

Government of Maharashtra

No.: SEAC-2010/CR.516/TC.2

Environment department
Room No. 217, 2nd floor,
Mantralaya Annexe,
Mumbai 400 032
Dated: 6th July, 2011

To,
M/s. Excel Industries,
Plot no. D-9, MIDC Lote ,
Tal -Khed, Dist - Rantagiri.

Sub: Expansion of Polymer Processing Chemicals such as DMBPC and THPE products at plot no. D-9, MIDC Lote, by M/s Excel Industries- Environmental clearance regarding.

Sir,

This has reference to your communication Letter dated 17th March, 2010 on the above mentioned subject. The proposal was considered as per the EIA Notification - 2006, by the State Level Expert Appraisal Committee in its 32nd meeting & recommended your proposal for prior Environment Clearance to State Level Environment Impact Assessment Authority (SEIAA) without any condition. Project considered by State Level Environment Impact Assessment Authority in its 33rd Meeting held on 28th January, 2011.

2. It is noted that the proposal is for grant of environmental clearance for Expansion of polymer processing chemicals such as DMBPC and THPE products at plot no. D-9, MIDC Lote, by M/s Excel Industries. The project considered by SEAC under screening category 5 (f) of EIA Notification 2006. Project proponent has submitted EIA Report.

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

Name of the Project	:	Expansion of polymer processing chemicals such as DMBPC(Dimethyl Bis Phenol Cyclohexnone) and THPE ({1,1,1 Tris (4-Hydroxy Phenol Ethane)}
Type of Project	:	Synthetic organic chemicals industry (basic organic chemicals, other synthetic organic chemicals and chemical intermediates)
Project Proponent	:	M/s Excel Industries
Location of the project	:	Plot no. D-9, MIDC Lote , Tal -Khed, Dist - Rantagiri
Land	:	7.33 hectares
Estimated cost of the project	:	Existing cost : ₹43.06 Crore Expansion cost : ₹ 6.27Crore

Production capacity: Annual production capacity: 15,510 MT. Annual capacities of byproducts: 18,236 MT (of which 15,000 MT is hydrochloric acid). Proposed increase in the annual production capacity of DMBPC and THPE: 360 to 1500 MT.



SR No	PRODUCT NAME	CAPACITY (TPA)
1	SPCP - Biocide	1,800
2	Codex-661 and Its Formulations (Hydroxy Ethylene Di Phosphonic Acid And Its Formulations)	7,200
3	Acetyl Chloride	3,600
4	Oxalyl Chloride	360
5	ATMP And Its Formulations	1,200
6	Codex-551	600
7	Dispercel-32(Poly Meleic Acid)	360
8	THPE { 1,1,1 Tris (4-Hydroxy Phenol) Ethane} and / OR DMBPC (Dimethyl Bis Phenol Cyclohexane)	360
9	R & D and Pilot Plant For Industrial Chemicals, Intermediates and Pharmaceuticals	--
10	Lauracel	30
Total product manufacturing capacity/ annum		15,510

List of By-product (existing):

SR No	PRODUCT NAME	CAPACITY (TPA)
1	Hydrochloric acid	15000
2	Dil. acetic acid	1200
3	Methanol	600
4	Spent acid	500
5	Sodium sulphate (30%)	936

Proposed:

SR No	PRODUCT NAME	CAPACITY (TPA)
1	THPE ({1,1,1 Tris (4-Hydroxy Phenol Ethane}and / OR DMBPC(Dimethyl Bis Phenol Cyclohexane)	1500
2	Spent acid	1645
3	Dil. Methanol	450

Raw material requirement:

- O-cresol – 1110 kg
- Cyclohexanone : 400 kg
- 3 MPA : 25 KG
- Sodium bicarbonate : 35 kg
- Methanol : 11250 kg
- Sulphuric acid : 76 kg
- HCL 30 % : 100 kg

Storage of hazardous chemicals:

The hazardous chemicals stored or used in the plant includes Methanol, Phenol. O-Cresol, Cyclohexanone. Storage of these chemicals is at atmospheric pressure. The table below provides the details about the storage.

Sr. No.	Name of material	Raw material storage area	Capacity	No. Of tanks
01	Sulfuric Acid	In designated Raw material storage area behind Codex Plant.	10 KL	1



02	Methanol	In designated Raw material storage area near THPE / DMBPC Plant	15 KL	1
03	O-Cresol	In designated Raw material storage area behind Codex Plant.	24 KL 20 KL	2 1
04	Cyclohexanone	In designated Raw material storage area behind Codex Plant.	21 KL	1
01	Methanol	In Designated Raw Material Storage Area Near THPE / DMBPC Plant.	24 KL	3 (Under Ground)

Total Water Requirement: existing: 350 KL/day; proposed: 107 KL/day
Fresh water: 227 KL/day; Source: MIDC; recycled water: 120 KL/day from ETP

Effluent generated:

Existing: From process: 73 KL/Day; Domestic: 63 KL/ day

Proposed activity:

From process: 9KL/Day; Domestic: 3 KL/ day;

Entire effluent would be treated in Effluent Treatment Plant and treated effluent will be transfer to CETP for further Treatment and disposal.

Capacity of ETP: treated effluent will be send to MIDC collection system to CETP.

The Effluent Treatment Plant is designed to Handle 175 M3 / Day Hydraulic load. The effluent retention time is 12 Days for the design capacity. This plant is quite sufficient to handle the daily hydraulic load of effluent generated on site.

Fuel used:

- Furnace oil :9458 kg/day
Sulphur content in FO: 4.0 %

Furnace oil was used for generation of steam earlier. Now the steam is generated from coal.
Furnace boiler is a standby

- Coal: Existing: 14 T/day; Proposed: 28 T/day.

Ash content in coal: 10 %

Sulphur content in coal: 0.7 %

Source: Coal mine; Transportation: by truck through road.

Solid Waste Management:

Total Ash generated: 1386 kg/day; Disposal: The fly ash generated from the solid fuel boiler (Coal Boiler) is sold to the brick manufacturer and accordingly an agreement has been done with the party

Sr. No.	Waste	Quantity	Method of storage	Disposal	Method of transport
1	Distillation Residue	300 MT/annum	Residue stored in 200 kgs capacity open mouth M.S. drums and the drums are stored in designated Hazardous waste storage area.	Send to MWML, Talaja	In closed truck by MPCB authorized transporter
2	Spent ion exchange resins	0.12 MT/annum	Spent ion exchange resins stored in 200 kgs capacity open	Send to MWML, Talaja	

			mouth MS Drums and the drums are stored in designated Hazardous waste storage area.	
3	Chemical sludge arising from ETP	75 MT/annum	In drying beds or gravity filters till reduction of moisture content; the same is filled in poly oven bags for disposal.	Send to CHWTSDF, Taloja
4	Discarded containers	10710 nos. /annum	In well ventilated space designated hazardous waste storage area	After decontamination, sale to authorized scarp dealer.

Power requirement: Existing: 3,08,506 KWH/month
Proposed: 2,60,500 KWH/month
Source: MSEDCL
DG set: existing: 1 x 250 KVA & 1 x 500 KVA Capacity.

Air pollution control measures:

- Furnace oil was used for generation of steam earlier. Now the steam is generated from coal. Furnace boiler is a standby, Sulphur content in FO is 4.0 % and Sulphur content in coal is 0.7 % hence SO₂ emission is reduced by 137.32 kg/day.
- Scrubbers are installed in all plants to take care of gases generated during the process, mainly the HCl gas.
- No additional process emission is generated due to expansion of this project.

Green belt development: Green belt has been developed in 40% of total plot area i.e. 28,481 Sq. Meter & about 1200 Trees Planted on site.

Environmental Management Plan: Capital cost will be ₹ 509.45 Lakhs and Recurring cost will be ₹ 82.08 Lakhs.

3. The proposal has been considered by SEIAA in its 33rd meeting & 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) This clearance is subject to conditions stipulated in MoEF office memorandum J-21011/58/2010-IA-I (I) dated 4th July, 2011.
- (ii) This environmental clearance is issued subject to land use verification. Local authority / planning authority should ensure this. This environmental clearance issued with respect to the environmental consideration and it does not mean that State Level Impact Assessment Authority (SEIAA) approved the proposed land use.
- (iii) "Consent for Establishment" shall be obtained from Maharashtra Pollution Control Board under Air and Water Act and a copy shall be submitted to the Environment department before start of any construction work at the site.
- (iv) Boiler ash should be stored in covered area.
- (v) Stack emission should be treated as per Standards laid down by MPCB.
- (vi) No land development / construction work preliminary or otherwise relating to the project shall be taken up without obtaining due clearance from respective authorities.



- (vii) No additional land shall be used /acquired for any activity of the project without obtaining proper permission.
- (viii) 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.
- (ix) No fuel other than mentioned above with said contents shall be used without obtaining proper permission.
- (x) For controlling fugitive natural dust, regular sprinkling of water & wind shields at appropriate distances in vulnerable areas of the plant shall be ensured.
- (xi) The coal will be transported through closed containers..
- (xii) Proper coal handling, transportation and handling system should be as per plan approved by MPCB.
- (xiii) 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.
- (xiv) 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.
- (xv) 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.
- (xvi) During transfer of materials, spillages shall be avoided and gullies drains be constructed to avoid mixing of accidental spillages with domestic waste and storm drains.
- (xvii) 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.
- (xviii) A detailed scheme for rainwater harvesting shall be prepared and implemented to recharge ground water.
- (xix) 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.
- (xx) 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.
- (xxi) 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.
- (xxii) The overall noise levels in and around the plant 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).
- (xxiii) 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.
- (xxiv) 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.



- (xxv) Occupational health surveillance of the workers shall be done on a regular basis and record maintained as per Factories Act.
- (xxvi) The company shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling.
- (xxvii) 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 collections/treatment/storage/disposal of hazardous wastes.
- (xxviii) The company 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.
- (xxix) 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.
- (xxx) A separate environment management cell with qualified staff shall be set up for implementation of the stipulated environmental safeguards.
- (xxxii) Separate funds shall be allocated for implementation of environmental protection measures/EMP along with item-wise breaks-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
- (xxxiii) 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>
- (xxxiv) 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.
- (xxxv) 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.
- (xxxvi) 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.
- (xxxvii) 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.
- (xxxviii) 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.

- (xxxviii) 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 industry.
 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.
 8. Any appeal against this environmental clearance shall lie with the National Green Tribunal, Van Vigyan Bhawan, Sec- 5, R.K. Puram, New Dehli - 110 022, if preferred, within 60 days as prescribed under Section 35 of the National Green Tribunal Act, 2010.



(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. Member Secretary, Maharashtra Pollution Control Board, with request to display a copy of the clearance.
4. 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).

5. Regional Office, MPCB, Kolhapur
6. Collector, Ratnagiri.
7. IA- Division, Monitoring Cell, MoEF, Paryavaran Bhavan, CGO Complex, Lodhi Road, New Delhi-110003.
8. Director(TC-1), Dy. Secretary(TC-2),Scientist-1,Environment department
9. Select file (TC-3).