.Pullaiah
Director
M/s Agrisol (India) Pvt. Ltd.
H.No. 10-289/87, 101 Fortune Heights,
Shantinagar, Masab Tank,
Hyderabad-500028

Email: agrisolindiapvtltd@gmail.com Fax.: 040-23748666

Subject: Manufacturing Unit of Agrochemicals (Capacity 6930 MTPA) at Sy. No. 163, 164 & 165, Udumulapadu Village, Dhone Mandal, Kurnool District, Andhra Pradesh by M/s Agrisol (India) Pvt. Ltd. – Environmental Clearance reg.

Ref. No.: Your online proposal no. IA/AP/IND2/26664/2015 dated 5th February, 2016.

Sir,

This has reference to your online proposal no IA/AP/IND2/26664/2015 dated 5th February, 2016 alongwith project documents including Form I, Terms of References, Pre-feasibility Report, EIA/EMP Report alongwith Public Hearing Report regarding above mentioned project.

2.0 The Ministry of Environment, Forest and Climate Change has examined the application. It is noted that the proposal is for setting up of manufacturing unit of Agrochemicals (Capacity 6930 MTPA) at Sy. No. 163, 164 & 165, Udumulapadu Village, Dhone Mandal, Kurnool District, Andhra Pradesh. Plot area is 33 acres, out of which greenbelt will be developed in 11 acres. Cost of project is Rs. 30 Crore. It is reported that no national park/wildlife sanctuary is located within 10 km distance. North Dhone RF (5.7 Km), South Dhone (6.5 Km) and Veldurthi RF (9.6 Km) are located within 10 km distance. Proposed unit will be implemented in the two phases. Following products will be manufactured:

S.No.	Product Name	CAS No	Capacity (TPA)
1	Acephate	30560-19-1	1320
2	Cartap Hydrochloride	15263-52-2	1320
3	Clodinafop Propargyl	105512-06-9	330
4	Difenoconazole	119446-68-3	330
5	Diafenthiuron	80060-09-9	660
6	Emamectin benzoate	137512-74-4	165
7	Ethephon	16672-87-0	990
8	Ethiprole	181587-01-9	330

9	Fipronil	120068-37-3	330
10	Flonicamid	158062-67-0	330
11	Foramsulfuron	173159-57-4	330
12	Glufosinate	51276-47-2	330
13	Glyphosate	1071-83-6	1320
14	Imidacloprid	138261-41-3	660
15	Imazethapyr	81335-77-5	330
16	Iprobenfos (Kitazin)	26087-47-8	330
17	Mesosulfuron	208465-21-8	330
18	Metribuzin	21087-64-9	330
19	Nitenpyram	150824-47-8	330
20	Penoxsulam	219714-96-2	330
21	Picoxystrobin	117428-22-5	330
22	Pretilachlor	51218-49-6	330
23	Prothioconazole	178928-70-6	330
24	Pyraclostrobin	175013-18-0	330
25	Spirotetramat	203313-25-1	330
26	Sulfosulfuron	141776-32-1	330
27	Thiocyclam	31895-22-4	330
28	Thiamethaxam	153719-23-4	1320
Total Phase I(3 Products on Campaign Basis)			3960
Total Phase II (3 Products on Campaign Basis)			2970
Total after Phase II (6 Products on Campaign Basis)			6930

List of By-Products

S.No	Name of the product	By-product	Capacity	
			Kg/day	TPA
1	Acephate	Ammonium Acetate	1430.8	472.2
2	Cartap Hydrochloride	Sodium Sulphite	3682.7	1215.3
3	Clodinafop Propargyl	Potassium Chloride	639.5	211.0
4	Diafenthiuron	Calcium Chloride	764	252.1
5	Flonicamid	Sodium Sulphite	529.3	174.7
6	Glufosinate	Ammonium Sulphate	730	240.9
7	Metribuzin	Dimethyl Sulfate	523.2	172.7
8	Thiocyclam	Sodium Sulphite	743.1	245.2
9	Thiomethaxam	Potassium Chloride	1022	337.3

3.0 Bagfilter will be provided to coal fired boiler (8 TPH, Phase-I and 8 TPH, Phase- 2) to control particulate emissions. Scrubber will be provided to control process emissions viz. HCl, SO₂, NH₃ and NH₃. Total water requirement will be 385 m³/day for Phase – I & II. Out of which fresh water requirement from ground water source will be 249 m³/day and remaining water requirement (135 m³/day) will be met from recycled/treated effluent. Effluent generation will be 145 m³/day after phase II. Industrial wastewater will be segregated into High TDS/COD and Low TDS/COD effluent streams. High TDS/COD effluent stream will be treated through steam stripper followed by multiple effect evaporator (MEE) and agitated thin film drier (ATFD). Low TDS effluent stream will be treated in ETP followed by reverse osmosis (RO). Sewage will be treated in Sewage Treatment Plant. The evaporation salts and ETP sludge will be sent to TSDF. Organic residue, spent carbon and Distillation residue will be sent to cement plant. Waste oil and used batteries from the DG sets are sent to authorize recyclers. Fly ash will be sent to brick manufacturers.

4.0 Public hearing/consultation meeting was held on 1st October, 2015.

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

6.0 The proposal was considered by the Expert Appraisal Committee (Industry) in its meetings held during 17th – 19th February, 2015 and 27th – 28th April, 2016 respectively. Project

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Proponent and the EIA Consultant namely M/s Team Labs & Consultant, have presented EIA / EMP report as per the TOR. EAC has found the EIA / EMP Report and additional information to be adequate and in full consonance with the presented TORs. The Committee recommended the proposal for environmental clearance.

7.0 Based on the information submitted by the project proponent, the Ministry of Environment, Forest and Climate Change 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) Bagfilter shall be provided to additional coal/briquette/lignite fired boiler to control particulate matter. Continuous air emission monitoring system to be installed from the stack. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/APPCB guidelines.
- iii) Scrubber will be provided to control process emissions viz. HCl, SO₂ and NH₃. 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) Ambient air quality data shall be collected as per NAAQES standards notified by the Ministry vide G.S.R. No. 826(E) dated 16th September, 2009. The levels of PM_{2.5}, of PM₁₀, SO₂, NO_x, VOC, NH₃ and HCl shall be monitored in the ambient air and emissions from the stacks and displayed at a convenient location near the main gate of the company and at important public places. The company shall upload the 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 AP Pollution Control Board.
- v) 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. The emissions shall conform to the limits stipulated by the SPCB. Odour management plan shall be implemented.
- vi) 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.
- vii) Solvent management shall be carried out as follows :
 - i. Reactor shall be connected to chilled brine condenser system
 - 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 shall be provided with breather valve to prevent losses.
- vii. All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.
- viii) Total water requirement from ground water source should not exceed 249 m³/day and prior permission should be obtained from the CGWA/SGWA.
- ix) Industrial effluent generation should not exceed 145 m³/day. Trade effluent shall be segregated into High COD/TDS and Low COD/TDS effluent streams. High TDS/COD shall be passed through stripper followed by MEE and ATFD (agitated thin film drier). Low TDS effluent stream shall be treated in ETP and then passed through RO system. Condensate and recover water will be recycled/reused within factory premises.
- x) 'Zero' effluent discharge shall be adopted and no effluent shall be discharged outside the premises.
- xi) The Company shall carry out bioassay test for the treated effluent in the guard pond. Ground water quality monitoring including the pesticides shall be carried out every month the monitored data shall be submitted to the Ministry's Regional Office, Chennai and SPCB.
- xii) Process effluent/any wastewater shall not be allowed to mix with storm water. Storm water drain shall be passed through guard pond.
- xiii) Automatic /online monitoring system (24 x 7 monitoring devices) for flow measurement and relevant pollutants in the treatment system to be installed. The data to be made available to the respective SPCB and in the Company's website.
- xiv) All necessary steps should be taken for monitoring of VOCs in the plant.
- xv) A proper Leak Detection and Repair (LDAR) Program for pesticide industry shall be prepared and implemented as per the CPCB guidelines.
- xvi) Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm. Solvent transfer shall be by pumps.
- xvii) As proposed, process organic residue and spent carbon shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF. The ash from boiler shall be sold to brick manufacturers/cement industry.
- xviii) 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 TPCB shall be obtained for disposal of solid / hazardous waste in the TSDF. Measures shall be taken for fire fighting facilities in case of emergency.
- xix) The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All Transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.
- xx) Fly ash should be stored separately as per CPCB guidelines so that it should not adversely affect the air quality, becoming air borne by wind or water regime during rainy season by flowing alongwith the storm water. Direct exposure of workers to fly ash & dust should be avoided.

- xxi) 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 clearing to reduce wastewater generation.
- xxii) The Company 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.
- xxiii) Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- xxiv) All the commitment made regarding issues raised during the Public Hearing/consultation meeting held on 1st October, 2015 shall be satisfactorily implemented.
- xxv) At least 5 % of the total cost of the project shall be earmarked towards the Enterprise social responsibility based on Public Hearing issues and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office at Bangalore. Implementation of such program shall be ensured accordingly in a time bound manner.
- xxvi) As proposed, green belt over an area of 11 acres shall be developed within plant premises with at least 10 meter wide green belt on all sides along the periphery of the project area, in downward direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the DFO.
- xxvii) Provision shall be made for the housing for the construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structure to be removed after the completion of the project. All the construction wastes shall be managed so that there is no impact on the surrounding environment.

B. GENERAL CONDITIONS:

- i. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board (SPCB), 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 State Pollution Control Board (SPCB) and it shall be ensured that at least one stations 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. 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.
- vii. Usage of Personnel Protection Equipments (PPEs) by all employees/ workers shall be ensured.
- viii. The company shall also comply with all the environmental protection measures and safeguards proposed in the documents 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.
- ix. The company shall undertake all relevant measures for improving the socio-economic conditions of the surrounding area. CSR activities shall be undertaken by involving local villages and administration.
- x. The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment.
- xi. A separate Environmental Management Cell equipped with full fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.
- xii. As proposed, the company shall earmark sufficient funds towards capital cost and recurring cost/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.
- xiii. A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, Zila Parisad/Municipal Corporation, Urban local Body and the local NGO, if any, from who suggestions/ representations, if any, were received while processing the proposal.
- xiv. 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&CC, the respective Zonal Office of CPCB and the State Pollution Control Board. A copy of Environmental Clearance and six monthly compliance status report shall be posted on the website of the company.
- xv. The environmental statement for each financial year ending 31st March in Form-V as is mandated shall be submitted 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 along with the status of compliance of environmental clearance conditions and shall also be sent to the respective Regional Offices of MoEF&CC by e-mail.
- xvi. 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.

- 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.

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

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

10.0 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.



(Lalit Bokolia)
Additional Director

Copy to :-

1. The Principal Secretary, Department of Environment, Forest, Science & Technology, Government of Telangana, Hyderabad, AP
2. The Chief Conservator of Forests, Regional Office (Southern Zone, Bangalore) Kendriya Sadan, 4th Floor, E&F Wing, II Block Koramangala, Bangalore-560034.
3. The Chairman, Central Pollution Control Board Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, New Delhi - 110 032.
4. The Chairman, Telangana Pollution Control Board, Paryavaran Bhawan, A-III, Industrial Estate, Sanath Nagar, Hyderabad - A.P.
5. Monitoring Cell, Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhavan, *Jorbagh Road*, New Delhi.
6. Guard File/Monitoring File/Record File.



(Lalit Bokolia)
Additional Director

