

Government of Maharashtra

No.: SEAC-2009/CR19/TC2

Environment department

Room No. 217, 2nd floor,

Mantralaya Annexe,

Mumbai 400 032

Dated: 18th November, 2009

To,

M/s. Laxmi Organic Industries Ltd.

Plot no. B-2/2, B-3/1/1 & B-3/1/2, MIDC,

Mahad, Dist. Raigad, Maharashtra

Sub: Production of Diketene and intermediates for pharmaceuticals, pesticides & pigments and storage of Ethyl alcohol tank of capacity 8500 KL at MIDC, Mahad - Environmental clearance regarding.

Sir,

This has reference to your communication no. Nil dated 13th March, 2009 on the above mentioned subject. The proposal was considered as per the EIA Notification - 2006, by the State Level Expert Appraisal Committee in its 16th meeting & recommended for prior Environment Clearance to State Level Environment Impact Assessment Authority (SEIAA) subject to submission of additional information on the points raised by SEAC. Subsequent information submitted by you, vide letter dated 23rd September, 2009 has also been considered by State Level Environment Impact Assessment Authority in its 16th meeting held on 7th November, 2009.

2. It is noted that the proposal is for grant of environmental clearance for Production of Diketene and intermediates for pharmaceuticals, pesticides & pigments; and storage of Ethyl alcohol tank of capacity 8500 KL at MIDC, Mahad.

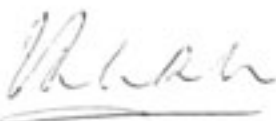
The project considered by SEAC under screening categories as - for Production of Diketene and Intermediates for Pharmaceuticals, Pesticides and Pigments: **5(f)** and Isolated storage for Ethyl Alcohol Category is **6(b)**

Project information from documents submitted by you & considered by SEAC & SEIAA is summarized as below:

Name of the Project : Environmental clearance for Production of Diketene and intermediates for pharmaceuticals, pesticides & pigments and storage of Ethyl alcohol tank of capacity 8500 KL at MIDC, Mahad

Project : Project involves two parts:
A. For Production of Diketene and Intermediates for Pharmaceuticals, Pesticides and Pigments.
B. Isolated storage For Storage for Ethyl Alcohol

Type of Project : Synthetic organic chemicals industry and Isolated storage & handling of hazardous chemicals.



Project Proponent	:	M/s. Laxmi Organic Industries Ltd.
Location of the project	:	Plot no. B-2/2, B-3/1/1 & B-3/1/2, MIDC, Mahad, Dist. Raigad, Maharashtra.
		Latitude - Approx. 18° 6'2.93"N
		Longitude - Approx. 73°29'4.98"E
Land	:	Total Plot Area: 74874 Sq. Mt. Alcohol Storage Area: 3570.05 Sq.m. Diketene Plant Area : 18828.43 Sq.m. Total: 22398.48 Sq. m.
Estimated cost of the project	:	A. Diketene Plant : Rs. 46.00 Crores B. Alcohol Storage Tank : Rs. 2.75 Crores

Production capacity:

Production of Diketene and Intermediates for Pharmaceuticals, Pesticides and Pigments:

1. Diketene : 600 TPM
2. Intermediates for Pharmaceuticals, Pesticides and Pigments : 900TPM
 - a. Esters
 - b. Amides
 - c. Arylides

Raw material requirement:

- Acetic Acid : 948 MT/M
- Monomethyl Amine : 189 MT/M
- Methanol : 63 MT/M
- Aniline: 113 MT/M
- Coal : 39 MT/day for boiler

Raw material storage:

- A. Raw Material Storage: for Diketene and Intermediates for Pharmaceuticals, Pesticides and Pigments like esters, Amides and Arylides.

DESCRIPTION	CAPACITY
Storage tank	
Raw Material Tank farm - I	
Acetic Acid Day tank-1	100 M ³
Acetic Acid Day tank-2	100 M ³
Acetic Acid Day tank-3	100 M ³
Raw Material & Fuel Tank farm - II	
Methanol tank	200 M ³
Ethanol tank	50 M ³
Diesel tank	100 M ³
Liquid Nitrogen Storage	6 M ³ (2 Nos.)
Raw Material Tank farm - III	
MMA (Mono methyl amine)	60 M ³ , 50 M ³
Aniline	25 M ³ , 30 M ³
Spare Tanks	10 M ³ , 30 M ³
Finished product tank farm	
Ester Day tank - I	20 M ³
Ester Day Tank - II	20 M ³
MMAAA (Monomethyl acetoacetamide) storage tank	100 M ³
Crude Diketene	20 M ³

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Pure Diketene	20 M ³
Distilled AAM ester (Acetoacetate methyl ester)	150 M ³
Crude AAM Ester	150 M ³

B. Storage Tanks for Storage of Ethyl Alcohol of the capacity of 8500 KL.

Tank No.	Capacity of tanks in KL at a time	Storage capacity in KL at a time
T-01	4323	8500
T-02	4323	

Water Requirement: 565 m³/day; Source: MIDC

Wastewater generated: 100 m³/day; shall be treated in a separate Effluent Treatment Plant (ETP) and then transferred to Common Effluent Treatment Plant (CETP) for further treatment. The sludge generated from ETP shall be stored and disposed off suitably to the authorized disposal sites.

Solid Waste Management:

Domestic waste: Construction Phase: Dry garbage: 16 Kg /day; Wet garbage: 4 Kg /day

Operation Phase: Dry garbage: 16 Kg /day; Wet garbage: 07 Kg /day

Disposal: Dry waste will be handed over to the authorized recyclers and wet waste will be disposed as Vermi Composting

Hazardous wastes: from process

- Coal Ash: 2 MT/day; and it will be send to Brick Manufacturers
- Plastic Drums / Containers: 50 Nos. /Day ; Handed over to the authorized recyclers

Sr. No.	Schedule I Category No. Type	Quantity (kgs/day)	Method of Disposal
1	Category No. 26.1 Process waste sludge/residue containing acid or other toxic metal or organic complexes	25 MT/M	Reprocessing
2	Category No. 34.3 ETP Sludge	4 MT/M	CHWTSDF

Power Requirement: During Construction Phase: 1. from M.S.E.D.C.L.: 300 KW

2. D.G. Sets : 40 KVA

During Operational Phase: From M.S.E.D.C.L.

Connected Load: 3500 KW

Maximum Demand: 2640 KW

D.G. Sets: 1000 KVA : 1 No. (Only during power failure for emergency and fire protection load)

Air pollution control measures:

- Scrubber shall be provided for process vent (2 Nos.).
- Dust collectors and Bag filters for Steam Boilers (1 No. Each).
- Appropriate Stack height as per MPCB norms will be provided for effective dispersion of pollutant.
- Tree Plantation.
- Manual water sprinkling
- Using RMC
- Dust cover for Trucks
- New Construction Machinery

Noise pollution control measure:

- Equipment will work intermittently
- Rotary drillers.
- Vehicular trips will not be at peak traffic hour
- Ear Plugs to workers.
- No noise polluting work in night shifts
- Acoustic enclosures will be provided to D.G. Set.
- The noise levels in the day time shall be maintained 55dB(A) and 45dB(A) during night time.
- Trees act as a Noise Buffer

Green belt area: 17854 sq. m. area will be provided. Total 450 trees will be planted.

Environmental Management Plan: Total cost on EMP during construction phase will be Rs. 14.9 lakhs and during operation phase EMP capital cost will be Rs. 170 lakhs and recurring cost will be Rs. 20 Lakhs

3. The proposal has been considered by SEIAA in its 16th meeting dated on 7th November, 2009 & decided to accord environmental clearance to the said project under the provisions of Environment Impact Assessment Notification, 2006 subject to implementation of the following terms and conditions :-

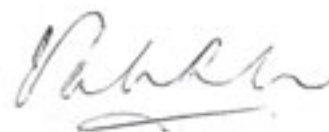
- (i) No land development / construction work preliminary or otherwise relating to the project shall be taken up without obtaining due clearance from respective authorities.
- (ii) Consent to establish & operate should be obtained from MPCB.
- (iii) No additional land shall be used /acquired for any activity of the project without obtaining proper permission.
- (iv) 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.
- (v) No chemicals other than mentioned above with said contents shall be used/stored without obtaining proper permission.
- (vi) For controlling fugitive natural dust, regular sprinkling of water & wind shields at appropriate distances in vulnerable areas of the plant shall be ensured.
- (vii) The coal & other chemicals will be transported & handled with due care. Proper plan should be & get approved by MPCB.
- (viii) Regular monitoring of the air quality, including SPM & SO₂ levels both in work zone and ambient air shall be carried out in and around the project and records shall be maintained. The location of monitoring stations and frequency of monitoring shall be decided in consultation with Maharashtra Pollution Control Board (MPCB) & submit report accordingly to MPCB.
- (ix) The process emissions and particulate matter from various 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 unit shall be immediately put out of operation and shall not be restarted until the desired efficiency has been achieved.



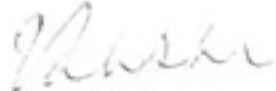
- (x) Fugitive emissions in the work zone environment, product and raw materials storage area shall be regularly monitored. The emissions shall conform to the limits imposed by MPCB.
- (xi) During transfer of materials, spillages shall be avoided and garland drains be constructed to avoid mixing of accidental spillages with domestic waste and storm drains.
- (xii) For control of process emissions, stacks of appropriate height as per the CPCB guidelines shall be provided. The scrubbed water shall be sent to the ETP for further treatment.
- (xiii) A detailed scheme for rainwater harvesting shall be prepared and implemented to recharge ground water.
- (xiv) Periodic monitoring of ground water shall be undertaken and results analyzed to ascertain any change in the quality of water. Results shall be regularly submitted to the Maharashtra Pollution Control Board.
- (xv) The project proponent shall treat the wastewater up to the industry specific standards as notified in EPA or as laid down by the MPCB whichever are stringent.
- (xvi) Leq of Noise level shall be maintained as per standards. For people working in the high noise area, requisite personal protective equipment like earplugs etc. shall be provided.
- (xvii) 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).
- (xviii) Green belt shall be developed & maintained around the plant periphery. Green Belt Development shall be carried out considering CPCB guidelines including selection of plant species and in consultation with the local DFO/ Agriculture Dept.
- (xix) Adequate safety measures shall be provided to limit the risk zone within the plant boundary, in case of an accident. Leak detection devices shall also be installed at strategic places for early detection and warning.
- (xx) Occupational health surveillance of the workers shall be done on a regular basis and record maintained as per Factories Act.
- (xxi) The Proponent shall make the arrangement for protection of possible fire hazards during manufacturing process & in material handling.
- (xxii) 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 Waste (Management and Handling) Rules, 2003. Authorization from the MPCB shall be obtained for collection/treatment/storage/disposal of hazardous wastes.
- (xxiii) The Proponent shall undertake following Waste Minimization Measures :
- 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 process.
 - Maximizing Recoveries.
 - Use of automated material transfer system to minimize spillage.
 - Use of "Closed Feed" system into batch reactors.
- (xxiv) Regular mock drills for the on-site emergency management plan shall be carried out. Implementation of changes / improvements required, if any, in the on-site management plan shall be ensured.
- (xxv) A separate environment management cell with qualified staff shall be set up for implementation of the stipulated environmental safeguards.
- (xxvi) Separate funds shall be allocated for implementation of environmental protection measures/EMP along with item-wise break-up. These cost shall be included as part of the project cost. The funds earmarked for the environment protection measures shall

not be diverted for other purposes and year-wise expenditure should reported to the MPCB & this department

- (xxvii) The project management shall advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the marathi language of the local concerned within seven days of issue of this letter, informing that the project has been accorded environmental clearance and copies of clearance letter are available with the Maharashtra Pollution Control Board and may also be seen at Website at <http://envis.maharashtra.gov.in>
- (xxviii) Project management should submit half yearly compliance reports in respect of the stipulated prior environment clearance terms and conditions in hard & soft copies to the MPCB & this department, on 1st June & 1st December of each calendar year.
- (xxix) A copy of the clearance letter shall be sent by proponent to the concerned Municipal Corporation and the local NGO, if any, from whom 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.
- (xxx) The proponent shall upload the status of compliance of the stipulated EC conditions, including results of 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 SPCB. The criteria pollutant levels namely, SPM, RSPM, SO₂, NO_x (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.
- (xxxi) 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 in hard copies as well as by e-mail) to the respective Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB.
- (xxxii) 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 along with the status of compliance of EC conditions and shall also be sent to the respective Regional Offices of MoEF by e-mail.
- (xxxiii) The environmental clearance is being issued without prejudice to the court case pending in the court of law and it does not mean that project proponent has not violated any environmental laws in the past and whatever decision of the Hon'ble court will be binding on the project proponent. Hence this clearance does not give immunity to the project proponent in the case filed against him.
4. The Environment department reserves the right to revoke the clearance if conditions stipulated are not implemented to the satisfaction of the department or for that matter, for any other administrative reason.
5. **Validity of Environment Clearance:** The environmental clearance accorded shall be valid for a period of 5 years to start of production operations by the power plant.
6. No further expansion or modifications in the plant shall be carried out without prior approval of SEIAA. In case of any deviation or alteration in the project proposed from those submitted to this department for clearance, a fresh reference should be made to the department to assess the adequacy of the condition(s) imposed and to incorporate additional environmental protection measures required, if any.



7. The above stipulations would be enforced among others under the Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and rules there under, Hazardous Wastes (Management and Handling) Rules, 1989 and its amendments, the public Liability Insurance Act, 1991 and its amendments.


(Valsa R Nair Singh)
Secretary, Environment
department & MS, SEIAA

Copy to:

1. Shri. Ashok Basak, IAS (Retd.),Chairman, SEIAA,502,Charleville, 'A' Road, Churchgate, Mumbai- 400 020, Maharashtra.
2. Shri. P.M.A Hakeem, IAS (Retd.), Chairman, SEAC, 'Jugnu' Kottaram Road, Calicut- 673 006 Kerla.
3. The Secretary, Energy department, Govt. of Maharashtra, Mantralaya, Mumbai - 400032., Maharashtra
4. Member Secretary, Maharashtra Pollution Control Board, with request to display a copy of the clearance.
5. The CCF, Regional Office, Ministry of Environment and Forest (Regional Office, Western Region, Kendriya Paryavaran Bhavan, Link Road No- 3, E-5, Ravi-Shankar Nagar, Bhopal- 462 016). (MP).
6. Regional Office, MPCB, Raigadh.
7. Collector,Raigadh.
8. IA- Division, Monitoring Cell, MoEF, Paryavaran Bhavan, CGO Complex, Lodhi Road, New Delhi-110003.
9. Director(TC-1), Dy. Secretary(TC-2),Scientist-1,Environment department
10. Select file (TC-3).